

An article entitled "The Evolution of Misbeliefs" by [Ryan McKay](#) and [Daniel Dennett](#) In [Behavioral and Brain Sciences](#) (2009) 32, 493-561, freely available [here](#), with commentaries by (among many others) George Ainslie, Roberto Casati, Pascal Boyer, Max Coltheart, Owen Flanagan, Keith Frankish, Gary Marcus, Ruth Millikan, Ara Norenzayan, Dan Sperber, David Sloan Wilson, and a reply by the authors.

Abstract: From an evolutionary standpoint, a default presumption is that true beliefs are adaptive and misbeliefs maladaptive. But if humans are biologically engineered to appraise the world accurately and to form true beliefs, how are we to explain the routine exceptions to this rule? How can we account for mistaken beliefs, bizarre delusions, and instances of self-deception? We explore this question in some detail. We begin by articulating a distinction between two general types of misbelief: those resulting from a breakdown in the normal functioning of the belief formation system (e.g., delusions) and those arising in the normal course of that system's operations (e.g., beliefs based on incomplete or inaccurate information). The former are instances of biological dysfunction or pathology, reflecting "culpable" limitations of evolutionary design. Although the latter category includes undesirable (but tolerable) by-products of "forgivably" limited design, our quarry is a contentious subclass of this category: misbeliefs best conceived as design features. Such misbeliefs, unlike occasional lucky falsehoods, would have been systematically adaptive in the evolutionary past. Such misbeliefs, furthermore, would not be reducible to judicious - but doxastically noncommittal - action policies. Finally, such misbeliefs would have been adaptive in themselves, constituting more than mere by-products of adaptively biased misbeliefproducing systems. We explore a range of potential candidates for evolved misbelief, and conclude that, of those surveyed, only positive illusions meet our criteria.