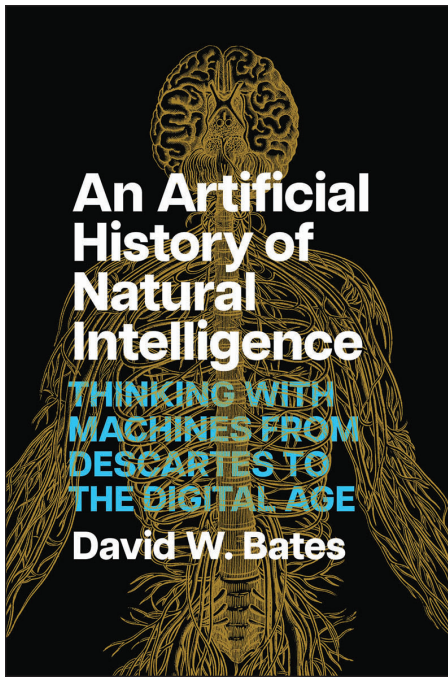


DAVID W. BATES

# An Artificial History of Natural Intelligence

Thinking with Machines from Descartes to the Digital Age

APRIL | 408 p. | 15 halftones | 6 x 9 | Cloth \$45.00



**David W. Bates** is professor of rhetoric at the University of California, Berkeley. He is the author of three books, including *Enlightenment Aberrations: Error and Revolution in France* and *States of War: Enlightenment Origins of the Political*.

## TABLE OF CONTENTS

Frame

1. Autonomy and Automaticity: On the Contemporary Question of Intelligence

### Part One: The Automatic Life of Reason in Early Modern Thought

2. Integration and Interruption: The Cartesian Thinking Machine

3. Spiritual Automata: From Hobbes to Spinoza

4. Spiritual Automata Revisited: Leibniz and Automatic Harmony

5. Hume's Enlightened Nervous System

Threshold: Kant's Critique of Automatic Reason

6. The Machinery of Cognition in the First Critique

7. The Pathology of Spontaneity: The Critique of Judgment and Beyond

### Part Two: Embodied Logics of the Industrial Age

8. Babbage, Lovelace, and the Unexpected

9. Psychophysics: On the Physio-Technology of Automatic Reason

10. Singularities of the Thermodynamic Mind

11. The Dynamic Brain

12. Prehistoric Humans and the Technical Evolution of Reason

13. Creative Life and the Emergence of Technical Intelligence

Prophecy: The Future of Extended Minds

14. Technology Is Not the Liberation of the Human but Its Transformation . . .

### Part Three: Crises of Order: Thinking Biology and Technology between the Wars

15. Techniques of Insight

16. Brains in Crisis, Psychic Emergencies

17. Bio-Technicity in Von Uexküll

18. Lotka on the Evolution of Technical Humanity

19. Thinking Machines

20. A Typology of Machines

21. Philosophical Anthropology: The Human as Technical Exteriorization

Hinge: Prosthetics of Thought

22. Wittgenstein on the Immateriality of Thinking

### Part Four: Thinking Outside the Body

23. Cybernetic Machines and Organisms

24. Automatic Plasticity and Pathological Machines

25. Turing and the Spirit of Error

26. Epistemologies of the Exosomatic

27. Leroi-Gourhan on the Technical Origin of the Exteriorized Mind

The Beginning of an End

28. Technogenesis in the Networked Age

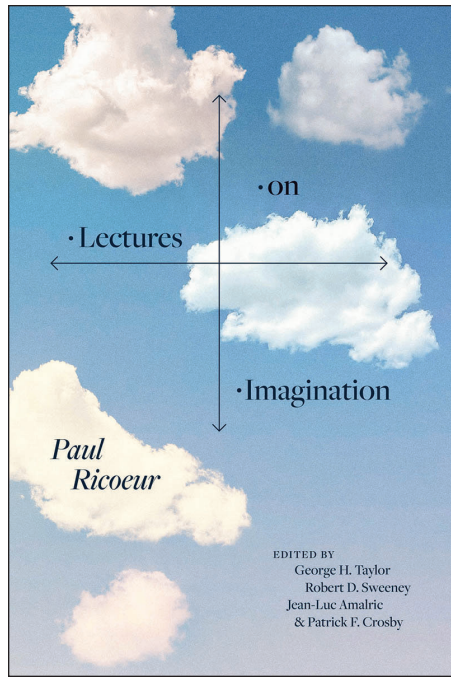
29. Failures of Anticipation: The Future of Intelligence in the Era of Machine Learning

Acknowledgments

Notes

Index

## PHILOSOPHY



**Paul Ricoeur** (1913–2005) was the John Nuveen Professor in the Divinity School, the Department of Philosophy, and the Committee on Social Thought at the University of Chicago. He was the author of many books, including *Memory, History, Forgetting*, *Oneself as Another*, and the three-volume *Time and Narrative*, all published by the University of Chicago Press. **George H. Taylor** is professor emeritus of law at the University of Pittsburgh. **Robert D. Sweeney** (1929–2016) was the Don Shula Chair in Philosophy at John Carroll University. **Jean-Luc Amalric** teaches at the CPGE Arts and Design in Nîmes and the Research Center for Arts and Language (CRAL), EHESS, Paris. **Patrick F. Crosby** (1948–2020) was an independent Ricoeur scholar.

**PAUL RICOEUR**

# Lectures on Imagination

*Edited by George H. Taylor, Robert D. Sweeney, Jean-Luc Amalric, and Patrick F. Crosby*

MARCH | 400 p. | 1 tables | 6 x 9 | Cloth \$45.00

The eminent philosopher Paul Ricoeur was devoted to the imagination. These previously unpublished lectures offer Ricoeur's most significant and sustained reflections on creativity as he builds a new theory of imagination through close examination, moving from Aristotle, Pascal, Spinoza, Hume, and Kant to Ryle, Price, Wittgenstein, Husserl, and Sartre. These thinkers, he contends, underestimate humanity's creative capacity. While the Western tradition generally views imagination as derived from the reproductive example of the image, Ricoeur develops a theory about the mind's power to produce new realities. Modeled most clearly in fiction, this productive imagination, Ricoeur argues, is available across conceptual domains. His theory provocatively suggests that we are not constrained by existing political, social, and scientific structures. Rather, our imaginations have the power to break through our conceptual horizons and remake the world.

