

Logic as the Outcome of an Evolutionary Process

David Miller
University of Warwick
COVENTRY CV4 7AL

dwmiller57@yahoo.com

William Cooper's book, *The Evolution of Reason* (Cambridge University Press 2001) advances the bold thesis that not just our powers of reasoning, but the logical standards by which we reason, and many of our conclusions, can be explained as the result of evolutionary pressures. Any other canons of rationality, he suggests, would be (in the long run) disadvantageous. The story that Cooper tells begins with 'life-history strategies', continues to what he calls Bayesian decision theory, and then encompasses probability theory (here called 'inductive logic'), classical deductive logic, classical mathematics, and even some non-classical systems of deduction into the bargain.

As a critical rationalist who does not believe that there is such a discipline as inductive logic and, moreover, regards the directive to maximize expected utility as uncharacteristic of, even in conflict with, genuine human rationality, I am (to say the least) unenthusiastic about many of Cooper's startling conclusions. The aim of this lecture is to identify some of the differences between us, and to determine whether either of us is right.