

CONTENTS

Introduction <i>Carlos Gershenson, Diederik Aerts and Bruce Edmonds</i>	1
Restricted Complexity, General Complexity <i>Edgar Morin</i>	5
Complexity Science as an Aspect of the Complexity of Science <i>Don C. Mikulecky</i>	30
On the Importance of a Certain Slowness <i>Paul Cilliers</i>	53
Simplicity is <i>Not</i> Truth-Indicative <i>Bruce Edmonds</i>	65
Can the Whole be More than the Computation of the Parts? A Reflection on Emergence <i>Camilo Olaya</i>	81
Why Diachronically Emergent Properties Must Also Be Salient <i>Cyrille Imbert</i>	99
On the Relativity of Recognising the Products of Emergence and the Nature of the Hierarchy of Physical Matter <i>Kurt A. Richardson</i>	117
Truth in Complex Adaptive Systems Models should be Based on Proof by Constructive Verification <i>David Shipworth</i>	141
Complexity as an Epistemic Revolution: Considerations on the New Science in the Context of Western Intellectual History <i>Damian Popolo</i>	156

Metaphors and Method: Epistemological Considerations on Complexity Science <i>Rodrigo Zeidan and Maria Fonseca</i>	173
Some Problems for an Ontology of Complexity <i>Michael McGuire</i>	181
How to Love the Bomb — Trying to Solve the Prisoner's Dilemma with Evolutionary Game Theory <i>Vasco Castela</i>	203
Physical Complexity and Cognitive Evolution <i>Peter Jedlicka</i>	221
Informational Dynamic Systems: Autonomy, Information, Function <i>Walter Riofrio</i>	232
Grasping the Complexity of Living Systems Through Integrative Levels and Hierarchies <i>J. M. Siqueiros and Jon Umerez</i>	250
Simulation as Formal and Generative Social Science: The Very Idea <i>Nuno David, Jaime Simão Sichman and Helder Coelho</i>	266
A Compromise Between Reductionism and Non-Reductionism <i>Eray Özkural</i>	285
The Complexity of Information-Processing Tasks in Vision <i>John Symons</i>	300
On the Possible Computational Power of the Human Mind <i>Hector Zenil and Francisco Hernandez-Quiroz</i>	315
How Does Complex Mathematical Theory Arise? Phylogenetic and Cultural Origins of Algebra? <i>Helen De Cruz</i>	338