



McDonald Institute for Archaeological Research
Annual Report

2007-2008





Contents

About us	1
Introduction from the Director	1
Members McDonald Research Fellows	2
Deputy Director's Report	5
Laboratories	6
Charles McBurney Geoarchaeology	6
George Pitt-Rivers Bioarchaeology	8
Grahame Clark Zooarchaeology	10
Glyn Daniel Genetics	12
Dorothy Garrod Isotope	14
Research Highlights	16
Research Grants	42
Events	44
Publications	47
Cambridge Archaeological Journal	47
McDonald Institute Monographs	48
Members/Fellows publications	50



Introduction from the Director

It gives me great pleasure to introduce the 2007–2008 Annual Report of the McDonald Institute for Archaeological Research, reporting another busy and productive year.

The Institute was founded in 1990 through a generous bequest of the late Dr D.M. McDonald, to facilitate and support archaeological research at Cambridge. Most archaeologists are based in the Department of Archaeology, but we also support researchers in the Cambridge Archaeological Unit, the Colleges, the Fitzwilliam Museum, the Leverhulme Centre for Human Evolutionary Studies, the Museum of Archaeology and Anthropology and the Faculties of Classics and Continuing Education.

Our overarching strategy is to promote archaeology at Cambridge as a discipline concerned with the human career in its entirety, from early prehistory to the most recent past. We do this by providing laboratories for work in archaeological science, project space, conference and seminar facilities, research grants and publication venues (the *Cambridge Archaeological Journal* and the Monograph series).

The post-doctoral early career researchers working in the Institute make up one of the largest such communities in archaeology in the world. Some are funded directly by the Institute, some by external Fellowships and some by research grants obtained by Cambridge staff.

As this report illustrates, Cambridge archaeologists are working on all periods of the past from early prehistory to the twentieth century, in most regions of the world, and across the humanities and science spectrum of the discipline.

The seminar room of the Institute has been used on an almost daily basis for laboratory group meetings, workshops, seminars and conferences, as well as for the research training



that supports the very large number of graduate students (including over a hundred full-time PhD students) attached to the Department of Archaeology. The highpoint of the meetings programme was the annual McDonald Lecture, this year's, the nineteenth, delivered by Professor Paul Mellars, on the debates about the origins of *Homo sapiens*, the so-called Human Revolution. This was also the theme of his major co-edited book published by the Institute. It was in fact a bumper year for the publication programme, including two volumes stemming from Institute conferences and four on major completed fieldwork programmes by Cambridge archaeologists and their collaborators.

Archaeology has important things to say about the human past, of relevance for today and tomorrow, and Cambridge archaeologists are at the forefront of that project. I would like to express my gratitude here for the hard work and commitment to excellence of the Institute central staff, and of my academic colleagues, that together make the Institute such an intellectually exciting, enjoyable and productive research centre.

Professor Graeme Barker

Members

- Dr Raymond Allchin (Ancient India and Iran Trust)
- 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 Lucilla Burn (Fitzwilliam Museum)
- **Dr Gilly Carr** (Institute of Continuing Education)
- Craig Cessford (Cambridge Archaeological Unit)
- Prof. Dilip Chakrabarti (Department of Archaeology)
- Dr Christopher Chippindale (Museum of Archaeology and Anthropology)
- Dr Elizabeth DeMarrais (Department of Archaeology)
- Alison Dickens (Cambridge Archaeological Unit)
- Christopher Evans (Cambridge Archaeological Unit)
- Prof. Robert Foley (Leverhulme Centre for Human Evolutionary Studies)
- Dr Charles French (Department of Archaeology)
- David Gibson (Cambridge Archaeological Unit)
- Dr Jason Hawkes (Cambridge Archaeological Unit)
- Dr Catherine Hills (Department of Archaeology)

- Dr 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 Michael Petraglia (Leverhulme Centre for Human Evolutionary Studies)
- Dr Cameron Petrie (Department of Archaeology)
- 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)
- **Dr Marc vander Linden** (*Cambridge Archaeological Unit*)

Senior McDonald Institute Fellows

- Dr Robert Anderson (McDonald Institute for Archaeological Research)
- **Dr Janine Bourriau** (McDonald Institute for Archaeological Research)
- 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 Andrea Balbo (British Antarctic Survey) Geoarchaeology
- **Dr David Beresford-Jones** (*British Academy Research Fellow*)
 The Archaeology of the Lower Ica Valley
- Dr Alison Blyth (McDonald Institute Fellowship stipendary)
 The Subterranean Archive: a New Source of Evidence
 for Vegetation and Land-use Change
- 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 Helen Farr (Research Associate)
 Exploring a Vanished Coastal Landscape in Holocene Southern Calabria
- Dr Lucy Farr (Research Associate) GIS, Cultured Rainforest Project
- **Dr Helen Geake** (Finds Adviser, Portable Antiquities Scheme) Early Anglo-Saxon 'Small-long' Brooches
- Dr Susanne Hakenbeck (Research Fellow, Newnham College) Ethnic Identities and Migration Processes in Medieval Bavaria: a Study of Stable Isotopes
- **Dr Jennifer Harland** (*Research Associate*)
 Origins of Commercial Sea Fishing in Medieval Europe
- Dr Oliver Harris (Research Associate)
 Changing Beliefs of the Human Body
- **Dr Paul Heggarty** (*Research Associate*) Languages and Origins of People in Europe
- Dr Jessica Hughes (Research Associate) Changing Beliefs of the Human Body
- Dr Harriet Hunt (Wellcome Trust Research Training Fellow) Modelling Agricultural Origins: Do Minor Crops Challenge the Conclusions Drawn from Major Crops?
- **Dr Graeme Lawson** (Independent Scholar) Archaeomusicology

- Dr Marsha Levine (Senior Research Associate)
 From Chariotry to Equestrian Pastoral Nomadism:
 the Evolving Role of the Horse
- Dr Carenza Lewis (Research Associate) Higher Education Field Academy
- Dr Diane Lister (Research Associate)
 The Potential for Genetic Analysis of Historical Barley Landraces to Trace the Spread of Cereal Cultivation across Europe
- Dr John MacGinnis (Independent Scholar)
 Mesopotamia and Eastern Anatolia
- **Dr Lisa Maher** (*Research Fellow, LCHES*)
 Epipalaeolithic Foragers in Azrag Project
- Dr Lambros Malafouris (Research Associate)
 The Balzan Project (Material Engagement)
- Dr Alex Mesoudi
 (Mellon Fellow, Dept. of Social & Developmental Psychology)
 Biological and Social Influences on Human Behaviour and Development
- **Dr lain Morley** (Research Associate) Roots of Spirituality
- Dr Anna Muthesius (Research Fellow, Lucy Cavendish College) Byzantine, Islamic and Near Eastern Silk Weaving
- Dr Sara Owen (Research Associate, Classics)
 Greek Colonization and the Archaeology of European Development
- Dr Ryan Rabett
 (Templeton Fellow and McDonald Institute Fellowship stipendary)
 Early Human Diversity: Behavioural Modernity in
 Inter-regional Perspective
- Dr Katharina Rebay (Research Associate) Changing Beliefs of the Human Body
- **Dr Pamela Rose** (Egypt Exploration Society Fellow) The Amarna Project and the Qasr Ibrahim' Project
- Dr Roman Roth (Classics Research Fellow, Peterhouse) Capena in the Tiber Valley
- **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



Director's Report

My major publication during the year was Archaeology and Desertification: the Wadi Faynan Landscape Survey. This monograph and accompanying CD presented the final results of a project that I co-directed with Professors David Gilbertson (then of the University of Bournemouth) and David Mattingly (University of Leicester) between 1996 and 2001, a study by a team of archaeologists and geographers of the long-term landscape history of the Wadi Faynan in southern Jordan. The book was published by Oxbow for the Council for British Research in the Levant, but produced — immaculately — to their specifications by Dora Kemp in the Institute. A very different publication in the year was my chapter describing the history of the Society of Antiquaries between 1950 and 2000, in a book celebrating its 300th anniversary, a sensitive chapter to write considering that many of its major actors are very senior members of our discipline!

My field research during the year focused on Libya and Borneo. In April I directed the second season of excavation in the Haua Fteah cave, on the coast of northeast Libva. The team succeeded in emptying the backfill of the deep trench excavated in the 1950s by Cambridge's Dr Charles McBurney down to about 8 metres — still leaving another 6 metres to the depth he reached at the end of his final season — as well as conducting fieldwork around the cave including trial excavations in two other caves. The depth we reached is approximately where Dr McBurney found two human mandibles originally thought to be Neanderthal but now regarded as Modern Human and critical for debates regarding when Modern Humans colonized North Africa. This depth is certainly below the limits of C14 dating and we are awaiting with great interest the results of a programme of OSL dating (a method of dating with a far longer timedepth than C14) of samples from the depth of the human remains, being analysed at the Universities of Wollongong, Australia, and Royal Holloway London.

I was in the field again in August, in Sarawak in Borneo, coordinating the second season of fieldwork by the Cultured Rainforest Project team, funded by the Arts and Humanities Research Council.
Anthropologists (from the Universities of Oxford, Sussex and Malaysia, Sarawak) are studying the lives of present-day Penan foragers and Kelabit farmers and how they relate to the



rainforest; and archaeologists (from Cambridge and Leicester) and geographers (from Queens' University Belfast) are investigating how foragers and farmers have used the rainforest, and shaped it, in the past.

Throughout the year I also coordinated a third project, investigating the development of horse husbandry in China, part of my ongoing interest in the early history of pastoralism. This project integrates the techniques of archaeozoology, the study of animal bones from excavations (Dr Marsha Levine, Dr Krish Seetah) and archaeogenetics, the analysis of the modern DNA of extant horse populations and of ancient DNA in archaeological bones (Dr Mim Bower). This project is funded by the Leverhulme Trust.

I gave a number of conference and keynote papers in the year, for example in Beijing, Dublin, London and Siena. The lectures in China were part of a study visit in December that culminated in the McDonald Institute and Department of Archaeology signing research collaboration agreements with Peking University and the Institute of Archaeology of the Beijing Academy of Social Sciences. In March I delivered the inaugural lecture celebrating the launch of the new Institute of European and Mediterranean Archaeology in Buffalo, USA, an initiative modelled in some ways on the McDonald Institute, designed to build research synergies amongst archaeologists working in different departments in the university.

Chairing the Archaeology Sub-Panel of the national 2008 Research Assessment Exercise also took a great deal of time, as between January and July the sub-panel members were each reading and grading several hundred books and articles selected by UK university archaeologists from their 2001–2007 publications.

Deputy Director's Report

My first year at the McDonald Institute has been an eventful and enjoyable one in each of my three areas of responsibility: managing the Institute, research and teaching. The first important steps were to launch a new website (providing a central resource for archaeological research at Cambridge) and to establish a new affiliation policy that encourages the Institute's varied constituencies to take advantage of everything the McDonald has to offer. All post-doctoral archaeological researchers in collegiate Cambridge are welcome as Members or Fellows of the Institute. Students of archaeology are also welcome to take advantage of its many events, and students at all levels form an important part of the Institute's scientific and humanistic research communities (particularly in the joint Department of Archaeology/McDonald Institute laboratories). New support schemes have also been established for conferences. workshops and discussion groups.

The publications team worked overtime to produce an exemplary suite of books and journals. The successful *Cambridge Archaeological Journal* and McDonald Institute Monograph Series remain important aspects of the Institute's activities. The monograph series will continue to include both themed volumes (typically arising from our conferences) and reports on fieldwork, but will increasingly also use supplementary on-line publication.

On the financial side, our accounts have been streamlined, our funding arrangements secured and our relationships with other parts of the University of Cambridge clarified. Partly as a result of these initiatives, our grants and awards provision has been increased to make up for the impact of inflation in recent years.

In terms of research, I have sought to balance my joint interests in medieval archaeology and historical ecology — often combining the two where the synergy is rewarding. My Medieval Origins of Commercial Sea Fishing project (funded by the Leverhulme Trust) has now entered its third year. The project's publications have already had a major impact

— being covered in *New Scientist* for example. The project team delivered over 10 conference papers in 2007/08 and hosted a major international workshop on the archaeology and early history of intensive



sea fishing. In the next 18 months, post-doctoral research associates Jen Harland and Cluny Johnstone will help bring the final publications to press.

Most of my other research this year has focused on the Viking Age. Examples include a theoretical review of the causes of the Viking Age published in *Antiquity* and trial excavation at an enigmatic chiefly and ecclesiastical settlement in Orkney known as the Brough of Deerness. This latter project begins a new exploration of the relationship between power and ideology during the Viking Age diaspora. I also co-organized an international conference on Maritime Societies of the Viking and Medieval World. Otherwise, my medieval research has focused on writing up my previous excavation project at Quoygrew, a medieval rural settlement in Orkney.

Soon I will be combining research and teaching in a new project: Crisis, What Crisis? Collapses and Dark Ages in comparative perspective (funded by the Mellon Foundation). This initiative, co-directed with Professors Martin Millett and John Hatcher, will combine a seminar series, a post-doctoral fellowship and two studentships all intended to help compare and explain the crises of the long fifth, ninth and fourteenth centuries AD — and to set them within an international comparative context. At present I am also enjoying the opportunity to teach Viking Age and Anglo-Saxon archaeology at the undergraduate and postgraduate levels.

The multifaceted Deputy Director position is challenging and rewarding. I look forward to my second year and to the continued support of the staff of both the McDonald Institute and the Department of Archaeology — to whom I owe my sincere gratitude.



Charles McBurney Geoarchaeology Laboratory

News and people

This year has seen several researchers completing their work and moving on to greater things. Manuel Arroyo-Kalin successfully completed his PhD on the terras pretas or dark earths of the central Amazon Basin, and is now developing further geoarchaeological projects in the Amazon Basin, as well as in the Pali Aike National Park in Patagonia (see p. 40 of this report) and Tierra del Fuego. Dr Andrea Balbo has now taken up a post-doctoral fellowship in soil micromorphology at ICREA in Barcelona. Dr Lenke Lisa completed her EU Marie Curie fellowship on the Dolní Věstonice Middle-Upper Palaeolithic loessic sequence and has now returned to the University of Brno in the Czech Republic. Julie Boreham, the laboratory's Senior Research Technician of 15 years, left in March of this year to make beautiful thin sections as her own business. She will be much missed. We now welcome Tonko Rajkovaca (formerly of Cambridge Archaeological Unit) as our new Senior Research Technician in Geoarchaeology to the laboratory as of 1 September.



Dr Rob Scaife sampling within Chingues Cave, Pali Aike National Park, southern Patagonia, Chile.

Project work

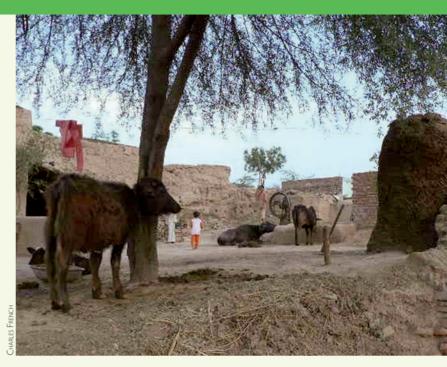
Field and laboratory work has continued for a number of projects that were begun last year namely at the Mesolithic-Neolithic settlement site of Vlasac in the Danube Gorges with Dr Dušan Borić, at the Early Bronze Age settlement site of Dhaskalio in the Cycladic islands of the Aegean under the direction of Prof. Colin Renfrew, at the later Bronze Age settlement and field-system site of Choenan in South Korea with Heejin Lee, and in the Durrington Walls and Stonehenge area of the Salisbury Plain with the Sheffield and Bournemouth University teams. At the latter, investigations of the Avenue leading to Stonehenge has suggested that this twin bank and ditch monument may have taken advantage in its sighting of a natural geological rise covered in periglacial stripes in the area immediately downslope of the Heel Stone.

New fieldwork has begun on early Holocene sites in southern Patagonia with Manuel Arroyo-Kalin, Dr Rob Scaife (Southampton) and Chilean colleagues. Team members made a reconnaissance of two Early Holocene cave sites (Chingues and Fell's Cave) in the Pali Aike National Park of southern Chile. Both sites contain *in situ* deposits of late glacial/early postglacial mega-fauna associated with early human activity.

New fieldwork with Prof. Chris Scarre (Durham). Prof. Ian Bailiff (Durham) and Dr Rob Scaife has started on the island of Herm in the Channel Islands (funded by the AHRC and Ogden Trust). Here an early Neolithic landscape with numerous chambered tombs is preserved across the whole northern third of the island. buried by later sand dune systems. Initial augering survey by Charles French, Manuel Arroyo-Kalin, Gary Marriner and Rob Scaife has indicated that a loess-rich, woodland soil existed over a wide area of this island in Mesolithic-Early Neolithic times. A first excavation season this summer has revealed strong evidence of fifthmillennium BC occupation in close proximity to a number of small chambered tombs, suggesting intensive exploitation of this island landscape in the early Neolithic period prior to burial by sand dunes.

Two projects in India are both investigating the rise and fall of Harappan urban sites in northwestern India, in Gujarat with Dr Ajith Prasad (Baroda) and Prof. Marco Madella (Barcelona) (Spanish-government funded) and in Udar Pradesh and Harvana provinces with Dr Cameron Petrie and Prof. Ravindra Singh (Banarus Hindu University) (British Council/UKIERI funded). Crucial to this is an understanding of the palaeo-river and dune systems of the early to mid-Holocene with respect to the Harappan agricultural landscape. Many of the Harappan sites themselves are now poorly preserved, largely as a result of guarrying for mud-brick manufacture and the encroachment of modern villages, but their direct association with now-filled river channels and reworked dune systems suggests that both climatic, hydrological and human factors may be involved in both the flourishing, demise, erosion and burial of the settlement remains of this society.

A number of geoarchaeology research students gave presentations at the World Archaeological Congress in Dublin last July. This included Heejin Lee on the recognition of wet rice agriculture in South Korea and Federica Sulas on ecological histories in the Aksum region of highland Ethiopia, with Manuel Arroyo-Kalin organizing a session entitled 'Landscape legacies' on the interconnection between landscape, ecology and people as well as giving a paper within that session on his geoarchaeological study of dark earths in the Amazon Basin. Heejin Lee also gave a paper to the Archaeological Soil Micromorphology Working Group Meeting in Frankfurt, and Mary Ownby gave a paper on the petrographic analysis of Middle Bronze Age Canaanite Jars from Memphis, Egypt, at the Sheffield Petrography of Archaeological Materials Conference. In addition, the laboratory director gave the keynote address at a conference celebrating the opening of the first archaeological science Masters course in Australia at the Australian National University in Canberra, in February.



A modern farmyard at Chimun, Haryana, cut into the Harappan tell deposits.

STAFF

Dr Charles French (*Laboratory Director*)
Julie Boreham
(*Senior Research Technician - until 20 March 2008*)
Tonko Rajkovaca
(*Senior Research Technician - from 1 September 2008*)

Post-doctoral Researchers

Dr Lenka Lisa (Marie Curie Fellow)

PhD Research Students

Manuel Arroyo-Kalin Robyn Inglis Heejin Lee Ivy Owens Mary Ownby Clea Paine Miranda Semple Federica Sulas

MPhil Archaeological Science Students

Boriana Boneva Alejandra Diaz Jane Sanford Sean Taylor Alyssa Trimmer Jingwei Wu



George Pitt-Rivers Bioarchaeoloy Laboratory

Our laboratory members undertake research into a wide variety of bioarchaeological remains to answer a great range of questions regarding past human societies. The most well known remains are the charred seeds and fruits that form the core of our evidence for foodways. This year, we have been collecting and studying charred food remains from as far afield as Italy (Rachel Ballantyne), Iceland (Dawn Mooney), Russia (Alex Pryor and Lenka Lisa), Siberia (Lindsey Friedman and Jingwei Wu), China (Xinyi Liu), Peru (David Beresford-Jones) and Argentina (Lauren Cadwallader). Flotation methods were applied for the first time to Neolithic sites in Ukraine (by Giedre Motuzaite Matuzeviciute). Here are some of the ways we have been expanding the range of archaeobotanical analysis this year.



A number of our studies have explored the fuels in use at different times and, in the case of charred wood, have used the fuel fragments themselves to better understand the environments in which those fuels were



Excavations underway at the Gard settlement (lower right), southern Bug River, Ukraine.

Below (left) Excavations at the Buran Kaya IV site, Crimea, Ukraine; (right) Giedre Motuzaite Matuzeviciute undertaking flotation for macrobotanical plant remains at Novoselovka in eastern Ukraine.





used. Sean Taylor's analysis of the tree rings within charcoal from the Dolní Věstonice hearths has revealed the extreme autumns and winters experienced by Palaeolithic mammoth trackers. The fuel situation was quite different in Harappan Gujarat (Carla Lancelotti) and Norse Iceland (Dawn Mooney), where archaeobotany instead elucidates the use of dung and seaweed, respectively, as fuels. Another aspect of thermoregulation is clothing, and we were pleased to welcome Judith Cameron from ANU to further her groundbreaking work on ancient textiles.

