



DAVID RUSSELL HARRIS

David Russell Harris

1930–2013

HOLDING ACADEMIC POSTS IN GEOGRAPHY and later in archaeology, David Harris believed that knowledge was universal and conducted research that was multidisciplinary and interdisciplinary. He was greatly influenced by Carl Sauer at the University of California, Berkeley, whose teaching introduced him to cultural geography, human ecology and anthropology. David taught geography in the University of London and made close contact with colleagues in anthropology. His enquiries asked big questions associated with the domestication of plants and the origins of farming, setting detailed case studies into their global context. His publications in the 1970s opened the way for new ecological approaches in archaeology. His research, writing and teaching at the Institute of Archaeology in London embraced environmental archaeology and palaeoecology. Many students were inspired by the breadth of his vision and his clear and challenging delivery. A highly efficient organiser of international conferences, David Harris displayed great skill as an exacting editor of their proceedings. Exercising more influence among archaeologists than among geographers, he pioneered new approaches to the understanding of early subsistence systems and strove to promote innovative scientific methods to elucidate fundamental questions about the human past.

Geographical career

From London to Oxford and then to California

David Russell Harris was born in north-west London on 14 December 1930, the third child of Herbert and Norah Harris. Herbert Harris had been a Nonconformist minister in Oxford but lost his faith and retrained as a medical doctor. In keeping with his principles, he had been a conscientious objector during the First World War, undertaking civilian service by working on a farm, where his interest in the countryside, plants and wildlife had been reinforced. This keen interest he communicated to his four children by telling them about Charles Darwin and taking them on country walks.

David received his secondary education as a boarder at Saint Christopher School in Letchworth, a progressive establishment, coeducational and vegetarian, with a pupil-centred approach. Oscar Backhouse, his geography teacher, organised caving, hill walking and mountaineering expeditions. At Saint Christopher, David met Helen Wilson who would become his wife. As a teenager he was very impressed by *What Happened in History* (1942), by V. Gordon Childe. Many years later he recalled: 'I was already a geographer in the making, and Childe's revelatory little book added a new dimension of deep time to my fascination with distant places.'¹ David studied biology, English, geography and history for his Higher School Certificate examinations, but was frustrated by the European focus of the history syllabus since he craved the global view. Straight after school, he did his national service, spending eighteen months in the Royal Air Force.

With an open exhibition, David entered University College, Oxford, to read geography. His real love was anthropology and archaeology, but these disciplines were only offered at graduate diploma level. The geomorphologist Robert Beckinsale was his personal tutor, and Robert Steel mentored him on the political geography of British colonial Africa. Although David was disillusioned by the intellectually restricted concept of geography at Oxford, he greatly enjoyed the geology course given by Colonel K. S. Sandford of Libyan desert fame, and the world ethnology sessions with anthropologists John Bradford and Beatrice Blackwood. David recalled how 'she used to take us to the Pitt-Rivers Museum where

¹D. R. Harris, 'Life at and before the Institute of Archaeology: a personal retrospect', *Archaeology International*, 9 (2005), 10.

she would unlock dusty cabinets and show us their wondrous contents'.² In the long vacation of 1952, David, his older brother Esmond and a geographer friend bought an old jeep and drove to the Atlas Mountains in Morocco. Their choice of destination may have reflected David's interest in deserts or it may have been due to Sandford's teaching. David achieved a distinction in his preliminary examinations, and was awarded the Herbertson Memorial Prize. In 1953 he graduated with a BA Honours (second class, second in the list), missing a first because he could not recall a detail of African geography. He received a postgraduate studentship to research 'Water resources and land use in Tunisia' for a BLitt (1955). Seeing Roman ruins and traditional irrigation systems stimulated a growing interest in the ecology and early history of agriculture.

In 1955, David received a King George VI Memorial Fellowship to study in the United States of America, choosing to be based at the University of California in Berkeley. There he was influenced by the cultural geographer Carl Sauer, whose controversial lectures to the American Geographical Society on worldwide agricultural origins and dispersals had been published in 1952.³ One year later, David enrolled as a doctoral student and took courses in botany, ecology, archaeology and anthropology as well as geography. During vacations, he travelled widely in western North America to gain experience of desert and semi-desert vegetation, and boreal forest and tundra. He wrote many course papers, including two for Sauer. One was on agriculture in prehistoric Europe, which introduced him to the work of Grahame Clark; the other was on the ancestry of the domestic goat. Sauer suggested that the second paper merited publication but David sought advice from Frederick Zeuner who recommended publishing the first part only.⁴ The remainder, on the symbolism of scimitar-like horns of wild goats, remained in David's files. Sauer's publications on the use and effects of fire and on early human migrations also impressed David, as did the proceedings of the symposium 'Man's role in changing the face of the Earth', at which Sauer was a prime mover.⁵ This wide-ranging work, published in two volumes, anticipated twenty-first-century concerns over exploitation and conservation of global resources.

In 1957, David married Helen Wilson and soon afterwards they left England, crossed the Atlantic on the *Queen Elizabeth*, bought an elderly

²Ibid.

³C. O. Sauer, *Agricultural Origins and Dispersals* (New York, 1952).

⁴D. R. Harris, 'The distribution and ancestry of the domestic goat', *Proceedings of the Linnaean Society of London*, 173 (1962), 79–91.

⁵W. L. Thomas (ed.), *Man's Role in Changing the Face of the Earth* (Chicago, IL, 1956).

Chevrolet in Manhattan and drove it from the East Coast to California, where David was taking up the post of Instructor in the Berkeley Geography department, camping rough all the way. With preliminary examinations over, David prepared to investigate the changing land use of three of the Outer Leeward Islands, conducting his first fieldwork with Helen in 1958: it was not all work, however; they 'usually ended up each day at a beach'.⁶ David's study fitted into a larger project of Caribbean enquiry funded by the Office of Naval Research, coordinated by James Parsons at Berkeley. Research in the field, the archive and the aerial photography laboratory led David to declare:

It is quite clear that the vegetation of Antigua has been drastically altered since the arrival of English settlers in the seventeenth century. How far the vegetation of Barbuda has been changed in this time is less certain. The outstanding problems raised by a study of vegetation in these islands concern the relation of climate and soils to the present cover of vegetation in aboriginal times and the consequences of man's interference with it since then.⁷

Opportunities and experiences in London and beyond

In the autumn of 1958 David returned to teach at Queen Mary College (QMC) in the University of London. As well as biogeography and the geography of deserts, he gave classes on Africa, North America and human and economic geography. He also contributed to the inter-collegiate course on plant geography. Lawrie Wright, one of his tutees, remembered that he was 'always cheerful, an enthusiast for the subject, a stickler for correct spelling and punctuation but, above all, a person who was interested in the essays we wrote and recommended new titles to broaden our reading'.⁸ June Sheppard found David to be 'a pleasant and amenable colleague, but I was always conscious that he was rather different. The rest of us were all London University products and out of the same mould ... David came from a different world, and I suspect he found us odd'.⁹ With his training at Oxford and Berkeley, and much field experience overseas, David was certainly different, holding a global view and striving to elucidate big questions.

