

Contents

| | | |
|---------------|--|-----|
| Editor's Note | Philip Vos Fellman | 1 |
| Part I | The Theoretical Background | 1 |
| 1 | Modeling Terrorist Networks: The Second Decade | 3 |
| | Philip Vos Fellman | |
| 2 | Complex Systems Studies and Terrorism | 35 |
| | Czeslaw Mesjasz | |
| 3 | The Psychology of Terrorism | 73 |
| | Elena Mastors | |
| 4 | A Framework for Agent-Based Social Simulations of Social Identity Dynamics..... | 89 |
| | M. Afzal Upal | |
| 5 | DIME/PMESII Models..... | 111 |
| | Dean S. Hartley III | |
| 6 | Net-Centric Logistics: Complex Systems Science Aims at Moving Targets..... | 137 |
| | Thomas Ray | |
| Part II | Applications and Case Studies | |
| 7 | A Fractal Concept of War | 149 |
| | Maurice Passman | |
| 8 | Disrupting Terrorist Networks: A Dynamic Fitness Landscape Approach | 165 |
| | Philip Vos Fellman, Jonathan P. Clemens, Roxana Wright, Jonathan Vos Post, and Matthew Dadmun | |

| | | |
|---|---|-----|
| 9 Comparison of Approaches for Adversary Modeling | <i>Decision Support for Counterterrorism.....</i> | 179 |
| Barry Ezell and Gregory S. Parnell | | |
| 10 The Landscape of Maritime Piracy and the Limits of Statistical Prediction..... | | 199 |
| Philip Vos Fellman, Dinorah Frutos, Thanarerk "Nathan" Thanakijisombat, Pard Teekasap, and Britten Schear | | |
| 11 Identities, Anonymity and Information Warfare..... | | 221 |
| Stuart Jacobs, Lou Chitkushev, and Tanya Zlateva | | |

Part III Broader Horizons

| | | |
|--|--|-----|
| 12 The Geography of Ethnic Violence..... | | 235 |
| Alex Rutherford, May Lim, Richard Metzler, Dion Harmon, Justin Werfel, Shlomiya Bar-Yam, Alexander Gard-Murray, Andreas Gros, and Yaneer Bar-Yam | | |
| 13 Food Security and Political Instability: From Ethanol and Speculation to Riots and Revolutions | | 249 |
| Marco Lagi, Karla Z. Bertrand, and Yaneer Bar-Yam | | |
| 14 South African Riots: Repercussion of the Global Food Crisis and US Drought | | 261 |
| Yavni Bar-Yam, Marco Lagi, and Yaneer Bar-Yam | | |
| 15 Conflict in Yemen: From Ethnic Fighting to Food Riots | | 269 |
| Andreas Gros, Alexander S. Gard-Murray, and Yaneer Bar-Yam | | |
| 16 Complexity and the Limits of Revolution: What Will Happen to the Arab Spring? | | 281 |
| Alexander S. Gard-Murray and Yaneer Bar-Yam | | |