The Folly of Fools: The Logic of Deceit and Self-Deception in Human Life

Author: Kurzban, Robert

Source: BioScience, 62(5) : 516-517

Published By: American Institute of Biological Sciences

URL: https://doi.org/10.1525/bio.2012.62.5.14

On the Advantages of Being Wrong

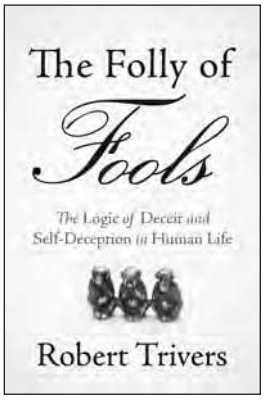
The Folly of Fools: The Logic of Deceit and Self-Deception in Human Life. Robert Trivers. Basic Books, 2011. 416 pp. $28.00 (ISBN 9780465027552 cloth).

"The key to defining self-deception," according to author Robert Trivers in *The Folly of Fools: The Logic of Deceit and Self-Deception in Human Life*, "is that true information is preferentially excluded from consciousness and, if held at all, is held in varying degree[s] of unconsciousness" (p. 9). His thesis is that *self-deception*, so defined, has an evolved function: fooling others.

The argument is, roughly, that if I (consciously) believe *p*, then I can fool you into believing *p* better than I could if I (consciously) believed *not-p*, because conscious attempts at deception can be detected. Take, for instance, the classic case of two organisms fighting over a resource. To the extent that you will back away depending on your belief about my formidability, I am better off believing that I am more formidable than I actually am; this false belief influences your belief and subsequent decisionmaking. In short, self-deception gets its force through belief copying: My (false) belief gives rise to your (false) belief.

The Folly of Fools expands on ideas laid out elsewhere (Trivers 2000, von Hippel and Trivers 2011) and, after the development of the theoretical framework in the opening chapters, provides a wide array of putative examples of self-deception and its consequences—among plants, nonhuman animals, and humans and, charmingly, including some candid glimpses of Trivers's own experiences with the phenomenon. Chapters on air disasters, sex, immunology, religion, the family, and warfare all describe entertaining cases and are spiced with unabashed editorializing. Some of the choicest remarks are reserved for the various branches of the social sciences, in which self-deception rears its head to such an extent that Trivers answers the question "Is economics a science?" with a confident "No."

The book is important, not least for bringing to the fore a set of interesting and pervasive psychological phenomena and grounding explanations for them in evolutionary biology. This approach stands in sharp contrast to the usual (evolution-free) explanations, which tend to have less to do with possible evolved functions and more to do with proximate motives, with self-esteem or mental health generally given pride of place (Taylor 1989). While covering a broad range of literatures, from physiology to politics, Trivers retains the reader's attention with his inimitable style and disarming autobiographical candor.



In part because the core ideas in the book were laid out previously, it is possible to predict the sorts of objections that will be leveled. For one, in trawling for examples of self-deception, Trivers might have cast the net too widely. For instance, in enumerating nine categories of the phenomenon, he refers to a study showing that young children prefer to play with members of their own group. In such cases, it is unclear what "truth" is being excluded from consciousness and, if there is some hidden truth, who is being fooled. In-group favoritism might be a "bias" in some sense, but it doesn't seem to entail having any sort of false belief.

This distinction connects to a larger issue, which is that there are different ways to be wrong, and self-deception is only one such way. As Steven Pinker (2011) put it, "it is essential to distinguish errors and biases, on the one hand, from self-deception, on the other. Just because a computational system is tuned or designed with inaccurate representations, that does not mean that it is deceiving itself" (p. 36). Trivers describes the 1982 crash of Air Florida Flight 90, in which the pilot of the aircraft underestimated the danger posed by ice on the wings. The example is persuasive in demonstrating errors—specifically, an excess of optimism—but it is not obvious that this is a case of self-deception.

Recall that Trivers claims that "fooling" is the function of self-deception. If that is the putative function of self-deception, cases in which no one else could be fooled should be excluded from the phenomenon. To once again quote Pinker (2011), "the adaptive explanation of self-deception, when there is no external audience in the loop, does not work" (p. 36). In the airplane example, and in all other examples in which false beliefs are consulted in the service of what is essentially a problem in individual decisionmaking, the putative function of belief copying does not appear to be operative.

Having said that, Trivers does not seem wedded—or perhaps it is better to say *constrained*—by his claim that the function of self-deception lies in persuasion. In his discussion of courtship, he implies that a man who incorrectly believes a woman is interested in him will pursue, and therefore "catch," as he puts it, more women than he would if he correctly diagnosed her lack of interest. The false belief here has its putative positive effect not from belief copying, but rather through motivation and, in this case, persistence.

