

The MIT Press Fall 2020



Dear Friends and Readers,

I love the image we've selected for the cover of our Fall 2020 catalog (from *The Architecture of Bathing*, p. 20). It evokes for me how we all feel at this odd moment in history: at sea, isolated, connected only from a distance with other human beings. These uncharted waters have brought some of us closer than others to real loss and trauma, and yet . . . life in many forms goes on. The life of the mind, in particular, can flourish in the midst of circumscribed options and diminished distraction. Thousands of scholars and researchers of all stripes around the world have turned their attention to understanding, ameliorating, and explaining the unprecedented COVID-19 pandemic and what lies ahead.

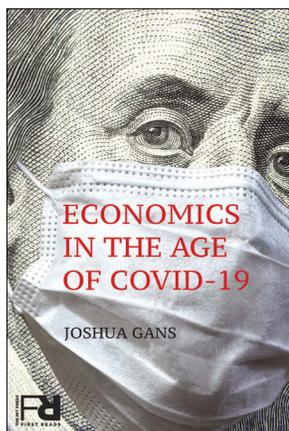


Amy Brand

As we grapple with the seemingly uncontrollable spread of this virus, with the implications of social distancing, and with the tragic loss of human life, we all need resources to help us make sense of this crisis. The mission of the MIT Press challenges us to rise to the occasion in what and how we publish. It is in this spirit that we have launched MIT Press First Reads, a new series of rapidly produced, digital-first titles providing expert insight to inform matters of urgent local and global consequence.

Our first book in the series is *Economics in the Age of COVID-19* by economist Joshua Gans. In this book, Gans steps back from the short-term chaos to take a clear and systematic look at how economic choices are being made in response to COVID-19. He outlines the phases of the pandemic economy, from containment to reset to recovery and enhancement. The publication of this book and the launch of MIT Press First Reads speak resoundingly to who we are as a publisher. You can count on the MIT Press to respond quickly, without sacrificing editorial rigor or quality, to the pressing need for timely information, as we strive to help readers weather this storm.

Amy Brand, PhD
Director, The MIT Press



New from the MIT Press **Economics in the Age of COVID-19**

Joshua Gans

now available
MIT Press First Reads
978-0-262-36279-5
eBook

The Pandemic Information Gap and the Brutal Economics of COVID-19

Joshua Gans

economics
November | 6 x 9, 160 pp.
\$19.95T paper
978-0-262-53912-8

Contents

Trade 1-43

Paperback reprints 44-54

Distributed by the MIT Press

Afterall Books 55

Goldsmiths Press 56-58

no place press 59

Semiotext(e) 60-62

Sternberg Press 63-74

Strange Attractor Press 75-77

Terra Nova Press 78

Urbanomic 79-80

Urbanomic/Sequence Press 81

Academic Impact 82-88

Professional 89-119

Journals 119-121

The Digital MIT Press 122

**Order and Rights Representation
Information** 123-124

Index 125-127

Paperback Highlights 128

Recent Highlights 129

Gift Books 130-inside back cover

The MIT Press gratefully acknowledges Books On Books (www.books-on-books.com) for sponsoring the planting of a tree through World Land Trust (www.worldlandtrust.org) in honor of each new book in the Fall 2020 catalog.

Front Cover:
Floating in the Dead Sea.
Photograph by Audrey Sel,
Wikicommons. From *The Architecture
of Bathing* by Christie Pearson.

The Smart Wife

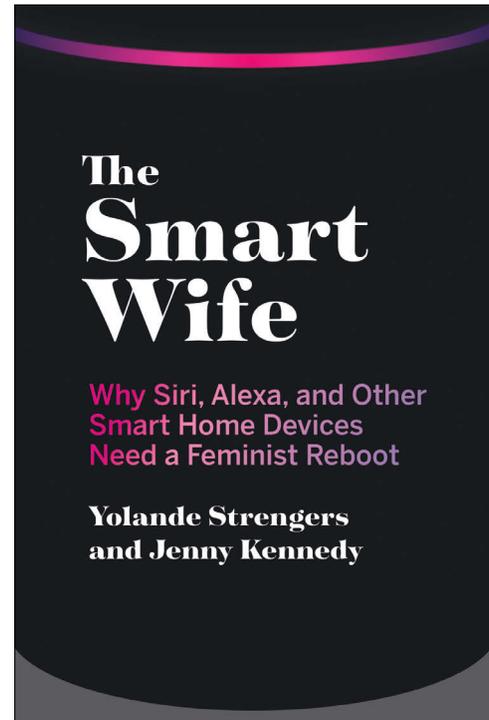
Why Siri, Alexa, and Other Smart Home Devices
Need a Feminist Reboot

Yolande Strengers and Jenny Kennedy

Meet the Smart Wife—at your service, an eclectic collection of feminized AI, robotic, and smart devices. This digital assistant is friendly and sometimes flirty, docile and efficient, occasionally glitchy but perpetually available. She might go by Siri, or Alexa, or inhabit Google Home. She can keep us company, order groceries, vacuum the floor, turn out the lights. A Japanese digital voice assistant—a virtual anime hologram named Hikari Azuma—sends her “master” helpful messages during the day; an American sexbot named Roxxy takes on other kinds of household chores. In *The Smart Wife*, Yolande Strengers and Jenny Kennedy examine the emergence of digital devices that carry out “wifework”—domestic responsibilities that have traditionally fallen to (human) wives. They show that the principal prototype for these virtual helpers—designed in male-dominated industries—is the 1950s housewife: white, middle class, heteronormative, and nurturing, with a spick-and-span home. It’s time, they say, to give the Smart Wife a reboot.

What’s wrong with preferring domestic assistants with feminine personalities? We like our assistants to conform to gender stereotypes—so what? For one thing, Strengers and Kennedy remind us, the design of gendered devices re-inscribes those outdated and unfounded stereotypes. Advanced technology is taking us backwards on gender equity. Strengers and Kennedy offer a Smart Wife “manifesta,” proposing a rebooted Smart Wife that would promote a revaluing of femininity in society in all her glorious diversity.

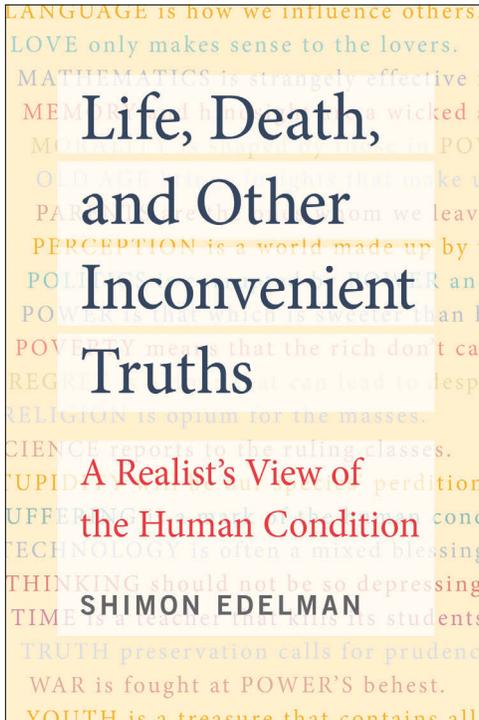
Yolande Strengers is Associate Professor of Digital Technology and Society in the Emerging Technologies Research Lab at Monash University, Melbourne. **Jenny Kennedy** is a Postdoctoral Research Fellow in the School of Media and Communication at RMIT University, Melbourne.



The life and times of the Smart Wife—feminized digital assistants who are friendly and sometimes flirty, occasionally glitchy but perpetually available.

September
6 x 9, 312 pp.
33 illus.

\$29.95T cloth
978-0-262-04437-0



**A guide for making sense
of life—from action
(good except when it's not)
to thinking (depressing)
to youth (a treasure).**

October
6 x 9, 312 pp.

\$26.95T cloth
978-0-262-04435-6

Life, Death, and Other Inconvenient Truths

A Realist's View of the Human Condition

Shimon Edelman

This book offers a guide to human nature and human experience—a guide for making sense of life. In thirty-eight short, interconnected essays, Shimon Edelman considers the parameters of the human condition, addressing them in alphabetical order, from action (good except when it's not) to love (only makes sense to the lovers) to thinking (should not be so depressing) to youth (a treasure). In a style that is by turns personal and philosophical, at once informative and entertaining, Edelman offers a series of illuminating takes on the most important aspects of living in the world.

Edelman avoids reductive synthesis, staying clear of both exuberance and negativity. Drawing on an eclectic range of sources—quoting from a pre-Islamic Bedouin poem on one page, from Gogol on the next, citing both Borges and Marx—Edelman offers insights into the bright and dark sides of our nature. About anxiety, he observes, “All sentient beings are capable of physiological stress response, but it takes special skills to also do anxiety.” Happiness is “a commodity that Americans pursue with almost as much verve as oil.” Human language, on the other hand, is “an essential window into the sublime.” All in all, human nature has much room for improvement. Working out ways to improve it, accompanied by this guide, is an exercise for the reader.

Shimon Edelman is Professor of Psychology at Cornell University. He is the author of *Computing the Mind*, *The Happiness of Pursuit*, and other books.

A Synthesizing Mind

A Memoir from the Creator of Multiple Intelligences Theory

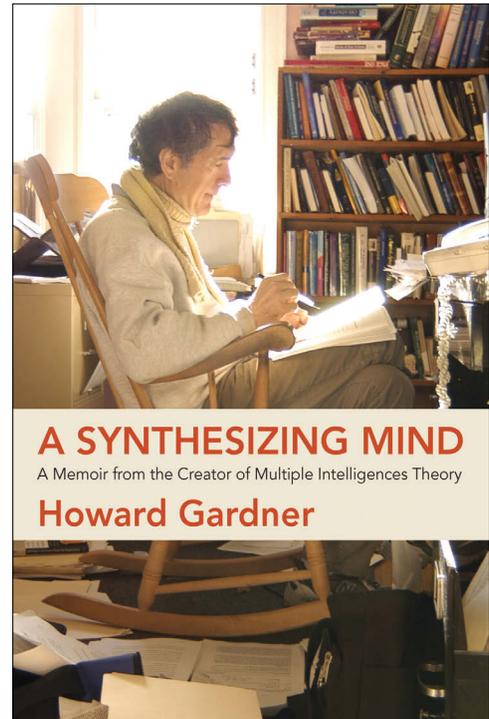
Howard Gardner

Howard Gardner's *Frames of Mind* was that rare publishing phenomenon—a mind-changer. Widely read by the general public as well as by educators, this influential book laid out Gardner's theory of multiple intelligences. It debunked the primacy of the IQ test and inspired new approaches to education; entire curricula, schools, museums, and parents' guides were dedicated to the nurturing of the several intelligences. In his new book, *A Synthesizing Mind*, Gardner reflects on his intellectual development and his groundbreaking work, tracing his evolution from bookish child to eager college student to disengaged graduate student to Harvard professor.

Gardner discusses his mentors (including Erik Erikson and Jerome Bruner) and his collaborators (Mihaly Csikszentmihalyi, William Damon, and others). Comedian Groucho Marx makes a surprise (non-)appearance, declining Gardner's invitation to chat with Harvard College students, in favor of "making a living."

Throughout his career, Gardner has focused on human minds in general, or on the minds of particular creators and leaders. Reflecting now on his own mind, he concludes that his is a "synthesizing mind"—with the ability to survey experiences and data across a wide range of disciplines and perspectives. The thinkers he most admires—including historian Richard Hofstadter, biologist Charles Darwin, and literary critic Edmund Wilson—are exemplary synthesizers. Gardner contends that the synthesizing mind is particularly valuable at this time and proposes ways to cultivate a possibly unique human capacity.

Howard Gardner is John H. and Elisabeth A. Hobbs Research Professor of Cognition and Education at the Harvard Graduate School of Education. Best known as the originator of the Theory of Multiple Intelligences, he is the author of thirty books, including *Frames of Mind: The Theory of Multiple Intelligences*; *Truth, Beauty, and Goodness Reframed*; and *The App Generation* (with Katie Davis).



An eminent authority on the human mind reflects on his intellectual development, his groundbreaking work, and different types of intelligences—including his own.

September
5 3/8 x 8, 272 pp.
30 illus.

\$29.95T cloth
978-0-262-04426-4

Too Much Information

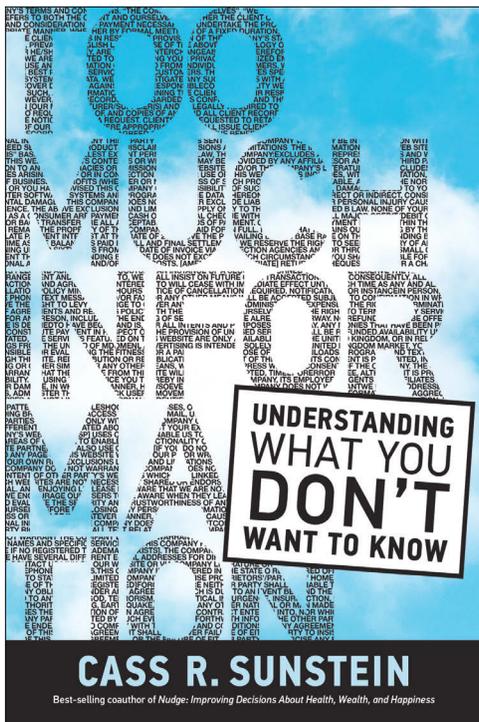
Understanding What You Don't Want to Know

Cass R. Sunstein

How much information is too much? Do we need to know how many calories are in the giant vat of popcorn that we bought on our way into the movie theater? Do we want to know if we are genetically predisposed to a certain disease? Can we do anything useful with next week's weather forecast for Paris if we are not in Paris? In *Too Much Information*, Cass Sunstein examines the effects of information on our lives. Policymakers emphasize “the right to know,” but Sunstein takes a different perspective, arguing that the focus should be on human well-being and what information contributes to it. Government should require companies, employers, hospitals, and others to disclose information not because of a general “right to know” but when the information in question would significantly improve people’s lives.

Sunstein argues that the information on warnings and mandatory labels is often confusing or irrelevant, yielding no benefit. He finds that people avoid information if they think it will make them sad (and seek information they think will make them happy). Our information avoidance and information seeking is notably heterogeneous—some of us do want to know the popcorn calorie count, others do not. Of course, says Sunstein, we are better off with stop signs, warnings on prescriptions drugs, and reminders about payment due dates. But sometimes less is more. What we need is more clarity about what information is actually doing or achieving.

Cass R. Sunstein, Robert Walmsley University Professor at Harvard Law School, was Administrator of the White House Office of Information and Regulatory Affairs in the Obama administration. He was the recipient of the 2018 Holberg Prize, one of the largest annual international research prizes awarded to scholars who have made outstanding contributions to research in the arts and humanities, social science, law, or theology. He is the author of *The Cost-Benefit Revolution*, *How Change Happens* (both published by the MIT Press), *Nudge: Improving Decisions about Health, Wealth, and Happiness* (with Richard H. Thaler), and other books.



How information can make us happy or miserable, and why we sometimes avoid it and sometimes seek it out.

September
5 3/8 x 8, 248 pp.
5 illus.

\$27.95T cloth
978-0-262-04416-5

Right / Wrong

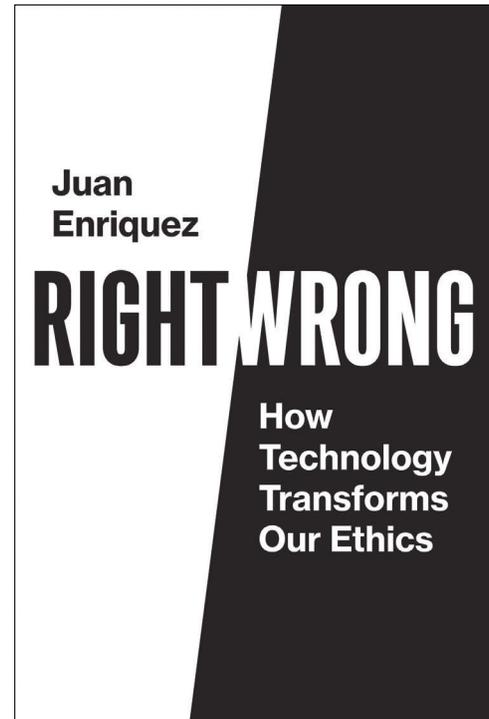
How Technology Transforms Our Ethics

Juan Enriquez

Most people have a strong sense of right and wrong, and they aren't shy about expressing their opinions. But when we take a polarizing stand on something we regard as an eternal truth, we often forget that ethics evolve over time. Many shifts in the right versus wrong pendulum are driven by advances in technology. Our great-grandparents might be shocked by in vitro fertilization; our great-grandchildren might be shocked by the messiness of pregnancy, childbirth, and unedited genes. In *Right / Wrong*, Juan Enriquez reflects on what happens to our ethics as technology makes the once unimaginable a commonplace occurrence.

Evolving technology changes ethics. Enriquez points out that, contrary to common wisdom, technology often enables more ethical behaviors. Technology challenges old beliefs and upends institutions that do not grow and change. With wit and compassion, Enriquez takes on a series of technology-influenced ethical dilemmas, from sexual liberation to climate change to the "immortality" of mistakes on social media. ("Facebook, Twitter, Instagram, and Google are electronic tattoos.") He cautions us to judge those who "should have known better," given today's vantage point, with less fury and more compassion. We need a quality often absent in today's charged debates: humility. Judge those in the past as we hope to be judged in the future.

