Evolutionary Psychology as Maladapted Psychology

Robert C. Richardson

A Bradford Book The MIT Press Cambridge, Massachusetts London, England © 2007 Massachusetts Institute of Technology

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

MIT Press books may be purchased at special quantity discounts for business or sales promotional use. For information, please e-mail special_sales@mitpress.mit.edu or write to Special Sales Department, The MIT Press, 55 Hayward Street, Cambridge, MA 02142.

This book was set in Times Roman and Syntax by SNP Best-set Typesetter Ltd., Hong Kong, and was printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Richardson, Robert C., 1949–.
Evolutionary psychology as maladapted psychology / by Robert C. Richardson.
p. cm.—(Life and mind)
"A Bradford book."
Includes bibliographical references and index.
ISBN 978-0-262-18260-7 (hardcover : alk. paper)
1. Evolutionary psychology. I. Title.

BF698.95.R44 2007 155.7—dc22

2006030807

10 9 8 7 6 5 4 3 2 1

Preface and Acknowledgments

Evolutionary psychology is by nature a hybrid discipline. The very name requires that it at least pay attention to evolutionary biology as one mistress, and to psychology as another. Philosophy might seem the odd one out. Locke thought of philosophy as a handmaiden to science. I think of philosophy as a facilitator. In this case, there is a discussion to be promoted.

I am by inclination and by profession a philosopher of science, interested in doing philosophy of science from the inside, engaging the details of the science, rather than from the outside, pretending to impose some independent standard on the sciences. Thus practiced, philosophy of science is a hybrid discipline. I work both within philosophy of biology and within philosophy and cognitive science. An outsider's philosophical perspective-which promotes a normative standard apart from the practice of science-was once common in philosophy of science. It is still lamentably common within much of philosophy; it isn't common any longer within philosophy of science. Philosophy of biology has generally abandoned any pretense of a stance that issues some sort of "standard" apart from the practice of biologists. Philosophy of mind, however, has a more ambiguous status. Some still maintain an independent stance. They think there is some standard of evidence apart from, and prior to, psychological practice. I do not traffic in the *a priori*. My interests in cognitive science, as in philosophy of biology, respect the science. This particular book pays more heed to the norms within biology than within psychology. David Buller, by contrast, is a philosopher who has offered a methodological critique of evolutionary psychology from a psychological perspective. I'm largely sympathetic with that critique. I don't defend its details, but I think the invitation to a more reflective methodology is salutary for evolutionary psychology. Even if evolutionary psychologists resist his conclusions, they should at least answer the problems of method he raises. Philip Kitcher is another philosopher who has raised a series of issues concerning sociobiology and, more recently, evolutionary psychology. Once again, I'm largely sympathetic

with his critique of sociobiology. And, again, I think the methodological issues he raises need addressing, whether or not one accepts his substantive critique.

My concerns are very much in harmony with both Buller and Kitcher. Buller focuses on the *psychological* credentials of evolutionary psychology. Like Kitcher, I focus on the *evolutionary* credentials of evolutionary psychology. As a philosopher, my concern is primarily with issues methodological. I am interested, first and foremost, in what we would need to know in order to validate the claims of evolutionary psychology. In particular, I am interested in what we would need to know in order to vindicate the *evolutionary* claims of evolutionary psychology. I sometimes describe these as *evolutionary pretensions*, because they are not explicitly argued for so much as assumed. They are part of the rhetoric. I take the pretensions seriously, exploring the various avenues available for empirically validating specific evolutionary claims, and asking how well the literature in evolutionary psychology fares against those standards.

My first ventures into the topics raised here were in the context of a seminar within the Department of Biological Sciences at the University of Cincinnati in the late 1970s. It was a robust discussion of E. O. Wilson's Sociobiology, and of the various models which lay behind it, looking at it chapter by chapter. It was an engaging experience. I gained a grounding in what we might learn about social behavior from an evolutionary perspective. I still think there is a great deal to be learned, and a great deal that has been learned. Most of our discussion then concerned ants, spiders, and occasionally hyenas and lions; our discussion was only incidentally about human behavior, as for that matter was Wilson's book. In the same period, I was discussing similar issues with friends and colleagues in the Department of Psychology at the University of Cincinnati. Some of this discussion concerned the implications of evolutionary biology for psychology. More often, the topics were more focused on psychology. Of course, here the discussion was less with spiders than with such things as incest avoidance. My good fortune continues still with colleagues in both departments. My life is enriched by all of them. For those who live out their academic lives within the confines of one department, it's difficult to imagine how rewarding this kind of interaction can be. Without wanting for a minute to diminish the appreciation gained from knowing something in exquisite detail, I have also gained much from the interaction with my peers. So to my various colleagues in the Department of Biological Sciences and the Department of Psychology at the University of Cincinnati, I am especially grateful.

My interests in the topics at the intersection of evolutionary biology and philosophy did not wane over the ensuing decades, although, as I've said, I did not formally enter the discussion. I certainly did not plan on writing an extended piece on evolutionary psychology. It seems to have been more something that happened to me. With my twin interests in evolutionary biology and cognitive psychology, perhaps it was inevitable that I at least engage the discussion. At the invitation of James Fetzer and Paul Davies, I did enter the discussion about ten years ago. At that point, I thought of the topic as a diversion from my main interests. It was an interesting diversion, but a diversion nonetheless. In the years that followed, I maintained an interest in the topic, and what started as a diversion assumed a kind of structure, and a life of its own. I ended up writing a series of papers on evolutionary psychology, all engaged with asking how the evolutionary pretensions of evolutionary psychology could be grounded. That is, my question was how we could know what evolutionary psychologists claim to know in order to get their psychology off the ground. I discussed my worries with colleagues in psychology and in biology. Much to my surprise, my skepticism was shared by colleagues both in biology and psychology, as it was by my colleagues in philosophy. I am sure my skepticism will be less warmly greeted by advocates of evolutionary psychology.

