CHANGE AND PROGRESS IN MODERN SCIENCE

Papers related to and arising from the Fourth International Conference on History and Philosophy of Science, Blacksburg, Virginia, November 1982

Edited by

JOSEPH C. PITT

Department of Philosophy, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, U.S.A.



D. REIDEL PUBLISHING COMPANY



DORDRECHT / BOSTON / LANCASTER

TABLE OF CONTENTS

Preface ·····	vii
INTRODUCTION	
IOSEPH C. PITT / Reflections on Change	3
PART I. HISTORICAL DIMENSIONS	
ALAN GABBEY / The Mechanical Philosophy and Its Problems: Mechanical Explanations, Impenetrability, and Perpetual Motion	9
KATHLEEN OKRUHLIK / Ghosts in the World Machine: A Taxonomy of Leibnizian Forces	85
R. W. HOME / The Notion of Experimental Physics in Early Eighteenth-Century France	107
GEREON WOLTERS / Some Pragmatic Aspects of the Methodology of Johann Heinrich Lambert	133
DANIEL HAUSMAN / Classical Wage Theory and the Causal Complications of Explaining Distribution	171
JACQUES VONÈCHE / Genetic Epistemology in the Context of Evolutionary Epistemology	199

PART II. CONCEPTUAL CONSIDERATIONS

ILKKA NIINILUOTO / Truthlikeness, Realism, and Progressive Theory-Change	235
MARCELLO PERA / In Praise of Cumulative Progress	267
LARRY LAUDAN / Kuhn's Critique of Methodology	283
JOHN WORRALL / Scientific Discovery and Theory- Confirmation	301
DIDERIK BATENS / Meaning, Acceptance, and Dialectics	333
NICHOLAS RESCHER / Extraterrestrial Science	361
INDEX	392