⁶ Email from Helen Harris to Ken Thomas, 23 July 2016.

⁷ D. R. Harris, *The Vegetation of Antigua and Barbuda, Leeward Islands, West Indies* (Washington DC: Technical Report, Geography Branch, Office of Naval Research, 1960), p. 70.

⁸ Information from Lawrie Wright, 26 April 2014.

⁹ Information from June Sheppard, 2 May 2014.

David went back to the Caribbean and spent a further two months there in 1960. While still working on his thesis, he wrote a critical paper on the invasion of oceanic islands by alien plants.¹⁰ Then he obtained a Fulbright Travel Grant to spend the academic year 1962–3 at the University of New Mexico, Albuquerque, with Helen and their two daughters (Sarah, born in 1959, and Joanna, in 1962). When not teaching or writing up, he undertook fieldwork, sometimes with his Oxford contemporary Yi-Fu Tuan, who was working on desert geomorphology. David drew on this experience to write a paper on recent plant invasions in the arid and semi-arid Southwest.¹¹ In 1963, he submitted his thesis for examination at Berkeley. The three Caribbean islands he had studied were well suited for work in historical ecology since they had not long been settled, and documentary sources for the period of English colonisation were plentiful. With additional information and professional illustrations, his thesis was published by the University of California.¹² Later research, involving scientific dating techniques, shows that human occupation was earlier than David had envisaged.

After New Mexico and summer school at Berkeley, David returned to London in the late summer of 1963. At this time, Henry Clifford Darby, Professor of Geography at University College London (UCL), was seeking a biogeographer to join his rapidly expanding academic staff. He had already met Sauer and considered David as a possible candidate. After presenting his paper on plant invasions to the International Geographical Congress in London, David joined UCL on 1 October 1964. With seventeen staff, his new department was very different from the half dozen geographers at QMC, enabling him to focus his teaching and research. UCL also had a dynamic department of anthropology and the still independent Institute of Archaeology was close by. In due course, David stimulated inter-departmental collaboration by running a culture and ecology seminar with anthropologists, initiating a joint degree in geography and anthropology, and contributing to an interdisciplinary course in human sciences.¹³ He worked with the UCL geomorphologist Claudio Vita-Finzi and Cambridge archaeologists on the climate, envi-

¹⁰D. R. Harris, 'The invasion of oceanic islands by alien plants', *Transactions and Papers, Institute of British Geographers*, 31 (1962), 67–82.

¹¹D. R. Harris, 'Recent plant invasions in the arid and semi-arid Southwest of the United States', *Annals of the Association of American Geographers*, 56 (1966), 408–22.

¹²D. R. Harris, *Plants, Animals and Man in the Outer Leeward Islands, West Indies: an Ecological Study of Antigua, Barbuda and Anguilla* (Berkeley and Los Angeles, CA, 1965).

¹³This programme was conceived by zoologist J. Z. Young in 1975.

ronment and industries of Stone Age Epirus,¹⁴ and on the erosion of a fragile ‘badland’ in Greece.¹⁵ His colleagues Ron Cooke and Andrew Warren also studied arid lands and provided David with intellectual support. Under Darby, and then from 1966 under William Richard Mead,¹⁶ the departmental ethos allowed David’s research to develop, and the arrival of geographer Paul Wheatley in 1966 was an important source of inspiration. Sharing the Berkeley experience, where Wheatley had taught geography and history, the two men provided complementary teaching in cultural geography, with Wheatley concentrating on urban origins and Harris exploring plant and animal domestication and agricultural origins.¹⁷ Tutees recall that David encouraged them to criticise the innovative works of Peter Haggett, Richard Chorley and David Harvey, since he firmly believed that the ‘new geography’ should be conceptual as well as quantitative. Postgraduates appreciated his editorial skills as he honed their work. David also collaborated with Wheatley in revising doctoral training along the lines of a North American graduate school. He demonstrated his administrative capabilities as departmental examinations tutor (1966–70) when examinations set by the federal University of London were replaced by assessments arranged by each college. During his years in geography departments, David co-edited *Africa in Transition* for undergraduates, contributing an essay on geographical diversity in unity in North Africa, but all his later books would be aimed at graduate students and researchers.¹⁸

In 1968, David joined an expedition to take a hovercraft through rivers and rapids from Manaus in Brazil along the Rio Negro, the Casiquiare channel and the River Orinoco in Venezuela to reach the Caribbean. Frequent stops by the hovercraft enabled him to observe vegetation and collect samples of soil and plants. Hating the noise and vibration, he travelled in a dug-out canoe through the Casiquiare and witnessed traditional shifting cultivation. At a Yanomamö settlement on the Rio Ocamo he

¹⁴E. S. Higgs, C. Vita-Finzi, D. R. Harris, A. E. Fagg and S. Bottema, ‘The climate, environment and industries of Stone Age Greece: Part III’, *Proceedings of the Prehistoric Society*, 33 (1968), 1–29.

¹⁵D. R. Harris and C. Vita-Finzi, ‘Kokkinopolis: a Greek badland’, *Geographical Journal*, 134 (1968), 537–46.

¹⁶H. Clout, ‘William Richard Mead 1915–2014’, *Biographical Memoirs of Fellows of the British Academy*, 14 (2015), 383–408.

¹⁷D. R. Harris, ‘New light on plant domestication and the origins of agriculture’, *Geographical Review*, 57 (1967), 90–107.

¹⁸D. R. Harris, ‘North Africa (excluding Egypt)’, in B. W. Hodder and D. R. Harris (eds.), *Africa in Transition; Geographical Essays* (London, 1967), pp. 35–94.

encountered people who cultivated root crops and fruit trees as well as undertaking fishing and hunting. David came to realise that 'the sharp division conventionally made between hunter-gatherers and agricultural subsistence was a gross oversimplification, and that, at least in the tropics, systems that integrated small-scale cultivation with continuing exploitation of wild plants and animals were widespread'.¹⁹

David took unpaid leave of absence in autumn 1970 to teach at the University of Toronto, where he, Helen and their four daughters (Lucy was born in 1964 and Zoe in 1969) spent six months. David visited various scholars including those at Berkeley, where he was urged to consider a permanent appointment. At the same time, the chair of geography at the Australian National University (ANU), Canberra, became vacant and he was invited to apply. He was flattered by the invitation but decided not to go ahead. Despite constrained finances at UCL, Bill Mead indicated that it would be reasonable to put David's name forward for promotion to Reader in 1971. Mead wrote to the College authorities to support David's case: 'On academic grounds he is well above average—a mature and recognised scholar, with plenty of work in the pipeline and of continuing potential; on departmental grounds, he is an exceptionally capable and effective colleague ... I would prefer him to remain at UCL as a Reader.'²⁰ In 1972, David received the Back Award from the Royal Geographical Society for biogeographical research. Further invitations to apply for chairs in the USA arrived, but not until 1973 was his Readership in the University of London attained.

