

The Institute's primary research groups

The coordinators of each of the Institute's five primary research groups report on their group's activities during the 2002/2003 academic year.

The Environment and Culture Research Group

Coordinator: Andrew Garrard

The Environment and Culture Research Group brings together the many staff and research students who are concerned with past interactions between people and the environments they occupied. Many of its members also participate in the activities of the Centre for the Evolutionary Analysis of Cultural Behaviour, which is a joint initiative between UCL and the University of Southampton, directed by Stephen Shennan and funded by the UK Arts and Humanities Research Board. During this academic year, the group has been joined by three new post-doctoral fellows: Daniel Antoine, Eleni Asouti and Marcello Mannino.

Research projects

Research in human osteoarchaeology has continued with Simon Hillson's and Charles Fitzgerald's investigation of dental reduction in the evolution of Neanderthals and anatomically modern humans, and Simon has also been preparing for publication his analyses of Upper Palaeolithic populations from the sites of Dolni Vestonice and Pavlov in the Czech Republic. He continues his projects in southern Peru and on the Aegean island of Astypalaia (see *AI 2001/2002*) and, with Daniel Antoine, has started a project to determine the impact of the Great Famine of AD 1315–23 on the growth of people who experienced it in childhood in London.

Several projects are concerned with the origins and spread of agriculture. Stephen Shennan, James Conolly and Sue Colledge are investigating the spread of the earliest plant domesticates from Southwest Asia into and across Europe, by compiling a comprehensive database of the archaeobotanical evidence from all relevant sites in this vast region (see *AI 2001/2002* for an initial account of this project). In a separate project, Stephen Shennan, Mark Lake and Alex Bentley are developing an agent-based computer simulation of the spread of agriculture in Neolithic Europe and the extent to which it resulted from the spread of farmers or the adoption of agriculture by foragers. Dorian Fuller and Eleni Asouti have begun an investigation of wood charcoal from Neolithic sites across southern India, to examine the environmental settings of early agricultural economies and their impact on the regional landscape. Arlene Rosen has continued her analyses of phytoliths from early sites in western

Asia and China to investigate plant exploitation in pre-agrarian societies, the types of micro-environments in which early farming occurred, and subsequent changes in agricultural practice; and Ken Thomas and Marcello Mannino have begun an ecological study of prehistoric shellfish exploitation in the coastal zone of north-west Sicily.

Several members are involved in geoarchaeological research and in the reconstruction of environmental and cultural landscapes. In Britain, Mark Roberts is mapping the Middle Pleistocene coastal plain of Sussex and Hampshire, in particular the geological units relevant to the Middle Palaeolithic site at Boxgrove (on which he reported in *AI 1997/98*); Jane Sidell is studying the tidal sections of the Thames valley, in relation to sea-level changes, the ecology of the floodplain, and prehistoric land use along the river margins (see her article in *AI 2001/2002*); and Tim Schadla-Hall has completed two field seasons at Lihou, the first late Mesolithic site to be found in Guernsey. Beyond Britain, James McGlade has continued his study of the evolution of the cultural landscape and the emergence of urban settlements in northeast Spain (see his article in *AI 1998/99*); Fekri Hassan has four current field projects in Egypt (see p. 9 of this issue of *AI*), including his geoarchaeological studies at Farafra oasis, where he is examining short-term climatic changes between 7600 and 5900 years ago, and their implications for cultural changes in the Sahara and the Nile valley; also in Egypt, David Jeffreys has continued his work at ancient Memphis (see his article in *AI 1999/2000*); Dorian Fuller is involved in four field projects in India and has also participated in salvage survey and excavation in northern Sudan (see p. 9). In northern Lebanon, I have undertaken reconnaissance for a Palaeolithic landscape project; and Arlene Rosen continues her geoarchaeological research in the Yiluo valley of central China (see her article in *AI 2001/2002*).

Seminars

During the autumn term, the Centre for the Evolutionary Analysis of Cultural Behaviour held a very well attended series of seminars on the theme "Evolution of culture". Topics discussed ranged from early hominid culture (Robert Foley, Cambridge) and culture among chimpanzees (Andrew Whiten, St Andrews), to

evolution and history in present-day Fiji (Christina Toren, Brunel), and major transitions in technology, including self-reproducing robots (Robert Aunger, Cambridge). The centre also runs the Culture Club, which holds informal seminars throughout the academic year. Their format varies from discussions of recently published academic papers to presentations of research in progress by members of the centre, and occasional contributions by visiting speakers. As well as contributing to the knowledge and ideas of its members, the aim of the club is to develop the sense of identity that is essential to the continuing success of a research group.