## TABLE OF CONTENTS

Editor's Acknowledgments by George H. Taylor

Editor's Introduction by George H. Taylor

1 Introductory Lecture

### Part One: Classical Readings

2 Aristotle

3 Pascal and Spinoza

4 Hume

5 Kant: Critique of Pure Reason

6 Kant: Critique of Judgment

### Part Two: Modern Readings

7 Ryle

8 Ryle (2) and Price

9 Wittgenstein

10 Husserl: Logical Investigations

11 Husserl: Ideas

12 Sartre (1)

13 Sartre (2)

14. Sartre (3)

### Part Three: Imagination as Fiction

15 Fiction (1): Introduction

16 Fiction (2): Metaphor

17 Fiction (3): Painting

18 Fiction (4): Models

19 Fiction (5): Poetic Language

Notes

Bibliography

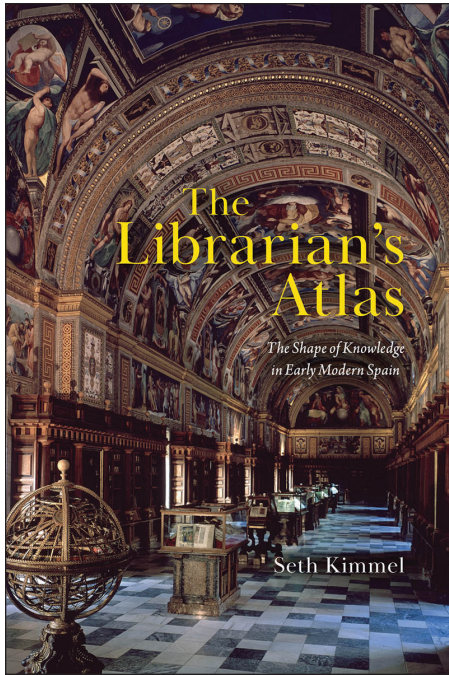
Index

SETH KIMMEL

# The Librarian's Atlas

The Shape of Knowledge in Early Modern Spain

MAY | 304 p. | 20 halftones | 5 1/2 x 8 1/2 | Cloth \$45.00



**Seth Kimmel** is associate professor of Latin American and Iberian cultures at Columbia University. He is the author of *Parables of Coercion: Conversion and Knowledge at the End of Islamic Spain*, also published by the University of Chicago Press.

Medieval scholars imagined the library as a microcosm of the world, but as novel early modern ways of managing information facilitated empire in both the New and Old Worlds, the world became a projection of the library. In *The Librarian's Atlas*, Seth Kimmel offers a sweeping material history of how the desire to catalog books coincided in the sixteenth and seventeenth centuries with the aspiration to control territory. Through a careful study of library culture in Spain and Morocco—close reading catalogs, marginalia, indexes, commentaries, and maps—Kimmel reveals how a book-lover's dream of a comprehensive and well-organized library shaped an expanded sense of the world itself.

## TABLE OF CONTENTS

List of Figures

Introduction: Books in Place

One: Hernando Colón's Cosmography

Two: Routes of Antiquarianism: From Seville to San Lorenzo

Three: A Universal Library for Philip II: Juan Páez de Castro and the Escorial's Order of Knowledge

Four: Biblioteca and Biblia: Benito Arias Montano's Logics of Place

Five: This Holy Land: Semitic Philology and Peninsular Toponymy

Six: Spanish Orientalism and Sa'adī Cultures of the Catalog

Conclusion: "Libraries" and the Shape of Knowledge

Acknowledgments

Notes

Bibliography

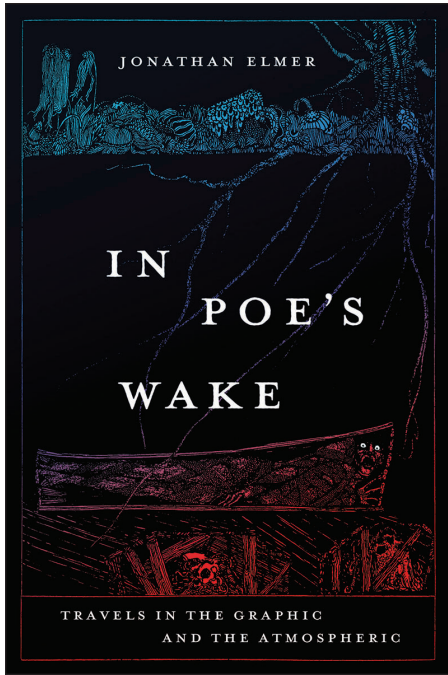
Index

JONATHAN ELMER

# In Poe's Wake

## Travels in the Graphic and the Atmospheric

JUNE | 224 p. | 18 color plates, 28 halftones | 6 x 9 | Paper \$22.50



**Jonathan Elmer** is professor of English at Indiana University. He is author of *Reading at the Social Limit: Affect, Mass Culture, and Edgar Allan Poe* and *On Lingering and Being Last: Race and Sovereignty in the New World*.

You'll find his face everywhere, from coffee mugs, bobbleheads, and T-shirts to the cover of the Beatles' *Sergeant Pepper's Lonely Hearts Club Band*. Edgar Allan Poe is one of American culture's most recognizable literary figures, his life and works inspiring countless derivations beyond the literary realm. Poe's likeness and influence have been found in commercial illustration and kitsch, art installations, films, radio plays, children's cartoons, and video games. What makes Poe so hugely influential in media other than his own? What do filmmakers, composers, and other artists find in Poe that suits their purposes so often and so variously?

*In Poe's Wake* locates the source of the writer's enduring legacy in two vernacular aesthetic categories: the graphic and the atmospheric. Jonathan Elmer uses Poe to explore these two terms and track some deep patterns in their use, not through theoretical labor but through close encounters with a wide sampling of aesthetic objects that avail themselves of Poe's work. Poe's writings are violent and macabre, memorable both for certain grisly images and for certain prevailing moods or atmospheres—dread, creepiness, and mournfulness. Furthermore, a bundle of certain Poe traits—his thematic emphasis on extreme sensation, his flexible sense of form, his experimental and modular method, and his iconic visage—amount to what could be called a Poe “brand,” one as likely to be found in music videos or comics as in novels and stories. Encompassing René Magritte, Claude Debussy, Lou Reed, Roger Corman, Spongebob Squarepants, and many others, Elmer's book shows how the Poe brand opens trunk lines to aesthetic experiences fundamental to a multi-media world.

