1. Record Nr. UNINA9910369914003321 Autore Wallace Rodrick **Titolo** Cognitive Dynamics on Clausewitz Landscapes: The Control and Directed Evolution of Organized Conflict / / by Rodrick Wallace Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-26424-6 Edizione [1st ed. 2020.] 1 online resource (173 pages) Descrizione fisica Disciplina 355.02 Soggetti Politics and war Peace **Statistics** System theory Military and Defence Studies **Conflict Studies** Statistics for Social Sciences, Humanities, Law Systems Theory, Control Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Contrasting tactical and strategic dynamics -- Chapter 2. Doctrine and the fog-of-war -- Chapter 3. On asymmetric conflict --Chapter 4. The Albigensian ground state -- Chapter 5. Can there be 'Third Stream' doctrine?- Chapter 6. Reconsidering doctrine and its discontents -- Chapter 7. Challenges to the US security doctrine of 'Resilience' -- Chapter 8. Culture and the induction of emotional dysfunction on a Clausewitz landscape -- Chapter 9. Expected unexpecteds: Cambrian explosions in Lamarckian systems -- Chapter 10. Reconsidering Clausewitz Landscape dynamics -- Chapter 11. Failure of a paramilitary system: a case history of catastrophe --Chapter 12. An emerging catastrophe: The weaponization of emotional sentience in AI -- Chapter 13. Final Remarks -- Chapter 14. Mathematical Appendix.

This book applies cutting-edge methods from cognitive and

evolutionary theories to develop models of conflict between

Sommario/riassunto

hierarchically-structured cognitive entities under circumstances of imprecision, uncertainty and stress. Characterized as friction and the fog-of-war by the Prussian military theorist Carl von Clausewitz, such conditions impair institutional cognition in real-time conflict and pose a real and continuing threat to organizations, such as the US military. In a linked collection of formal essays and a mathematical appendix, the book explores different aspects of cognitive and evolutionary process as conducted under the direction of doctrine that acts as a kind of genome for retention of what is learned through Lamarckian evolutionary selection pressures: armies and corporate entities learn from conflict, and incorporate that learning into their ongoing procedures. The book proposes models and policy solutions for strategic competence. A central feature of the book is a formal description of the famous OODA loop of the US military theorist John Boyd in terms of the Data Rate Theorem that links control and information theories. That description is expanded to cover more fully the impact of stochastic fog-of-war effects on tactical and operational scales of conflict. Subsequent chapters examine in more detail the role of doctrine, and the particular effect of embedding culture on cognitive and Lamarckian evolutionary processes associated with conflict on tactical, operational, and strategic scales and levels of organization. A scientifically sophisticated exercise in applied mathematics, history, evolutionary theory, and ecosystem theory, this book will be appropriate for researchers and students interested in defense, security, and international relations, as well as non-academic career professionals in government and industry.