## **Evolving Science of the Mind**

Grant T. Trouton
State University of New York at New Paltz

A review of David M. Buss, *Evolutionary Psychology: The New Science of the Mind* (4<sup>th</sup> edition). Pearson: Upper Saddle River, NJ, 2011, 480 pp., US\$142.60, ISBN 978-0205015627.

With his fourth installment of Evolutionary Psychology: The New Science of the Mind, David Buss delivers a powerfully comprehensive and current account of the breakthroughs and discoveries of researchers in this rapidly evolving field. In the book's preface (p. xiii - xiv), Buss clearly delineates his purpose and goals for the textbook, as 1) to "showcase the foundations of this new science [evolutionary psychology] and the fascinating discoveries of its practitioners," 2) "to provide a major update of new discoveries," and 3) "to fill important omissions" in the previous (3<sup>rd</sup>) edition. As such, the textbook is geared primarily towards undergraduate students while maintaining its "appeal to a wider audience of laypersons, graduate students, and professionals who seek an up-to-date overview of evolutionary psychology" (p. xiii). As a current graduate student having read both the 3<sup>rd</sup> and 4<sup>th</sup> editions of this textbook, I am well-positioned to say that Buss has clearly met these goals. In addition to the comprehensive list of updated discoveries and evolutionary hypotheses, the textbook's greatest strengths include its topical format, the presentation of multiple, oftentimes competing hypotheses for specific phenomena, and the identification of areas in the behavioral sciences that are in need of future research.

The book's structure is predominantly topical, addressing specific aspects of human behavior of interest to evolutionary psychologists. For example, chapter 3 addresses human survival problems, with subsections on food acquisition and selection (p. 74-87), shelter preferences (p. 88-90), combating environmental threats (p. 90-98), and death (p. 98-102). These subsections are divided further, addressing specific hypotheses and research questions pertinent to each subtopic. Additionally, a summary and list of suggested readings is included at the end of each chapter. This topical structure, which addresses the foundations of evolutionary psychology (part 1, p. 1-69), problems of survival (part 2, p. 72-103), reproduction (part 3, p. 105-201), parenting and kinship (part 4, p. 203-265), group living (part 5, p. 267-388), and integrating psychology around an evolutionary paradigm (part 6, p. 389-429), is one that Buss maintains across the  $3^{rd}$  and  $4^{th}$  editions. For me, this formatting serves two primary purposes. The first

AUTHOR NOTE: Please direct correspondence to: Grant T. Trouton, JFT 316, SUNY New Paltz, 600 Hawk Drive, New Paltz, NY 12561-2440. Email: <a href="mailto:gtrouton88@gmail.com">gtrouton88@gmail.com</a>

(perhaps most obvious) benefit is that it permits easy reference when wanting to look up information on specific subjects or hypotheses. However, a second, more subtle benefit is that it provides a foundation with which to explain evolutionary psychology to individuals wanting a quick overview of the field.

While finishing my undergraduate career, an adviser (in good faith) warned me that informing others that I study evolutionary psychology would elicit one of two responses: (1) hostility and/or skepticism in some form, often due to potential misunderstandings about implications for human behavior, or (2) the classic "deerin-the-headlights" stare, mixed with elements of confusion indicating lack of familiarity with the field, regardless of the field's existence. Despite the response, he concluded, the behavioral output of the target individual would likely consist of a nervous glance towards the nearest escape-permitting door, replete with body language indicating that I would have 60 seconds to persuade them otherwise. While the sarcastic humor in his tone suggested he was only half-joking, his message was nevertheless clear: Evolutionary psychology is a subject that many people are not familiar with, and the onus would be on me to present an accurate, convincing, and coherent description of the field in such situations.

