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Cover: Professor A.L. Kroeber in the lower Sacramento Valley, California at an excavation by R.F. Heizer in the early 1930's. (Photograph courtesy of the R.H. Lowie Museum of Anthropology).

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**THE KROEBER ANTHROPOLOGICAL
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Editors

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Foreword

Noel T. Boaz and John E. Cronin

The papers presented in the present volume have been written by physical anthropologists with a primary connection, now or in the recent past, with the University of California, Berkeley. The spectrum of topics treated does not fully sample the range of variation of interests in Berkeley physical anthropology but it is indicative of it. Such areas of current research as early primate paleontology, primate morphometric studies, hominid cranio-dental and mandibular functional anatomy, ecological/behavioral studies of wild primates and bio-social anthropology ("sociobiology") have not been dealt with here directly, although in some cases referred to or alluded to in the texts. The papers here represent lines of research, some of which have been undertaken in some form or another at Berkeley since the end of the last century, and some of which have come of age only within the last decade or so.

The first "physical anthropology" course taught at Berkeley pre-dated the founding of the Anthropology Department in 1901. It was entitled "The Geological History of Man" and was taught by J.C. Merriam, Professor of Paleontology, who came to Berkeley in 1894. Excavations financed by Mrs. Phoebe Hearst also were begun prior to 1901 in Egypt (by G.A. Reisner), in Peru (by M. Uhle) and on Santa Rosa Island, California (by P.M. Jones) which supplied the skeletal collections now housed in the Lowie Museum. Some of these specimens formed the basis of Y.Z. Rak's contribution in the present volume.

An advisory committee, composed of Franz Boas (of Columbia and the American Museum), Frederick W. Putnam (of Harvard and the American Museum), Merriam, Mrs. Hearst, (all of whom had a strong interest in the physical history and diversity of man), the President of the university and others, was responsible for setting up the Anthropology Department and the museum, and for bringing A.L. Kroeber to the university in 1901 (see McCown, 1961). The focus of the new department was California and thus much of the physical anthropological research was on California Indians or fossil man. Putnam, the first director of the museum and the first chairman of the department, cooperated with Merriam in the study of the Calaveras skull, found in the auriferous gravels of the Sierra Nevada (see Sinclair, 1908). Aleš Hrdlička studied specimens in the museum and published his report in the newly established *University of California Publications in American Archaeology and Ethnology* (1906, v. 4(2):49-64). He also had taken part in the study of the

Calaveras skull. Interest in fossil man thus extends back to the earliest days of the Berkeley Anthropology Department.

Studies of California Indian skeletal biology, paleodemography and anthropometric population studies probably dates from research on California crania by Lucien Carr at Harvard in 1879-80. The first such study undertaken at Berkeley was "Californian Anthropometry" published in 1926 by E.W. Gifford who had joined the department in 1912. The study followed Kroeber's *Handbook of the Indians of California* (1925) and included measurements by Gifford, Kroeber, E.A. Hooton (whose student, S.L. Washburn, was to come to Berkeley some years later) and L.L. Loud.

A general survey course in anthropology, including physical, was first offered by Kroeber in the 1905-06 school year. His interest in and emphasis on physical anthropological topics can be seen in his textbook, *Anthropology* (1923), in which the first three chapters are entitled, "Fossil Man," "Living Races," and "Problems of Race." Ronald Olson came to the department in 1931 and instituted the Anthropology 1 system in which the first semester was devoted to physical anthropology.

Theodore McCown, a former Berkeley student, in 1938 became the first physical anthropologist hired in the department. McCown started the department's research interest in Old World paleoanthropology with excavations at Skhūl and Tabūn Caves (now in Israel). He and Sir Arthur Keith described the skeletal material in the well known *Stone Age of Mount Carmel*, Volume 2 (1939). Also indicative of an increasing interest in early man abroad was research by Ralph Chaney of the Paleontology Department at Choukoutien, northern China in the late 1930's (see Pope, this volume for a related article on the Plio-Pleistocene of China.) Chaney's interests centered on paleoecology and on the diet of Peking Man.

The University of California Expedition to South Africa, mounted in 1947 to 1948, re-investigated the type locality of *Australopithecus africanus* at Taung (see following article by Boaz) and the Bolt's Farm locality. The expedition was headed by Prof. Charles Camp of the Paleontology Department and it extended its activities to western Lake Turkana, Kenya (just south of the area presently being investigated by the Berkeley Omo Research Expedition) and to the Fayum Depression, Egypt.

Even during this period of increasing fieldwork ab-

road research on California Indians and collections in the Lowie Museum continued. R.F. Heizer and McCown published a report on the Stanford skull in 1950, and S. Cook, T.D. Stewart, J.L. Angel and others, including many doctoral students, undertook significant studies during this time.

Pierre Teilhard de Chardin visited the university for one quarter during 1952. While in Berkeley he collaborated with R. Stirton of the Paleontology Department in a major work on biostratigraphy.

Sherwood L. Washburn moved to Berkeley from Chicago in 1958. Shortly thereafter Washburn and I. DeVore carried out a landmark field study of the East African baboon. A primate behavior station was established at Berkeley under Washburn's direction and in 1966 Phyllis Dolhinow, whose primary research had been on langurs, joined the faculty. Primate studies today remain a viable and rewarding area of research (see McKenna, himself a recent addition to the Anthropology faculty, and Curtin, this volume).

Molecular anthropology is a promising area of phylogenetic research (see Cronin, this volume). In 1967 Vincent Sarich, who had received a doctorate from Berkeley in the same year, added this area of investigation to Berkeley physical anthropology.

F. Clark Howell (a former student of Washburn's), after a distinguished career in paleoanthropology at Chicago, came to Berkeley in 1970. Howell's recent long-term research in Ethiopia has yielded valuable hominid and other primate remains and contexts (see Meikle, Boaz and Thompkins, this volume).

J. Michael Hoffman, who recently has come to the Berkeley faculty, continues in the long tradition of skeletal biology and paleodemography.

The papers presented here are expositions of new data, of interpretations based thereon or of original syntheses of data. In a general sense the papers continue a commitment to empirical and data-oriented anthropology which has been a hallmark of Berkeley physical anthropology since its inception.

The editors wish to extend their appreciation to the editorial staff of the *K.A.S. Papers*, especially Randy Thompkins, who assisted in the editing of manuscripts. Several Berkeley colleagues read the manuscripts and made helpful suggestions; among these Eric Meikle is to be especially thanked. Much of the foregoing history of the department was organized by Elizabeth McCown, who graciously lent her time to the endeavor. Drs. Al Elsasser, John Rowe and Clark Howell are also thanked for their help in compiling this history. (A short history of the department can be found in Rowe 1967). Judith Ogden did most of the graphics in the volume and their quality is a reflection of the interest she showed in the various articles.

The *K.A.S. Papers* has been assisted by a grant from the Graduate Division of the University of California to whom the editors express their gratitude.

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