### TABLE OF CONTENTS

Introduction

The Face, the Brand

Graphic and Atmospheric

Method and Mosaic

**Part I: Graphic**

1. The Black Box and the Eye
  - Graphicality
  - Graphic/Literature
  - The Black Box
  - The Eye
  - Disclosure
  - Facing the Unreadable

2. Unwatchable

- The Frenzy of the Visible and the Grave of the Eye
- The Black Box, Illuminated
- Juvenile Culture
- From Body Genres to Torture Porn

**Part II: Atmospheric**

3. The House and Its Atmospheres
  - Eaten Up by Ambience
  - Flow and Flou
  - La Lumière Cendrée
  - Atmosphere, Art, Eversion
  - Atmosphere and the Deformation of the Same
  - Aura and Aria

4. Estrangements of Voice

- The Pythian Cosmos
- Earworm
- The Work of Art in the Age of Its Supernatural Reproducibility
- The Presence of Absence
- Incursion, Immersion, Explosion
- Ambient Diptych

Afterword

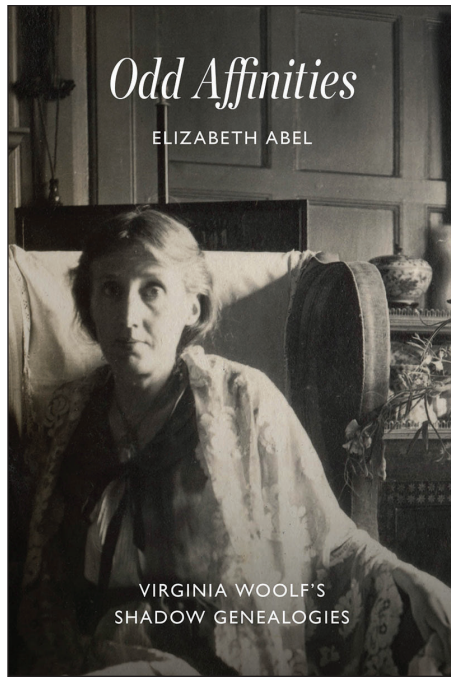
Acknowledgments

Notes

Bibliography

Index

### LITERATURE AND LITERARY CRITICISM



**Elizabeth Abel** is the John F. Hotchkis Professor of English at the University of California, Berkeley. She is the author of *Virginia Woolf and the Fictions of Psychoanalysis* and *Signs of the Times: The Visual Politics of Jim Crow* and the editor or coeditor of four collections, most recently, *Female Subjects in Black and White: Race, Psychoanalysis, Feminism*.

ELIZABETH ABEL

# Odd Affinities

## Virginia Woolf's Shadow Genealogies

APRIL | 304 p. | 15 halftones | 6 x 9 | Paper \$32.50

For decades, Virginia Woolf's work has been viewed primarily within a female literary tradition. Elizabeth Abel dislodges Woolf from her iconic place within this tradition to uncover her shadowy presence in other literary genealogies. Abel elicits unexpected echoes of Woolf in four major writers from diverse cultural contexts: Nella Larsen, James Baldwin, Roland Barthes, and W.G. Sebald. By mapping the wayward paths of what Woolf called "odd affinities" that traverse the boundaries of gender, race, and nationality, Abel offers a new account of the arc of Woolf's career and the transnational modernist genealogy constituted by her elusive and shifting presence. *Odd Affinities* will appeal to students and scholars working in New Modernist studies, comparative literature, gender and sexuality studies, and African American studies.

### TABLE OF CONTENTS

List of Figures

Acknowledgments

Introduction: Woolf Tracks

#### Part I: Woolf's Room in African American Modernism

Chapter 1: *Mrs. Dalloway* in Harlem: Passing's Contending Modernisms

Chapter 2: The Smashed Mosaic: Woolf's Traces in Baldwin's Oeuvre

#### Part II: Woolf's Refuge in Late European Modernism

Chapter 3: Light Rooms: Virginia Woolf, Roland Barthes, and the Mediums of Maternal Mourning

Chapter 4: Invisible Subjects: Woolf's Flickering in Sebald's Austerlitz

Afterword: Vibrations and Visibility

List of Abbreviations

Notes

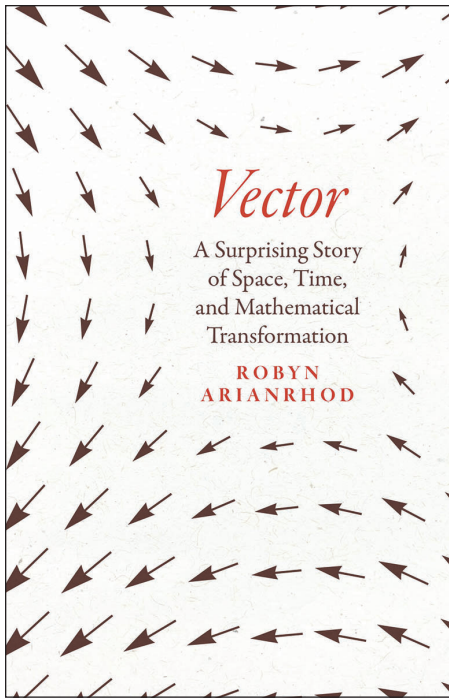
Index

ROBYN ARIANRHOD

# Vector

## A Surprising Story of Space, Time, and Mathematical Transformation

MAY | 376 p. | 13 halftones, 39 line drawings | 5 1/2 x 8 1/2 | Cloth \$28.00



### Praise for *Einstein's Heroes*

**“Arianrhod’s achievement is to so masterfully combine history, biography, and mathematics as to absorb and enlighten even the mathematically maladroit.”**

—*Booklist*

**Robyn Arianrhod** is a science writer and mathematician affiliated with Monash University’s School of Mathematics, where she studies general relativity. She is the author of the critically acclaimed books *Einstein’s Heroes: Imagining the World through the Language of Mathematics*; *Seduced by Logic: Émilie du Châtelet, Mary Somerville and the Newtonian Revolution*; and *Thomas Harriot: A Life in Science*.

The stars of this book, vectors and tensors, are unlikely celebrities. If you ever took a physics course, the word “vector” might remind you of the mathematics needed to determine forces on an amusement park ride, a turbine, or a projectile. You might also remember that a vector is a quantity that has magnitude and (this is the key) direction. In fact, vectors are examples of tensors, which can represent even more data. It sounds simple enough—and yet, as award-winning science writer Robyn Arianrhod shows in this riveting story, the idea of a single symbol expressing more than one thing at once was millennia in the making. And without that idea, we wouldn’t have such a deep understanding of our world.

