Contents

Foreword by Lev Manovich 11

Introduction 15

Acknowledgments 19

01 | The Tree of Life 21

Sacred Trees — Trees of Knowledge — The End of an Era

02 | From Trees to Networks 43

Planning a City — Neural Landscape — Ubiquitous Datasphere — Social Collaboration — Classifying Information — Ordering Nature — Network Thinking

03 | Decoding Networks 73

The Birth of Network Science — Psychological Geography — The Cartography of Networks — Principles of Network Visualization

04 | Infinite Interconnectedness 97

Blogosphere — Citations — Del.icio.us — Donations — Email — Internet — Literature — Music — News — Proteins — Terrorism — Trajectories — Twitter — Wikipedia

05 | The Syntax of a New Language 159

Arc Diagram — Area Grouping — Centralized Burst — Centralized Ring — Circled Globe — Circular Ties — Elliptical Implosion — Flow Chart — Organic Rhizome — Radial Convergence — Radial Implosion — Ramifications — Scaling Circles — Segmented Radial Convergence — Sphere

06 | Complex Beauty 221

Holism — Complexity Encoding — Ordered Complexity — Networkism

07 | Looking Ahead 245

Seeing the World in Data

by Nathan Yau 246

—

The Fall and Rise of Ambient Visualization

by Andrew Vande Moere 249

—

Cybernetics Revisited: Toward a Collective Intelligence

by Christopher Kirwan 252

—

Reflexive Ecologies: Visualizing Priorities

by David McConville 255

Bibliography 258

Contributor Biographies 263

Image Credits 264

Index 265