During the spring term the research group ran two series of seminars. The first was concerned with environmental traumas and human responses in antiquity. It included two presentations relating to the eastern Mediterranean region: one on responses to ecological and social disasters in Egypt at 2100 BC (Fekri Hassan, UCL), and the other on vegetational changes relating to major seismic events in northwest Turkey and their impact on Byzantine settlement (Suzanne Leroy, Brunel). Two seminars were concerned with the impact of natural and humanly induced environmental changes on island communities: one on the human colonization of the Pacific Islands (Paul Rainbird, Lampeter), and the other on settlement patterns in Iceland (Gudrun Sveinbjarnardottir, UCL). The final seminar was on the management of agricultural risk in relation to environmental changes in the Peruvian Andes (Ann Kendall, UCL, Nick Branch and Barbara Silvaboth, both of Royal Holloway). The second seminar series in the spring term consisted of informal talks given by members of the research group, including the three new post-doctoral fellows: Daniel Antoine spoke about teeth as a source of data on human growth and disease, Eleni Asouti described her recent fieldwork in southern India, and Marcello Mannino reported on the initial phase of his and Ken Thomas's project in Sicily. Also, Jane Sidell summarized her work on sea-level change in the Thames estuary, and Arlene Rosen spoke about aridization, landscape change and the rise of social complexity in the late Neolithic of central China.

This year, too, members of the group, and many other colleagues from the Institute and farther afield, came together on 13 March 2003 to hear Simon Hillson deliver his inaugural lecture as Professor of Bioarchaeology. His title was "Teeth and recent human evolution", and in the allotted hour he gave a masterly account of what the study of teeth is beginning to reveal about the evolution of *Homo sapiens* during the past 100,000 years, including some of the results of his own research on human teeth from Upper Palaeolithic sites in western Asia and Europe and from medieval and later burials in London.

The Material Culture and Data Science Research Group

Coordinator: Thilo Rehren

The Material Culture and Data Science Research Group is a new addition to the primary research groups of the Institute. Established in May 2002, it takes the place of the former Material Culture and Technology secondary research group, and by making this change the Institute has recognized its longstanding contribution, and increased commitment, to this field of study. The new group brings together individuals with research interests in the analysis of archaeological materials, particularly by instrumental and quantitative methods, within broader archaeological frameworks. One of its primary aims is to promote the critical application of these methods to archaeological questions by generating data that are independent of, and complementary to, traditional archaeological methods of enquiry. A major aim of the group is to study ancient technologies by analyzing the form and composition of artefacts, raw materials and waste products, and by means of experimental studies. We aim to optimize the productivity of the Institute's substantial human and technical resources in this field of research, and to promote the understanding of science-based archaeological information as an essential component in the study of material culture. One way to achieve this is for the group as a whole to facilitate the early integration of quantitative methods and data in projects being developed by the Institute's other research groups, and for its individual members to contribute to group research, in addition to their own projects.

Most of the research currently undertaken by members of the group is done collaboratively, both with colleagues in the Institute and also with a wide range of external partners. Many of the group's activities are concerned with the development of innovative methods, the promotion of best analytical practice, and the establishment of working standards. In addition, members of the group frequently offer advice on procedural and other aspects of science-based archaeological enquiry, particularly in relation to the use of advanced computing facilities and of the equipment in the Institute's Wolfson Archaeological Science Laboratories.¹

Research on instrumental and statistical methods

A key issue in the use of scientific instrumental and numerical analysis in archaeology is the development and promotion of coherent procedures, aimed at generating reproducible, reliable and compatible data, and interpreting existing datasets in the most effective and relevant way. Examples of such work include the continuous calibration of the analytical instruments in

the Wolfson Laboratories, against each other and against certified reference materials. What may be thought a routine task is in reality a challenging one, because of the very wide, and frequently changing, nature of the archaeological materials to be studied. During this academic year, these materials have included several types of ceramics, at least six or seven different metals and alloys, a wide range of glasses, obsidian, bones, natural and artificial pigments, iron and copper ore and many samples of slag, to name only the more common materials. One example of this type of work is the recently completed development of a fully calibrated method for the analysis of iron and copper slag. This method – which has already been used by six members of the Institute and two visiting colleagues for their own research, and has contributed to several publications – took most of a year's work by a research student (Xander Veldhuijzen) and considerable input from one of our technicians (first Peter Ditchfield, later Simon Groom).