Archaeobotany beyond agriculture

In addition to investigating farming sites, as noted above in South America and North China, and urban trading foci such as the Port of Rome, we are becoming increasingly interested in fisher-hunter-gatherer communities and their plant diets and ecologies. Lindsey Friedman has continued our programme of flotation at the seal-hunting Neolithic sites on the fringes of Lake Baikal, and Jingwei Wu has examined and identified seeds and fruits recovered from last year's flotation. The Kostenki project, central Russia, has generated some unique plant assemblages from early northward episodes of modern human movement.



Bullock-cart carrying water for flotation, Kanmer (Gujarat, India).

Primate archaeobotany

Carla Lancelotti was pleased to work with Caroline Phillips (LCHES) in a pilot study to apply phytolith analysis and other archaeobotanical techniques to primate faeces, which has considerable potential for broadening our understanding of the evolution of foodways.

STAFF

Professor Martin Jones (*Laboratory Director*)
Dr Liliana Janik (*Laboratory Manager*)

Post-doctoral Researchers

Dr David Beresford-Jones Dr Alison Blyth

PhD Research Students

Rachel Ballantyne Brigitta Berzsenyi Carla Lancelotti Xinyi Liu Dawn Mooney Giedre Motuzaite Matuzeviciute

Affiliated Researchers

Lauren Cadwallader Dr Alan Clapham Lindsey Friedman Alex Pryor Anne de Vareilles Jingwei Wu

Experimental archaeology? Cooking roti on an open-air fireplace, Kanmer (Gujarat, India).



Grahame Clark Zooarchaeology Laboratory

Dr Preston Miracle continued with field research in the Balkans and southern India in 2007–2008. In the Balkans, he returned for a second season of work on faunal assemblages from the site of Vela Spila on Korčula Island (Croatia). This year he focused on Late Mesolithic faunal assemblages characterized by the systematic butchery and consumption of red foxes and small-sized fish — the latter are already represented by over 30,000 bones! In southern India he examined Pleistocene faunal assemblages from the Kurnool District from sites with such prosaic names as 'Cathedral Cave' and 'Charnal House Cave' excavated by Dr Michael Petraglia's (LCHES) team. He continued with work on Mousterian faunal assemblages from Vindija and Mujina Cave, Croatia. He continued to work with Dr Dušan Borić on the Leverhulme Research Programme 'Changing Beliefs of the Human Body', and results of this research were presented at a symposium that he organized at the Annual Meeting of the American Anthropological Association in Washington, DC.

Professor Tony Legge (Leverhulme Senior Research Fellow) continued work on the Tell Abu Hureyra project in which the entire identification and measurement data bases from the site are to go on-line. Recent work has concentrated on the less common mammals; in particular the Carnivora and Reptilia. Analysis is complete with regard to the fauna of the



Danilo-Pokrovnik project in Croatia, and the first reports are prepared for publication. Elsewhere, at the invitation of Professor Barry Kemp, he worked at Tell el Amarna during the 2008 season where he identified Bovine laminitis in cattle remains. This is caused by feeding cattle a high-carbohydrate diet — a scene represented in tomb and temple art. It is very probable that this is the result of the force-feeding of cattle for sacrifice. There are also curious and rather frequent serious projectile wounds on the bones of domestic pigs — the wounds then being largely healed. This is evidence for faux hunting in which the pigs were pursued as quarry while in enclosures then returned to the sty for recovery.

Dr Ryan Rabett undertook fieldwork in Libya (March–April 2008) as part of the Cyrenaica Prehistory Project (Dir. G. Barker), Malaysia (May 2008) and Vietnam (June–July 2008), where he led the third season of excavations by the Tràng An archaeological project (see p. 37). He is now completing a book entitled *The Great Journey: Early Human Dispersal and the Emergence of Behavioural Modernity* resulting from research funded by the John Templeton Foundation

Dr 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.' He is currently developing a technique to study patterns of relatedness among horse populations through analysis of the morphology of their teeth. He has also directed a pilot project, funded by the British Academy and McDonald Institute, investigating the colonial archaeology of Mauritius (see p. 33).

We have been very glad to welcome Dr Jen Harland to the laboratory. Jen has been working with James Barrett on the final year of the Medieval Origins of Intensive Sea Fishing Project funded by the Leverhulme Trust.

Our hats are off to Dr David Orton who submitted and defended his PhD dissertation on wild and domestic animal use in the Neolithic

Foreground: Krish Seetah and Natalie White working on food 'offerings' from a Roman grave in Baldock. Background: Tony Legge processing faunal data from Abu Hureyra.

Central Balkans. He also finished the analysis of the fauna from the Lismore Landscape Project and continued to work on animal bone assemblages from the West Mound excavations directed by Dr Peter Biehl at Çatalhöyük. At the end of August 2008, he took up a post-doctoral position at the State University of New York, Binghamton, where he will be working on a Neolithic (Halaf period) faunal assemblage from southeastern Turkey.

Natalie White has been concentrating on writing up her PhD (AHRC funded). Nevertheless, she also found the time to deliver a paper at the Nottingham 'Food in Archaeology' conference on 'Meat and Mourning in Late Pre-Roman Iron Age Dorchester'. Earlier in the year she analysed a number of samples of animal bone from burial contexts in two Roman period cemeteries from Baldock under the supervision of Krish Seetah.

Patrick Skinner (AHRC funded) completed his second year of research on human—bear interactions during the Pleistocene, with a focus on the Middle and Upper Palaeolithic periods (roughly 60–20 kya) in the Czech Republic. In January 2008 he co-organized (with Rebecca Farbstein) a one-day conference held at the McDonald Institute on OIS-3 in Central Europe. He also presented results of his PhD research at the 6th World Archaeology Conference in Dublin.

Paul Ewonus completed his second year of PhD research (funded by SSHRC, Canada and Cambridge Commonwealth Trust) on prehistoric social landscapes of the southern Strait of Georgia region of the Pacific Northwest Coast. He undertook zooarchaeological lab work at the University of Victoria in Canada, training in archaeogenetics under Dr Mim Bower's supervision in Cambridge and participated in fieldwork in Orkney, Scotland as part of Dr James Barrett's dig at the Brough of Deerness Norse settlement. Paul also presented a paper at the 6th World Archaeological Congress, Dublin and gave invited presentations at the Universities of Sheffield and Cambridge.

David Kingle completed his second year of PhD research on changes in human health between the Roman and Saxon periods in England. During the past year he conducted complete

skeletal analyses on c. 400 Roman and Saxon period skeletons. In July he helped excavate rich 6th Merovingian burials at Vendeuil-Caply, Picardy France, and presented papers at the 2nd annual Post Roman Early Medieval Archaeological Student Symposium and the Archaeological Institute of America 2007 Annual Meeting.

Recipient of a three-year NERC studentship, Chris Stimpson has completed the second year of research on the bird and bat bones of the Niah Caves, Sarawak, culminating in two and a half months in the field. A major outcome of his research has been the collation of an unparalleled record of the cave-dwelling bat communities of Niah of the last 46,000 years. This record is a powerful tool for characterizing the nature of the local environments around the caves during periods of human occupation and for addressing questions of the presence or persistence of lowland tropical rainforest in northwestern Borneo during the late Pleistocene.

We are very pleased to welcome two new PhD students to the laboratory. Pia Spry-Marques (Cantab. 2005) has come back to Cambridge, after taking an MSc in Zooarchaeology at York, to start a PhD on Late Pleistocene faunas from the Eastern Adriatic region (particular focus on Vela Spila, Croatia). Jane Sanford completed the MPhil in Archaeological Science in 2008 with a dissertation entitled 'Resnik: Diet and Status in a Dalmatian Hellenistic Colony'. She is now starting a PhD on the impact of Hellenistic colonization on food practices in Dalmatia.

STAFF

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

Post-doctoral Researchers

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

PhD Research Students

Paul Ewonus Jane Sanford
David Klingle Patrick Skinner
Lindsay Lloyd-Smith Pia Spry-Marques
Andy Mclaren Chris Stimpson
Stephanie Meece Natalie White
David Orton



Glyn Daniel Genetics Laboratory

The interface between genetics and archaeology is one of the fastest-changing growth areas in archaeological research. The two principal foci of that research concern evolutionary change in humans and their close relatives, and evolutionary change in the plants and animals they exploit. The current emphasis of the laboratory is in the latter area, with research being conducted into the exploitation in the past of horses, wheat, barley and millet. We work in close collaboration with a range of institutes to examine ancient, historic and contemporary DNA sequences. Each of these projects is closely integrated with conventional zooarchaeology, archaeobotany and isotopic analyses.

Plants

Research on plant genetics includes two important investigations. Firstly, Dr Diane Lister is involved with 'The Domestication of Europe' project (funded by the NERC and the Isaac Newton Trust) concerning the genetic analysis of European emmer wheat and barley. The spread of early agriculture can be followed through genetics as well as archaeology. By bringing together these two disciplines we have greatly enhanced our understanding of the early establishment of agriculture in Europe, and of the history and genetic diversity of some of the first plants to be domesticated by man. Both modern European 'landraces' (traditional varieties

historically associated with a particular locality) and historic specimens were included in this study. Dr Lister's research on historic specimens has shown the value of historic genetic data in filling in geographical gaps in the distribution of modern landraces and in producing geographical patterns of genetic diversity with greater clarity than can be obtained with modern material. Diane, and PhD student Hugo Oliveira now continue this work, expanding it with case studies from north of the Silk Road, the Iberian peninsula and North Africa.

Historic barley specimen from the Museum of Natural History, Wroclaw University, Poland.

Secondly, Wellcome Trust fellow Dr Harriet Hunt is researching the genetic diversity of broomcorn millet and its implications for the origins of this pan-Eurasian crop. This forms part of the larger East–West Millet Project within the Institute, led by Martin Jones, and has also been supported by Prof. Chris Howe (Dept. of Biochemistry). Millet has been cultivated for at least



Millet plants in the Botanic Garden.

8000 years in China, and was an important crop across temperate Eurasia. Its probable origin in East Asia distinguishes it from other components of the European Neolithic agricultural package that arose in the Near East, and suggests early contact between societies along the routes that later became the Silk Road. Millet can be grown in harsh, semi-arid environments that are otherwise marginal for agriculture. Studying the history, cultivation and evolution of this crop helps in understanding the interaction between early farmers and their environment, and is relevant to predicting human responses to contemporary climate change.

This year we have also continued with numerous sub-projects which focus on different genetic marker systems. For example, we are using microsatellite markers in collaboration with Dr Christian Tobias, US Department of Agriculture, Western Region Research Center and Dr Yong-Jin Park, Konkuk University, Seoul, to analyse the diversity of broomcorn millet landraces from across Eurasia. Another subproject focuses on waxy or 'sticky' starch varieties in cereals, many from the Far East, where they are used in particular dishes. Chinese classical texts provide evidence for both waxy and normal broomcorn millet 2000 years ago. We have used modern reference material, from the collections of the Vavilov Institute, St Petersburg, to uncover an elegant 'genetic switch' between sticky and non-sticky starch. This project has been possible through a collaboration with Dr Kay Denyer (John Inner Centre, Norwich).



Animals

Research on human–animal interaction focuses on two major projects. The first, 'From Chariotry to Equestrian Pastoral Nomadism: the Evolving Role of the Horse in the 2nd and 1st Millennia BC', is a multidisciplinary project (PI - Prof. Graeme Barker) which closely links zooarchaeology, palaeopathology and archaeogenetics to understand the role of the horse in central and east Asia. The core focus of the archaeogenetic aspect of this project, led by Mim Bower, is the use of population genetics, both of living horse populations and of archaeological horse remains, to see if any genetic patterns in our data can be linked to prehistoric horse husbandry. We have travelled throughout central and east Asia collecting hair samples from isolated populations of horses, extracted DNA from these and have sequenced a fragment of the mitochondrial control region. We are now expanding our data set to include a panel of nuclear DNA markers including the Y chromosome (to explore stallions' history) and the X chromosome (to explore mares' history). Fieldwork took our team to Kyrgyzstan, Russia, Georgia, China, Hungary and several locations in the UK. Kyrgyzstan was particularly interesting because we were privileged to be accompanied by Equine Ethnographer, Dr Rebecca Cassidy (University of London), who collected ethnographic data in the form of interviews, photographs and film, on behalf of our adjunct project on the ethnography of horse-human relationships in this region. We welcome Research Assistant, Natalia Vibla (funded by the Isaac Newton Trust) who will be collecting ethnographic data on horse husbandry in order to help us interpret our data. The coming year will focus on data analysis and on the generation of ancient DNA data from archaeological horses from both ritual, burial



contexts and from settlement contexts in order to help us date the patterns in our genetic data.

Street pony in China.

Dr Rebecca Cassidy (Goldsmith's, University of London) interviewing a group of young Kyrgyz horsemen at the Festival of the Kyrgyz Horse, Barskoon, Kyrgyzstan, November 2007.



The second project, 'Genetic Variation in Historic Thoroughbred Horses', explores the genetic history of the thoroughbred horse and the origins of breed development in the seventeenth century. A core focus is to enable the analysis of genetic traits in archaeological materials, both phenotypic, i.e. what an animal looks like, but more importantly, genetic disease associated SNiPs. There are a number of genetic disorders which affect elite thoroughbreds and we are interested in fixing these disorders to a particular generation of horses, by tracing them through past elite thoroughbred lines, using ancient DNA from historic collections. This project has now come to a close and we are preparing a number of publications from the exciting results we have. We have isolated phenotypic trait data from historic animal specimens, by studying a coat colour gene which selects for chestnut or bay coat colour in horses.

The horse projects are funded by the Leverhulme Trust, Horserace Betting Levy Board and the Isaac Newton Trust. Other components of this research are reported on p. 10 (Dr Krish Seetah: biometric morphometrics) and p. 35 (Dr Marsha Levine: zooarchaeology).

STAFE

Prof. Martin Jones (*Laboratory Director*) Dr Paula Ware (*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



The Dorothy Garrod Isotope Laboratory

In its fourth year, the laboratory has continued to expand with new additions in the form of PhD students and a project technician. Archaeological projects are as diverse as ever, spanning the full chronological range, including studies of diet, mobility and climate in the Palaeolithic, ethnicity and migration in post-Roman Europe, and diet and animal husbandry in Iron Age Britain, amongst others.

Dr Rhiannon Stevens was recently awarded a Royal Society Dorothy Hodgkin Research Fellowship. Her four-year research project investigates the response of humans to rapid climate change. She is using oxygen, carbon and nitrogen isotope analysis of animal bones and teeth from European Palaeolithic archaeological sequences to reconstruct the local climatic conditions. This will allow us to address archaeological issues such as what local environmental conditions were experienced by early modern humans and how did they adapt to these conditions? Did cultural and technological innovations result from novel problem-solving in the face of climatic and environmental stress?

Dr Susanne Hakenbeck, a JRF at Newnham College, continues her work in the stable isotope lab. Her research focuses on the social changes during the late Roman to early medieval transition on the European continent and in Britain. She is interested in migration and shifting identities in early medieval Bavaria, as reflected in changing burial practices. She is using a multi-disciplinary approach, drawing on mortuary studies, a detailed knowledge of the material culture of the period and on stable isotope analyses of skeletal remains to consider the history and theoretical basis of concepts such as migrations, ethnicity, race, typology and archaeological cultures.

Dr Tamsin O'Connell has continued work on an EU-funded project jointly with the Université di Roma 'Tor Vergata' and the Museo Pigorini in Rome and the Department of Classics in Cambridge. Isotopic analyses were conducted on skeletons from the late Roman Velia cemetery in central Italy, and the results from this project have been submitted for publication. Dr Tamsin O'Connell is now on maternity leave and will be returning to the laboratory in June 2009.

Catherine Kneale, who formerly worked for the Forensic Science Service, has joined the isotope laboratory as a project research technician. She is working on Dr Tamsin O'Connell's Wellcome Trust funded project entitled 'Changing Levels of Protein Intake: a Critical Issue for Human Palaeodiets'.

Xinyi Liu is currently writing up his PhD thesis which examines the onset and spread of millet agriculture in China. Emma Lightfoot entered the second year of her AHRC-funded PhD working on post-Roman period in the Balkans, specifically Croatia. Emma's work aims to elucidate subsistence changes that occur as a result of possible population migrations. Lindsey Friedman and Alex Pryor began their PhD research. Using isotopic techniques Lindsey is investigating dietary changes associated with the Jomon-Yayoi cultural transition in Japan. She is particularly interested in dietary differences between coastal and inland populations. Alex's research focuses on the human response to climate change. He is using oxygen isotope analyses of animal teeth to investigate whether Upper Palaeolithic sites across northern Europe and western Russia were occupied during cold



or warm periods. He will compare the climatic reconstruction with the archaeological evidence for behavioural adaptations.

This year the laboratory has had numerous visitors who have been working on collaborative isotope projects. Richard Madgwick from the University of Cardiff has been working on animal husbandry in South Uist, Scotland. Michael Dekker from the University of Amsterdam conducted research for his masters thesis. His research focused on investigating seasonal climatic variations during the Pleistocene/Holocene Transition at the site of Pupićina Peć in Croatia through oxygen isotope analysis of red deer teeth.

Three masters and two undergraduate students undertook isotope-based dissertations this year, with projects focusing on dietary reconstruction in Neolithic Jordan, Iron Age Kent and the Mesolithic-Neolithic transition in Croatia. amongst others. Four undergraduate students undertook isotope-based projects, with topics including the identification of slave burials in Cape Verde and climate reconstruction at Banwell Bone Cave (Mendips). Our ongoing collaboration with Tim Clutton-Brock's Large Animal Research Group in Zoology has resulted in Zoology undergraduate students undertaking ecology-based isotope projects within the lab. Sarah Rothwell isotopically analysed wool from Soay sheep that lived on the Isle of St Kilda in order to assess the influence of nutritional stress





Dr Rhiannon Stevens preparing a lock of hair for isotopic analysis.

on an animal's isotopic signatures. The findings from these methodological development projects have implications for isotopic investigations within archaeological contexts.

STAFF

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

PhD Research Students

Lindsey Friedman Xinyi Liu Emma Lightfoot Alex Pryor

Visiting Scholars

Michael Dekker Richard Madgwick

Alex Pryor (far left), Dr Catherine Kneale and Emma Lightfoot working in the laboratory.



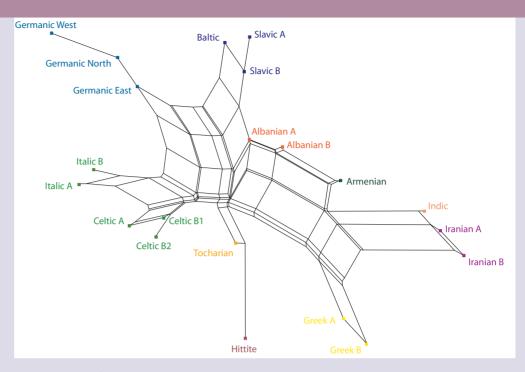
Languages and Origins of Europe

COLIN RENFREW AND PAUL HEGGARTY

This cross-disciplinary project brings to the McDonald Institute a specialist in comparativehistorical linguistics, to promote interaction between that discipline and archaeology, in order to combine their independent windows on the past into a more coherent, holistic view of prehistory. Dr Heggarty's primary casestudy is on the Indo-European language family, particularly its main European branches. He collects new data bases on the dialect continuum

structures of Germanic, Romance and Slavic, as potential models for the earlier divergence of Indo-European-speaking populations. From these data his new analysis methods produce quantifications of linguistic divergence, as input to phylogenetic analysis algorithms. Outputs are then compared with those from a range of wider and deeper-time Indo-European language data bases.

In 2008 he has completed work to collect, edit and process our Germanic data (recordings and transcriptions online at www.languagesandpeoples.com/Germanic),



NeighborNet of relationships between early Indo-European languages.

presented our quantitative results at a number of venues, and begun writing up our first articles on this. Fieldtrips in 2008 have completed our other major data base, on Romance, now under processing and analysis, and begun a third smaller data base on Slavic. Work is in progress also on a final, separate study on Romance lexis.

This project, and the related archaeology and linguistics in the Andes research (see p. 39 of this report) has resulted in articles in the *Cambridge Archaeological Journal* in 2007 and 2008, another forthcoming in *Current Anthropology* and several more to emerge from

a string of invited papers at conferences, workshops and seminars across Europe.

Funding is provided through a three-year Leverhulme Trust award.



Sample page from our online data base on Germanic languages and dialects.



The Brough of Deerness and the Viking Age Diaspora

JAMES BARRETT

McDonald Institute for Archaeological Research

Adam Slater

Cambridge Archaeological Unit

This summer new excavations began at the Brough of Deerness, an enigmatic Viking Age site in Orkney, Scotland. The foundations of c. 30 buildings and a church can be seen on the grass-covered top of this rock stack, despite the fact that it is only 80 m wide and surrounded by 30 m cliffs that drop vertically to the sea. Excavations in the 1970s by Christopher Morris revealed that the chapel had two phases, separated by a layer containing an Anglo-Saxon coin minted between AD 959 and 975. It thus represents one of the earliest known churches in the Scandinavian North Atlantic. However, no excavation of the associated settlement has previously been possible.

