

VIEWS AND REVIEWS

The Chimpanzees of Gombe. Patterns of Behavior.

Jane Goodall. 1986. Harvard University Press. xiii + 673 pp.

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Discoveries from a quarter century of chimp-watching at Gombe and elsewhere are in retrospect not so much surprising as expected. Throughout the last half century, field studies of animals have revealed a correlation between brain size and complexity of behavior, particularly in the realm of social interactions. Larger brains are associated with greater memory, and memory is the foundation of social interactions. Recognition of individuals and remembrance of their behavior in the past aid in making behavioral choices that are predicated on how these other individuals are likely to respond to oneself in the immediate present and near future.

It is not uncanny that chimps behave remarkably like us; it would be surprising if they did not. Their relative brain size probably overlaps that of the earliest hominids. Thus, rather than sit back and be astounded by chimps, we should start examining their behavior more critically from the framework of our own behavior. For example, we should not be amazed that chimps can conduct 'human-type' warfare, but ask instead why in all the years of watching chimps have only one or two cases of 'warfare' been observed. What made these two cases special?

An interesting question about 'natural' chimp behavior today is that of how much may have been acquired by people-watching. All animals of 'high' intelligence can learn by watching others and imitating the action. If such were the origin of some of the chimpanzee's more human-like behavior, it would not demean them in the least but attest to their intelligence. Casual cat-watching suggests to me that imitative learning may be a great deal more prevalent among large-brained vertebrates that we usually consider in our behavioral models. Farming might be beyond the intellectual skills of chimps but I would not be unduly surprised to see a chimp plant seeds and harvest the result. I suspect, however, that their memories are not adequate to correlate the act of planting with the results of harvest.

Goodall's descriptively detailed and beautifully illustrated book provides a rich foundation of long-term observations on individuals that is critical for evaluating how chimps interact socially. Studying chimps is not so very different from studying a tribe of Australian aborigines or a small village in England or China. The individual histories of the members of the social group are critically important because in chimps, as in humans, there exist few really stereotypic roles that can be predictably counted upon. (We still do try to impose stereotypes to simplify our lives and denigrate other people.) Indeed, no surprise results from finding in the book a 'Who's Who' among chimps, perhaps the only nonhuman species for which this has been done. (The depiction on the dust jacket of what looks at casual glance to be a 'human-style nuclear family' is misleading, because chimps do not approach this form of social organization at all.) As with humans, chimp individuals may behave in internally consistent ways that match no theoretically-derived motive for gain in power, offspring number, etc. Though many behaviorists may deplore the lack of quantitative analysis, the chimps of Gombe suggest that perhaps we are not yet ready to perform such adequately. For confidence in the reality of such quantitative models as behaviorists are currently fond of presenting, we need first to apply them to our own better-understood (?) species before applying them to chimps.

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