Equally important is the development of new statistical models to explore how best to identify, retrieve and use the archaeologically relevant content of existing large databases. This is particularly relevant to radiocarbon dating, where large datasets exist. Here, two members of the group (Clive Orton and John Meadows) are cooperating with English Heritage in a project aimed at significantly increasing both the use, and the awareness in the archaeological community, of the latest statistical techniques for analyzing radiocarbon dates. Unlike many other uses of statistics, however, archaeological data are often very incomplete and do not represent the initial total – a problem that demands solution by specific mathematical methods (see Clive Orton's article in this issue of *AI* for an example of this approach in the analysis of Roman pottery). One such statistical model is currently being developed by a research student (Alex Bailey), using an exceptionally large set of data from English and Welsh medieval church bells, for which matching historical evidence is available, thus providing a unique tool to check the results of the statistical analysis against the historical documents.

Other methodological research is concerned with the development of new analytical approaches, such as an advanced image-analysis system for the quantitative investigation of thin sections of pottery (being developed by Dafydd Griffiths), and the modification of petrological models borrowed from geoscience to understand the production of ancient glass. The latter research (by research student Satoko Tanimoto and myself) involves many

experimental melts of glasses using ancient formulations, and it links to the strong interest of members of the group in experimental archaeology.

Conferences and seminars

In November 2002 the group initiated a one-day conference to discuss the Jordan valley in the Bronze and Iron Ages. It was held jointly with the British Museum and included lectures by several European colleagues and by local scholars. The one-day conference on the theme "Past societies and materials: archaeological information and written sources", which took place in May 2002 (and was briefly reported on page 6 of *AI 2001/2002*), is currently being prepared for publication by members of the research group.

On 6 March 2003 members of the group joined many other staff and students of the Institute, as well as numerous friends and colleagues from elsewhere, to hear Clive Orton give his inaugural lecture as Professor of Quantitative Archaeology. It was entitled "The fourth umpire: risk in archaeology", and in it he explained why he gave up a promising career as a mathematician in the civil service to follow his avocation in archaeology, first at the Museum of London and later at the Institute. Unravelling, with clarity and wit, the meanings hidden in the lecture's tantalizing title, he persuaded even the non-mathematically minded in the audience of the merits of Bayesian statistics, and he concluded by offering some challenging thoughts on the future of archaeology.

Within the Institute, the group has organized several informal seminars on practical issues related to laboratory work and the processing of numerical data. They are intended to provide a practical guide to the use of the existing analytical facilities and offer hands-on experience. In addition, two members of the group have contributed to this year's Institute Research Seminar: Alex Bentley presented his research on the use of strontium-isotope analysis of skeletal remains to investigate forager-farmer interaction in Neolithic Europe, and I discussed the significance of specialized types of slag in medieval urban contexts in Central Asia.

Note

1. The Wolfson Archaeological Science Laboratories contain a wide range of analytical instruments, including two standard SEMs (scanning electron microscopes) with EDX (energy dispersive spectrometry) systems, a Phillips ESEM (environmental SEM) with EDX and WDX (wavelength DX) system, a JEOL microprobe, a Spectro Xlab 2000 (P) ED-XRF (energy-dispersive X-ray fluorescence spectrometer), dedicated wet chemistry and sedimentology facilities, full sample preparation and several furnaces for metal and glass melting (see pp. 4–5 in *AI 1997/98* for a brief account of the creation of the Wolfson Laboratories in the early 1990s).

The Social and Cultural Dynamics Research Group

Coordinator: Ruth Whitehouse

The Social and Cultural Dynamics Research Group brings together staff and postgraduate students of the Institute whose primary interest is in anthropological and sociological approaches to the study of material culture, cutting across the regional and chronological boundaries that have traditionally divided archaeology. Its members share the common aim of studying the dynamics of material-culture systems in a comparative perspective.

Research projects

Several existing field projects undertaken by members of the group continued, one of the main themes of which is island archaeology: Cyprian Broodbank's Kythera Island project, now in a post-survey stage, Peter Drewett's research in the Caribbean (part of which, on the island of Tortola, he describes in this issue of *AI*), José Oliver's project in Puerto Rico, Liz Graham's in Cuba, and Lis Bacus's on Bali. The global scale of Institute research on this theme – extending from the Caribbean to Indonesia and taking in the Mediterranean en route – and the staff and research students involved (see e.g. Reuben Grima's research on the Maltese islands described in this issue of *AI*) provide the opportunity for comparative research directed at broad theoretical and methodological issues. Indeed, the research group hopes to organize a workshop on island archaeology in 2003/2004.