Vector and tensor calculus offers an elegant language for expressing the way things behave in space and time, and Arianrhod shows how this enabled physicists and mathematicians to think in a brand-new way. These include James Clerk Maxwell when he ushered in the wireless electromagnetic age; Einstein when he predicted the curving of space-time and the existence of gravitational waves; Paul Dirac, when he created quantum field theory; and Emmy Noether, when she connected mathematical symmetry and the conservation of energy. For it turned out that it’s not just physical quantities and dimensions that vectors and tensors can represent, but other dimensions and other kinds of information, too. This is why physicists and mathematicians can speak of four-dimensional space-time and other higher-dimensional “spaces,” and why you’re likely relying on vectors or tensors whenever you use digital applications such as search engines, GPS, or your mobile phone.

In exploring the evolution of vectors and tensors—and introducing the fascinating people who gave them to us—Arianrhod takes readers on an extraordinary, five-thousand-year journey through the human imagination. She shows the genius required to reimagine the world—and how a clever mathematical construct can dramatically change discovery’s direction.

### TABLE OF CONTENTS

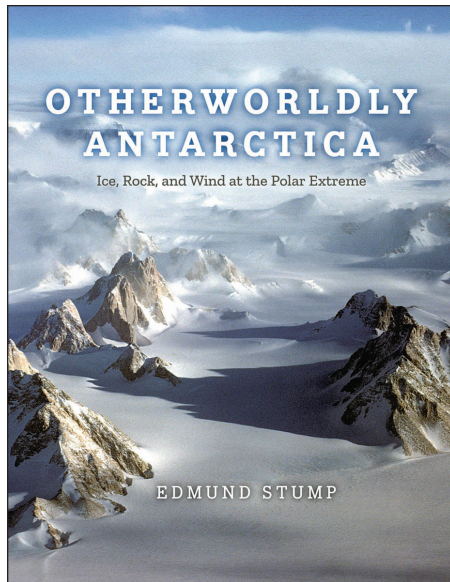
Prologue

1. The Liberation of Algebra
2. The Arrival of Calculus
3. Ideas for Vectors
4. Understanding Space (and Storage)
5. A Surprising New Player and a Very Slow Reception

6. Tait and Maxwell: Hatching the Electromagnetic Vector Field
7. The Slow Journey from Quaternions to Vectors
8. Vector Analysis at Last—and a “War” over Quaternions
9. From Space to Space-Time: A New Twist for Vectors
10. Curving Spaces and Invariant Distances: On the Way to Tensors

11. Inventing Tensors—and Why They Matter
  12. Everything Comes Together: Tensors and the General Theory of Relativity
  13. What Happened Next
- Epilogue  
Timeline  
Acknowledgments  
Notes  
Index

### SCIENCE-HISTORY



**“Stump has made studying these mountains his life’s work. . . . Thanks to the stunning photographs . . . this solid and dependable book is as beautiful as the mountains it describes.”—*Nature, on The Roof at the Bottom of the World***

**Edmund Stump** is a retired professor of exploration at Arizona State University where he taught geology for thirty-seven years. In a research career funded by the National Science Foundation spanning forty years and thirteen Antarctic field seasons, he studied and sampled rocks throughout the 1,500-mile length of the Transantarctic Mountains and collected samples from the Vinson Massif, the highest summit in Antarctica. He is the author of *The Roof at the Bottom of the World: Discovering the Transantarctic Mountains*.

**EDMUND STUMP**

# Otherworldly Antarctica

Ice, Rock, and Wind at the Polar  
Extreme

APRIL | 168 p. | 144 color plates | 8 1/2 x 11 | Cloth \$28.00

The interior of Antarctica is an utterly pristine wilderness, a desolate landscape of ice, wind, and rock; a landscape so unfamiliar as to seem of another world. This place has been known to only a handful of early explorers and the few scientists fortunate enough to have worked there. Edmund Stump is one of the lucky few. Having climbed, photographed, and studied more of the continent-spanning Transantarctic Mountains than any other person on Earth, this geologist, writer, and photographer is uniquely suited to share these alien sights.

With stories of Stump’s forty years of journeys and science, *Otherworldly Antarctica* contains 130 original, color photographs, complemented by watercolors and sketches by artist Marlene Hill Donnelly. Over three chapters—on the ice, the rock, and the wind—we meet snowy paths first followed during Antarctica’s Heroic Age, climb the central spire of the Organ Pipe Peaks, peer into the crater of the volcanic Mt. Erebus, and traverse Liv Glacier on snowmobile, while avoiding fatal falls into the blue interiors of hidden crevasses. Along the way, we see the beauty of granite, marble, and ice-cored moraines, meltwater ponds, lenticular clouds, icebergs, and glaciers. Many of Stump’s breathtaking images are aerial shots taken from the planes and helicopters that brought him to the interior. More were shot from vantages gained by climbing the mountains he studied. Some were taken from the summits of peaks. Many are places no one had set foot before—or has since. All seem both permanent and precarious, connecting this otherworld to our fragile own.

## TABLE OF CONTENTS

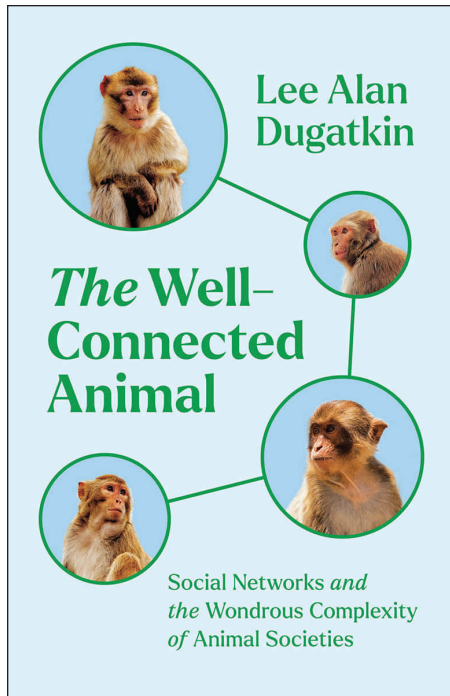
- Preface
- Introduction: The Spectre and the Glory
- 1. The Ice
- 2. The Rock
- 3. The Wind
- Afterword
- Acknowledgments
- Appendix

LEE ALAN DUGATKIN

# The Well-Connected Animal

Social Networks and the Wondrous Complexity of Animal Societies

MAY | 264 p. | 10 color plates, 6 halftones, 1 table | 5 1/2 x 8 1/2 | Cloth \$29.00



## Praise for Dugatkin

**“Dugatkin’s depiction of power in the wild yields a stunningly provocative reflection.”—*Wall Street Journal*, on *Power in the Wild***

**“A story that is part science, part Russian fairy tale, and part spy thriller. . . . Sparkling.”—*New York Times Book Review*, on *How to Tame a Fox (and Build a Dog)***

**Lee Alan Dugatkin** is an evolutionary biologist and historian of science in the Department of Biology at the University of Louisville. Among his many books, he is co-author of *How to Tame a Fox (and Build a Dog)* and the author of *Power in the Wild*, both also published by the University of Chicago Press.