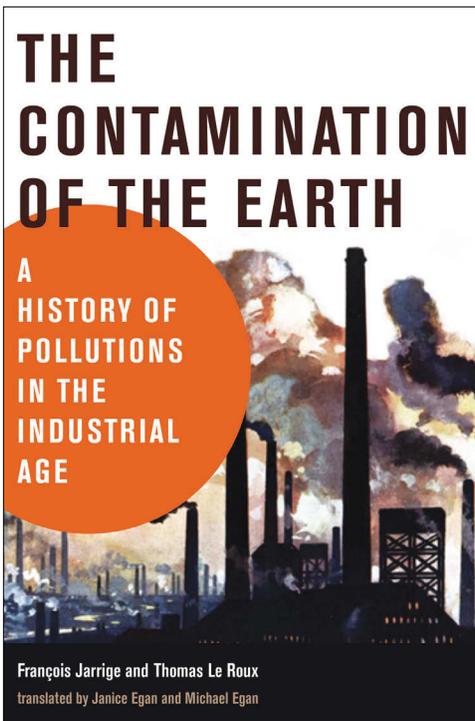
Juan Enriquez is the author of *As the Future Catches You, Evolving Ourselves*, and other books. A frequent speaker at TED and other conferences, he has contributed to such publications as *Harvard Business Review* and *Foreign Policy*. He is a cofounder and investor in brain and synthetic biology start-ups.



A lively and entertaining guide to ethics in a technological age.

October
5 3/8 x 8, 224 pp.
13 b&w illus.

\$24.95T cloth
978-0-262-04442-4



The trajectories of pollution in global capitalism, from the toxic waste of early tanneries to the poisonous effects of pesticides in the twentieth century.

July
6 x 9, 480 pp.
27 illus.

\$39.95T cloth
978-0-262-04383-0

History for a Sustainable Future series

The Contamination of the Earth

A History of Pollutions in the Industrial Age

François Jarrige and Thomas Le Roux

translated by Janice Egan and Michael Egan

Through the centuries, the march of economic progress has been accompanied by the spread of industrial pollution. As our capacities for production and our aptitude for consumption have increased, so have their byproducts—chemical contamination from fertilizers and pesticides, diesel emissions, oil spills, a vast “plastic continent” found floating in the ocean. *The Contamination of the Earth* offers a social and political history of industrial pollution, mapping its trajectories over three centuries, from the toxic wastes of early tanneries to the fossil fuel energy regime of the twentieth century.

The authors describe how, from 1750 onward, in contrast to the early modern period, polluted water and air came to be seen as inevitable side effects of industrialization, which was universally regarded as beneficial. By the nineteenth century, pollutants became constituent elements of modernity. The authors trace the evolution of these various pollutions, and describe the ways in which they were simultaneously denounced and permitted. The twentieth century saw new and massive scales of pollution: chemicals that resisted biodegradation, including napalm and other defoliants used as weapons of war; the ascendancy of oil; and a lifestyle defined by consumption. In the 1970s, pollution became a political issue, but efforts—local, national, and global—to regulate it often fell short. Viewing the history of pollution through a political lens, the authors also offer lessons for the future of the industrial world.

François Jarrige is Senior Lecturer in Contemporary History at the University of Burgundy's Georges Chevrier Centre. **Thomas Le Roux** is a tenured Researcher at the French National Centre for Scientific Research (CNRS), based at the Centre for Historical Research in the School for Advanced Studies in the Social Sciences (CRH-EHESS) in Paris.

The Story of Life in 10 1/2 Species

Marianne Taylor

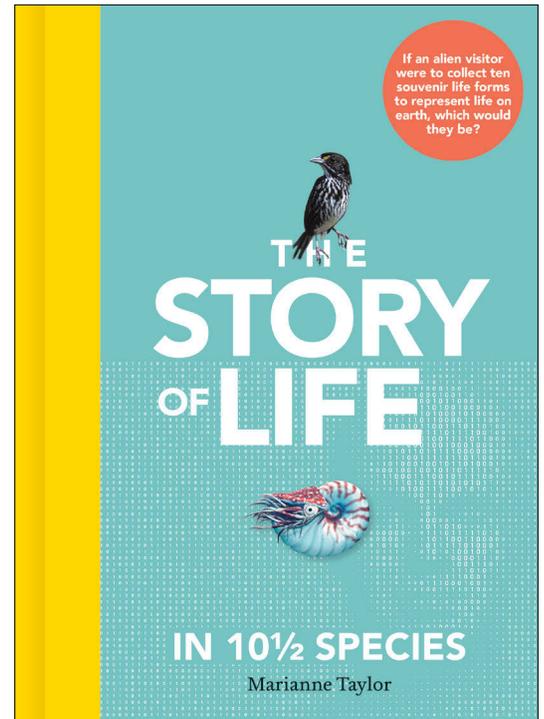
If an alien visitor were to collect ten souvenir life forms to represent life on earth, which would they be? This is the thought-provoking premise of Marianne Taylor's *The Story of Life in 10 1/2 Species*. Each life form explains a key aspect about life on Earth. From the sponge that seems to be a plant but is really an animal to the almost extinct soft-shelled turtle deemed extremely unique and therefore extremely precious, these examples reveal how life itself is arranged across time and space, and how humanity increasingly dominates that vision.

Taylor, a prolific science writer, considers the chemistry of a green plant and ponders the possibility of life beyond our world; investigates the virus in an attempt to determine what a life form is; and wonders if the human—"a distinct and very dominant species with an inevitably biased view of life"—could evolve in a new direction. She tells us that the giraffe was one species, but is now four; that the dusky seaside sparrow may be revived through "re-evolution," or cloning; explains the significance of Darwin's finch to evolution; and much more. The "half" species is artificial intelligence. Itself an experiment to understand and model life, AI is central to our future—although from the alien visitor's standpoint, unlikely to inherit the earth in the long run.

Marianne Taylor has authored more than twenty-five books on natural history, including *The Way of the Hare* and *Dragonflight*. She has just completed *Bats: An Illustrated Guide to All Species*.

10 1/2 SPECIES

a green plant
 the virus
 the nautilus
 the Lord Howe stick insect
 the sponge
 the human
 the giraffe
 the dusky seaside sparrow
 the soft-shelled turtle
 the finch
 artificial intelligence

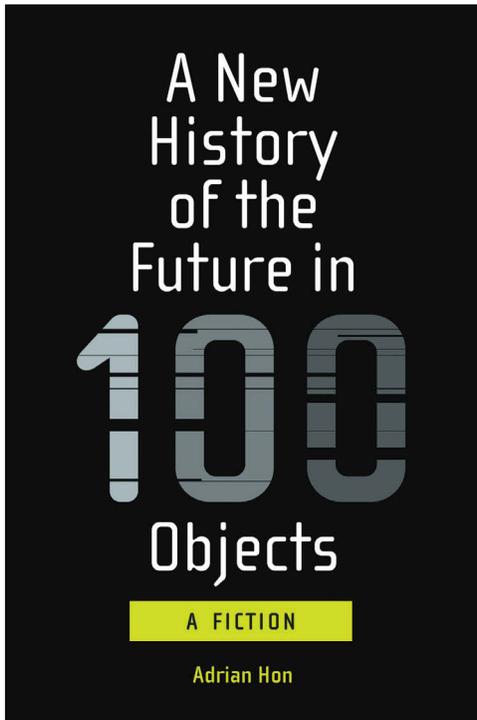


**Souvenirs of the planet:
 Ten (and a half) life forms,
 each of which explains a key
 aspect of life on Earth.**

October
 6 1/2 x 9, 256 pp.
 150 illus.

\$29.95T cloth
 978-0-262-04448-6

For sale in North America only



Imagining the history of the twenty-first century through its artifacts, from silent messaging systems to artificial worlds on asteroids.

October
6 x 9, 384 pp.

\$21.95T paper
978-0-262-53937-1

A New History of the Future in 100 Objects

A Fiction

Adrian Hon

In the year 2082, a curator looks back at the twenty-first century, offering a history of the era through a series of objects and artifacts. He reminisces about the power of connectivity, which was reinforced by such technologies as silent messaging—wearable computers that relay subvocal communication; recalls the Fourth Great Awakening, when a regimen of pills could make someone virtuous; and notes disapprovingly the use of locked interrogation, which delivers “enhanced interrogation” simulations via virtual reality. The unnamed curator quotes from a self-help guide to making friends with “posthumans,” describes the establishment of artificial worlds on asteroids, and recounts pro-democracy movements in epistocratic states. In *A New History of the Future in 100 Objects*, Adrian Hon constructs a possible future by imagining the things it might leave in its wake.

Many of these things are just an update or two away: improved ankle monitors, for example, and deliverbots. Others may be the logical conclusions of current trends—“downvote” networks that identify and erase undesirables, and Glyphish, an emoticon-based language that supersedes the written word. More benign are Braid Collective, which provides financial support for artists, and Rechartered Cities, which invites immigrants to revitalize urban areas hollowed out by changing demographics. With this engaging and ingenious work, Hon leads the way into an imagined future while offering readers a new perspective on the present.

Adrian Hon is CEO and founder of the London-based game design company Six to Start.

Entanglements

Tomorrow's Lovers, Families, and Friends

edited by Sheila Williams

In a future world dominated by the technological, people will still be entangled in relationships—in romances, friendships, and families. This volume in the *Twelve Tomorrows* series considers the effects that scientific and technological discoveries will have on the emotional bonds that hold us together.

The strange new worlds in these stories feature AI family therapy, floating fungitecture, and a futuristic love potion. A co-op of mothers attempts to raise a child together, lovers try to resolve their differences by employing a therapeutic sexbot, and a robot helps a woman dealing with Parkinson's disease. Contributions include Xia Jia's novelette set in a Buddhist monastery, translated by the Hugo Award-winning writer Ken Liu; a story by Nancy Kress, winner of six Hugos and two Nebulas; and a profile of Kress by Lisa Yaszek, Professor of Science Fiction Studies at Georgia Tech. Stunning artwork by Tatiana Plakhova—"infographic abstracts" of mixed media software—accompanies the texts.

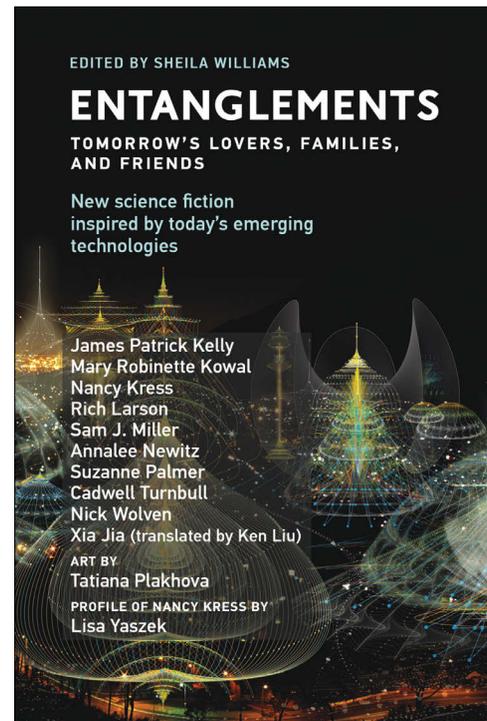
Sheila Williams is the multiple Hugo-award winning editor of Asimov's *Science Fiction* magazine and the editor or coeditor of more than two dozen anthologies.

Contributors

James Patrick Kelly, Mary Robinette Kowal, Nancy Kress, Rich Larson, Ken Liu, Sam J. Miller, Annalee Newitz, Suzanne Palmer, Tatiana Plakhova, Cadwell Turnbull, Nick Wolven, Xia Jia (translated by Ken Liu)

Art by Tatiana Plakhova

Profile of Nancy Kress by Lisa Yaszek



Science fiction authors offer original tales of relationships in a future world of evolving technology.

September
6 x 9, 256 pp.
11 illus.

\$19.95T paper
978-0-262-53925-8

DAVID CAMPANY



ON PHOTO- GRAPHS

**An exploration of photography
in 120 photographs.**

October
6 3/4 x 8 1/2, 272 pp.
120 illus.

\$34.95T cloth
978-0-262-04424-0

For sale in North America only

On Photographs

David Company

In *On Photographs*, curator and writer David Company presents an exploration of photography in 120 photographs. Proceeding not by chronology or genre or photographer, Company's eclectic selection unfolds according to its own logic. We see work by Henri Cartier-Bresson, William Eggleston, Helen Levitt, Garry Winogrand, Louise Lawler, Andreas Gursky, and Rineke Dijkstra. There is fashion photography by William Klein, one of Vivian Maier's contact sheets, and a carefully staged scene by Gregory Crewdson, as well as images culled from magazines and advertisements. Each of the 120 photographs is accompanied by Company's lucid and incisive commentary, considering the history of that image and its creator, interpreting its content and meaning, and connecting and contextualizing it within visual culture. Image by image, we absorb and appreciate Company's complex yet playful take on photography and its history.

The title, *On Photographs*, alludes to Susan Sontag's influential and groundbreaking *On Photography*. As an undergraduate, Company met Sontag and questioned her assessment of photography without including specific photographs. Sontag graciously suggested that someday Company could write his own book on the subject, titled *On Photographs*. Now he has.

David Company is a curator and writer based in London and New York City. He is the author of *Walker Evans: The Magazine Work*, *The Open Road: Photography and the American Road Trip*, *Jeff Wall: Picture for Women* (Afterall Books/MIT Press), and other books.

The Story of Contemporary Art

Tony Godfrey

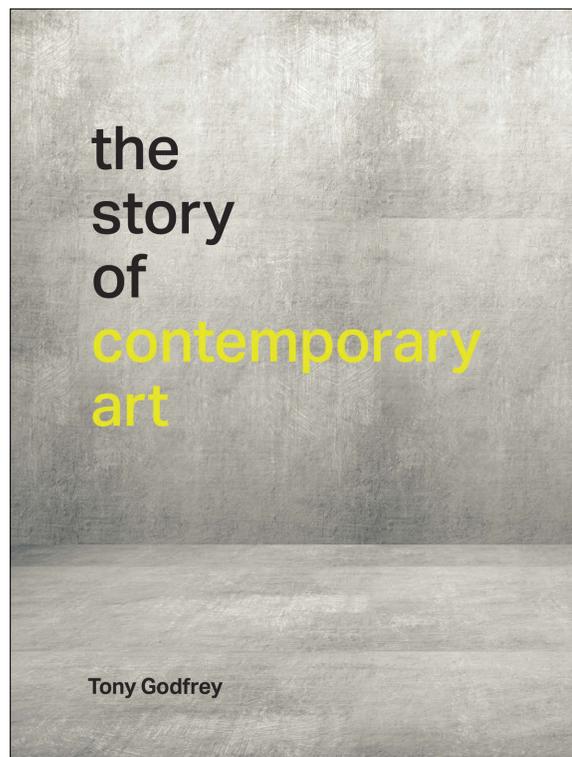
Encountering a work of contemporary art, a viewer might ask, “What does it mean?” “Is it really art?” and “Why does it cost so much?” These are not the questions that E. H. Gombrich set out to answer in his magisterial *The Story of Art*. Contemporary art seems totally unlike what came before it, departing from the road map supplied by Raphael, Dürer, Rembrandt, and other European masters. In *The Story of Contemporary Art*, Tony Godfrey picks up where Gombrich left off, offering a lively introduction to contemporary art that stretches from Andy Warhol’s Brillo boxes to Marina Abramović’s performance art to today’s biennale circuit and million-dollar auctions. Godfrey, a curator and writer on contemporary art, chronicles important developments in pop art, minimalism, conceptualism, installation art, performance art, and beyond.

Godfrey’s narrative, lavishly illustrated, traces a series of debates over what art is or should be: object versus sculpture, painting versus conceptual, local versus global, gallery versus wider world. He presents multiple voices—not only critics, theorists, curators, and collectors but also artists and audiences. Key to Godfrey’s account is the upending of the once widespread perception that art is made almost exclusively by white men from North America and Europe. *The Story of Contemporary Art* is an essential guide to this radical transformation.

Tony Godfrey is the author of *Conceptual Painting* and *Painting Today* and has contributed to *Art in America* and the *Burlington Magazine*. Formerly Programme Director of the MA in Contemporary Art at Sotheby’s Institute in London, he is a curator based in Manila.

AMONG THE MANY ARTISTS INCLUDED

Marina Abramović • Ai Weiwei • John Baldessari
 Matthew Barney • Tania Bruguera • Cai Guo-Qiang
 Sophie Calle • Maurizio Cattelan • Njideka Akunyili Crosby
 Do Ho Suh • Marlene Dumas • Olafur Eliasson
 Ayşe Erkmen • Eric Fischl • Theaster Gates
 Adrian Ghenie • Ann Hamilton • Carsten Höller
 Tehching Hsieh • Donald Judd • Yayoi Kusama
 Maria Lassnig • Richard Long • Ana Mendieta
 Bruce Nauman • Shirin Neshat • Nam June Paik
 Imran Qureshi • Gerhard Richter • Pipilotti Rist
 Richard Serra • Nilima Sheikh • Cindy Sherman
 Shahzia Sikander • Kiki Smith • Rirkrit Tiravanija
 Bill Viola • Jeff Wall • Xu Bing

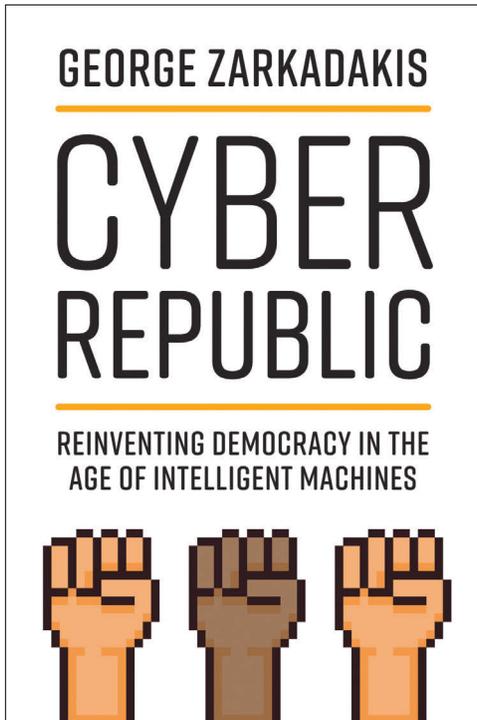


A lively introduction to contemporary art that stretches from Andy Warhol’s Brillo boxes to Marina Abramović’s performance art to today’s biennale circuit and million-dollar auctions.