Having crossed this hurdle, David applied for a year's unpaid leave of absence as Visiting Fellow at the Research School of Pacific Studies of the ANU to investigate Aboriginal subsistence systems in the Torres Strait region and Papua New Guinea, and in particular the interactions between foragers and farmers. He duly received a Fellowship, but Helen and the children remained in England, travelling out for a couple of weeks at Christmas. In mid-September 1974, he reached Rocky Point in Queensland and wrote to Mead, 'sitting literally under a coconut palm at the back of the beach, with the swash of the Coral Sea sounding gently on the sand'.²¹ After a month in the field, he drove 600 miles to the Lockhart River

¹⁹ Harris, 'Life at and before', 11; D. R. Harris, 'The ecology of swidden cultivation in the upper Orinoco rain forest, Venezuela', *Geographical Review*, 61 (1971), 475–95.

²⁰ Geography Department Archive UCL, letter from W. R. Mead to A. Tattersall, dated 15 October 1971.

²¹ Geography Department Archive UCL, letter from Harris to W. R. Mead, dated 18 September 1974.

Reserve before flying to the Torres Strait Islands. This enquiry into subsistence horticulture was the start of a decade-long project that continued to expand after David joined the Institute of Archaeology.²² He concluded that the celebrated subsistence divide or agricultural boundary at Torres Strait was essentially a construct of modern ethnography, which exaggerated contrasts in subsistence practices between Australian ‘hunter-gatherers’ and Papuan ‘agriculturalists’, as well as the extent and intensity of agriculture in New Guinea. He suggested that ‘since Torres Strait came into existence some 6000 years ago, it has functioned neither as a barrier to nor a bridge for the “transmission” of agriculture into Australia’.²³

During the late 1960s and 1970s, David participated in interdisciplinary symposia, organised by Peter Ucko, Geoffrey Dimbleby, Colin Renfrew and others, where he presented critical review papers. The published proceedings of these meetings had a major impact on various aspects of research, such as plant and animal domestication, and the origins and diffusion of farming. David explained that, in the first volume, he explored ‘an ecosystemic approach to the beginnings of plant cultivation and domestication, in the second the nature of swidden (shifting) cultivation and its relation to settlement, and in the third I proposed an ethnoecological model for the prehistory of tropical agriculture’.²⁴ While still based in Geography, David participated in other international symposia on the origins of plant domestication in Africa, pre-Hispanic Maya agriculture, and early civilisations in Asia and Meso-America. In the mid-1970s, he was charged with organising the Wenner-Gren Foundation Symposium on Human Ecology in Savanna Environments that met in 1978 at Burg Wartenstein in Austria. As well as making his own contributions, he edited the conference volume.²⁵

David’s reputation continued to grow and further invitations to apply for chairs arrived, including a tempting request to attend for interview at

²²D. R. Harris and A. J. Barham, *Archaeological and Palaeoenvironmental Investigations in Western Torres Strait, Northern Australia: Final Report to the Research and Exploration Committee of the National Geographic Society* (London: Institute of Archaeology and Department of Geography, UCL, 1987).

²³D. R. Harris, ‘Early agriculture in New Guinea and the Torres Strait divide’, in J. Allen and J. F. O’Connell (eds.), *Transitions: Pleistocene to Holocene in Australia and Papua New Guinea, Antiquity (special number)*, 69 (1995), 853–4.

²⁴Harris, ‘Life at and before’, 11; H. Clout, ‘David Russell Harris, 1930–2013’, *Geographers: Biobibliographical Studies* 35 (London, 2016) provides a full bibliography of David’s work.

²⁵D. R. Harris, ‘Tropical savanna environments: definition, distribution, diversity and development’, in D. R. Harris (ed.), *Human Ecology in Savanna Environments* (London, 1980), pp. 3–27.

Berkeley; but a younger and less expensive applicant was selected. James Parsons declared: 'It would have been grand to have had you here. The very thought of it made my imagination soar. And yet I know that it would have been a wrench and a very difficult personal decision for you and Helen.'²⁶ David had to weigh his ambitions carefully against the advantages of an English education for his daughters and the benefits of the National Health Service for the whole family. An attractive opportunity came in 1979, when the Chair of Human Environment at the Institute of Archaeology (still an independent part of the University of London) was about to become vacant. In his letter of recommendation Bill Mead stated:

For the past decade, David Harris has established a considerable reputation for himself outside the traditional limits of geography as well as within them. In my own view, his research 'took off' with a paper entitled 'Alternative pathways towards agriculture', in this there is displayed a blend of theory and fieldwork, a deep concern with the past and a keen appreciation of contemporary techniques, a wide-ranging spirit of enquiry, and love of detail ... David Harris has proved to be a man of initiative and imagination in administration as well as in research ... He has a positive outlook on life and a pleasant sense of humour. He can be firm when required and does not suffer fools gladly. A happy family background undoubtedly strengthens his capacity for work.²⁷

David was duly appointed, but his arrival at the Institute was delayed since he spent October and November visiting Australian universities. His new position opened important challenges in a long career that exemplified his belief that knowledge was universal and that research should be multidisciplinary and interdisciplinary. In 2002, he wrote the following words:

I cherish the memory of the fifteen years I spent in the UCL geography department ... The departmental ethos permitted—even encouraged—one to pursue a personal research agenda, unrestricted by disciplinary boundaries that were emphasized in some geography departments. I was free to develop my interests in cultural ecology, anthropology and archaeology, without fearing that I was straying unacceptably beyond the bounds of geography—a process that was intensified after the arrival of Paul Wheatley, who became a close friend and a source of inspiration. It was largely due to the UCL Geography department (and my earlier experience at Berkeley) that I have felt academically comfortable working in the fertile fields where geography, anthropology and archaeology

²⁶Geography Department Archive, UCL, letter from J. Parsons to D. R. Harris, dated 1 March 1977.

