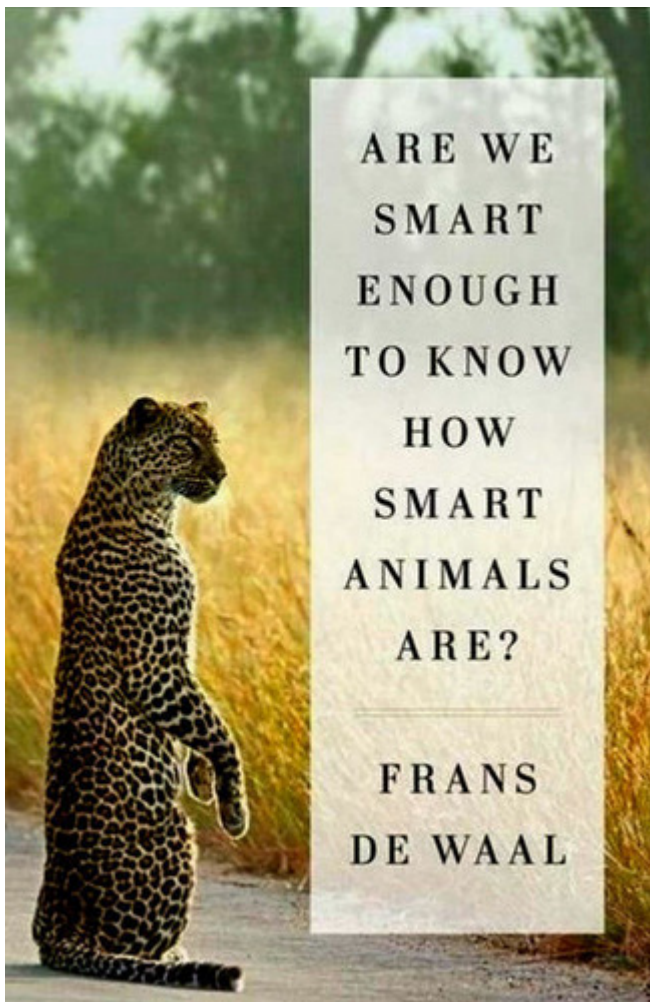


‘Smart’ a deceptively interesting book

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“Are We Smart Enough to Know How Smart Animals Are?” by Frans de Waal. New York: W.W. Norton & Company, 2016, 326 pages, \$27.95.



“In trying to find out at what mental level other species operate, the real challenge comes not just from the animals themselves but also from within us,” Frans de Waal explains near the beginning of *“Are We Smart Enough to Know How Smart Animals Are?”*, his latest effort to further define and explain the nature of intelligence in the animal world. “Human attitudes, creativity and imagination are very much part of the story. Before we ask if animals possess a certain kind of intelligence, especially one that we cherish in ourselves, we need to overcome internal resistance to even consider the possibility.”

When I was younger, I was taught the principal difference between animals and human beings was that we have these amorphous things called “souls” and they do not. It was not until much later I was able to sufficiently decipher the religious and philosophical connotations wrapped up in this seemingly matter-of-fact synopsis of what makes *Homo sapiens* qualitatively distinct from the rest of creation. I mention this only because it tends to be an underlying sentiment in much of de Waal’s work – and his latest contribution to our ever-expanding knowledge and insight into the

cognitive behavior of primates is no exception.

Who among us has not wondered whether animals are capable of consciousness as we experience it – with all of the traits and abilities we have come to associate with being aware of our own existence? As anyone who owns a pet knows, it is not unusual to see animals engaging in fairly complex and purposeful problem-solving strategies in order to catch prey or elicit attention. Both our cats, for instance, seem to know how to manipulate various objects in order to achieve some desired result. The easy explanation, and the one most often employed, is to chalk these kinds of behaviors up to “instinct.” But the reality of what is actually occurring may be much more complicated, and infinitely more intriguing, than this relatively generic and overused justification for actions that otherwise have all the hallmarks of genuine intelligence.

As de Waal notes, some scientists continue to believe the ability to “actively recall the past and imagine the future” is what sets humans apart from our counterparts in the animal kingdom. He vehemently disagrees with this assertion and offers several observations, including the following

anecdote from “Time Will Tell,” the seventh chapter: “Judging the gap between two trees, a monkey relies on its memory of past jumps to calculate the next one. Is there a landing spot on the other side? Is it within jumping distance? Can the branch handle its impact? These life-and-death decisions take a great deal of experience to make and show how past and future intertwine in a species’s behavior. The past provides the required practice, whereas the future is where the next move will take place.”

De Waal is the C.H. Candler Professor in the Department of Psychology at Emory University as well as a Distinguished Professor at the University of Utrecht, where he earned his doctorate in biology in 1977. He serves as director of the Living Links Center at the Yerkes National Primate Research Center in Atlanta. A regular contributor to *Science*, *Nature* and *Scientific American*, his previous 10 books include “The Bonobo and the Atheist,” “The Age of Empathy” and “Primates and Philosophers.” In 2007, *Time Magazine* selected him as one of the “World’s 100 Most Influential People Today” and *Discover Magazine* named him one of the 47 (all-time) “Great Minds of Science” in 2011.

As might be anticipated, the book is exceptionally well-researched with 14 pages of source notes and a 28-page bibliography at the conclusion of the prologue and nine chapters that comprise the main text. The narrative also features several illustrations by the author and a glossary that provides explanations for much of the discipline-specific terminology permeating the manuscript. For example, “displacement activity,” an important phenomenon in several key experiments, is defined as “an activity irrelevant to the current situation that appears suddenly due to a thwarted motivation or conflict between incompatible motivations, such as fight and flight.”

The inclusion of the glossary saves de Waal from having to clarify the phrase every time it is used. Full disclosure: I majored in biology as an undergraduate, and my master’s degree is in educational psychology, so I was vaguely familiar with most of the concepts de Waal articulates with relative ease. Still, I am convinced the book is accessible to a wide audience; certainly it is not beyond the capability of anyone who is sufficiently motivated to drill down to the essence of his primary thesis.

De Waal’s unwavering confidence in his research findings is obviously based on a scientific belief system deeply rooted in empirical observation and rigorous deductive reasoning. While reading this volume you definitely get the sense he is someone who knows what he is talking about and is not willing to compromise or otherwise amend his conclusions in order to attenuate his critics. At the same time, there is an aura of weariness surrounding much of his prose; occasionally, his frustration bubbles to the surface, as it did in “Revolutionary Cognition,” the ninth chapter and one of my personal favorites:

“I can’t count the number of times I have been called naive, romantic, soft, unscientific, anthropomorphic, anecdotal or just a sloppy thinker for proposing that primates follow political strategies, reconcile after fights, empathize with others or understand the social world around them. Based on a lifetime of firsthand experience, none of these claims seemed particularly audacious to me. So one can imagine what happened to scientists suggesting awareness, linguistic capacities or logical reasoning. Every claim was picked apart and held up against the light of alternative theories, which invariably sounded simpler given that they derived from the behavior of pigeons and rats in the confines of a Skinner box.”

“Are We Smart Enough to Know How Smart Animals Are?” is one of those deceptively interesting books that really makes you think. It’s a great read; I recommend it highly.

— *Reviewed by Aaron W. Hughey, Department of Counseling and Student Affairs, Western Kentucky University.*