Contents

I	Simulations as Tools for Modelling and Theory Building
1	Models, Processes and Algorithms: Towards a Simulation Toolkit 3 by Nigel Gilbert
2	Questions in the Methodology of Artificial Societies
3	Computer Assisted Interfacing: On the Use of Computer Simulation for Theory Construction
4	Interactive Neural Networks as Tools for Modeling Social Systems 48 by Christina Stoica
II	Multi-Agent Based Simulations
5	SMASS: A Serial Multi-Agent System for Social Simulation
6	PECS: A Reference Model for the Simulation of Multi-Agent Systems 83 by Christoph Urban
7	Bedrock: Building Multi-Agent Simulation Applications
8	Diversity in Strategies of Partnership Formation
Ш	Game Theory and Cellular Automata
9	Cellular Automata Models as a Modelling Tool
10	Evolution of Learning Rules in Space

viii Contents

11	Maintaining Diversity: Simulating the Role of Nonliniarity and Discrete in Dynamic Social Impact	eness 196
	by Bibb Latané & Hiroaki Morio	
12	Representation Methods and the Emergence of Inter-Group Cooperation	218
IV	Sensitivity Analysis	
13	Sensitivity Analysis in the Social Sciences: Problems and Prospects by Edmund Chattoe, Nicole J. Saam & Michael Möhring	. 243
14	Tests of Dynamic Social Models with Time Related Surveys: an Experimental Approach	274
15	What Is the Use of Gossip? A Sensitivity Analysis of the Spreading of Respectful Reputation	302
V	Applications	
16	Modelling Greening Investors: Economic Development, Opinion Format and Technological Change in a Multilevel Simulation Model	
17	Microsimulating Farm Business Performance by Philip Kokic, Ray Chambers & Steve Beare	344
18	Ordering Parameters in the Rule Space of Social Systems	351
Bio	graphical Sketches	373
Sub	eject Index	380
Aut	thor Index	382