

# The "Racial" Economy of Science

*Toward a Democratic Future*

Edited by Sandra Harding

*"Sandra Harding is an intellectually fearless scholar. She has assembled a bold, impressive collection of essays to make a volume of illuminating power. This brilliantly edited book is essential reading for all who seek understanding of the multicultural debates of our age. Never has a book been more timely."*—Darlene Clark Hine

These authors dispute science's legitimization of culturally approved definitions of race difference—including craniology and the measurement of IQ, the notorious Tuskegee syphilis experiments, and the dependence of Third World research on First World agendas.

*Race, Gender, and Science*

cloth \$39.95 paper \$18.95



## The Less Noble Sex

*Scientific, Religious, and Philosophical  
Conceptions of Woman's Nature*

Nancy Tuana

Provides a framework for understanding the persistence of the Western patriarchal view of woman as inferior. Tuana examines beliefs that were accepted *a priori* as evidence of women's inferiority and studies early theories of woman's nature to illustrate the way scientific literature was influenced by—and in turn affected—religious and philosophical tenets.

*Race, Gender, and Science*

cloth \$29.95 paper \$12.95

## The Play of Nature

*Experimentation as Performance*

Robert P. Crease

*"Crease's brilliantly exploited theatrical analogy places scientific theorizing back into the wider context of experimental inquiry."*

—Robert C. Scharff

Crease attacks the "mystical" account of experimentation embraced by the positivist and Kantian varieties of philosophy of science, according to which experimentation takes a backseat to theory.

*Indiana Series in the Philosophy of Technology*

cloth \$35.00



At bookstores or from

**INDIANA  
UNIVERSITY  
PRESS**

Bloomington, IN 47404  
Orders 1-800-842-6796

# SCIENCE AND ANTI-SCIENCE

Gerald Holton

What is good science? What goal—if any—is the proper end of scientific activity? Is there a legitimating authority that scientists may claim? These questions have long been debated but, as Gerald Holton points out, every era must offer its own responses. In this book he examines these questions not in the abstract but shows their historic roots and the answers emerging from the scientific and political controversies of the past century. Holton displays the broad scope of his insight into the workings of science: from the influence of Ernst Mach on twentieth-century physicists, biologists, psychologists, and other thinkers to the rhetorical strategies used in the work of Albert Einstein, Niels Bohr, and others; from the bickering between Thomas Jefferson and the U.S. Congress over federal sponsorship of scientific research to philosophical debates over whether our scientific knowledge will ever be "complete."

\$24.95 cloth

# WE HAVE NEVER BEEN MODERN

Bruno Latour

TRANSLATED BY  
CATHARINE PORTER

In this provocative synthesis from one of our most influential interpreters of science, Latour proposes that modernity is nothing more than a matter of faith in the scientific method—relying as it does on our careful distinctions between nature and society, human and thing (distinctions never made in the pre-modern worlds of alchemy, astrology, and phrenology). Yet at the same time we moderns construct systems mixing politics, science, technology, and nature, such as debates over the ozone, global warming, deforestation, even black holes. As these hybrids increasingly challenge our ability to keep nature and culture separate, Latour calls on us to rethink our definition and constitution of modernity itself.

\$29.95 cloth/\$12.95 paper

*Available at bookstores or from*

**Harvard University Press**

Cambridge, MA 02138 Order toll-free: 800-448-2242

## PHILOSOPHY FROM CAMBRIDGE

### **The Ethical Dimensions of the Biological Sciences**

*Ruth Ellen Bulger,  
Elizabeth Heitman and  
Stanley Joel Reiser, Editors*

This systematically organized anthology on responsible conduct in scientific research has been designed in response to the increasing concern to teach graduate students about ethical issues in the biological sciences. It contains classic essays and other published material and provides insights into issues often not formally considered in graduate science education such as methods of scientific investigation, scientific paradigms, and the creative process.

43463-7 Hardcover \$54.95  
43599-4 Paper \$18.95

### **The Ethics and Politics of Human Experimentation**

*Paul M. McNeill*

This book focuses on experimentation that is carried out on human beings, including medical, drug, and social scientific research. It discusses the ethics of such experimentation and asks the question: who defends the interests of these human subjects and ensures that they are not harmed?

41627-2 Hardcover \$59.95

### **Metaphor and Thought**

Second Edition

*Andrew Ortony, Editor*

*"Ortony and others involved in this project are to be congratulated... this volume is a persuasive demonstration that for the theories of language, communication, and cognition, an adequate account of metaphor is a necessity and no mere nicety."*

—*Canadian Journal of Philosophy*

40547-5 Hardcover \$69.95  
40561-0 Paper \$29.95

Now in paperback...

