

Contents

Foreword: Ethics for the Coming Epoch of Conflict vii

JOHN ARQUILLA

Notes on Contributors xiii

Introduction: Editors' Introduction 1

Part I FOUNDATIONAL NORMS FOR CYBERWARFARE

1. Emerging Norms for Cyberwarfare 13

GEORGE R. LUCAS JR.

2. The Emergence of International Legal Norms for Cyberconflict 34

MICHAEL N. SCHMITT AND LIIS VIHUL

3. Distinctive Ethical Issues of Cyberwarfare 56

RANDALL R. DIPERT

Part II CYBERWARFARE AND THE JUST WAR TRADITION

4. *Cyber Chevauchées*: Cyberwar Can Happen 75

DAVID WHETHAM

5. Cyberwarfare as Ideal War 89

RYAN JENKINS

6. Postcyber: Dealing with the Aftermath of Cyberattacks 115

BRIAN OREND

PART III ETHOS OF CYBERWARFARE

7. Beyond *Tallinn*: The Code of the Cyberwarrior? 139

MATTHEW BEARD

8. Immune from Cyberfire? The Psychological and Physiological Effects of Cyberwarfare 157

DAPHNA CANETTI, MICHAEL L. GROSS, AND ISRAEL WAISMEL-MANOR

9. Beyond Machines: Humans in Cyberoperations, Espionage, and Conflict 177

DAVID DANKS AND JOSEPH H. DANKS

PART IV CYBERWARFARE, DECEPTION, AND PRIVACY

10. Cyber Perfidy, Ruse, and Deception 201

HEATHER M. ROFF

11. Cyberattacks and "Dirty Hands": Cyberwar, Cybercrime, or Covert Political Action? 228

SEUMAS MILLER

12. Moral Concerns with Cyberespionage: Automated Keyword Searches and Data Mining 251

MICHAEL SKERKER

Name Index 277

Subject Index 283