This year we conducted a five-week trial excavation to clarify the preservation, chronology and function of the settlement. Two buildings and associated external deposits were investigated by open-area excavation. House 20 proved to be a long-lived domestic dwelling of typically Scandinavian style, probably last used in the eleventh century. House 23, a similar building, was dug into midden deposits of earlier



Eleventh-century glass bead from House 20.

date which contain much animal bone. The buildings and associated finds imply that the site was a long-lived domestic settlement despite its exposed location. It probably served as a chiefly stronghold combining defensive potential with dramatic command of the maritime landscape. Continued excavation will help illuminate the relationship between power and religion during the Scandinavian diaspora of the Viking Age.

The research was supported by the McDonald Institute for Archaeological Research, the Orkney Islands Council, the Royal Norwegian Embassy (London) and the Royal Norwegian Consulate General (Edinburgh) — with assistance in kind from Historic Scotland, Orkney College, the Orkney Museum and Julie Gibson, the Orkney Islands Archaeologist.



The Brough of Deerness under excavation in 2008.

House 20 under excavation.

The Thwing Project

MARTIN MILLETT

With support from the McDonald Institute a first phase of fieldwork and excavation on the Iron Age and Roman landscape at Thwing, in the Yorkshire Wolds, was completed in 2008. This examined the evolution of part of a complex ladder settlement, with especial focus on a Roman period house which was the main residence within an enclosure system. Adjacent yard surfaces and the pre-building sequence were also excavated. Deposits from each phase were intensively sampled in order to establish more about the agrarian economy of this High Wolds landscape, often characterized as dependent on pastoralism.

The excavation of the pre-buildings deposits involved cutting a section through the primary Iron Age ditch around which the ladder settlement had evolved. Related features produced a bronze scabbard chape and a fragment of iron blade. Later enclosures cutting across the Iron Age ditch contained rich midden deposits of earlier Roman date, pre-dating the construction of the stone house probably in the third century AD. Initial assessment of the material from these Iron Age and earlier Roman deposits strongly indicates a mixed farming

economy rather than one focused on specialist pastoralism.

The Roman house was a finely built and substantial construction, initially rectangular in plan. It survived remarkably well with in situ rubble protecting the floor levels so that architectural details — including door ways — were preserved. Subsidence at the front necessitated its remodelling, with the main eastern wall being moved back to create a 'winged-corridor' plan. The interior was divided into three rooms, a main central hall, with smaller rooms accessed from it at either end of the building. The larger, at the south, was apparently a reception room. Later remodelling of the frontage resulted in further narrowing of the main rooms. In this phase the south room was decorated with painted wall plaster and was heated by a fireplace with a chimney stack — and a decorated chimney pot which was recovered from the destruction rubble. In the final phase the pavilion rooms on the front of the building were demolished with that to the south covered by a midden rich in sea-food remains. Probably at this stage an iron-smelting furnace was constructed within the building, close to the door into the southern room (which was apparently still in use). Preliminary analysis suggests that both ore and fuel were brought from distant low-lying areas (probably the Vale of

Pickering) for the smelt.

Overall, the evidence from the excavation provides a wealth of new material for understanding the nature of the rural landscape in this remote area of the Roman Empire. Equally, it provides key evidence to challenge a series of assumptions about the use of Roman buildings.

The fieldwork was funded by grants from: University of Cambridge Faculty of Classics, the McDonald Institute for Archaeological Research, the Society for the Promotion of Roman Studies and the Roman Research Trust, to all of whom we are extremely grateful.

Overall photo of the Thwing excavation 2008 with the iron-smelting furnace in the foreground.



Access Cambridge Archaeology

CARENZA LEWIS

During 2007–2008 Access Cambridge Archaeology (ACA), directed by Dr Carenza Lewis working with Catherine Ranson (CAU/ACA), Dan Aukett (ACA) and Jessica Rippengal (Department of Archaeology)

supported by Mary Ownby (MPhil, Cambridge), Mary Chester-Cadwell (MPhil, Cambridge) and Nisha Doshi (BA, Cambridge) expanded its activities, enabling more than 1000 members of the public to engage directly with archaeological research and many more to hear about these experiences second-hand through lectures, local media reports and by word of mouth. Nearly 400 GCSE pupils from disadvantaged and/or nonuniversity-educated backgrounds each spent two days on ACA's established Higher Education Field Academy (HEFA) programme, excavating one of several 1 m square test pits sited within one of twelve rural settlements, before spending a third day in the University of Cambridge analysing their discoveries and getting a taste of life and learning at university. Three new ACA initiatives (community excavation; test-pit digging for autistic adults; and an 'advanced' HEFA course involving a four-day residential programme of landscape archaeology and excavation) and an undergraduate training weekend brought the total number of test pits excavated this year to 159.

Altogether since 2005, more than 400 test pits in 21 different currently occupied rural settlements (CORS) (also including associated settlement components such as outlying hamlets and farms) have now been excavated by members of the public under ACA supervision. In the past, CORS have been neglected by archaeologists in favour of deserted sites, and the HEFA testpitting approach has proved particularly valuable in occupied sites where larger excavations are prevented by the presence of existing settlement, especially in the period between c. AD 850-1600 when documentary and cartographic data are of limited use. The results have demonstrated the potential contribution of the recovered data, both for managing the archaeological resource and for advancing knowledge and understanding



of the development of the rural landscape.
Regarding management of the archaeological resource within CORS, it is significant that in all settlements, the HEFA test pitting has produced new evidence for medieval activity, and in most cases evidence for earlier activity has also been

recovered. Dozens of locations are now known to have been exploited or occupied much earlier (or, in some cases, much later) than has previously been demonstrated. The test pitting has shown that the survival of intact premodern deposits is much more extensive within CORS than has previously been suspected (mostly based on conventional archaeological surveillance of development within occupied settlements): around 25% of HEFA pits revealed undisturbed deposits pre-dating AD 1600.

Detailed evaluation of the test-pit data is still at an early stage in 2008, but it is already clear that the HEFA test-pitting strategy is able to identify chronological and geographical variations in the intensity of activity within areas of CORS. Phased plans showing the spatial development of settlements over time are produced at the end of each phase of investigation, and in a significant number of sites this can be seen to be very different to that which would have been inferred from conventional retrogressive plan analysis and/or earthwork survey. It is becoming clear that the dynamism and volatility of rural settlement in the medieval period may have been greater than has previously been thought.





Archaeology of Occupation

GILLY CARR

Dr Gilly Carr is currently spearheading an entirely new area within Conflict Archaeology, namely, an 'Archaeology of Occupation'. This is based on her fieldwork in the Channel Islands, where she has been examining the archaeology of the German occupation of WWII. This approach takes several avenues of enquiry, including an examination of the changing attitudes towards the landscape of occupation (including the German bunkers and the sites of forced worker camps); the materiality of occupation (including trench art and makedo-and-mend items made by islanders, slave workers, the deported, and German soldiers) and what these tell us about the experience of being occupied; and an examination of the memorialization of the occupation and the heritage industry it has generated.

Shell case engraved by Guernsey internee, Byll Balcombe, in Biberach camp, 1945.



GRAHAM JACKSON

Gilly has also been working with people from the Channel Islands who were deported to civilian internment camps in Germany in WWII. She has been examining the artefacts and artwork made during this period of internment, which came from recycled Red Cross parcel contents. Her research in this field will be the subject of two museum exhibitions in Jersey and Guernsey in 2009 and 2010.



The project is funded by the British Academy and the McDonald Institute.

German bunker in Guernsey.

Rebuilding of the Ferhadija Mosque in Banja Luka, northwestern Bosnia.



Identity and Conflict: Cultural Heritage and the Re-construction of Identities after Conflict

Marie Louise Stig Sørensen

Recent conflicts in Europe, as well as abroad, have highlighted the deliberate destruction of heritage as a means of inflicting pain. The processes involved and thus the long-term consequences are, however, poorly understood. Heritage reconstruction is not merely a matter of design and resources — at stake is the re-visioning and reconstruction of people's identities! This project aims to investigate the ways the destruction and subsequent selective reconstruction of the cultural heritage impact identity formation. The project seeks to illuminate both the empirical and theoretical relationship between cultural heritage, conflict and identity. In particular, it will examine how destruction as well as reconstruction affect notions of belonging and identities at different scales ranging from the individual to the pan-national.

The European Union has awarded a four-year grant to investigate five European case studies (Spain, France, Germany, Cyprus and Bosnia) which will provide historical depth, variation, and different trajectories, while the shared methodologies and axes of investigation will ensure comparative measures are reached. The international, interdisciplinary project will be directed from the University of Cambridge (PI Dr M.L.S. Sørensen, post-doc D. Viejo-Rose). The following questions will be addressed:

- What conditions and ideologies inspire the deliberate destruction of cultural heritage?
- What are the consequences at local, national and regional levels of this destruction, and what measures can be developed to better inform reconstruction processes?



Moravian Gate

MARTIN JONES

We have been exploring foodways and ecology in the renowned Upper Palaeolithic sites around the Moravian Gate in the Czech Republic, bringing together archaeobotany, zooarchaeology and isotopic studies, in the context of a renewed examination of the loess stratigraphy in which they are embedded. While the sampling programmes at Dolní Věstonice and Predmošti have been completed in previous seasons, we had the opportunity this summer to join Russian and American colleagues at the contemporary sites at Kostenki, from which this year we have taken samples for archaeobotanical and isotopic study.

Novel scientific approaches to sedimentary sequences, the animal bones and the charcoal have all provided significant precise insights into the central question of seasonality of these harsh climate occupations, with direct evidence of the intensity of summer and winter seasons in the period when modern humans were expanded northwards across the globe.

The loess stratigraphy is funded by the European Commission (Marie Curie), isotopic palaeoclimate studies are funded by a Royal Society fellowship and excavation and sample collection is funded by the McDonald Institute for Archaeological Research.



Masters student, Sean Taylor, gaining precise measurements of late season ring growth from Dolní Věstonice charcoal.



PhD student, Clea Paine, explaining her analysis of seasonality patterns from Dolní Věstonice micromorph slides.

Palaeolithic Occupation of the Danube Gorges and its Hinterlands

Dušan Borić

It has been suggested for some time now that one of the important routes for the spread of Anatomically Modern Humans into Europe from southwest Asia was the Danube River basin. Yet, apart from several hinterland cave sites presently known in the central and northern Balkans there have been no known Palaeolithic sites on the Danube banks. In 2004 a collaborative initiative between the Departments of Archaeology of the University of Cambridge, UK and Belgrade University, Serbia, discovered a cave site in the Danube Gorges karst region, with Pleistocene levels immediately below a thin layer of Holocene topsoil. Further investigation of this cave, known as Tabula Traiana, in 2005 established that it was inhabited in the early phases of the Upper Palaeolithic relating to the Oxygen Isotope Stage 3 and the early Aurignacian culture.

In 2008 we gathered palaeoenvironmental data relating to the Last Glacial. Micromorphological and palynological samples were taken by Charles French (Department of Archaeology in Cambridge). In the course of excavations, the Upper Palaeolithic occupation was confirmed by a diagnostic Aurignacian retouched lamelle. Below this level, and especially at the entrance area of the cave, a concentration of Middle Palaeolithic finds were discovered, dominated by quartz implements and typical Levallois flakes made of poor-quality chert. These finds suggest that the cave might have been occupied by Neanderthal populations as well. Currently, this is one of few Palaeolithic sites in Serbia and the only Palaeolithic site in the region of the Danube Gorges and its immediate hinterlands.

Funding for this project was received from the National Science Foundation (High Risk Research in Archaeology Award BCS-0442096), the British Academy (Small Grant 40967) and the McDonald Institute for Archaeological Research.



Dr Preston Miracle and Jelena Raičević excavating in Tabula Traiana Cave in 2008.



An Aurignacian endscraper and a lamelle from Tabula Traiana Cave.



Bova Marina

JOHN F ROBB

The Bova Marina Archaeological Project continued the excavation of a Final Bronze Age house at the site of Sant'Aniceto in July 2008.

This year's excavation provided absolute dates of around 1000 BC (calibrated) for the Bronze Age occupation and verified the excellent preservation of the deposits, which we hope to expose in an area excavation as an investigation of the Bronze Age household in future work. Interestingly, Sant'Aniceto also yielded evidence of buried medieval features accompanying the small medieval chapel still standing on the site; one area excavated probably consisted of a small, inaccessibly located monastic cell with frescoed walls.

In June 2008 we pursued the question of underwater geology. It followed up findings in 2005 that the coastline of Bova Marina has been subsiding significantly and that evidence of prehistoric coastline use up to the Bronze or Iron Age may now be deeply submerged. This year, geological dive teams conducted underwater reconnaissance, recovering samples of sediments for analysis and dating, and surface teams used side-scan sonar to construct a detailed topographic map of the sea floor which will be analysed for features such as tectonic faulting. Preliminary results indicate a geologically active sea floor with consequent effects upon coastline use through the ages.

The excavation was led by John Robb (Cambridge), Meredith Chesson (Notre Dame) and David Yoon (American Numismatic Society), with support from the McDonald Institute for Archaeological Research and Notre Dame University; participants also came from Boston University, Indiana University, and McMaster University. Work on the underwater geology was a collaboration between John Robb, Eduard Reinhardt and Joe Boyce of McMaster University, and Helen Farr (McDonald Institute), with funding from the AHRC and collaboration of Dr Fabio Filianoti of the University of Reggio Calabria.



Sant'Aniceto, Bova Marina: excavating the Bronze Age wall. The medieval church on the right represents the site's second use as a small monastic community; excavations have located subsurface remains of medieval pits and a small contemplative cell.

The Final Bronze Age wall: this rear wall of a large round hut was dug partially into the steep slope of the site.

Portus Project

RACHEL BALLANTYNE

The Portus Project is a three-year field investigation into the character and development of Portus, the principal port of imperial Rome for key foodstuffs, marble, glass and metalwork. The second season of fieldwork in 2008 has seen major open-area excavation directed by Prof. Simon Keay and Dr Graeme Earl (both University of Southampton), and field survey on the Isola Sacra directed by Prof. Martin Millett (University of Cambridge). Archaeobotanical investigations are coordinated by Prof. Martin Jones, Ms Rachel Ballantyne (both George Pitt-Rivers Lab) and Dr Evi Margaritis (American School at Athens).

A wide range of scientific techniques are being integrated to address both the use and disuse of the Claudian and Trajanic harbours. This season, deep coring of harbour sediments in collaboration with Dr Jean-Philippe Goiran and Mr Ferréol Salomon (both CNRS, Lyon) has transformed our understanding of the ancient harbours' environments. Evidence for past activities in harbour-side areas and buildings has

also been recovered by flotation sieving of bulk samples from excavated deposits. Finally, deep structural features with waterlogging have been targeted for their timbers and for biological evidence of past use. Dendrochronological samples collected by Prof. Sturt Manning and Dr Thomasz Wazny (both Cornell University) will further contribute to a regional tree-ring sequence by the Wiener Laboratory for Aegean and Near Eastern Dendrochronology.

The project is funded by the Arts and Humanities Research Council and the Soprintendenza di Beni Archeologici di Ostia. Further support has been provided by the British School at Rome, and by the Universities of Southampton and Cambridge.



Deep coring of sediments at the edge of the Claudian harbour, watched by Ferréol Salomon and Evi Margaritis.



The Cambridge Keros Project

COLIN RENFREW AND MICHAEL BOYD

2008 saw the third and final season of excavations at Keros in the Cyclades. Excavations in 2006 and 2007 had concentrated mainly at the site of Kavos, where a special deposit of broken choice material has been systematically excavated. 2008 saw the completion of that excavation and the project move into the study phase. The material includes figurines, vessels and other objects made of marble, all broken prior to deposition and most likely broken elsewhere and brought to Kavos for deposition. The

lack of joining fragments shows that only a part of the broken material was deposited here, while ongoing studies of the pottery and other material shows that material was brought from multiple sources for deposition here.

In 2008 work concentrated on the settlement site of Dhaskalio Kavos, located on an islet opposite the special deposit. Excavation began here in 2007 but in 2008 we excavated a large area in 25 trenches, revealing a substantial building 16 metres long and 4 metres wide, the largest from this period in the Cyclades, within which was discovered the 'Dhaskalio hoard' comprising a chisel, an axe-adze and a shaft-hole axe of copper or bronze. In addition to excavation, survey of the islet showed that



most of its surface — a total of 7000 m² — was occupied during the Early Bronze Age, making this the largest site in the Cyclades.

Specialist studies for the geomorphology, geology, petrology, ceramic petrology, metallurgy and environmental aspects (botanical and faunal remains, phytoliths) are in progress. No more fieldwork is planned prior to final publication of the 2006 to 2008 seasons.

The Cambridge Keros Project is supported by 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.







Rock Art in Northern Russia

LILIANA JANIK

In a rapidly changing environment, such as that in the Vyg River, Karelia, northern Russia where periodically water from the nearby hydroelectric power station is released with great force, covering rock art with water and drowning the vegetation, it is essential to follow changes and alterations in the ecosystem of which rock carvings are part. This research project recorded newly discovered rock carvings and the floral composition of the plant communities growing on and around the rocks. This work produced a data set for further research and will serve as a benchmark for future assessments of rock-art weathering and destruction. In conjunction with British Academy Funding, the elevation of each art site was also established, allowing us to date all White Sea carvings on the basis of isostatic movements.

The project is funded by the British Academy and the McDonald Institute for Archaeological Research.

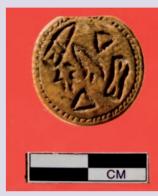


Kilise Tepe, Turkey

NICHOLAS POSTGATE

In July and August of 2008 the Kilise Tepe project continued its three-pronged exploration of how a provincial centre responded to the global events of the end of the Bronze Age and beginning of the Iron Age.

From the time of the Hittite
Empire, excavation of 'Level
Ill' was extended, giving us a
block of four large rooms and
recovering a corpus of ceramics
and environmental evidence
from the Hittite empire period.
An ivory stamp seal from the
floor of the main reception room,
which surfaced in the flotation
tank, bears an official's name
in hieroglyphs and is further



Ivory stamp seal.

confirmation that this was a public building.

Near the end of the Late Bronze Age it was flattened and replaced by the 'Stele Building'. This was on a totally different alignment but may have served the same purpose. Further evidence for its cultic and storage functions came from Room 2 which had a large pottery bathtub at the west end, and most of a single sheep buried under the floor at the other end. The Stele Building was destroyed around 1170 and for the centuries which followed we turn to our Iron Age sounding south of the church (K14). Perhaps the most surprising result of the season was a double ring of concentric post-holes just above Bronze Age walls at the base of the sounding: this looks as though it belonged to a structure 8 m in diameter, and may fit into the pattern of 'post-palatial' architecture observable from Greece to Gordion.

Our work at Kilise Tepe is sponsored by the British Institute at Ankara, as part of its strategic research on the settlement history of Anatolia, and we are much indebted to them for their support in Ankara and London. This season's fieldwork was funded by the Isaac Newton Trust and the McDonald Institute for Archaeological Research, the HASS Faculty in Newcastle, the Institute for Aegean Prehistory, and the National Geographic Society (for the bioarchaeological research).

Excavations at Tell Brak, Northeast Syria

AUGUSTA MCMAHON

Excavations at Tell Brak during March–May of 2008 concentrated on the mid-Late Chalcolithic Period (c. 4300–3600 Bc). This is the period of Brak's initial urban expansion and of key changes in cross-regional social and economic organization.

During the past two years, we have exposed an industrial area at the north edge of the main mound with early fourth-millennium BC evidence for production of ceramics, obsidian and flint tools and decorative objects. As we reach levels of the later fifth millennium BC, we have exposed a less-intensive use of this area, allowing us to reconstruct details of the city's growth. As well as expanding outwards, the city's internal structure became more dense, and the range of industrial activities expanded. This has implications for reconstructions of household economic dynamics, among other aspects of urbanization.

We also invested considerable effort into a sub-mound that marks Brak's northern limits (Tell Majnuna). In 2006, modern construction revealed part of a mass grave there, and we have spent parts of the past two seasons in exploring this complex deposit. We now know that the sub-mound holds at least three mass graves of slightly different dates within *c.* 3800–3600 Bc. These mass graves contain from twelve to several hundred young adults, who had died simultaneously elsewhere as the result of conflict. Each mass grave was followed by dense deposits of industrial rubbish, including quantities of ceramics and hundreds of clay container sealings.

The placement of these graves at the edge of the expanding city has implications for the conscious creation of



Container sealing with impression of stamp showing a human figure killing a lion.



Adult skeletons and animal bones in mass grave, Tell Majnuna.

an urbanized landscape, while the evidence of repeated violent conflict adds colour to our picture of the social stresses that accompanied urbanization.

Funding for the 2008 excavation came from the British Institute for the Study of Iraq, the McDonald Institute for Archaeological Research and the University of Cambridge.

The Cyrenaica Prehistory Project, Libya

GRAFME BARKER

The 1950s excavations by Charles McBurney in the great Haua Fteah cave, situated on the northern shore of the Gebel Akhdar ('Green Mountain') in northeast Libya, revealed a deep (14 m) sequence of human occupation from the Graeco-Roman to Middle Palaeolithic periods. As a result, it is commonly recognized as the most important prehistoric site in North Africa. Occupation in the cave may well go back 200,000 years. In 2007 a renewed programme of archaeological and geomorphological investigation began, directed by Graeme Barker, with the objective of improving understanding of the cave's occupation sequence and, combined with fieldwork in the landscape, of the history of landscape change and human responses to it.

