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History of Twentieth Century Paleoanthropology: A Bibliographic Survey

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Margarita Diaz-Andreu (Archaeology, University of Durham) who has for some time been carrying on research in the historiography and history of archaeology, especially in Spain, but also in Latin-America and elsewhere (cf. below, "Suggested by our Readers") is currently working on 19th century connections between prehistory and anthropology, including the International Congress of Anthropology and Prehistoric Archaeology

Judy Daubenmier (graduate student, American History, University of Michigan) is doing a dissertation on Sol Tax and the action anthropology project at the Meskwaki settlement near Tama, Iowa. She would like to hear from former participants in the project and may be reached via e-mail at jdaubenm@umich.edu.

Matthew R. Goodrum (mgoodrum@indiana.edu) is working on the history of the idea of prehistory and the early study of the origin and early state of humans by scientists and natural philosophers in the 17th and 18th centuries, and has recently presented a paper entitled "Establishing a Place for the History of Prehistoric Anthropology and Archaeology within the History of Science."

Frank Salamone (fsalmone@iona.edu) has been awarded a grant by the American Philosophical Society to examine the impact of Franz Boas on current epistemological issues.

Mark Solovey (Arizona State University) is studying the post-WWII debate about whether social science is really science, with reference to patronage from private foundations, the military and NSF, developments in disciplines and departments, the national science advisory system and public policy issues.

John David Smith (History, North Carolina State, Raleigh) is doing research on the Austrian anthropologist Felix von Luschan (1854-1924) and would welcome communication with colleagues familiar with Luschan's life and work. Smith can be reached at smith_jd@unity.ncsu.edu

Kevin Strohm (Amsterdam School for Cultural Analysis, University of Amsterdam) is working on a dissertation tentatively entitled "Ethnography and the Promise of Authority: The Politics of Cultural Difference in Twentieth-Century American Anthropology" with reference to the work of Mead, Benedict, Sapir, Redfield, down to that of Marcus, Fischer, Clifford and Rosaldo.

William Willard (Washington State University) is working on two papers relating to American ethnographers resident in the Soviet Union in the 1930s (cf. HAN XXVII, #1:3): "Archie Phinney, Nez Perce Anthropologist. His Russian Years" and "Roy Barton, Obsessed Ethnographer."

Kevin A. Yelvington (Anthropology, University of South Florida) has been awarded a fellowship from the W.E.B. DuBois Institute for Afro-American Research at Harvard University. In 2001 he will begin his project entitled "Harvard's Hereditarians: Science, Politics, and Ideology in a University that 'Stands Firmest for the Public Honor.'"

BIBLIOGRAPHICA ARCANA

I. The History of Twentieth Century Paleoanthropology:

A Bibliographic Survey

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This article is meant as a resource to help researchers, educators, and students interested in the history of anthropology and the history of science locate works treating the history of paleoanthropology in the twentieth century. The works discussed were selected primarily from recent

scholarship, although some particularly useful older sources are also listed, and they all investigate some aspect of the history of paleoanthropology, theories of human origins and human evolution, or other related disciplines. Research into the history of paleoanthropology has advanced significantly in recent decades, covering a broad range of topics from varying points of view and with increasing sophistication. Books and articles dealing with this subject have proliferated for various reasons. Some anthropologists and archeologists have hoped to throw new light on contemporary problems by placing them in their historical context, while others have sought to trace the history of particular theories or methodologies. Historians interested in the history of science and the history of anthropology have begun to study the history of paleoanthropology in order to situate its discoveries and theories within a broader social and intellectual context. The bibliography below reflects the diversity of topics and problems that have drawn the attention of scholars, but is also designed to indicate different approaches, perspectives, and disciplinary tools that have been used to study them.

Perhaps the most prominent feature of paleoanthropology has been the discovery of the fossil remains of human ancestors, the so-called "missing links". Thus, it is not surprising that many works have been published on the people and circumstances surrounding these remarkable finds. While introductory textbooks in anthropology and popular works on human origins often contain chapters covering the history of major fossil finds, more systematic and historically oriented studies have also been published (Leakey and Goodall 1969; Reader 1981; Trinkaus and Shipman 1993; Tattersall 1995). The discovery of the *Pithecanthropus* remains by Eugène Dubois just before the turn of the century has drawn special attention from historians because of the importance of the find, Dubois' conviction that it was an evolutionary link between the apes and modern humans, and the debate that this sparked among anthropologists (Theunissen 1989; Leguebe 1992; Leakey and Slikkerveer 1993).

A more controversial fossil human was discovered in 1911-13, the famous Piltdown Man. Arguments over the meaning of the remains, the central position that they held in the theories of many influential anthropologists, and the eventual demonstration that they were a hoax has prompted books and articles seeking to explain how the hoax could have been perpetrated, who could have done it, and why the specimen was given such importance (Weiner 1955; Hammond 1979; Spencer 1984; Costello 1985; Blinderman 1986). As Frank Spencer (1984) has shown, the anthropological, as well as the historical, significance of Piltdown is linked to an array of factors ranging from the English desire to have their own early human fossil to the theoretical expectations of researchers like Arthur Keith and others. Yet another early fossil discovery that has provoked historical study is the Chapelle-aux-Saints Neanderthal. This is largely because the fossil was studied by the influential French anthropologist Marcellin Boule and his conclusions had a powerful and lasting impact on the way Neanderthals were viewed (Hammond 1982; Albarello 1987; Laurent 1995). This is but one, although critical, episode in the long and often troubled history of the study and interpretation of the Neanderthals, where debate has raged regarding their relationship to modern humans and whether *Homo sapiens* evolved through a 'Neanderthal Stage' (Brace 1964; Spencer and Smith 1981; Spencer 1984; Trinkaus and Shipman 1993).

