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Darwin at the Zoo

Did humans invent right and wrong, or are these feelings part of the inheritance from our primate ancestors?

By Jonathan Weiner

Primates and Philosophers: How Morality Evolved
by Frans de Waal. Edited by Stephen Macedo and Josiah Ober
Princeton University Press, 2006

It was not until a year and a half after his voyage on board the *Beagle* that Charles Darwin first came face to face with an ape. He was standing by the giraffe house at the London Zoo on a warm day in late March of 1838. The zoo had just acquired an orangutan named Jenny. One of the keepers was teasing her--showing her an apple, refusing to hand it over. Poor Jenny "threw herself on her back, kicked & cried, precisely like a naughty child," Darwin wrote in a letter to his sister.

In the secret notebooks that he kept after the voyage, Darwin was speculating about evolution from every angle, including the emotional, and he was fascinated by Jenny's tantrum. What is it like to be an ape? Does an orangutan's frustration feel a lot like ours? Might she cherish some sense of right and wrong? Will an ape despair because her keeper is breaking the rules--because he is just not playing *fair*?

Our own species has been talking, volubly and passionately, for at least 50,000 years, and it's a fair guess that arguments about right and wrong were prominent in our conversation pretty much from the beginning. We started writing things down 5,000 years ago, and some of our first texts were codes of ethics. Our innumerable volumes of scripture and law, our Departments of Justice, High Courts, Low Courts, and Courts of Common Pleas are unique in the living world. But did we human beings invent our feeling for justice, or is it part of the package of primal emotions that we inherited from our ancestors? In other words: Did morality evolve?

Dutch-born psychologist, ethologist and primatologist Frans de Waal has spent his career watching the behavior of apes and monkeys, mostly captive troupes in zoos. As a young student, he sat on a wooden stool day after day for six years, observing a colony of chimpanzees at the Arnhem Zoo. Today he watches chimpanzees from an observation post at Emory University's Yerkes National Primate Research Center in Atlanta and at other zoos and primate centers. His work, along with primatologist Jane Goodall's, has helped lift Darwin's conjectures about the evolution of morality to a new level. He has documented tens of thousands of instances of chimpanzee behavior that among ourselves we would call Machiavellian and about as many moments that we would call altruistic, even noble. In his scientific papers and popular books (including *Chimpanzee Politics, Our Inner Ape* and *Good Natured*), he argues that Darwin was correct from that first glimpse of Jenny at the zoo. Sympathy, empathy, right and wrong are feelings that we share with other animals; even the best part of human nature, the part that cares about ethics and justice, is also part of nature.

De Waal's latest book, *Primates and Philosophers*, is based on the Tanner Lectures that he delivered at Princeton University's Center for Human Values in 2004. In this book he tries--as he has many times before--to refute a popular caricature of Darwinism. Many people assume that to be good, be nice, behave, play well with others, we have to rise above our animal nature. It's a dog-eat-dog world out there--or, as the Romans put it, *homo homini lupus*, man is wolf to man (a curious proverb for a people whose founding myth was the suckling by a wolf of the infant twins Romulus and Remus).

Thomas Henry Huxley, Darwin's self-appointed bulldog, promoted this dark, cold view of life in a famous lecture, *Evolution and Ethics*. "The ethical progress of society depends, not on imitating the cosmic process, still less in running away from it, but in combating it," he declared. In Fyodor Dostoyevsky's *The Brothers Karamazov*, Ivan puts it another way: if there is no God, then we are lost in a moral chaos. "Everything is permitted." De Waal calls this "Veneer Theory." In this view, human morality is a thin crust on a churning urn of boiling funk.

In reality, de Waal reminds us, dogs are social, wolves are social, chimps and macaques are social, and we ourselves are "social to the core." Goodness, generosity and genuine kindness come just as naturally to us as meaner feelings. We didn't have to invent compassion. When our ancestors began writing down the first codes of conduct, precepts, laws and commandments, they were elaborating on feelings that evolved thousands or even millions of years before they were born. "Instead of empathy being an endpoint," de Waal writes, "it may have been the starting point."

Back in the 1950s and 1960s, when animal psychologists talked about "sympathy" and "empathy," they always put those words between quotation marks, de Waal notes. Now he wants to take away the quotation marks. He describes one of his best-known demonstrations that animals care about fairness. In the experiment, he had pairs of capuchin monkeys perform simple tasks in their cages. For successfully completing each task they would get a reward, sometimes a slice of cucumber, sometimes a grape. All the monkeys would work for and eat the cucumber slices, but they preferred grapes. If one monkey kept getting paid in cucumber and it could see that its partner in the next cage was getting grapes, it would get mad, like Darwin's Jenny. After a while the monkey would refuse to eat or throw the cucumber right out of the cage.

Is de Waal right about all this? In the second half of *Primates and Philosophers*, his arguments are critiqued by a series of commentators, all of whom have written important studies of evolutionary ethics. They cite Freud, Kant, Hume, Nietzsche and Adam Smith. They circle and circle around those pairs of capuchin monkeys:

"A capuchin rejects a cucumber when her partner is offered a grape--is she protesting the unfairness, or is she just holding out for a grape?" writes Christine M. Korsgaard, Arthur Kingsley Porter Professor of Philosophy at Harvard University.

"Of course, if the lucky capuchin were to throw down the grape until his comrade had a similar reward, that would be *very* interesting!" writes Philip Kitcher, John Dewey Professor of Philosophy at Columbia University.

They disagree, they discuss, they bicker a little, like all primates and philosophers. They illuminate not only ageless questions of ethics but also current concerns such as the Geneva convention and "why universal empathy is such a fragile proposal," as de Waal writes in his response to his critics. By the end of the book it seems clear that we can no longer look at morality as a sort of civilized veneer on a cold and selfish animal, even though that view goes back long before Darwin went to the zoo. Its origin lies in the Western concept of original sin--when Adam and Eve ate their first apple.

The Editors Recommend

All Things Reconsidered: My Birding Adventures
by Roger Tory Peterson. Edited by Bill Thompson III. Houghton Mifflin, 2006

Bird Songs: 250 North American Birds in Song
by Les Beletsky. Chronicle Books, 2006

"All Things Reconsidered" was the title of Peterson's monthly column in Bird Watcher's Digest, which he wrote from 1984 until his death in 1996. Thompson, editor of the Digest, has chosen 40-odd columns and illustrated them with Peterson's own photographs (the great naturalist was nearly as passionate about photography as he was about painting). These are the best of Peterson's chatty columns, in which he shared his birding adventures--from the hot plains of the Serengeti, where he stabilized his long lens on "a cloth bag filled with rice," to freezing water off the coast of Maine, where his boat capsized as he, then in his 80s, was filming a documentary.

One wonders what Peterson would have made of Bird Songs, an audio book that plays, with remarkable clarity, the songs of the 250 birds it profiles. The audio component, built right into the book, has a speaker and an LCD display and is extremely easy to operate. The bird songs, from the collection of the Cornell Laboratory of Ornithology, are complemented by Beletsky's relevant and compact text (he is a wildlife biologist and writer) and beautifully straightforward color illustrations by four different artists. But you buy this book for the sound. Most likely, Peterson would have loved it.