In the second (2008) season of fieldwork we removed the McBurney backfill to a total depth of 7.5 m below the present ground surface, the depth at which two human mandibles were found in the 1950s excavations. Reconnaissance at the Hagfet ed-Dabba established that the sediments associated with the Upper Palaeolithic 'Dabban' industry were more or less entirely removed by the McBurney excavation. Exploratory excavations in the Hagfet al-Gama, a coastal cave west of the Haua Fteah, found evidence of Mesolithic, Neolithic and Hellenistic occupation. The geomorphological fieldwork identified rich sequences of later Quaternary deposits (marine, colluvial, alluvial, aeolian) with the potential to provide significant results regarding the history of climate and environment in the region. Archaeological survey around the Haua Fteah





Haua Fteah cave looking south.

indicates that the variability of the surface lithic evidence appears to reflect real differences in past human behaviour and use of the landscape and not just post-depositional taphonomic processes. The initial results from the study of botanical remains, both macroscopic and microscopic, obtained in the 2007 season at the Haua Fteah confirm the potential of the site to yield a rich suite of materials to inform on climatic and environmental change, and on human activities in the cave. Fifty years after the extraordinary pioneering work of McBurney and his colleagues, the new work is demonstrating the continued potential of the Haua Fteah's unique occupation sequence and the multi-period 'human landscapes' around it to transform understanding of early human societies in North Africa.

The 2008 fieldwork was funded by the Society for Libyan Studies and the Leakey Foundation, and the project is also grateful to the NERC/AHRC ORADS committee for funding to date a suite of radiocarbon samples at the Oxford Radiocarbon Laboratory.

Left: Flotation of sediment samples from the Haua Fteah for botanical remains.

Right: Sampling the exposed McBurney sections.



Middle Stone Age of the Lesotho Highlands

BRIAN A. STEWART

This project builds on the pioneering 1970s work of former Cambridge archaeologist, Pat Carter. Highland Lesotho is home to a dense concentration of Middle Stone Age (MSA) occupation evidence in the form of both rockshelter deposits and open-air stone tool scatters. This inland, high-altitude research location provides a significant counterpoint to sites along the Cape coasts, towards which a heavy geographical research bias exists. The principle project aim is to use lithic assemblages at key excavated sequences to chronologically diagnose open-air scatters and so map changing landscape use through the latter half of the Upper Pleistocene. Integrating these data with those documenting palaeoenvironmental and subsistence changes, we can hopefully begin to understand how fluctuations in human settlement choices reflect responses to changing environmental, economical and perhaps social stimuli.

The first phase involves excavations at two large rockshelters, Melikane and Sehonghong, to be followed by surveys focused on the deeply incised valleys surrounding each. The first field season (in July and August 2008) saw a 2 x 3 metre trench opened at Melikane, a large shelter situated a few hundred metres above the valley floor on the south side of the Melikane River, a tributary of the Sengu (Orange). The shelter is one of thousands scoured into a thick layer of sandstone that outcrops extensively throughout the Maloti-Drakensberg Mountains, the socalled Clarens Formation. For tens of thousands of years these overhangs sheltered huntergatherers, the porous sandstone walls forming ideal surfaces on which to paint (Melikane itself is particularly famous for its ethnographically informed Bushman rock paintings).

Recently yielding Lesotho's oldest radiometric (OSL) date (80 kya), Melikane contains a well-stratified cultural sequence extending from the historical period to likely 100 kya+. An immensely rich MSA lithic inventory was recovered.

The interior of Melikane Rockshelter (before the July–August 2008 excavation).



Rugged, heavily dissected landscape typical of the Maloti-Drakensberg Mountains.

Samples were taken on which to perform charcoal, phytolith and isotopic analyses for palaeoenvironmental reconstruction. The MSA component consists of episodic occupation levels spanning Marine Isotope Stages 4 and 3, both key phases in the evolution of behavioural modernity, and includes important MSA II, Howieson's Poort, MSA III and Middle to Later Stone Age transitional industries. The site thus holds unique potential for shedding light on how some of the world's earliest cognitively modern humans adapted their technologies and societies to ecological habitats distinct from those known ethnographically in sub-Saharan Africa, such as the Kalahari Desert. Analyses in this direction are now underway.

The project is funded by the McDonald Institute for Archaeological Research and the British Academy.



A Bridge to Canaan

BETTINA BADER

Bettina Bader's research focuses on ancient Egypt. The project analyses archaeological finds within a settlement of the Late Middle Kinadom (c. 1800–1700 BC) in the northeastern Nile Delta. Modern Tell el-Dabca lies at the site of ancient Avaris that was to become the capital of the 15th Dynasty. The settlement was inhabited by non-Egyptian people and thus affords the chance to study an element of non-Egyptian population within an Egyptian context. Tombs show that Egyptian as well as Levantine/Middle Bronze Age traditions were intertwined, but the finds in the settlement do not reflect this situation. The bulk of the material culture follows Egyptian traditions. Amphorae and jugs highlight trade relations in the ancient Mediterranean, but cannot be used to indicate the place of origin of the non-Egyptian inhabitants of Avaris. However, vessels like dishes and bowls, also locally imitated, may soon provide a clearer idea of the origin of the settlers, because open vessels are not thought to be normal trading commodities.

Funding for the project is provided by the European Commission by means of the Marie Curie Actions Programme that awarded an Intra-European Fellowship.



View of ancient Avaris under modern cultivation.

The Ancient City of Amarna

BARRY KEMP

Over the last year the investigation of Akhenaten's city pursued a broad programme of excavation, survey and on-site study. At a large cemetery for the ordinary people excavation added to the picture of short, hard lives and injuries, probably exacerbated by an epidemic that is recorded in Hittite documents as originating in Egypt. It also added to the evidence for how people reacted to the new religion when facing the need to arrange burials. Amongst the finds were the remains of a coffin for a woman, named Maiai, painted with texts and scenes.

With support from the Cambridge Templeton Consortium an investigation into the religious landscape of Amarna has led to preparation of material that will launch the Amarna Virtual Museum (being developed in conjunction with the University of Arkansas). The study of ancient technology has also been part of the regular Amarna programme. Current research has centred on the experimental re-melting of metals and production of faience using replicas of excavated kilns.

The Amarna Project is funded by a range of sources channeled through the Amarna Trust, a charity registered in the UK. Web sites are www.amarnaproject. com and www.amarnatrust.com.



The South Tombs cemetery, Amarna, Spring 2008.





Suakin Project: Archaeological Study and Conservation at a Port on the Red Sea, Sudan

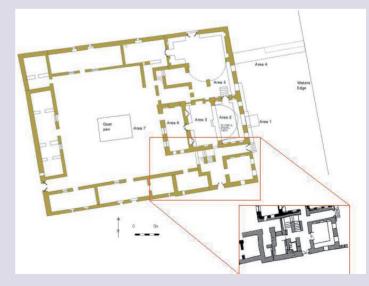
Laurence Smith and Michael Mallinson

Suakin was the main port for Sudan from the later fifteenth to early twentieth century, with trade contacts extending to South and East Asia. The Project is carried out under the Sudanese National Corporation for Antiquities and Museums and the Red Sea State, including personnel from the Universities of Cambridge, Ulster, London (SOAS) and Khartoum and Headland Archaeology. Work continued on several sites in 2007. Near the Beit el Basha a trench, 6 m x 4 m, was excavated to the water table establishing, for the first time, that occupation in the centre of the town island was continuous to 3.1 m depth, and may extend back to the eighth century AD. An area in the southeastern quarter of the Beit Khorshid Effendi was cleared, revealing new rooms and features absent from the published plan of the building. Three trenches were opened in the centre of the Shafa'i Mosque courtyard. These revealed a sequence of strata, and a pier and column base from an earlier structure.

Other activities comprised artefact conservation, involving the continued monitoring of objects stored from previous seasons and the dismantling and storage of two *roshans* (oriel windows) in the Governor's Residence. Preliminary surveys were undertaken: one to examine the start of routes from Suakin through the Red Sea Hills, and the other to confirm the presence of remains in the Classical style

around Aqiq, south of Suakin. On 1–2 December a conference was held by the Governor of the Red Sea, organized by Michael Mallinson, on the restoration and redevelopment of Suakin in order to provide employment, establish a University of the Red Sea Humanities Department and create two museums, two mosques and an eco-hotel. A Sudanese company has been set up to carry out these works, beginning in October 2008. The Conference was attended by members of the EC Development Agency, DFID, World Bank, UNESCO, the British Ambassador's Office, and Prof. Barker of the McDonald Institute, together with many local Suakin people.

The project is grateful for funding and support from the McDonald Institute for Archaeological Research, the Red Sea State and the Ministry of Culture Youth and Sport, Sudan.



Plan of Beit Khorshid Effendi with updated plan of southeastern rooms shown in inset. (M. Mallinson, after J.-P. Greenlaw and J.S. Phillips.) Above: View of Suakin Island town.

Sesebi, North Sudan

KATE SPENCE AND PAMELA ROSE

Kate Spence and Pamela Rose visited the ancient Egyptian colonial town at Sesebi, northern Sudan to undertake a reconnaissance in advance of proposed survey and trial excavation in 2009. The town was built around 1350 BC under king Akhenaten and contains the remains of two large stone temples as well as massive storage facilities, a residential area and an extra-mural



Image of a bound Nubian captive from a column in the main temple at Sesebi. Below: Akhenaten's main temple at Sesebi, looking north.

cemetery. The site was excavated in 1936–8 by the Egypt Exploration Society but was only ever published in preliminary reports. Many questions remain about the history of the site, its purpose, its relationship to the landscape and earlier human activity in the region, the identity of its inhabitants and their lifestyles. As the site is contemporary with Akhenaten's residence city at Amarna it also offers opportunities to compare in detail the material culture of a colonial outpost with that of a political centre of the midfourteenth century BC.

Our initial survey suggests that the site probably served as a base for gold extraction, an activity of immense importance to the Egyptian state. We found numerous striated hard-stone grindstones on the surface of the site that are closely comparable with those found in contemporary gold-mining sites in the Eastern Desert in Egypt, while some areas of the site also have very significant deposits of crushed quartz, a common by-product of gold extraction. Pitting along a wadi north of the site may suggest dry panning of deposits and there may also have been mining activity in the mountains to the north.

The 2008 fieldwork at Sesebi was funded by the British Academy. We would like to thank the National Corporation for Antiquities and Museums for permission to visit the site.





Mauritius

Krish Seetah

Modern Mauritius has its naissance in 1721 when a group of French colonists named it *Île-de-France*. Its strategic position made it the focus of successive waves of colonizing powers all of whom left their material markers. However, there has been very limited examination based on systematic methods-driven archaeology addressing the island's role as a colonial enclave, a trading post between the Spice Islands and Europe and a long-term colony with European, African and Indo-Chinese influence. As a volcanic island lacking any indigenous population it also presents an exceptional opportunity to establish baseline data detailing specific environmental/landscape conditions.

To initiate systematic archaeological studies, a pilot project was undertaken. The first season of excavation focused on a small site to the north of the island in Mont Choisy. A near-pristine site was identified within a region that is undergoing extensive development. The archaeo-historic results from the ongoing work will be integrated with current research on ethnicity and nation building, the longer-term socio-political and economic implications of imperialism and the environmental consequences of colonialism.

The pilot project is funded by the McDonald Institute for Archaeological Research and the British Academy.

The Material Engagement Project

LAMBROS MAI AFOURIS

The cognitive life of things and the causal efficacy of material culture in the long-term development of human intelligence has been the main underlying theme of the Material Engagement project. Funded by the Balzan prize awarded to Professor Colin Renfrew in 2004, the project employed Dr Lambros Malafouris as Research Associate in Cognitive Archaeology. The project has been focused on the development of Material Engagement Theory (MET) and the research field of 'neuroarchaeology'. The project bridges perspectives from archaeology, philosophy, anthropology and neuroscience. Two international interdisciplinary symposia were organized at the McDonald Institute: The Cognitive Life of Things: Recasting the Boundaries of the Mind and The Sapient Mind: Archaeology Meets Neuroscience.

Colin Renfrew and Lambros Malafouris would like to thank the Balzan Foundation for their financial support. Many thanks also to the British Academy and the Guarantors of Brain for sponsoring the Sapient Mind symposium. Lambros Malafouris would like also to acknowledge the support of the 'European Platform for Life Sciences, Mind Sciences, and the Humanities' (Volkswagen Stiftung).



'Sapient Mind' symposium participants.



Looking for Lost Rivers in Northwest India

CAMERON A. PETRIE AND RAVINDRA SINGH

South Asia's great Bronze Age urban society, known as the Indus or Harappan Civilization, flourished in the third and second millennium BC, and engaged in long-range trade both within the subcontinent and with regions in Central Asia, Iran, the Persian Gulf and Mesopotamia. However, by the middle of the second millennium BC, all of the great urban centres had declined or been abandoned.

Scholars have long known that major palaeochannels stretch across the plains of northwest India and into Pakistan. These relic watercourses have caused much debate and speculation because they are often believed to be the traces of a substantial glacier-fed river (or rivers) that once flowed parallel to the mighty Indus. The existence of a major river is seemingly confirmed by large numbers of proto-historic archaeological sites along these relic water courses, in areas that lack perennial water today. This has led to the proposition that this river was instrumental in supporting some of the major sites of the Harappan Civilization, and that its drying was one of the critical factors in the abandonment of sites and the ultimate collapse of the Harappan urban system. The specific reasons behind the disappearance of the river are unclear, but the prevailing opinion is that it was a result of a combination of tectonic activity



Yamuna/Indus Interfluve – plains of Haryana and Punjab
Landsat 7 artificially coloured imagery (NASA ZULU)

Satellite image of the plains of Haryana showing the courses of the various palaeochannels in dashed orange lines.

and river capture, with both the Yamuna and the Sutlej Rivers shifting course. The shift of the Kosi River, a tributary of the Ganges, in August 2008 as a result of monsoon rains shows that such shifts are still occurring today.

Despite extensive debate, we have no precise dates for when the palaeochannels last carried perennial water, and to understand the geographical context and the human settlement systems of this region, it is essential to establish the chronological and temporal relationships between archaeological settlements and their geographical and landscape contexts. Thus, a multidisciplinary collaborative team (consisting of researchers from Banaras Hindu University, the University of Cambridge, the University of Oxford, Imperial College London, the Indian Institute of Technology Kanpur, and the Uttar Pradesh State Archaeology Department) carried out a reconnaissance of a number of Harappan and later period sites in western Uttar Pradesh (UP) and Haryana in April 2008. Members of this team from Banaras Hindu University began excavations at the site of Alamgirpur in western UP in May 2008. Fieldwork will continue in April 2009.

This project is primarily funded by a research project grant from the UK India Education Research Initiative (UKIERI), and additional support has been provided by the Isaac Newton Trust, the British Academy (Stein Arnold Fund) and the McDonald Institute for Archaeological Research.

Alamgirpur from the south, with large mounds of dung cakes visible over most of the surface, wrapped in sugar cane leaves for protection during the monsoon.

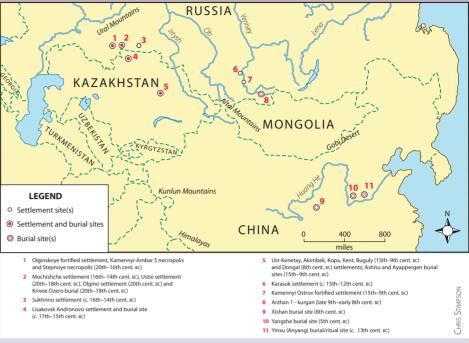
From Chariotry to Equestrian Pastoral Nomadism: the Changing Role of the Horse in Central and East Asia in the Second and First Millennia BC

Marsha Levine

Although it appears that the chariot spread eastwards from the South Urals to China between around 2000 Bc and 1250 Bc, very little else is known about the routes taken, the distribution of domestic horses or the role they played in human society.

Although many first-millennium BC sites, especially burials, have been excavated, the development of riding and husbandry during this period is not well known. The geographical region in question is enormous and the resources available to archaeologists, and especially archaeozoologists, have been inadequate.

For these reasons Dr Levine's research has two primary objectives. The first has been discussion and collaboration with local scholars to obtain a clearer picture of the current understanding of the domestic horse on the central Asian steppe and in China. The second has been to carry out analyses of selected horse bone assemblages in



order to obtain a more detailed understanding of available material.

During the 2007–8 academic year, Dr Levine continued fieldwork in Kyrgyzstan, Kazakhstan, China and the UK.

This project has been funded by the Leverhulme Trust, the Isaac Newton Trust and the McDonald Institute for Archaeological Research. Other components of the research are reported on p. 10 (Dr Krish Seetah: biometric morphometrics) and p. 13 (Dr Mim Bower: archaeogenetics).



Kyrgyzstan horses grazing near Lake Issyk Kul, along one branch of the ancient Silk Road.



East-West Millet Project

MARTIN JONES

Genetics, archaeobotany and isotopic analyses are brought together to understand perhaps the earliest contacts between East and West Eurasian farmers, as reflected by the evidence for broomcorn millet. This year, we made excellent progress in genetic studies on germplasm from across the regions, exploring a range of informative sequences. We gathered and analysed millet assemblages from North China and Ukraine, and completed whole food web isotopic studies of human and animal bones from archaeological sites in North China.



The north foothills of Tienshan in the centre of Asia: farmed since the Neolithic and still growing land-races of broomcorn millet.

We explored the interconnecting route between east and west farming areas, around an international workshop held at Jiunquan in Gansu province, and involving a large-scale survey of sites and environments between Central and Northwest China, informing future fieldwork possibilities.

The project is funded by the Leverhulme Trust and Wellcome Trust (archaeogenetics), Dorothy Hogkin (NERC) and Gates Trust studentships (archaeobotany and isotope studies), and RCUK China Office (international workshop).



The RCUK Workshop in Jiuquan.



The Tràng An Archaeological Project, Vietnam

RYAN RABETT

Tràng An is a cultural and ecological park development covering 2500 hectares and centred on an isolated massif on the southern edge of the Red River delta, northern Vietnam. The Tràng An Archaeological Project (TAAP) is investigating the early human settlement of this karstic landscape with particular reference to how communities adapted to ecological changes at the end of the Pleistocene. The project is headed jointly by the McDonald Institute and the Xuan Truong Construction Corporation, backed by the Ninh Bình People's Committee and the Vietnamese Ministry of Culture, Sports and Tourism and is envisaged to run for five years.

Excavation began at Hang Boi, a cave northwest of Tràng An, in May 2007, and quickly revealed a largely undisturbed series of cultural horizons dating from at least 12,300 cal. BP — the base of these deposits has not yet been reached. Stratigraphic evidence suggests that occupation was probably episodic. People were exploiting terrestrial, arboreal and riverine resources. Although this included several species of freshwater animal, it does not appear to have included any significant gathering of freshwater molluscs; land snails (verified as deliberately collected) dominate the midden. Artefact evidence suggests that links to the coast existed even when this was up to 100 km away. However, exploitation of marine resources does not appear to have occurred, even when these became closer to the cave because of coastal inundation at the end of the Ice Age. Principal occupation ended soon after c. 10,500 cal. BP. The TAAP aims to further elucidate this settlement picture through continuing excavation at Hang Boi and new parallel work at the nearby cave of Hang Trống, where the top of the cultural deposits have been dated by this project to c. 12,800 cal. BP.



Lucy Farr and Chris Stimpson collecting charcoal samples during the 2008 Hang Boi excavation.

The 2008 team was: Ryan Rabett, Chris Stimpson, Nguyêń Cao Tâń, Jo Appleby, Lucy Farr, Athanasia Gallou, Jason Hawkes, David Marcus and Lisa Marlow. 2008 funding was provided by the McDonald Institute for Archaeological Research and the British Academy (ASEASUK), and is gratefully acknowledged. The excavation team thanks Mr Nguyen Van Truong for providing all internal logistics during our visits.



The view from Hang Trống.



Cultured Rainforest

GRAFME BARKER

The aim of the Cultured Rainforest project is to investigate long-term and present-day interactions between people and rainforest in the Kelabit Highlands of central Borneo (Malaysian Sarawak), so as to better understand past and present agricultural and hunter-gatherer lifestyles and landscapes. The project has three main strands. Anthropologists are using anthropological and ethnohistorical methods such as oral histories to collect information on present-day forest life and the past as people remember or imagine it, on how objects are used today and (using museum collections) in the recent past. Archaeologists are conducting surveys and excavating selected monuments to reconstruct the lives of past forest dwellers. Palaeoecologists are studying fossil pollen in sediment cores from archaeological sites to document the long-term history of the rainforest and human impacts upon it.

The first fieldwork season (July 2007) of this multidisciplinary project highlighted the profound differences in the ways in which the Kelabit and Penan see their respective 'proper' relationships with the landscape. While the Kelabit aim to mark the landscape (constructing megalithic monuments, cutting ditches, making rice padi fields and cemeteries), the Penan aim to leave nothing but their personal traces, a kind of aura of their having been there, with a minimal physical expression. Both groups believe that forest spirits have the role of guardians of the forest, punishing those who misbehave in relation to the living environment. Clear links emerged between many archaeological monuments in the landscape and focal and apical ancestors/culture heroes among the Kelabit, as well



Pa' Dalih men at the Batuh Kelabet ('gibbon stone').



