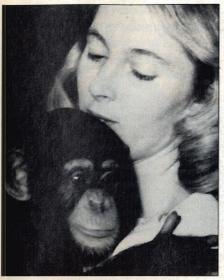


JANE GOODALL'S MASTERWORK Life Among the Chimps



Primatologist Goodall and baby Lulu

THE CHIMPANZEES OF GOMBE: PATTERNS OF BEHAVIOR

by Jane Goodall (Harvard University Press, \$30)

Adventure doesn't present itself often in our daily life, but Jane Goodall knew where to look for it. In 1959 she left the cozy world she had grown up in in England and traveled to Kenya (she had earned the fare waiting on tables). There she met and began to work for Louis Leakey, the renowned fossil hunter. She had little to recommend her except a childhood dream that she would study animals in Africa. A year later her courage and his confidence combined to make possible her first trip to the Gombe Stream Reserve, an obscure stretch of forested beach on the eastern shore of Lake Tanganyika. There, as she kept coming back and the months turned into years, she encountered, and then came to know with unprecedented intimacy, free-ranging members of the secondmost-interesting species in the world.

She made up in talent and perseverance whatever she may have lacked at first in training. As for courage, she prowled tirelessly in a jungle, trying to get close to dangerous large animals known to attack people at least occasionally. It would later become clear that the most dangerous animals for her were—as in most places—people. Within a few years she got the training, too, taking her doctorate under Cam-

bridge University's Robert Hinde, one of the world's most rigorous and distinguished authorities on animal behavior.

Then the young Englishwoman began to impress the world with her appearances on television for National Geographic, and later, with her book In the Shadow of Man (Houghton Mifflin, 1971). These sentimental journeys through the world of the chimpanzees depicted a harmonious social life, an idyllic pattern of care of the young, a range of charming individual personalities, and, in general, a harmlessness that humans, she implied, would do well to emulate. But the weight of evidence soon to be recorded by her and her colleagues-Caroline Tutin, Patrick McGinnis, William McGrew, Richard Wrangham, Anne Pusey, and many others-shook the ground under such benign generalizations; after about 20 of the study's 25 years, Goodall was moved to declare publicly her change of mind and heart.

At stake was the human conception of human nature, since these creatures were held to be not just a metaphoric mirror but a treasure trove of scientific insight into the human evolutionary past. What she had now observed was the killing of infants by adult males and females other than the mother; the cannibalism of some of those infants; attacks upon defenseless mother-infant pairs by large brutal males; and the systematic killing of one individual after another in one group by a violent gang of males in an adjacent one.

The observations that support these perspectives are brought together in a systematic and comprehensive way in The Chimpanzees of Gombe. During the same 25 years in which Goodall abandoned her idyllic view of chimpanzee life, she also followed and adopted in moderation the revolution in animal-behavior study known as sociobiology, which holds that animal behavior, even when it looks maladaptive, may serve to enhance reproductive success. This gives her account a timeliness it would otherwise not have had, and makes the description of chimpanzee life more widely and enduringly valuable.

There was a time when some of Goodall's fellow scientists took a dim view of what was seen as her an-

thropomorphizing of the animals. It was even suggested that numbers rather than names—especially cute names—for the animals would help to avoid sentimentality and distortion. The fact that some of her animals—Flo and Flint and Flame and David Greybeard—became world famous (Flo had an obituary in the London *Sunday Times*), with greater name recognition among the American public than some past Presidents, only added to the skepticism.

With this book Goodall shows decisively that sentiment and science are in her case compatible. In fact, only such empathy as she had always had could have produced the intimate three-generation family histories that are among the book's most important *scientific* contributions. Vivid "personal" prose portraits and evocative photographic "snapshots"—including a magnificent color portfolio—give the book something of the quality of a family album; yet these coexist comfortably with densely informative graphs and tables.