November
 7 3/4 x 10 1/4, 280 pp.
 200 illus.

\$39.95T cloth
 978-0-262-04410-3

For sale in North America only



How to make liberal democracies more inclusive and the digital economy more equitable: a guide for the coming Fourth Industrial Revolution.

September
6 x 9, 192 pp.
9 illus.

\$26.95T cloth
978-0-262-04431-8

Cyber Republic

Reinventing Democracy in the Age of Intelligent Machines

George Zarkadakis

foreword by Don Tapscott, coauthor of *Blockchain Revolution*

Around the world, liberal democracies are in crisis. Citizens have lost faith in their government; right-wing nationalist movements frame the political debate. At the same time, economic inequality is increasing dramatically; digital technologies have created a new class of super-rich entrepreneurs. Automation threatens to transform the free economy into a zero-sum game in which capital wins and labor loses. But is this digital dystopia inevitable? In *Cyber Republic*, George Zarkadakis presents an alternative, outlining a plan for using technology to make liberal democracies more inclusive and the digital economy more equitable. *Cyber Republic* is no less than a guide for the coming Fourth Industrial Revolution and the post-pandemic world.

Zarkadakis, an expert on technology and management, explains how artificial intelligence, together with intelligent robotics, sophisticated sensors, communication networks, and big data, will fundamentally reshape the global economy; a new “intelligent machine age” will force us to adopt new forms of economic and political organization. He envisions a future liberal democracy in which intelligent machines facilitate citizen assemblies, helping to extend citizen rights, and blockchains and cryptoeconomics enable new forms of democratic governance and business collaboration. Moreover, the same technologies can be applied to scientific research and technological innovation. We need not fear automation, Zarkadakis argues; in a postwork future, intelligent machines can collaborate with humans to achieve the human goals of inclusivity and equality.

George Zarkadakis leads the Future of Work consulting practice at Willis Towers Watson, a global risk management consulting firm. The author of *In Our Own Image: The History and Future of Artificial Intelligence* and other books, he has written extensively on science and technology for publications including *Aeon* and *Wired*.

Democratizing Our Data

A Manifesto

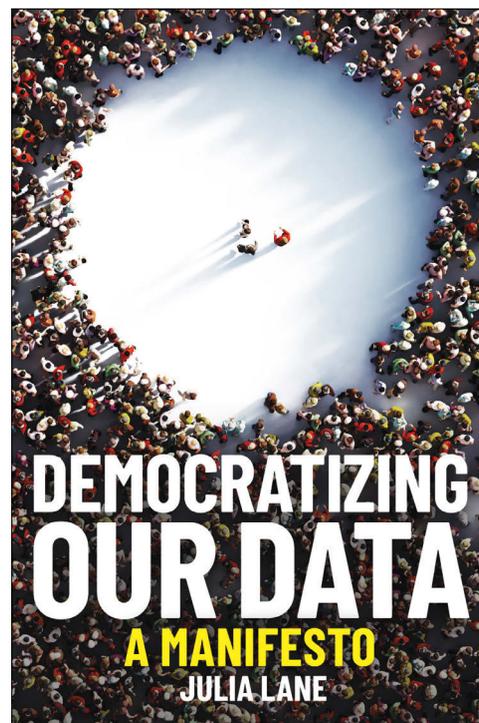
Julia Lane

Public data are foundational to our democratic system. People need consistently high-quality information from trustworthy sources. In the new economy, wealth is generated by access to data; government's job is to democratize the data playing field. Yet data produced by the American government are getting worse and costing more. In *Democratizing Our Data*, Julia Lane argues that good data are essential for democracy. Her book is a wake-up call to America to fix its broken public data system.

Lane argues that we must rethink ways to democratize data; there are successful models to follow and new legislation that can help effect change. The private sector's data revolution—which creates new types of data and new measurements to build machine learning and artificial intelligence algorithms—can be mirrored by a public sector data revolution characterized by attention to counting all who should be counted, measuring what should be measured, and protecting privacy and confidentiality. Just as Google, Amazon, Microsoft, Apple, and Facebook have led the world in the use of data for profit, the United States can show the world how to produce data for the public good.

Lane calls for a more automated, transparent, and accountable framework for creating high-quality public data that would empower citizens and inspire the government that serves them. And she outlines an organizational model that has the potential to make data more accessible and useful. As she says, failure to act threatens our democracy.

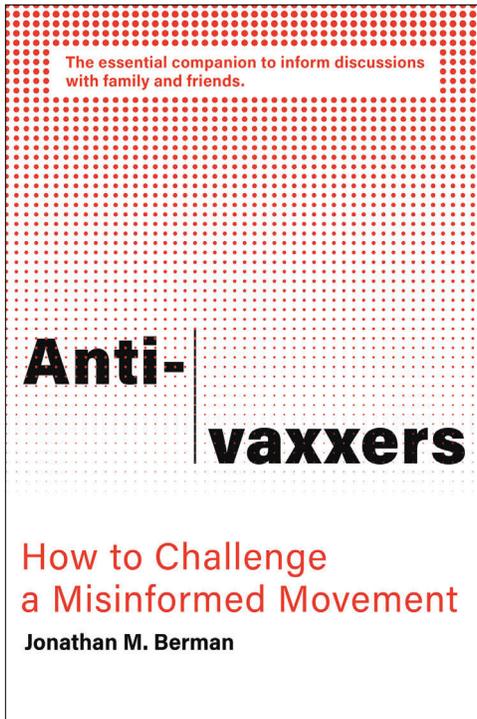
Julia Lane is a founder of the Coleridge Initiative, Professor at the NYU Wagner Graduate School of Public Service and the NYU Center for Urban Science and Progress, and an NYU Provostial Fellow for Innovation Analytics.



A wake-up call for America to create a new framework for democratizing data.

September
5 3/8 x 8, 192 pp.

\$24.95T cloth
978-0-262-04432-5



A history of the anti-vaccination movement, from its nineteenth-century antecedents to today's anti-vax activism, offering strategies for refuting its claims.

September
5 3/8 x 8, 296 pp.
4 illus.

\$19.95T paper
978-0-262-53932-6

Anti-vaxxers

How to Challenge a Misinformed Movement

Jonathan M. Berman

Vaccines are a documented success story, one of the most successful public health interventions in history. Yet there is a vocal anti-vaccination movement, featuring celebrity activists (including Kennedy scion Robert F. Kennedy Jr. and actress Jenny McCarthy) and the propagation of anti-vax claims through books, documentaries, and social media. In *Anti-vaxxers*, Jonathan Berman explores the phenomenon of the anti-vaccination movement, recounting its history from its nineteenth-century antecedents to today's activism, examining its claims, and suggesting a strategy for countering them.

After providing background information on vaccines and how they work, Berman describes resistance to Britain's Vaccination Act of 1853, showing that the arguments anticipate those made by today's anti-vaxxers. He discusses the development of new vaccines in the twentieth century, including those protecting against polio and MMR (measles, mumps, rubella), and the debunked paper that linked the MMR vaccine to autism; the CDC conspiracy theory promoted in the documentary *Vaxxed*; recommendations for an alternative vaccination schedule; Kennedy's misinformed campaign against thimerosal; and the much-abused religious exemption to vaccination.

Anti-vaxxers have changed their minds, but rarely because someone has given them a list of facts. Berman argues that anti-vaccination activism is tied closely to how people see themselves as parents and community members. Effective pro-vaccination efforts should emphasize these cultural aspects rather than battling social media posts.

Jonathan M. Berman is Assistant Professor in the Department of Basic Sciences at NYITCOM–Arkansas. An active science communicator, he served as national cochair of the 2017 March for Science.

Salt Wars

The Battle Over the Biggest Killer in the American Diet

Michael F. Jacobson

Foreword by Tom Frieden, President of Resolve to Save Lives and former Director of the Centers for Disease Control and Prevention

A high-sodium diet is deadly; studies have linked it to high blood pressure, strokes, and heart attacks. It's been estimated that excess sodium in the American diet causes as many as 100,000 deaths and many billions of dollars in avoidable health-care costs each year. And yet salt is everywhere in our diets—in packaged foods, fast foods, and especially meals at table-service restaurants. Why hasn't salt received the sort of public attention and regulatory action that sugar and fat have? In *Salt Wars*, Michael Jacobson explains how the American food industry and a small group of scientists have successfully fought government efforts to reduce dangerous levels of sodium in our food.

Despite an abundance of research going back more than half a century showing that high-sodium diets lead to hypertension and other ills, a few scientists argue the opposite—that American consume a healthy amount of salt and that eating less would increase the risk of cardiovascular disease. This “man bites dog” take on sodium confused consumers and was enthusiastically taken up by food industry lobbyists. Jacobson, a salt wars combatant for more than forty years, explains what science actually says about salt intake and rebuts “sodium skeptics.” He discusses what other countries are doing to cut dietary salt, and describes some recent victories in the United States. He advises readers how to reduce salt—warning them against “salt bombs” (Campbell’s Chicken Noodle Soup, for example, packs an entire day’s worth of sodium in one can)—and calls on them to suit up for the next battle in the salt wars.

Michael F. Jacobson is Cofounder and Senior Scientist at the Center for Science in the Public Interest. He is the author of *Six Arguments for a Greener Diet* and other books.

“Michael Jacobson has produced a thorough, clearly written, masterful analysis.”

—from the foreword by Tom Frieden

How food industry lobbyists and a small group of scientists have successfully fought government efforts to reduce dangerous levels of sodium in our food.

October
6 x 9, 248 pp.
11 illus.

\$26.95T cloth
978-0-262-04444-8

Make It Clear

Speak and Write to Persuade and Inform

Patrick Henry Winston

foreword by Gill Pratt

The essentials of communication for professionals, educators, students, and entrepreneurs, from organizing your thoughts to inspiring your audience and ensuring what you say is remembered.

August
7 x 9, 360 pp.
145 color illus., 45 b&w illus.

\$34.95T paper
978-0-262-53938-8

Make It Clear

Speak and Write to Persuade and Inform

Patrick Henry Winston

foreword by Gill Pratt, CEO, Toyota Research Institute

Do you give presentations at meetings? Do you ever have to explain a complicated subject to audiences unfamiliar with your field? Do you make pitches for ideas or products? Do you want to interest a lecture hall of restless students in subjects that you find fascinating? Then you need this book. *Make It Clear* explains how to communicate—how to speak and write to get your ideas across. Written by an MIT professor who taught his students these techniques for more than forty years, the book starts with the basics—finding your voice, organizing your ideas, making sure what you say is remembered, and receiving critiques (“do not ask for brutal honesty”)—and goes on to cover such specifics as preparing slides, writing and rewriting, and even choosing a type family.

The book explains why you should start with an empowerment promise and conclude by noting you delivered on that promise. It describes how a well-crafted, explicitly identified slogan, symbol, salient idea, surprise, and story combine to make you and your work memorable. The book lays out the VSN-C (Vision, Steps, News-Contributions) framework as an organizing structure and then describes how to create and organize your ideas with a “broken-glass” outline, how to write to be understood, how to inspire, how to defeat writer’s block—and much more. Learning how to speak and write well will empower you and make you smarter. Effective communication can be life-changing—making use of just one principle in this book can get you the job, make the sale, convince your boss, inspire a student, or even start a revolution.

Patrick Henry Winston (1943–2019) was Ford Professor of Artificial Intelligence and Computer Science at MIT.

“I learned more from Patrick Winston than any other professor while at MIT. I use many of his lessons to this day, both inside and outside the workplace.”

—**Eric Chemi, MIT Class of 2005, and CNBC TV Reporter**

The Ends Game

How Smart Companies Stop Selling Products and Start Delivering Value

Marco Bertini and Oded Koenigsberg

Would you rather pay for health care or for better health? For school or education? For groceries or nutrition? A car or transportation? A theater performance or entertainment? In *The Ends Game*, Marco Bertini and Oded Koenigsberg describe how some firms are rewriting the rules of commerce: instead of selling the “means” (their products and services), they adopt innovative revenue models to pursue “ends” (actual outcomes). They show that paying by the pill, semester, food item, vehicle, or show does not necessarily reflect the value that customers actually derive from their purchases. Revenue models anchored on the ownership of products, they argue, are patently inferior.

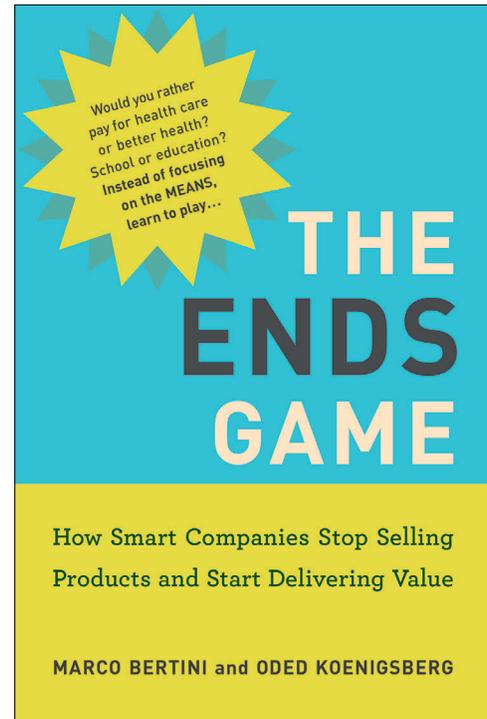
Bertini and Koenigsberg explain that advances in technology have made it possible for firms to collect “impact data” that tells them when and how customers use their products and how those products perform, and that firms can draw on this data to turn products into seamless services. New revenue models will enable transparency, accountability, and efficiency.

Bertini and Koenigsberg offer real-world examples of how companies in healthcare, transportation, education, and other sectors are already playing “the ends game,” describing, among other things, the successes of Dollar Shave Club, Rent the Runway, and “pay as you fly” insurance for drone flights.

Finally, they outline the challenges in adopting these new models, offering guidance on such issues as criteria for defining an outcome, concerns over data collection, and internal organizational obstacles.

Marco Bertini is Associate Professor of Marketing at ESADE Business School, Barcelona.

Oded Koenigsberg is Professor of Marketing and Deputy Dean at London Business School.



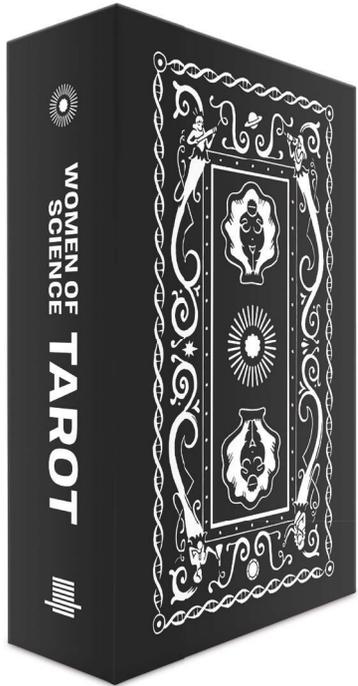
How some firms are rewriting the rules of commerce by pursuing “ends” — actual outcomes — rather than selling “means” — their products and services.

September
6 x 9, 160 pp.
7 illus.

\$29.95T cloth

978-0-262-04434-9

**Management on the Cutting Edge series,
published in cooperation with MIT Sloan
Management Review**



tarot

Women of Science Tarot

Massive Science

The *Women of Science Tarot Deck* is a card game that helps us tell stories about our future based on principles of science. The 22 major arcana cards feature a fundamental scientific concept like extinction, diversity, or gravity. The 56 minor arcana cards feature inspirational women who have changed the course of STEM. The lively illustrations are by neuroscientist and comic artist Matteo Farinella. For readers new to tarot or those who want to learn more about women in STEM, accompanying the deck is a guidebook with biographies of all the women featured on the cards as well as information about the major arcana cards.

The MIT Press and Massive Science are proud to offer a feminist tarot deck that values diversity and representation.

The set includes a tarot deck of 78 cards and a printed paperback gameplay guidebook of 96 pages, packaged in a custom box.

Massive Science is a content and media company delivering science news, opinion, translated research, and longform content to subscribers. **Matteo Farinella** is the author of *Neurocomic* and *The Senses*.

A tarot deck that features inspirational women of science on the minor arcana cards, plus a guidebook with scientist biographies and other information.