Crossing a river to an excavation site.

as both differences to and parallels between their relationships with the forest and the landscape and those of the Penan. A first suite of radiocarbon dates indicated that human occupation of the Kelabit Highlands stretches far beyond the Metal Age (the beginning of which in Borneo is commonly dated to around 500 BC), probably by several thousand years.

In the second fieldwork season (August 2008), resistivity and magnetometer surveys (the first in tropical rainforest) were undertaken at a series of archaeological sites identified in the first season. to characterize their spatial extent and to search for buried structures. Excavations were carried out at three main sites sampled in 2007: an enigmatic habitation site we explored in 2007 dated by C14 to c. AD 400; a ceremonial mound; and a stone jar cemetery with grave goods of the fourteenthsixteenth centuries AD. The anthropological studies were extended from the genealogical work to the social networks and relationships represented by Kelabit material culture, from basketry obtained from Penan to the plants in house gardens. Work also continued with both the Kelabit and the Penan on aspects of their relationships to the forest, particularly through its spirits. The anthropological, archaeological, and environmental data sets are being integrated into a single GIS framework to facilitate the archiving, analysis, and dissemination of the project's findings.

A major grant by the AHRC's Landscape and Environment Research Programme was awarded to Prof. Graeme Barker (Cambridge), Dr Chris Hunt (Belfast), Dr Huw Barton (Leicester), Prof. Chris Gosden (Oxford), Dr Monica Janowski (Sussex), and Jayl Langub (Malaysia). In addition to the AHRC grant, the project has also received funding from ASEASUK, the UK Association of Southeast Asianists.



Archaeology and Linguistics in the Andes

PAUL HEGGARTY AND DAVID BERESEORD-JONES

Building on the McDonald's tradition in facilitating inter-disciplinary studies between archaeology and linguistics, this project extends the synthesis into a region almost entirely overlooked hitherto. David Beresford-Jones and Paul Heggarty, specialists respectively in the archaeology and indigenous languages of the Central Andes, have won funding from the British Academy for a series of international symposia and lectures on this joint theme.

In September 2008 our first symposium brought to the McDonald a roll-call of distinguished world authorities on the archaeology and linguistics of the Central Andes from Harvard, Yale, Binghampton NY, Nijmegen, Leiden, the CNRS-CELIA in Paris, and many others. Ancillary events included a further symposium on the post-Columbian period at the *Institute for the Study of the Americas* (University of London), a reception by the Peruvian Ambassador, and a day of public lectures at the British Museum.

Key guests from the Andean region were Professors Rodolfo Cerrón-Palomino and Peter Kaulicke, respectively heads of linguistics and

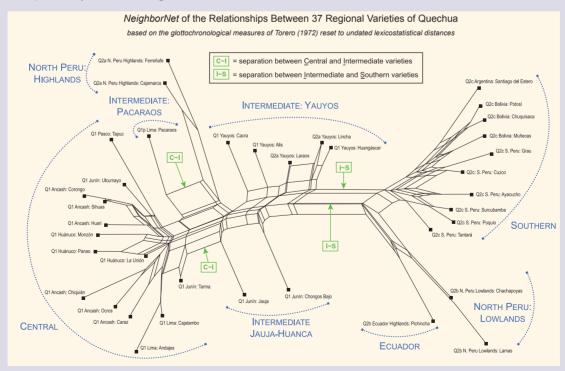


Wari khipu (c. AD 800) — predecessor of the later Inca record-keeping (and narrative?) system.

archaeology at our partner institution, the PUCP, among the leading universities in the Andes. They will host our final symposium in Lima in August 2009, which will include a lecture series by Heggarty, Beresford-Jones and Colin Renfrew there and elsewhere in the Andes.

See www.arch.cam.ac.uk/ala/ and our forthcoming feature in the *British Academy Review*.

This project is financed principally by an award under the British Academy's UK–Latin American Link Programme, together with a contribution from the McDonald Institute for Archaeological Research (conference fund) and from the Institute for the Study of the Americas.



NeighborNet representation of the Quechua dialect continuum.



Cueva de los Chingues, Pali Aike National Park, Southern Patagonia, Chile

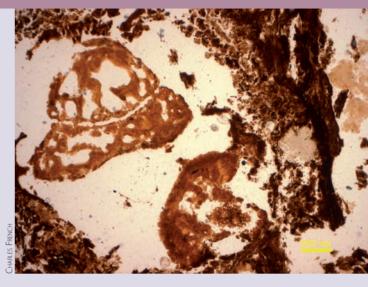
Manuel Arroyo-Kalin, Charles French and Rob Scalfe

The landscape of the Pali Aike National Park, situated along the border between Chile and Argentina, is a low extensive plateau where volcanic landforms intersect with late Pleistocene pro-glacial moraine features. Pali Aike entered archaeological knowledge through the pioneering work of Junius Bird, whose excavations at two archaeological sites — the Pali Aike Cave and Fell's Cave — provided some of the earliest stratigraphically-controlled evidence for the co-existence between humans and extinct terminal Pleistocene megafauna in the Southern Cone.

In December 2007, Arroyo-Kalin, French and Scaife re-examined the litho-stratigraphic sequence of a new cave in Pali Aike — Cueva de los Chingues or 'Skunk's Cave'. This cave site is located at the edge of a volcanic crater, c. 2.2 km from the Pali Aike cave site.

Micromorphological analysis of Chingues cave has investigated the main formation processes of the deposit and identified 12 distinct micro-stratigraphic facies spanning the four top strata reported by a University





Phosphatized and amorphous iron replaced organic matter and bone from Chingues Cave (plane-polarized light). Scale bar = 200 um (microns).

of Magallanes excavation team. These facies include (in addition to natural deposits) hearths, occupation surfaces, dung accumulations by herbivores and carbonized bone fragments — supporting co-occupation of the site by omnivores/carnivores and humans, probably in the late Pleistocene.

In sum, we have provided alternative evidence to suggest the cave was used by non-human carnivores/omnivores and humans throughout its history. There is good evidence of *in situ* burning in sediments that can be litho-stratigraphically dated to the terminal

Pleistocene and hence may be affiliated to Palaeoindian occupations.

This research has been supported by the Centre for Quaternary Studies (Punta Arenas, Chile), Chile Projects (Centre of Latin American Studies, University of Cambridge), and the McDonald Institute for Archaeological Research.

The entrance to Chingues Cave, with Rob Scaife (left), Flavia Morello (centre) and Özlem Biner (right).



Roots of Spirituality

IAIN MORLEY

The 'Roots of Spirituality' project, funded by the Sir John Templeton Foundation and directed by Prof. Renfrew, with Dr Iain Morley as Co-Investigator, was concluded this year with the completion of the third and final book produced under its aegis, Measuring the World and Beyond: the Genesis of Quantification and Cosmology. This will be published by Cambridge University Press in 2009, as will the second volume, Becoming Human: Innovation in Prehistoric Material and Spiritual Culture. The first of the three books, Image and Imagination: a Global Prehistory of Figurative Representation, is already available, having been published by the McDonald Institute as part of the Monographs series in late 2007.

Image and Imagination considers, on a global scale, prehistoric archaeological evidence for figurative representation. This spans the earliest examples from the Palaeolithic, through later periods, and explores the role and meaning of representational art in different early communities. Such meaning is attached not only to the representations themselves, but also to the processes of their creation, use and discard. It also has the potential to reveal new evidence about people's conceptions of the world around them, and of the world beyond that — with representations of ancestors and super-natural creatures — to point to the place of imagery in the world's earliest religions.

The focus of *Becoming Human* is the relationship between the practice of symbolic activities and the emergence of activities and conceptions related to ritual and spiritual thought. The Upper Palaeolithic era of Europe has left an abundance of evidence for symbolic activities, such as direct representations of animals and other features of the natural world, personal adornments and

elaborate burials, as well as other vestiges that are more abstract and cryptic. These behaviours are also exhibited by populations throughout the world, from the prehistoric period through to the present day. The contributions to this book explore how we can interpret these activities, how they relate to the ideologies, cosmology, and understanding of the world of the peoples who carried them out, and how the activities of humans in prehistoric Europe compare with those of their predecessors there and elsewhere.

Measuring the World and Beyond is concerned with the archaeological evidence for the emergence, in different periods and places, of activities related to quantification. This includes the measurement of properties of the world, and commodities, as well as the quantification of time. Such activities have important implications for interaction with the world and with other humans, but also have great significance for the ways in which people understand and explain the world and events within it. In this way these activities often have powerful roles in the formation of world-views and cosmologies. This third book in the 'Roots of Spirituality' series explores the relationships between measurement, economy, architecture, time, symbolism, cosmology, ritual and religion amongst prehistoric and early historic societies throughout the world.

Each of the books features contributions from between fifteen and thirty international scholars who originally participated in symposia held at the McDonald Institute ('Image and Imagination' and 'Measuring the World and Beyond') and in Les Eyzies ('Becoming Human'). Together they constitute not only a related trilogy in their own right, but a contribution to the McDonald Institute's ongoing research and publication programme in the area of cognitive archaeology.



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 2008, grants totalling £116,250 were awarded to 30 projects ranging widely in time and space, many of which are highlighted in this report.

Completed applications for grants for 2009 must reach the Deputy Director by 30 January 2009.

DM McDonald Grants and Awards

- Dr Sally-Ann Ashton North Karnak Survey
- Dr Nicole Boivin Pilot Excavations at Europa Point, Gibraltar
- Dr Dušan Borić
 Palaeolithic Occupation of the Danube
 Gorges and its Hinterlands: Archaeological
 Investigations of Tabula Traina Cave, Serbia
- **Dr Janine Bourriau** *The Pottery from the Anubieion at Saqqara*
- **Dr Mim Bower** Y-chromosome Diversity and the Emerging Story of Horse Domestication in Central and East Asia
- Dr Adam Brumm
 Early Human Stone Technology from a Southeast Asian Perspective
- Dr Gilly Carr Deportee Art and Artefacts
- Prof. Dilip Chakrabarti The Historical Routes of the Indian Panjab
- Prof. Robert Dewar Vohemar and Malagasy Prehistory
- Mr Christopher Evans The Archaeology of Ciudade Velha, Cape Verde

· Dr Charles French

Terminal Pleistocene and Holocene Human Occupations and Landscape Evolution in the Pali Aike Region, Southern Patagonia, Chile

- **Dr Oliver Harris**Northern Enclosures Project: Investigating West
 Lindsaylands
- Dr Liliana Janik Rock Art of Northern Russia
- Prof. Barry Kemp Amarna: the Stone Village Survey
- Dr Carenza Lewis HEFA CORS Research Project
- Dr John MacGinnis
 Ziyaret Tepe Excavations
- Dr Augusta McMahon Excavations at Tell Brak, Northeast Syria
- **Dr Martin Millett**Roman Rural Settlement at Thwing, East Yorkshire
- Dr Cameron Petrie
 The Cultural and Geographical Transformation
 of Northwest India between 2000 and 300 BC
- Dr Nicholas Postgate Excavations at Kilise Tepe

• Dr Ryan Rabett

Tràng An Project (Ninh Bình Province, Vietnam)

- Prof. Colin Renfrew
 Keros and the International Spirit of the Cycladic Early Bronze Age
- **Dr John Robb** The Bronze Age at Sant' Aniceto
- Dr Krish Seetah
 Understanding Colonialism through Diet in Mauritius
- Dr Laurence Smith Suakin and the Red Sea Coast of Sudan
- Prof. Anthony Snodgrass
 Publication of 'The City of Thespiai' (Boeotia
 Survey Project)
- Dr Kate Spence
 New Kingdom Colonialism, Sesebi
- Dr Rhiannon Stevens
 Identifying Migratory Behaviour through Oxygen
 Isotope Analysis of Reindeer Teeth: a Proof of
 Concept Study
- **Dr Brian Stewart**Middle Stone Age of the Lesotho Highlands,
 Southern Africa
- Dr Simon Stoddart The Civita di Grotte di Castro



External Research Grants

The list below contains the names of Principal Investigators, their project titles and the external funding body.

- Dr Bettina Bader & Prof. Graeme Barker Bridge to Canaan: Tell El-Daba (Egypt) (European Commission)
- **Prof. Graeme Barker**The Cultured Rainforest: Long-term Human
 Ecological History (AHRC)
- Prof. Graeme Barker
 The Cyrenaica Prehistory Project Renewed Fieldwork at the Haua Fteah
 (Leakey Foundation)
- Prof. Graeme Barker From Chariotry to Equestrian Pastoral Nomadism (Leverhulme Trust)
- Prof. Graeme Barker
 RCUK Summer School: Rethinking
 Agricultural Origins in NW China
 (Medical Research Council Charity Funds)
- Dr James Barrett Investigating the Origins of Commercial Sea Fishing in Medieval Europe (Leverhulme Trust)
- Dr James Barrett Maritime Societies of the Viking and Medieval World (British Academy)
- Dr James Barrett, Prof. Martin Millett & Prof. John Hatcher
 Crisis, What Crisis? Collapses and Dark Ages in Comparative Perspective (Mellon Foundation)
- Dr David Barrowclough Cultural Collapse and Climate Change (British Council)
- Dr Alison Blyth Biomarkers in Cave Sediments (Royal Society)
- Dr Alison Blyth

 A New Approach to Detecting Past Climate
 Change and its Impact on Terrestrial
 Ecosystems (Isaac Newton Trust)
- Dr Dušan Borić
 Forager–Farmer Encounters in the Balkans
 (British Academy)
- Dr Janine Bourriau
 The Pottery from the Anubieion at Saqqara
 (British Academy &
 Seven Pillars of Wisdom Trust)
- Dr Mim Bower Characterising 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 Calchaqui
 Valley, Argentina (British Academy)
- Dr Charles French
 Island of the Dead? The Buried Neolithic
 Landscape of Herm (Channel Islands)
 (AHRC/Durham University)
- Dr Helen Geake

 Early Anglo-Saxon 'Small-Long' Brooches
 (Headley Trust)
- **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 Liliana Janik & Dr Pawel Nasiadka The Origins of Shamanism: Rock Art and the World's 'Oldest Religion' (Cambridge Templeton Consortium)
- Dr Liliana 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
 The Potential for Genetic Analysis of Historical Barley Landraces
 (Isaac Newton Trust)
- Prof. Barry Kemp Investing in Religion at Akhenaten's Amarna (Cambridge Templeton Consortium)
- Dr John MacGinnis 2008 Field Season at Ziyaret Tepe (Neil Kreitman Foundation)
- Dr Augusta McMahon
 Iraq Symposium
 (British Institute for Study of Iraq)
- Dr Cameron Petrie
 The Cultural and Geographical
 Transformation of Northwest India
 (Isaac Newton Trust)
- Dr Cameron Petrie In the District of Pushkalavati (British Academy)
- Dr Cameron Petrie Stein-Arnold Exploration Fund: Environment and the Collapse of Harappan Urbanism (British Academy)

- Dr Cameron Petrie

 Ukieri Standard From the Collapse of

 Harappan Urbanism (British Council India)
- Dr Nicholas Postgate

 Kilise Tepe Archaeological Project
 (Isaac Newton Trust)
- Dr Ryan Rabett
 Regionalism in the Development of Modern
 Human Behaviour
 (Cambridge Templeton Consortium)
- Dr Ryan Rabett Tràng An Project (ASEASUK)
- **Dr Ulla Rajala**Romanisation of a Faliscan Town Nepi and its Hinterland (British Academy)
- Prof. Colin Renfrew

 Keros and the International Spirit of the

 Cycladic Early Bronze Age (British Academy)
- Prof. Colin Renfrew
 The Keros Project
 (Stavros S. Niarchos Foundation)
- Prof. Colin Renfrew

 Languages and Origins in Europe
 (Leverhulme Trust)
- Prof. Colin Renfrew Roots of Spirituality (Leverhulme Trust)
- Dr John Robb Changing Beliefs of the Human Body (Leverhulme Trust)
- **Dr John Robb & Dr Helen Farr**Exploring a Vanished Coastal Landscape in
 Holocene Southern Calabria (AHRC)
- **Dr Krish Seetah**Exploiting the Star of the Indian Ocean:

 Understanding Colonialism Through Diet in

 Post-Medieval Mauritius (British Academy)
- Dr Marie Louise Stig Sørensen Identity and Conflict, Cultural Heritage and the Reconstruction of Identities after Conflict (EC FP7 CP)
- Dr Marie Louise Stig Sørensen The Landscape of the Body (AHRC)
- **Dr Anna Stevens** *The Amarna Stone Village Project*(British Academy)
- Dr Simon Stoddart, Dr Caroline Malone & colleagues Explorations into the Conditions of Spiritual Creativity in Prehistoric Malta (Cambridge Templeton Consortium)
- Dr Katherine Szabo & Prof. Graeme Barker Molluscs as a Food Source (British Academy)



McDonald Annual Lecture

●21 November The 19th McDonald Lecture — Paul Mellars - The *Homo Sapiens* Explosion: New Archaeological and Genetic Perspectives

McDonald Institute Seminars

- ●8 October José Luis Lanata and Simón Bol'var Human Dispersal in South America: Key Issues for the Understanding of Native Diversity
- **Q24 October** Graeme Barker In the Footsteps of Charles McBurney: the Haua Fteah, Libyan Cyrenaica, 2007
- **@31 October** Camilla Briault Postpalatial Transformations: Tradition and Innovation in Late Bronze Age Cretan Ritual
- **©7 November** Iain Morley Rocks, Rhombes and Racleurs: Beyond Piped Music in the Palaeolithic
- **14 November** Cameron Petrie Eruption, Abandonment and Reoccupation: Bayesian Approaches to Assessing Volcanic Disasters and Human History
- **© 27 November** Jérémy Jacob (CNRS-Université d'Orléans) Past Climate–Human–Environment Interactions Reconstructed from Fossil Molecules in Sediments
- **@28 November** James Barrett Rounding up the Usual Suspects: What Caused the Viking Age?
- **© 23 January** Oliver Harris The Struggle Within: Objects, Subjects and Multivocality on Excavations in Scotland
- •30 January Ryan Rabett The Tràng An Project, Vietnam: a Preliminary Report on the 2007 Fieldwork
- **6 February** Marie Louise Stig Sørensen and Christopher Evans A Place of History: the Archaeology of Cidade Velha, Cape Verde
- **13 February** Marsha Levine From the Urals to China: the Evolving Role of the Horse in Late Prehistory



Profs. Robert Foley, Paul Mellars and Graeme Barker at the reception following the 19th McDonald lecture.

- **©27 February** Kate Spence Exploitation and Engagement: Reassessing the Ancient Egyptian Colonial Town at Sesebi, Northern Sudan
- ●5 March Lambros Malafouris Archaeology, Neuroscience, and the Active Nature of Material Culture
- **7 March** Richard Leakey (Stony Brook University, USA) Developments in East African Palaeoanthropology
- **12 March** Tamsin O'Connell How Old is Your Femur and Why Do I Care?
- **19 March** Jaimie Lovell Archaeology Undergound: Caves and the Chalcolithic in Jordan
- **30 April** Laurence Smith History and Archaeology at Suakin, a Medieval Port on the Sudanese Red Sea coast
- **©2 May** Christopher Ehret (Department of History, UCLA) Correlating Archaeology, Genetics, and Linguistics: the Missing Link
- **14 May** Nicholas Postgate Kilise Tepe 2007, with Some Thoughts on Empires and Dark Ages
- **21 May** Brian Stewart Who were the Strandlopers? A Perspective on Hunters and Herders from a Later Stone Age Coastal Campsite, South Africa
- **© 28 May** David Beresford-Jones The Lower Ica Valley, South Coast Peru: an Archaeological Case Study of Ecological and Cultural Collapse
- **Q4 June** Marc vander Linden The Formation of Europe: Mathematical Modelling, Radiocarbon Dating and the Spread of the Neolithic in Europe"
- ●11 June Adam Brumm Early Hominin Stone Technology on Flores, Indonesia
- 10 September Luciano da Fontoura Costa (University of São Paulo, Brazil) - Complex Networks: a Powerful Concept in Archaeology

Garrod Research Seminars — Department of Archaeology

- **11 October** Matthew Johnson Empiricism and Landscape Archaeology
- **18 October** Flemming Kaul The Ship, the Fish, the Horse and the Snake at Work in Nordic Bronze Age mythology; *and* Richard Bradley Ships on Stones
- **© 1 November** Andrew Flemming Island Narratives: the Case of St Kilda
- **15 November** Fraser Sturt Perception, Rhythm and Form: 6000–3500 Bc in the British Isles
- **@24 January** Hildegard Diemberger Landscape and Ritual in Tibet: From Ancient Royal Tombs to Contemporary Territorial Cults
- **Tim** Ingold Pathways through the Weather-World: Movement, Flux and Perception
- **14 February** Alan Macfarlane Enchanted Landscapes
- **© 28 February** Tom Williamson Does the Social become the Spatial? Thinking about the Medieval Rural Landscape



Conferences and Workshops

- **©22 October** Personal Histories Retrospect: Henrietta Moore (LSE), Meg Conkey (UC at Berkeley), Ruth Tringham (UC at Berkeley) and Alison Wylie (University of Washington).
- **13 November** Archaeology of Bronze in China
- **14 November** Research Seminar on Prehistoric Italy
- 18 January Unravelling Hominin Relations with the Environment in Central Europe during Oxygen Isotope Stage 3
- **26 January** Higher Education Field Academy Seminar
- **29 March** Medieval Settlement Research Group Easter Seminar - The Multiple Estate Revisited: Territories, Resources and Society in Early Medieval Britain
- **©31 March** CRIC Identity and Conflict: Cultural Heritage and the Re-construction of Identities after Conflict
- 19 April The 9th Annual Cambridge Heritage Seminar
 Packaging the Past: the Commodification of Heritage
- **©25 April** Biology, Evolution and the Social Science Curriculum
- ●10 May From the Trent to the Thames: One Thousand Years of Prehistory Patterns in Archaeology from 1500–500 BC
- **31 May–4 June** Maritime Societies of the Viking and Medieval World (held in Orkney)
- ●4-8 June Cod and Herring: the Archaeology and Early History of Intensive Fishing (held in Orkney)
- **©23–24 June** Preludes to Urbanism in the Ancient Near East A Conference in Honour of Joan Oates: her 80th Birthday and her 57th year of Archaeological Research in the Middle East
- **©11–13 September** Archaeology and Linguistics in the Andes
- **© 20 September** South Asia Day: Recent Developments in South Asian Archaeology

Science on Saturday (15 March 2008)

Members of the McDonald Institute 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 chariots and raced them across a map of Asia;
- · tried out flotation techniques;
- learned about ancient DNA and how archaeologists can tell where you come from by what you eat;
- were shown how to tell the sex of an individual based on skeletal evidence;
- had a chance to dig for bones in a model cave;
- · and processed grain.

