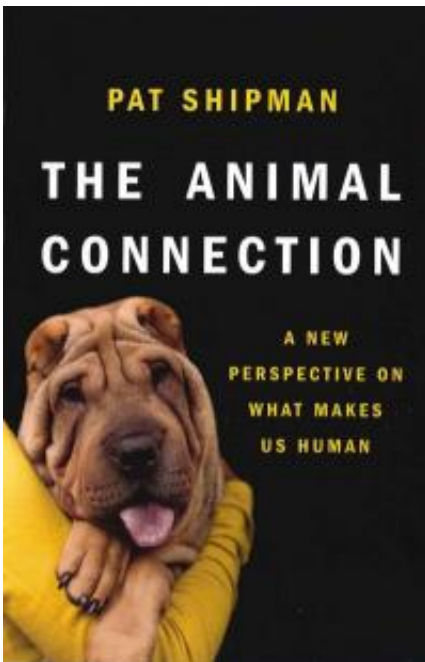


The Animal Connection -- a new perspective on what makes us human

July 5 2011



"The Animal Connection," a new book by Pat Shipman, a Penn State paleoanthropologist, presents the groundbreaking new idea that humans' connection to other animal species may be the driving force behind the last 2.6 million years of human evolution. Reviewers have hailed the book, calling it "a work of extraordinarily broad scholarship" and saying that "animal lovers and readers who are interested in human psychology will not be able to put this fascinating book down." Credit: W. W. Norton & Company

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connection to other animal species may be the driving force behind the last 2.6 million years of human evolution. Reviewers have hailed the book, calling it "a work of extraordinarily broad scholarship" and saying that "animal lovers and readers who are interested in human psychology will not be able to put this fascinating book down."

Shipman argues that the human connection with animals is unique, noting that animals have served as livestock, as transportation for people and goods, and as treasured pets throughout human history. "No other mammals rear and support the young of other species like we do. You won't see elephants rearing hippos, or raccoons raising squirrels," she said. "This connection also is deeply psychological. Whether you are a pet lover or not, as a human you share something that is deep and visceral with other animals."

Scientists who study the evolution of humans have identified three unique behaviors that distinguish early humans from other mammals: tool making, language, and the domestication of other species. These three evolutionary developments often are studied in isolation, as if each one arose independently. Now, Shipman argues, "The animal connection is a fourth, previously unrecognized human habit that links together the other uniquely human characteristics into a single evolutionary force."

Tool-making enabled our early ancestors to become effective hunters for the protein-rich foods that were crucial for the evolution of our larger brains. Shipman explains that tools let our ancestors directly compete with other predators, even though humans lack the sharp claws, strong teeth, and speed of most other carnivores. She has found evidence of this competition on some fossilized [animal bones](#), where teeth marks made by carnivorous animals overlap cut marks made with stone tools by early humans.

The evolution of language, Shipman argues, was a matter of life and

death once our early ancestors adopted a predatory lifestyle. "Language arose as a way to store and transmit to other humans vital knowledge about the habits of other animals -- both fellow predators and prey -- especially as humans spread farther and farther afield in search of food." Evidence of the overwhelming importance of the animal connection to prehistoric humans is evident in ancient cave art from Europe to Africa, Asia, and Australia, where the figures depicted are nearly always animals, including majestic bulls and mysterious felines.

Animal [domestication](#) usually is assumed to be a consequence of agriculture, which developed 10,000 to 12,000 years ago. But Shipman recounts compelling evidence from a recent radiocarbon-dating study of a fossil canine skull that humans were keeping domesticated dogs 32,000 years ago -- more than 20,000 years before the agricultural era. Humans themselves also became domesticated and were changed by the animals they lived with, Shipman notes, giving those humans with a better knowledge of animal behavior a selective advantage over other farmers.

In "The Animal Connection," Shipman's intimate knowledge of animals shines through her engaging and insightful scholarship. She brings the reader with her into the field, piecing together forensic remains with the excitement of a detective. She investigates clues about how [early humans](#) lived, including such details as how they made [stone tools](#). "Making a cutting tool out of a piece of flint is not easy," Shipman said, telling the story of how she learned to do it herself.

Shipman, who is both a scientist and an award-winning writer, is uniquely qualified to tell the story of how the human connection with animals originated and then came to shape our evolution. An adjunct professor of anthropology at Penn State University, she is the author of ten books, including *Wisdom of the Bones*, which won the Rhone-Poulenc Prize for Science Books in 1997, and *The Ape in the Tree*, A Natural and Intellectual History of Proconsul, which won the W.W.

Howells Book Award in 2009. Her scientific studies have produced major breakthroughs in the understanding of human origins, behavior, and ecology. She also is the author of a recent scholarly article in the scientific journal *Current Anthropology*, which explains the academic basis for the scientific studies of fossil remains that she describes in her new book.

Shipman elegantly synthesizes decades of paleontology, anthropology, and evolutionary theory through the new lens of the animal connection, creating a compelling view of human development. "Animals were not incidental to our evolution into *Homo sapiens*; they were essential to it -- they are what made us [human](#)."

More information: *The Animal Connection: A New Perspective on What Makes Us Human* by Pat Shipman; Publisher: W. W. Norton & Company; ISBN: 978-0-393-07054-5; Price: \$26.95 hardcover; 304 pages

Provided by Pennsylvania State University

Citation: *The Animal Connection -- a new perspective on what makes us human* (2011, July 5) retrieved 19 April 2024 from <https://phys.org/news/2011-07-animal-perspective-human.html>

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