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William A. Rottschaefer  
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This important book brings recent findings and theories in biology and psychology to bear on the fundamental question in ethics of what it means to behave morally. It explains how we acquire and put to work our capacities to act morally and how these capacities are reliable means to achieving true moral beliefs, proper moral motivations, and successful moral actions.

By presenting a complete model of moral agency based on contemporary evolutionary theory, developmental biology and psychology, and social cognitive theory, the book offers a unique perspective. It will be read with profit by a broad swathe of philosophers, as well as psychologists and biologists.

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## **The biology and psychology of moral agency**

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WILLIAM A. ROTTSCHAEFER

*Lewis and Clark College*



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## Preface

In this book I propose a scientific naturalistic account of moral agency, offering answers to four central questions: (1) what counts as moral agency, both substantively and functionally? (2) how do we acquire our capacities as moral agents? (3) how do we put these capacities to work? and (4) what makes for justified true moral beliefs, proper moral motivations, and successful moral action? I argue that moral agency is a phenomenon of the natural world best understood with the help of sciences. Making use of recent theories and findings in evolutionary theory, developmental biology and psychology, and social cognitive theory in psychology, I set forth a model of moral agency as a complex four-level capacity consisting of (1) a base level of both evolutionarily based and operantly learned capacities; (2) a behavioral level consisting of cognitively acquired moral beliefs and desires that is the immediate source for moral behaviors; (3) a reflective level composed of moral beliefs and desires concerning the behavioral-level moral beliefs and desires and regulative of the latter; and (4) a self-referentially reflective level by means of which an agent conceives of herself as a moral agent.

In proposing my model, I pursue a goal common to many philosophers, the search for what Wilfrid Sellars (1963) aptly called the *synoptic vision*: the attempt to see things as a whole. Sellars's goal was to articulate the connections between what he termed the *manifest* and *scientific images* of human persons in order to achieve a synoptic vision. It was my attempt to work through Sellars's monumental efforts to do this that brought my previous philosophical endeavors to a focus and gave them subsequent direction. Although trained in philosophy of science and physics, the discipline to which philosophers of science have devoted so much of their analytic and synthetic efforts, I found myself teaching at a small liberal arts college with colleagues in psychology and biology who had great interest in both the substantive philosophical issues connected with their disciplines and the

## *Preface*

contributions that philosophy of science could make to an understanding of their disciplines. The issues we discussed often focused on questions concerning science and values. Thus began my journey through the highways and byways of behaviorism, B. F. Skinner's science of values, and cognitive social learning theories. The intrinsic connections between psychology and biology, as well as the emergence of sociobiology into popular and philosophical consciousness, next led to a study of E. O. Wilson's proposal to biologize ethics and subsequent developments in evolutionary ethics. From there the path into developmental biology and psychology become a necessary one to follow.

Another strain in my philosophical education provided a guiding principle for these investigations. My mentor at Boston University, Abner Shimony, not only introduced me to the work of Sellars but demonstrated the importance of bringing to bear the theories and findings of the natural sciences, especially biology and psychology, on both the traditional problems of epistemology and the epistemological problems raised in philosophy of science. It became clear to me that a synoptic vision could not be achieved without a similar endeavor in ethics or moral philosophy. Although not a specialist in moral philosophy, I found myself involved in trying to address questions about the nature of morality and the justification of moral beliefs, motivations, and actions from a scientific naturalistic perspective. Although it is necessarily incomplete because it does not bring in the relevant contributions of the social sciences such as anthropology, sociology, political science, and economics, I offer an account of the biology and psychology of moral agency. The plausibility of this account is to be measured not only by the extent to which it is faithful to the findings of the sciences that it employs but also by the extent to which it provides a scientific naturalistic alternative to autonomous commonsense, philosophical, or religious accounts of moral agency, one that better answers the questions about moral agency.

I am very indebted to Michael Ruse, who offered much encouragement, support, and advice. I owe much to Mike Bradie and David Shaner, who read and commented on a much longer version of the manuscript. I also thank Ted Schoen, who provided helpful suggestions on another earlier version. I thank Wendell Stephenson for conversations on several sections of an earlier version. My colleagues in philosophy, Sevin Koont and Clayton Morgareidge, offered many helpful comments on earlier portions of the book that I presented at our colloquia. I owe much to my colleague in biology, Dave Martinsen, and in mathematics, Bob Owens, and to my former colleague in psychology, Bill Knowlton. I would also like to thank

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