September
4 x 6, 94 pp.
78 cards, box

\$29.95T cards and book
978-0-262-53993-7



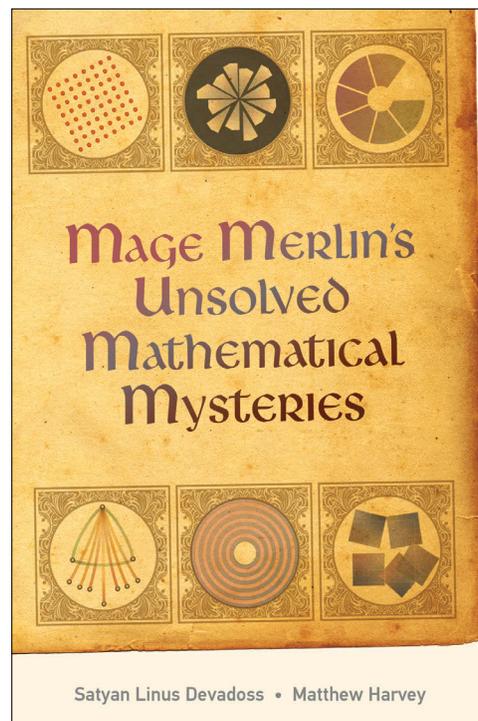
Mage Merlin's Unsolved Mathematical Mysteries

Satyan Linus Devadoss and Matthew Harvey

Most people think of mathematics as a set of useful tools designed to answer analytical questions, beginning with simple arithmetic and ending with advanced calculus. But, as *Mage Merlin's Unsolved Mathematical Mysteries* shows, mathematics is filled with intriguing mysteries that take us to the edge of the unknown. This richly illustrated, story-driven volume presents sixteen of today's greatest unsolved mathematical puzzles, all understandable by anyone with elementary math skills. These intriguing mysteries are presented to readers as puzzles that have time-traveled from Camelot, preserved in the notebook of Merlin, the wise magician in King Arthur's court.

Our guide is Mage Maryam (named in honor of the brilliant young mathematician, the late Maryam Mirzakhani), a distant descendant of Merlin. Maryam introduces the mysteries—each of which is presented across two beautifully illustrated pages—and provides mathematical and historical context afterward. We find Merlin confronting mathematical puzzles involving tinker toys (a present for Camelot's princesses from the sorceress Morgana), cake-slicing at a festival, Lancelot's labyrinth, a vault for the Holy Grail, and more. Each mystery is a sword awaiting removal from its stone, capturing the beauty and power of mathematics.

Satyan Linus Devadoss is the Fletcher Jones Professor of Applied Mathematics and Professor of Computer Science at the University of San Diego. A recipient of two national teaching awards, he has published on topics ranging from origami and cartography to phylogenetics and particle collisions. **Matthew Harvey** is Professor of Mathematics at the University of Virginia's College at Wise and the author of the textbook *Geometry Illuminated*.



Sixteen of today's greatest unsolved mathematical puzzles in a story-driven, richly illustrated volume that invites readers to peek over the edge of the unknown.

July
6 x 9, 120 pp.
38 color illus.

\$24.95T cloth
978-0-262-04408-0

The Architecture of Bathing

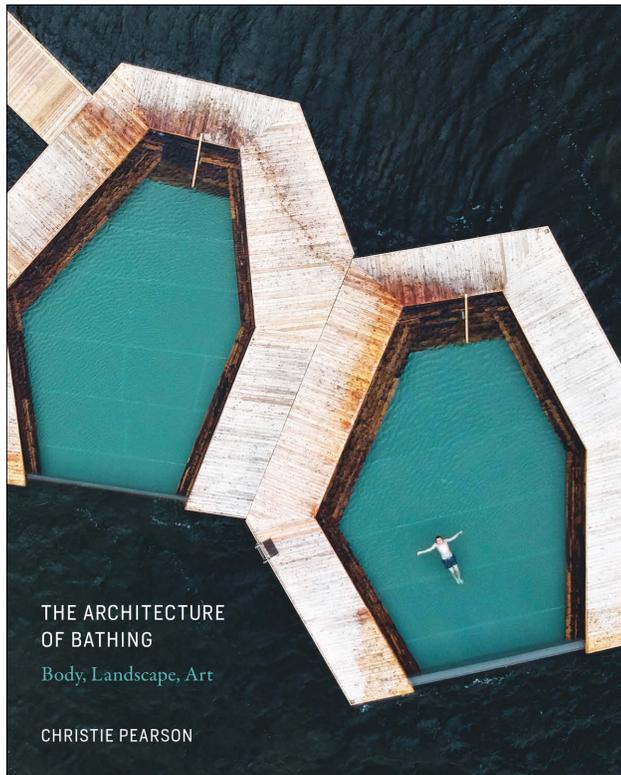
Body, Landscape, Art

Christie Pearson

We enter the public pool, the sauna, or the beach with a heightened awareness of our bodies and the bodies of others. The phenomenology of bathing opens all of our senses toward the physical world entwined with the social, while the history of bathing is one of shared space, in both natural and built environments. In *The Architecture of Bathing*, Christie Pearson offers a unique examination of communal bathing and its history from the perspective of architecture and landscape. Engagingly written, with more than 260 illustrations, many in color, *The Architecture of Bathing* offers a celebration of spaces in which public and private, sacred and profane, ritual and habitual, pure and impure, nature and culture commingle.

Pearson takes a wide-ranging view of her subject, drawing on architecture, art, and literary works. Each chapter is structured around an architectural typology and explores an accompanying theme—for example, tub: sensuality; river: flow; waterfall: rejuvenation; and banya: immersion. Offering examples, introducing relevant theory, and recounting personal experiences, Pearson effortlessly combines a practitioner's zest with astonishing erudition. As she examines these forms, we see that they are inextricable from landscapes, bodily practices, and cultural production. Looking more closely, we experience architecture itself as an immersive material and social space, embedded in the interdependent environmental and cultural fabric of our world.

Christie Pearson is an award-winning architect, writer, and urban interventionist. An Adjunct Professor at the University of Waterloo School of Architecture, she is coeditor of the architectural journal *Scapegoat*.



A celebration of communal bathing—swimming pools, saunas, beaches, ritual baths, sweat lodges, and more—viewed through the lens of architecture and landscape.

October
8 x 10, 440 pp.
115 color illus., 151 b&w illus.

\$44.95T cloth
978-0-262-04421-9

Botanicum Medicinale

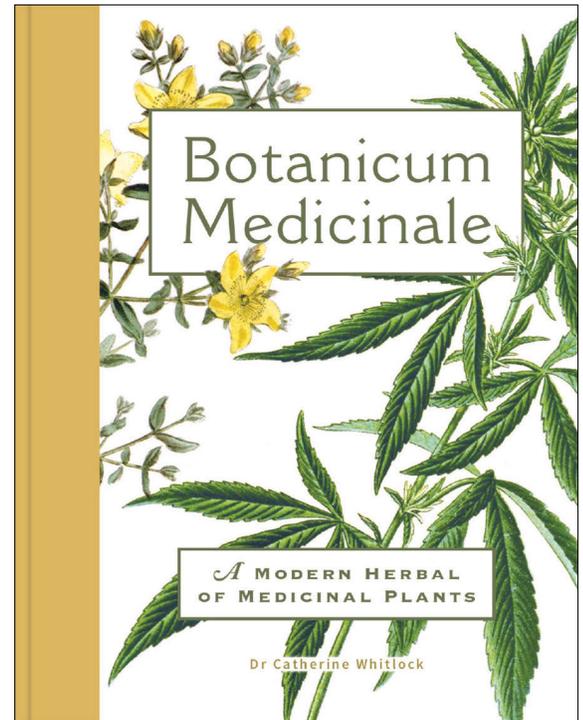
A Modern Herbal of Medicinal Plants

Catherine Whitlock

Remedies derived from plants are the world's oldest medicines. Used extensively in China, India, and many African countries, herbal medicine has become increasingly popular in the West along with other holistic and alternative therapies. *Botanicum Medicinale* offers a modern guide to 100 medicinal plants, featuring beautiful, full-color botanical illustrations and informative, engaging text.

Each entry describes the plant's classification and habitat, traditional and current medicinal uses, and an interesting fact or two. Readers will learn, for example, that absinthe, the highly alcoholic, vividly green potable, was traditionally flavored with bitter wormwood (*Artemisia absinthium*); that cannabis may have been used by Queen Victoria for menstrual pain; and that willow bark contains a chemical similar to aspirin. Detailed and striking artwork depicts each plant. The entries are arranged alphabetically—from *Adonis vernalis* (a perennial in the buttercup family) to *Vinca minor* (also known as the common periwinkle). The 100 plants featured in the book all have a long history of medicinal use or are the subject of new medical research. Many treat a range of conditions, from insomnia to indigestion. Some plants are lovely enough to be in a bridal bouquet; others are considered weeds. Cross-reference features at the end of the book connect specific medical conditions and the plants used to treat them.

Catherine Whitlock is a science writer in Kent, England. She is the author of *Meet Your Bacteria*, *Ten Women Who Changed Science*, and other books.



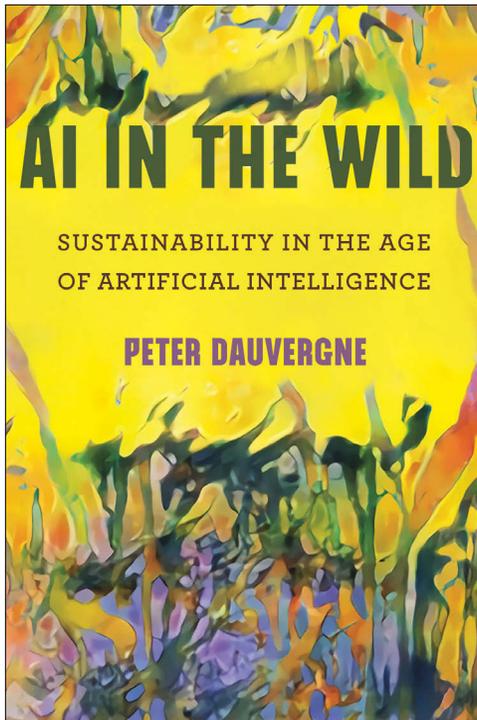
A beautifully illustrated, informative, and engaging guide to 100 plants used for medicinal purposes.

October
7 1/2 x 9 3/4, 224 pp.
200 color illus.

\$29.95T cloth
978-0-262-04447-9

For sale in North America only





Examining the potential benefits and risks of using artificial intelligence to advance global sustainability.

September
6 x 9, 272 pp.

\$24.95T paper
978-0-262-53933-3

One Planet series

AI in the Wild

Sustainability in the Age of Artificial Intelligence

Peter Dauvergne

Drones with night vision are tracking elephant and rhino poachers in African wildlife parks and sanctuaries; smart submersibles are saving coral from carnivorous starfish on Australia's Great Barrier Reef; recycled cell phones alert Brazilian forest rangers to the sound of illegal logging. The tools of artificial intelligence are being increasingly deployed in the battle for global sustainability. And yet, warns Peter Dauvergne, we should be cautious in declaring AI the planet's savior. In *AI in the Wild*, Dauvergne avoids the AI industry-powered hype and offers a critical view, exploring both the potential benefits and risks of using artificial intelligence to advance global sustainability.

Dauvergne finds that corporations and states often use AI in ways that are antithetical to sustainability. The competition to profit from AI is entrenching technocratic management, revving up resource extraction, and turbocharging consumption, as consumers buy new smart devices (and discard their old, less-smart ones). Smart technology is helping farmers grow crops more efficiently, but also empowering the agrifood industry. Moreover, states are weaponizing AI to control citizens, suppress dissent, and aim cyberattacks at rival states.

Is there a way to harness the power of AI for environmental and social good? Dauvergne argues for precaution and humility as guiding principles in the deployment of AI.

Peter Dauvergne is Professor of International Relations at the University of British Columbia. He is the author of *Environmentalism of the Rich, Eco-Business: A Big-Brand Takeover of Sustainability* (with Jane Lister), and *The Shadows of Consumption: Consequences for the Global Environment*, all published by the MIT Press.

Driverless at Last

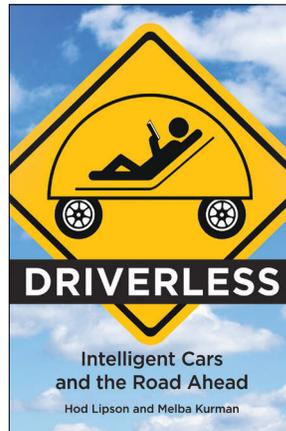
Cars, Artificial intelligence, and You

Hod Lipson and Melba Kurman

Few inventions have changed life as much as the car. These large hunks of steel and horsepower are everywhere, so ubiquitous and deeply intertwined with our lives, jobs and families that we barely pay any attention to them. The familiar car, however, is about to become the ultimate mobility device. Thanks to rapid advances in robotics and artificial intelligence, cars are poised to morph into the first mainstream autonomous robots that we will entrust with our lives, creating a cascade of social and economic change. In *Driverless at Last*, Hod Lipson and Melba Kurman discuss how this technology will change our lives, our businesses, and our cities, and describe the new opportunities that lie ahead. Lipson and Kurman explain how driverless cars work and consider the technological and social barriers to their adoption.

Hod Lipson is Professor of Engineering and Data Science at Columbia University and an author of the award-winning book *Fabricated: The New World of 3D Printing*.

Melba Kurman writes about disruptive technologies and is an author of the award-winning book *Fabricated: The New World of 3D Printing*. Lipson and Kurman are the authors of *Driverless: Intelligent Cars and the Road Ahead*.



A look at how driverless cars will change the way we live, play, and work, and an explanation of the technologies that make them possible.

December
6 x 9, 216 pp.
10 illus.

\$24.95T cloth

978-0-262-04476-9

Also available

Driverless

Intelligent Cars and the Road Ahead

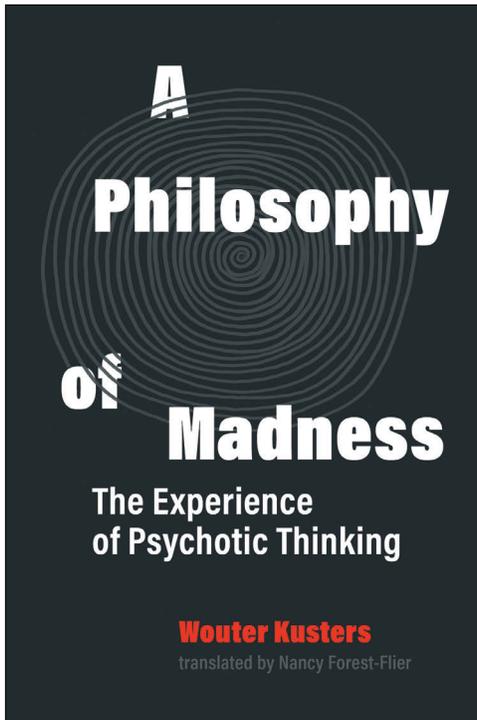
Hod Lipson and Melba Kurman

\$19.95T paper
978-0-262-53447-5

Praise for *Driverless*

“Anyone who wants to understand what’s coming must read this fascinating book.”

—**Martin Ford**, *New York Times* bestselling author of *Rise of the Robots*



**The philosophy of psychosis
and the psychosis of
philosophy: a philosopher
draws on his experience
of madness.**

November
6 x 9, 800 pp.
1 illus.

\$39.95T cloth
978-0-262-04428-8

A Philosophy of Madness

The Experience of Psychotic Thinking

Wouter Kusters

translated by Nancy Forest-Flier

In this book, philosopher and linguist Wouter Kusters examines the philosophy of psychosis—and the psychosis of philosophy. By analyzing the experience of psychosis in philosophical terms, Kusters not only emancipates the experience of the psychotic from medical classification, he also emancipates the philosopher from the narrowness of textbooks and academia, allowing philosophers to engage in real-life praxis, philosophy *in vivo*. Philosophy and madness—Kusters’s preferred, non-medicalized term—coexist, one mirroring the other.

Kusters draws on his own experience of madness—two episodes of psychosis, twenty years apart—as well as other first-person narratives of psychosis. Speculating about the maddening effect of certain words and thought, he argues, and demonstrates, that the steady flow of philosophical deliberation may sweep one into a full-blown acute psychotic episode. Indeed, a certain kind of philosophizing may result in confusion, paradoxes, unworldly insights, and circular frozenness reminiscent of madness. Psychosis presents itself to the psychotic as an inescapable truth and reality.

Kusters evokes the mad person’s philosophical or existential amazement at reality, thinking, time, and space, drawing on classic autobiographical accounts of psychoses by Antonin Artaud, Daniel Schreber, and others, as well as the work of phenomenological psychiatrists and psychologists and such phenomenologists as Edmund Husserl and Maurice Merleau-Ponty. He considers the philosophical mystic and the mystical philosopher, tracing the mad undercurrent in the Husserlian philosophy of time; visits the cloud castles of mystical madness, encountering LSD devotees, philosophers, theologians, and nihilists; and, falling to earth, finds anxiety, emptiness, delusions, and hallucinations. Madness and philosophy proceed and converge toward a single vanishing point.

Wouter Kusters is a Dutch philosopher and linguist. He is the author of *Pure Madness*. *A Philosophy of Madness* was awarded the Dutch Socrates Award in 2015 for best philosophy book in the Dutch language.

