## Contents

Lis	st of Figures	vi
	t of Tables	iz
	knowledgments	х
Int	roduction	xii
Pa	art I. Correlation and the Social Contract	1
1.	Evolution and the Social Contract	3
Pa	rt II. Importance of Dynamics	27
2.	Trust, Risk, and the Social Contract	31
3.	Bargaining with Neighbors: Is Justice Contagious? with Jason Alexander	38
4.	Stability and Explanatory Significance of Some Simple Evolutionary Models	50
5.	Dynamics of Conformist Bias	73
6.	Chaos and the Explanatory Significance of Equilibrium: Strange Attractors in Evolutionary Game Dynamics	83
7.	Evolutionary Dynamics of Collective Action in N-person Stag Hunt Dilemmas with Jorge M. Pacheco, Francisco C. Santos, and Max O. Souza	110
8.	Learning to Take Turns: The Basics with Peter Vanderschraaf	128
9.	Evolutionary Considerations in the Framing of Social Norms with Kevin J. S. Zollman	135
Pa	rt III. Dynamic Networks	147
10.	Learning to Network with Robin Pemantle	149
11.	A Dynamic Model of Social Network Formation with Robin Pemantle	163

12.	Network Formation by Reinforcement Learning: The Long and the Medium Run with Robin Pemantle	187
13.	Time to Absorption in Discounted Reinforcement Models with Robin Pemantle	205
Pa	rt IV. Dynamics of Signals	221
14.	Learning to Signal: Analysis of a Micro-level Reinforcement Model with Raffaele Argiento, Robin Pemantle, and Stanislav Volkov	225
15.	Inventing New Signals with Jason McKenzie Alexander and Sandy L. Zabell	250
16.	Signals, Evolution, and the Explanatory Power of Transient Information	274
17.	Co-Evolution of Pre-play Signaling and Cooperation with Francesco Santos and Jorge Pacheco	298
18.	Evolution of Signaling Systems with Multiple Senders and Receivers	314
Inc	dex	337