

# **IV**

## **Analyses of Theories and Methods of Physics and Psychology**

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**MINNESOTA STUDIES IN THE PHILOSOPHY OF SCIENCE**

Minnesota Studies in the  
**PHILOSOPHY OF SCIENCE**

HERBERT FEIGL AND GROVER MAXWELL, GENERAL EDITORS

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VOLUME IV

*Analyses of Theories and Methods of Physics  
and Psychology*

EDITED BY

MICHAEL RADNER AND STEPHEN WINOKUR

FOR THE MINNESOTA CENTER FOR PHILOSOPHY OF SCIENCE

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## *Preface*

In their preface to the first volume of *Minnesota Studies in the Philosophy of Science*, Professors Feigl and Scriven noted the extensive concern of staff and guests of the Minnesota Center for Philosophy of Science with "the meaning of theoretical concepts as defined by their locus in the 'nomological net' and the related rejection of the reductionist forms of operationism and positivism." In this fourth volume of the series, several of our contributors are again concerned with the philosophical, logical, and methodological problems of psychology. As before, some papers are concerned with broader philosophical issues, others with more specific problems of method or interpretation. However, the deep concern for logical and methodological problems of special relevance to the physical sciences manifested in volume III persists and is reflected in a number of contributions to the present volume.

The first group of papers presented here evolved from one of the many conferences held at the Minnesota Center for Philosophy of Science; reports of other conferences will appear in future volumes of this series. Although all the papers resulting from this conference have been considerably modified as a result of further discussions, we have placed them together in this volume. Thus Professor Feigl's paper, which is based upon his opening remarks, serves to set the theme of the conference: the problem of correspondence rules. This is then followed by papers by the main speakers, arranged in alphabetical order. Finally, we conclude this section with a report of some of the discussions that followed the original presentation of the papers. Our readers should bear in mind that these remarks were made during the course of several days in May 1966 and that this report is an edited transcript of the recorded proceedings. Since that time, a number of those philosophers presented here have changed their views or styles of presenting them. However, we believe that publication of these

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proceedings will be fruitful in leading to a wider and deeper appreciation of the problems which have been the concern of the Center's staff and guests.

The second group of papers in this volume consists of essays by various members of the staff of the Center and its visitors. Some of these are new and reflect work going on in 1969-70. Again, we have arranged them in alphabetical order. We believe these contributions are of particular timeliness since they reflect current issues and controversies of great interest. In this connection, our readers are referred to the December 1970 issue of *Philosophy of Science* in which Professor Adolf Grünbaum published his comments on Mr. Demopoulos's paper.

It is with profound gratitude that we acknowledge our indebtedness to the Hill Family Foundation, the Carnegie Corporation of New York, and the National Science Foundation for grants which made continued operation of the Center possible. We also thank Professor N. R. Hanson's literary executors for permission to publish his paper, and Herbert Feigl for his advice and encouragement.

Michael Radner  
Stephen Winokur

January 1970

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