The Mind

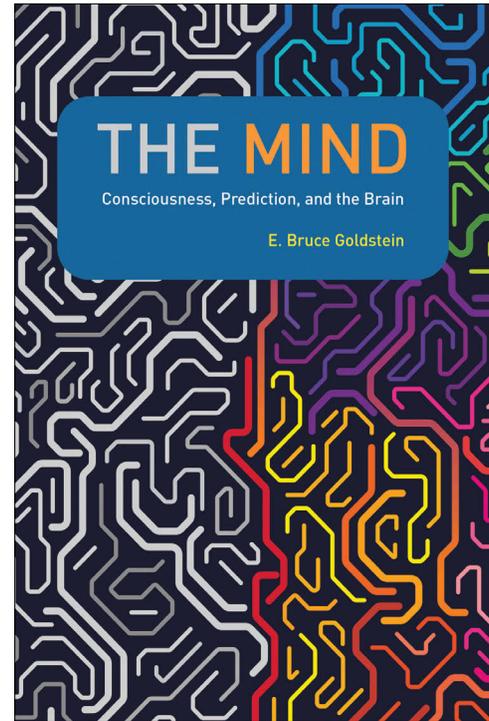
Consciousness, Prediction, and the Brain

E. Bruce Goldstein

The mind encompasses everything we experience, and these experiences are created by the brain—often without our awareness. Experience is private; we can't know the minds of others. But we also don't know what is happening in our own minds. In this book, E. Bruce Goldstein offers an accessible and engaging account of the mind and its connection to the brain. He takes as his starting point two central questions—what is the mind? and what is consciousness?—and leads readers through topics that range from conceptions of the mind in popular culture to the wiring system of the brain. Throughout, he draws on the latest research, explaining its significance and relevance.

Goldstein discusses how the mind has been described and studied since the nineteenth century, and surveys modern approaches to studying mind–brain connections; considers consciousness and how the nervous system creates experience; and explores the hidden mechanisms of the brain. Then, in the heart of the book, he focuses on one principle that holds across a wide range of the mind's functions: prediction. All the behaviors and physiological processes associated with prediction—including eye movements, tactile sensation, language, music, memory, and social processes—involve communication between different places in the brain. The mind emerges not from the firing of neurons in one specialized area but from communications that travel across what Goldstein calls “highways of the mind.”

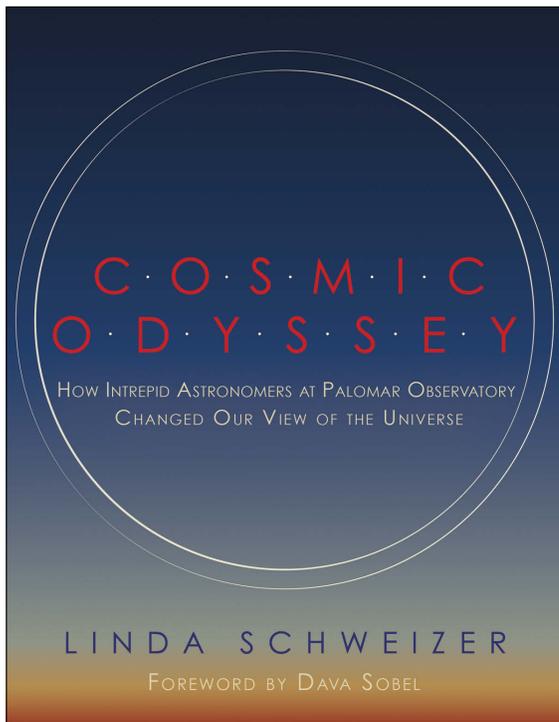
E. Bruce Goldstein is Associate Professor Emeritus of Psychology at the University of Pittsburgh and currently teaches courses about the mind for the Osher Lifelong Learning Institute at Carnegie-Mellon University, the University of Pittsburgh, and the University of Arizona. An award-winning textbook writer, he is the author of *Sensation and Perception* (now in its tenth edition) and *Cognitive Psychology* (now in its fifth edition).



An accessible and engaging account of the mind and its connection to the brain.

September
5 3/8 x 8, 248 pp.
34 illus.

\$27.95T cloth
978-0-262-04406-6



From newborn galaxies to icy worlds and blazing quasars, a behind-the-scenes story of how Palomar Observatory astronomers unveiled our complex universe.

November
7 x 9, 312 pp.
55 color illus., 61 b&w illus.

\$39.95T cloth
978-0-262-04429-5

Cosmic Odyssey

How Intrepid Astronomers at Palomar Observatory
Changed our View of the Universe

Linda Schweizer

foreword by Dava Sobel

Ever since 1936, pioneering scientists at Palomar Observatory in Southern California have pushed against the boundaries of the known universe, making a series of dazzling discoveries that changed our view of the cosmos: quasars, colliding galaxies, supermassive black holes, brown dwarfs, supernovae, dark matter, the never-ending expansion of the universe, and much more. In *Cosmic Odyssey*, astronomer Linda Schweizer tells the story of the men and women at Palomar and their efforts to decipher the vast energies and mysterious processes that govern our universe.

Palomar was the Apollo mission of its era. The first images from the 200-inch George Ellery Hale telescope, commissioned in 1948 as the world's largest, generated as much excitement as images from the moon in 1969 and from the Hubble Space Telescope more recently. So far, Palomar's "Big Eye" and three other telescopes have yielded more than 75,000 telescope-nights of precious data. Schweizer takes readers behind the scenes of scientific discovery, mapping the often chaotic process of detours, dead ends, and serendipitous leaps of insight. Although her focus is on Palomar, she follows threads of discovery across the world to other teams and observatories. Based on more than one hundred interviews and enhanced by research in scientific journals, her account paints a fascinating picture of how discrete insights acquired over decades by researchers in a global community cascade, collide, and finally coalesce into the discoveries we come to accept as facts.

Linda Schweizer holds a PhD in astronomy from the University of California, Berkeley. She has observed at many observatories, published in astronomical journals, and taught science writing and was a Visiting Scholar at the California Institute of Technology, all while raising four daughters.

Ever Smaller

Nature's Elementary Particles, from the Atom to the Neutrino and Beyond

Antonio Ereditato

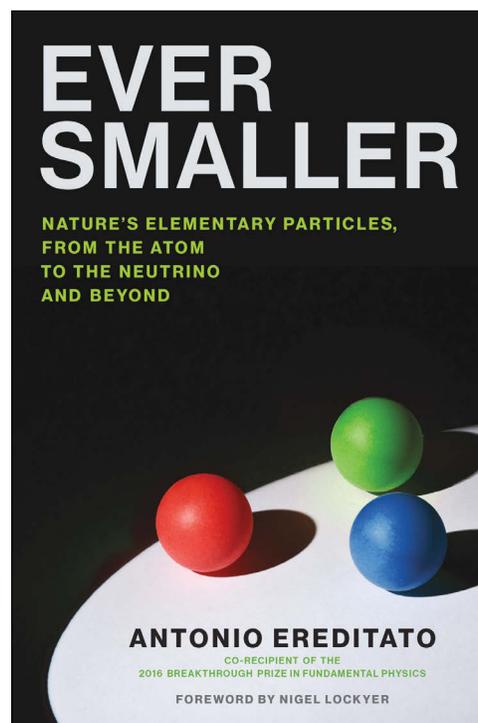
translated by Erica Segre and Simon Carnell

foreword by Nigel Lockyer

The elementary particles of matter hold the secrets of Nature together with the fundamental forces. In *Ever Smaller*, neutrino physicist Antonito Ereditato describes the amazing discoveries of the “particle revolution,” explaining ideas, theories, experiments, and unanswered questions in particle physics in a way that is accessible (and enjoyable) for the general reader. Ereditato shows us that physics is not the exclusive territory of scientists in white lab coats exclaiming “Eureka” but that its revelations can be appreciated by any reader curious about the mysteries of the universe.

Ereditato's overview takes us through a century of particle physics, from the discovery of the components of the atom through an endless procession of subatomic particles—the pion, the muon, the quarks, the W, Z, gluon, Higgs boson, and the mysterious, ubiquitous neutrino (Ereditato's chosen specialty)—interweaving the history of these discoveries with basic explanations of the physics itself as well as the technology behind the discoveries. He considers the particle physicist's impulse to pursue the “ever smaller”—to divide matter into ever more minuscule parts, until reaching the elementary constituents of the universe; explains how Nature likes symmetries; describes the workings of particle accelerators and detectors; demonstrates how to distinguish between three identical quarks; and warns that the ugliest experimental data are more important than the most beautiful theory. With *Ever Smaller*, Ereditato invites readers to join him in appreciating the beauty of the microcosm.

Antonio Ereditato is Director of the University of Bern's Laboratory for High Energy Physics. He is the former leader of OPERA, a large multinational collaborative study of neutrino physics at CERN (European Organization for Nuclear Research) and he participated in the ATLAS experiments at CERN that led to the detection of the Higgs boson (the “God particle”) and in several large neutrino projects including T2K in Japan and MicroBooNE and DUNE in the United States. He is the author of *The State of the Art of Neutrino Physics*.



Ideas, theories, experiments, and unanswered questions in particle physics, explained (with anecdotes) for the general reader.

September
6 x 9, 352 pp.
152 illus.

\$34.95T cloth
978-0-262-04386-1



Data | Action

Using Data for Public Good

Sarah Williams

Big data can be used for good—from tracking disease to exposing human rights violations—and for bad: implementing surveillance and control. Data inevitably represents the ideologies of those who control its use; data analytics and algorithms too often exclude women, the poor, and ethnic groups. In *Data Action*, Sarah Williams provides a guide for working with data in more ethical and responsible ways. Williams outlines a method that emphasizes collaboration among data scientists, policy experts, data designers, and the public. The approach generates policy debates, influences civic decisions, and informs design to help ensure that the voices of people represented in the data are neither marginalized nor left unheard.

Williams's method is powered by three calls to data action: *Build it! Hack it! Share it!* Digital technology allows anyone to collect data with very little training; we can all build datasets that can have a policy impact. Working with experts and communities, we can acquire public data creatively—“hacking” it, literally or figuratively—to investigate policies. Once shared, data, both in its raw form and through visualizations, initiates societal change by exposing insights that catch the public eye.

**How to use data as a tool
for empowerment rather
than oppression.**

November
9 x 11 3/4, 380 pp.
110 color illus.

\$39.95T cloth
978-0-262-04419-6

Sarah Williams is Associate Professor of Technology and Urban Planning at the MIT School of Architecture and Planning, where she is also Director of the Civic Data Design Lab. Trained in geography, landscape architecture, and urban planning, she was named one of the Top 25 Leading Thinkers in Urban Planning and Technology and Game Changer by *Metropolis Magazine*. Her design work has been widely exhibited at venues including the Guggenheim, the Museum of Modern Art (MoMA), and the Cooper Hewitt Museum.

Wikipedia @ 20

Stories of an Incomplete Revolution

edited by Joseph M. Reagle, Jr., and Jackie L. Koerner

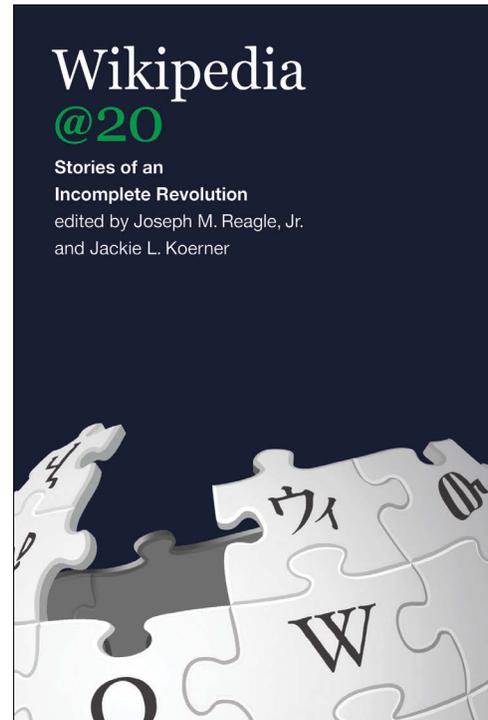
We have been looking things up in Wikipedia for twenty years. What began almost by accident—a wiki attached to an nascent online encyclopedia—has become the world’s most popular reference work. Regarded at first as the scholarly equivalent of a Big Mac, Wikipedia is now known for its reliable sourcing and as a bastion of (mostly) reasoned interaction. How has Wikipedia, built on a model of radical collaboration, remained true to its original mission of “free access to the sum of all human knowledge” when other tech phenomena have devolved into advertising platforms? In this book, scholars, activists, and volunteers reflect on Wikipedia’s first twenty years, revealing connections across disciplines and borders, languages and data, the professional and personal.

The contributors consider Wikipedia’s history, the richness of the connections that underpin it, and its founding vision. Their essays look at, among other things, the shift from bewilderment to respect in press coverage of Wikipedia; Wikipedia as “the most important laboratory for social scientific and computing research in history”; and the acknowledgment that “free access” includes not just access to the material but freedom to contribute—that the summation of all human knowledge is biased by who documents it.

Joseph Reagle, Jr., is Associate Professor of Communication Studies at Northeastern University. He is the author of *Good Faith Collaboration*, *Reading the Comments*, and *Hacking Life*, all published by the MIT Press. **Jackie Koerner** is a qualitative research analyst for online communities. She is Community Health Consultant for the Wikimedia community and from 2016 to 2018 was Visiting Scholar at Wiki Education Foundation at San Francisco State University.

Contributors

Phoebe Ayers, Omer Benjakob, Yochai Benkler, William Beutler, Siko Bouterse, Rebecca Thorndike-Breeze, Amy Carleton, Robert Cummings, LiAnna L. Davis, Siân Evans, Heather Ford, Stephen Harrison, Heather Hart, Benjamin Mako Hill, Dariusz Jemielniak, Brian Keegan, Jackie Koerner, Alexandria Lockett, Jacqueline Mabey, Katherine Maher, Michael Mandiberg, Stephane Coillet-Matillon, Cecelia A. Musselman, Eliza Myrie, Jake Orlowitz, Ian A. Ramjohn, Joseph Reagle, Jr., Anasuya Sengupta, Aaron Shaw, Melissa Tamani, Jina Valentine, Matthew Vetter, Adele Vrana, Denny Vrandečić



Wikipedia’s first twenty years: how what began as an experiment in collaboration became the world’s most popular reference work.

October
6 x 9, 376 pp.
3 illus.

\$27.95T paper
978-0-262-53817-6



Why video games need feminism and feminism needs video games.

August
5 3/8 x 8, 184 pp.
3 illus.

\$26.95T cloth
978-0-262-04438-7

Playful Thinking series

Play like a Feminist.

Shira Chess

“You play like a girl”: it’s meant to be an insult, accusing a player of subpar, un-fun playing. If you’re a girl, and you grow up, do you “play like a woman”—whatever that means? In this provocative and enlightening book, Shira Chess urges us to play like feminists. Furthermore, she urges us to play video games like feminists. Playing like a feminist is empowering and disruptive; it exceeds the boundaries of gender yet still advocates for gender equality. Playing like a feminist offers a new way to think about how humans play—and also a new way to think about how feminists do their feministing. Chess argues that feminism need video games as much as video games need feminism.

Video games, Chess tells us, are primed for change. Roughly half of all players identify as female, and Gamergate galvanized many of gaming’s disenfranchised voices. Games themselves are in need of a creative platform-expanding, metaphysical explosion; feminism can make games better. Chess reflects on the importance of play, and playful protest, and how feminist video games can help us rethink the ways that we tell stories. She proposes “Women’s Gaming Circles”—which would function like book clubs for gaming—as a way for feminists to take back play. (An appendix offers a blueprint for organizing a gaming circle.) Play and games can be powerful. Chess’s goal is for all of us—regardless of gender orientation, ethnicity, ability, social class, or stance toward feminism—to spend more time playing as a tool of radical disruption.

Shira Chess is Associate Professor of Entertainment and Media Studies at the University of Georgia and the author of *Ready Player Two*.

The Infinite Playground

A Player's Guide to Imagination

Bernard De Koven

with Holly Gramazio

edited by Celia Pearce and Eric Zimmerman

Bernard De Koven (1941–2018) was a pioneering designer of games and theorist of fun. He studied games long before the field of game studies existed. For De Koven, games could not be reduced to artifacts and rules; they were about a sense of transcendent fun. This book, his last, is about the imagination: the imagination as a playground, a possibility space, and a gateway to wonder. *The Infinite Playground* extends a play-centered invitation to experience the power and delight unlocked by imagination. It offers a curriculum for playful learning.

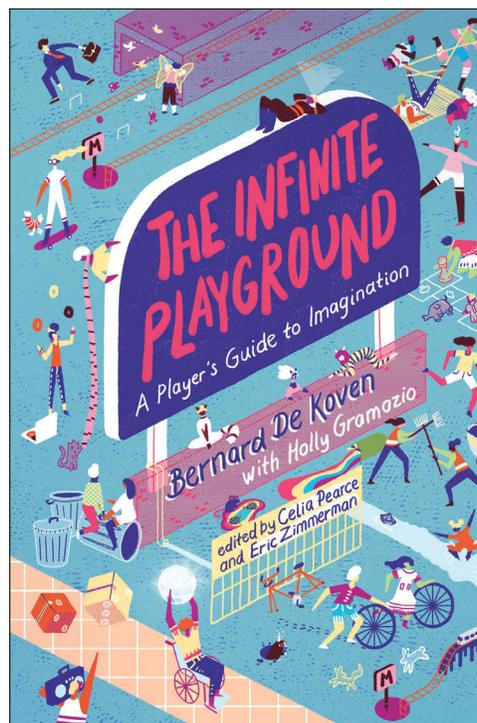
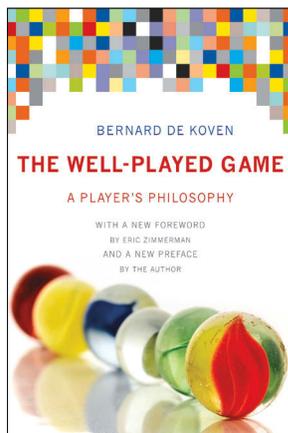
De Koven guides the readers through a series of observations and techniques, interspersed with games. He begins with the fundamentals of play, and proceeds through the private imagination, the shared imagination, and imagining the world—observing, “the things we imagine can become the world.” Along the way, he reminisces about playing ping-pong with basketball great Bill Russell; begins the instructions for a game called *Reception Line* with “Mill around”; and introduces blathering games—*Blather*, *Group Blather*, *Singing Blather*, and *The Blather Chorale*—that allow the player’s consciousness to meander freely.

