



Topic  
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# Roots of Human Behavior

Course Guidebook

Professor Barbara J. King  
The College of William and Mary



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Barbara J. King, a biological anthropologist, has taught at the College of William and Mary since 1988. Currently University Professor for Teaching Excellence, she has won three previous teaching awards, including William and Mary's Thomas Jefferson Teaching Award and the Virginia State Council of Higher Education's Outstanding Faculty Award. Her classes, focused on undergraduates, aim to guide students in critical thinking about primate behavior and human evolution.

Professor King received her B.A. in Anthropology from Douglass College in New Jersey and earned both her M.A. and Ph.D. in Anthropology from the University of Oklahoma. Now carrying out research on gorillas at the Smithsonian's National Zoological Park in Washington, DC, she has previously studied the behavior of monkeys and apes in Gabon, West Africa; Kenya, East Africa; and the Language Research Center, Georgia State University. Her research interests include the cognition and communication of monkeys and apes, with a particular focus on how infants negotiate the complex social worlds into which they are born.

Two books by Professor King reflect her desire to link her own research to broader questions in anthropology. In 1994, she published *The Information Continuum: Social Information Transfer in Monkeys, Apes, and Hominids* and, in 1999, both contributed to and edited *The Origins of Language: What Nonhuman Primates Can Tell Us*. In 2000, Professor King helped organize a major international symposium in Mexico on the anthropological use of the concept of *culture*. With Richard Fox, she is editing a volume of papers from that conference, to be called *Anthropology Beyond Culture*. This book will be published by Berg in 2002.

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Chimpanzee grooming footage provided courtesy of Janette Wallis.

Footage of orangutans in the wild provided by Anne Russon.

# Roots of Human Behavior

## Scope:

In *Roots of Human Behavior*, we will explore the evolutionary links that humans share with our close relatives, chiefly the monkeys and apes. The significance of those links for understanding human behavior today will be thoroughly explored. This perspective has its disciplinary home in biological anthropology, one of the subfields of anthropology.

Because anthropology provides the framework for the course, we begin by defining its subject matter and the variety of approaches that anthropologists use when studying human behavior. One main tool of the biological anthropologist is the biocultural approach. Using this perspective, humans are analyzed both as products of their evolutionary past and as architects of their own current cultural contexts. Further, humans are seen as one type of anthropoid, a grouping of organisms that includes monkeys, apes, humans, and human ancestors. In this comparative approach, the behavior of anthropoids is broadly assessed to identify possible “roots of human behavior.”

The initial lectures focus on understanding the nature of our relationship with other anthropoids. To achieve this understanding, we must be able to distinguish, anatomically and behaviorally, not only between humans and other anthropoids, but also among major groupings of anthropoids. Monkeys and apes, in particular, differ crucially from each other, as we will see. Our four closest living relatives are all apes: orangutans, gorillas, chimpanzees, and bonobos. These four anthropoids will receive particular emphasis in this course. We will also address the key fact that humans have not evolved from these organisms directly, but rather from a common ancestor shared by them and humans.

We start our in-depth look at monkeys and apes by establishing that these are, without exception, highly social animals. Most species live in year-round social groups; all are characterized by long-term social bonds that develop between close associates (most often between relatives, such as mothers and their infants). Most biological anthropologists think that these bonds indicate underlying emotional attachments. The actual structure of these social groupings varies across species. We carefully distinguish the different social structures of the four great apes, for instance, but we concentrate on basic social patterns that most, or many, anthropoids share.

The middle section of the course is devoted to a search for the roots of various human behaviors: aggression and dominance in males versus females, sexual behavior and reproduction, social learning, tool using and tool making, cultural behavior, and social communication and language. Case studies are undertaken, relying heavily on the great apes and a few selected monkey species, to vividly illustrate the most compelling evidence.

Chimpanzees, for example, the most well studied great apes of Africa, provide us with case study information that is highly relevant to understanding tool using, tool making, social learning, and the presence of culture in other species. The termite-fishing chimpanzees studied by Jane Goodall in East Africa, and the nut-cracking chimpanzees more recently discovered in West Africa, tell us that the basis for our complex human technology lies in the capacities of our closest evolutionary cousins.

Bonobos, another African great ape, do not use such complex tools in the wild. They are, however, highly useful for showing that males are not inevitably aggressive and dominant (as they are, in fact, in chimpanzees). Female bonobos sometimes bond together and achieve equality with, and indeed dominance over, males. Comparing chimpanzee and bonobo behavior illustrates a key concept of the course: Few generalizations about the most complex behaviors can be made even across closely related anthropoids.

This basic approach to the evidence is multiplied across different case studies and different behaviors. Then, the penultimate lecture reviews the highlights of human evolution itself. This review is necessary to fill in the “gap” between living monkeys and apes, on the one hand, and ourselves, on the other. We fill the gap with the fascinating extinct hominids; hominid fossils allow us to reconstruct the anatomy and some of the behavior of our actual ancestors. The earliest hominids set themselves apart from earlier anthropoids by virtue of their bipedalism. Gradually, hominids became more sophisticated. They invented new stone tool technology; migrated out of Africa; and eventually, developed art and complex language.

What emerges from this course is a twofold notion. Many complex behaviors are unique neither to humans nor to their human ancestors. Yet, what we have inherited from our anthropoid forebears are not so much specific skills or behaviors, but the ability to respond flexibly and adaptively according to the physical and social circumstances that confront us. We are not just bipedal, hairless chimpanzees or bonobos; we have

taken some of the abilities passed along to us throughout anthropoid evolution and adapted them to our own unique environment. We conclude the course by stressing this point and by considering the implications of the biocultural perspective for understanding our place in today's world and our relationship with our fellow anthropoids.