Ever since that conversation, I took it upon myself to be prepared at all times to give a simple basic "run-down" of what evolutionary psychology is, and the phenomena it seeks to explain. The textbook's topical format allowed me to memorize all of the section and chapter titles of Buss' text, and string them together in my head to form a coherent, fear-subduing explanation of what evolutionary psychologists study. For example, I could say that "Evolutionary psychologists study how ancestral problems of survival (e.g., food and housing preferences, avoiding predators) and reproduction (how men and women approach sex differently) shape how we continue to think and act today." This brief, simple explanation moves chronologically through the textbook, from section 2 to section 3. If a hasty bolt towards the exit seems to have been averted, I might continue to mention things like parenting and sibling rivalry (section 4), or cooperation and warfare (section 5). Indeed, I have used Buss' textbook as an outline to explain the field on multiple occasions, and responses are almost always positive. As a result, I personally consider this format to be one of the text's greatest strengths, as it is easy to follow, understand, and convey to others.

A second strength of this text is its thoroughness. When addressing specific issues, Buss includes a variety of hypotheses that have varying degrees of empirical support. For example, Buss reviews three evolutionary theories that could account for aspects of male homosexuality in his chapter on men's long-term mating strategies (p. 160 – 161), two of which are newly added since the 3<sup>rd</sup> edition. Chapter 9's "Problems of Group Living" contains three highly detailed hypotheses that help explain human cooperation and altruism (p. 274 – 282), chapter 5 contains a table presenting a whopping *fourteen* hypotheses on the benefits of women's short-term mating strategies (p. 189), and chapter 11 contains a review of four competing hypotheses of sexual and emotional fidelity between men and women (p. 344). These examples are merely a small sampling of, and testament to the research behind the writing of this textbook.

For me, the main benefit reaped from the many hypotheses included in this book is not about having as much background as possible (although, that is

certainly an important place to start), but to test and expound upon these hypotheses in personal research projects. Simply put, this book contains extraordinary heuristic value for researchers. Creative and inquisitive researchers might want to pit discussed hypotheses against each other, combine aspects of multiple hypotheses, or expound upon existing hypotheses. As a graduate student with this goal in mind, I combed through the 4<sup>th</sup> edition paying specific attention to the hypotheses proposed throughout the text. For instance, after four weeks and a devoured notepad full of potential research ideas pulled from the textbook, I combined elements from chapter 5's "Men's Long-Term Mating Strategies" and chapter 7's "Problems of Parenting" to formulate a thesis topic. Without Buss' generous inclusion of (oftentimes competing) hypotheses, such an endeavor would likely have proved less fruitful.

Finally, Buss periodically acknowledges areas of study that are in particular need of research and/or topics that should prove fruitful for researchers in the future. Students interested in conducting their own research projects can use this information to help guide them in selecting topics to investigate. In conjunction with Buss' inclusion of varying hypotheses, these two aspects of the text can provide a powerful impetus directing prospective researchers. However, there are no separate sections that are titled "future research" or "promising research" in each chapter. Instead, these observations are weaved into the text. While some may consider this to be inconvenient, it actually forces readers to pull information from different sections and formulate his or her own ideas. For undergraduate and graduate students, this kind of critical thinking is key to expanding the field and proposing new hypotheses. In this manner, the text provides extensive and updated information while simultaneously fostering creative thought necessary for future research projects.

In conclusion, the 4<sup>th</sup> edition of *Evolutionary Psychology: The New Science* of the *Mind*, is an indispensable source of both information and inspiration for all current and aspiring evolutionary psychologists. Its simple topical format, along with new updates and concise language that cover a vast array of topics, is ideal for laypersons and undergraduates alike. The comprehensive inclusion of hypotheses and areas in need of future research make it ideal for graduate students and researchers looking build upon evolutionary psychology's past successes. Consequently, I would strongly recommend purchase of this textbook, even for those that may already own the 3<sup>rd</sup> edition. As David Buss notes himself, "The quest for understanding the human mind is a noble undertaking" (p. xiv), and his textbook, *Evolutionary Psychology: The New Science of the Mind*, remains one of this quest's greatest accomplishments to date.