²⁷Geography Department Archive, UCL, letter from W. R. Mead to P. F. Vowles, Academic Registrar, University of London, dated 8 May 1979.

intersect, and I count myself very fortunate to have spent most of my professional career at UCL.²⁸

The Institute of Archaeology

In January 1980 David joined the Institute of Archaeology, at that time one of a number of Senate Institutes of the University of London, with its own internal academic departments.²⁹ He succeeded Geoffrey W. Dimbleby as Professor of Human Environment and Head of the Department of Human Environment, after a difficult meeting of the appointment board, where his broad range and experience eventually prevailed over the merits of another strong candidate. His appointment provided an immense support for the then Director of the Institute, Professor John D. Evans, whose time was increasingly taken up with outside commitments. David contributed a great deal during those years, though his more managerial style was not to everyone's taste.

His first academic priority for the Department of Human Environment was to develop research and teaching in the archaeobotany of plant macro-remains. He already knew that Gordon Hillman had carried out innovative archaeobotanical research in Turkey and had also retrieved a large assemblage of cereal and other charred plant remains from Epipalaeolithic and Neolithic levels at the important site Tell Abu Hureyra in Syria during Andrew Moore's excavation of the site in the early 1970s. Abu Hureyra was a key site for investigating the beginnings of agriculture in south-west Asia, and Gordon's job in the Plant Sciences department in Cardiff left him insufficient time to analyse the plant assemblage fully. So, with the agreement of Gordon's head of department, Alan Smith, David successfully applied in 1981 to the Science and Engineering Research Council's Science-Based Archaeology Committee for a three-year research grant to enable Gordon to work full time on the project at the Institute.

As part of this research, in 1983 David, Gordon and Sue Colledge travelled extensively in Syria and Turkey (accompanied by Tony Legge and Peter Rowley-Conwy in Syria), making ecological surveys and collecting herbarium specimens to develop the Institute's now-renowned comparative botanical and archaeobotanical reference collections. Sue Colledge has

²⁸ Geography Department Archive, UCL, Letter from D. R. Harris to H. Clout, received August 2002.

²⁹ For a concise history of the earlier years of the Institute of Archaeology see D. R. Harris, 'Sixty years on: the Institute of Archaeology, 1937–97', *Archaeology International* 1997/98, 3–5.

recorded how much she learned from David and Gordon, following in their footsteps as they ‘strode across the Syrian steppe’, and has emphasised the importance of David’s contribution to the trip’s success, ‘not just his tireless, late into the night, pressing of endless plant specimens, but his knowledge and understanding of the environment and how early use of the natural resources had transformed the landscape’.³⁰

David later recalled an incident during fieldwork searching for emmer wheat in a remote area in north-eastern Turkey, when they were stopped at gunpoint by Turkish soldiers who thought they were spying. Sue’s diary for 30 April records, ‘getting distinctly colder up in the mountains; stopped to look back at the view of the city that had the largest army base I’ve ever seen in the foreground; David took lots of photos of some interesting land formations in the far distance—our Turkish colleagues looked worried’. They were driven to the military headquarters in a nearby town and incarcerated overnight but were released the following morning after the commandant recognised the surname of one of the group’s Turkish colleagues as being the same as that of a major general in the army (she was his daughter). It had been believed that they were Armenian spies.³¹

An important, if less adventurous, development later in 1983 was the appointment of Gordon Hillman to a lectureship in archaeobotany which David had secured through a University of London New Academic Initiatives competition.

The following year he resumed his fieldwork in Australia with his new Institute colleague Tony Barham and others. Two more field seasons of survey and small-scale excavation of coastal middens and relict field systems were carried out on islands in Western Torres Strait and in coastal Papua New Guinea, with the aim of testing his previously developed ideas about past patterns of settlement and subsistence.³² Their reconnaissance work on the island of Mabuyag led to the mapping and excavation of an area of great past ceremonial significance on the island’s south coast. The study of the excavated material with reference to the nineteenth-century

³⁰ Unpublished account of the journey prepared by Sue Colledge for the writing of this memoir.

³¹ This was not the last time the search for emmer wheat in Turkey led to trouble. It happened again in 1992 when a group including Helen, Zoe and the Israeli archaeobotanist Daniel Zohary were stopped by suspicious Kurdish soldiers (Helen Harris, telephone conversation, 30 March 2017).

³² See A. J. Barham and D. R. Harris, ‘Prehistory and palaeoecology of Torres Strait’, in P. M. Masters and N. C. Flemming (eds.), *Quaternary Coastlines and Marine Archaeology: Towards the Prehistory of Land Bridges and Continental Shelves* (London, 1983), pp. 549–57; and see A. J. Barham and D. R. Harris, ‘Relict field systems in the Torres Strait region’, in I. S. Farrington (ed.), *Prehistoric Intensive Agriculture in the Tropics* (Oxford, 1985), pp. 247–83.

ethnographic records of past island life formed the basis of a PhD thesis by Barbara Ghaleb Kirby.³³ The significance of the work was further demonstrated and enhanced twenty years later by a team of Australian archaeologists based at Monash University.³⁴

Back in Britain, the 1980s were stormy times for archaeology. In 1981 it had been agreed that Britain would organise the next major congress of the International Union of Pre- and Protohistoric Sciences, a long-established organisation that was largely dominated by European archaeologists and their specialist topics. It was to take place in 1986 and be organised by the archaeologist and anthropologist Peter Ucko, an old friend of David's who had recently returned to Britain from Australia, where he had revolutionised the Institute of Aboriginal Studies. This was at the height of the anti-apartheid campaign for an academic boycott of South Africa and in the run-up to the meeting, under pressure from the anti-apartheid movement and the unions, it was agreed to exclude people who worked in South Africa from participation, in defiance of the International Union, whose meeting it was supposed to be. The Union withdrew its support, a move that led to the resignation of the existing organising committee of senior British archaeologists. David, however, 'was supportive of such actions—including within the academic world—and so was fully behind ... [it] in the circumstances'.³⁵ He joined Peter Ucko's new organising committee to create the first World Archaeological Congress, which took place in Southampton in 1986 and not only had a much broader focus but also included representatives of indigenous peoples whose lives were affected by archaeologists' actions.

One of the participants in the World Archaeological Congress was Professor V. M. Masson, the Director of the Institute for the History of Material Culture in Leningrad and a Corresponding Member of the Academy of Sciences of Turkmenistan, where he had partially excavated a number of Neolithic sites, including the site of Jeitun on the southern edge of the Karakum desert, believed to be the earliest farming site in Central Asia. In the late 1980s the Soviet Union, under Mikhail Gorbachev, was going through the period of 'glasnost', opening up to the outside

³³ For a summary see D. R. Harris and B. Ghaleb Kirby, 'Mabuyag (Torres Strait) in the mid-1980s: archaeological reconnaissance of the island and midden excavations at Goemu', in I. J. McNiven and G. Hitchcock (eds.), *Goemulgaw Lagal: Cultural and Natural Histories of the Island of Mabuyag, Torres Strait* (Brisbane, 2015), pp. 283–375.

