

1. Record Nr.	UNINA9910485038303321
Titolo	Explanation in the Special Sciences : The Case of Biology and History // edited by Marie I. Kaiser, Oliver R. Scholz, Daniel Plenge, Andreas Hüttemann
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2014
ISBN	94-007-7563-6
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (365 p.)
Collana	Synthese Library, Studies in Epistemology, Logic, Methodology, and Philosophy of Science, , 0166-6991 ; ; 367
Disciplina	501
Soggetti	Biology—Philosophy History Philosophy and science Philosophy of Biology History of Science Philosophy of Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographic references.
Nota di contenuto	1. Introduction – Points of Contact between Biology and History; Marie I. Kaiser and Daniel Plenge -- Part I. General Issues on Explanation -- 2. The Ontic Account of Scientific Explanation; Carl F. Craver -- Part II Explanation in the Biological Sciences -- 3. Causal Graphs and Biological Mechanisms; Alexander Gebharter and Marie I. Kaiser -- 4. Semiotic Explanation in the Biological Sciences; Ulrich Krohs -- 5. Mechanisms, Pathomechanisms, and Disease in Scientific Clinical Medicine; Gerhard Müller-Strahl -- 6. The Generalizations of Biology: Historical and Contingent?; Alexander Reutlinger -- 7. Evolutionary Explanations and the Role of Mechanisms; Gerhard Schurz -- Part III Explanation in the Historical Sciences -- 8. Explaining Roman History – A Case Study; Stephan Berry -- 9. Causal Explanation and Historical Meaning: How to Solve the Problem of the Specific Historical Relation between Events; Doris Gerber -- 10. Do Historians Study the Mechanisms of History? A Sketch; Daniel Plenge -- 11. Philosophy of History – Metaphysics and Epistemology; Oliver R. Scholz -- 12. Causal

Explanations of Historical Trends; Derek D. Turner -- Part IV Bridging the Two Disciplines -- 13. Aspects of Human Historiographic Explanation: A View from the Philosophy of Science; Stuart Glennan -- 14. History and the Sciences; Philip Kitcher and Daniel Immerwahr -- 15 Explanation and Intervention in Coupled Human and Natural Systems; Daniel Steel -- 16. Biology and Natural History: What Makes the Difference; Aviezer Tucker.

Sommario/riassunto

Biology and history are often viewed as closely related disciplines, with biology informed by history, especially in its task of charting our evolutionary past. Maximizing the opportunities for cross-fertilization in these two fields requires an accurate reckoning of their commonalities and differences—precisely what this volume sets out to achieve. Specially commissioned essays by a team of recognized international researchers cover the full panoply of topics in these fields and include notable contributions on the correlativity of evolutionary and historical explanations, applying to history the latest causal-mechanical approach in the philosophy of biology, and the question of generalized laws that might pertain across the two subjects. The collection opens with a vital interrogation of general issues on explanation that apart from potentially fruitful areas of interaction (could the etiology of the causal-mechanical perspective in biology account for the historical trajectory of the Roman Empire?) this volume also seeks to chart relative certainties distinguishing explanations in biology and history. It also assesses techniques such as the use of probabilities in biological reconstruction, deployed to overcome the inevitable gaps in physical evidence on early evolution. Methodologies such as causal graphs and semantic explanation receive in-depth analysis. Contributions from a host of prominent and widely read philosophers ensure that this new volume has the stature of a major addition to the literature.
