

proof of the intellectual pudding is in both the eating and the nutrition, and the instructor can — if sufficiently knowledgeable — point out discrepancies (muskrats are *not* attracted by insects as potential food; fossil tarsioids have *not* been recovered from the Paleocene; and many others) and possible differences in viewpoint.

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MAN. Second ed. By Richard J. Harrison and William Montagna. viii + 458 pp., figures, tables, bibliography, index. Prentice-Hall, Englewood Cliffs, N.J. \$5.25 (paper).

In recent years the field of physical anthropology has greatly enlarged its scope to cover the areas of osteology, odontology, primatology, anatomy, body composition, but also human reproduction, human growth, human ecology and human adaptation as well. Harris and Montagna's book attempts to cover some of these areas within an evolutionary perspective. This is the second edition and compared with the first one, one finds considerable positive changes. The book includes 17 chapters.

The first chapter deals with the external morphological features of man that differentiate him from the other mammals and primates. In the second chapter the non-human primates are discussed with the objectives of showing the origins of man and his relationship to the non-human primates. This section is a well presented chapter. Chapter 3 deals with human variation and, although in the first pages the authors attempt to explain human variation as a result of human evolution, their treatment and inclusion of nineteenth century classifications of human races contradict their prime objective.

Chapters 4 through 9 deal with human anatomy and physiology (brain, extremities, skin, teeth, endocrine system, etc.). These chapters are also well presented and quite thorough. Chapters 10 through 12 deal with human reproduction from conception to maturity. I find some of the statements made in chapter 12 (*His Sexual Behavior*), particularly those dealing with detailed de-

scriptions of sexuality, to be of a sensational nature rather than actually contributing to a more thorough understanding of man's sexual behavior. The several pictures of male and female nudes are further evidence of sensationalism without purpose. Chapters 13 through 15 treat the areas of the biological basis of communication. Chapters 16 and 17 are concerned with aging, and the book terminates with a summary section.

In conclusion the level of presentation in the book is uneven; parts of the book are very simplistic while others are very technical. Some portions are current while others are outdated. Furthermore, the book lacks appropriate treatments of human ecology and adaptation, which are necessary for the understanding of man both in a contemporary and an evolutionary context. For these reasons, use of this book as an undergraduate textbook must be considered with great caution. The use of supplemental material is mandatory.

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RACE. By John R. Baker. xviii + 625 pp., figures, tables, bibliography, index. Oxford University Press, New York. 1974. \$15.00 (cloth).

The phenomenon of race in contemporary man, with all of its complexities, motivates different modern workers to different directions according to their varied interests and personalities. For some the interest is taxonomic, and the challenge is to put thousands of living groups into a smaller number of taxa. To others, the call is phylogenetic — tracing origins and timing separations, as for the Thai-folk and the southern Chinese. To still others, now, the differences between races call for explanation, either by invoking evolutionary forces or uncovering them by both experimental and epidemiological studies. Some are fascinated by the historical and political uses of the term "race," yet not by races themselves, and still others have for their discovery that there are no human races (merely ethnic groups or populations or clines).

But for John R. Baker, retired reader in cytology at Oxford, none of these directions hold. His is the motivation to write an encyclopedic work, partially covering the history of the term race, partially covering race and culture and culture-history, the meaning of species, and including not less than 13 appendices (or 14 including a post-index listing of race-names once in use). His is also the motivation to compress race and culture as one, in the fashion of the last century, with a long excursion into superiority and inferiority, and into the evidence for the heritability of intelligence. *Race* therefore could be called an encyclopedic work, but as Sherwood L. Washburn might add, "encyclopedic in a miscellaneous sort of way." *Race* might also be labelled a racist book, even though Baker carefully includes a very late disclaimer, writing (on p. 534) "It follows that no one can claim superiority simply because he or she belongs to a particular ethnic taxon."

This book does have a grand scope. Just in the first four chapters it makes the span "From Neanderthal Man to the Philosophers of the Eighteenth Century" (Chapter 1) to "From Kossina to Hitler" (Chapter 4). There follow sections on the meaning of species, in birds and bees, on the meaning of race, taxonomic and evolutionary theories, color (viz. colour) and physical differences. There is a 232-page section on "Selected Human Groups," and nearly 100 pages on Superiority and Inferiority. Baker's "races" are for the most part geographical races, with Von Eikstadt's terminology, and he leaves no doubt but that, in his view, some races are inferior to others.

Africa is given particular consideration, with descriptions of house-types and kings and pictures of sculpture, but it is largely the Africa as described by Livingstone (1857) and DuChailu (1860) and Schweinfurth (1857). Baker's physical anthropology is of comparable vintage, the kind of craniology that once was, and primitiveness — "primitive" dolichocephalic skulls, "primitive" nasal tips, "primitive" hair cross-sections, "primitive" vertebral spines, and the like.

Of the 87 pages devoted to "Criteria of Superiority and Inferiority" there is much review of mental test data and a compre-

hensive if Shuey-like review of mental testing in the U.S.A. Baker includes, in detail, cousin, sibling, fraternal twin and monozygotic twin correlational material, as well as group comparisons of "Negrids," "Indi-anids" and others. Obviously, he does not realize that the very same values of r , and indeed comparable group differences, can be duplicated with urinary ascorbic acid or urinary riboflavin, without genetical meaning at all.

