

Contents

<i>Introduction</i>	<i>page ix</i>
<i>List of Authors</i>	xv

PART ONE. GENES AND TRAITS

1	The Dissolution of Protein Coding Genes in Molecular Biology <i>T. Fogle</i>	3
2	The Differential Concept of the Gene: Past and Present <i>S. Schwartz</i>	26
3	Gene Concepts and Genetic Concepts <i>F. Gifford</i>	40

PART TWO. EXTRACTING THE UNITS OF HEREDITY

4	From Measurement to Organization: A Philosophical Scheme for the History of the Concept of Heredity <i>J. Gayon</i>	69
5	From Gene to Genetic Hierarchy: Richard Goldschmidt and the Problem of the Gene <i>M. R. Dietrich</i>	91
6	Seymour Benzer and the Definition of the Gene <i>F. L. Holmes</i>	115

PART THREE. GENETIC PROGRAMS AND DEVELOPMENTAL GENES

7	Decoding the Genetic Program: Or, Some Circular Logic in the Logic of Circularity <i>E. Fox Keller</i>	159
8	Genes Classical and Genes Developmental: The Different Use of Genes in Evolutionary Syntheses <i>S. F. Gilbert</i>	178

Contents

9	The Developmental Gene Concept: History and Limits	<i>M. Morange</i>	193
PART FOUR. CONCEPTUAL PERSPECTIVES			
10	Gene Concepts: Fragments from the Perspective of Molecular Biology	<i>H.-J. Rheinberger</i>	219
11	Reproduction and the Reduction of Genetics	<i>J. R. Griesemer</i>	240
12	A Unified View of the Gene, or How to Overcome Reductionism	<i>P. J. Beurton</i>	286
FINAL REVIEW The Gene – A Concept in Tension			
	<i>R. Falk</i>		317
	Glossary		349
	Index		377