### **Methods and Problems in Greek Science**

Selected Papers

*G. E. R. Lloyd*

*"A wonderful, miscellaneous introduction to Greek science through the mind of one of its finest historians."* —*Key Reporter*

Fourteen papers range over all areas and periods of Greek science, including astronomy, cosmology, biology and medicine from the earliest Presocratic philosophers to Ptolemy and Galen.

39762-6 Paper \$24.95

### **The Cambridge Companion to Hume**

*David Fate Norton, Editor*

Although he was best known for his contributions to epistemology, metaphysics, and the philosophy of religion, Hume also made substantial and influential contributions to many other disciplines. This first comprehensive overview of his work reveals the full scope of his creativity.

Contributors: *John Biro, Robert Fogelin, John Gaskin, Peter Jones, Terence Penelhum, Alexander Rosenberg, Andrew Skinner, David Wootton, Knud Haakonssen, David Fate Norton*

38273-4 Hardcover \$59.95  
38710-8 Paper \$17.95

### **Irrationality and the Philosophy of Psychoanalysis** *Sebastian Gardner*

Reconstructing the theories of Freud and Klein, this study argues that psychoanalytic theory explains the nature of irrationality, and is an extension of everyday psychological explanation. It advances a view of the unconscious as a source of inherently irrational desires seeking expression through wish fulfilment and phantasy.

41090-8 Hardcover \$54.95

# PHILOSOPHY FROM CAMBRIDGE

## **Decision Sciences**

An Integrative Perspective

*Paul R. Kleindorfer,  
Howard G. Kunreuther  
and Paul J. H. Schoemaker*

Using a set of illustrative examples, this text synthesizes current research about different types of decision making, including individual, group, organizational, and societal. Special attention is also given to the linkage between problem finding and problem solving.

32867-5 Hardcover \$69.95

33812-3 Paper \$19.95

*Now in paperback...*

## **Eminent Economists**

Their Life Philosophies

*Michael Szenberg, Editor*

An intimate view of the dominant economists of this century, scholars whose work changed the direction of the discipline, is presented in this volume. The contributors, who come from quite divergent points of the ideological compass, present their life philosophies and reflect on their conceptions of human nature, society, justice and the source of the creative impulse.

38212-2 Hardcover \$34.95

44987-1 Paper \$14.95

## **Decisions with Multiple Objectives**

Preferences and Value Tradeoffs

*Ralph L. Keeney  
and Howard Raiffa*

The standard approach in decision theory or decision analysis specifies a simplified single objective like monetary return to maximize. By generalizing from the single objective case to the multiple objective case, this book considerably widens the range of applicability of decision analysis.

44185-4 Hardcover \$69.95

43883-7 Paper \$21.95

## **Method in Ecology**

Strategies for Conservation

*Kristin S. Shrader-Frechette  
and Earl D. McCoy*

Although conceptual problems have often prevented the formulation and evaluation of theories, this text reveals how ecology can provide us with specific answers to practical environmental questions. A case study using the Florida panther is accordingly examined.

41861-5 Hardcover \$69.95

44693-7 Paper \$29.95

## **The Life of Isaac Newton**

*Richard S. Westfall*

*"An altogether admirable job of scholarship, whose weightiness is balanced by the surfacing... of Westfall's dry humor."*

—*Kirkus Reviews*

This vivid biography captures the personal life and scientific career of one of the greatest scientists of all time.

43252-9 Hardcover \$24.95

*Now in paperback...*

## **A Cognitive Theory of Consciousness**

*Bernard J. Baars*

By contrasting well-established conscious phenomena with closely comparable unconscious ones, this study suggests a way to specify empirical constraints on a theory of consciousness.

42743-6 Paper \$19.95

---

Available in bookstores or from

**CAMBRIDGE**  
UNIVERSITY PRESS

40 West 20th St., N.Y., NY 10011-4211

Call toll-free 800-872-7423

MasterCard/VISA accepted.

Prices subject to change.

**MIT Press**

## **Between Biologists & Philosophers**

### **DEVELOPMENT AND EVOLUTION**

**Complexity and Change in Biology**

*Stanley N. Salthe*

*Development and Evolution* surveys and illuminates the key themes of rapidly changing fields and areas of controversy that are redefining the theory and philosophy of biology.

A Bradford Book 400 pp., 33 illus. \$50.00

*Now Available in Paperback*

### **NEW PHILOSOPHY OF SOCIAL SCIENCE**

**Problems of Indeterminacy**

*James Bohman*

"This book is without equal in reflecting the actual state of debate in the various social sciences. The wide range of issues considered and the reliance on case studies from the actual practice of social inquiry make this the best available text on the subject."