Other continuing field projects (almost all of which have been described in *AI*) include Liz Graham's project at Lamanai, Belize (see *AI 2000/2001*), Kevin MacDonald's Cane River African diaspora project in Louisiana (described in this issue), Andrew Reid's project in Buganda (see *AI 2000/2001*), Bill Sillar's research at Raqchi in Peru (see *AI 1999/2000*), and Todd Whitelaw's project at Knossos in Crete (see this issue for an account of one of his other island projects in the Aegean). Sue Hamilton's joint project with Barbara Bender and Chris Tilley at Leskernick on Bodmin Moor (described in *AI 1999/2000*) is close to final publication.

Two new field projects are under way. Peter Jordan, whose work forms part of the research programme of the Centre for the Evolutionary Analysis of Cultural Behaviour (see p. 4 in this issue of *AI*), has been awarded a Leverhulme Special Research Fellowship to investigate processes of cultural and linguistic transmission in western Siberia (see his article in this issue on fieldwork that he has already carried out in this region). The other new field project – the Tavoliere–Gargano prehistory project in southeastern Italy – was initiated in a short exploratory season in the summer of 2002. It is jointly directed by Sue Hamilton

and myself and its aim is to explore the interrelationships in prehistory of two adjacent areas of contrasting physical character in northern Puglia (the flat Tavoliere plain and the rocky mountain promontory of the Gargano on its northern flank). We anticipate a five-year project involving GIS-based landscape analysis and phenomenological field survey,¹ as well as re-examination of previous excavation and survey data and the collection of new samples for dating and environmental analyses.

In addition to the existing and new field projects, another investigation has been started. Entitled "Developmental literacy and the establishment of regional and state identity in early Italy: research beyond Etruria, Greece and Rome", it is funded by the UK Arts and Humanities Research Board and is directed by myself, together with John Wilkins (University of London Accordia Research Institute) and Kathryn Lomas, who has been appointed at the Institute of Archaeology as a research fellow for the project. Our aim is to study the role of incipient literacy in the formation of urban societies, and in the emergence of cultural identities, in three areas of ancient Italy where local communities developed in contact with the Etruscans, the western Greeks and the Romans. In all three areas, writing was adopted from elsewhere in Italy and seems to have been used in ways that differed from usage in other regions. The methodology we are following involves a combination of contextual archaeological study (writing appears in a wide variety of objects and contexts in these areas) and linguistic analysis, which usually constitute quite separate fields of research. We hope that the comparative framework of the project will allow us to identify shared cultural processes of wide applicability and also specific factors that operated locally.

Lectures and conferences

In October 2002 Sarah Nelson of the University of Denver (USA), gave a lecture entitled "Gender archaeology in the US and UK: divergences and parallels". She spoke on one of the major themes of interest of the research group, and her lecture provoked a lively debate. In February 2003 the seventh Symposium on Mediterranean Archaeology (SOMA), which is a national event organized by postgraduate students working on Mediterranean subjects, was held at the Institute under the auspices of the research group. The symposium was attended by 126 people, 74 of whom presented papers (including 13 Institute students). In addition to participants from UK universities, there were speakers from 14 other countries. The organizing committee comprised four Institute research

students: Camilla Briault, Jack Green, Anthi Kaldelis and Anna Stellatou. The aim of the symposium this year was to break out of the geographical and topical limitations that have traditionally structured the subject and to explore broad themes within an integrated discipline of Mediterranean archaeology. Major themes discussed were: trade, exchange and economy; cultural identities and regionalism; approaches to death and burial; religion and ritual; archaeological landscapes; urban and domestic spatial analysis; production and technology; archaeobotanical and zooarchaeological studies; art and iconography; archaeology and textual sources; destruction and warfare; and cultural heritage and the management of archaeological sites. The geographical spread of the papers was very wide, comprising the entire Mediterranean from the Levant in the east to Iberia in the west. The numbers of people involved, the range of themes covered, and the enthusiasm that pervaded the symposium, left no doubt that the archaeology of the Mediterranean is as popular as it ever was and that its future is in good hands.

Publications

The three volumes mentioned in my report last year as then being in preparation – *Women in archaeology, women in antiquity* (edited by Sue Hamilton, Ruth Whitehouse and Karen Wright); *Agency uncovered: archaeological perspectives on social agency, power and being human* (edited by Andrew Gardner), and *The archaeology of water: social and ritual dimensions* (edited by Fay Stevens) have all made good progress and we expect them to go to press before the end of 2003.

Note

1. "Phenomenological" refers here to the type of survey that includes, in addition to visual observation, other aspects of sensory experience of the landscape; see C. Tilley, *A phenomenology of landscape: places, paths and monuments* (Oxford: Berg, 1994).