It’s all about who you know. Whether vampire bats sharing blood meals for survival, field crickets remembering champion fighters, macaque monkeys forming grooming pacts after a deadly hurricane, or great tit birds learning the best way to steal milk—it pays to be well connected.

In this tour of the animal kingdom, evolutionary biologist Lee Alan Dugatkin reveals a new field of study, uncovering social networks that existed long before the dawn of human social media. He accessibly describes the latest findings from animal behavior, evolution, computer science, psychology, anthropology, genetics, and neurobiology, and incorporates interviews and insights from researchers that he finds swimming with manta rays, avoiding pigeon poop, and stopping monkeys from stealing iPads. With Dugatkin as our guide, we investigate social networks in giraffes, elephants, kangaroos, Tasmanian devils, whales, bats, and more. From animal networks in Australia and Asia to Africa, Europe, and the Americas, *The Well-Connected Animal* is an eye-opening expose of wild friends, enemies, and everything in between.

## TABLE OF CONTENTS

Preface

1. The Networked Animal
2. The Ties That Bind
3. The Food Network
4. The Reproduction Network
5. The Power Network
6. The Safety Network
7. The Travel Network
8. The Communication Network
9. The Culture Network
10. The Health Network

Afterword

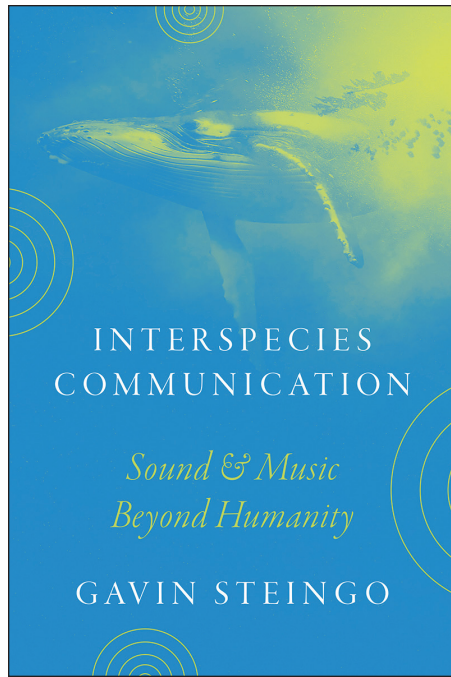
Acknowledgments

Notes

Index

SCIENCE





**Gavin Steingo** is professor of music at Princeton University. He is the author of *Kwaito's Promise: Music and the Aesthetics of Freedom in South Africa*, published by the University of Chicago Press.

**GAVIN STEINGO**

# Interspecies Communication

Sound and Music beyond Humanity

MARCH | 256 p. | 10 halftones | 6 x 9 | Paper \$27.50

In *Interspecies Communication*, music scholar Gavin Steingo examines significant cases of attempted communication beyond the human—cases in which the dualistic relationship of human to non-human is dramatically challenged. From singing whales to Sun Ra to searching for alien life, Steingo charts the many ways we have attempted to think about, and indeed to reach, beings that are very unlike ourselves.

Steingo focuses on the second half of the twentieth century, when scientists developed new ways of listening to oceans and cosmic space—two realms previously inaccessible to the senses and to empirical investigation. As quintessential frontiers of the postwar period, the outer space of the cosmos and the inner space of oceans were conceptualized as parallel realities, laid bare by newly technologized “ears.” Deeply engaging, *Interspecies Communication* explores our attempts to cross the border between the human and non-human, to connect with non-humans in the depths of the oceans, the far reaches of the universe, or right under our own noses.

## TABLE OF CONTENTS

Preface

Introduction: Interspecies Prattle

### I. Animal

1. Lilly's Wager

2. Tales of Love

### II. Alien

Prefatory Remark to the Second Part

3. The Incomparable

4. An Alien Music

Epilogue

Acknowledgments

Appendix: A Summary Excursion into Biosemiotics

Notes

Index

GAVIN WILLIAMS

# Format Friction

## Perspectives on the Shellac Disc

JUNE | 208 p. | 14 halftones, 2 tables | 6 x 9 | Paper \$30.00

*New Material Histories of Music*

With the rise of the gramophone around 1900, the shellac disc traveled the world and eventually became the dominant sound format of the first half of the twentieth century. *Format Friction* brings together a set of local encounters with the shellac disc, beginning with its preconditions in South Asian knowledge and labor as well as early colonial expeditions to capture sounds, to offer a global portrait of this format.

Spun at 78 revolutions per minute, the shellac disc rapidly became an industrial standard, even while the gramophone itself remained a novelty. The very basis of this early sound reproduction technology was friction, an elemental materiality of sound shaped through cultural practice. Using friction as a lens, Gavin Williams illuminates the environments plundered, the materials seized, and the ears entangled in the making of this format. Bringing together material, political, and music history, *Format Friction* decenters the story of a beloved medium and so too explores new ways of understanding listening in technological culture more broadly.

### TABLE OF CONTENTS

Introduction: Friction into Format

1. Shellac as Musical Plastic

2. Sound Capital

Interlude: Remembering 78s in Singapore

3. The Reproduction of Caruso

4. Gramophone vs. Gazooka

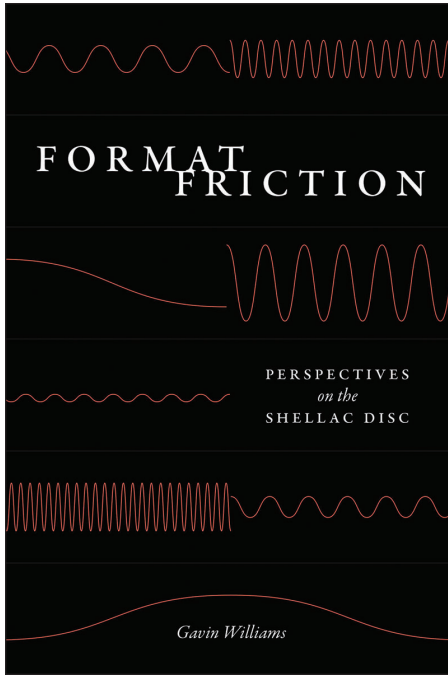
5. Being and Listening

Acknowledgments

Notes

Bibliography

Index



**Gavin Williams** is a lecturer in music at King's College London. He is the editor of *Hearing the Crimean War: Wartime Sound and the Unmaking of Sense*.