³⁴ I. J. McNiven, D. Wright, S. Sutton, M. Weisler, S. Hocknull and J. Stanisic, 'Midden formation and marine specialization at Goemu village, Mabuyag, Torres Strait, before and after European contact', in McNiven and Hitchcock, *Goemulgaw Lagal*, pp. 377–475.

³⁵ Letter from Helen Harris to Ken Thomas, 30 September 2015.

world, and Masson invited David to come and carry out new excavations that would apply modern methods to the retrieval and analysis of botanical and faunal remains. Despite his many administrative duties, including as Director of the Institute of Archaeology from 1989 (see below), David was determined not to give up fieldwork altogether and this became his last field project. He and Gordon Hillman visited the site in April 1989 and carried out preliminary excavations alongside the Russian and Turkmen team to evaluate the site's potential for environmental analysis. Excavation and related fieldwork continued until 1997, with major field seasons in 1993 and 1994, though Russian involvement gradually declined as the Soviet Union collapsed and Turkmenistan became independent. Unsurprisingly in this climate, enormous administrative, logistical and financial difficulties had to be faced and overcome. It is always difficult bringing together the results of excavations involving contributions from many specialists working in different places and with their own timetables and priorities, but David achieved this in characteristic well-organised fashion with the publication in 2010 of the fieldwork monograph, which included the first modern synthesis of the evidence for the spread of farming into western Central Asia at the end of the seventh millennium BCE.³⁶

The Institute of Archaeology joins UCL

As financial pressure on universities grew ever stronger during the Thatcher years of the early 1980s it became clear that the Institute was running up significant deficits and that the University of London Senate was not prepared to keep supporting it. In fact, this was the culmination of increasing problems in the Institute's relations with the central University authorities arising from the decision to admit undergraduates in the late 1960s. In Senate House's view, institutes were essentially static bodies designed to provide facilities for research and certainly did not need more teaching staff. The Institute was told it would have to look after its own future. A number of options was explored but it was pretty clear that joining UCL was the only viable one and David was very keen on it, in contrast to some of his colleagues. In 1986, after a series of negotiations in which he played a major part alongside John Evans, the Director, the Institute merged with UCL; after a period of transition, the Institute's internal departments were dissolved. In 1989 David became Director of the Institute,

³⁶D. R. Harris, *Origins of Agriculture in Western Central Asia: an Environmental-Archaeological Study* (Philadelphia, PA, 2010). This is the source for the description of the project given above.

which benefitted greatly from his previous experience as a member of the UCL Geography department.

David's legacy as Director of the Institute

His period as Director, 1989 to 1996, left a number of important legacies. Perhaps the greatest, and certainly the most tangible, were the Wolfson Archaeological Science Laboratories and secure artefact store that were built in the basement of the Institute, following a major fund-raising effort, including the auction of Indiana Jones's whip, and opened in 1991. These laboratories have been the foundation of the Institute's subsequent world-leading eminence in archaeological materials science under Professors Thilo Rehren and Ian Freestone. The artefact store has provided the basis for ongoing efforts to put the Institute's massive artefact collections in order. It was also during David's tenure that the Institute took its present shape, with the Classical Archaeologists, the Medieval Archaeologists and the Egyptologists, who had always been in separate departments in UCL, joining the Institute.

A less tangible major achievement but perhaps the most important of all was a 'culture shift' in the Institute towards a clearer focus on excellence in research and in teaching. Or, as one colleague put it, 'he helped change the Institute of Archaeology from a nice but sluggish institution to a strong research centre'. Indeed, he led the way personally, gaining one of the first large research grants in the then new science-based archaeology.

Another aspect of his 'culture-shift' was an expansion of teaching at graduate level, with new MA and MSc degree courses. He also broadened out the academic profile of the Institute in a variety of ways. For example, he appointed the first lecturer in Museum Studies and started the MA in Museum Studies, still one of the Institute's key degrees. Apart from the important appointment in his own field of Gordon Hillman, he also appointed the first lectureship in African archaeology, Kevin MacDonald, and the first post in theoretical archaeology, Cyprian Broodbank, now Disney Professor of Archaeology at Cambridge, who set the pattern for many subsequent Master's degrees with his course 'Themes, Thought and Theory in World Archaeology', which in modified form is still running.

When the time came for David to retire from the Directorship he was determined that his legacy should be built on and extended, and to this end made sure that Peter Ucko, then at the University of Southampton, was appointed as his successor. He knew Peter would be even more radical

than he had been himself and he thought that this was what the Institute needed. His success in achieving the appointment was a result of his political abilities and the support of Derek Roberts, then Provost of UCL. The result provoked a storm within the Institute and in the British archaeological world more widely at the time, but it was achieved and David told people approvingly, 'You won't recognise the Institute in ten years' time.' His vision, and the resulting structural changes, created a firm foundation upon which subsequent Directors have continued to build. In short, while he always came across as very urbane and measured, and the very epitome of politeness, those qualities hid a radicalism, vision and determination that, allied to his sheer competence, laid the foundations for the modern Institute.

Nor should his broader administrative contributions be forgotten. In addition to his major role at the Institute, David was also actively involved in the academic and administrative affairs of UCL and the University of London, as well as the wider academic community. Among the latter, the chairmanship (1989–92) of the Science-Based Archaeology Committee (then part of the Science and Engineering Research Council, now under the aegis of the Natural Environment Research Council) and the presidency of the Prehistoric Society (1990–4) stand out as especially important contributions.

As Emeritus Professor of Human Environment at the Institute of Archaeology following his retirement in 1998, David continued to be involved with the Institute, attending seminars and public lectures, and stimulating and encouraging younger colleagues. He was particularly excited by the work of Dorian Fuller, whom he regarded as his intellectual heir in many ways, continuing his commitment to a global view of the subsistence practices of early societies and their implications. Important research and writing continued too, not least preparing the publication of the Jeitun monograph described above. David also founded *Archaeology International*, the 'house' journal of the Institute of Archaeology, editing it from its first issue of 1997/8 to the eighth in 2004/5. In typical fashion, he was still editing his friend and former colleague Jack Golson's book on Papua New Guinea when illness took over.³⁷ But retirement also enabled him to spend more time on cultivating the large garden at home, practising (in Helen's words) a little of what he preached, growing subsistence crops such as potatoes and beans. He and Helen, who had fitted her career as a French teacher around the demands of David's academic life, stayed in the same house in

³⁷ Neil Faulkner, eulogy for David Harris at his funeral, 15 January 2014.

