

**PsycCRITIQUES - A Place to Stand**  
**A Place to Stand**  
**A review of**

The Handbook of Evolutionary Psychology  
by David M. Buss, Ed.

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In 340 AD Archimedes described the law of the lever and the crux of the problem when he said, “Give me a place to stand and I will move the earth” (Heath, 1953, p. xix). With a place to stand, anything is possible. The problem for a science of psychology has long been the doing of science without a place to stand. Darwin recognized this early on when he jotted this observation in one of his Notebooks:

To study metaphysics [psychology] as they have been studied appears to me like struggling at astronomy without mechanics.—Experience shows the problem of the mind cannot be solved by attacking the citadel itself.—the mind is function of the body.—we must find some stable foundation to argue from. (Hagen, 2005, p. 170)

In the foreword to *The Handbook of Evolutionary Psychology*, Steven Pinker recalls being deeply disappointed as a beginning psychology student upon discovering that the subject matter was little more than a mixed bag of illusions and laboratory curiosities. In our zest to become “real” scientists we focused all of our attention on operationalism. The unfortunate thing is that once you achieve an expertise as a methodologist, it is all too easy to become functionally fixated at this level of doing science. The end result is that you are, in effect, using the organism to learn about the behavior of the apparatus rather than the other way around (Knight, 1994); this circumstance caused Gibson (1985) to lament, “The conclusions that can be reached from a century of research on perception are insignificant” (p. 229). If psychology is fragmented and incoherent, it is because we have not been asking good (well-formed) questions deduced from a foundational theory—that is to say, we have not had a place to stand.

**Where We Stand: A Natural Science Paradigm**

Because of the importance of theory in science, where we stand is with Darwin, in nature. Our theories are theories of nature, informed by nature, and validated against nature. Evolutionary psychology is a paradigm of emergent complexity and the unity of the natural sciences; it is theory that distinguishes it from more traditional empiricist orthodoxy. Theory in evolutionary psychology functions at three levels: (a) understanding ancestral problems of survival through reverse engineering (what Charles Pierce calls abduction) and reasoning about the demand characteristics of particular physical and social ecologies; (b) deducing a computational

algorithmic description of how psychological mechanisms as adaptations reflect these demand characteristics, making it possible to formulate meaningful questions in the form of if-then logical consequences; which are then (c) translated into postulates or hypotheses amenable to experimentation (induction).

Every chapter in *The Handbook of Evolutionary Psychology* evidences the worth of these functions of theory for a science of the mind, not only summarizing the hundreds of discoveries that have been made as a result of evolutionary thinking, and would in all probability not have been made otherwise (see, e.g., the chapter “Adaptations to Ovulation”), but functioning heuristically, providing a road map for the future.

What Buss gives us is a strong sample of Darwin's conceptual progeny, competing in a field of epistemological conspecifics. Each section, a family of chapter essays by itself, is prefaced with a short, lucid introduction to the topic at hand via thematically connected redactions of each article's salient points. The book begins with a family of essays on the foundations of evolutionary psychology and ends with a potentially unruly set of essays exploring extensions of the field into both literature and law. Owen Jones's chapter on evolutionary psychology and the law will undoubtedly become a classic, a starting point for scientists and practitioners alike.

Between the terra firma of disciplinary foundations and the heavenly orbs of aesthetics and ethics, Buss situates five sections reflecting what could be called the discipline-defining areas of inquiry in evolutionary psychology. Darwin's conceptual progeny in these chapters include “survival,” “mating,” “parenting and kinship,” and “group living.” Introductions to each section contain thoughtful and generally nuanced treatments of the particular area, with the second to last, tellingly titled *Evolutionizing Traditional Disciplines of Psychology*, presenting a strong argument for propagation of the Darwin meme into social psychology, developmental psychology, personality, psychopathology, and therapy. One thing is clear across these families of essays: The clan of evolutionary psychology is both ambitious and territorial, not only staking claim to vast territories of psychological knowledge but also determined to change the epistemological landscape.

Particularly notable “offspring” of Darwin in *The Handbook of Evolutionary Psychology* include Cosmides and Tooby's impressive “Conceptual Foundations of Evolutionary Psychology.” Part manifesto, part elegant argument, the essay provides a consistent outline of the field, pulling together history of psychological science, proposed methodologies, and seminal findings to support a claim for what, analogically at least, is a unified field theory of the human. The authors describe a long-forestalled scientific attempt to assemble out of the disjointed, fragmented, and mutually contradictory human disciplines a single, logically integrated research framework for the psychological, social, and behavioral sciences—a framework that not only incorporates the evolutionary sciences on a full and equal basis, but that systematically works out all of the revisions in existing belief and research practice that such a synthesis requires. (p. 5)

In many ways, this rich sentence describes the Darwin family reunion that is *The Handbook of Evolutionary Psychology*. Diverse yet conceptually consistent, the book is a recognizable family if not a phylum of works that at the minimum is a step toward what Steven Pinker writes

in the foreword: “a realization of the hope that psychology can be a systematic and explanatory science of the human condition” (p. xvi).

Almost without exception, this handbook's chapters are exceptional discursive children of Darwin. Schmitt's “Fundamentals of Human Mating Strategies,” for example, is typical of the essays: a “child” of Darwin exhibiting an unmistakable disciplinary maturity, as it brings together a large body of extant research on mating strategies to provide a state-of-the-field exposition. That chapter, as with most in *The Handbook of Evolutionary Psychology*, is thickly referenced, with the multipaged bibliographies alone evidence of evolutionary psychology's transition into disciplinary adulthood.

### **Darwin's Lever**

On opening the book you will immediately see the dedication. It is to Charles Darwin, an altogether fitting homage to the founding father of scientific psychology. Egocentric humans believed themselves the center of the universe until Copernicus's revolution and, 200 years later, Galileo's famous mutter, “*eppur si muove*” (Jones, 1999, p. xvii). Today, few believe in a geocentric universe, but many remain haunted by the equally enigmatic romantic fallacy, the egocentric illusion of humans as the center of special creation. Darwin did not use the word evolution in the *Origin of Species*, because in the spirit of the times it meant progressive, purposeful change, precisely the idea his variational model of undirected change was seeking to overthrow. Darwin's dangerous idea revolutionized thinking about humans, granting us admission to the natural world and describing an algorithm for understanding change, whether of genes or behavior, and in doing so carved out a place for scientific psychology to stand, a psychology “based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation” (Darwin, 1859, p. 449).

Darwin's idea is one of the most profound ever conceived, the inextricable complementarity between variation, randomness without purpose, and selection, preservation through a deterministic compatibility with ecological constraints—chance and necessity, as it was so aptly described by Jacques Monod (1972). Variation and selection form the main bifurcation of psychology's family tree, through the lineage of Galton and Fisher on the one side and James and Thorndike on the other. *The Handbook of Evolutionary Psychology* is a compilation of essays describing ideational descent with modification from these humble beginnings. In this sense it is not merely another edited volume with no attempt to integrate the field, but rather an all-inclusive opus in 34 movements. It is not the first handbook and it will not be the last, but its publication is truly a landmark event.

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