

Stoneking *et al.* discuss the dating of mitochondrial DNA (mtDNA) using two new approaches described below. Neither of these approaches is based on the mtDNA analyses of humans and chimpanzees, which Stoneking *et al.* suggest suffer from reliability problems. Mitochondrial DNA is inherited from one's mother. Stoneking *et al.* and other researchers suggest that the human mitochondrial ancestor was a female living approximately 200,000 years ago.

Two variables must be estimated to determine the age of the mtDNA ancestor. These are the amount and the rate of sequence evolution. Using only human mtDNA, the reliability of comparisons between mtDNA and humans and chimpanzees is avoided. In addition, human-only mtDNA produces standard errors of the parameters that are then used to construct 95% confidence intervals for the age estimates.

Using archaeological data from Papua New Guinea, Stoneking *et al.* assume that only one migration occurred to colonize PNG. They proceed to estimate the rate of mtDNA within and then between PNG groups based on the mtDNA differences since colonization. Based on these two approaches, a conservative date of 60,000 years was used for the colonization of Australia and New Guinea. The 60,000 year date is based on archaeological data, and an estimate of the rate of the mtDNA control region is then made. Applying the results of the analysis to the human mtDNA ancestor produces a date of 137,000 years ago for the occurrence of that ancestor with a 95% confidence interval between 63,000 to 416,000 years ago. Although the mtDNA ancestor does not have to be a member of our species, the paleoanthropological evidence suggests that she was.

In part three, Deacon discusses southern Africa and modern human origins, with an emphasis on archaeological and paleontological data from Klasies River and Border Cave in South Africa. Hublin describes skeletal and archaeological evidence from North Africa and suggests that the Mediterranean was a major barrier between European and North African human populations during the second half of the middle Pleistocene. Bar-Yosef discusses the Levantine archaeological evidence for modern humans. He emphasizes the importance of diverse archaeological evidence such as spatial relationships between artifacts and features, seasonality, and food choices, for understanding the transition from the Middle to the Upper Paleolithic and the routes of migration.

Clark discusses human fossil evidence and tool assemblages from Europe, Asia, and Africa from the Lower to Upper Paleolithic. He chronicles the technological changes in tools through this broad time period and the impact large scale climatic change had in regional migrations, including the one leading to modern humans emigrating into Asia through the Levant. Stringer focuses on human cranial measurements from fossils and several modern populations and suggests that the strongest evidence for a ancestry between archaic and modern humans is found in Africa. Stringer uses the Penrose Size and Shape Statistic as a simple way to measure similarity between the crania.

Mellars restricts his analysis to archaeological materials from the Middle to Upper Paleolithic transition of Europe, the Aurignacian, to argue that the Aurignacian represents the archaeological correlates of modern human dispersal across the whole of Europe. The dispersal would have displaced co-terminous Neanderthal populations already living in Europe. Brown looks at recent human evolution in East Asia and Australasia and states that arguments in support of regional continuity between archaic and modern humans in these areas must overcome problems of time control, skeletal preservation, and site clustering before this hypothesis can be accepted. The last chapter by Smith assesses the fossil evidence from Africa that is pertinent to the emergence of modern humans. He finds support for the *out-of-Africa* model, but suggests that the incontrovertible skeletal evidence and dating of these skeletal remains used by others to support this model should be critically evaluated before acceptance.

All the chapters favor the *out-of-Africa* model as the best explanation for the emergence of modern humans, though some authors are more cautious than others in fully endorsing the model. Although the *multiregional* model is discussed, no author suggests that it provides a better explanation. Readers will need to review other recent books and articles for arguments in support of the *multiregional evolution* model.

I think all the authors would support more research, especially discovery and reporting of skeletal evidence from Middle and Upper Paleolithic sites in Europe, Asia, and Africa.

The book is well worth adding to your library as it presents very up-to-date information on an on-going contested topic in paleoanthropology, namely, who were our ancestors. The relevance of this book for the history of archaeology lies in continuation of the 85 year-old debate between the *multiregional evolution* and *out-of-Africa* models.

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"One Grand Pursuit": A Brief History of the American Philosophical Society's First 250 Years. 1743-1993 by Edward C. Carter II. American Philosophical Society, Philadelphia, 1993. \$10.00 (Paper).

