CONTENTS

List of Abbreviations ix
Acknowledgements xi
The Contributors xii

Introduction 1
Wolfram Hinzen, Markus Werning, and Edouard Machery

PART I  HISTORY AND OVERVIEW

1. Compositionality: its historic context 19
   Theo M. V. Janssen

2. Compositionality in Montague Grammar 47
   Marcus Kracht

3. The case for compositionality 64
   Zoltán Gendler Szabó

4. Compositionality problems and how to solve them 81
   Thomas Ede Zimmermann

PART II  COMPOSITIONALITY IN LANGUAGE

5. Direct Compositionality 109
   Pauline Jacobson

6. Semantic monadicity with conceptual polyadicity 129
   Paul M. Pietroski

7. Holism and compositionality 149
   Francis Jeffry Pelletier
8. Compositionality, flexibility, and context dependence  
   François Recanati

9. Compositionality in Kaplan style semantics  
   Dag Westerståhl

10. Sub-compositionality  
    Sebastian Löbner

PART III  COMPOSITIONALITY IN FORMAL SEMANTICS

11. Formalizing the relationship between meaning and syntax  
    Wilfrid Hodges

12. Compositionality and the Context Principle  
    Gabriel Sandu

13. Compositionality in discourse from a logical perspective  
    Tim Fernando

PART IV  LEXICAL DECOMPOSITION

14. Lexical decomposition in grammar  
    Dieter Wunderlich

15. Lexical decomposition in modern syntactic theory  
    Heidi Harley

16. Syntax in the atom  
    Wolfram Hinzen

17. Co-compositionality in grammar  
    James Pustejovsky

PART V  THE COMPOSITIONALITY OF MIND

18. Typicality and compositionality: the logic of combining vague concepts  
    James A. Hampton and Martin L. Jönsson
19. Emergency!!!! Challenges to a compositional understanding of noun–noun combinations 403
   Edward J. Wisniewski and Jing Wu

20. Can prototype representations support composition and decomposition? 418
   Lila R. Gleitman, Andrew C. Connolly, and Sharon Lee Armstrong

21. Regaining composure: a defence of prototype compositionality 437
   Jesse J. Prinz

22. Simple heuristics for concept combination 454
   Edouard Machery and Lisa G. Lederer

PART VI EVOLUTIONARY AND COMMUNICATIVE SUCCESS

23. Compositionality and beyond: embodied meaning in language and protolanguage 475
   Michael A. Arbib

24. Compositionality and linguistic evolution 493
   Kenny Smith and Simon Kirby

25. Communication and the complexity of semantics 510
   Peter Pagin

26. Prototypes and their composition from an evolutionary point of view 530
   Gerhard Schurz

PART VII NEURAL MODELS OF COMPOSITIONAL REPRESENTATION

27. Connectionism, dynamical cognition, and non-classical compositional representation 557
   Terry Horgan
28. The Dual-Mechanism debate  
MARTINA PENKE  
574

29. Compositionality and biologically plausible models  
TERRENCE STEWART AND CHRIS ELIASMITH  
596

30. Neuronal assembly models of compositionality  
ALEXANDER MAYE AND ANDREAS K. ENGEL  
616

31. Non-symbolic compositional representation and its neuronal foundation:  
towards an emulative semantics  
MARKUS WERNING  
633

32. The processing consequences of compositionality  
GIOSUÈ BAGGIO, MICHEL VAN LAMBALGEN, AND PETER HAGOORT  
655

References  
673

Index  
725