The Complex and Literate Societies Research Group

Coordinator: John Tait

Since last year's report of the Complex Societies Research Group was published in *AI 2001/2002*, the group agreed, after considerable discussion, to add "and Literate" to its former title. However, the range of interests of its members remains essentially unchanged, and literate and pre-literate societies continue to be studied. Although the research of many members involves work on texts, all are engaged with archaeological data and some have particular interests in coinage, ceramics or art. The geographical range of work is vast, extending from Central and Southwest Asia to Egypt, the Balkans, Greece, France and southern England. Research also covers an immense chronological span, from the Neolithic period to Roman and medieval times, including work on the present-day management of sites and collections. Some members of the group are concerned with the development of a single site over a long timespan, whereas others focus on trade and other interconnections between areas usually studied in isolation. Following the formation of the Institute's Material Culture and Data Science primary research group (see p. 5 in this issue), several members of the former Complex Societies group have transferred to it, but our group has also seen an influx of new members of staff and research students.

Research projects

Several members of the group have continued their existing field projects. In England, David Rudling completed a third season of research excavations at the site of Barcombe Roman villa in Sussex, and Neil Faulkner has conducted the seventh consecutive summer season at the village of Sedgeford in northwest Norfolk where a middle-late Saxon cemetery and settlement in a well defined medieval landscape is being investigated (see his article in *AI 2001/2002*). Field projects continuing overseas include Kris Lockyear's at Roman Noviodunum on the lower Danube (see his article in this issue); Harriet Crawford's and Rob Carter's in Kuwait at the Neolithic site known as H3, where evidence of very early seafaring has been discovered (see Rob's article in this issue); and Tim Williams' at ancient Merv in Turkmenistan (see his article in this issue). Tim has become Co-director of the Merv project (with Kakamurad Kurbanakhatov in Ashkabat), and Gabriele Puschnigg has been appointed Assistant Director. In addition to limited excavation, the project has two chief objectives: first, to develop appropriate conservation procedures for a site with colossal but endangered mudbrick structures, newly threatened by dramatic rises in the water table caused by modern irrigation schemes

nearby; and, secondly, to develop the collaboration to ensure that the Turkmens have the skills and resources to carry forward in the longer term the maintenance and interpretation of the site. Roger Matthews has completed the fieldwork in northern Turkey for his Project Paphlagonia (see his article in *AI 1999/2000*), has carried out related museum study, and is now preparing the results of the project for publication. He has also published two books this year: the first presents fully for the first time the results of early twentieth-century excavations at the important Late Chalcolithic site of Jemdet Nasr in southern Iraq, and the second is an account of methodological approaches to the archaeology of Mesopotamia.¹

Several other research projects deserve mention. Martin Welch, with two Institute research students, Sue Harrington and Stuart Brookes, has compiled an electronic database for Early Anglo-Saxon Kent. It is a collaboratively-built record of over 3500 burials, 10,000 artefacts and 650 findspots, and is a first step towards establishing a national database – the Early Anglo-Saxon Census project – which will provide a comprehensive electronic register of the archaeological remains and material culture of the Early Anglo-Saxon populations of England (c. AD 400–750). Alan Johnston has continued his studies of Greek pottery (see, for example, his article in *AI 2001/2002*), and has started work on a corpus of minor Greek inscriptions. Rachael Sparks is investigating interaction between Egyptians and Canaanites in Palestine during the Middle and Late Bronze Age, using items of material culture from the Institute's Petrie Palestinian Collection and the Petrie Museum of Egyptian Archaeology (see her article in this issue). The year saw the publication by Stephen Quirke (with Mark Collier, University of Liverpool) of a volume of letters from the Petrie Museum's collection of Middle Kingdom papyri from Kahun,² and it is also the final year of the successful project Digital Egypt for Universities (described by Stephen and his colleagues in *AI 2001/2002*).

Conferences and seminars

In December 2002, Stephen Quirke, together with Amelie Kuhrt of the UCL History Department, organized a one-day workshop on Achaemenid Egypt, and in January 2003 the fourth conference on current research in Egyptology, organized by several of our research students, was held in the Institute. It attracted nearly 100 participants, and some 25 papers were given over two days. It showed that many present-day students are developing theoretical approaches to Egyptian data.

In the autumn term, Rachael Sparks

(together with Karen Wright) launched a series of meetings to give research students opportunities to discuss their work with each other. The group also continued to support, and its members participate in, the Joint Seminars in Early Medieval Studies (organized with the British Museum's Department of Medieval and Modern Europe), the Mycenaean and Classical Archaeology Seminar (organized jointly with the University of London Institute of Classical Studies), and seminars and lectures given under the auspices of both the London Centre for the Ancient Near East and the Egypt Exploration Society.

