## BOOK REVIEWS

## Ape Ethnography

Chimpanzee Material Culture. Implications for Human Evolution. W. C. McGREW. Cambridge University Press, New York, 1992. xvi, 277 pp., illus. \$79.95 or £40; paper, \$27.95 or £16.95.

Only 30 years after Goodall first observed tool use in wild chimpanzees, the body of evidence of this behavior in *Pan troglodytes* is now such that, according to McGrew, "Some artefacts would be unattributable to [human or chimpanzee] species if they lost their museum labels" (p. 230). Three decades of field research have indeed produced an impressive quantity of observations on tool-using and tool-making behaviors and social customs in chimpanzees.

McGrew describes them and carefully analyzes their role in feeding strategies, describing their patterns of acquisition and stressing sex differences and variations among populations. An example of the material culture of chimpanzees is the nutcracking behavior studied by Boesch and Boesch at Taï, Ivory Coast (but not found, for example, at Gombe National Park, Tanzania). This behavior involves selecting "hammers" of the appropriate weight to crack open nuts and transporting both hammer and nuts to suitable anvils. Females were found to be better than males at exploiting the nuts and were observed to share the prize with their infants until the young learned the necessary skills (it takes years!). Yet this wealth of complicated patterns makes McGrew wonder about some striking lacks: why do apes not use tools to hunt or containers to transport food?

Particular attention is devoted to chimpanzee "ethnography," that is, to the differences among chimpanzee populations: why don't the chimpanzees at Gombe ever wade into even the shallowest and narrowest streams, whereas their counterparts living in the same ecological conditions at Mahale, no farther than 170 kilometers away, do? Why do the former adopt an amusing hand-clasp posture to groom the armpits of conspecifics whereas the latter do not? Do these types of differences meet the criteria used by anthropologists to define human culture?

In answering this question, McGrew is faced with the problem of defining culture. He adopts Kroeber's operational definition based on six criteria—innovation, dissem-

ination, standardization, durability, diffusion, tradition—to which he adds two more: non-subsistence and, to eliminate cases of artificial influence from humans, naturalness. McGrew argues that although no single chimpanzee population shows a single behavioral pattern that satisfies all eight criteria, all of them (except perhaps diffusion) are readily met by some chimpanzees in some cases.

It is not McGrew's aim to discuss the cognitive abilities involved in using tools; however, he briefly analyzes the processes that allow new behaviors to spread. He points out that though recent experimental findings and critical reviews of the literature have shown that imitation and teachinggenerally considered the obvious processes accounting for culture—are indeed minimal in apes (and even less in monkeys), they are not necessarily required by culture. I would like to stress, however, that teaching and imitation must be taken into account, since the occurrence of culture would be much less frequent and its diffusion much slower without them. Is not time one of the major differences between genetic and cultural evolution?

The book, which masterfully integrates primatology and (paleo)anthropology, scrutinizes diet, food acquisition and processing, and other aspects of chimpanzees' daily life and compares their behaviors with those of other ape species and living hunter-gatherer societies (a point-by-point parallel is drawn between Tanzanian chimpanzees and Tasmanian hunter-gatherer humans, as they live in ecologically similar environments) to gain insight into hominization. Chimpanzees have indeed repeatedly been used as models for human evolution in the past; but chimpanzee data have unfortunately been more frequently used to draw suggestive parallels in wildly speculative scenarios.

McGrew, a field primatologist whose training in zoology, psychology, and anthropology provides him with exceptional "tools" for a critical and systematic approach to comparisons, points out some major flaws and fallacies of paleoanthropology. Adopting a chimpanzee model, he fruitfully channels his imagination to make specific and testable predictions about the tool-using behaviors of our ancestors. He hypothesizes the kind of archeological rec-

ords various populations of chimpanzees on the one hand, and hunter-gatherers on the other, would leave us and what we would learn about their culture from these records.

Finally, to grasp the plot of human evolution and gain insight into hominid behavior and culture, McGrew speculates about how these records compare with what our ancestors left us. The striking similarities he reveals between the material culture of *Pan* and that of *Homo* will certainly play a role in the thought-provoking debate on apes' rights recently fueled by the publication of *The Great Ape Project: Equality Beyond Humanity* (P. Singer and P. Cavalieri, Eds., Fourth Estate, London, 1993).

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## The Study of Individuals

Fifty Years of Personality Psychology. KEN-NETH H. CRAIK, ROBERT HOGAN, and RAY-MOND H. WOLFE, Eds. Plenum, New York, 1993. xx, 313 pp. \$47.50. Perspectives on Individual Differences. Based on symposiums, 1987.

What is human nature? Among the many intellectual traditions that endeavor to answer this question, personality psychology is distinguished by the adoption of scientific methods and values and by taking individual persons as the basic unit of analysis. As a coherent subdiscipline of psychology, its history is brief despite origins as ancient as the humoral theory of temperament. Two textbooks, Gordon Allport's Personality: A Psychological Interpretation and Ross Stagner's Psychology of Personality, both published in 1937, are often cited as landmarks in establishing the field. To commemorate the 50th anniversary of their publication, Fifty Years of Personality Psychology describes the origins of these two textbooks and their broad, enduring influence on personality psychology. The 20 chapters of this volume are organized around three themes: the historical origins of the two textbooks and the lives of their authors, current styles and forms of personality textbooks, and the present status of research on basic issues in personality. Because all the contributors remain solidly anchored to the contributions of Allport and Stagner, the chapters are unusually well integrated and allow a synopsis of sorts.

The chapters discussing disciplinary history focus on the two textbook authors' lives and ideas. Stagner's reminiscences de-