Delivered during the last months of his life, *The Infinite Playground* has been painstakingly cowritten with Holly Gramazio, who worked together with coeditors Celia Pearce and Eric Zimmerman to complete the project as Bernie De Koven’s illness made it impossible for him to continue writing. Other prominent game scholars and designers influenced by De Koven, including Katie Salen Tekinbaş, Jesper Juul, Frank Lantz, and members of Bernie’s own family, contribute short interstitial essays.

Bernard De Koven was a leading game designer and theorist of fun. He was a codirector of the New Games Foundation, a founder of the Games Preserve, the author of the game studies classic *The Well-Played Game: A Player's Philosophy* (MIT Press), *Junkyard Sports*, and *A Playful Path*, and creator of the website deepfun.com.

Contributors

Ian Bogost, Stephen Conway, Adriaan de Jongh, Elyon De Koven, Rocky De Koven, Mary Flanagan, Gonzalo Frasca, Tracy Fullerton, Holly Gramazio, Catherine Herdlick, Jesper Juul, Frank Lantz, Colleen Macklin, Celia Pearce, Sebastian Quack, Lee Rush, Katie Salen Tekinbaş, John Sharp, Tassos Stevens, Akira Thompson, Greg Trefry, Douglas Wilson, Zach Wood, Eric Zimmerman



A play-centered invitation to experience the power and delight unlocked by imagination.

July
5 3/8 x 8, 208 pp.
1 illus.

\$29.95T cloth
978-0-262-04407-3

Also Available

The Well-Played Game
A Player's Philosophy
Bernard De Koven
\$29.95T cloth
978-0-262-01917-0

Who Are You?

Nintendo's Game Boy Advance Platform

Alex Custodio

The Game Boy Advance platform as computational system and cultural artifact, from its 2001 release through hacks, mods, emulations, homebrew afterlives.

In 2002, Nintendo of America launched an international marketing campaign for the Game Boy Advance that revolved around the slogan “Who Are You?”—asking potential buyers which Nintendo character, game, or even device they identified with and attempting to sell a new product by exploiting players’ nostalgic connections to earlier ones. Today, nearly two decades after its release, and despite the development of newer and more powerful systems, Nintendo’s Game Boy Advance lives on, through a community that continues to hack, modify, emulate, make, break, remake, redesign, trade, use, love, and play with the platform. In this book Alex Custodio traces the network of hardware and software afterlives of the Game Boy Advance platform.

Each chapter considers a component of this network—hardware, software, peripheral, or practice—that illuminates the platform’s unique features as a computational system and a cultural artifact. Examining the evolution of the design and architecture of Nintendo’s handhelds and home consoles, and the constraints imposed on developers and players, for example, Custodio finds that Nintendo essentially embeds nostalgia into its hardware. She explores Nintendo’s expansion of the platform through interoperability; physical and affective engagement with the Game Boy Advance; portability, private space, and social interaction; the platformization of nostalgia; fan-generated content including homebrew, hacking, and hardware modding; and e-waste—the final afterlife of consumer electronics.

Alex Custodio is a scholar, writer, and artist living in Montreal.

September | 6 x 9, 288 pp. | 14 illus.

\$29.95T cloth
978-0-262-04439-4

Platform Studies series

Free-to-Play

Mobile Video Games, Bias, and Norms

Christopher A. Paul

An examination of free-to-play and mobile games that traces what is valued and what is marginalized in discussions of games.

Free-to-play and mobile video games are an important and growing part of the video game industry, and yet they are often disparaged by journalists, designers, and players and pronounced inferior to games with more traditional payment models. In this book, Christopher Paul shows that underlying the criticism is a bias against these games that stems more from who is making and playing them than how they are monetized. Free-to-play and mobile games appeal to different kinds of players, many of whom are women and many of whom prefer different genres of games than multi-level action-oriented killing fests. It’s not a coincidence that some of the few free-to-play games that have been praised by games journalists are *League of Legends* and *World of Tanks*.

Paul explains that free-to-play games have a long history, and that the current model of premium sales is an aberration. He analyzes three monetization strategies: requirements to spend, where players must make a purchase to gain access; paying for advantage; and optional spending (used by *Fortnite*, among other popular free-to-play games). He considers how players rationalize or resist spending; discusses sports games and gacha-style games that entice players to make “just one more” purchase; and describes the framing of certain free-to-play games as proper games while others are cast as abusive abominations. Paul’s analysis offers a provocative picture of what is valued and what is marginalized in discussions of games.

Christopher A. Paul is Professor in the Communication and Media Department at Seattle University. He is the coauthor of *Real Games: What’s Legitimate and What’s Not in Contemporary Videogames* (MIT Press).

October | 5 3/8 x 8, 304 pp. | 21 illus.

\$30.00T paper
978-0-262-53941-8

Ambient Play

Larissa Hjorth and Ingrid Richardson

How mobile games are part of our day-to-day lives and the ways we interact across digital, material, and social landscapes.

We often play games on our mobile devices when we have some time to kill—waiting in line, pausing between tasks, stuck on a bus. We play in solitude or in company, alone in a bedroom or with others in the family room. In *Ambient Play*, Larissa Hjorth and Ingrid Richardson examine how mobile game-play fits into our day-to-day lives. They show that as mobile games spread across different genres, platforms, practices, and contexts, they become an important way of experiencing and navigating a digitally saturated world. Mobile games become conduits for what the authors call ambient play, pervading much of our social and communicative terrain. We become digital wayfarers, moving constantly among digital, material, and social worlds.

Hjorth and Richardson explore how households are transformed by media—how idiosyncratic media use can alter the spatial composition and emotional cadence of the home. They show how mobile games connect domestic forms of play with more public forms of playfulness in urban spaces, how collaborative play (both networked and face-to-face) is incorporated into private and public play, and how touchscreens and haptic play emphasize the perception of the moving body. Hjorth and Richardson invite us to think of mobile gaming as more than a “casual” distraction but as a complex cultural practice embedded into our contemporary ways of being, knowing, and communicating.

Larissa Hjorth is Distinguished Professor and Director of Design and Creative Practice at RMIT University in Melbourne. She is coauthor of *Screen Ecologies* (MIT Press). **Ingrid Richardson** is Professor of Digital Communication at RMIT University in Melbourne.

August | 5 3/8 x 8, 200 pp. | 20 photos

\$21.95T cloth
978-0-262-04436-3

Playful Thinking series

Online Afterlives

Immortality, Memory, and Grief in Digital Culture

Davide Sisto

translated by Bonnie McClellan-Broussard

How digital technology—from Facebook tributes to QR codes on headstones—is changing our relationship to death.

Facebook is the biggest cemetery in the world, with countless acres of cyberspace occupied by snapshots, videos, thoughts, and memories of people who have shared their last status updates. Modern society usually hides death from sight, as if it were a character flaw and not an ineluctable fact. But on Facebook and elsewhere on the internet, we can't avoid death; digital ghosts—electronic traces of the dead—appear at our click or touch. On the Internet at least, death has once again become a topic for public discourse. In *Online Afterlives*, Davide Sisto considers how digital technology is changing our relationship to death.

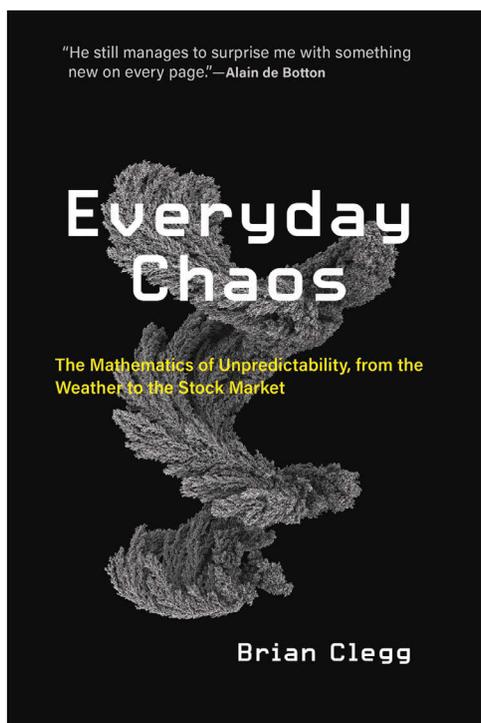
Sisto describes the various modes of digital survival after biological death—including Facebook tributes, chatbots programmed to speak in the voice of a dead person, and QR codes on headstones—and discusses their philosophical ramifications. Sisto reports on such phenomena as the Tweet Hereafter, a website that collects people's last tweets; the intimacy of sending a WhatsApp message to someone who has died; and digital cremation, the deactivation of a dead person's account. Because we can mingle with the dead online almost as we mingle with the living, he warns, we may find it difficult to distinguish communication at a distance from communication with the dead.

The digital afterlife has restored the communal dimension of death, rescuing both mourners and the mourned from social isolation. A society willing to engage with death and mortality, Sisto argues, is a more balanced and mature society.

Davide Sisto, a philosopher and authority on thanatechnology, is a Researcher in Theoretical Philosophy at the University of Turin.

September | 5 3/8 x 8, 216 pp.

\$19.95T paper
978-0-262-53939-5



Chaos and complexity explained, with illuminating examples ranging from unpredictable pendulums to London's wobbly Millennium Bridge.

October
6 1/4 x 9 1/4, 256 pp.
160 illus.

\$29.95T paper
978-0-262-53969-2

For sale in North America only

Everyday Chaos

The Mathematics of Unpredictability, from the Weather to the Stock Market

Brian Clegg

The math we are taught in school is precise and only deals with simple situations. Reality is far more complex. Trying to understand a system with multiple interacting components—the weather, for example, or the human body, or the stock market—means dealing with two factors: chaos and complexity. If we don't understand these two essential subjects, we can't understand the real world. In *Everyday Chaos*, Brian Clegg explains chaos and complexity for the general reader, with an accessible, engaging text and striking full-color illustrations.

By chaos, Clegg means a system where complex interactions make predicting long-term outcomes nearly impossible; complexity means complex interacting systems that have new emergent properties that make them more than the sum of their parts. Clegg illustrates these phenomena with discussions of predictable randomness, the power of probability, and the behavior of pendulums. He describes what Newton got wrong about gravity; how feedback kept steam engines from exploding; and why weather produces chaos. He considers the stock market, politics, bestseller lists, big data, and London's wobbling Millennium Bridge as examples of chaotic systems, and he explains how a better understanding of chaos helps scientists predict more accurately the risk of catastrophic Earth-asteroid collisions. We learn that our brains are complex, self-organizing systems; that the structure of snowflakes exemplifies emergence; and that life itself has been shown to be an emergent property of a complex system.

Brian Clegg is an award-winning popular science writer and the author of more than thirty books, including *A Brief History of Infinity*, *Dice World*, and *Dark Matter and Dark Energy: The Hidden 95% of the Universe*.

Praise for Brian Clegg

"He still manages to surprise me with something new on every page."

—**Alain de Botton**

A Manager's Guide to the New World of Work

The Most Effective Strategies for Managing People, Teams, and Organizations

MIT Sloan Management Review

Insights from organizations that are navigating the novel challenges of the digital workplace.

How can technology and analytics help companies manage people? Why do teams working remotely still need leaders? When should organizations use digital assessment tools for gauging talent and potential? This book from *MIT Sloan Management Review* answers questions managers are only beginning to ask, presenting insights and stories from organizations navigating the novel challenges of the digital workplace.

Experts from business and academia describe what's worked, what's failed, and what they've learned in the new world of work. They look at strategies that organizations use to help managers and employees adapt to the fast-changing digital environment, from the benefits of wool-gathering to the use of anonymous chats; examine digital tools for collaboration, including interactive spreadsheets and analytics that increase transparency; and discuss such "big-picture" trends as expanded notions of value and new frontiers in upskilling. A detailed case study, produced by *MIT Sloan Management Review* in collaboration with McKinsey & Company, explores how IBM reimagined talent and performance management with the goal of increasing employee engagement.

Contributors

Steve Berez, Ethan Bernstein, Josh Bersin, Matthew Bidwell, Ryan Bonnici, Tomas Chamorro-Premuzic, Rob Cross, Chris DeBrusk, Federica De Stefano, Thomas H. Davenport, Angela Duckworth, Ken Favaro, Lynda Gratton, Peter Gray, Lindred Greer, John Hagel III, Manish Jhunjhunwala, David Kiron, Frieda Klotz, David Lazer, Massimo Magni, Likoebe Maruping, Kelly Monahan, Will Poindexter, Reb Rebele, Adam Roseman, Michael Schrage, Jeff Schwartz, Jesse Shore, Brian Solis, Barbara Spindel, Anna A. Tavis, Adam Waytz, David Waller, Maggie Woolf

July | 5 3/8 x 8, 224 pp. | 2 illus.

\$24.95T paper

978-0-262-53944-9

**Digital Future of Management series,
published in cooperation with
MIT Sloan Management Review**

From Insight to Innovation

Engineering Ideas that Transformed America in the Twentieth Century

David P. Billington, Jr.

The engineering ideas behind key twentieth-century technical innovations, from great dams and highways to the jet engine, the transistor, the microchip, and the computer.

Technology is essential to modern life, yet few of us are technology-literate enough to know much about the engineering that underpins it. In this book, David P. Billington, Jr., offers accessible accounts of the key twentieth-century engineering innovations that brought us into the twenty-first century. Billington examines a series of engineering advances—from the Hoover Dam and jet engines to the transistor, the microchip, the computer, and the internet—and explains how they came about and how they work.

Each of these innovations tells a unique story. The great dams of the New Deal brought huge rivers under control, and a national highway system interconnected the nation, as did jet air travel. The transistor and the microchip originated in the private sector and found a mass market after early government support. The computer and the internet began as government projects and found a mass market later in the private sector. Billington finds that engineers with unconventional insights could succeed in a bureaucratic age; what mattered were independent vision and a society that welcomed innovation.

This book completes the story of American engineering begun with the earlier volumes *The Innovators* (by the author's father) and *Power, Speed, and Form* (by the author and his father).

David P. Billington, Jr., is a historian and author of books and articles exploring the history of engineering innovation.

November | 7 x 9, 320 pp. | 144 illus.

\$34.95T cloth

978-0-262-04430-1



Critical Zones

The Science and Politics of Landing on Earth

edited by Bruno Latour and Peter Weibel

Artists and writers portray the disorientation of a world facing climate change.

This monumental volume, drawn from a 2020 exhibition at the ZKM Center for Art and Media, portrays the disorientation of life in a world facing climate change. It traces this disorientation to the disconnection between two different definitions of the land on which modern humans live: the sovereign nation from which they derive their rights, and another one, hidden, from which they gain their wealth—the land they live on, and the land they live from. Charting the land they will inhabit, they find not a globe, not the iconic “blue marble,” but a series of critical zones—patchy, heterogenous, discontinuous.

With short texts, longer essays, and more than 500 illustrations, the contributors explore the new landscape on which it may be possible for humans to land—what it means to be “on Earth,” whether the critical zone, the Gaia, or the terrestrial. They consider geopolitical conflicts and tools redesigned for the new “geopolitics of life forms.” The “thought exhibition” described in this book opens a fictional space to explore the new climate regime; the rest of the story is unknown.

Bruno Latour, a philosopher and anthropologist, is the author of *We Have Never Been Modern*, *An Inquiry into Modes of Existence*, *Facing Gaia*, *Down to Earth*, and many other books. He coedited (with Peter Weibel) the previous ZKM volumes *Making Things Public*, *ICONOCLASH*, and *Reset Modernity!* (all published by the MIT Press). **Peter Weibel** is Chairman and CEO of the ZKM | Center for Art and Media, Karlsruhe. He has edited other ZKM volumes, including, most recently, *Sound Art* and *Global Activism* (both published by the MIT Press).

Contributors

Dipesh Chakrabarty, Pierre Charbonnier, Emanuele Coccia, Vinciane Despret, Jérôme Gaillarde, Donna Haraway, Joseph Leo Koerner, Timothy Lenton, Richard Powers, Simon Schaffer, Isabelle Stengers, Bronislaw Szerszynski, Jan A. Zalasiewicz, Siegfried Zielinski

October | 8 1/2 x 12 1/2, 560 pp. | 500 color illus.

\$65.00T cloth

978-0-262-04445-5

Copublished with ZKM | Center for Art and Media Karlsruhe

Deserting from the Culture Wars

edited by Maria Hlavajova and Sven Lütticken

Artists and writers consider a tactical desertion from the “culture wars”—a refusal to be distracted, an embrace of the emancipatory understanding of culture.

Deserting from the Culture Wars reflects upon and intervenes in our current moment of ever-more polarizing ideological combat, often seen as the return of the “culture wars.” How are these culture wars defined and waged? Engaging in a theater of war that has been delineated by the enemy is a shortcut to defeat. Getting out of the reactive mode that produces little but a series of Pavlovian responses, this book proposes a tactical desertion from the culture wars as they are being waged today—a refusal to play the other side’s war games, an unwillingness to be distracted.

The volunteer troops in the culture wars are often given marching orders by professional masters of propaganda. What, then, might artists and others who are professionally engaged with images and imaginaries, with narratives and assemblies, have to contribute to the collective discovery of different modes of living culture? Far from limiting the performance of culture to a one-sided speech act, an emancipatory understanding of culture needs to conceive of speech as embodied and intersubjective—as a collective performance.