The event was very well attended and enjoyed by all.



Giedre Motuzaite Matuzeviciute demonstrates how to process grain.



David Klingle showing the public how to tell the sex of an individual from their skeleton.



A child examines bones she excavated from a model cave.



Mim Bower and Dan Leighton help members of the public build chariots.



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 (katharinazinn 2004@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 2007/8 they explored perceptions of landscapes from both archaeological and anthropological perspectives with case studies drawn from the Britain, Scandinavia and Tibet.

Contact: Sheila 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 (hro22@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).

2007 saw the initiation of a new research cluster, the **Grahame Clark Laboratory group**, showcasing the wealth of zooarchaeological and osteoarchaeological studies undertaken in the department. A series of seminars were presented that illustrated the spatial, chronological and methodological breath of these disciplines, bringing the significance of osteoarchaeological investigations to the wider archaeological community.

Contact: Krish Seetah (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: Gilly Carr (gcc20@hermes.ac.uk); Shadia Taha (st446@ cam.ac.uk) or Naomi Farrington (nhf21@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: Katharina Rebay (kr302@cam.ac.uk); Oliver Harris, (ojth2@cam.ac.uk).

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

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 masters 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).



Cambridge Archaeological Journal

JOHN ROBB

2007–8 was an excellent year for *CAJ*. The overall profile of publication remained much the same, but content expanded considerably.

The core territory of the journal remains interesting social archaeology regardless of theoretical denomination, and our contents over the last year maintain the journal's traditional strengths in art and symbolism, high civilizations of the Old and New Worlds, and the evolution of cognition. The 2008 volume included two special sections (one edited by Robb and Pauketat on long-term change and the ARCHAEOLOGICAL other edited by Renfrew and Malafouris on neuroarchaeology). Submissions remain strong; we currently accept approximately one third of all first submissions, and at present we have material in hand for about half the 2009 volume with 8 articles and

In editorial policy, statistics of internet 'hits' for individual articles supplied by CUP has shown that the entire range of our material is finding a readership; book reviews are sometimes surprisingly well-read, and we are increasing the range of books we review in light of this. We have also begun to add colour, as there are consistently at least one or two articles in each issue which really require it; while this adds a little to the production cost, the results in terms of attractive and effective presentation are well worth it.

one special section still out for review.

On the business side of things, we have renewed our contract with Cambridge University Press, who are increasingly making CAJ available through electronic subscriptions ARCHAEOLOGICAL and institutional consortia packages. While such arrangements are rapidly superseding the traditional individual print subscription, this is overall good news for the journal; with moderate price increases (keeping the journal under-priced compared to many other academic journals), CAJ's revenue continues to produce a healthy surplus, and via online institutional access the journal is reaching many more potential readers than ever before. Coverage remains patchy, however; CAJ

is available in virtually 100% of higher education institutions in some unexpected countries (China, Kazakhstan, Uganda and Croatia, for example) but is not comprehensive in the UK and USA; we have been discussing ways of addressing this with CUP.

CAJ's success in 2008 derives in great part from the compact and amazingly efficient team which produces it, including Liz Farmar (secretary), Dora Kemp (production) and Katie Boyle (book reviews, having succeeded Nick James in May 2008).

Vol. 17, No. 3, October 2007

ARTICLES

- Why We Need New Spectacles: Mapping the Experiential Dimension in Prehistoric Cretan Landscapes BY S. WALLACE
- The Palace Façade Motif and the Pyramid Texts as Cosmic Boundaries in Unis's Pyramid Chambers By A. De Trafford
- Minerals, Metal, Colours and Landscape By G. JULEFF & L. BRAY
- Skiing on the Rocks BY L. JANIK ET AL.
- Linguistics for Archaeologists By P. HEGGARTY
- Middle Palaeolithic Scraper Morphology, Flaking Mechanics and Imposed Form BY G.F. Monnier

SHORTER NOTE

- The Creation of North Australian Shell Rings $\,\mbox{\scriptsize BY}$ P. $\mbox{\scriptsize BOURKE}$ & D. Guse REVIEWS

Vol. 18, No. 1, February 2008

ARTICLES

ARCHAEOLOGICAL

- Representation of Humans and Animals in Greece and the Balkans during the Earlier Neolithic BY S. NANOGLOU
- Past Practices: Rethinking Individuals and Agents in Archaeology
 BY A.B. KNAPP & PETER VAN DOMMELEN WITH COMMENTS FROM C. COBB, D.J. SAITTA & J. THOMAS
- Linguistics for Archaeologists: a Case-study in the Andes By P. Heggarty
 SPECIAL SECTION Time and Change in Archaeological Interpretation
 EDITED BY J. ROBB & T.R. PAUKETAT WITH ARTICLES BY G. LUCAS, A. WHITTLE ET AL., R.M. VAN DYKE,
 T.R. PAUKETAT & T.E. EMERSON, C.R. COBB & E. DRAKE, J.E. CLARK & A. COLMAN
 REVIEW FEATURE
- The Archaeology of Liberty in an American Capital By M. Leone REVIEWED BY D.V. ARMSTRONG, Y. MARSHALL & A.T. SMITH REVIEWS

Vol. 18, No. 2, June 2008

ARTICLES

- Figured Lifeworlds and Depositional Practices at Çatalhöyük BY L. MESKELL ET AL.
- Rainbow Colour and Power among the Waanyi of Northwest Queensland BY P. S.C. TAÇON
- Catastrophe, Revitalization and Religious Change on the Prehispanic North Coast of Peru $\,$ By J. Jennings
- Human Burial Evidence from Hattab II Cave and the Question of Continuity in Late Pleistocene—Holocene Mortuary Practices in Northwest Africa By N. BARTON ET AL.
- The Triadic Causeways of Ichmul: Virtual Highways Becoming Actual Roads By J. NORMARK
- Rituals of Sanctification and the Development of Standardized Temples in Oaxaca, Mexico BY E.M. REDMOND & C.S. SPENCER

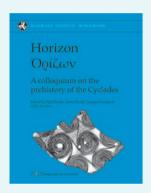
 REVIEWS



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.



Horizon: a Colloquium on the Prehistory of the Cyclades edited by Neil Brodie, Jenny Doole, Giorgos Gavalas and Colin Renfrew

The Cycladic Islands of Greece played a central role in Aegean prehistory, and many new discoveries have been made in recent years at sites ranging in date from the Mesolithic period to the end of the Bronze Age. In the well-illustrated chapters of this book, international scholars including leading Greek archaeologists offer new information about recent developments, many arising from

hitherto unpublished excavations. The book contains novel theoretical insights into the workings of culture process in the prehistoric cultures of the islands.

Hardback | £65 | ISBN 978-1-902937-36-6 | xvi+576 pp. | 286 \times 220 mm | 498 b&w & 60 col. ills. | April 2008



Simulations, Genetics and Human Prehistory edited by Shuichi Matsumura, Peter Forster and Colin Renfrew

Data from molecular genetics have changed our views on the origin, spread and timescale of our species across this planet. But how can we reveal more detail about the demography of ancient human populations? Is it possible to determine when and how many people arrived at a certain continent, and which route they took from a choice of geographically plausible options? One of the most promising tools for such investigation is computer simulation

incorporating various demographic scenarios. The simulation outcomes must be evaluated by teams with archaeological expertise, as this is generally the best evidence currently available on the population histories of geographical regions. In this volume specialists in simulations and molecular genetics as well as archaeologists present and evaluate the state of the art, and discuss future possibilities.

Hardback | £25 | ISBN 978-1-902937-45-8 | 240 pp. | 286 × 220 mm | June 2008

Nostratic Dictionary by Aharon Dolgopolsky

Aharon Dolgopolsky is today the leading authority on the Nostratic macrofamily. His *Nostratic Dictionary* is the most thorough and extensive documentation so far of what may be termed the 'Nostratic hypothesis': that several of the world's best-known

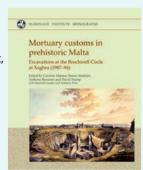


language families are related in their origin, their grammar and their lexicon, and that they belong together in a larger unit, of earlier origin, the Nostratic macrofamily. It should be noted that several elements of this enterprise are controversial. As a result of a Nostratic symposium held at the Institute, the decision was taken to invite Dolgopolsky to publish his Dictionary, for it became clear that the diversities of view expressed at that symposium were not likely to be resolved by further polemical exchanges. Instead, a substantial body of data was required, whose examination and evaluation could subsequently lead to more mature judgments. Those data are presented in this work, and that more mature evaluation can now proceed.

This publication and its updates are accessible on-line at http://www.dspace.cam.ac.uk/handle/1810/196512

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





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 nonurban, island society so far published.

Hardback | £45 | ISBN 978-1-902937-49-6 | xxiv+424 pp. | 286 \times 220 mm | 300 ills. | December 2008 in press



Rethinking the Human Revolution: New Behavioural and Biological Perspectives on the Origin and Dispersal of Modern Humans edited by Paul Mellars, Katie Boyle, Ofer Bar-Yosef and Chris Stringer

Arising from an important international conference held at the University of Cambridge, *Rethinking the Human Revolution* reconsiders all of the central issues in modern human behavioural, cognitive, biological and demographic origins in the light of new information

and new theoretical perspectives which have emerged over the past twenty years of intensive research in this field.

Hardback | £35 | ISBN 978-1-902937-46-5 | xx+436 pp. | 286 \times 220 mm | 160 ills., 33 tables | October 2007



Excavations at Kilise Tepe, 1994–98: From Bronze Age to Byzantine in Western Cilicia edited by Nicholas Postgate and David Thomas

Kilise Tepe, a major archaeological site in Turkey, takes its importance from its position guarding the Göksu Valley, one of the two main routes from the interior of Anatolia to the Mediterranean opposite Cyprus. This two-volume set reports on five seasons' excavation and

four millennia of occupation at the site, from the Early Bronze Age through the rise and fall of the Hittite Empire and into the Byzantine era. It includes detailed accounts of the site's stratigraphy, architecture, artefacts and results of environmental studies.

Hardback | £95 | ISBN 978-1-902937-40-3 | 864 pp. | 286 \times 220 mm | 527 b&w & 58 col. ills. | November 2007



Keros, Dhaskalio Kavos: the Investigations of 1987–88 edited by Colin Renfrew, Christos Doumas, Lila Marangou and Giorgios Gavalas

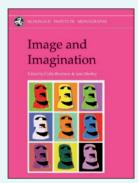
The site of Dhaskalio Kavos, on the remote Cycladic island of Keros, was extensively looted in the late 1950s and early 1960s. Investigations starting in 1963 then revealed large quantities of fractured marble bowls, broken marble figures and smashed pottery

of the Early Cycladic period from around 2500 Bc. This report of the subsequent survey and rescue excavations of 1987–88 reveals the extraordinary richness of the site, now confirmed as one of the most prolific in élite goods of the entire Aegean Early Bronze Age.

Hardback | £69 | ISBN 978-1-902937-43-4 | xxii+475 pp. | 286 \times 220 mm | 308 ills., 91 tables | December 2007

Image and Imagination: a Global Prehistory of Figurative Representation edited by Colin Renfrew and Iain Morley

The dawn of art is sometimes equated with the birth of the human spirit. But when and how did figuration — sculpture, painting, drawing — actually begin? And did these first figurative creations coincide with the emergence of our own species, *Homo sapiens*? Is figuration a general and fundamental feature of the human condition? In this challenging volume



leading experts review the evidence now available from the worldwide practice of prehistoric archaeology, and go on to formulate some important conclusions.

Hardback | £30 | ISBN 978-1-902937-48-9 | x+339 pp. | 286 \times 220 mm | 306 ills. | December 2007

Prehistoric Landscape Development and Human Impact in the Upper Allen Valley, Cranborne Chase, Dorset edited by Charles French and Helen Lewis

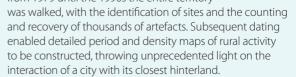
The results of palaeoenvironmental and archaeological investigations in the Upper Allen Valley, Cranborne Chase, Dorset, 1998–2003 challenge some long-standing assumptions about the palaeoecology of the chalk, questioning the ubiquity of climax woodland and brown forest soils associated with it, the idea of extensive



Hardback | £60 | ISBN 978-1-902937-47-3 | xxiv+412 pp. | 286×220 mm | 189 ills., 96 tables | December 2007

Testing the Hinterland: the Work of the Boeotia Survey (1989–1991) in the Southern Approaches to the City of Thespiai by John Bintliff, Phil Howard and Anthony Snodgrass

Testing the Hinterland covers the sector of the rural landscape of Boeotia lying in the immediate southern approaches of Thespiai, which was in intermittent occupation from the Final Neolithic to just after AD 1800. During the intensive survey from 1979 until the 1990s the entire territory



Hardback | £65/US\$130 | ISBN 978-1-902937-37-3 | 317 pp. | 286 \times 220 mm | 457 b&w ills., 50 col ills. | December 2007



Testing the hinterland

Members/Fellows Publications

BETTINA BADER

- 2007 A tale of two cities: first results of a comparison between Avaris and Memphis, in *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium Bc: Proceedings of the SCIEM 2000, 2nd Euro Conference, Vienna, 28th of May to 1st of June, Vienna 2007, vol. III, ed. M. Bietak. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 249–67.*
- 2008 Sedment pottery concordance, in Unseen Images: Archive Photographs in the Petrie Museum, vol. 1: Gurob, Sedment and Tarkhan, eds. J. Picton & I. Pridden. London: Golden House Publication, 181–3.

GRAEME BARKER

- 2007 (ed.) (with D. Gilbertson & D. Mattingly). Archaeology and Desertification: the Wadi Faynan Landscape Survey, Southern Jordan. London: Council for British Research in the Levant.
- 2007 (with C. Hunt & T. Reynolds). The Haua Fteah, Cyrenaica (northeast Libya): renewed investigations of the cave and its landscape, 2007. Libyan Studies 38, 93–114.
- 2007 Changing roles and agendas: the Society of Antiquaries and the professionalization of archaeology, 1950–2000, in *Visions of Antiquity: The Society of Antiquaries of London* 1707–2007, ed. S. Pearce. London: Society of Antiquaries, 383–413.
- 2007 (with D. Mattingly). Cores and peripheries revisited: the mining landscapes of the Wadi Faynan (Southern Jordan), 5000 BC—AD 700, in Communities and Connections: Essays in Honour of Barry Cunliife, eds. C. Gosden, H. Hamerow, P. de Jersey & G. Lock. Oxford: Oxford University Press, 95–124.
- 2007 (with R. Rabett). Through the looking glass: new evidence on the presence and behaviour of late Pleistocene humans at Niah Cave, Sarawak, Borneo, in Rethinking the Human Revolution, eds. P. Mellars, K. Boyle, O. Bar-Yosef & C. Stringer. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 411–24.
- 2008 (with K. Szabo & S. Piper). Sailing between the worlds: the symbolism of death in northwestern Borneo, in Islands of Enquiry, eds. G. Clark, S. O'Connor & B.F. Leach. Canberra: ANU E-Press, 149–70.

JAMES BARRETT

- 2007 (with K. Dobney, D. Jaques & C. Johnstone). Farmers, Monks and Aristocrats: the Environmental Archaeology of an Anglo-Saxon Estate Centre at Flixborough, North Lincolnshire, UK. Oxford: Oxbow Books.
- 2008 What caused the Viking Age? *Antiquity* 82, 671–85.
- 2008 (with C. Johnstone, J. Harland, W. Van Neer, A. Ervynck, D. Makowiecki, D. Heinrich, A.K. Hufthammer, I.B. Enghoff, C. Amundsen, J.S. Christiansen, A.K.G. Jones, A. Locker, S. Hamilton-Dyer, L. Jonsson, L. Lõugas, C. Roberts & M. Richards). Detecting the medieval cod trade: a new method and first results. Journal of Archaeological Science 35(4), 850–61
- 2008 (with A.J. Kettle, D. Heinrich, N. Benecke & A. Locker). Past distributions of the European freshwater eel from archaeological and palaeontological evidence. Quaternary Science Reviews 27(13–14), 1309–34.
- 2008 (with G. Bailey, O. Craig & N. Milner). Historical ecology of the North Sea basin: an archaeological perspective and some problems of methodology, in *Human Impacts on Ancient Marine Ecosystems: a Global Perspective*, eds. T. Rick & J. Erlandson. Berkeley (CA): University of California Press, 216–42.

MARK BLACKBURN

- 2007 Presidential Address 2006. Currency under the Vikings, part 3: Ireland, Wales, Isle of Man and Scotland in the ninth and tenth centuries. *British Numismatic Journal* 77, 119–49.
- 2007 Crosses and conversion: the iconography of the coinage of Viking York ca. 900, in Cross and Culture in Anglo-Saxon England: Studies in Honor of George Hardin Brown, eds. K.L. Jolly, C.E. Karkov & S. Larratt Keefer. (Medieval European Studies IX.) Morgantown (WV): West Virginia University Press, 172–200.
- 2007 Gold in England during the 'Age of Silver' (eighth–eleventh centuries), in *Silver Economy in the Viking Age*, eds. J. Graham-Campbell & G. Williams. Walnut Creek (CA): Institute of Archaeology, 55–98.
- 2008 The coin finds from Kaupang, in Kaupang: the Means of Exchange, ed.
 D. Skre. (Publication Series 2.) Aarhus & Oslo: Kaupang Excavation Project, 29–74.

2008 (with G. Rispling & Kenneth Jonsson). Catalogue of the coins found at Kaupang, in Kaupang: the Means of Exchange, ed. D. Skre. (Publication Series 2.) Aarhus & Oslo: Kaupang Excavation Project, 75–93.

ALISON BLYTH

- 2008 (with S. Frisia). Molecular evidence for bacterial mediation of calcite formation in cold high-altitude caves. Geomicrobiology Journal 25(2), 101–11.
- 2008 (with A. Baker, K.E.H. Penkman, M.J. Collins, M.A. Gilmour, J.S. Moss, D. Genty & R. Drysdale). Molecular organic matter in speleothems as an environmental proxy. *Quaternary Science Reviews*, doi:10.1016/ j.apgeochem.2008.05.008.

ROBIN BOAST

2007 (with M. Bravo & R. Srinivasan). Return to Babel: emergent diversity, digital resources, and local knowledge. Information, Communication and Society 23:5.

Dušan Borić

- 2007 (with V. Dimitrijević). When did the 'Neolithic package' reach Lepenski Vir? Radiometric and faunal evidence. Documenta Praehistorica 34, 53–72.
- 2007 The house between grand narratives and microhistories: a house society in the Balkans, in *The Durable House: House Society Models in Archaeology*, ed. R.A. Beck Jr. (Occasional Paper 35.) Carbondale (IL): Center for Archaeological Investigations, 97–129.
- 2007 Images of animality: hybrid bodies and mimesis in early prehistoric art, in *Image and Imagination: a Global Prehistory of Figurative Representation*, eds. C. Renfrew & I. Morley. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 89–105.
- 2007 Mesolithic–Neolithic interactions in the Danube Gorges, in *Mesolithic–Neolithic Interactions in the Danube Basin*, eds. J.K. Kozlowski & M. Nowak. (British Archaeological Reports, International Series.) Oxford: Archaeopress, 31–45.
- 2008 (with C.A.I. French & V. Dimitrijević). Vlasac revisited: formation processes, stratigraphy and dating. *Documenta Praehistorica* 35, 293–320.
- 2008 First households and 'house societies' in European prehistory, in *Prehistoric Europe*, ed. A. Jones. Malden (MA): Blackwell Publishing, 109–42.



MIM BOWER

2008 (with H. Jones, F.J. Leigh, I. Mackay, L.M.J. Smith, M.P. Charles, G. Jones, M.K. Jones, T.A. Brown & W. Powell). Population based re-sequencing reveals that the flowering time adaptation of cultivated barley originated east of the Fertile Crescent. Molecular Biology and Evolution 25, 2211–20.

