

ing interest in our evolution, and will reward its readers with a hearty feel for the current state of the art.

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THE ANTHROPOLOGY OF MODERN HUMAN TEETH: DENTAL MORPHOLOGY AND ITS VARIATION IN RECENT HUMAN POPULATIONS. *Cambridge Studies in Biological Anthropology, Volume 20.*

By G Richard Scott and Christy G Turner II. Cambridge and New York: Cambridge University Press. \$80.00. xxiii + 382 p; ill.; index. ISBN: 0-521-45508-1. 1997.

This volume synthesizes several decades of research and methodological developments in dental non-metric trait studies. Data from more than 30,000 individuals (much of which is generously provided in the appendixes) from populations spanning the last 20,000 years are used to reconstruct population history on global and regional scales.

The first half of the book focuses on Arizona State University's system of classification for non-metric variation in crown and root morphology. This system, more than 25 years in development, is summarized elsewhere, but the present volume provides a systematic description and illustration of the more than 30 traits and their variant expressions. Chapters on genetic and biological factors affecting these variations provide the essential understanding needed to inform the myriad of small decisions that researchers make in ranking trait expression. There is a thoughtful discussion of variability in trait recording and quantification and the ways in which methodology impacts research results.

In the second half of the book, Scott and Turner characterize global dental variation. They employ linguistic, geographic, archaeological and dental data to derive five major divisions of humankind: Western Eurasia, Sub-Saharan Africa, Sino-Americas, Sunda-Pacific and Sahul-Pacific, plus regional subdivisions. Charts listing trait expression frequencies for the subdivisions are followed by summaries of trait constellations characteristic of each. Given the importance of this stratification of data, more discussion of the rationale for the subdivisions would be appropriate. In the final chapters they apply the data to larger issues of human population history, and compare their findings with those of craniometric, genetic, and mtDNA-based biodistance studies. The extent to which these data sets agree (and the degree of comparability) is quite variable.

Scott and Turner portray the research in the volume as work-in-progress. They acknowledge the sampling problems imposed by the uneven temporal and spatial distribution of dental casts and skeletal

remains available for study. Thirty thousand sets of teeth is a lot, but not when spread over the globe. One hopes that they will fill some data gaps—New Guinea, Melanesia, Australia—so that future analyses will avoid perplexing results like the grouping of New Guinea dentition with those of Western Eurasians. This could be dismissed as sampling error, but it also sends a message about the fluidity of human population movements, the linguistic, cultural, and biological results of which defy unidimensional characterization.

Regardless of my potential disagreement with some of the hypotheses presented, this book comprises an invaluable source of methodological guidance and comparative data for students and practitioners of dental trait studies.

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KINSHIP TO MASTERY: BIOPHILIA IN HUMAN EVOLUTION AND DEVELOPMENT.

By Stephen R Kellert. Washington (DC): Island Press. A Shearwater Book. \$25.00. xvi + 256 p; index. ISBN: 1-55963-372-7. 1997.

The study of human minds, particularly their evolution and connection with nature, is an important one for these troubled times. Such study raises profound issues including the origins of evil, cruelty, enlightenment and altruism. In this book, no less an authority than E O Wilson states that "Stephen Kellert, a leading authority on the subject, has given us a full account of the many dimensions of Nature's psychological pull on humanity" (back cover). In spite of such praise, I find this to be a disappointing book.

Where to start? How about with the single sentence that "[t]he Buddhist-Hindu perspective especially emphasizes a concept of shared relation linking the human and nonhuman worlds" (p 136). This important, one might say essential, topic is then dropped, when even superficial reflection might suggest something is awry. Asia has lost just as much forest (if not more) than the rest of the world, has many endangered species, and now even has its own Holocaust, the killing fields of (Buddhist) Cambodia. There is no evidence for a special "Asian" relationship with life and nature. Nor does Kellert supply any.