—Thomas McCarthy, Northwestern University

288 pp. \$15.95 paper

*Second Edition Now Available*

### **CONCEPTUAL ISSUES IN EVOLUTIONARY BIOLOGY**

*edited by Elliott Sober*

"This book has no competition whatsoever. There is no anthology which even attempts to cover this ground. There are three virtues which an anthology might possess; in Sober's anthology I think you have an example of all three. First, it contains a well-thought-out selection of reading of the sort that a student or non specialist reader would find valuable as an introduction to the field. Second, it covers ground not already adequately covered by existing anthologies. Finally, its publication will advance the related disciplines. It will, I believe, become the standard text."

—Richard Boyd, Cornell University (review of the first edition)

A Bradford Book 496 pp., 29 illus. \$27.50 paper

*Original in Paperback*

### **READINGS IN THE PHILOSOPHY OF SOCIAL SCIENCE**

*edited by Michael Martin and Lee C. McIntyre*

This is the first comprehensive anthology in the philosophy of social science to appear since the late 1960s. Covering all of the major areas in the discipline, it will serve as the standard source for scholarship in the field and could be used as the basis for an entire course.

**Sections cover:** Explanation, Prediction, and Laws. Interpretation and Meaning. Rationality. Functional Explanation. Reductionism, Individualism, and Holism. Objectivity and Values. Problems of the Special Sciences.

**Commissioned articles:** *Taylor on Interpretation and the Sciences of Man*, Michael Martin. *Microfoundations of Marxism*, D. Little.

*Evidential Constraints: Pragmatic Empiricism in Archaeology*,

A. Wylie

800 pp. \$29.95 paper

To order call  
toll-free

**1-800-356-0343**  
(US & Canada) or  
(617) 625-8569

Mastercard and  
VISA accepted.

Prices will be higher  
outside the U.S. and  
subject to change  
without notice.

**The MIT Press**  
55 Hayward Street  
Cambridge, MA  
02142

# PHILOSOPHIA MATHEMATICA

PHILOSOPHY OF MATHEMATICS, ITS LEARNING, AND ITS APPLICATION  
PHILOSOPHIE DES MATHÉMATIQUES, LEURS ÉTUDE ET APPLICATIONS

Series Three is published from spring 1993 for the Canadian Society for History and Philosophy of Mathematics / Société canadienne d'histoire et de philosophie des mathématiques by the University of Toronto Press.

*Philosophia Mathematica* is the only journal in the world devoted specifically to philosophy of mathematics. Aiming at scholarly interchange, the journal will publish peer-reviewed new work in philosophy of mathematics, including what can be learned from the study of mathematics, whether under instruction or by research, and including the application of mathematics, including computation. In addition to main articles, sometimes grouped on a single theme, there will be shorter discussion notes, letters, and book reviews. Frequency of publication: Volume One (1993) two issues, Volume Two (1994) three issues.

## EDITORIAL BOARD

Jon Barwise	Nicolas Goodman	Fred Richman
John L. Bell	Geoffrey Hellman	Gian-Carlo Rota
Douglas S. Bridges	Reuben Hersh	Stuart G. Shanker
John P. Burgess	A. D. Irvine	Stewart D. Shapiro
Ubiratan D'Ambrosio	Daniel R. Isaacson	Mark Steiner
Michael Detlefsen	Philip Kitcher	Neil Tennant
Paul Ernest	Virginia Klenk	Richard Tieszen
John Etchemendy	Saunders Mac Lane	Thomas Tymoczko
Stephen E. Fienberg	Penelope Maddy	Jean Paul Van Bendegem
Donald Gillies	Charles D. Parsons	Hao Wang
	Michael D. Resnik	

**Editor:** Robert S. D. Thomas, Department of Applied Mathematics,  
University of Manitoba, Winnipeg, Manitoba, Canada R3T 2N2.  
Internet: Robert\_Thomas@UManitoba.CA

## PUBLISHED AND IN PROCESS

Contents of the first number (March, 1993) include papers by David Lewis, Michael Detlefsen, and John P. Burgess. Contents of the second number (September, 1993) include papers by Hao Wang, William Demopoulos and John L. Bell, and Granville C. Henry and Robert J. Valenza. Volume Two will begin with a special issue on categories in the foundations of mathematics and language edited by John L. Bell and including papers by F. W. Lawvere, John Mayberry, Colin McLarty, and M. La Palme Reyes, J. Macnamara, G. E. Reyes, and H. Zolfaghari.

## SUBSCRIPTIONS AND SAMPLE COPIES

Price (including postage): \$60 a calendar year for institutions, \$29 for individuals (VISA/Mastercard available). Currency: U.S. outside Canada, Canadian inside Canada (no GST). A discount applies to subscriptions for Society members when paid with annual dues. Sample-copy requests, subscriptions, remittances, and non-editorial correspondence should be sent to:

Journals Division, University of Toronto Press Incorporated,  
5201 Dufferin Street, North York, Ontario, Canada M3H 5T8.

PHILOSOPHY  
OF  
SCIENCE

*VOLUME LX*

1993