This raises another problem, however. Everything else being equal,

doi:10.1525/bio.2012.62.5.14

having false beliefs carries costs. Being overly motivated to pursue the uninterested person in front of you entails that if a better option comes along, one is insufficiently motivated to leave the current interaction, which may lead to a nonoptimal outcome. Generally, having false beliefs can influence any number of decisions that turn on that belief, and a better design would be to have true beliefs—or, at least, the best estimate of what is true—and to design the motivational system to maximize the expected value. This would allow the retention of the true belief while still allowing the pursuit of low-probability but high-payoff options.

The costs of false beliefs would seem to be important, yet they are given scarce attention in terms of the theoretical development. The book is filled, in contrast, with accounts of the costs of false beliefs to their owners, as in the case of the hapless crew of Flight 90, and those around the owners of these false beliefs. In this sense, *The Folly of Fools* is an odd juxtaposition of an argument about the advantages, in biological terms, of self-deception coupled with an array of all the many disadvantages of self-deception as it appears in the real world.

Although this combination might appear to represent a logical contradiction, there are many reasons that minds well designed for human ancestral environments might produce unpleasant and unhealthful outcomes, given the many ways in which modern environments differ from those of the past (Burnham and Phelan 2000). It seems plausible that our minds are eager to adopt false beliefs because of the powers of persuasion, but that this process misfires to horrible effect in the present. Additional work to shed light on these issues will be needed, and an important aspect of the book is that it points to new paths for future researchers to follow.

Finally, just as critics in psychology and cognitive science will object to some of the ideas that Trivers presents, others—perhaps many—will object to his politics, including such claims as "after World War II, the Zionists appear to have adopted a secret plan for the ethnic cleansing of Palestine, by force of arms, terror, encirclement, starvation, and murder" (p. 238). It would be a shame if these sorts of political remarks were sufficient to deter interested readers from exploring the scientific ideas in this book. *The Folly of Fools* is an important example of how thinking about evolved function can yield new insights into important aspects of human social behavior. At least, I hope that readers will think so; it is possible that, given my own interests, I might be deceiving myself (Kurzban 2010).

References cited

Burnham T, Phelan J. 2000. Mean Genes: From Sex to Money to Food—Taming Our Primal Instincts. Perseus.

Kurzban R. 2010. Why Everyone (Else) Is a Hypocrite: Evolution and the Modular Mind. Princeton University Press.

Pinker S. 2011. Representations and decision rules in the theory of self-deception. Behavioral and Brain Sciences 34: 35–37.

Taylor SE. 1989. Positive Illusions: Creative Self-Deception and the Healthy Mind. Basic Books.

Trivers R. 2000. The elements of a scientific theory of self-deception. Annals of the New York Academy of Sciences 907: 114–131.

Von Hippel W, Trivers R. 2011. The evolution and psychology of self-deception. Behavioral and Brain Sciences 34: 1–16.

ROBERT KURZBAN

Robert Kurzban (kurzban@psych.upenn.edu) is an associate professor in the Department of Psychology at the University of Pennsylvania, in Philadelphia. His recent book is called Why Everyone (Else) Is a Hypocrite: Evolution and the Modular Mind *(2010).*

EVOLUTIONARY HISTORY AND THE CONQUEST OF LAND

How Vertebrates Left the Water. Michel Laurin. University of California Press, 2010. 216 pp., illus. $34.95 (ISBN 9780520266476 cloth).

Extinct species constitute more than 99 percent of the living forms that have inhabited this planet, according to various estimates. Paleontology therefore plays a central role in documenting the history of life on Earth. *How Vertebrates Left the Water* is a very readable summary of what we know about the past conquest of dry land by vertebrates, told through the eyes and mind of paleontologist Michel Laurin. The title of the book spotlights a fascinating focus, but in many ways, the book itself "is an attempt to show how much paleontological, paleobiological, and evolutionary research relies on data compiled from fossils that were previously described" (p. 167). Much of the text is about modern paleontology and methodological issues; the discussion of these is prominent and transcends the evolutionary subject used to lure the reader.

Laurin is a vertebrate paleontologist interested in the origin and phylogeny of tetrapods, paleobiology, and phylogenetic nomenclature. He has worked on the anatomy and relationships of Paleozoic tetrapods, and has studied the origins of various higher extant taxa, such as lissamphibians, turtles, and archosaurs. As an undergraduate at the Université de Montréal, he focused on comparative anatomy and systematics and later received his PhD in the Department of Zoology at the University of Toronto, where he researched the osteology of seymouriamorphs and its implications for the origin of amniotes and where he was mentored and inspired by Robert Reisz. Since 1998, Laurin has worked as a research scientist for the National Center for Scientific Research in Paris, where he investigates the paleohistology of bone, phylogenetic nomenclature, and comparative evolutionary biology.

The conquest of land by forms that evolved from aquatic ancestors represents a fascinating drama in Earth's history of life. The gradual transition during the last few hundreds of millions of years was initiated by simple forms, to be followed later by more complex organisms, including the vertebrates. The book summarizes what we know about this history and includes a frank discussion of both the

doi:10.1525/bio.2012.62.5.15