Baker accepts the notion that the level of civilization attained by different groups is an indication of their intellectual capacities. His "proofs" include Galton's ratings of the mental qualities of dogs, Australian Aborigines, Negroes, classical Greeks, and Baker feels that he has both considered and rejected environmental explanations. Of course, Galton never worked with Australian Aborigines. There is no evidence that Baker has, or that Baker has the knowledge of Olmec, Toltec or Aztec civilizations that any undergraduate student of anthropology may be expected to show.

Clearly, John R. Baker has put a great deal of effort into compiling *Race*, from the 82 illustrations (including the geographical distribution of the races of the crested newt) to the 1,181 references (most of them a century old). He has read widely, though not necessarily wisely, and there is no particular evidence in the text or in the references to personal familiarity with the subject-matter at hand, excepting perhaps a description of 13 "Australid skulls that show certain features particularly clearly" (Appendix 4) and photographs of certain archaeological sites. Yet this book has been lauded in a jacket-blurb as "a most impressive display of profound scholarship and vast erudition" by Arthur R. Jensen, and given other but much more guarded citations by Sir Peter Medawar and Rene Dubos. Neither, presumably, gave attention to Baker's derivation of the Arabs ("Orientalids") or the Syrians ("probably of mixed Orientalid and Armenid stock") and neither, presumably read the work in detail.

To contemporary physical anthropologists and modern human biologists *Race* is merely an anomaly or more appropriately an *atavism* completed with unguided industry by a man lost in the form of pterion and the bifurcations of the vertebral spines,

and quite certain that Africa was as described by Henry M. Stanley, and that the stages of "civilization" devised by Lewis Henry Morgan are appropriate today. To be instructed that only the Europid and Mongolid races (sic) developed great civilizations or that the Incas and Aztecs were *merely* in the "middle status of barbarism" at least frees his colleagues at Oxford from guilt by association.

There is some concern that *Race*, published by the Oxford University Press (and with review copies broadly distributed) will be taken at face value by some people in the hard sciences. Baker adopts the now-it-can-be-told line of presentation, he hints at a conspiracy of silence (which he has the unique courage to break), and he refrains from predicting the end of the world. Baker clearly believes that some dogs are smarter than some Englishmen and this is a good place to stop.

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PERSPECTIVES ON HUMAN EVOLUTION 2.

Edited by S. L. Washburn and Phyllis Dolhinow. xiv + 491 pp., figures, tables, bibliographies. Holt, Rinehart and Winston, New York, 1972. \$5.00 (paper).

The underlying theme of *Perspectives* is set in the introduction "... man stands alone, fabricates alone, speaks alone." The reader begins with a revised version of Kenneth Oakley's paper on skill as an uniquely human possession. His brief survey of tool use among vertebrates reflects his philosophy that although monkeys and other primates make human movement, human manual skill reflects a "fine central nervous mechanism." The article reviews traditional concepts which relate tool use with the evolution of skill and includes a brief review of Old World archeology.

F. Clark Howell summarizes paleoanthropology in a detailed review. Its first section is written in a positive tone and reflects his viewpoint strongly. For example, "there is little to distinguish *Ramapithecus punjabicus* from the earliest well-known hominid, *Australopithecus africanus*." On the other hand, some subjects are discussed with

great care "... the designation of *Homo habilis* as a new taxon may indeed prove warranted. However, additional and more adequately preserved skeletal parts are necessary to confirm what is still hypothesis." The result is that the hypotheses with which the author identifies appear to the reader as fact. Later sections however, do present a diversity of opinions about the fossil record in a clear and informative style.

In the third paper, Richard Leakey and Glynn Isaac describe the most exciting finds since Choukoutien in a brief and unpretentious manner. Although their text is too brief and descriptive to allow the novice to perceive its importance, this preliminary description of numerous fossil hominids in primary and datable context with associations from the area east of Lake Rudolph adds an interesting exclamation point to Howell's discussion of recent advances in the study of human evolution.

The type of bone damage produced by spotted hyaenas is presented in a brief article by Antony Sutcliffe. His observations have substantial utility in paleontology and are incorporated in the previous article by Howell.

The fifth paper, a discussion of wild animals as sources of food, is a compelling argument for game ranching to increase productivity of existing meat resources. Talbot's article is perhaps the most important in this series both in its practical application and the surprising amount of ecological information included in a concise summary.

Kohne, Chiscon, and Hoyer summarize DNA hybridization data and their relevance to primate taxonomy in a two page article. Although their results are consistent with most primatologists views of the taxonomic relationships among members of the order, they suggest the rate of DNA sequence change is a generation-time dependent phenomenon.

Chapter 7 is an anatomical examination of the hominoid wrist joint by Lewis which concludes that all living hominoids have a basically similar morphological arrangement that is the result of genetic affinity rather than parallelism. William Straus' brief essay focuses primarily on the evolutionary relationship between man and the anthropoid apes and concludes that no sin-