DEBBIE BERNE

# The Design of Books

An Explainer for Authors, Editors, Agents, and Other Curious Readers

MARCH | 256 p. | 45 halftones | 6 x 9 | Paper \$22.50

*Chicago Guides to Writing, Editing, and Publishing*

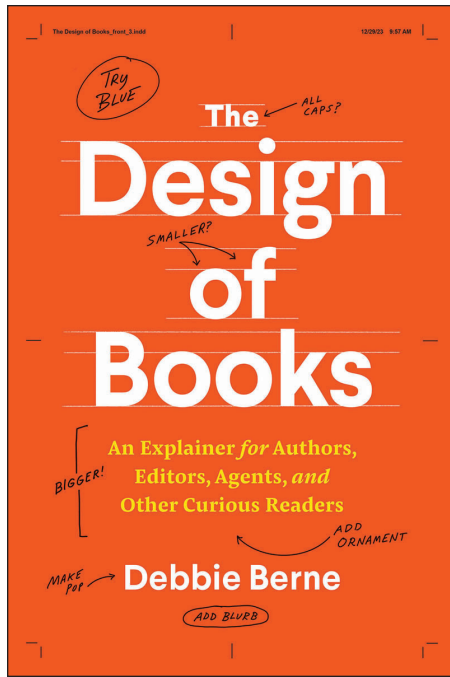
In this book, you'll learn about:

- The different kinds of books
- The anatomy of a book
- Paper and printing options
- Typeface vs. font
- The logic of typesetting
- How to plan ahead for sidebars
- Working with images
- Reflowable ebooks
- Cover design
- Self-publishing
- Working with freelancers
- and more

Design is central to the appeal, messaging, and usefulness of books, but to most readers, it's mysterious or even invisible. Through interiors as well as covers, designers provide structure and information that shape the meaning and experience of books. In *The Design of Books*, Debbie Berne shines a light on the conventions and processes of her profession, revealing both the aesthetic and market-driven decisions designers consider to make books readable and beautiful. In clear, unstuffy language, Berne reveals how books are put together, with discussions of production considerations, typography and fonts, page layouts, use of images and color, special issues for ebooks, and the very face of each book: the cover.

*The Design of Books* speaks to readers and directly to books' creators—authors, editors, and other publishing professionals—helping them to become more informed partners in the design of their projects. Berne lays out the practical steps at each stage of the design process, providing insight into who does what when and offering advice for authors on how to be effective advocates for their ideas while also letting go and trusting their manuscripts with teams of professionals. She includes guidance as well for self-publishing authors, including where to find a designer, what to expect from that relationship, and how to art direct your own book.

Throughout, Berne teaches how understanding the whats, hows, and whys of book design heightens our appreciation of these cherished objects and helps everyone involved in the process to create more functional, desirable, and wonderful books.

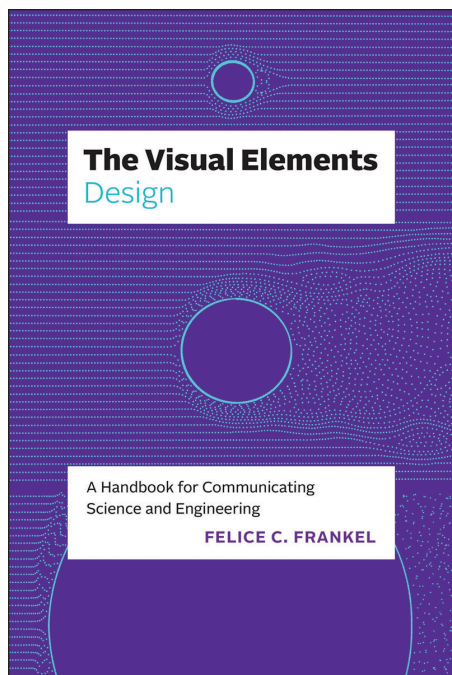


**Debbie Berne** has been a professional book designer since 2002 and has designed hundreds of books and book covers. This is the first book she has both written and designed.

## TABLE OF CONTENTS

Introduction  
 Chapter 1: The Physical Book  
 Chapter 2: Type  
 Chapter 3: The Cover  
 Chapter 4: Inside the Book  
 Chapter 5: Illustrated Books  
 Chapter 6: Ebooks  
 Chapter 7: The Design Process  
 Postscript  
 Appendix  
 Glossary  
 Notes  
 Further Readings  
 Acknowledgments  
 Image Credits  
 Index

## REFERENCE



**“Frankel is a legend when it comes to science imaging. This book is her powerful, inspiring guide to the tools and techniques for success.”—Randi Klett, photography director, *IEEE Spectrum*, on *The Visual Elements—Photography***

**Felice C. Frankel** is an award-winning science photographer and research scientist in the Department of Chemical Engineering at the Massachusetts Institute of Technology. Working in collaboration with scientists and engineers, Frankel has had images appear in the *New York Times*, *National Geographic*, *Nature*, *Science*, *PNAS*, *Newsweek*, *Scientific American*, *Discover*, *Popular Science*, and *New Scientist*, among others. She is the author or coauthor of several books, including *Visual Strategies*, *Picturing Science and Engineering*, and *The Visual Elements—Photography*, the last also published by the University of Chicago Press.

