

Cambridge University Press

0521771870 - The Concept of the Gene in Development and Evolution: Historical and Epistemological Perspectives

Edited by Peter J. Beurton, Raphael Falk and Hans-Jörg Rheinberger

Table of Contents

[More information](#)

Contents

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

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

Cambridge University Press

0521771870 - The Concept of the Gene in Development and Evolution: Historical and Epistemological Perspectives

Edited by Peter J. Beurton, Raphael Falk and Hans-Jorg Rheinberger

Table of Contents

[More information](#)

Contents

- 9 The Developmental Gene Concept: History and
Limits *M. Morange* 193

PART FOUR. CONCEPTUAL PERSPECTIVES

- 10 Gene Concepts: Fragments from the Perspective of
Molecular Biology *H.-J. Rheinberger* 219

- 11 Reproduction and the Reduction of Genetics
J. R. Griesemer 240

- 12 A Unified View of the Gene, or How to Overcome
Reductionism *P. J. Beurton* 286

- FINAL REVIEW The Gene – A Concept in Tension
R. Falk 317

- Glossary* 349

- Index* 377