Maria Hlavajova is the Founding General and Artistic Director of BAK, basis voor actuele kunst, Utrecht. She is coeditor of *Former West: Art and the Contemporary after 1989*, and *Propositions for Non-Fascist Living: Tentative and Urgent* (both published by the MIT Press). **Sven Lütticken**, an art historian and critic, teaches at Vrije Universiteit, Amsterdam. He is the author of *Cultural Revolution: Aesthetic Practice after Autonomy* (Sternberg Press) and other books.

Contributors

Bini Adamczak, Kader Attia, Rose Hammer, Tom Holert, Charl Landvreugd and Sebastian Olma, Geert Lovink and Esmee Schoutens, Sven Lütticken, Diana McCarty, Dan McQuillan, Johannes Paul Raether, Natascha Sadr Haghghighian, Jonas Staal

October | 4 5/8 x 6 1/2, 150 pp. | 8 color illus., 16 b&w illus.

\$19.95T paper

978-0-262-53943-2

Copublished with BAK, basis voor actuele kunst

The Photoromance

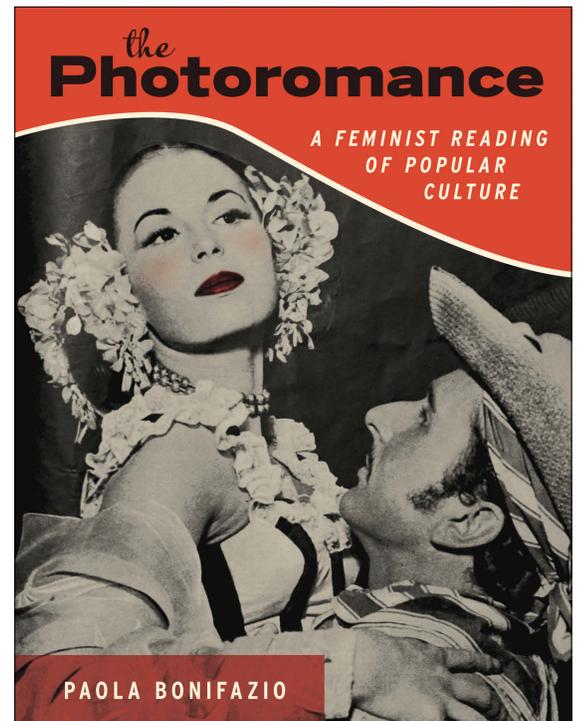
A Feminist Reading of Popular Culture

Paola Bonifazio

Born in Italy and successfully exported to the rest of the world, photoromances had a readership of millions in the postwar years. By the early 1960s, more than ten million Italians read a photoromance each week. Despite its popularity, the photoromance—a form of graphic storytelling that uses photographs instead of drawings—was widely scorned as a medium, and its largely female audience derided as naive, pathetic, and uneducated. In this provocative book, Paola Bonifazio offers another perspective, making a case for the relevance of the photoromance for both feminism and media culture. She argues that the photoromance pioneered storytelling across platforms, elevated characters and artists into brands, and nurtured a devoted fan base. Moreover, Bonifazio shows that female readers—condescended to by intellectuals, journalists, and politicians of both the left and the right—powered the Italian photoromance industry’s success.

Bonifazio examines the “convergence culture” of Italian media as photoromance magazines dispersed their content across multiple formats, narrative conventions, editorial and business strategies, and platforms. The plots of photoromances often resembled the storylines of romantic films, and film stars themselves often appeared in photoromances. Bonifazio discusses the media habits of photoromance readers; the use of photoromances to promote political, religious, and social agendas, including a campaign for “birth control in comics”; and long-term fandom. While publishers built lifelong relationships with their readers, the readers built a common identity and culture.

Paola Bonifazio is Associate Professor in the Department of French and Italian at the University of Texas at Austin. She is the author of *Schooling in Modernity: The Politics of Sponsored Films in Postwar Italy*.



A fascinating feminist reading of an often scorned medium: the storytelling, cross-platform success, and female fandom of the photoromance.

September
7 x 9, 256 pp.
20 color illus., 21 b&w illus.

\$29.95T paper
978-0-262-53928-9

On the Wings of Hypothesis

Collected Writings on Soviet Cinema

Annette Michelson

edited by Rachel Churner

foreword by Malcolm Turvey

Annette Michelson's erudite and incisive readings of the revolutionary films of Sergei Eisenstein and Dziga Vertov, collected for the first time.

This posthumous volume gathers Annette Michelson's erudite and incisive readings of the revolutionary films of Sergei Eisenstein and Dziga Vertov, giving readers the opportunity to track her sustained investigations into their work. Michelson introduced American audiences to Soviet cinema in the early 1970s, extending the interpretive paradigm she had used for American filmmakers of the mid-twentieth century—in which she emphasized phenomenological readings of their work—to films and writings by Eisenstein and Vertov. Over four decades, Michelson returned again and again to what she calls, following Eisenstein, “intellectual cinema”—the deliberate attempt to create philosophically informed analogues for consciousness.

The volume includes Michelson's major essays on Eisenstein's unrealized attempts to make movies of both Marx's *Capital* and Joyce's *Ulysses*, as well as her authoritative discussion of Vertov's 1929 masterpiece *The Man with a Movie Camera*. Together, the texts demonstrate Michelson's pervasive influence as a writer and thinker, and her role in the establishment of cinema studies as an academic field. This collection makes these canonical texts available for a new generation of film scholars.

Annette Michelson (1922–2018) was widely considered one of the twentieth century's most influential writers on film. During her more than five-decade career, she was an art editor and critic for the *New York Herald Tribune*, a writer for *Artforum*, a founding editor of the journal *October*, and Professor in the Department of Cinema Studies at New York University. Some of Michelson's essays on film were collected in *On the Eve of the Future: Selected Writings on Film* (MIT Press).

October | 7 x 9, 248 pp. | 37 illus.

\$29.95T cloth

978-0-262-04449-3

An October Book

Documentary in Dispute

The Original Manuscript of *Changing New York*
by Berenice Abbott and Elizabeth McCausland

Sarah Miller

The recreation of a landmark in 1930s documentary photography.

Berenice Abbott's *Changing New York* (1939) is the career-defining book by one of modernism's most prominent photographers and a landmark in 1930s documentary photography. Published in 1939 by E. P. Dutton with support from the New Deal's Federal Art Project, the book presented ninety-seven photographs from Abbott's larger WPA-funded “Changing New York” project (1935–1939), with by captions credited to art critic Elizabeth McCausland. Yet, because of editorial changes by the publisher, the book that Abbott and McCausland actually planned, sequenced, and wrote remains unseen. As a consequence, their wholly unique theory of documentary, along with their radical program for conjoining change, history, experience, and photography-trained vision in New York City's built environment, have been lost. This book recreates *Changing New York* as it was originally envisioned by Abbott and McCausland, presenting their original selection of photographs and McCausland's original and published captions.

In an accompanying essay, Sarah Miller investigates *Changing New York*'s recreation, the publisher's revisions, and the European theoretical and cultural background of the project, explaining how the concept of “documentary” was a contested notion and the object of intense, if not acrimonious, discussions. Julia Van Haften and Gary Van Zante then discuss *Changing New York* as a physical artifact, focusing on the document's provenance, its archival history and preservation, and, more important, its recent institutional accessibility—which has made this book possible.

Sarah Miller is the author and editor of *Berenice Abbott's Changing New York* and is Assistant Adjunct Professor of Art History at Mills College. Her reviews, criticism, and interviews have appeared in *Aperture*, *Critical Inquiry*, *Études Photographiques*, *Artforum*, *Photography & Culture*, and *caa.reviews*.

October | 7 x 9, 450 pp. | 150 color photographs

\$34.95T cloth

978-0-262-04417-2

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The Themerson Archive Catalogue

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volume I: Letters and Documents

volume II: The Themersons

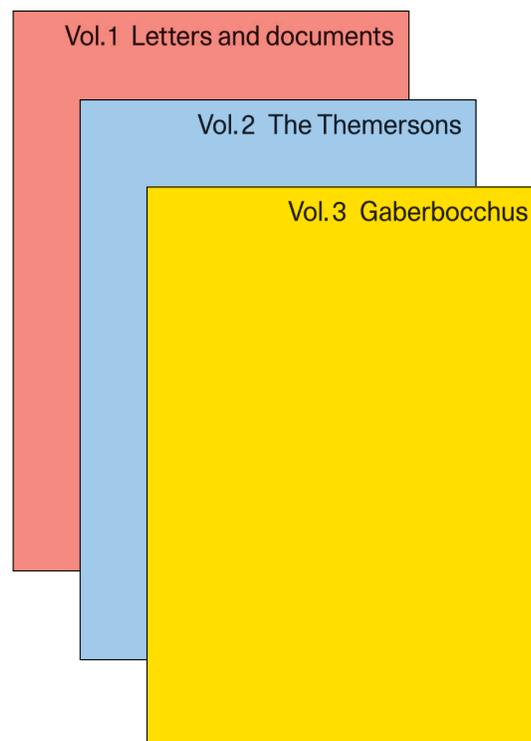
volume III: Gaberbocchus

edited by **Jasia Reichardt** and **Nick Wadley**

This monumental three-volume set documents the life and work of writer, publisher, and filmmaker Stefan Themerson (1910–1988) and his wife, painter, illustrator, and theater designer Franciszka Themerson (1907–1988). The Themersons, active members of the Polish avant-garde, lived in Paris beginning in 1938, and found their way to London during World War II. In London, they continued their artistic practice, individually and in collaboration, and founded the small avant-garde press Gaberbocchus. At Gaberbocchus (the press's name is a Latinized “Jabberwocky”), they published the first English editions of works by Alfred Jarry, Raymond Queneau, the Pataphysicians, and others, alongside work by young English writers outside the commercial mainstream.

Volume I collects the Themersons' correspondence, with recipients ranging from the philosopher Bertrand Russell to the Themersons' house cleaner. Volume II documents the Themersons' lives—successes and frustrations, work and travel, filmography and exhibitions. Volume III presents the history of the Gaberbocchus Press from 1942 to 1979.

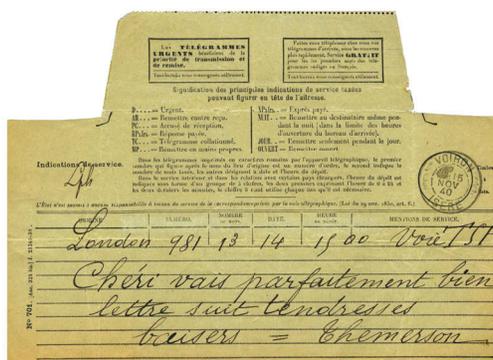
Jasia Reichardt, a writer on art, has worked as an assistant editor at the London-based *Art News and Review*, Assistant Director of the influential Institute of Contemporary Art in London, and Director of the Whitechapel Gallery in London. Since 1990, she has organized and edited the catalog of the Themerson archive with her husband, the art historian and artist **Nick Wadley** (1935–2017).



Documents, photographs, and artwork from the archive of Stefan and Franciszka Themerson, including material from their small avant-garde press Gaberbocchus.

August
8 1/4 x 11 3/4, 1000 pp.
1,000 illus.

\$250.00T paper
978-1-9162474-1-3



Health

edited by **Bárbara Rodríguez Muñoz**

The ethical, aesthetic and political significance of practices, positions, and theories connected to health in contemporary art.

In an era of diet pills, rising antidepressant usage, yoga, and health-management apps, wellness is one of the defining issues of contemporary life, affecting every intimate aspect of our lives. Historically, art has been entwined with the values of medicine, beauty, and the productive body that have defined Western scientific paradigms. Contemporary artists are increasingly confronting and reshaping these ideologies, drawing on the vexed experiences surrounding questions of health and identity. *Health* explores the ethical, aesthetic, and political significance of practices, positions, and theories connected to health and illness in contemporary art.

Raw, confrontational, and affective, these texts consider pressing discourses in artistic practices including care, shifting identities, and community building. The featured artists, curators, writers, and thinkers engage with the ways the vulnerability of our bodies and the maladies that seize them also reveal structural aspects of our societies: how hegemonic narratives are connected with ideas of health, disability, and cure, and how sickness intersects with sexuality, ethnicity, gender, and class. By reclaiming other existences—beyond what is considered straight, healthy, neurotypical, or productive—this reader questions the myths, stigmas, and cultural attitudes that shape people's perceptions of illness and normativity.

Bárbara Rodríguez Muñoz is a writer and Curator of Temporary Exhibitions at Wellcome Collection, London. Her exhibitions include *Jo Spence and Oreet Ashery: Misbehaving Bodies* (cocurated with George Vasey, 2019–20). She has written for *Afterall*, *Concreta*, *Les Laboratoires d'Aubervilliers*, and *Mousse Publishing*.

September | 5 3/8 x 8 1/4, 240 pp.

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Documents of Contemporary Art series

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Perspecta 53

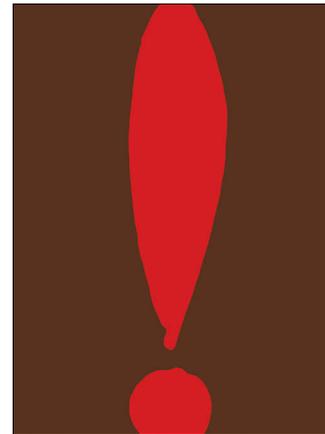
Onus

The Yale Architectural Journal

edited by **Caroline Acheatel, Paul J. Lorenz, Paul Rasmussen, and Alexander Stagge**

Essays and projects examine the ethical questions and moral tensions that arise during the ideation, development, completion, and aftermath of the architectural design process.

In architecture, ethics are malleable. In theory, the terms are rigid, yet the reality is elastic. While much of the built



environment is ostensibly designed for an individual client's needs, architecture's effects reverberate politically, environmentally, and culturally, often in unexpected ways and far beyond the limits of any parcel or project. This volume of *Perspecta*—the oldest and most distinguished student-edited architectural journal in the United States—considers the ethical questions and moral tensions that arise during the ideation, devel-

opment, completion, and aftermath of the design process.

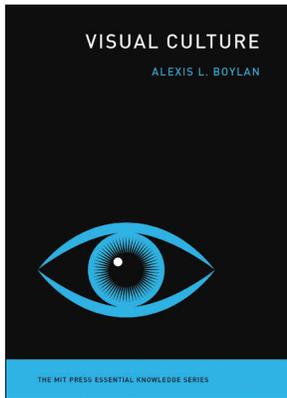
Architecture operates on a temporal scale largely disconnected from social shifts. Although often bound up in power networks and funded by those who are most powerful, architecture has implicit obligations to those most vulnerable. Architecture's language, by making abstract concepts concrete, can reinforce or disrupt political, environmental, and social structures.

Contributors from a range of geographies and practices offer insights, provocations, and questions about the dilemmas that architects encounter at every stage of designing the built environment. Through arguments, essays, and projects that examine the issue at a range of scales—from the intimacy of a single material to the reach of global typology—*Perspecta 53* explores the complex dynamics of architectural onus, and how designers can navigate conflicting agendas to pose new possibilities.

Caroline Acheatel, Paul J. Lorenz, Paul Rasmussen, and Alexander Stagge are graduates of the Yale School of Architecture.

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visual culture | art

Visual Culture

Alexis L. Boylan

How to think about what it means to look and see: a guide for navigating the complexities of visual culture.

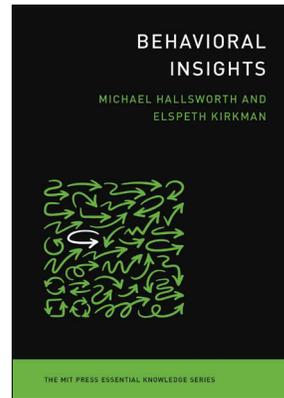
Alexis L. Boylan is Director of Academic Affairs at the Humanities Institute of the University of Connecticut, where she

is also Associate Professor in the Art and Art History Department and Africana Studies Institute. She is the author of *Ashcan Art, Whiteness, and the Unspectacular Man*.

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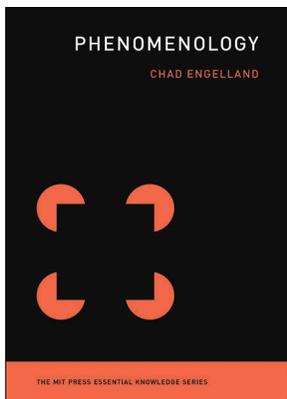
The definitive introduction to the behavioral insights approach, which applies evidence about human behavior to practical problems.

Michael Hallsworth, PhD, is Managing Director of the Behavioral Insights Team (BIT) North America. He has held positions at Columbia University and Imperial College London. **Elsbeth Kirkman** founded BIT's North American office before returning to the UK to run the organization's social policy portfolio out of London. She has taught behavioral insights courses at Harvard and Warwick Universities and is a Visiting Senior Research Fellow at King's College London.

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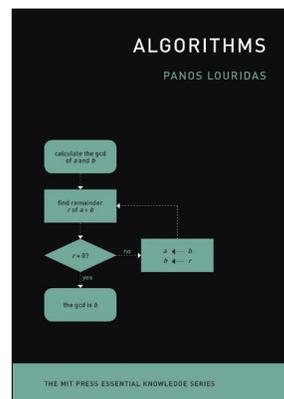
Chad Engelland is Associate Professor of Philosophy and Chair of the Philosophy Department at the University of Dallas. He is the author of *Heidegger's*

Shadow: Kant, Husserl, and the Transcendental Turn; *The Way of Philosophy: An Introduction*; and *Ostension: Word Learning and the Embodied Mind* (MIT Press).

