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 nut-cracking 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, dissemination, 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 teaching—generally 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 records 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. KENNETH H. CRAIK, ROBERT HOGAN, and RAYMOND 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-

scribe the intellectual climate and personal circumstances of his early academic career; and several chapters supply biographical and interpretative material on Allport's life and views. At a time when behavioral and psychoanalytic approaches exhausted the list of developed theoretical perspectives, both Allport and Stagner balked at the choice. Stagner chose an integrative resolution, indicating here that he sought to include the clinical insights of psychoanalysis within a behavioristic framework. Allport firmly rejected both schools and helped create a third, humanistic alternative.

While Stagner wrote a good textbook that went through several editions, Allport did more than write a textbook: He provided a definition of the field that is today still widely employed and presented his own theoretical framework for understanding personality. The chapters reviewing the current status of personality textbooks make clear that what Allport achieved is no longer even attempted and what Stagner accomplished is only rarely equaled. Current textbooks typically proffer an uncritical serial presentation of personality theories or perspectives, perhaps devoting several chapters to "representative" but arbitrarily selected content areas. Though the contributors to this volume do not agree on what would constitute the ideal contemporary personality textbook, they all appear dissatisfied with the current form. This dissatisfaction is not hard to understand if Allport's text is the standard for evaluating our present efforts. Allport offered a clearly articulated point of view emphasizing the conscious, purposive, and unique nature of persons, and he assimilated the relevant research literature to this perspective. As a result, Allport's book is a landmark. By comparison, most current texts are little more than tourist guides.

The key to the success of Allport's textbook is in the topics he engaged. In *Fifty Years of Personality Psychology*, the largest set of chapters is devoted to reviewing the current status of those topics that were central in Allport's textbook: understanding the unique individual, motivation and the self, making judgments about personality, and personality assessment. The authors of these chapters take full and deliberate advantage of hindsight. Though each of these chapters could stand alone as a review of a research topic, they collectively provide a fair and demanding test of the personality psychology envisioned by Allport. It is remarkable that the central issues of this 50-year-old textbook provide a framework for understanding so much of the contemporary research literature. Allport was not fully prescient, for there are important areas of current investigation (for example, those concerned with the biological basis of personality) where he had little to contribute. Contemporary research and theory in the areas emphasized by Allport, including the use of personal documents, the nature of self and identity, motivation, trait structure, judgments of personality, and the prediction of behavior, are each discussed in separate chapters. The wealth of now available data shows that these topics are still central to personality psychology, and Allport's influence on the contemporary scene is unmistakable.

The chapters of *Fifty Years of Personality Psychology* are well written with a minimum of jargon and should be accessible to beginning graduate students, though this audience will lack the preparation to fully appreciate the chapters focusing on substantive issues. But even where this kind of background is lacking the book may compel interest, for it is a book with protagonists whom the reader will come to know and perhaps admire. Those who teach personality psychology will find historical and personal material invaluable for enlivening lectures. This book, moreover, does more than respond to the interests of students of personality and their teachers. Contained here is an implicit but provocative question of interest to an audience much wider than ever anticipated for this volume: What is the role of the textbook in the growth and development of a science?

The absence of a serious effort to engage this question in any of the chapters contributed is the source of my sole quibble with the editors' choice of what to include here. Virtually all of the contributors to this volume agree that Allport's textbook had a profound influence on the subsequent development of personality psychology, and this influence is amply documented in many individual chapters. Why was Allport's book so important? The historical context, the nascent state of the discipline, and Allport's own keen insight that permitted recognition of the key conceptual issues may all be cited as factors. Revolutionary theories, unexpected observations, and methodological innovations are all well-known if not fully understood contributors to the evolution of scientific disciplines. Allport's *Personality: A Psychological Interpretation* shows that a textbook with a point of view can have extensive and perhaps equivalent consequences. For those interested in the growth and development of scientific disciplines, Allport's textbook and its influence on personality psychology present a case to ponder.

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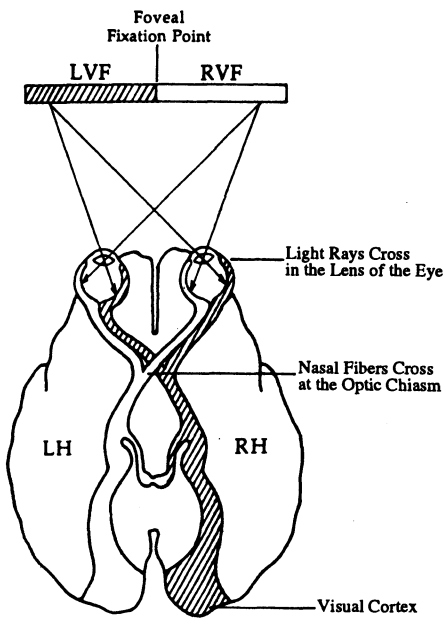
The Unified Brain

Hemispheric Asymmetry. What's Right and What's Left. JOSEPH B. HELLIGE. Harvard University Press, Cambridge, MA, 1993. xvi, 396 pp., illus. $35 or £27.95. Perspectives in Cognitive Neuroscience.

In the 1960s Nobel laureate Roger Sperry performed pioneering studies of the effects of disconnecting the forebrain commissures in patients with intractable epilepsy. Since then, thousands of papers on cerebral hemispheric asymmetry have been published. The topic has captured the imagination of the general public, as witnessed by the success of popular books on how to access or develop the "other" side of the brain. As a "poor person's neuropsychology," cerebral asymmetry provides a satisfying synthesis of biology and cognition while addressing the most accessible aspect of functional localization.

Hemispheric Asymmetry is the latest in a series of attempts to synthesize a disjointed and contradictory literature. Hellige reminds us that hemispheric specialization is relative and quantitative rather than absolute and qualitative and that how information is processed is more important than the nature (verbal or spatial) of the stimulus. He reviews the concept of metacontrol, which refers to the neural mechanisms that determine the extent to which each hemisphere attempts to assume control of processing, as well as the role of subprocessors.



"The anatomical arrangement of the visual projection system in humans. Note that information from each visual half-field is projected directly to the visual cortex of the contralateral hemisphere." [From *Hemispheric Asymmetry*]