Rickmansworth for most of their married life, enjoying the views and sunsets over the valley of the River Chess.

David's teaching at the Institute of Archaeology

By the early 1980s, when David was Head of the Department of Human Environment, the Institute was offering a wide range of courses on different specialist aspects of environmental archaeology, but the central course for any programme in this field was his own 'Resources and Subsistence', a module that cut across the boundaries of these 'specialisms' to address the broad issues of understanding global subsistence systems, how humans had managed their land-use and used plants and animals as subsistence resources. It was an entirely unique course stemming directly from David's academic background and research interests, combining the approaches of ecological geography, anthropology and archaeology. The course took as its focus the main categories of organic resources exploited by humans as food, and examined the systems by which food is procured. The scope was remarkable, both in geographical range and David's sheer breadth of knowledge about plant and animal use in a diverse range of ecosystems. For many fledgling archaeology students these were the most fascinating and memorable hours in the lecture theatre. They learnt, for example, how bitter manioc was detoxified in South America using a *tipiti* expandable basket, pulled down to draw out the toxin, so the grated manioc could be made into cakes and baked—and, incidentally, how the extracted poison could be used for tipping hunting arrows, or adding to low waters to stupefy fish. And there can have been no other archaeology students in the UK at the time learning about how Torres Strait Islanders undertook short-term food storage by tethering green turtles to boats and shorelines, or how prehistoric fishers in the Hawaiian Island chain constructed boulder fish traps for use at low tide. His main message for environmental archaeology students, however, was the importance of considering whole systems in the explanation of past subsistence: he demonstrated how the predictabilities of resource distribution, productivity, reproduction, seasonality and yields, combined with ethnographic perspectives on social practices, resource selection and preparation, were powerful tools for the environmental archaeologist. He encouraged students not to be shy of a lack of firm archaeological data and demonstrated how building models of subsistence systems led to the construction of testable hypotheses that put detailed fieldwork and laboratory studies in context. In short, David's teaching was an enthusiastic

distillation and sharing of his immense knowledge and deep thought gained from his lifelong research and interests.³⁸

David's teaching inspired generations of Institute of Archaeology students. Many undergraduates and particularly Master's students during the 1980s and 1990s got hooked by the questions posed in his teaching and the logic of the interdisciplinary approaches he advocated. Since his death, a number of past MSc students now in academic posts in various parts of the world have posted online tributes to his teaching. One, now a senior researcher at the Royal Botanic Gardens at Kew, states: 'I first came in contact with David through his "Resources and Subsistence" MSc module at the Institute, a fascinating world tour of food production practices, all based on first-hand observations, and a compelling demonstration of the virtues of the worldwide, comparative, rigorous approach that David took.'³⁹

Broader influence: David Harris and the origins of agriculture⁴⁰

Through his writings, edited volumes⁴¹ and conference organisation, David influenced generations of environmental archaeologists, ethnobotanists and archaeobotanists, by promoting a comparative and world approach to the diversity of pathways from foraging to farming. This began with his 1967 paper 'New light on plant domestication and the origins of agriculture',⁴² an ambitious review of all the key regions globally, from Eurasia to Africa and the Americas. In this paper he sought to update the global view of his supervisor Carl Sauer by drawing on a greatly expanded evidence base, both from botanists working on crops and the genetics of domestication and from archaeology. Unlike Sauer, Harris was a polycentrist and he

³⁸ The description of David's teaching is taken from an unpublished account of it prepared by Louise Martin for the purpose of this memoir.

³⁹ Mark Nesbitt, Comment on <http://archaeobotanist.blogspot.co.uk/2014/01/in-memoriamprofessor-david-r-harris.html>, made on 6 January 2014 (accessed 18 April 2017).

⁴⁰ The detailed review in this section of David's contribution to understanding the origins of agriculture has been edited from an unpublished text provided by Dorian Fuller.

⁴¹ D. R. Harris (ed.), *The Origins and Spread of Agriculture and Pastoralism in Eurasia* (Washington, DC, 1996); D. R. Harris (ed.), *The Archaeology of V. Gordon Childe: Contemporary Perspectives* (London, 1994); and D. R. Harris and G. C. Hillman (eds.), *Foraging and Farming: the Evolution of Plant Exploitation* (London, 1989)—all originating from international symposia that David had organised. Those who contributed to his edited collections soon became aware of how very exacting an editor he was; some felt that he had virtually rewritten their contributions and, in so doing, improved them immeasurably.

⁴² D. R. Harris, 'New light on plant domestication and the origins of agriculture: a review', *Geographical Review*, 80 (1967), 90–107.

concluded that the origin of agriculture was not a revolution nor driven by a single environmental change, but that ‘the beginnings of cultivation were slow and complex processes involving varied and gradual adjustments between man and the land over long periods of time in many different habitats’.⁴³ He highlighted that hard evidence was still meagre for most of the world and for most plants, calling for more genetic and ethnobotanical studies of minor cultigens and more archaeology beyond the then established centres of southwest Asia and Mesoamerica. His brief reviews of the evidence from China, Southeast Asia and Africa now appear remarkably prescient.

It was the innovative ideas that David had developed on the origins of agriculture in tropical forest regions, drawing on deductions from ecology, biogeography and ethnography, that first brought him to the attention of archaeologists, with his ‘Agricultural systems, ecosystems and the origins of agriculture’,⁴⁴ delivered at a multidisciplinary seminar on domestication at the Institute of Archaeology in May 1968. This chapter was a conceptual one and can be regarded as his first landmark contribution to this field; it continues to gather regular citations. In it David explores variations in cultivation in terms of their biodiversity and how it transformed pre-existing natural ecosystems. Most often agriculture represents a reduction in diversity, or ecological specialisation, but in some cases, especially tropical slash-and-burn systems, the opposite could be true and agricultural systems maintained or enhanced plant diversity. This insight suggests quite different potential pathways from foraging to managed agricultural systems in different parts of the world. David also observed that most known transitions to farming occurred initially in quite diversified natural ecosystems, such as tropical forest-savanna or the Mediterranean zone of south-west Asia, rather than more monotonous vegetation zones, like the Eurasian steppe. He went on to draw attention to the fundamental difference between seed culture and vegetative food production. In addition, he began to formulate some biogeographically informed rules that could predict where in the world agricultural origins were likely to have occurred. This offered an opportunity to escape an ascertainment bias in early agriculture research, by which archaeologists focus on regions of known origins (the Near East, Mexico), find evidence

⁴³Ibid., 107

⁴⁴D. R. Harris, ‘Agricultural systems, ecosystems and the origins of agriculture’, in P. J. Ucko and G. W. Dimbleby (eds.), *The Domestication and Exploitation of Plants and Animals* (London, 1969), pp. 3–15.

for origins there, and then conclude that those are the only primary centres for agricultural origins, without comparable evidence from elsewhere. In this chapter, as in his subsequent works, David took a balanced and global view of what evidence there was and where gaps in research, in various regions or on various species, continued to limit knowledge.