**FELICE C. FRANKEL**

# The Visual Elements—Design

A Handbook for Communicating Science and Engineering

MARCH | 208 p. | 232 color plates, 18 halftones | 5 1/2 x 8 1/2 | Paper \$20.00

## *The Visual Elements*

In this short handbook, award-winning science communicator Felice C. Frankel offers a quick guide for scientists and engineers who want to share—and better understand—their research by designing compelling graphics for journal submissions, grant applications, presentations, and posters. Like all the books in the *Visual Elements* series, this handbook is also a training tool for researchers. Distilling her celebrated books and courses to the essentials, Frankel shows scientists and engineers, from students to primary investigators, the importance of thinking visually. This crucial volume in the *Visual Elements* series offers a wealth of engaging design examples. Case studies and advice from designers at prestigious publications and researchers’ own before-and-after examples show how even the smallest changes—to color, type, composition, and layering—can greatly improve communication. Ideal for researchers who want a foothold for presenting and preparing their work for everything from conferences to publications, the book explains the steps for creating a concise and communicative graphic to highlight the most important aspects of research—and to clarify researchers’ own thinking. The resulting book is an essential element of any scientist’s, engineer’s, or designer’s library.

## TABLE OF CONTENTS

- Introduction
- 1 Listing and Sketching
- 2 Case Studies—Iterating the Iterations
- 3 Graphic Submissions—Figuring the Figures
- 4 Posters and Slide Presentations
- A Last Word or Two
- Credits

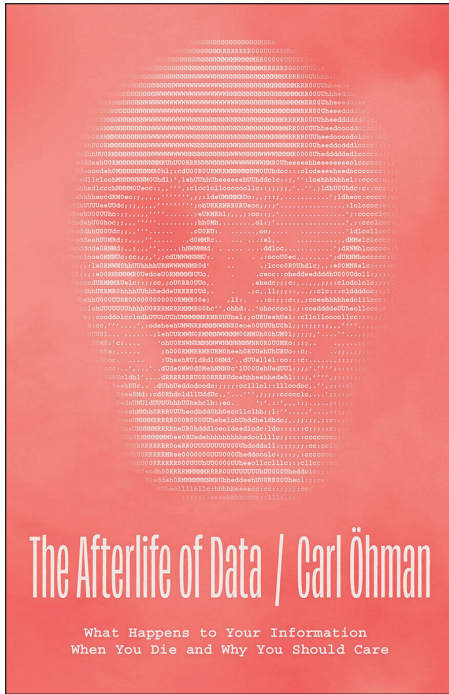
## REFERENCE

CARL ÖHMAN

# The Afterlife of Data

## What Happens to Your Information When You Die and Why You Should Care

APRIL | 200 p. | 2 halftones | 5 1/2 x 8 1/2 | Cloth \$22.50



Carl Öhman is assistant professor of political science at Uppsala University, Sweden.

These days, so much of our lives takes place online—but what about our afterlives? Thanks to the digital trails of data that we leave behind, our identities can now be reconstructed after our death. In fact, AI technology is already enabling us to “interact” with the departed. Sooner than we think, the dead will outnumber the living on Facebook. In this short, thought-provoking book, Carl Öhman explores the increasingly urgent question of what we should do with all this data—and to whom do our digital afterlives belong.

The stakes could hardly be higher. In the next thirty years alone, about two billion people will die. Those of us who remain will inherit the digital remains of an entire generation of humanity—the first digital citizens. Whoever ends up controlling these archives will also effectively control future access to our collective digital past, which will give them great power with vast political consequences. The fate of our digital remains should be of concern to everyone—past, present, and future. Rising to these challenges, Öhman explains, will require a collective reshaping of our economic and technical systems to reflect more than just the monetary values of digital remains.

As we stand before a period of deep civilizational change, *The Afterlife of Data* will be an essential guide to understanding why and how we as a human race must gain control of our collective digital past—before it is too late.

### TABLE OF CONTENTS

#### Introduction: A Collective Matter

The New Natufians  
 What Do We Do with the Digital Dead?  
 Everyone’s Concern

#### Chapter 1: From Bones to Bytes

Beginnings  
 The Deep Time of the Dead  
 The Portable Dead  
 The Port from Which We Depart  
 Where Are We Now?

#### Chapter 2: How to Think about Digital Remains

What Are Digital Remains?  
 Ghost Cars and Prayer Bots

### SOCIAL SCIENCE

The Informational Corpse  
 Can the Dead Be Harmed?  
 The Digital Encyclopedia of the Dead  
 Brutus’s Closet  
 Not So Valuable After All?

#### Chapter 3: The Rise of the Digital Afterlife Industry

Ash & Martha  
 The Digital Afterlife Industry  
 Critiquing the Industry  
 Online Museums

#### Chapter 4: Who Owns the (Digital) Past?

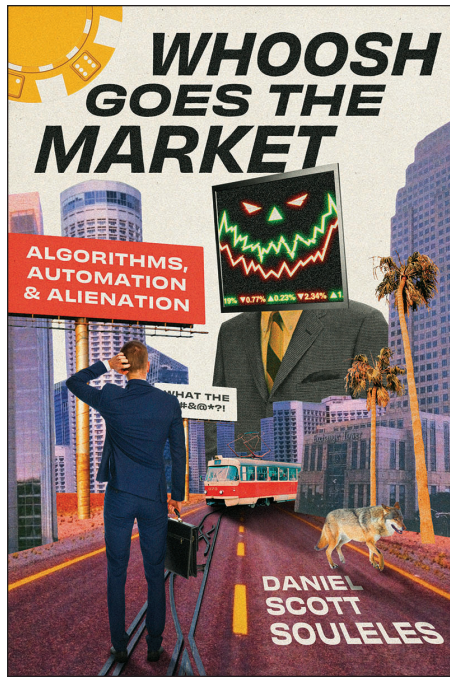
Grave Dangers  
 Who Is Worth Preserving?

What If Facebook Goes Bust?  
 Orwell’s Warning  
 Decentralizing Control

#### Chapter 5: Living in the Post-Mortal Condition

In the Shoes of Max Brod  
 The Meaning of “Post-Mortal” and “Condition”  
 Archeopolitan Duties  
 What Is to Be Done?

Epilogue  
 Acknowledgments  
 Notes  
 Bibliography  
 Index



DANIEL SCOTT SOULELES

# Whoosh Goes the Market

## Algorithms, Automation, and Alienation

JUNE | 208 p. | 5 halftones, 9 tables | 6 x 9 | Paper \$27.50

**Daniel Scott Souleles** is an anthropologist who is associate professor in the Department of Business Humanities and Law at the Copenhagen Business School. He is the author of *Songs of Profit, Songs of Loss: Private Equity, Wealth, and Inequality* and a coeditor of *People before Markets: An Alternative Casebook*.

