

Contents

From Individual to Social Cognition: Piaget, Jung, and Commons	1
Francisco Antonio Pereira Fialho	
POEM-COPA Collaborative Open Peer Assessment	15
Pierre Collet, Raaj Seereekissoon, Isaac Abotsi, Marie Michaud-Maret, Anna Scius-Bertrand, Emma Tillich, and Pierre Parrend	
Ecological Dynamics: A Theoretical Framework for Understanding Sport Performance, Physical Education and Physical Activity	29
Ludovic Seifert and Keith Davids	
A Multi-agent System Approach to Load-Balancing and Resource Allocation for Distributed Computing	41
Soumya Banerjee and Joshua P. Hecker	
Is the Lean Organisation a Complex System?	55
Pierre Masai, Pierre Parrend, Nicolas Toussaint, and Pierre Collet	
An Artificial Immune Ecosystem Model for Hybrid Cloud Supervision...	71
Fabio Guigou, Pierre Parrend, and Pierre Collet	
Analysis of a Planetary Scale Scientific Collaboration Dataset Reveals Novel Patterns	85
Soumya Banerjee	
A Formal Model to Compute Uncertain Continuous Data	91
Jérôme Dantan, Yann Pollet, and Salima Taibi	
Bayesian Causalities, Mappings, and Phylogenies: A Social Science Gateway for Modeling Ethnographic, Archaeological, Historical Ecological, and Biological Variables	99
Douglas White, Paul Rodriguez, Eric Blau, Stuart Martin, Lukasz Lacinski, Thomas Uram, Feng Ren, Wesley Roberts, and Tolga Oztan	

A General Approach to the Linear Stability Analysis of Miscible Viscous Fingering in Porous Media	109
Tapan Kumar Hota, Satyajit Pramanik, and Manoranjan Mishra	
Viscosity Scaling in Hydrodynamic Instabilities in Porous Media	117
Satyajit Pramanik	
MOOC as a Complex System	125
Natália Nakano, Mariana Cantisani Padua, and Maria José Vicentini Jorente	
Emerging Dance Movements Under Ecological Constraints in Contact Improvisation Dancers with Different Background	133
C. Torrents, J. Coterón, A. Ric, and R. Hristovski	
Adaptability in Swimming Pattern: How Do Swimmers Modify Propulsive Action as a Function of Speed?	141
Christophe Schnitzler, Ludovic Seifert, Chris Button, Gavin Kennedy, and Huub Toussaint	
Emerging Collective Shared Behaviors from Individual Exploration in Football Small-Sided Games	149
A. Ric, C. Torrents, and R. Hristovski	
Matrimonial Patterns and Trans-Ethnic Entities	157
Philippe Ramirez	
Are Innovation Systems Complex Systems?	167
Emmanuel Muller, Jean-Alain Héraud, and Andrea Zenker	
Dynamic Emissions Reduction from Vehicles with Technical and Behavioral Approach	175
Mohammad Syafrizal, Estelle Bretagne, Nadia Hamani, Bambang Sugiarto, and Setyo Sarwanto Moersidik	
Frontal Systems as Mechanisms of Fish Aggregation	183
Alberto Baudena, Francesco d'Ovidio, Guido Boffetta, and Silvia De Monte	
Science Information and the Complexity: Are We Oriented to a Transdisciplinary Science?	187
Rafaela Carolina da Silva and Rosângela Formentini Caldas	
Flexible Perception-Action Strategies: The Influence of Segmental and Global Motion Information on Follow-the-Leader Coordination	191
Laurentius A. Meerhoff, Harjo J. De Poel, and Chris Button	

Dynamic Process of Pulmonary Data Analysis: From the Athlete Mouth to the Coach Hands 195
 A. Sousa, K. de Jesus, L. Machado, J.P. Vilas-Boas, and R.J. Fernandes

Lyapunov Exponents and Oceanic Fronts 199
 Francesco Toselli, Francesco d’Ovidio, Marina Lévy, Francesco Nencioli, and Olivier Titaud

Software is Not Fragile 203
 William B. Langdon and Justyna Petke

Open Systems Science: A Challenge to Open Systems Problems 213
 Mario Tokoro

Open Systems Exploration: An Example with Ecosystems Management 223
 Masatoshi Funabashi

Entropy, Earthquakes, and Tumors 245
 Oscar Sotolongo Costa

Coarse-Grained Molecular Dynamics for Copolymer-Vesicle Self-Assembly. Case Study: Sterically Stabilized Liposomes 255
 Alexander Kantardjiev and Pavletta Shestakova

Understanding and Modeling the Complexity of the Immune System 261
 Véronique Thomas-Vaslin

A Simple Paradigm for Nooeconomics, the Economy of Knowledge 271
 Idriss J. Aberkane

From Waste to Kwaste: On the Blue Economy in Terms of Knowledge Flow 283
 Idriss J. Aberkane

Exploring the Synergy Between Motorists and Motorcyclists in Urban Mobilization 291
 Juan C. Correa

Synergetic Economics. Scientifical Approaches of Synergistic Economic Networks and Systems 297
 Laura Melinda Stan

Synergy Drives the Evolutionary Dynamics in Biology and Economics ... 311
 Klaus Jaffe

A Case Study in the Emergence of Recursive Phrase Structure 333
 Emília Garcia-Casademont

From “Traces” and “Human Trace” to “Human-Trace Paradigm” 337
 Béatrice Galinon-Méléneç

Foundation of CS-DC e-Laboratory: Open Systems	
Exploration for Ecosystems Leveraging	351
Masatoshi Funabashi, Peter Hanappe, Takashi Isozaki, AnneMarie Maes, Takahiro Sasaki, Luc Steels, and Kaoru Yoshida	
Product Lifecycle Management (PLM): A Key to Manage	
Supply Chain Complexity	375
Imane Bouhaddou and Abdellatif Benabdelhafid	
Performance Improvement of Baggage Handling System in the	
Soekarno-Hatta International Airport	383
Dimas Novrisal, Nadia Hamani, A. Elmhamedi, and Tresna Soemardi	
Territory as a Narrative	385
Eddie Soulier	
Fractal Density and Singularity Analysis of Extreme Geo-Processes	395
Qiuming Cheng	
Globalisation, Multilingualism and Multiculturalism in Mozambique	407
Sarita Monjane Henriksen	
Lagrangian Approach to Phytoplankton Mesoscale	
Biogeography in the Kerguelen Region	415
Alice Della Penna, Simon Wotherspoon, Thomas W. Trull, Silvia De Monte, Craig Johnson, and Francesco d’Ovidio	
Index	421



<http://www.springer.com/978-3-319-45900-4>

First Complex Systems Digital Campus World
E-Conference 2015

Bourgine, P.; Collet, P.; Parrend, P. (Eds.)

2017, VIII, 424 p. 120 illus., 96 illus. in color., Hardcover

ISBN: 978-3-319-45900-4