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The American Philosophical Society (APS) was founded in 1743 by Benjamin Franklin (then only 37 years old) and is North America's oldest scholarly organization. The archaeological interests of Thomas Jefferson, who became its third president in 1797,

are not mentioned in this history but it is worth noting that besides his well known pioneering excavation of a burial mound in 1784 he sent out a circular letter for the APS to secure information on archaeological remains, stating, "The American Philosophical Society have [sic] always considered the antiquity, changes, and present state of their own country as primary objects of their research" (quoted in Willey and Sabloff, *A History of American Archaeology*, 1980, p. 28).

Nevertheless archaeology remained a minor part of APS activities until it began its small grants program in 1933, with emphasis on the humanities and social sciences. In the next 60 years it made grants to 12,000 scholars and scientists for a total of \$15,000,000. The APS has also published in its *Transactions* the work of many archaeologists, such as Kate Peck Kent, René Millon, R. S. MacNeish, Luther S. Cressman, and Joffre Coe, to name only a few.

Today the library and manuscript archives of the APS are an important resource for this history of archaeology, as well as many other disciplines. Its main emphases are "Frankliniana; American Colonial and Revolutionary history; and Native American languages, archaeology, and ethnology" (p. 81). It should be noted that its library is open to all without charge and that there are few limitations on using its collections. The APS is the repository for fieldnotes, letters, records, and other documents given by scholars in every field.

This *Brief History* is, unfortunately, much less a history of the APS's scholarly activities than of its changing organizational structure, its physical facilities, its financial ups and downs, and its officers. However, anyone interested in the history of archaeology should focus on its extraordinary riches of information rather than its buildings and personnel.

VI. Activities of Various Academic Gatherings Related to the History of Archaeology

A panel discussion "Preserving the Anthropological Record" was held during the November 1993 annual meeting of the American Anthropological Association. The session, held on 19 November, was organized by Nancy J. Parezo (Arizona State Museum) and chaired by Robert V. Kemper (Southern Methodist University). The purpose of the session was to continue previous work on developing strategies to better preserve the anthropological record.

Joseph A. Tiffany (California Polytechnic-Pomona) and Patricia A. McCormack (Provincial Museum of Alberta) organized and cochaired a symposium entitled "Museum Archaeology in the '90's" at the 51st Plains Conference in Saskatoon, Saskatchewan in October 1993. The session covered new collecting initiatives, current concerns, and new directions in museum-based research and popular interpretation.

"Ape/Man/Ape/Man 1600-2000", symposium du Congrès international "Pithecanthropus Centennial (1893-1993)", Leyde, was held 26 June-1 July 1993. Information can be obtained from R. Corbey, Department of Philosophy, Tilburg University, Post Office Box 90153, 5000 Le Tilburg, Pay-Bas.

Dr. Terry A. Barnhart presented a paper "Archaeology and History: A Critical Connection at the Spring 1993 meeting of the Ohio Archaeological Council.

The symposium "Disciplinary Boundaries and the Study of Early Humans, 1860-1940" was held during the History of Science Society annual meeting (11-14 November) in Santa Fe, Mexico. Participants included Henrika Kuklick (chair, University of Pennsylvania), A. Bowdoin Van Riper (Franklin and Marshall College), "After Abbéville: Redrawing the Geology-Archaeology Boundary in Britain, 1860-1880"; David K. van Keuren (Naval Research Laboratory), "Man Culture, and Science: Disciplinary Definition and Change in Mid-to late Victorian Anthropology", Valerie Pinsky (Smithsonian), "Boundaries and Professionalization in American Archaeology Between the Wars"; comment, by Curtis M. Hinsley (Northern Arizona University).

South Asian Archaeology 1989 has been published by Prehistory Press (1993). The volume is made up of papers from the Tenth International Conference of South Asian Archaeologists in Western Europe, Musée National de Arts Asiatiques. The volume is edited by Catherine Jarrige.

Dr. Alice B. Kehoe writes: "Carol I. Mason (University of Wisconsin-Fox Valley) read a paper, "The Archaeology of Paul Radin" at the Midwest Archaeological Conference, Milwaukee, Wisconsin on 24 October 1993. Mason contrasts Radin's early (1915-1923) ethnographic conclusions from his fieldwork with the Winnebago, with his 1945-1949 publications in which he describes an earlier matrilineal, stratified society. She accounts for the contradiction between his earlier and later conclusions by pointing out his conviction, in his *The Story of the American Indian* (1927, 1934, 1937 editions), that North American Indians were strongly influenced by the Nuclear American civilizations, and that archaeology demonstrated the influence of the Maya in the United States. Mason concludes with the irony that most archaeologists working with Oneota data, likely to represent ancestral Winnebago (among other nations), attempt to reconcile these data with Radin's late work that was itself his effort to reconcile ethnographic data with archaeology!"