An entirely new panorama was introduced into the study of human origins during the 1920's and 1930's by work done in China (by Davidson Black, Wenzhong Pei, and Franz Weidenreich), in South Africa (by Raymond Dart and Robert Broom), and in Indonesia (by G. von Koenigswald). Reader (1981), Lewin (1987), and Tattersall (1995) all provide useful general accounts of these developments, while Jia (1990) offers valuable information about the contribution of Chinese scientists in the excavation and study of the *Sinanthropus* (Peking Man) remains. But it was Africa that produced some of the most exciting and well-known discoveries of the second half of the century. The work of Louis and Mary Leakey at Olduvai Gorge, of Richard Leakey at Lake Turkana, and of Donald Johanson in Ethiopia has expanded the hominid family tree and extended human evolutionary history by millions of years. Not surprisingly, there have been many popular accounts

of their finds, but only a few rigorous historical studies exist for this extremely important period in the history of paleoanthropology (see Reader 1981; Lewin 1987; Walker 1992; Tattersall 1995).

The history of twentieth century paleoanthropology consists of more, however, than the excavation and study of fossil remains. Paleoanthropology itself has emerged as a science within the context of other sciences. Always closely linked with physical anthropology, it has been influenced by ideas about the physical diversity of the human species, zoological studies of human and primate anatomy, and theories of race (Bennike and Bonde 1992; Chiarelli 1992; Melbye and Meiklejohn 1992; Spencer 1997). Moreover, since the first proposals of transmutationist and evolutionary theories in biology in the nineteenth century, all modern attempts to formulate a scientific explanation of human origins have been founded on some theory of biological evolution. As Peter Bowler (1986, 1989) has shown, competing theories of evolution (Neo-Lamarckism and orthogenesis, as well as those based on Darwinian natural selection) have profoundly influenced the way human evolution was envisioned and the way fossil material was interpreted. The rise of the New Evolutionary Synthesis in the middle years of the century also had a significant impact on paleoanthropological theory (Tattersall 1995; Delisle 1995).

The study of stone tools and other material artifacts has also been an important source of information about early hominids. Such objects provide essential information about the development of culture, and in many instances have supplied the only evidence of the presence and activities of our ancestors, where fossil remains are lacking. While excellent works have been published on the study of stone artifacts in the nineteenth century, there has been less effort devoted to it in the twentieth century. One noteworthy exception is the eolith controversy during the first decades of this century, which has been admirably studied by Donald Grayson (1986).

The history of paleoanthropology has been investigated by some scholars in terms of new discoveries and new theories, and the people responsible for them. It is also possible, however, to approach the history of paleoanthropology by attempting to situate anthropologists and their theories within a broader social, cultural, and intellectual context. Michael Hammond (1982) and Robin Dennell (1990) have convincingly shown how social and political concerns have played critical roles in the way empirical evidence has been interpreted and theories have been formulated and received. Social factors such as a person's educational background, institutional affiliations, access to funds and research materials, to name but a few, can have a profound impact on one's ability to conduct research and communicate discoveries and ideas successfully to other scientists (for examples see Theunissen 1989; Trinkaus and Shipman 1993; Spencer 1997).

Some remarkable insights into the relationships between paleoanthropology and its social and intellectual context have resulted from the application of ideas and perspectives borrowed from other fields of study. The representation of women in studies of human evolution and other issues relating to gender have been investigated by Diane Gifford-Gonzalez (1993) and Stephanie Moser (1993). Misia Landau (1984, 1991) and B. Latour and S. C. Strum (1986) have subjected various narrative accounts of human evolution to illuminating textual analysis. Their work shows that by investigating the narrative scenarios of human evolution formulated by anthropologists one can learn much about the construction of scientific knowledge and the implicit assumptions underlying theories. Stephanie Moser (1992, 1996) has argued that the visual representations of extinct hominids employed by different researchers at different times also often convey ideas and reflect assumptions that are not mentioned in the textual discussions of these creatures.

The history of paleoanthropology has also begun to form closer ties to the history of science, and this is a relationship that will certainly benefit both disciplines. Topics of interest to historians of science, such as the development of science in different national contexts, the professionalization and

institutionalization of science, or its function and status in society, for example, offer new ways to study the origin and development of paleoanthropology. By situating paleoanthropology within the context of the history of science more generally, a dynamic picture emerges in which ideas, practices, tools, theories, and philosophical assumptions are being exchanged by many different sciences. Developments in the geological sciences, for example, have proven tremendously important to the progress of paleoanthropology (Grayson 1986; Spencer 1990). Historians of biology can point to research in primatology (Simons and Covert 1981), comparative anatomy, genetics, evolutionary theory, and biogeography (Bowler 1995) as essential to understanding problems in the history of paleoanthropology. Paleoanthropology also offers invaluable opportunities to study the often tense but sometimes constructive relationship between science and religion—for despite the frequent confrontations between science and religion over the question of human origins, there have been instances where their interaction has been of a more complex nature (Livingstone 1990, 1992).

The history of paleoanthropology is not merely the history of a single narrowly defined scientific discipline. In its most general form it encompasses the history of modern thought and society. It is linked to literature, art, social and political issues, and popular culture. In many critical ways it is intimately connected with the development of other sciences, while at the same time being influenced by broader philosophical and intellectual trends. By recognizing and investigating these connections and influences, anthropologists benefit by being made aware of the often hidden roots of many contemporary theories, practices, and controversies, while historians uncover the significant contributions paleoanthropology has made to modern science, thought, and society. Vigorous scholarly inquiry into these topics has just begun, however, and a great deal is left to be done.

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