



Evolution & Human Behavior

Many people fear that accepting evolution in any form means also accepting that humans are products of evolution, and that this places us and our behavior under the evolutionary lens. We may not want to acknowledge that not only our bodies, but also our minds and behavior, reflect an evolutionary heritage. This way of looking at ourselves may initially be disturbing to many people unfamiliar with modern science. It is hard to shake the feeling that we are not only the most advanced and special creatures on earth, but that we owe nothing to our ancient ancestors.

Charles Darwin was one of the world's first psychologists who influenced, in varying ways, most of the pioneering psychologists of the 20th century. He wrote two books on psychological themes, *The Expression of the Emotions in Man and Animals* (1872) and *The Descent of Man and Selection in Relation to Sex* (1871). In his writings, he discussed evidence that mental abilities and emotions that we think of as distinctly human are found in other species, such as love, loyalty, language, intelligence, and even aesthetics. He then noted that human behavior has its evolutionary roots in the behavior of other species. For example, he saw the similarity in our facial expressions and postures to those of nonhuman primates, especially the great apes. He even traced out the similar facial muscles involved. But he went much further and saw that our social relationships contain similarities to those of other species when we fight, court, play, and raise our young. This side of Darwin's work was often ignored

by biologists and psychologists, who wanted to stress only "biological" or "bodily" evolution and leave behavior, especially human behavior, out of evolutionary study. Such 'mind-body dualism' is unacceptable in these days of modern neuroscience and genetics.

Today we know much more than Darwin about how to study behavior, inheritance (genetics), and how nature and nurture interact to affect behavior of all living things. Methods developed to study sociality, foraging, mate selection, communication, competition, cooperation, decision making, behavior genetics, brain and behavior, culture, and numerous topics in other organisms are now being applied to understanding our own species. Evolutionary studies are helping us understand mental illness, child abuse, jealousy, drug addictions, eating disorders, the arts and literature, economics, politics, legal systems, gender differences, and violence. Although the popular media often sensationalize findings in simplistic ways, the research behind them is often solid. It is understandable that when our own behavioral evolution is involved, controversy is rife. Consider how the 'quiet' field of ecology has become central in debates on our responsibility for environmental degradation (and human evolutionary reasons even underlie this destructive behavior!). In short, scientific findings about the origins and consequences of our behavior can lead to rethinking political, cultural, religious, and other deeply held views. The application of evolutionary ideas to understanding our behavior is still in its infancy. Nevertheless, we now know enough to realize that, unless we accept our role in the evolutionary history of our planet, we will continue to deny insights critical to understanding and solving many important problems in our country and throughout the world.

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