

CONTENTS

<i>Introduction</i>	xi
<i>Prelude to Chapter 1: The Generativist Manifesto</i>	1
CHAPTER 1: Agent-Based Computational Models and Generative Social Science	4
<i>Joshua M. Epstein</i>	
<i>Prelude to Chapter 2: Confession of a Wandering Bark</i>	47
CHAPTER 2: Remarks on the Foundations of Agent-Based Generative Social Science	50
<i>Joshua M. Epstein</i>	
<i>Prelude to Chapter 3: Equilibrium, Explanation, and Gauss's Tombstone</i>	72
CHAPTER 3: Non-Explanatory Equilibria: An Extremely Simple Game with (Mostly) Unattainable Fixed Points	75
<i>Joshua M. Epstein and Ross A. Hammond</i>	
<i>Appendix to Chapter 3: Large Effect of a Subtle Rule Change</i>	86
<i>Prelude to Chapters 4–6: Generating Civilizations: The 1050 Project and the Artificial Anasazi Model</i>	88
CHAPTER 4: Understanding Anasazi Culture Change through Agent-Based Modeling	90
<i>Jeffrey S. Dean, George J. Gumerman, Joshua M. Epstein, Robert L. Axtell, Alan C. Swedlund, Miles T. Parker, and Stephen McCarroll</i>	
CHAPTER 5: Population Growth and Collapse in a Multiagent Model of the Kayenta Anasazi in Long House Valley	117
<i>Robert L. Axtell, Joshua M. Epstein, Jeffrey S. Dean, George J. Gumerman, Alan C. Swedlund, Jason Harburger, Shubha Chakravarty, Ross Hammond, Jon Parker, and Miles Parker</i>	

CHAPTER 6: The Evolution of Social Behavior in the Prehistoric American Southwest	130
<i>George J. Gumerman, Alan C. Swedlund, Jeffrey S. Dean, and Joshua M. Epstein</i>	
<i>Prelude to Chapter 7: Generating Patterns in the Timing of Retirement</i>	144
CHAPTER 7: Coordination in Transient Social Networks: An Agent-Based Computational Model of the Timing of Retirement	146
<i>Robert L. Axtell and Joshua M. Epstein</i>	
<i>Prelude to Chapter 8: Generating Classes without Conquest</i>	175
CHAPTER 8: The Emergence of Classes in a Multi-Agent Bargaining Model	177
<i>Robert L. Axtell, Joshua M. Epstein, and H. Peyton Young</i>	
<i>Prelude to Chapter 9: Generating Zones of Cooperation in the Prisoner's Dilemma Game</i>	196
CHAPTER 9: Zones of Cooperation in Demographic Prisoner's Dilemma	199
<i>Joshua M. Epstein</i>	
<i>Appendix to Chapter 9: Generating Norm Maps in the Demographic Coordination Game</i>	222
<i>Prelude to Chapter 10: Generating Thoughtless Conformity to Norms</i>	225
CHAPTER 10: Learning to be Thoughtless: Social Norms and Individual Computation	228
<i>Joshua M. Epstein</i>	
<i>Prelude to Chapter 11: Generating Patterns of Spontaneous Civil Violence</i>	245
CHAPTER 11: Modeling Civil Violence: An Agent-Based Computational Approach	247
<i>Joshua M. Epstein</i>	
<i>Prelude to Chapter 12: Generating Epidemic Dynamics</i>	271
CHAPTER 12: Toward a Containment Strategy for Smallpox Bioterror: An Individual-Based Computational Approach	277
<i>Joshua M. Epstein, Derek A.T. Cummings, Shubha Chakravarty, Ramesh M. Singha, and Donald S. Burke</i>	

<i>Prelude to Chapter 13: Generating Optimal Organizations</i>	307
CHAPTER 13: Growing Adaptive Organizations: An Agent-Based Computational Approach <i>Joshua M. Epstein</i>	309
<i>Coda</i>	345
<i>Index</i>	349

