

1. Record Nr.	UNINA9910828175903321
Autore	Kastner Lena <1986->
Titolo	Philosophy of cognitive neuroscience : causal explanations, mechanisms, and experimental manipulations / / Lena Kastner
Pubbl/distr/stampa	Berlin, [Germany] ; ; Boston, [Massachusetts] : , : De Gruyter, , 2017 ©2017
ISBN	3-11-052920-3
Descrizione fisica	1 online resource (268 pages) : illustrations
Collana	Epistemic Studies, , 2512-5168 ; ; Volume 37
Classificazione	CC 5680
Disciplina	612.8/233
Soggetti	Cognitive neuroscience - Philosophy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Preface -- Contents -- List of Figures -- 1. Introduction -- Part I: Stage Setting -- 2. Braining Up Psychology -- 3. The Life of Mechanisms -- 4. The Interventionist View -- 5. Intermezzo: What's at Stake? -- Part II: Puzzles -- 6. The Unsuccessful Marriage -- 7. Causation vs. Constitution -- 8. Beyond Mutual Manipulability -- 9. Interventionism's Short-Sightedness -- 10. Intermezzo: Well Then? -- Part III: Shopping for Solutions -- 11. Fixing Interventionism -- 12. Mere Interactions -- 13. Excursus: A Perspectival View -- 14. Mere Interactions at Work: A Catalog of Experiments -- 15. Conclusions -- References -- Key Terms -- Index
Sommario/riassunto	How do cognitive neuroscientists explain phenomena like memory or language processing? This book examines the different kinds of experiments and manipulative research strategies involved in understanding and eventually explaining such phenomena. Against this background, it evaluates contemporary accounts of scientific explanation, specifically the mechanistic and interventionist accounts, and finds them to be crucially incomplete. Besides, mechanisms and interventions cannot actually be combined in the way usually done in the literature. This book offers solutions to both these problems based on insights from experimental practice. It defends a new reading of the interventionist account, highlights the importance of non-interventionist studies for scientific inquiry, and supplies a taxonomy of experiments that makes it easy to see how the gaps in contemporary

accounts of scientific explanation can be filled. The book concludes that a truly empirically adequate philosophy of science must take into account a much wider range of experimental research than has been done to date. With the taxonomy provided, this book serves a stepping-stone leading into a new era of philosophy of science-for cognitive neuroscience and beyond.
