

# PHILOSOPHY OF SCIENCE

*Official Journal of the Philosophy of  
Science Association*



VOLUME 26, NUMBER 2

APRIL 1959

PUBLISHED BY THE ST. CATHERINE PRESS, BRUGES, BELGIUM

# PHILOSOPHY OF SCIENCE

ORGAN OF THE PHILOSOPHY OF SCIENCE ASSOCIATION

CO-SPONSORED BY THE INSTITUTE FOR THE UNITY OF SCIENCE AND BY  
SECTION L OF THE AMERICAN ASSOCIATION FOR THE  
ADVANCEMENT OF SCIENCE

## EDITORIAL BOARD:

- C. WEST CHURCHMAN, School of Business Administration, *University of California*, Berkeley 4, California, *Editor in Chief* (1959)\*  
LEWIS K. ZERBY, *Michigan State University*, East Lansing, Michigan, *Managing Editor* (1960)  
GUSTAV BERGMANN, Department of Philosophy, *Iowa State University*, Iowa City, Iowa (1960)  
ARTHUR BURKS, Department of Philosophy, *University of Michigan*, Ann Arbor, Michigan (1960)  
HENRY MARGENAU, Sloane Physics Laboratory, *Yale University*, New Haven, Connecticut (1959)  
ERNEST NAGEL, Department of Philosophy, *Columbia University*, New York, New York (1958)  
RICHARD S. RUDNER, *Michigan State University*, East Lansing, Michigan (1960)

## BOOK REVIEWS:

- J. S. MINAS, *Ohio State University*, Columbus, Ohio (1959)

## GOVERNING BOARD OF THE ASSOCIATION:

- C. J. DUCASSE, *President* (1960)  
ERNEST NAGEL, *Vice President* (1959)  
LEWIS K. ZERBY, *Secretary-Treasurer* (1960)  
GUSTAVE BERGMANN (1959)                      PHILIPP FRANK (Past President)  
RUDOLPH CARNAP (1959)                        R. BRUCE LINDSAY (1960)  
C. WEST CHURCHMAN (1960)                    HENRY MARGENAU (Past President)  
THEODOSIUS DOBZHANSKY (1960)              CHARLES W. MORRIS (1959)  
S. S. STEVENS (1959)

\* All terms of Office expire December 31 of the year mentioned.

## EDITORIAL CONSULTANTS:

- |                    |                  |                   |
|--------------------|------------------|-------------------|
| ERIC T. BELL       | C. J. DUCASSE    | I. LANGMUIR       |
| A. C. BENJAMIN     | HERBERT FEIGL    | CHARLES W. MORRIS |
| L. VON BERTALANFFY | R. A. FISHER     | OLIVER L. REISER  |
| NIELS BOHR         | R. W. GERARD     | D. RUNES          |
| RUDOLPH CARNAP     | J. B. S. HALDANE | R. J. SEEGER      |
| W. J. CROZIER      | W. KOHLER        | M. S. VALLARTA    |
| PAUL WEISS         | F. Z. ZWICKY     |                   |

© 1959 by Philosophy of Science Association

PRINTED BY THE ST-CATHERINE PRESS LTD, BRUGES, BELGIUM

---

Subscription price \$6.00 per Volume. Single numbers \$2.00

## CONTENTS

Experience and Experiment. THOMAS A COWAN - - - - -	77
Toward a Clarification of System Analysis in the Social Sciences. H. M. BLALOCK, JR., and ANN B. BLALOCK	84
Physicalism, Behaviorism and Phenomena. HERBERT HOCH- BERG - - - - -	93
The Analytic and the Synthetic. GEORGE KRZYWICKI HERBERT - - - - -	104
History, Freedom, and Responsibility. FRANCIS V. RAAB -	114
Mach's Principle. PARRY MOON and DOMINA EBERLE SPENCER	125
The Resolution of the Clock Paradox. GEOFFREY BUILDER -	135
The Clock Paradox and Thermodynamics. PHILIP ROSEN	145
Book Reviews - - - - -	148