Contents

Introduction:
The Study of Information in the Context of Knowledge Ecology ix
Gordana Dodig-Crnković and Mark Burgin

Part I: Philosophy of Information 1

1. Subject Is No Object: Complementary Basis of Information 3
   Piotr Bołtuć

2. Information and the Vision of Stephane Lupasco: Science, Logic and Philosophy 41
   Joseph E. Brenner

3. Information or Noise? 67
   Terrence W. Deacon

4. Reflections on the Concept of "Objective Non-Reality" in Information Philosophy 79
   En Wang

5. Rethinking Mencius Classical Debate on the Difference Between Humans and Animals Based on the Philosophy of Information 89
   Lu Wang

6. Philosophy of Information — Radical Changing Force of Philosophy 99
Kun Wu and Ping Wang

7. In the Light of Shadows: Tracing an Information Profile 121
Rossella Lupacchini

8. The Philosophy of Information as an Ethical Application of Social Epistemology: Informational Ontogenesis and Philosophical-Symbolic Dilemmas 147
Gustavo Silva Saldanha, Vinícios Souza de Menezes and Rodrigo Porto Bozzetti

Part II: Methodology of Information 169

9. Information-Oriented Analysis of Discovery and Invention in Mathematics 171
Mark Burgin

10. Evolutive Information in the Anthropocene Era 201
Rodolfo A. Fiorini

11. Computationalism in a Dynamic and Distributed Eco-cognitive Perspective 265
Lorenzo Magnani

12. Theoretical Study of the Concepts of Information Defined as Difference and as Identification of a Variety 289
Marcin J. Schroeder

13. Factors Space and Mechanism-Based Artificial Intelligence Theory 315
Peizhuang Wang

14. Beyond Metaphorization: A Blochian View onto Chaos and Fractality 337
Rainer E. Zimmermann and Zhang Xiaomeng

Part III: Philosophy of the Study of Information **351**

15. The Situated Nature of Informational Ontologies 353
Jordi Vallverdú

16. Discussion on the Necessity of Integrating Information Philosophy and Unified Information Science from the Perspective of Thomas Kuhn's Paradigm Theory 367
Zhensong Wang

17. Research on the Modernity of Confucianism from the Perspective of Philosophy of Information 399
Jun Liu

Part IV: Methodology of Information Studies **409**

18. Can Cybersemiotics Solve the Problem of Informational Transdisciplinarity? 411
Søren Brier

19. Ten Principles of Information Science 443
Pedro C. Marijuán and Jorge Navarro

20. Knowledge Structures and Conceptual Networks for Evaluation of Knowledge Integration 457
José María Díaz-Nafría, Mark Burgin and Blanca Rodriguez-Bravo

21. Universal Logics for Intelligent Information Processing 491
H. C. He, Y. Q. Zhou and Z. C. Chen

22. Information Ecology and Cognitive Justice: Core Value and Methodological Principles of Information Ecology 515
O. Kang

23. Information Ecology: The Methodology for Information Studies 525
Y. X. Zhong

Author Index 553