

Contents

	Series Foreword	vii
1	Evolutionary Causation Tobias Uller and Kevin N. Laland	1
2	Causality and the Role of Philosophy of Science Massimo Pigliucci	13
3	Understanding Bias in the Introduction of Variation as an Evolutionary Cause Arlin Stoltzfus	29
4	The Shape of Things to Come: <i>Evo Devo</i> Perspectives on Causes and Consequences in Evolution Armin P. Moczek	63
5	Incorporating the Environmentally Sensitive Phenotype into Evolutionary Thinking David I. Dayan, Melissa A. Graham, John A. Baker, and Susan A. Foster	81
6	Genotype-Environment Interaction and the Unscripted Reaction Norm Sonia E. Sultan	109
7	Understanding Niche Construction as an Evolutionary Process Kevin N. Laland, John Odling-Smee, and Marcus W. Feldman	127
8	Biological Dynamics and Evolutionary Causation Renée A. Duckworth	153
9	The Causes of a Major Transition: How Social Insects Traverse Darwinian Space Heikki Helanterä and Tobias Uller	173

10	Are Developmental Plasticity, Niche Construction, and Extended Inheritance Necessary for Evolution by Natural Selection? The Role of Active Phenotypes in the Minimal Criteria for Darwinian Individuality	197
	Richard A. Watson and Christoph Thies	
11	The Paradox of Population Thinking: First Order Causes and Higher Order Effects	227
	Denis M. Walsh	
12	Ontology, Causality, and Methodology of Evolutionary Research Programs	247
	Jun Otsuka	
13	A Darwinian Dream: On Time, Levels, and Processes in Evolution	265
	Arnaud Pocheville	
14	Decoupling, Commingling, and the Evolutionary Significance of Experiential Niche Construction	299
	Lynn Chiu	
15	Biological Information in Developmental and Evolutionary Systems	323
	Karola Stotz	
	Contributors	345
	Index	347