

## MEDIA REVIEW

### Exploration of Culture in Chimpanzees

Review of *The Cultured Chimpanzee: Reflections on Cultural Primatology* by William C. McGrew. Cambridge, Cambridge University Press, 2004, 248 pp, \$29.99.

William McGrew's excellent volume *The Cultured Chimpanzee: Reflections on Cultural Primatology* is an apt book at this time in the history of primatology. It extends his previous book, *Chimpanzee Material Cultures: Implications for Human Evolution* [McGrew, 1992], and more recent publications that argued for the concept of culture in apes [e.g., Whiten et al., 1999], while setting the groundwork for the discipline of cultural primatology. Numerous descriptions of nonhuman culture have been published of late, but many are essentially a list of potentially cultural behaviors. McGrew goes beyond this by incorporating a variety of different research methods to address chimpanzee culture, and concludes that chimpanzee (and primate) culture is far more similar to human culture than it is to that of most other taxa.

McGrew's main argument is that culture in primates is similar to that in humans, as opposed to most other species, which lack culture altogether. Culture, he argues, requires great diversity and flexibility in cultural behaviors, which are both exhibited by humans and primates. However, other taxa (with the possible exception of cetaceans) are cultural "one-trick ponies," that show impressive feats of social learning, but no flexibility, diversity, or innovation beyond the one example of social learning in which they happen to be particularly gifted. Prior to making this argument, he provides the theoretical and empirical foundations for cultural primatology, which he then uses as criteria to distinguish those with culture from those without. It is perhaps in his attempt to establish criteria for culture and mechanisms for the study of culture that McGrew makes his most valuable contribution.

Cultural primatology (the name is an intentional knockoff of "cultural anthropology") utilizes the best features of cultural anthropology, archeology, psychology, and zoology to elucidate primate culture. These disciplines allow for complete ethnography as well as an understanding of material artifacts (which is particularly valuable since much of ape culture is material) and psychological mechanisms, all under the umbrella of evolution. While there have been other assertions that humans and apes are similarly cultural, this ambitious contribution is invaluable in providing a mechanism for scientific inquiry that allows quantitative comparisons and testable hypotheses to be made on a variety of different levels. It is also, to my knowledge, the first explicit attempt to apply human ethnography techniques to a nonhuman species. While cultural anthropologists are likely to take issue with his assessment of the current field (he spends a lot of time denigrating the postmodern movement and the overreliance

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on verbal self-reports), he makes a strong case that ethnography is possible in these nonverbal species as long as the focus is on behavior.

In the first few chapters McGrew addresses several potentially fatal flaws in his argument. He gives a multipronged response to the argument that humans are a unique species. First, humans are no more unique than any other species. Comparisons of anatomical or physiological features (e.g., digestion) are made without invoking the term “unique,” so it is illogical and inappropriate to a priori set such a barrier between human and chimpanzee behaviors. Second, he argues against the fallacy of comparing chimpanzees with only modern Western humans. He concludes that the most accurate comparison is “which (if any) of its [humans’] *universal* traits are *qualitatively* different (in kind) from the universal traits of chimpanzees” (p. 8). Language, symbol use, and cumulative culture are also problematic. McGrew argues that in fact, language may be a methodological curse, as it encourages scientists to rely on easy-to-obtain self-reports instead of collecting data on how people actually behave. Thus the lack of language may benefit cultural primatology in terms of accuracy, even as information on motivations and beliefs is lost. He further argues that symbol use and cumulative culture are present in chimpanzees, albeit with less complexity and variety.

In Chapter 2, McGrew offers his definition of culture. Given the plethora of definitions (and conflicts over definitions) available, he proposes that no single definition is likely to emerge, so the main criteria for any definition of culture are clarity, explicitness, and operationality. After dismissing many of the existing definitions, he distills culture down to four essential ingredients—culture is learned, is learned socially, is normative, and is collective—and chooses to define culture simply as “the way we do things.”

The theoretical and empirical underpinning of cultural primatology is a combination of the tools of four disciplines (Chapter 3): cultural anthropology, archeology, psychology, and zoology. The first two are interesting to consider, since these disciplines are not commonly associated with animal studies. McGrew makes the case that both can be informative. Cultural anthropology, he proposes, can contribute ethnography and ethnology, which allow us to categorize and describe cultural behavior. For those who are unfamiliar with the terms, ethnography is systematic description and classification of behavioral characteristics in a population, while ethnology involves hypothesis testing based on a theoretical framework. Archeology contributes the study of material artifacts, which allows for the study of past material culture in chimpanzees, as well as direct comparisons between chimpanzees (present and past) and past human societies. This may provide more information with which to compare culture between our two species. Psychology provides the psychological mechanisms (e.g., social learning) that underpin culture, and zoology provides the evolutionary framework in which culture is to be analyzed.

Two chapters deal with species other than chimpanzees. The chapter on nonprimate species rapidly dismisses almost all recent claims of culture in fish, birds, and mammals on the basis that they do not exhibit the variety that characterizes culture. In other words, social learning is not synonymous with culture, and one example of social learning—no matter how complex it is—does not replace a broad dependence on vocal learning, visual learning, and so forth. His classification is useful because it offers an objective way to characterize “culture” as distinct from social learning. However, since this book is focused on primates, it does not fully address the large body of literature on social learning in nonprimates. A more thorough review of this literature using McGrew’s criteria may uncover more examples of culture in nonprimate species. He does withhold judgment on the cetaceans, based on the fact that we have so little data on these species because of the difficulties inherent in studying them. Primates

(specifically macaques, capuchins, and great apes), he argues, show a great number and flexibility of cultural tasks that grant these species cultural status. Gorillas and bonobos show much less evidence of culture than the other species discussed; however, as with the cetaceans, he argues that not enough is known about bonobos or gorillas in this regard, and that the absence of evidence in these cases should not be taken as an absence of culture.

Before embarking on a discussion of chimpanzees, McGrew spends a chapter addressing the issue of whether ethnography and ethnology studies are feasible in chimpanzees. While many have said that ethnography requires an explanation of an individual's intentions, beliefs, and so forth, and is therefore not applicable to nonverbal species, McGrew argues that it is possible to perform such studies well if accurate and complete behavioral data are recorded. Following this, McGrew discusses material culture (an extension of his previous book) and social culture. In this chapter he argues that behaviors that do not reflect subsistence or self-maintenance, but instead express collectivity, can also be cultural. More controversially, he argues that many chimpanzee behaviors fit the definition of human behaviors that have long been associated with culture, such as customs, institutions, rites, status, and taboos. As an example, he argues that the rain dance and waterfall rituals observed at Gombe may represent a rite or a ritual. I suspect that much disagreement will arise from this chapter, since many will object to using such terms when we cannot know the motivations and intentions that underlie such behaviors. However, McGrew's ultimate message—that we need to gather accurate and complete data, and then make sound inferences about what the meaning may (or may not) be—is useful to all.

*The Cultured Chimpanzee* is important reading for those who are interested in culture in both humans and nonhumans. The ideas in this book are controversial but quite thought-provoking. McGrew's conclusions will no doubt lead to lively discussions, and provide ideas that can be incorporated into future research. Whether or not the reader agrees with the arguments presented, this book does successfully lay down a series of empirical methods as the groundwork for a new discipline of cultural primatology. McGrew should be applauded for setting out clear methods and hypotheses to be used in such studies, and for being willing to push discussion to the next level. Hopefully, this book will spur on other researchers in many subjects to place their research in a framework that can provide testable, refutable hypotheses.

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