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Nota di contenuto	Chapter 1. Agent based models, tools -- Chapter 2. Simulating self-organization and interference between certain hierarchical structures -- Chapter 3. Interactions between terror and anti-terror organizations -- Chapter 4. Organization growth and decay: simulating interactions of hierarchical structures, corruption and gregarious effect -- Chapter 5. The spontaneous rise of the herd instinct: agent based simulation -- Chapter 6. Influence of the gregarious instinct and individuals' behavior patterns on macro migrations: Simulation experiments -- Chapter 7. Simulating our self-destruction -- Chapter 8. Prey-predator models revisited: uncertainty, herd instinct, fear, limited food, epidemics,

evolution and competition -- Chapter 9. Discret event simulation vs continuous system dynamics.

Sommario/riassunto

This book presents examples of and the latest simulation studies on artificial societies and populations, highlighting innovative implementations of various models of artificial societies and populations using a new, C++-related simulation tool. It demonstrates that the prey-predator models—including spatial distribution, moving patterns, limited renewable food, fear, gregarious (herd) instinct, clustering, epidemics, and competition—are more complex than other publications have suggested, and highlights the great discrepancy between agent-based and conventional continuous models. The book also discusses the modeling and simulation of self-organization and interactions between organizations, including terror organizations, offering fascinating insights into organizational dynamics. The book provides a broad range of examples and comparisons with the classical dynamics approach, showing readers how to construct models of complex systems. It starts with descriptions of the behavior of interacting individuals and also includes important information on the macro-behavior of the whole system.