MICHAEL BOYD

- 2007 (with I.K. Whitbread & J.A. MacGillivray). Geophysical investigations at Palaikastro. Annual of the British School at Athens 101, 89–134.
- 2007 Rural settlement architecture on the Lower Danube at the transition to Late Antiquity, in *The Transition to Late Antiquity*, ed. A. Poulter. (Proceedings of the British Academy 141.) London: The British Academy, 597–609.
- 2008 (with R. Doonan). CONTACT
 enhancing artefact teaching by
 digitising both object and process, in
 Touch in Museums: Policy and Practice
 in Object Handling, ed. H.J. Chatterjee.
 Oxford: Berg, 107–20.
- 2008 (with N.J. Brodie). Identifying burned mud brick buildings using fluxgate gradiometry, in *Proceedings* of the 4th Symposium of the Hellenic Society for Archaeometry, eds. Y. Facorellis, N. Zacharias, & K. Polikreti. Oxford: Archaeopress, 73–6.
- 2008 (with A. Konecny, R. Marchese & V. Aravantinos). Plataiai in Boiotia: a preliminary report on geophysical and field surveys conducted in 2002–2005. Hesperia 77, 43–71.
- 2008 (with N.J. Brodie & R. Sweetman).
 The settlement of south Phylakopi:
 a reassessment of Dawkins and
 Droop's 1911 excavations, in Horizon:
 a Colloquium on the Prehistory of
 the Cyclades, eds. N.J. Brodie, J.
 Doole, G. Gavalas & C. Renfrew.
 (McDonald Institute Monographs.)
 Cambridge: McDonald Institute for
 Archaeological Research, 409–15.

KATHERINE BOYLE

- 2007 (ed.) (with P. Mellars, O. Bar-Yosef & C. Stringer). Rethinking the Human Revolution. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2007 Le phoque dans les eaux néolithique de Bretagne. *Melvan*, *Revue des Deux lles* 4, 265–74.
- 2007 Changing biodiversity and complexity across the Middle–Upper Palaeolithic transition, in *Rethinking the Human Revolution*, eds. P. Mellars, K. Boyle, O. Bar-Yosef & C. Stringer. (McDonald Institute Monographs.)

- Cambridge: McDonald Institute for Archaeological Research, 303–14.
- 2008 Review of: Marciniak, A. 2005. 'Placing Animals in the Neolithic. Social Zooarchaeology of Prehistoric Farming Communities'. *Environmental Archaeology* 13(2), 201–2.

ADAM BRUMM

2007 Stone artifacts and hominins in Island Southeast Asia: new insights from Flores, eastern Indonesia. *Journal of Human Evolution* 52(1), 85–102.

GILLY CARR

- 2007 Creolising the body: constructing identity through appearance in early Roman Britain, in *Roman Finds: Context and Theory. Proceedings of a Conference held at the University of Durham*, eds. R. Hingley & S.H. Willis. Oxford: Oxbow Books, 106–15.
- 2007 Excarnation to cremation: continuity or change?, in *The Later Iron Age in Britain and Beyond*, eds. C. Haselgrove & T. Moore. Oxford: Oxbow Books, 446–55.
- 2008 The politics of forgetting on the island of Alderney. *Archaeological Review from Cambridge* 22.2, 89–112.
- 2008 The trench art of Byll Balcombe of Biberach. *Channel Islands Occupation Review* 36, 131–45.

CRAIG CESSFORD

- 2007 (with A. Dickens). Ely Cathedral and environs: recent investigations. *Proceedings of the Cambridge Antiquarian Society* 96, 161–74.
- 2007 History of excavation of Buildings 1 and 5 and summary of phases, in Excavating Çatalhöyük: South, North and KOPAL Area Reports from the 1995–99 Seasons, ed. I Hodder. (McDonald Institute Monographs; BIAA Monograph 37.) Cambridge: McDonald Institute for Archaeological Research; London: British Institute at Ankara, 340–60.
- 2008 Excavation of the Civil War bastion ditch of Cambridge Castle. *Proceedings of the Cambridge Antiquarian Society* 97, 137–48.
- 2008 (with A. Dickens, N. Dodwell & A. Reynolds). Middle Anglo-Saxon justice: the Chesterton Lane Corner execution cemetery and related sequence. *The. Archaeological Journal* 164, 197–226.

ELIZABETH DEMARRAIS

2007 Early figuration in northwest Argentina: materiality, iconography, and the uses of imagery, in *Image* and *Imagination: a Global Prehistory* of Figurative Representation, eds. C. Renfrew & I. Morley. (McDonald

- Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 255–70.
- 2007 Settings and symbols: assessing complexity in two pre-Hispanic polities, in *Socialising Complexity: Approaches to Power and Interaction in the Archaeological Record*, eds. S. Kohring & S. Wynne-Jones. Oxford: Oxbow Books, 118–39.

CHRISTOPHER EVANS

- 2007 The Birth of Modern Archaeology In Making History: Antiquaries in Britain 1707–2007. London: Society of Antiquaries of London, Exhibition Catalogue, Royal Academy of Art.
- 2007 (with M. Knight & L. Webley). Iron Age settlement and Romanization on the Isle of Ely: the Hurst Lane Reservoir site. Proceedings of the Cambridge Antiquarian Society 96, 41–78.
- 2007 'Delineating objects': nineteenth century antiquarian culture and the project of archaeology, in *Visions of Antiquity: the Society of Antiquaries of London:* Society of Antiquaries of London: Society of Antiquaries of London, 266–305.
- 2007 Review: Lewis, J. et al. 'Landscape Evolution in the Middle Thames Valley: Heathrow Terminal 5 Excavations, vol.
 1: Perry Oak. (Framework Archaeology Monograph 1.) Antiquity 81, 809–11.
- 2008 (with T. Murray). Histories of Archaeology: a Reader in the History of Archaeology. Oxford: Oxford University Press.
- 2008 (with M. Knight). Further investigations at Arbury Camp, Cambridge: the eastern entrance — A monumental architecture. Proceedings of the Cambridge Antiquarian Society 97, 7–30.
- 2008 Model excavations: 'performance' and the three-dimensional display of knowledge, in *Archives, Ancestors, Practices: Archaeology in the Light of its History*, eds. N. Schlanger & J. Nordbladh. Oxford: Berghahn Books, 147–61.

CHARLES FRENCH

- 2007 (ed.) (with H. Lewis, M. Allen, M. Green, R. Scaife & J. Gardiner, 2007. Prehistoric Landscape Development and Human Impact in the Upper Allen Valley, Cranborne Chase, Dorset. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2008 Deposition process: the geomorphological picture, in Keros: Dhaskalio and Kavos, Early Cycladic stronghold and ritual centre. Preliminary report of the 2006 and



- 2007 excavation seasons, eds. C. Renfrew, O. Philaniotou, N. Brodie & G Gavalas . *Annual of the British School at Athens* 102, 113–14.
- 2008 (with D. Borić, & V. Dimitrijevic). Vlasac revisited: formation processes, stratigraphy and dating. *Documenta Praehistorica* XXXV, 1–27.

HELEN GEAKE

2007 The Inhabitants: the human burials, in *Excavations at Flixborough-North Conesby, North Lincolnshire*, ed. C.P. Loveluck. Oxford: Oxbow Books, 113–28.

SUSANNE HAKENBECK

- 2007 Situational ethnicity and nested identities: new approaches to an old problem. *Anglo-Saxon Studies in Archaeology and History* 14, 21–34.
- 2007 Identitätsbildunsprozesse im Gräberfeld von Altenerding, in Innere Strukturen von siedlungen und Gräberfeldern als Spiegel gesellschaftlicher Wirklichkeit, eds. C. Gruenewald & T. Capelle. (Veröffentlichungen der Altertumskommission für Westfalen XV11.) Münster: Aschendorff Verlag, 88–97.

Norman Hammond

- 2008 Context and human society lecture series. *Context* 19(1–2), 20–21.
- 2008 James R. Wiseman Archaeological Institute of America gold medal citation. American Journal of Archaeology 112, 340.
- 2008 (with J.M. Weeks & J.A. Hill). The Carnegie Maya: the Carnegie Institution of Washington Maya research program. Antiquity 82, 231–2.
- 2008 (with C. Runnels.) Editorial essay. Journal of Field Archaeology 33, 1.
- 2008 Emerging Eurozones. Review: Cunliffe, B. 2008, 'Europe Between the Oceans: Themes and Variations 9000 BC-AD 1000. *Literary Review* 354, (May), 33-4.

JENNIFER HARLAND

- 2007 Status and space in the 'Fish Event Horizon': initial results from Quoygrew and Earl's Bu, Viking Age and medieval sites in Orkney, Scotland, in *The Role of Fish in Ancient Time*, ed. H.H. Plogmann. Rahden: Verlag Marie Leidorf, 63–8.
- 2008 (with J. Barrett, C. Johnstone, W. Van Neer, A. Ervynck, D. Makowiecki, D. Heinrich, A.K. Hufthammer, I.B. Enghoff, C. Amundsen, J.S. Christiansen, A.K.G. Jones, A. Locker, S. Hamilton-Dyer, L. Jonsson, L. Lõugas, C. Roberts & M. Richards). Detecting the medieval cod trade: a new

method and first results. *Journal of Archaeological Science* 35(4), 850–61.

PAUL HEGGARTY

- 2007 Linguistics for archaeologists: principles, methods and the case of the Incas. *Cambridge Archaeological Journal* 17(3), 311–40
- 2007 (with A. McMahon, R. McMahon & W. Maguire). The sound patterns of Englishes: representing phonetic similarity. English Language and Linguistics 11.1, 113–42.
- 2008 Linguistics for archaeologists: a case-study in the Andes. *Cambridge Archaeological Journal* 18(1), 35–56.

CATHERINE HILLS

- 2007 History and archaeology: the state of play in early medieval Europe. *Antiquity* 81, 191–200.
- 2007 Anglo-Saxon attitudes, in *Britons in Anglo-Saxon England*, ed. N. Higham. (Manchester Centre for Anglo-Saxon Studies 7.) Woodbridge: Boydell Press, 16–26
- 2008 Roman to Saxon in East Anglia, in Aedificia Nova: Studies in Honor of Rosemary Cramp, eds. C.E. Karkov & H. Danico. (Medieval Institute Publications.). Kalamazoo: Western Michigan University, 268–82.

LILIANA JANIK

- 2007 (with C.F. Roughley & K. Szczkesna). Skiing on the rocks: the experiential art of fisher-gathererhunters in prehistoric northern Russia. Cambridge Archaeological Journal 17(3), 297–310.
- 2007 Animism in the rock art and material culture of prehistoric Siberia, in *Cult in Context: Reconsidering Ritual in Archaeology*, eds. D.A. Barrowclough & C.A.T. Malone. Oxford: Oxbow Books, 191–7.

MARTIN JONES

- 2007 (with E. Margaritis). Crop processing of Olea europaea L.: an experimental approach for the interpretation of archaeobotanical olive remains. Vegetation History and Archaeobotany 17(4), 381–92.
- 2007 (with J. Svoboda, M. Novak & M. Nyvltova Fisakova). Dolní Věstonice. *Přehled Výskumu* 47, 82–4.
- 2007 A feast of Beltain? Reflections on the rich Danebury harvests, in *Communities and Connections: Essays in Honour of Barry Cunliffe*, eds. C. Gosden, H. Hamerow, P. de Jersey & G. Lock. Oxford: Oxford University Press, 142–53.
- 2007 (with M. Bower). Ancient DNA, in *The Encyclopaedia of Archaeology*, ed.

D.M. Pearsall. London: Elsevier. 2007 (with L. Foxhall & H. Forbes). Human ecology and the classical landscape, in *Blackwell Studies in Classical Archaeology*, eds. S. Alcock &

R. Osborne. Oxford: Blackwell, 89-117.

- 2007 (with T. Brown). Selection, cultivation, and reproductive isolation; a reconsideration of the morphological and molecular signals of domestication, in Rethinking Agriculture: Archaeological and Ethnoarchaeological Perspectives, eds. T. Denham, J. Iriarte & L. Vrydaghs. Walnut Creek (CA): Left Coast Press, 36–49.
- 2008 (with H. Martlew & K. Tsedakis). Archaeology Meets Science: Biomolecular and Site Investigations in Bronze Age Greece. Oxford: Oxbow Books.
- 2008 (with H. Jones, D.L. Lister, M.A. Bower, F.J. Leigh & L.M. Smith).
 Approaches and constraints of using existing landrace and extant plant material to understand agricultural spread in prehistory. Plant Genetic Resources: Characterization and Utilization 6(2), 98–112.
- 2008 (with D.L. Lister, M.A. Bower & C.J. Howe). Extraction and amplification of nuclear DNA from herbarium specimens of emmer wheat: a method for assessing DNA preservation by maximum amplicon length recovery. *Taxon* 57(1), 254–8.
- 2008 (with E. Margaritis). Olive oil production in Hellenistic Greece: the interpretation of charred olive remains from the site of Tria Platania, Macedonia, Greece (fourth–second century BC). Vegetation History and Archaeobotany 17(4), 393–401.
- 2008 (with X. Liu). When archaeology begins cultural and political context of Chinese archaeological thought. Bulletin of the History of Archaeology 18(1), 25–7.
- 2008 (with C.W. Beck, V. Garner & M.P. Richards). Biomolecular archaeology in the Aegean context, in Archaeology Meets Science: Biomolecular and Site Investigations in Bronze Age Greece, eds. H. Martlew, K. Tsedakis & M.K. Jones. Oxford: Oxbow Books, 238–42.
- 2008 (with E. Margaritis). Greek and Roman agriculture, in *Handbook of Engineering and Technology in the Classical World*, ed. J.P. Oleson. Oxford: Oxford University Press.

BARRY KEMP

2007 (with F. Weatherhead). The Main Chapel at the Amarna Workmen's Village and its Wall Paintings. London: Egypt Exploration Society.



2007 The orientation of burials at Tell el-Amarna, in *The Archaeology and Art of Ancient Egypt: Essays in Honor of David B. O'Connor*, eds. Z. Hawass & J. Richards. Cairo: Supreme Council of Antiquities Press, 21–31.

GRAEME LAWSON

- 2008 Conserving the future of music's distant past: some thoughts on the development of music-archaeological conservation, in *Herausforderungen und Ziele der Musikarchäologie [Challenges and Objectives in Music Archaeology]*, eds. A.A. Both, R. Eichmann, E. Hickmann & L.-C. Koch. (Studien zur Musikarchäologie VI.) Rahden, Westfalia: Verlag Marie Leidorf, 389–400.
- 2008 Representation and reality in the Late Roman World: some conflicts between excavated finds and popular images of panpipes, lyres and lutes, in Herausforderungen und Ziele der Musikarchäologie [Challenges and Objectives in Music Archaeology], eds. A.A. Both, R. Eichmann, E. Hickmann & L.-C. Koch. (Studien zur Musikarchäologie VI.) Rahden, Westfalia: Verlag Marie Leidorf, 179–96.

TONY LEGGE

- 2007 Animals and economy at Majaladares, in *Majaldares: a Bronze Age Village of Farmers, Herders and Hunters*, ed. R.J. Harrison. Rahden, Westfalia: Verlag Marie Ledorf, 167–82.
- 2007 Seasonality of site occupation, in Encyclopaedia of Archaeology, ed. D.M. Pearsall. London: Elsevier, 1–9.
- 2008 Livestock and Neolithic society at Hambledon Hill, in *Hambledon Hill, Dorset, England: Excavation and Survey of a Neolithic Monument Complex and its Surrounding Landscape*, eds. R. Mercer & F. Healy. London: English Heritage, 457–75.
- 2008 (with G. Jones). The charred plant remains, in Hambledon Hill, Dorset, England: Excavation and Survey of a Neolithic Monument Complex and its Surrounding Landscape, eds. R. Mercer & F. Healy. London: English Heritage, 427–39.

Marsha Levine

2008 (with D. Goodwin & P. McGreevy). Preliminary investigation of morphological differences between ten breeds of horses suggests selection for paedomorphosis. Journal of Applied Animal Welfare Science 11(3), 204–12.

CARENZA LEWIS

2007 Test pit excavation within occupied settlements in East Anglia in

2006. MSRG Annual Report 21, 37–44.
 2007 New avenues for the investigation of currently occupied medieval rural settlement — preliminary observations from the Higher Education Field Academy. Medieval Archaeology 51, 131–61.

DIANE LISTER

- 2008 (with H. Jones, M.A. Bower, F.J. Leigh, L.M.J. Smith & M.K. Jones). Approaches and constraints of using existing landrace and extant plant material to understand agricultural spread in prehistory. Plant Genetic Resources 6, 98–112.
- 2008 (with M.A. Bower, C.J. Howe & M.K. Jones). Extraction and amplification of nuclear DNA from herbarium specimens of emmer wheat: a method for assessing DNA preservation by maximum amplicon length recovery. Taxon 57, 254–8.

LAMBROS MALAFOURIS

- 2007 Before and beyond representation: towards an enactive conception of the Palaeolithic image, in *Image and Imagination: a Global Prehistory of Figurative Representation*, eds. C. Renfrew & I. Morley. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 289–302.
- 2007 The sacred engagement: outline of a hypothesis about the origin of human 'religious intelligence', in *Cult in Context: Reconsidering Ritual in Archaeology*, eds. D.A. Barrowclough & C. Malone. Oxford: Oxbow Books, 198–205.
- 2008 (ed.) (with C. Knappett).

 Material Agency: Towards a Nonanthropocentric Approach. New York
 (NY): Springer.
- 2008 Beads for a plastic mind: the 'Blind Man's Stick' (BMS) hypothesis and the active nature of material culture. *Cambridge Archaeological Journal* 18(3), 401–14.
- 2008 Between brains, bodies and things: tectonoetic awareness and the extended self. *Philosophical Transactions of the Royal Society of London* Series B 363, 1993–2002.
- 2008 (with C. Renfrew & C. Frith). The sapient mind: archaeology meets neuroscience. Philosophical Transactions of the Royal Society of London Series B 363 (Theme Issue).
- 2008 (with C. Renfrew). Steps to a 'neuroarchaeology' of mind: an introduction. Cambridge Archaeological Journal 18(3), 381–5.
- 2008 At the potter's wheel: an argument for material agency, in

- Material Agency: Towards a Nonanthropocentric Approach, eds. C. Knappett & L. Malafouris. New York (NY): Springer, 19–36.
- 2008 (with C. Knappett). Material and non-human agency: an introduction, in *Material Agency: Towards a Non*anthropocentric Approach, eds. C. Knappett & L. Malafouris. New York (NY): Springer, ix–xix.

AUGUSTA McMahon

- 2007 (with J. Oates, P. Karsgaard, S. al- Kuntar & J. Ur). Early Mesopotamian urbanism: a new view from the north. *Antiquity* 81, 585–600.
- 2007 (with J. Oates, S. al-Quntar, M. Charles, C. Colantoni, M.M. Hald, P. Karsgaard, L. Khalidi, A. Soltysiak, A. Stone & J. Weber). Excavations at Tell Brak, 2006–2007. *Iraq* 69, 1–27.
- 2007 (with P. Quenet). A late third millennium BC pottery assemblage from Chagar Bazar (area D, phase II), in Chagar Bazar (Syrie) II: Les vestiges post-akkadiens du chantier D et études diverses, eds. O. Tunca, A.M. McMahon & A. Baghdo. Leuven: Peeters, 69–242.

PAUL MELLARS

- 2007 (ed.) (with K. Boyle, O. Bar-Yosef & C. Stringer). Rethinking the Human Revolution. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2007 Rethinking the human revolution: Eurasian and African perspectives, in *Rethinking the Human Revolution*, eds. P. Mellars, K. Boyle, O. Bar-Yosef & C. Stringer. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 1–11.
- 2008 (with B. Gravina). Châtelperron: theoretical agendas, archaeological facts, and diversionary smoke-screens. Palaeoanthropology 2008, 43–64.

MARTIN MILLETT

- 2007 The Romanization of Britain: changing perspectives [Proceedings of the International Symposium on the Ancient Mediterranean World, University of Tokyo, 16–18 April 2004]. *Kodai* 13–14, 169–73.
- 2007 (with C. Carlucci, M.A. De Lucia Brolli, S. Keay & K. Strutt). An archaeological survey of the Faliscan settlement at Vignale, Falerii Veteres, (Province of Viterbo). Papers of the British School at Rome 75, 39–121.
- 2007 Urban topography and social identity in the Tiber Valley, in *Roman By Integration: Dimensions of Group Identity in Material Culture and Text*, eds. R. Roth & J. Keller. *Journal of Roman*



- Archaeology supplement 69, 71–82.
 2007 Experiments in the analysis of finds deposition at Shiptonthorpe: a retrospect, in Roman Finds: Context and Theory, (eds.) R. Hingley & S.H.
 Willis. Oxford: Oxbow Books, 100–105.
- 2007 Roman Kent, in *The Archaeology* of Kent to AD 800, ed. J.H. Williams. Woodbridge: Boydell Press, 135–84.
- 2007 What is Classical Archaeology?, in Roman Archaeology, Classical Archaeology, eds. S.E. Alcock & R. Osborne. (Blackwell Studies in Global Archaeology.) Oxford: Blackwell, 30–50.

