SCIENCE AND SPIRITUALITY

Making Room for Faith in the Age of Science

In Science and Spirituality: Making Room for Faith in the Age of Science, Michael Ruse offers a new analysis of the often troubled relationship between science and religion. Arguing against both extremes – in one corner, the New Atheists; in the other, the Creationists and their offspring, the Intelligent Designers – he asserts that science is undoubtedly the highest and most fruitful source of human inquiry. Yet, by its very nature and its deep reliance on metaphor, science restricts itself and is unable to answer basic, significant, and potent questions about the meaning of the universe and humankind’s place within it: Why is there something rather than nothing? What is the ultimate source and foundation of morality? What is the nature of consciousness? What is the meaning of it all? Ruse shows that one can legitimately be a skeptic about all of these questions, yet why it is nonetheless open to a Christian, or a member of any faith, to offer answers. Scientists, he concludes, should be proud of their achievements but modest about their scope. Christians should be confident of their mission but respectful of the successes of science.

Michael Ruse is the Lucyle T. Werkmeister Professor of Philosophy and Director of the Program in the History and Philosophy of Science at Florida State University. The author or editor of numerous books, most recently Darwinism and Its Discontents and The Cambridge Companion to the “Origin of Species” (with Robert Richards), he has been a Herbert Spencer Lecturer at Oxford University, a Gifford Lecturer at the University of Glasgow, and Reynolds Lecturer at Baylor University. He is a Fellow of the Royal Society of Canada and of the American Association for the Advancement of Science and the recipient of three honorary degrees.
To Ronald Numbers
SCIENCE AND SPIRITUALITY

Making Room for Faith in the Age of Science

Michael Ruse

Florida State University

Cambridge University Press
CONTENTS

Acknowledgments vii
Introduction 1
One: The World as an Organism 11
Two: The World as a Machine 32
Three: Organisms as Machines 54
Four: Thinking Machines 85
Five: Unasked Questions, Unsolved Problems 117
Six: Organicism 149
Seven: God 181
Eight: Morality, Souls, Eternity, Mystery 208
Conclusion 234
Bibliography 237
Index 251
ACKNOWLEDGMENTS

In writing this book, I have learned from and been encouraged by many good friends and colleagues, most of whom will reject the conclusion that I draw. These include Francisco J. Ayala, John Beatty, Joe Cain, David Castle, Fritz Davis, Wim Drees, Peter Harrison, John Haught, Philip Hefner, David Livingstone, Ronald Numbers, Robert J. Richards, Joseph Travis, and Edward O. Wilson. Also I must acknowledge two great influences, now deceased: Jay Newman and Arthur Peacocke. I am particularly in the debt of two members of the Florida State University Department of Religion, Matthew Day and John Kelsay. They have given generously of their time and knowledge, the former especially with respect to history and the latter to theology. Above all others, two very longtime friends hover above the project – Mary Hesse, who taught me the importance of metaphor in science, and Ernan McMullin, who showed me that one can, as a philosopher, write profitably and responsibly on the science-religion relationship. Samantha Muka and Peter Takacs spent many hours in the library searching down books and articles. As always, I am grateful to the encouraging and professional folk at Cambridge University Press, my editor, Beatrice Rehl, and my copy editor, Russell Hahn. Kathleen Paparchontis did the index. And last
but certainly not least, I record my thanks to and love for my wife, Lizzie.

Support for this project came from the very generous gift to the Philosophy Department of Florida State University by William and Lucyle Werkmeister. Given the social context in which this book is appearing, it is perhaps worth saying that this was the only source of support and that there are absolutely no conditions attached to the gift. The agenda and conclusions are mine and mine alone.