

Table of Contents

Foreword

Cyborgs and Symbionts: Living Together in the New World Order xi
Donna J. Haraway

Introduction

Cyborgology: Constructing the Knowledge of Cybernetic Organisms 1
Chris Hables Gray, Steven Mentor, Heidi J. Figueroa-Sarriera

Part 1: The Genesis of Cyborg

- 1.1 African Influences in Cybernetics 17
Ron Eglash
- 1.2 Cyborgs and Space 29
Manfred E. Clynes and Nathan S. Kline
- 1.3 Cyborg II: Sentic Space Travel 35
Manfred E. Clynes
- 1.4 An Interview with Manfred E. Clynes 43
conducted by Chris Hables Gray
- 1.5 How Do We Get There? 55
Jack E. Steele, USAF, MC
- 1.6 An Interview with Jack E. Steele 61
conducted by Chris Hables Gray

The Proliferation of Cyborgs

Part 2: in Science and Engineering/in Space and War

- 2.1 Engineering Man For Space: The Cyborg Study 75
Robert W. Driscoll
- 2.2 Teleoperators and Human Augmentation 83
Edwin G. Johnsen and William R. Corliss
- 2.3 An Interview with Patricia Cowings 93
conducted by Ron Eglash
- 2.4 Pilot's Associate 101
DARPA
- 2.5 Science Fiction Becomes Military Fact 104
Chris Hables Gray
- 2.6 Short Circuit: Watching Television with a Nuclear-Weapons Scientist 107
Hugh Gusterson
- 2.7 Socializing the Cyborg Self: The Gulf War and Beyond 119
Ken Robins and Les Levidow
- 2.8 Children of the Mind with Disposable Bodies: Metaphors of Self in a Text on Artificial Intelligence and Robotics 127
Heidi J. Figueroa-Sarriera

Part 3: in Medicine

- 3.1 Modernity, Postmodernity, & Reproductive Processes, ca. 1890-1990, or "Mommy, Where Do Cyborgs Come From Anyway?" 139
Adele Clarke
- 3.2 Barney B. Clark, DDS: A View From the Medical Service 157
F. Andrew Gaffney, MD and Barry J. Fenton, MD
- 3.3 Artificial Heart and Assist Devices: Directions, Needs, Costs, Societal and Ethical Issues (abstract) 161
Robert L. Van Citters, et al.
- 3.4 Artificial Liver: Present and Future 163
Motokazu Hori
- 3.5 ISAO Proffers a Marvelous Cover for Acting Out Fantasies 167
Eli A. Friedman
- 3.6 Minerva v. National Health Agency 169
George J. Annas
- 3.7 Fetal Cyborgs and Technomoms on the Reproductive Frontier: Which Way to the Carnival? 183
Monica J. Casper
- 3.8 Tales From the Cryptic: Technology Meets Organism in the Living Cadaver 203
Linda F. Hogle

Part 4: in the imagination

- 4.1 From Captain America to Wolverine: Cyborgs in Comic Books, Alternative Images of Cybernetic Heroes and Villains 219
Mark Oehlert
- 4.2 Recalling Totalities: The Mirrored Stages of Arnold Schwarzenegger 233
Jonathan Goldberg
- 4.3 Art, Psychasthenic Assimilation, and the Cybernetic Automaton 255
David Tomas
- 4.4 Envisioning Cyborg Bodies: Notes From Current Research 267
Jennifer González
- 4.5 "Death is Irrelevant": Cyborgs, Reproduction, and the Future of Male Hysteria 281
Cynthia J. Fuchs
- 4.6 Digital Pistil 301
Lois H. Gresh
- 4.7 I Hope I Shall Arrive Soon 307
Philip K. Dick
- 4.8 The Life Cycle of Cyborgs: Writing the Posthuman 321
N. Katherine Hayles

The Futures Of Cyborgs

Part 5: Cyborg Anthropology

- 5.1 Cyborg Anthropology 341
Gary Lee Downey, Joseph Dumit, Sarah Williams
- 5.2 Brain-Mind Machines and American Technological Dream Marketing: Towards an Ethnography of Cyborg Envy 347
Joseph Dumit
- 5.3 Human Agency in CAD/CAM Technology 363
Gary Lee Downey
- 5.4 On Low-Tech Cyborgs 371
David J. Hess
- 5.5 "Perhaps Images at One with the World are Already Lost Forever": Visions of Cyborg Anthropology in Post-Cultural Worlds 379
Sarah Williams

Part 6: The Politics of Cyborgs

- 6.1 Split Subjects, Not Atoms; or, How I Fell In Love With My Prosthesis 393
Sandy Stone

6.2	New Sciences: Cyborg Feminism and the Methodology of the Oppressed	407
	Chela Sandoval	
6.3	Postcolonial Cyborgs: Subjectivity in the Age of Cybernetic Reproduction	423
	Joseba Gabilondo	
6.4	From Cognitive Psychologies to Mythologies: Advancing Cyborg Textualities for a Narrative of Resistance	433
	William R. Macauley and Angel J. Gordo-López	
6.5	The Conversion of Père Version	445
	Lorne Falk and Mireille Perron	
6.6	The Cyborg Body Politic: Version 1.2	453
	Chris Hables Gray and Steven Mentor	
	Bibliography	469
	Filmography	475
	Biographies	478
	Index	481
	Illustrations	537
	Acknowledgements	539