Following my initial foray into issues concerned more directly with evolutionary psychology at the invitation of Fetzer and Davies, I found there was an interest among others in approaching these issues from the point of view of philosophy of science. As a consequence, I was invited to give talks on evolutionary psychology at a number of universities and societies over this period. Since I did not want to do the same thing over and over, I began to branch out, though working within the same theme. Soon it seemed there was a kind of system to the madness. (That would be my madness, not the madness of evolutionary psychology.) By the time there was a series of publications, several of my friends were urging me to do a book. When there's a system to the madness, that constitutes a book. When there's not, I guess it's a collection of articles. This book is not a collection of articles. It draws on, and elaborates on, the articles I have written on the topics over the last decade. This volume develops the themes of the various articles and presentations, but without reprinting them. Thankfully, my views have not remained static over the period. Had it not been for the opportunity provided by writing these articles, and the opportunity to talk about the issues, I surely would not have produced this book. I am grateful for the various audiences, and for their input.

One of the serendipitous results of this project is that it has encouraged me, as a philosopher of science, to think more systematically about the place of natural selection and its alternatives in evolutionary theory. It has also forced me to think more about how we distinguish the alternatives empirically. That forms the backbone of the book, which is structured around three ways we can approach questions concerning the role of natural selection within evolutionary theory. For philosophers of biology, that theme, along with the case studies I offer, might be of more enduring interest.

During the period I've been working on the book, I've also gained from discussions with colleagues in cognitive science in the Netherlands and in Germany at the University of Osnabrück. I was fortunate enough, during this period, to have visiting appointments at the Free University of Amsterdam within the Department of Molecular Cell Physiology, and at the University of Osnabrück within the Department of Cognitive Science. They were, inevitably, subjected to my interest in evolutionary psychology even though our joint interests were far removed from that topic.

Three people have read or commented on all of the manuscript. Each changed the book in substantial ways. One is Paul Davies, who was a postdoc at the University of Cincinnati many years ago. I count him as one of my best friends, and his comments changed the manuscript substantially. Another is Stephen Downes, whom I also count as a friend, and who focused critically on the thinking about adaptation. Finally, Michael Bailey offered some incisive critical commentary, particularly on the interpretation of the key idea of heritability. I think that I have incorporated many of their insights. I have certainly benefited from them, though of course that does not at all imply that they agree with much of what is included here. Each has, in any case, improved the book.

General debts are one thing. It would be remiss to avoid specific debts. Some are acknowledged in the text that follows. I am sure that many have made contributions which I have incorporated while unintentionally suppressing the contributor. I am also sure that many have offered contributions that I have failed to incorporate, sometimes because I've disagreed and sometimes because I've not properly appreciated the point. Still, following the artificial divisions that define academic disciplines, I need at least to acknowledge the following individuals. Within biology, Maricia Bernstein, Fred Boogert, Frank Bruggeman, Rebecca German, Richard Lewontin, George Uetz, and Wim van der Steen have been significant in shaping my intellectual agenda. In psychology and cognitive science, I've profited especially from discussions with George Bishop, William Dember, Huib Looren de Jong, Maurice Schouten, Don Schumsky, and Dan Wheeler. Within philosophy, I've gained from various discussions with William Bechtel, John Bickle, Robert Brandon, Richard Burian, Christine Cuomo, Marjorie Greene, Donald Gustafson, Lynne Hankinson, Lawrence Jost, John McEvoy, W. E. Morris, Thomas Polger, Robert Skipper, Jan Slaby, Achim Stephan, and William Wimsatt.

Peggy DesAutels is a philosopher at the University of Dayton who has helped this project along from its inception. She is also my wife and my closest friend. She has contributed to the work at every stage. She even took the time to read and correct the final version—a thankless task for which I thank her. Though sometimes she found my engagement with evolutionary psychology puzzling, she also thought the project was important. She also has contributed in many places to the content, often pressing me to sharpen the point, or at least to make it coherent. I hope in each case I at least met the latter demand. Without her encouragement and interest, I might easily have wandered off into more esoteric concerns.

MIT Press has been very encouraging. July Feldmann did a great deal to improve the work. As an editor, she deserves a great deal of credit.

I have also been fortunate to receive a substantial amount of support from the Taft Faculty committee at the University of Cincinnati over the years. Without that support, I would have had even less time to devote to the project.

Finally, I want to acknowledge a special debt to Thomas Kane, who was formerly a professor within the Department of Biological Sciences at the University of Cincinnati. Tom was a cave biologist, but that underestimates the scope of his knowledge and interest. He studied caves, but he knew enormous amounts about biology beyond those confines. He was comfortable with evolutionary ecology, with population genetics, and with the molecular techniques that inform and shape contemporary evolutionary biology. He loved the fact that he worked in the tradition of great naturalists such as Darwin and Wallace, and he drew from their work as well. I learned much of this from him, both in the field and in the lab. For nearly thirty years, he was a wonderful colleague, and a cherished friend. This book is dedicated to him.