Notes

1. R. Matthews, *Secrets of the dark mound: excavations at Jemdet Nasr, 1926–1928* (Warminster: British School of Archaeology in Iraq, 2002), and *The archaeology of Mesopotamia: theories and approaches* (London: Routledge, 2003).
2. M. Collier & S. Quirke, *The UCL Lahun Papyri: Letters* (Oxford: Archaeopress, British Archaeological Reports International Series 1083, 2002).

The Heritage Studies Research Group

Coordinator: Nick Merriman

The Heritage Studies Research Group brings together those members of the Institute who are involved in research on the interpretation, presentation and conservation of the cultural heritage. At the beginning of the academic year an open meeting was held to discuss the group's future role. One of our first tasks was to inform ourselves more fully about the activities of the group as a whole, which comprises 22 staff, 11 honorary members of the Institute, and 25 post-graduate research students. A document detailing the research interests of each member was compiled, circulated and placed on the group's notice board. It reveals the great strength and diversity of current research at the Institute on the cultural heritage, not all of which can be described in this short report.

Research projects

Projects currently undertaken by members of the group fall into a series of themes. One of these is public interpretation and understanding of the cultural heritage. Beverley Butler's ethnographic research in Alexandria, Egypt, focusing on the Bibliotheca Alexandrina (a joint project between UNESCO and the Egyptian government to revive the ancient Mouseion/Library) and underwater archaeological excavations on the waterfront, is groundbreaking in its approach to the themes of heritage revivalism, urban regeneration, and the role of myth and memory in linking Alexandria's ancient and modern pasts (see *AI* 1998/99 for an article by Beverley on some aspects of this research).

Paulette McManus's research is concerned with museum visitors. She is currently working on a model to describe how the behaviour and functions of exhibition teams affect museum communication, and she is also developing methods of evaluation for the museum and heritage sector. Related work is being undertaken by a research student, Olga Fakatseli, who is exploring the conceptions and misconceptions of social history and folk art held by Greek academics and members of the public in Greece, in order to develop a new model of museum presentation.

The popular representation of the past is another theme in heritage research at the Institute, on which the projects of several research students focus. Examples of such research include Fiona Handley's investigation of how trans-Atlantic slavery is represented at historic sites in the USA (see her article, with Kevin MacDonald and David Morgan, in this issue of *AI*), Isabel Medina's examination of nineteenth-century three-dimensional representations of Mesoamerica, and Michael Seymour's study of the representation of ancient

Mesopotamia, particularly Babylon, in modern Europe.

Conservation has been a major strength of the Institute since its foundation, and a wide range of research is currently being undertaken by staff and students. John Merkel is investigating corrosion inhibitors and protective coatings for metallic artefacts, soil conditions and corrosion of metals at Kaman-Kalehöyük (Turkey), Chalcolithic copper smelting in Israel, Byzantine metal artefacts, and Sican-period gold alloys and copper alloys from Peru. Clifford Price's work on historic buildings and monuments continues to attract research students to this field of study. For example, Fadi Bala'awi is examining salt damage to stone monuments at Petra, Jordan, and Louise Cooke is studying the conservation and management of earthen architecture in archaeological contexts. Research in conservation at the Institute also extends beyond traditional archaeology to topics such as Anna Karatzani's work on the characterization of metal threads from Orthodox ecclesiastical textiles of the late and post-Byzantine periods, Jocelyn Kimmel's characterization and conservation of Cairean coloured glass windows set in a gypsum frame (qamariyyas), and Pip Laurenson's on the conservation and management of time-based works of art such as videos. The Institute's commitment to public archaeology is also stimulating research in what can be called public conservation. Thus, Glenn Wharton's work on heritage conservation as social intervention focuses on public involvement in the conservation of a statue of Kamehameha, the last Hawaiian king; and Konstantina Liwieratos is examining the involvement of the public in conservation projects on the Mani peninsula in southern Greece.

Public archaeology is also well represented, for example in the research by Sarah McCarthy, who is assessing local knowledge and perceptions of archaeology in Ireland and Scotland, and their implications for archaeological resource management, and in Ioannis Poullos's study of how archaeological and economic approaches might be reconciled to benefit the management of Byzantine archaeological sites in Greece.

To encourage discussion among the group's research students, I invited them all to an informal meeting to hear about one another's work and to debate what makes good research in heritage studies. They are now being encouraged to form their own reading and discussion groups and hold their own study days.

