# Table of Contents

# Detailed Table of Contents

This chapter inverts the usual assumptions implicit in MAS by suggesting that it is the human agents who may be emulating non-human agents, and that the task for the researcher is as much to develop different human behaviors as it is as different models for non-human agents. In the process, the authors draw a much richer (and more ambiguous) picture of agent communication (including the possibilities in miscommunication). Fittingly, the application of some of these ideas leads us to questions of second-order emergence.



This chapter takes the social theories elaborated in Part I in the designs of Virtual Learning Environments designed to reduce the incidence (as well as mitigate the effects) of school bullying. In these hybrid agent interactions, "believability" is an emergent category—non-human agents can be "too believable" (and hence unbelievable), as are ideas about empathy and engagement.



This chapter looks at reputation as the "meta-belief" enabling other beliefs and, in the process, generates other, emergent socialities: cooperation, altruism, and other reciprocal behaviors.



In this chapter, the forms emerging from temporal variance in a MAS are exploited by agents who attempt to influence each other's beliefs, in the process stretching Conway's cellular automata to new (and emergent) applications in both simulations and future, hybrid MAS.