TABLE OF CONTENTS

PREFACE / Robert S. Cohen	ix
OPENING ADDRESS / Karl-Friedrich Wessel	хi
FOREWORD / Helga Hörz	xv
I: INTRODUCTION	
WILLIAM R. WOODWARD / World Views and Scientific Discipline Formation: How East German Science Studies Contributed to the Fall of the Cultural Wall MARTIN GUNTAU and HUBERT LAITKO / On the Origin and Nature of Scientific Disciplines	1 17
II: IDEAS AND INSTITUTIONS	
KARL-FRIEDRICH WESSEL / Relating Evolutionary Theory to the Natural Sciences	29
HERBERT HÖRZ / Dialectical Understanding of the Unity of Scientific Knowledge	39
GÜNTER KRÖBER / History of Science in the GDR: Institutions and Programmatic Positions	49
III: MATHEMATICS IN A SOCIO-POLITICAL CONTEXT	
HANS WUßING / Historiography of Mathematics: Aims, Methods, Tasks HARTMUT HECHT and DIETER HOFFMANN / The Berlin	63
'Society for Scientific Philosophy' as Organizational Form of Philosophizing in the Medium of Natural Science REINHARD SIEGMUND-SCHULTZE / Mathematics and	75
Ideology in Fascist Germany	89
IV: PSYCHOLOGY CONSTRUCTS ITS SUBJECT MATTER	
ADRIAN BROCK / Imageless Thought or Stimulus Error? The Social Construction of Private Experience	97

LOTHAR SPRUNG / The Berlin Psychological Tradition:	
Between Experiment and Quasi-Experimental Design,	105
1850–1990 MARY MOSHER ELESHER / Move over Dominio	107
MARY MOSHER FLESHER / Move over Darwin: The Ontogenetic Sources of William Preyer's Developmental	
Psychology	117
MARTIN MÜLLER / On the Interdisciplinary Genesis of Experimental Methods in Nineteenth-Century German Psychology	129
V: PHYSICS IN THE CONTEXT OF PHILOSOPHY AND THEORY OF SCIENCE	
MARTIN KOCH / From Boltzmann to Planck: On Continuity in Scientific Revolutions	141
DIANA BARKAN / Walther Nernst and Quantum Theory	151
ULRICH RÖSEBERG / Historical Explanations in Modern Physics: The Lesson of Modern Overture Machanias	163
Physics: The Lesson of Modern Quantum Mechanics STEVE J. HEIMS / Fritz London and the Community of Quantum	163
Physicists	177
VI: THEORY AS METHOD	
GERALD WICKLEIN / The Middle Ages: Darkness in the Sciences?	101
HANS-PETER KRÜGER / Introduction to the Basic Concepts of	191
Communication-Oriented Science Studies	199
JOHN ERPENBECK / Philosophical Problems of Modern	
Psychology	209
VII: DISCIPLINE FORMATION OF PHILOSOPHY	
HANS-CHRISTOPH RAUH / Neo-Kantianism and Epistemology:	
On the Formation of a Philosophical Discipline in Nineteenth- Century Germany	222
REINHARDT PESTER / The Transformation of German	223
Philosophy in the Context of Scientific Research in the	
Nineteenth Century	235
HARTWIG FRANK / Reform Efforts of Logic at Mid-Nineteenth	
Century in Germany	247

VIII: BIOLOGICAL EVOLUTION IN THE MIRROR OF THEORIES OF EVOLUTION	
RALF-DIETMAR HEGEL / August Weismann: One of the First Synthetic Theorists of Evolutionary Biology FREDERICK GREGORY / Darwin and the German Theologians REINHARD MOCEK / Two Faces of Biologism: Some Reflec- tions on a Difficult Period in the History of Biology in Germany	259 269 279
PETER BEURTON / What Keeps a Species Together?	293
IX: TEACHERS AND STUDENTS: CHEMISTRY LABORATORIES AND DISSERTATIONS	
PAUL R. JONES / The Training in Germany of English-Speaking Chemists in the Nineteenth Century and its Profound Influence in America and Britain	299
MARK R. FINLAY / Science and Practice in German Agriculture: Justus von Liebig, Hermann von Liebig, and the Agricultural Experiment Stations	309
PETER OESPER / Things Are Seldom What They Seem: The Story of Non-Phosphorylating Glycolysis	321
X: NATURAL SCIENCE AND NATURPHILOSOPHIE	
ERNST HAMM / Goethe's Morphology of Stones: Between Natural History and Historical Geology ELKE HAHN / The Philosophy of Living Things: Schelling's	329
Naturphilosophie as a Transition to the Philosophy of Identity PETER NOLTE / A New Correspondence of the Philosopher	339
F. W. J. Schelling ILSE JAHN / The Influence of Jakob Friedrich Fries on Matthias	351
Schleiden	357
XI: SCIENCE AND SOCIETY	
ROBERT BRAIN / The Geographical Vision and the Popular Order of Disciplines, 1848–1870	367
ANDREAS KAHLOW / Knowledge Transfer in the Nineteenth	
Century: Young, Navier, Roebling, and the Brooklyn Bridge ANNETTE VOGT / Soviet-German Scientific Relations before	377
World War II: Fruitful Cooperation in Different Social Orders	387

XII: THE SOCIAL CONSTRUCTION OF SCIENTIFIC KNOWLEDGE

HELGA SPRUNG / Bourgeois Berlin Salons: Meeting Places for	
Culture and the Sciences	401
WOLFGANG BEESE / Max Delbrück: A Physicist in Biology FRIEDRICH KLEINHEMPEL / 'Nobody Can Become a Real	415
Engineer Who Has Not Already Become a Whole Person'	423
SUMMER INSTITUTE PROGRAM, 1988	431
ABOUT THE AUTHORS	439
NAME INDEX	451
SUBJECT INDEX	157