Markets are messy, and no one knows this better than traders who work tirelessly to predict what they will do next. In *Whoosh Goes the Market*, Daniel Scott Souleles takes us into the day-to-day experiences of a team at a large trading firm, revealing what it's actually like to make and lose money on contemporary capital markets.

The team Souleles shadows have mostly moved out of the pits and now work with automated, glitch-prone computer systems. They remember the days of trading manually, and they are suspicious of algorithmically driven machine-learning systems. Openly musing about their own potential extinction, they spend their time expressing fear and frustration in profanity-laced language. With Souleles as our guide, we learn about everything from betting strategies to inflated valuations, trading swings, and market manipulation. This crash course in contemporary finance vividly reveals the existential anxiety at the evolving frontlines of American capitalism.

### TABLE OF CONTENTS

Preface: Five Times a Day?	Acknowledgments
1. Whooshing Up	Appendix A. Note-Taking Summary
2. Everything Is Down Again	Appendix B. Profanity Distribution
3. The Greatest Trader in the World	Appendix C. AlgoFinance Project Informants
4. On Markets: Rallies and Flows	Appendix D. How Exchange Professionals Use the Word Market
5. Eternal Optimizers	Appendix E. How Quants Use the Word Stem Algo
6. A Nice Chianti for Our Trading Partner, the Target Bomber	Glossary of Some Trading Words
7. They Don't Tell You That There's No Price	Notes
8. Why Would You Buy an Electric Car on Jet Ski Friday?	References
9. The Economy Will Be Open by Easter	Index

### SOCIAL SCIENCE



**Teresa Ghilarducci** is professor of economics and policy analysis at the New School for Social Research in New York City. She serves as the director of the Schwartz Center for Economic Policy Analysis and the New School's Retirement Equity Lab (ReLab). She also writes a regular column for Forbes's #RetireWell blog.

**TERESA GHILARDUCCI**

# Work, Retire, Repeat

The Uncertainty of Retirement in the New Economy

*With a Foreword by E. J. Dionne Jr.*

MARCH | 264 p. | 6 line drawings, 8 tables | 6 x 9 | Cloth \$25.00

While the French went on strike in 2023 to protest the increase in the national retirement age, workers in the United States have all but given up on the notion of dignified retirement for all. Instead, Americans—whose elders face the highest risk of poverty compared to workers in peer nations—are fed feel-good stories about Walmart clerks who can finally retire because a customer raised the necessary funds through a GoFundMe campaign.

Many argue that the solution to the financial straits of American retirement is simple: people need to just work longer. Yet this call to work longer is misleading in a multitude of ways, including its endangering of the health of workers and its discrimination against people who work in lower-wage occupations. In *Work, Retire, Repeat*, Teresa Ghilarducci tells the stories of elders locked into jobs—not because they love to work but because they must.

But this doesn't need to be the reality. *Work, Retire, Repeat* shows how relatively low-cost changes to how we finance and manage retirement will allow people to truly choose how they spend their golden years.

## TABLE OF CONTENTS

Foreword by E. J. Dionne Jr.

### **Part I: How the Working-Longer Consensus Made the Retirement Crises Worse**

Chapter 1: The Erosion of Retirement and the Rise of Retirement Inequality

Chapter 2: The Shift to Retirement Insecurity

### **Part II: The Hidden Costs of Working Longer**

Chapter 3: Working Longer Is Often Not a Choice

Chapter 4: Working Longer Can Harm Your Health

Chapter 5: Working Longer Creates Unequal Retirement Time

Chapter 6: Working Longer Does Little to Improve Retirement Security

Chapter 7: When Older Workers Lose, All Workers Lose

Chapter 8: The High Cost of Bad Pensions

### **Part III: The Gray New Deal**

Chapter 9: Good Jobs for Older Workers

Chapter 10: Creating Better Pensions

Notes

Bibliography

Index

POLITICAL SCIENCE

CORINA LACATUS

# The Strength of Our Commitments

## National Human Rights Institutions in Europe and Beyond

FEBRUARY | 248 p. | 4 line drawings, 18 tables | 6 x 9 | Paper \$39.00

*Chicago Series on International and Domestic Institutions*

In the years since World War II, the endeavor to promote human rights has gained momentum and become increasingly important within international relations. Yet these efforts often run into serious problems of enforcement.

Many countries formed national human rights institutions (NHRIs) with independent mandates to support and monitor government compliance with international human rights law. Be they commissions, ombudsmen, or tribunals, these institutions vary in their power and impact. For this book, Corina Lacatus surveyed NHRIs in Europe and around the world to determine their effectiveness and explain why some succeed while others fail.

*The Strength of Our Commitments* explores the relationship between the domestic and international support an institution receives and its ability to secure resources, credibility, and tangibly improve human rights conditions. Lacatus shows that NHRIs can be models of resilience, even in the face of opposition from political elites. Although their impact on human rights is difficult to measure, *The Strength of Our Commitments* shows how NHRIs' strength comes from clearly defined formal powers, strong institutional leadership, and independence from political interference.

### TABLE OF CONTENTS

Introduction

1. The Strength and Effectiveness of National Human Rights Institutions
2. The Strength and Effectiveness of National Human Rights Institutions in Central and Eastern Europe
3. The Strength and Effectiveness of National Human Rights Institutions in Western Europe
4. European and Global Patterns of Socialization: A Quantitative Exploration of Institutional Strength

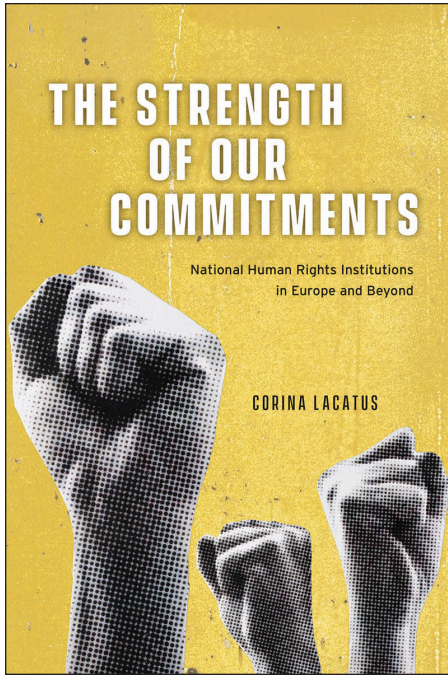
Conclusion

Acknowledgments

Appendix

References

Index



**Corina Lacatus** is associate professor of global governance at Queen Mary University of London. She is the author of *The (In)visibility Complex*.