Every aspect of chimpanzee life is comprehensively treated, and it is impossible even to hint at more than a fraction of this coverage. But consider some facts about the lives of females. Chimpanzees are one of the few nonhuman primates in which females rather than males change groups at adolescence to find mates. This gives their young lives a sort of adventurousness generally thought of as reserved for males. Sexuality is characterized by estrus, a more widespread animal pattern that gives females a cyclical but extremely active role in the initiation of sexual encounters. A female may choose to go off with a single male during this period, and the study of these consortships has implications for the emergence of human

The females mate early with adult males, but are protected for some years by a period of adolescent infertility. Thereafter, they have infants once every five years or so (extended nursing prevents more frequent births), and some of Goodall's most lyrical passages concern their subtle and enduring maternal capabilities, which go way beyond the realm of instinct. Here as elsewhere Goodall reminds us that these animals have been shown in controlled labora-

marriage.

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tory studies to have virtually every human mental capability in more than small degree. Thus the anthropomorphizing she does must often be right on

the mark.

And of course females are involved not only in reproduction. They hunt mammals, and cooperate in doing so. They are actors and targets in violent conflicts of all kinds. They devote less time and energy to fighting, hunting, and jostling for position than do males, but they are nevertheless very involved in all these things. Old age in the forties completes the female life cycle. (Female chimpanzees do not experience menopause, however.) Throughout this time the old ties of kinship and bonds of maternal and sisterly affection remain deeply rewarding and important.

The book has its imperfections. First, although it is clearly organized and almost encyclopedic, the subjects of infant and juvenile development and of parent-offspring relations receive no special place of their own. These are important topics with which Goodall's reputation is in part identified, and the information on them should not be scattered, as it is, throughout the volume. Second, certain sexist elements should have been purged from the prose, such as the generic reference to "the chimpanzee" as "he," and corresponding references to "his" differences from or similarities to "Man." Third, and in a different vein, there is the still unexplained question of Goodall's behavior during the 1975 kidnapping of four young researchers at the field station by political guerrillas from neighboring Zaire. She mentions this critical event, but does not discuss the controversy regarding her lack of participation in the ransom negotiations. (David Hamburg, then a Stanford psychiatrist collaborating with Goodall, made a significant contribution to the effort, which led to the eventual release of all four researchers.) Finally, and most important, is the attitude illustrated by Goodall's wish that the research "will lead us to treat [the chimpanzees] with at least the compassion we would accord fellow humans." I think we should take her words "at least" very seriously. Jane Goodall is the sort of person who believes that animals may be more important than people.

But none of these problems bears on the substance of the book, which is that of a comprehensive masterpiece. It sets a high standard for future research to emulate. It tests and illuminates theories of evolutionary adaptation, ecology, animal psychology, social interaction, child development, and language, and in its wealth of detail it functions as both spiritual mirror and true (though obscure) myth of origin.

In 1973, a precedent was set for the awarding of the Nobel prize in medicine to investigators of animal behavior, and this type of study was thus officially deemed to have relevance to human experience. Goodall's lifework is of comparable scientific importance and probably has much greater human relevance than the 1973 prizewinner. If another such award is contemplated at any time in the foreseeable future, Goodall should be a leading candidate, and this brilliant and beautiful book will be Exhibit A.

Melvin Konner, Ph.D., M.D., is the author of "The Tangled Wing: Biological Constraints on the Human Spirit" (Harper & Row). He is also a fellow at the Center for Advanced Study in the Behavioral Sciences in Stanford, California, on leave from Emory University in Atlanta, Georgia.

Characters And Collectors



Dr. Claribel and Miss Etta Cone, in Paris around 1925

DR. CLARIBEL & MISS ETTA

by Brenda Richardson (Baltimore Museum of Art, \$24.95)

BY LAVINIA EDMUNDS

The Cone sisters, Dr. Claribel and Miss Etta, peer out of the pages of this beautifully designed book. They are sure of themselves, free of anyone else's opinions; they wear typical Victorian long black skirts and high-necked white blouses; they picnic with Gertrude Stein, perch on an elephant in India, giggle behind smokestacks of transatlantic ships. Heiresses to a family textile fortune, they made annual trips to Europe in the early decades of this century, and along the way amassed one of the premier modern art collections in the world.

Before most people knew the name Matisse, they bought directly from the artist: 42 oils, 18 sculptures, 36 drawings,