Seminars and lectures

The main theme for this academic year has been the future of heritage collections,

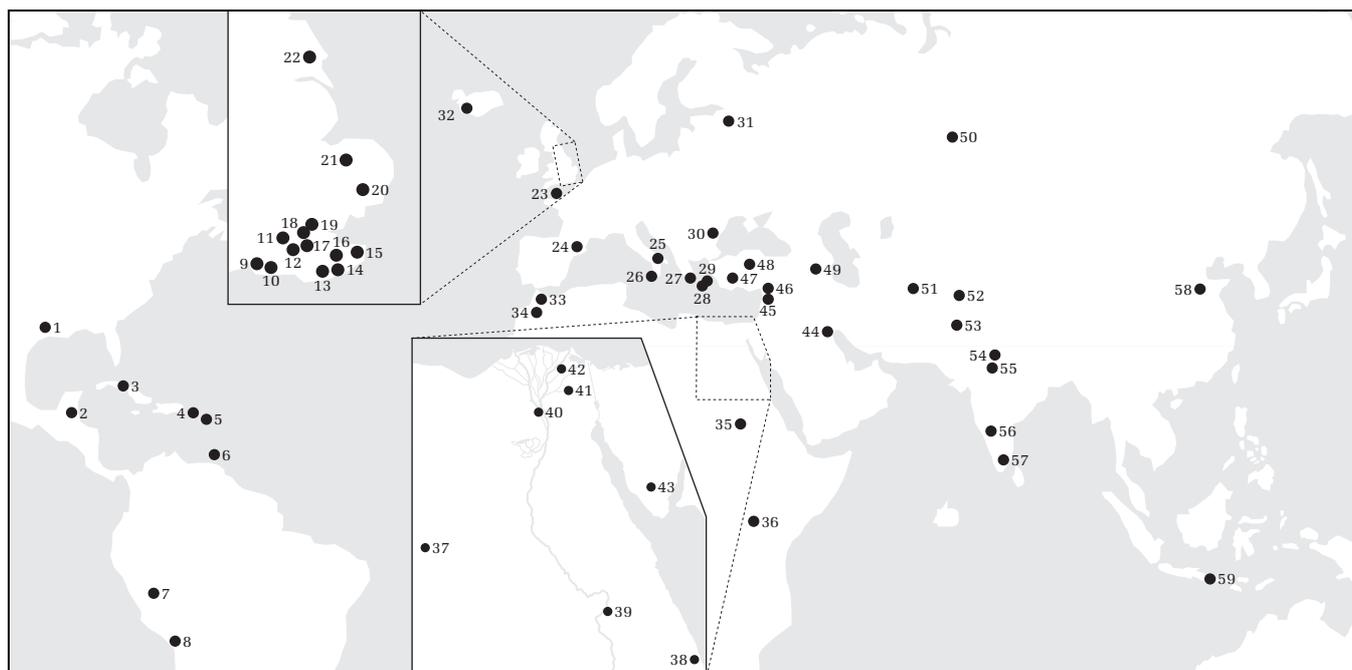
which was taken forward by Suzanne Keene, first through a seminar of five short papers and then through a five-week series of lectures and discussions focusing in particular on the large traditional research collections that do not fit comfortably into current government initiatives concerned with public access and social inclusion. Topics included discussions of the ways in which greater use could be made, by scholars and the public, of archaeological archives, natural history and history of science collections, and of whether museums contain too much material.

Members of the group also contributed to the Institute Research Seminar this year: Suzanne Keene and Pip Laurenson spoke about the preservation of digital cultural materials, including works of art, and Sally MacDonald and Stephen Quirke of the Petrie Museum of Egyptian Archaeology discussed new ways of representing ancient Egypt, based on research among African-Caribbean, Egyptian and Sudanese communities in London.

The group was also pleased to be able to host several external speakers this year. They included Brigitte Wallborn of the Association des Centres Culturels de Rencontre, Paris, whose topic was "Re-using historic architecture: experience and perspective of a European network", and Klas Nordberg of the Department of Electrical Engineering, Linköping University, Sweden, who discussed "The use of mobile information technology in the presentation of museums and heritage sites".

UCL Heritage Studies Teaching and Research Forum

In 1999, a study revealed that a hundred staff and research students at UCL, scattered across a wide range of academic departments, were undertaking research in the heritage field. It is clear that there is a need to share information and I have therefore established the Heritage Studies Teaching and Research Forum, which held its first meeting on 11 November 2002. The aim of the forum is for representatives of each of the main departments in which heritage-related activities take place to meet and exchange information on current research and teaching programmes, and to discuss ways of cooperating more closely.