It is not as if there is a dearth of information available on the topic of minds and nature. During the last twenty-five years we have lived through a revolution of sorts in our understanding of the human psyche, courtesy of the Communist Chinese. As they destroyed monasteries, burned libraries, and killed monks, they forced a few refugees over the Himalayas into India and even as far as North America. One now cannot enter even the most modest bookstore without finding books on "Bud-

dhist psychology." If Kellert was unwilling to read books by Asians, many western students have now studied in this tradition. There is the venerable Robert Aitken, an American Zen master now living in Hawaii, who encountered Zen in a Japanese prisoner-of-war camp, and more recently names like Alan Watts, Joan Halifax, Pema Chödrön, Joseph Goldstein and Jack Kornfield. Buddhist psychology now permeates our culture, from poets like Gary Snyder and the late Allen Ginsberg to popular magazines (*Tricycle*, *The Shambhala Sun*) to glitzy Hollywood personalities. Apparently all this has passed Kellert by. What a pity.

In contrast, western Judeo-Christians are, as usual, accused of destroying nature in our search for mastery. Yet the unique contribution of the west has been the introduction of western scientific methods in general, and the theory of evolution in particular, to the study of the human psyche—names like Darwin, Freud, Jung, Tansley, Adler, Dawkins in the academic realm—and to varying degrees, Campbell, Bradshaw, and Bly in the popular realm. A couple of paragraphs simply cannot do justice to someone like Jung.

We might accept superficiality and omissions if the space were needed for more important topics. It is not. Throughout the text (set off in italics) are stories (using Kellert's words) that describe real or imaginary situations (I cannot tell which). A sample: "*Jamie gazed about the audience. He had already exceeded his allotted time and sensed not only their interest but also some confusion and perhaps disappointment*" (p 59). Literary agents tell me that scientists should avoid the temptation to write fiction. I am inclined to agree. Here one gets the impression that the first manuscript seemed too short and some expansion was needed. Those seeking basic psychological insights into humans and nature might start instead with a wise and readable book by another Harvard professor—*The Principles of Psychology* by William James in 1891 (London: Macmillan). It was followed, one might add, by *The Varieties of Religious Experience: A Study in Human Nature* in 1902 (New York: Longmans, Green and Co).

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THE ORIGINS OF NATIVE AMERICANS: EVIDENCE FROM ANTHROPOLOGICAL GENETICS.

By Michael H Crawford. New York: Cambridge University Press. \$64.95. xvii + 308 p; ill.; author and subject indexes. ISBN: 0-521-59280-1. [First published in Spanish as *Antropología Biología de los Indios Americanos*, 1992.] 1997.

The author is a leading anthropologist who has been working on problems of variation in Native American peoples for several decades. His contri-

butions include his own research and a career of professional organizing, orchestrating, and advocacy on behalf of anthropological genetics (notably, as editor of an important journal in this field, *Human Biology*). This is reflected in a well-written book that covers most areas of the subject of aboriginal Americans and their historical origins and experience.

Morphological and demographic data on Amerindian variation are presented, with summary tables and figures. The main focus is genetics (classical and recent), and an extensive presentation of the distribution of variation within and among populations that is revealed by these data is provided. The data are put in the historical contexts of the science that collected and analysed them, and the questions that drove that work. Major population history issues are discussed, including population size, contact effects, regional subdivision, disease, archeology, Asian source regions, admixture, and the state of contemporary populations.

The essential ideas behind the basic analytic methods are outlined, and although the book is not a source for technical detail or interpretation, its strength lies in graphical and verbal presentation of the synthesis of a large amount of data. In some areas of controversy, as the original settlement date and process, the number of "waves" of incursion into the New World and its relation to language, or disease susceptibility patterns, major differing points of view are presented fairly, although the author acts as reviewer rather than arbiter. This book is substantial but not obtuse, and will benefit a serious nonspecialist or upper-level student who wants an introduction to the origins of peoples of the Americas, their sojourn in the New World, and their current variability. In a fast-changing field, the book will serve as a launching point for consulting the primary literature, and an orientation for interpreting the new.

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THE EVOLVING FEMALE: A LIFE-HISTORY PERSPECTIVE.

Edited by Mary Ellen Morbeck, Alison Galloway, and Adrienne L Zihlman. Princeton (New Jersey): Princeton University Press. \$27.95 (paper). xix + 332 p; ill.; index. ISBN: 0-691-02747-1. 1997.

This volume is in many ways bold, quirky, and sometimes frustrating, perhaps just what the editors would have hoped. In the 20 chapters and additional section introductions, the editors and authors seek to examine females, particularly human females, within their evolutionary heritage and with a focus on individuals, life histories, ecological context—both environmental and social—and on the