In this landmark chapter he also deduced that as underground tubers represented a survival strategy for some plants growing in seasonally dry tropics, it was in these regions, the forest savanna margins, that the early use and cultivation of many tuber crops should be sought, including Asian and African yams, as well as Neotropical tuber crops. He predicted that in these zones small-scale fixed plot horticulture or ‘proto-cultivation’ could be expected. This idea was developed further in a journal article,⁴⁵ and in the specific context of Africa,⁴⁶ but his general framework and predictions have had their greatest impact through inspiring and informing multidisciplinary archaeology in the lowland tropics of the New World,⁴⁷ and the highland tropics of New Guinea.⁴⁸ Piperno and Pearsall attribute to Harris an explanation for the delay between an early start of tropical cultivation and fully sedentary village life, in contrast to the more closely tied transition in seed cropping systems, as tropical cultivation was higher in diversity and closer to natural systems, and began under lower population densities.⁴⁹

David’s next landmark paper, ‘Alternative pathways to agriculture’,⁵⁰ was a global synthesis of archaeobotanical and archaeozoological data on origins, but also a framework for comparing different subsistence systems and trajectories of change. It was organised around resource types—grass and forb seeds, nuts, roots and tubers, fish and aquatic mammals, herd ungulates—and for each category explored documented variation in processing, storing, producing and reproducing such resources, drawing on a mixture of ethnographic and archaeological cases. For example, wild

⁴⁵ D. R. Harris, ‘The origins of agriculture in the tropics: ecological analysis affords new insights into agricultural origins and suggests a fresh evaluation of the limited archaeological evidence’, *American Scientist*, 60 (1972), 180–93.

⁴⁶ D. R. Harris, ‘Traditional systems of plant food production and the origins of agriculture in West Africa’, in J. R. Harlan, J. M. J. De Wet and A. B. Stemler (eds.), *Origins of African Plant Domestication* (The Hague, 1976), pp. 311–56.

⁴⁷ D. R. Piperno and D. M. Pearsall, *The Origins of Agriculture in the Lowland Neotropics* (New York, 1998).

⁴⁸ E.g. T. Denham, ‘Envisaging early agriculture in the Highlands of New Guinea: landscapes, plants and practices’, *World Archaeology*, 37 (2005), 290–306.

⁴⁹ Piperno and Pearsall, *The Origins of Agriculture in the Lowland Neotropics*, p. 22.

⁵⁰ D. R. Harris, ‘Alternative pathways toward agriculture’, in C. Reed (ed.), *Origins of Agriculture* (The Hague, 1977), pp. 179–243.

seed gathering by Native Americans of the recent past in the Great Basin was compared with broadcast sowing of millets in north China and early Neolithic cereal growing of the Near East, highlighting the importance of different harvesting techniques in allowing intensification and selecting for domestication. This paper provides a framework for systematically comparing subsistence practices and considering the feedbacks between particular practices, resource productivity and potential pressures that might select for changes leading to domestication. In this paper he also proposed four alternative models for how different stresses—environmental changes, human impacts on the environment, resource competition, and population density increase—might push wild food procurement systems towards food production. Issues relating to growing population density and the emergence of sedentism were explored in a subsequent paper on ‘settling down’,⁵¹ which acts as a supplement to ‘alternative pathways’.

David’s third landmark paper explored both Darwinian and ecological interactions between plants and people.⁵² In it he outlined an ‘evolutionary continuum’ between foragers and farmers, framing key stages that can be expected in any chronological pathway between hunting and gathering and agricultural economies and in particular the necessary intermediate stage of ‘pre-domestication cultivation’. While a few scholars had noted or implied the likelihood of finding evidence for plant cultivation without the botanical changes recognised as domestication,⁵³ it was arguably Harris that really made ‘pre-domestication cultivation’ part of the accepted archaeological lexicon. It is now quite routinely explored as an analytical framework by archaeobotanists working in various world regions.⁵⁴

⁵¹D. R. Harris, ‘Settling down: an evolutionary model for the transformation of mobile bands into sedentary communities’, in J. Friedman and M. J. Rowlands (eds.), *The Evolution of Social Systems* (London, 1978), pp. 401–17.

⁵²D. R. Harris, (1989) ‘An evolutionary continuum of people-plant interaction’, in Harris and Hillman, *Foraging and Farming*, pp. 11–26.

⁵³E.g. H. Helbaek, ‘The palaeoethnobotany of the Near East and Europe’, in R. J. Braidwood and B. Howe (eds.), *Prehistoric Investigations in Iraqi Kurdistan* (Chicago, IL, 1960), pp. 99–118; R. I. Ford, ‘The processes of plant food production in prehistoric North America’, in R. I. Ford (ed.), *Prehistoric Food Production in North America* (Ann Arbor, MI, 1985), pp. 1–18.

⁵⁴E.g. Piperno and Pearsall, *The Origins of Agriculture in the Lowland Neotropics*; Denham, ‘Envisaging early agriculture in the Highlands of New Guinea’; S. Kahlheber and K. Neumann, ‘The development of plant cultivation in semi-arid West Africa’, in T. Denham, J. Iriarte and L. Vrydaghs (eds.), *Rethinking Agriculture: Archaeological and Ethnoarchaeological Perspectives* (Walnut Creek, CA, 2007), pp. 320–46; D. Q. Fuller and L. Qin, ‘Water management and labour in the origins and dispersal of Asian rice’, *World Archaeology*, 41 (2009), 88–111.

However, he was concerned to make clear that he was not supposing ‘pre-ordained steps on a ladder’ nor irreversibility, but rather that a gradient existed in terms of ‘increasing input of human energy per unit area of exploited land’.⁵⁵ In other words, there was an intensification trajectory inherent in the transition to agriculture. His main aim with his model of an evolutionary continuum was to ‘clarify the general terminology’ and it did so by disentangling changes in plants (domestication) from changes in human activities (cultivation, agriculture). While he sketched a history of how domestication had been conceptualised in archaeology and botany and built on earlier insights of a wide range of scholars, his model, presented as a table, laid a new foundation for a clearer and more structured approach to using archaeological evidence to document domestication. A comparison of the archaeological literature prior to this paper and that which came after suggests that the conflation of finding domestication and finding agriculture was typical through the 1980s and broke down from the 1990s onwards.