PRESTON MIRACLE

- 2007 The Krapina Paleolithic Site: Zooarchaeology, Taphonomy, and Catalog of the Faunal Remains. Zagreb: Croatian Natural History Museum.
- 2007 (with G. Larson, U. Albarella, K. Dobney, P. Rowley-Conwy, J. Schiblerf, A. Tressetg, J.-D. Vigne, C.J. Edwards, A. Schlumbaum, A. Dinui, A. Bălăçsescuj, G. Dolmank, A. Tagliacozzo, N. Manaseryan, L. Van Wijngaarden-Bakker, M. Masseti, D.G. Bradley & A. Cooper). Ancient DNA, pig domestication, and the spread of the Neolithic into Europe. PNAS 104(39), 15,276–81.
- 2007 (with G. Boschian). Shepherds and caves in the karst of Istria (Croatia). Atti Soc. tosc. Sci. nat., Mem., Serie A, 112, 173–80.
- 2007 The Late Glacial 'Great Adriatic Plain': 'Garden of Eden' or 'No Man's Land' during the Epipalaeolithic? A view from Istria (Croatia), in *Late Paleolithic Environments and Cultural Relations Around the Adriatic*, ed. R. Whallon. (BAR International Series 1716.) Oxford: Archaeopress, 41–51.
- 2008 (with D. Brajković). Middle Palaeolithic and Early Upper Palaeolithic subsistence practices at Vindija Cave, Croatia, in *The Palaeolithic* of the Balkans, eds. A. Darlas & D. Mihailović. (BAR International Series 1819.) Oxford: Archaeopress, 107–16.

IAIN MORLEY

- 2007 (ed.) (with C. Renfrew). Image and Imagination: a Global Prehistory of Figurative Representation. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2007 Material beginnings: introducing Image and Imagination, in Image and Imagination: a Global Prehistory of Figurative Representation, eds.
 C. Renfrew & I. Morley. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological

- Research, xvii–xxii.
- 2007 New questions of old hands: outlines of human representation in the Palaeolithic, in *Image and Imagination: a Global Prehistory of Figurative Representation*, eds. C. Renfrew & I. Morley. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 69–81.
- 2008 Materialising the transcendent: the 'Roots of Spirituality' project. *Material Religion: the Journal of Objects, Art and Belief* 4(1), 117–18.
- 2008 (with I. Cross). The evolution of music: theories, definitions and the nature of the evidence, in Communicative Musicality, eds. S. Malloch & C. Trevarthen. Oxford: Oxford University Press, 61–82.

JOAN OATES

- 2007 (with J. Ur & P. Karsgaard). Early urban development in the Near East. *Science* 317, 1188.
- 2007 (with T. Molleson & A. Soltysiak). Equids and an acrobat: closure rituals at Tell Brak. *Antiquity* 82, 390–400.
- 2007 (*with* A. McMahon). Excavations at Tell Brak, 2006–2007. *Iraq* 69, 145–71.
- 2007 Monumental public architecture in Late Chalcolithic and Bronze Age Mesopotamia, with particular reference to Tell Brak and Tell al Rimah, in *Power and Architecture*, eds. J. Bretschneider *et al.* Leuven.

TAMSIN O'CONNELL

- 2007 (with K.L. Privat & R.E.M. Hedges). The distinction between freshwater- and terrestrial-based diets: methodological concerns and archaeological applications of sulphur stable isotope analysis. *Journal of Archaeological Science* 34(8), 1197– 204.
- 2008 (with R.E.M. Hedges & A. Saville). Characterizing the diet of individuals at the Neolithic chambered tomb of Hazleton North, Gloucestershire, England, using stable isotopic analysis. Archaeometry 50, 114–28.

CAMERON PETRIE

- 2007 (with A. Sardari Zarchi & A. Javanmard Zadeh). Developing societies and economies in 4th millennium BC Fars: further excavations at Tol-e Spid. Iran 45, 301–9.
- 2007 (with J. Morris, F. Khan, J.R. Knox, & K.D. Thomas). The dynamics of late prehistoric ceramic production and distribution in the Bannu and Gomal Regions, NWFP, Pakistan. South Asian Studies 23, 75–94.
- 2007 (with P. Magee). Histories,

- epigraphy and authority: Achaemenid and indigenous control in Pakistan in the 1st millennium Bc. *Gandharan Studies* 1, 3–22.
- 2007 (with D.T. Potts, A. Asgari Chaverdi, A. Dusting, F. Farhadi, I.K. McRae, S. Shikhi, E.H. Wong, A. Lashkari & A. Javanmard Zadeh). The Mamasani Archaeological Project, stage two: excavations at Qaleh Kali (Tappeh Servan/Jinjun [MS 46]). Iran 45, 287–300.
- 2007 Kaftari ceramic vessels, in Encyclopaedia Iranica, ed. E. Yarshater. Los Angeles (CA): Mazda Publishers.
- 2007 (with D. Kennet & S.M.N. Priestman). The glazed ceramics, in *Charsadda: the British-Pakistani Excavations at the Bala Hisar*, eds. R.A.E. Coningham & I. Ali. (BAR International Series 1709.) Oxford: Archaeopress, 227–33.
- 2008 (with R.N. Singh). An archaeological and geographical reconnaissance of western Uttar Pradesh and Haryana: April 4–15 and May 21, 2008. Bharati 32.
- 2008 (with R. Torrence). Assessing the effects of volcanic disasters on human history: a Bayesian approach to radiocarbon dating. *The Holocene* 18.5, 729–44.
- 2008 (with R.N. Singh). Settlements in context: reconnaissance in western Uttar Pradesh and Haryana, April and May 2008. Man and Environment 33.2.
- 2008 (with A. Askari Chaverdi & H. Taylor). Early village settlements on the Persian Gulf littoral: revisiting Tol-e Pir and the Galehdār Valley. *Iran* 46, 21–42.
- 2008 (with F. Khan, J.R. Knox, P.G. Magee & K.D. Thomas). Further research on the later prehistory of the Bannu Basin: the 1998 excavations at Akra, in South Asian Archaeology 1999, eds. E.M. Raven & G.L. Possehl. Groningen: Egbert Forsten Publishing, 211–22.

NICHOLAS POSTGATE

- 2007 (ed.) Languages of Iraq, Ancient and Modern. London: BSAI.
- 2007 (with A.Y. Ahmad). Archives from the Domestic Wing of the North-west Palace at Kalhu/Nimrud. (Edubba 10.) London: Nabu Publications.
- 2007 (ed.) (with D.C. Thomas).

 Excavations at Kilise Tepe, 1994–1998:
 From Bronze Age to Byzantine in Western
 Cilicia, 2 vols. (McDonald Institute
 Monographs; BIAA Monograph 30.)
 Cambridge:McDonald Institute for
 Archaeological Research; London:
 British Institute at Ankara.
- 2007 The ceramics of centralisation and dissolution: a case study from Rough Cilicia. *Anatolian Studies* 57, 141–50.



RYAN RABETT

- 2007 (with P.J. Piper & the Earl of Cranbrook). New discoveries of an extinct Giant pangolin (Manis cf. palaeojavanica Dubois) at Niah Cave, Sarawak, Borneo: biogeography, palaeoecology and taxonomic relationships. Sarawak Museum Journal 84 (New series), 205–26.
- 2007 Vertebrate faunal remains from Gua Cha: new material found in association with recently rediscovered human remains from the 1954 Sieveking excavation, in *Archaeological Heritage of Malaysia*, (eds.) M. Saidin & S Chia. Penerbit Pusat Penyelidikan Arkeologi Malaysia, 61–72.
- 2008 (with P.J. Piper & E. Kurui).
 Using community, composition
 and structural variation in terminal
 Pleistocene vertebrate assemblages
 to identify human hunting behaviour
 at the Niah Caves, Borneo. IPPA Bulletin
 28, 88–98.
- 2008 Analysis of faunal remains: bone tool analysis, in *Encyclopaedia* of *Archaeology*, (ed.) D.M. Pearsall. London: Elsevier, 931–6.

JOHN RAY

2007 The Rosetta Stone and the Rebirth of Ancient Egypt. (Profile Books.)
Cambridge (MA): Harvard University Press.

KATHARINA REBAY

- 2007 Das Gräberfeld von Statzendorf in Niederösterreich Soziale Differenzierung und Wandel der Bestattungssitten in der frühen Eisenzeit, in *Die unteren Zehntausend auf der Suche nach den Unterschichten der Eisenzeit*, eds. P. Trebsche, I. Balzer, C. Eggl, J. Koch, H. Nortmann & J. Wiethold. (Beiträge zur Ur- und Frühgeschichte Mitteleuropas 47.) Beiträge zur Tagung der AG Eisenzeit in Xanten 2006, 49–56.
- 2007 Plotting social change: the cemetery of Statzendorf, Austria as an example of changing burial rites at the beginning of the Early Iron Age in Central Europe, in *Perceptions of Space and Time: Archaeology's Final Frontier*, eds. R. Salisbury & D. Keeler. Cambridge: Cambridge Scholars Press, 134–67.
- 2007 (with M.L.S. Sørensen). Changing social practices of death in later European prehistory, in *Interpretierte* Eisenzeiten, eds. R. Karl & J. Leskovar. (Studien zur Kulturgeschichte von Oberösterreich 16.) Linz: Oberösterreichisches Landesmuseum, 119–23

- 2008 Rechts- und Linkshänder in der Hallstattzeit. *Archäologie Österreichs* 19, 72–7.
- 2008 (with M.L.S. Sørensen). Interpreting the body: burial practices at the Middle Bronze Age cemetery at Pitten. Archaeologia Austriaca 89, 153–75.
- 2008 (with M.L.S. Sørensen). The impact of 19th century ideas on the construction of 'Urnfield' as chronological and cultural concept: tales from northern and central Europe, in Actes du colloque 'Construire le temps'. Lille.

COLIN RENFREW

- 2007 Prehistory: the Making of the Human Mind. London, Weidenfeld & Nicolson.
- 2007 (ed.) Excavations at Phylakopi in Melos 1974–77. London: British School at Athens.
- 2007 (ed.) (with C. Doumas, L. Marangou & G. Gavalas). Keros, Dhaskalio Kavos, the Investigations of 1987–88. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2008 (with P. Bahn). Archaeology: Theories, Methods and Practice. 5th edition. London: Thames & Hudson.
- 2008 (ed.) (with N. Brodie, J. Doole & G. Gavalas). Horizon: a Colloquium on the Prehistory of the Cyclades. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2008 (ed.) (with S. Matsumura & P. Forster). Simulations, Genetics and Human Prehistory. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2008 Neuroscience, evolution and the sapient paradox: the factuality of value and of the sacred. *Philosophical Transactions of the Royal Society,* Series B 363, 2041–7.
- 2008 (with O. Philaniotou, N. Brodie & G. Gavalas). Keros: Dhaskalio and Kavos, Early Cycladic stronghold and ritual centre. Preliminary report of the 2006 and 2007 excavations seasons. Annual of the British School at Athens 102, 103–36
- 2008 (ed.) (with C. Frith & L. Malafouris). The sapient mind: archaeology meets neuroscience. *Philosophical Transactions of the Royal Society,* Series B 363 (Theme issue).
- 2008 (with L. Malafouris). Steps to a 'neuroarchaeology' of mind: an introduction. *Cambridge Archaeological Journal* 18(3), 381–5.

Јони **R**овв

2007 The Early Mediterranean Village: Agency, Material Culture and Social

- *Change in Neolithic Italy.* Cambridge: Cambridge University Press.
- 2007 Burial treatment as transformations of bodily ideology, in *Performing Burial*, ed. N. Laneri. Chicago (IL): Oriental Institute, University of Chicago), 287–98.
- 2007 (with P. Miracle). Beyond 'migration' versus 'acculturation': new models for the spread of agriculture, in Going Over: the Mesolithic–Neolithic Transition in Western Europe, ed. A. Whittle. (Proceedings of the British Academy 114.) London: British Academy, 90–113
- 2007 (with L. Foxhall, P. Lazrus, K. Michelaki, D. Van Hove & D. Yoon). Upland landscapes: the Bova Marina Survey, in *Upland Landscapes in Sicily and Southern Italy*, ed. M. Fitzjohn. London: Accordia Research Centre, 19–35.
- 2008 'Introduction' to special section, Time and change in archaeological interpretation. *Cambridge Archaeological Journal* 18(1), 57–9.

KRISH SEETAH

- 2007 The Middle Ages on the block: animals, guilds and meat in medieval Britain, in *Breaking and Shaping Beastly Bodies: Animals as Material Culture in the Middle Ages*, ed. A. Pluskowski. Oxford: Oxbow Books, 18–31.
- 2007 A zooarchaeological contribution to biological anthropology, in *Proceedings of the 6th Annual BABAO Conference*, eds. K. Robson Brown & A. Roberts. (BAR S1623.) Oxford: Archaeopress, 72–80.
- 2007 (with A. Pluskowski). The animal bones from the 2004 excavations at Stari Bar, Montenegro, in Stari Bar: the Archaeology of a Deserted Town, ed. S. Geliche. Florence: All'Insegna del Giglio, 97–111.
- 2008 Modern analogy, cultural theory and experimental archaeology. *World Archaeology* 40(1), 135–50.
- 2008 (with A. Pluskowski). The animal bones from Sacuidic Castle, in Richerche nel Castello di Sacuidic (Forni di Sopra – Udine), eds. S. Gelichi & F. Piuzzi. Florence: All'Insegna del Giglio, 84–8.
- 2008 (with A. Pluskowski). The animal bones from UTS 8a at Stari Bar, Montenegro, in A Town Through the Ages:the 2006–2007 Archaeological Project in Stari Bar, ed. S. Gelichi. Florence: All'Insegna del Giglio, 88–98.

Anthony Snodgrass

2007 (with J. Bintliff & P. Howard). Testing the Hinterland: the Work of the Boeotia Survey (1989–1991) in the Southern



Approaches to the City of Thespiai. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.

MARIE LOUISE STIG SØRENSEN

- 2007 Case study, in *Inclusivity in Teaching Practice and the Curriculum*,
 vol. 6: *Guides for Teaching and Learning in Archaeology*, eds. K.
 Croucher & W. Romer. Liverpool: The
 Subject Centre for History, Classics
 and Archaeology.
- 2007 English and Danish Iron Ages a comparison through houses, burials and hoards, in *The Earlier Iron Age in Britain and the Near Continent*, eds. C. Haselgrove & R. Pope. Oxford: Oxbow Books, 328–37.
- 2007 On gender negotiation and its materiality, in *Archaeology and Women: Ancient and Modern Issues*, eds. S. Hamilton, R. Whitehouse & K.I. Wright. London: UCL Press, 41–51.
- 2007 What does sustainability have to do with it? Reflections upon heritage language and the heritage of slavery and missionaries, in *World Heritage: Global Challenges, Local Solutions*, eds. J. Carman & R. White. (BAR International Series 1698.) Oxford: Archaeopress, 75–80.
- 2007 (with K. Rebay). Changing social practices of death in later European prehistory, in Interpretierte Eisenzeiten, eds. R. Karl & J. Leskovar. (Studien zur Kulturgeschichte von Oberösterreich 16.) Linz: Oberösterreichisches Landesmuseum, 119–23.
- 2008 (with K. Rebay). Interpreting the body: burial practices at the Middle

- Bronze Age cemetery at Pitten. *Archaeologia Austriaca* 89, 153–75.
- 2008 (with K. Rebay). The impact of 19th century ideas on the construction of 'Urnfield' as chronological and cultural concept: tales from northern and central Europe, in Actes du colloque 'Construire le temps'. Lille.

KATE SPENCE

- 2007 A contextual approach to ancient Egyptian domestic cult: the case of the 'lustration slabs' at el-Amarna, in *Cult in Context: Reconsidering Ritual in Archaeology*, eds. D. Barrowclough & C. Malone. Oxford: Oxbow Books, 283–90
- 2008 Topography, architecture and legitimacy: Hatshepsut's foundation deposits at Deir el-Bahri, in *Egyptian Stories: a British Egyptological Tribute to Alan B. Lloyd on the Occasion of His Retirement*, eds. T. Schneider & K. Szpakowska. (Alter Orient und Altes Testament 347.) Münster: Ugarit-Verlag, 353–72.

SIMON STODDART

- 2007 The impact of landscape and surface survey on the study of the Etruscans. *Etruscan Studies* 10, 239–45.
- 2007 (with G. Cifani & R. Opitz). LiDAR survey in southern Etruria, Italy. a significant new technique for the study of cultural landcapes. *The European Archaeologist* 27, 2–3.
- 2007 (with G. Cifani & R. Opitz). Mapping the Ager Faliscus road-system: the contribution of LiDAR (light detection and ranging) survey. *Journal of Roman Archaeology* 20, 165–76.

- 2007 The Maltese death cult in context, in Cult in Context: Reconsidering Ritual in Archaeology, eds. D. Barrowclough & C. Malone. Oxford: Oxbow Books, 54–60
- 2007 (with F.C. Sturt & C.A.T. Malone). Extracting the domestic from indigenous Sicily, in Building Communities: House, Settlement and Society in the Aegean and Beyond, eds. N. Fisher, J. Whitley & R. Westgate. (British School at Athens Studies 15.) Athens: British School at Athens, 47–53.
- 2007 (with L. Ceccarelli). The Faliscans, in Ancient Italy: Regions without Boundaries, eds. C. Riva, G. Bradley, & E. Isayev. Exeter: Exeter University Press, 131–60.
- 2007 (with C.A.T. Malone & D.A. Barrowclough). Introduction, in Cult in Context: Reconsidering Ritual in Archaeology, eds. D. Barrowclough & C. Malone. Oxford: Oxbow Books, 1–7.
- 2007 (with M. Anderson). Mapping cult context: GIS applications in Maltese temples, in Cult in Context: Reconsidering Ritual in Archaeology eds. D. Barrowclough & C. Malone. Oxford: Oxbow Books, 41–4.
- 2007 (with S. Ashley, J. Bending, G. Cook, A. Corrado, C.A.T. Malone P. Pettitt, D. Puglisi & D Redhouse). The resources of an upland community in the fourth millennium BC, in Uplands of Ancient Sicily and Calabria: the Archaeology of Landscape Revisited, ed. M. Fitzjohn. (Accordia Specialist Study on Italy.) London: Accordia Research Centre, University of London, 59–80.





Graeme Barker









Paul Mellars











Sara Harrop



Colin Lomas



Steve Topper





Kate Pretty



Nicholas Postgate



Julian Dowdeswell









Dora Kemp



Katherine Boyle

Managing Committee

Prof. Graeme Barker (Director) (McDonald Institute) Prof. Julian Dowdeswell (Director, Scott Polar Research Institute) Prof. Martin Jones (Department of Archaeology) Prof. Paul Mellars (Department of Archaeology) Prof. Martin Millett (Chair) (Faculty of Classics) Prof. Nicholas Postgate (Department of Archaeology) Dr Kate Pretty (Faculty of Archaeology and Anthropology) Sir Tony Wrigley (Emeritus Professor, Department of Geography)

Central Staff

Prof. Graeme Barker (Director) Dr James Barrett (Deputy Director) Ms Sara Harrop (PA to the Director) Mrs Liz Farmar (PA to the Deputy Director) Mr Colin Lomas (Accounts) Miss Dora Kemp (Publications Manager) Dr Katherine Boyle (Research Facilitator) Mr Steve Topper (Custodian)

DM McDonald Grants and Awards Committee

Prof. Graeme Barker (McDonald Institute) Dr James Barrett (Deputy Director) Dr Augusta McMahon (Department of Archaeology) Dr Michael Petraglia (Leverhulme Centre for Human Evolutionary Studies) Dr Kate Pretty (Faculty of Archaeology and Anthropology) Dr John Robb (Department of Archaeology)



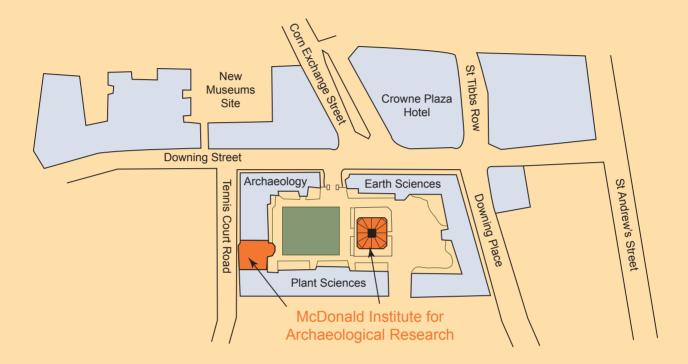
Augusta McMahon



Michael Petraglia



John Robb



McDonald Institute for Archaeological Research, University of Cambridge
Downing Street, Cambridge, CB2 3ER, UK
+44 (0)(1223) 333538; +44 (0)(1223) 333536 (FAX)
www.mcdonald.cam.ac.uk

© 2008 McDonald Institute for Archaeological Research

Printed by Blueprint Cambridge, Coldhams Road, Cambridge, CB1 3EW, UK; +44 (0)(1223) 472400

Cover photographs (left to right)

 ${\it Courtesy}\ of\ Liliana\ Janik,\ Laura\ Basell\ and\ Dora\ Kemp\ respectively.$