World distribution of current field projects

The Americas	England	Continental Europe	Africa	Asia
1. Cane River, Louisiana, USA MacDonald: historical (creole)	9. Boxgrove, Sussex Roberts: Lower Palaeolithic	24. Empordà, Spain McGlade: multiperiod	33. Oued Laou, Morocco Parfitt: Upper Palaeolithic	44. as-Sabiyah, Kuwait Carter, Crawford: Neolithic
2. Lamanai, Belize Graham: multiperiod	10. Shoreham, Sussex Stevens: medieval	25. Northern Puglia, Italy Whitehouse, Hamilton: Neolithic–Iron Age	34. Volubilis, Morocco Fentress, Palumbo: early Islamic	45. Sidon, Lebanon Doumet, Griffiths: multiperiod
3. Los Buchillones, Cuba Graham: 12th to 17th century AD	11. Barcombe, Sussex Rudling: Roman	26. Northwest Sicily, Italy Thomas, Mannino: Palaeolithic–Mesolithic	35. Nile 4th Cataract, Sudan Fuller: multiperiod	46. Qadisha Valley, Lebanon Garrard: Palaeolithic
4. Caguana, Puerto Rico Oliver: Prehispanic	12. Mount Caburn, Sussex Drewett, Hamilton: multiperiod	27. Kythera, Greece Broodbank, Johnston: multiperiod	36. Buganda, Uganda Reid: Iron Age-historic	47. Çatal Höyük, Turkey L. Martin, Rosen: Neolithic
5. Tortola, Virgin Islands Drewett: Prehispanic	13. Winchelsea, Sussex D. Martin: medieval	28. Knossos, Greece Whitelaw: multiperiod	37. Farafra Oasis, Egypt Hassan: Late Palaeolithic	48. Paphlagonia, Turkey Matthews: multiperiod
6. Barbados Drewett: Prehispanic	14. Lydd, Kent Barber: medieval	29. Astypalaia, Greece Hillson: Late Archaic–Classical	38. Wadi Gimal, Egypt Hassan: multiperiod	49. Azokh Cave, Nagorno Karabagh Moloney: Palaeolithic
7. Raqchi, Peru Sillar: multiperiod	15. Cinque Ports coastal survey Kent, Sussex Clarke, Milne: medieval	30. Noviodunum, Romania Lockyear, Popescu: Roman–Byzantine	39. Thebes, Egypt Janssen: Dynastic	50. Ob Valley, western Siberia, Russia Jordan: ethnographic
8. Ilo, Peru Hillson: multiperiod	16. Ashford, Kent Stevenson: Iron Age	31. Novgorod, Russia Orton: medieval	40. Memphis, Egypt Jeffreys: multiperiod	51. Merv, Turkmenistan Williams, Puschnigg: multiperiod
	17. Crawley, Sussex Stevens: medieval	32. Reykholt, Iceland Sveinbjarnardottir: medieval–present	41. Kafr Hassan Dawood, Egypt Hassan: multiperiod	52. Akhsiket, Uzbekistan Rehren: early Islamic
	18. Ewell, Surrey Orton: Roman		42. Qantir-Piramesses, Egypt Rehren: Late Bronze Age	53. Bannu, Pakistan Thomas: multiperiod
	19. Thames foreshore, London Milne, Sidell: prehistoric–present		43. St Catherine Protectorate, Egypt Hassan: Neolithic–Early Bronze Age	54. Garhwal, India Fuller: Early Historic
	20. Hoxne, Suffolk Parfitt: Lower Palaeolithic			55. Belan River, India Fuller: Neolithic
	21. Sedgeford, Norfolk Faulkner: multiperiod			56. Karnataka, India Fuller: Neolithic
	22. Pickering, Yorkshire Schadla-Hall: Mesolithic			57. Tamil Nadu, India Fuller: multiperiod
	23. Lihou, Guernsey Schadla-Hall: Mesolithic			58. Yiluo River, China Rosen: Neolithic–Bronze Age
				59. Bali, Indonesia Bacus: multiperiod

- The list includes only the projects involving survey or excavation (or both) run by members of the Institute or to which they make a major contribution (individual research students' field projects are excluded, as are study visits to museum and other collections), and only the main members of the Institute involved in each project are named; staff from other UCL departments and other UK and overseas universities and organizations also participate in many projects and in some cases co-direct them.
- All the overseas projects depend on collaboration with local archaeologists and with the relevant antiquities services, museums or universities, and several of them also involve collaboration with other UK universities, museums and other organizations, e.g. 9 (English Heritage, Natural History Museum), 20 (British Museum, Queen Mary, University of London), 22 (Cambridge, Durham), 25 (UMIST), 27 (Cambridge, Oxford, Sheffield), 30 (Cambridge, Southampton), 31 (Bournemouth), 33 (Natural History Museum, Oxford Brookes), 40 (Egypt Exploration Society), 45 (British Museum), 46 (Lampeter), 47 (Cambridge), 53 (British Museum).