ters on work capacity, ecological models, high-altitude adaptation, and Samoan modernization. However, it is very nice to see that criticisms and differences of opinion are not overlooked. Given the discussion in several chapters of the views of Mazess, the reader can only lament the fact that he did not contribute his recent thinking on matters of genetic adaptation. Of interest in this regard, however, is the fact that even within the rather tightly united fraternity of Baker's students, there still does not seem to be a consensus on the terminology of adaptation. Some of the chapters provide definitions of terms while others seem to utilize them in novel combinations, i.e., "acclimatization adaptation."

To a lesser extent, the same kind of terminological difficulties appear to surround the concepts of stress and stressors. However, in the nutrition and modeling chapters particularly, the authors try to carefully delineate their terms. I found the chapter entitled Reflections on Adaptive and Ecological Models to be particularly interesting as it traced the development of modeling efforts among the Quechua, Samoans, and Turkana with emphasis on the utility of models for heuristic purposes.

Criticisms of the volume pale before its strengths. There is some duplication of information. At times the authors make connections between chapters as if the manuscripts might have been exchanged; at other times it seems obvious that chapters were added independently of each other. The text is handsome in appearance and generally well edited, making the typographical errors in a few chapters stand out. There are instances in which graphical material lacks legends or information that identify populations or sources of data. However, the breadth of coverage of the chapters, the chapter bibliographies, and the emphasis on directions for future research make this volume a necessary addition to the bookshelf of any anthropologist or nonanthropologist interested in biocultural aspects of our own species. In addition, I think it will find a niche in upper-level courses or seminars dealing with the subject of human adaptation, whether they are taught in anthropology, physiology, nutrition, ecology, demography, or medical science departments.

Recent histories of anthropology usually credit E.A. Hooton with training an entire generation of physical anthropologists in the United States. Obviously, there will never be another Hooton with that all-embracing impact on our field. However, Paul T. Baker should have a prominent place in future histories as being responsible for defining a new direction within this field and training a generation of researchers that have expanded that direction and its cross-linkages with many other disciplines. This volume stands as a testament to Baker's vision and his teaching. Only those who know or have worked with Paul can be aware of how it also should represent a testament to him as a very human being.

PAUL L. JAMISON
Department of Anthropology
Indiana University
Bloomington, Indiana

The Human Career. By Richard G. Klein. xxi + 524 pp. Chicago: University of Chicago Press. 1989. $39.95 (cloth).

Richard Klein has done the anthropological community, and particularly the physical anthropologists, a great service in producing this excellent textbook on Paleolithic biological and cultural evolution. Of particular use to physical anthropologists is Klein's emphasis on the archaeology of the Paleolithic, which will complement the strengths of those of us who may be able to tell Peking Man from OH-9 but cannot tell a discoidal scraper from an Acheulian handaxe.

The book's title is telling, for Klein's opus tries to dig deeper than the ordinary textbook of paleonathropology, which often tends towards a litany of bones. By "The Human Career," Klein implies that economic activities are at the root of being human and tries to cast his net widely enough to review both the ins and outs of anatomical evolution and the origins and evolution of cultural subsistence activities. I like this approach, probably because it is so "anthropological." For those of us that have a hard enough time pulling together one subfield of anthropology, Klein is sitting on the border of two.

Though some of the more rigorously paleontological readers may be disappointed to find that Klein condenses 50 million years of primate evolution into Chapter 2 and then spends five chapters on the next 3 million years, it works well. If one's interest is in human evolution, then one might just as well get into the cultural material record as soon as possible.

The Human Career is very copiously illus-

trated, apparently mostly by computer graphics, and quite effectively so. Site localities, geological sections, tool types, and fossil skulls comprise most of the illustrations, and the comprehensive tabular presentations of the fossil record for each taxon are also very valuable.

Much of this comes at the expense of the evolutionary processes and of functional morphology, two of the areas that physical anthropologists tend to emphasize when teaching this material. Again, however, this strikes me as more a matter of complementarity than of deficit.

In sum, Klein's book is very effective in two ways. It serves as an excellent secondary source that can steer any of us to the recent literature on selected topics in human evolution. Second, I would adopt it without hesitation as the major text in a course on paleoanthropology (even though I do not teach one now, my colleague who does has indeed adopted this book).

JONATHAN MARKS
Departments of Anthropology and Biology
Yale University
New Haven, Connecticut

The Emergence of Modern Humans. Edited by E. Trinkhaus. xv + 285 pp. Cambridge: Cambridge University Press, 1989, $49.50 (cloth).

When I mentioned to a knowledgeable colleague that I was reviewing this volume, I was tersely informed that the papers resulting from this 1986 symposium are "out of date." In fact, from the viewpoint of paleoanthropologists, archeologists, and on-lookers (professional and lay alike) caught up in the currently raging debate about the origin of modern humans, the papers are just as timely and very similar to the most recent arguments that have been presented in this important debate. Most of the nine chapters in the book are rich enough to warrant their own separate reviews. Both well-delineated theoretical perspectives and substantive data analysis, drawn from the subdisciplines of human paleontology and archeology, have been brought together to ostensibly examine the "Neandertal Question" and the biological and cultural transitions of later Pleistocene in Europe and Africa. Yet in the products of this symposium, it is easy to discern the firmly planted roots of wider issues encompassed in the replacement versus multi-evolution debate that has flowered in all the regions where investigations of human origins continue. The question of the interface between biology (morphological modernity) and behavior (archeological complexity) is of evident concern to all the contributors to this volume. This concern runs throughout all of these papers and most importantly, presages the major paleoanthropological issues evident in current human evolutionary studies.

The first and third chapters by Trinkaus delineate VI "General Issues," 20 "More Specific Issues," and "a Few Phylogenetic Issues," which aptly characterize most of the concerns of the other contributions. Trinkaus's explicit discussion of both the general and specific issues runs the entire gamut of paleoanthropology as a whole and is the hallmark of an excellent editor. Unfortunately, only a few of the issues dealt with can be summarized here. These include the influence of paleobiogeography and climatic fluctuations of the area under study; the relation between behavior, cognitive abilities, organizational complexity, and phylogeny; the influence of chronological estimates on perceived evolutionary rates; the importance of genetic data and the historical background; and orientations of the investigators themselves. One important theme raised by Trinkaus is the issue of standards of identification for perceived behavioral, technological, and phylogenetic change leading to hominids that are recognizably "human."

Binford proposes an answer to this question in the second chapter and argues that "Planning Depth, Tactical Depth, and Curation" of tools are the hallmarks of human behavior and that the Acheulian provides us with an example in which ". . . no patterned differentiations convincingly covary with grossly different environments." He does, however, note that in fact East Asian paleolithic assemblages contrast markedly with regions producing true Acheulian assemblages but does not emphasize that the paleoenvironmental contexts of East Asian paleolithic assemblages contrast markedly with those of Pleistocene, western Eurasia, and Africa. He believes that the Oldowan, like the Acheulian, does not suggest an "extrasomatic" means of technological inheritance, but instead a ". . . technologically aided, biologically based, panspecific form of adaptation." This last pronouncement is, to my way of thinking, an extremely apt characterization of ourselves which qualifies