The influence of David’s ‘evolutionary continuum’ is evident in three ways. First, as already noted, one finds it referred to as a framework for the transition to farming across many disparate world regions, from New Guinea to the Neotropics, from Africa to Eastern Asia. Second, the history of citation of this paper charts an impressive trajectory, such that within twenty years it had easily outstripped his earlier landmark papers. Through his later career he often returned to this model and made minor modifications;⁵⁶ indeed, he worked on a final revision as an encyclopaedia entry in his last year, published posthumously.⁵⁷ Finally, by early in the twenty-first century, the phase of pre-domestication cultivation that was theoretically central to the evolutionary continuum started to be recognised through empirical archaeological evidence.⁵⁸

⁵⁵ Harris, ‘An evolutionary continuum of people–plant interaction’, p. 12.

⁵⁶ E.g. D. R. Harris, ‘Themes and concepts in the study of early agriculture’, in D. R. Harris (ed.), *The Origins and Spread of Agriculture and Pastoralism in Eurasia* (London, 1996), pp. 1–9; D. R. Harris, ‘Domesticatory relationships of people, plants and animals’, in R. Ellen and K. Fukui (eds.), *Redefining Nature: Ecology, Culture and Domestication* (Oxford, 1996), pp. 437–63; D. R. Harris, ‘Evolution of agroecosystems: biodiversity, origins, and differential development’, in P. Gepts, T. R. Famula, R. L. Bettinger, S. B. Brush, A. B. Damania, P. E. McGuire and C. O. Qualset (eds.), *Biodiversity in Agriculture: Domestication, Evolution, and Sustainability* (Cambridge, 2012), pp. 21–56.

⁵⁷ D. R. Harris and D. Q. Fuller, ‘Agriculture: definition and overview’, in C. Smith (ed.), *Encyclopaedia of Global Archaeology* (New York, 2014), pp. 104–13.

⁵⁸ E.g. G. Hillman, R. Hedges, A. Moore, S. Colledge and P. Pettitt, ‘New evidence of Lateglacial cereal cultivation at Abu Hureyra on the Euphrates’, *The Holocene*, 11 (2001), 383–93; G. Willcox, ‘Charred plant remains from a 10th millennium B.P. kitchen at Jerf el Ahmar (Syria)’, *Vegetation History and Archaeobotany*, 11 (2002), 55–60; E. Weiss, M. E. Kislev and A. Hartmann,

In exploring and illustrating the evolutionary continuum, David produced a number of empirically based syntheses on the transition to farming and settled life in the Near East. The first of these is represented by the Kroon Memorial Lecture delivered in May 1990 and subsequently published.⁵⁹ In this he probed the history of research on domestication leading up to his evolutionary continuum model and drew on his 'alternative pathways' paper to suggest how wild cereals and pulses were more readily intensified and domesticated than the tree nuts, like acorns, that were inferred to be co-staples during the Epipaleolithic.⁶⁰ In subsequent years he updated his syntheses of both Near Eastern plant domestication and subsequent agricultural expansion involving the integration of livestock,⁶¹ and the expansion of growing agricultural populations.⁶² His final revised synthesis of agricultural origins and early dispersals in the Near East constituted a key chapter in his monograph of the Djeitun field project.⁶³ While these syntheses drew on the slowly expanding empirical record, they also recorded a major shift in thinking on causation by attributing the beginning of pre-domestication cultivation to the push factor of climatic aridification brought on by the Younger Dryas at the end of the Pleistocene. Indeed, exploring the evidence for a global climatic event at the Younger Dryas, and its potential as a factor driving parallel evolution of agriculture, for example in south-west Asia and China, was an important addition to his later syntheses.⁶⁴ While the role of the Younger Dryas continues to be debated, David's strong conceptual framework, represented by the three landmark papers identified above, has left a lasting legacy on

'Autonomous cultivation before domestication', *Science*, 312 (2006), 1608–10; D. Q. Fuller, (2007) 'Contrasting patterns in crop domestication and domestication rates: recent archaeobotanical insights from the old world', *Annals of Botany*, 100 (2007), 903–24.

⁵⁹ D. R. Harris, *Settling Down and Breaking Ground: Rethinking the Neolithic Revolution* (Harlem, 1990).

⁶⁰ Harris 'Alternative pathways toward agriculture'.

⁶¹ D. R. Harris, 'The origins of agriculture in southwest Asia', *Review of Archaeology*, 19 (1998), 5–11; D. R. Harris, 'The spread of neolithic agriculture from the Levant to western Central Asia', in A. D. Damania, J. Valkoun, G. Willcox and C. O. Qualset (eds.), *The Origins of Agriculture and Crop Domestication* (Aleppo, 1998), pp. 65–82.

⁶² D. R. Harris, 'The expansion capacity of early agricultural systems: a comparative perspective on the spread of agriculture', in P. Bellwood and C. Renfrew (eds.), *Examining the Farming/Language Dispersal Hypothesis* (Cambridge, 2002), pp. 31–40.

⁶³ D. R. Harris, *Origins of Agriculture in Western Central Asia: an Environmental–Archaeological Study* (Philadelphia, PA, 2010).

⁶⁴ E.g. D. R. Harris, 'Climatic change and the beginnings of agriculture: the case of the Younger Dryas', in L. Rothschild and A. Lister (eds.), *Evolution on Planet Earth: the Impact of the Physical Environment* (London, 2003), pp. 379–94.

the interpretation of the growing empirical evidence for domestication processes and transitions to agricultural economies.

The excellence of David's academic contributions was recognised in various ways throughout his career. His awards in his earlier career in Geography have already been mentioned. In 1982 he was elected a Fellow of the Society of Antiquaries; he was made an Honorary Fellow of University College London in 2000 in recognition of his services to UCL; and his distinguished contributions to scholarship were recognised in 2004 when he was elected a Fellow of the British Academy. It was entirely appropriate that he was a member of two of the Academy's sections: Archaeology, and Anthropology and Geography. In that position he was at home.

STEPHEN SHENNAN
HUGH CLOUT
Fellows of the Academy

Note: Helen Harris and her daughter, Lucy, generously discussed David's life and work with Hugh Clout on 22 April 2014; further information is taken from the tribute delivered by Neil Faulkner at David's funeral on 15 January 2014. In addition to the contributions made by Helen Harris, Sue Colledge, Dorian Fuller and Louise Martin noted in the text this memoir is also based on the work of Ken Thomas, including the obituary he wrote for *Archaeology International*.⁶⁵

⁶⁵ K. Thomas, 'Professor David Russell Harris (1930–2013)', *Archaeology International*, 17 (2014), 7–11, DOI: <http://dx.doi.org/10.5334/ai.1701>.