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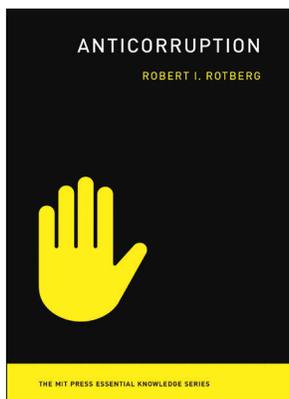
An accessible introduction to algorithms, explaining not just what they are but how they work, with examples from a wide range of application areas.

Panos Louridas is Associate Professor in the Department of Management Science and Technology at the Athens University of Economics and Business. He is the author of *Real World Algorithms: A Beginner's Guide* (MIT Press).

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political science

Anticorruption

Robert I. Rotberg

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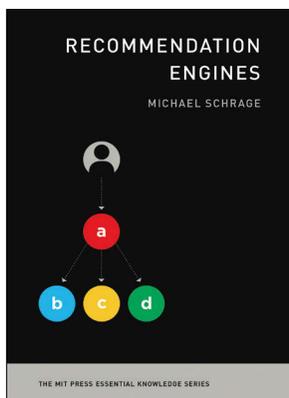
emy of Arts and Sciences. He is the author of *The Corruption Cure: How Citizens and Leaders Can Combat Graft*, *Things Come Together: Africans Achieving Greatness in the Twenty-First Century*, *Transformative Political Leadership*, and numerous other books.

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technology

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Michael Schrage

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Michael Schrage is a Research Fellow at the MIT Sloan School of Management's Initiative on the Digital Economy. A sought-after expert on innovation, design, and network effects, he is the author of *Who Do You Want Your Customers to Become?*, *The Innovator's Hypothesis: How Cheap Experiments Are Worth More than Good Ideas* (MIT Press), and other books.

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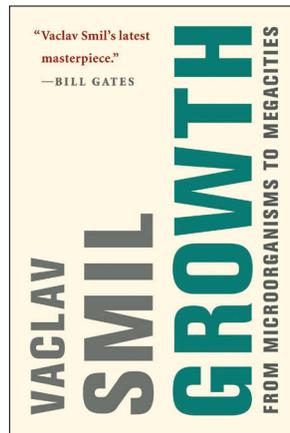
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Growth

From Microorganisms to Megacities

Vaclav Smil

Growth has been both an unspoken and an explicit aim of our individual and collective striving. In this magisterial book,



Vaclav Smil offers a systematic investigation of growth in nature and society, from tiny organisms to the trajectories of empires and civilizations. Smil takes readers from bacterial invasions through animal metabolisms to megacities and the global economy. He begins with organisms whose mature sizes range from microscopic to enormous, looking at disease-causing microbes, the cultivation of staple crops, and human growth from infancy to adulthood. He examines

the growth of energy conversions and man-made objects that enable economic activities—developments that have been essential to civilization. Finally, he looks at growth in complex systems, beginning with the growth of human populations and proceeding to the growth of cities. He considers the challenges of tracing the growth of empires and civilizations, explaining that we can chart the growth of organisms across individual and evolutionary time, but that the progress of societies and economies, not so linear, encompasses both decline and renewal. The trajectory of modern civilization, driven by competing imperatives of material growth and biospheric limits, Smil tells us, remains uncertain.

Vaclav Smil is Distinguished Professor Emeritus at the University of Manitoba. He is the author of forty books, including *Energy and Civilization*, published by the MIT Press. In 2010 he was named by *Foreign Policy* as one of the Top 100 Global Thinkers.

"An epic, multidisciplinary analysis of growth."

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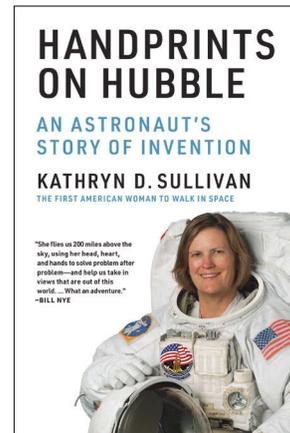
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Handprints on Hubble

An Astronaut's Story of Invention

Kathryn D. Sullivan

The Hubble Space Telescope has revolutionized our understanding of the universe. It has, among many other achievements,



revealed thousands of galaxies in what seemed to be empty patches of sky. In *Handprints on Hubble*, retired astronaut Kathryn Sullivan describes her work on the NASA team that made all of this possible. Sullivan, the first American woman to walk in space, recounts how she and other astronauts, engineers, and scientists launched, rescued, repaired, and maintained Hubble, the most productive observatory ever built. Along the way, she chronicles her

early life as a “Sputnik Baby,” her path to NASA through oceanography, and her initiation into the space program as one of “thirty-five new guys.” She was also one of the first six women to join NASA’s storied astronaut corps. Sullivan describes in vivid detail what liftoff feels like inside a spacecraft, shows us the view from a spacewalk, and recounts the temporary grounding of the shuttle program after the Challenger disaster.

Kathryn D. Sullivan is a NASA astronaut (retired), former Under Secretary of Commerce for Oceans and Atmosphere of the National Oceanic and Atmospheric Administration (NOAA), and an inductee in the Astronaut Hall of Fame.

Featured on Science Friday

“Accessible and fascinating. . . . Sullivan’s fine volume shines a light on the nuts-and-bolts tasks that make extraordinary endeavors possible.”

—**Publishers Weekly (starred review)**

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Leimelson Center Studies in Invention and Innovation series

The Laws of Simplicity

John Maeda

In *The Laws of Simplicity*, John Maeda offers ten laws for balancing simplicity and complexity in business, technology, and design—guidelines for needing less and actually getting more. Maeda explores the question of how we can redefine the notion of “improved” so that it doesn’t always mean something more, something added on. His first law of simplicity is “Reduce.” It’s not necessarily beneficial to add technology features just because we can. And the features that we do have must be organized (Law 2) in a sensible hierarchy so users aren’t distracted by features and functions they don’t need.

Maeda’s concise guide to simplicity in the digital age shows us how this idea can be a cornerstone of organizations and their products—how it can drive both business and technology. We can learn to simplify without sacrificing comfort and meaning, and we can achieve the balance described in Law 10. This law, which Maeda calls “The One,” tells us: “Simplicity is about subtracting the obvious, and adding the meaningful.”

An internationally recognized leader at the intersection of design and technology, **John Maeda** is Executive Vice President/Chief Experience Officer at Publicis Sapient. He was the 16th President of the Rhode Island School of Design (RISD). He is the author of *Design by Numbers* and *Redesigning Leadership*, both published by the MIT Press.

“The book is important; and Maeda has made an absurdly complex subject—simplicity—approachable and usable. Bravo!”
—**Tom Peters, author of *In Search of Excellence***

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Simplicity: Design, Technology, Business, Life series

Mismatch

How Inclusion Shapes Design

Kat Holmes

foreword by John Maeda

Sometimes designed objects reject their users: a computer mouse that doesn’t work for left-handed people, for example, or a touchscreen payment system that only works for people who read English phrases, have 20/20 vision, and use a credit card. These mismatches are the building blocks of exclusion. In *Mismatch*, Kat Holmes describes how design can lead to exclusion, and how design can also remedy exclusion. Inclusive design methods—designing objects with rather than for excluded users—can create elegant solutions that work well and benefit all. Holmes tells stories of pioneers of inclusive design, many of whom were drawn to work on inclusion because of their own experiences of exclusion. She shows how inclusion can be a source of innovation and growth, especially for digital technologies. Each time we remedy a mismatched interaction, we create an opportunity for more people to contribute to society in meaningful ways. This paperback edition features a new preface by the author.

Kat Holmes, named one of *Fast Company*’s “Most Creative People in Business” in 2017, is founder of *Mismatch.design*, a firm with the mission of advancing inclusive education and resources. She served as the Principal Director of Inclusive Design at Microsoft from 2014 to 2017.

“One of the first books to really take inclusive design out of an academic setting and into the working world.”

—**Christina Mallon, *Fast Company***

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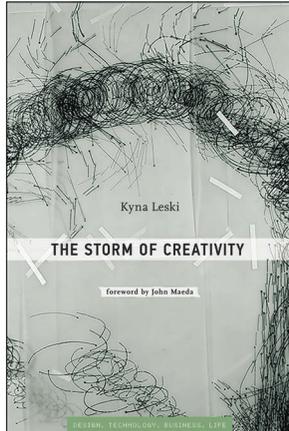
Simplicity: Design, Technology, Business, Life series

The Storm of Creativity

Kyna Leski

foreword by John Maeda

Although each instance of creativity is singular and specific, Kyna Leski tells us, the creative process is universal. All of us—artists, architects, poets, inventors, and scientists—must work our way through the empty page, the blank screen, writer’s block, confusion, chaos, and doubt in order to discover something that does not yet exist. In this book, Leski likens the creative process to a storm; it slowly begins to gather and take form until it overtakes us—if we are willing to let it. It is dynamic, continually in motion; it starts, stops, rages and abates, ebbs and flows. In



illustrations that accompany each chapter, she maps the arc of the creative process by tracing the path of water droplets traveling the stages of a storm. Leski draws on examples of creative practice that range from Paul Klee to Steve Jobs, from the discovery of continental drift to the design of Antoni Gaudí’s Sagrada Família. Creativity, Leski tells us, is a path with no beginning or end; it is ongoing.

This paperback edition features a new preface by the author.

Kyna Leski is Professor in the Department of Architecture at the Rhode Island School of Design and a Founding Principal of 3six0 Architecture.

“We spiral through our lives trying to do our work, and Kyna Leski understands the elusive complexity of it all. I love the air and light in the book. Thank God she has written a how-not-to book that helps us understand how to do it. And not do it.”

—**Maira Kalmam**, author of *The Principles of Uncertainty*

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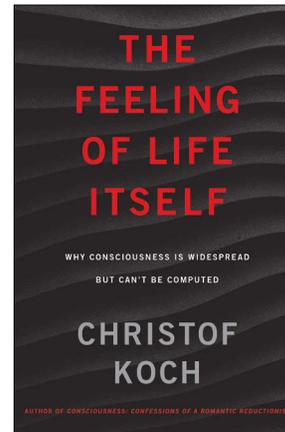
Simplicity: Design, Technology, Business, Life series

The Feeling of Life Itself

Why Consciousness Is Widespread but Can’t Be Computed

Christof Koch

In *The Feeling of Life Itself*, Christof Koch offers a straightforward definition of consciousness as any subjective experience,



from the most mundane to the most exalted—the feeling of being alive. How can the brain, three pounds of highly excitable matter, a piece of furniture in the universe, subject to the same laws of physics as any other piece, give rise to subjective experience? Koch argues that what is needed to answer these questions is a quantitative theory that starts with experience and proceeds to the brain. He describes how the theory explains many facts about the neurology of consciousness and

how it has been used to build a clinically useful consciousness meter. The theory predicts that many, and perhaps all, animals experience the sights and sounds of life. Contrary to received wisdom, however, Koch argues that programmable computers will not have consciousness. Even a perfect software model of the brain is not conscious. Consciousness is not a special type of computation—it is not a clever hack. Consciousness is about being.

Christof Koch is President and Chief Scientist of the Allen Institute for Brain Science in Seattle, following twenty-seven years as a Professor at the California Institute of Technology. He is the author of *Consciousness: Confessions of a Romantic Reductionist* (MIT Press), *The Quest for Consciousness: A Neurobiological Approach*, and other books.

“Koch’s mind-stretching book provides a rich feast.”

—**New Scientist**

“Invigorating.”

—**Nature**

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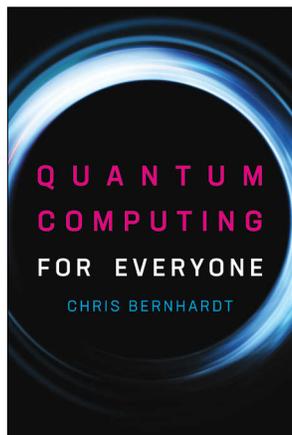
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Quantum Computing for Everyone

Chris Bernhardt

Quantum computing is a beautiful fusion of quantum physics and computer science, incorporating some of the most stunning ideas from twentieth-century physics into an entirely new way of thinking about computation. In this book, Chris Bernhardt offers an introduction to quantum computing that is accessible to anyone who is comfortable with high school mathematics. He explains qubits, entanglement, quantum teleportation, quantum algorithms, and other quantum-related topics as clearly as possible for the general reader. Bernhardt, a mathematician himself, simplifies the mathematics as much as he can and



provides elementary examples that illustrate both how the math works and what it means. Bernhardt introduces the basic unit of quantum computing, the qubit, and explains how the qubit can be measured; discusses entanglement and what it means when two qubits are entangled; and introduces quantum cryptography. By the end of the book, readers understand that quantum computing and classical computing are not two distinct disciplines, and that quantum computing is the fundamental form of computing. The basic unit of computation is the qubit, not the bit.

Chris Bernhardt is Professor of Mathematics at Fairfield University and the author of *Turing's Vision: The Birth of Computer Science* (MIT Press).

"The collection of exercises is a treasure. . . . A masterpiece."

—**Physics Today**

"A pedagogical triumph. . . . A masterpiece that should be read by all who are interested in quantum computing."

—**Times Higher Education**

"One of the best introductions to the themes and concepts of quantum measurement."

—**Computing Reviews**

September | 6 x 9, 216 pp. | 60 illus.

\$17.95T paper
978-0-262-53953-1

cloth
978-0-262-03925-3

Novacene

The Coming Age of Hyperintelligence

James Lovelock

James Lovelock, creator of the Gaia hypothesis and the greatest environmental thinker of our time, has produced an astounding new theory about future of life on Earth. He argues that the Anthropocene—the age in which humans acquired planetary-scale technologies—is, after 300 years, coming to an end. A new age—the Novacene—has already begun. In the Novacene, new beings will emerge from existing artificial intelligence systems. They will think 10,000 times faster than we do and they will regard us as we now regard plants. These hyperintelligent beings will be as dependent on the health

of the planet as we are. They will need the planetary cooling system of Gaia to defend them from the increasing heat of the sun as much as we do. And Gaia depends on organic life. We will be partners in this project. Perhaps, Lovelock speculates, the Novacene could even be the beginning of a process that will finally lead to intelligence suffusing the entire cosmos.

James Lovelock is the originator of the Gaia hypothesis (now Gaia theory). His many books on the subject include *Gaia: A New Look at Life on Earth*, *The Revenge of Gaia*, *The Vanishing Face of Gaia*, and *A Rough Ride to the Future*. The author of more than 200 scientific papers, he was elected a Fellow of the Royal Society in 1974.

"A prophet who deserves every honour the human race can bestow."

—**Guardian**

"The greatest scientific thinker of our time."

—**Sunday Times**

September | 5 3/8 x 7 3/4, 160 pp.

\$16.95T paper
978-0-262-53951-7

cloth
978-0-262-04364-9

For sale in the US and Philippines only

Fire, Ice, and Physics

The Science of *Game of Thrones*

Rebecca C. Thompson

foreword by Sean Carroll

Game of Thrones is a fantasy that features a lot of made-up science—fabricated climatology, astronomy, metallurgy, chemistry, and biology. Most fans of George R. R. Martin’s fantastical world accept it all as part of the magic. In this book, Rebecca Thompson turns a scientist’s eye on *Game of Thrones*. A PhD in physics and an enthusiastic *Game of Thrones* fan, Thompson uses the fantasy science of the show as a gateway to some interesting real science. She starts at the beginning, with winter, explaining seasons and the very elliptical orbit of the Earth that might cause winter to come (or not come). She compares regular steel to Valyrian steel, explains that dragons are “bats, but with fire,” and considers Targaryen inbreeding. Finally she offers scientific explanations of the various types of fatal justice meted out, including beheading, hanging, poisoning, skull crushing, and burning at the stake. *Fire, Ice, and Physics* is an essential companion for all future bingeing.

Rebecca C. Thompson, PhD, is a physicist and author of the popular Spectra series of comic books about physics. She is Head of the Office of Education and Public Outreach at Fermilab, the particle physics research facility near Chicago. She served as Director of Public Engagement for the American Physical Society from 2008 to 2019.

“An exciting and informative read for fans of the show who often asked ‘how would that really work?’”

—*Ars Technica*

“[An] engagingly weird book. . . . Tremendous fun.”

—*Sunday Times*

September | 6 x 9, 296 pp. | 27 illus.

\$16.95T paper

978-0-262-53961-6

cloth

978-0-262-04307-6

Dr Space Junk vs the Universe

Archaeology and the Future

Alice Gorman

foreword by Adam Roberts

Alice Gorman is a space archaeologist: she examines the artifacts of human encounters with space. These objects—dead satellites in eternal orbit, discarded zip ties around a defunct space antenna, an American flag on the moon, messages from Earth sent into deep space—raise interesting questions: Why did Elon Musk feel compelled to send a red Tesla into space? What accounts for the multiple rocket-themed playgrounds constructed after the Russians launched Sputnik? Gorman—affectionately known as “Dr Space Junk”—takes readers on a journey through the solar system and beyond, deploying space artifacts, historical explorations, and even the occasional cocktail recipe in search of the ways that we make space meaningful. Engaging and erudite, Gorman recounts her background as a (nonspace) archaeologist and considers how everyday people engage with space. To an archaeologist, objects from the past are significant because they remind us of what we might want to hold on to in the future.

Alice Gorman is a leader in the emerging field of space archaeology. Her work has been featured in *National Geographic*, the *New Yorker*, and the *Atlantic*. She is a Senior Member of the American Institute of Aeronautics and Astronautics and Senior Lecturer at Flinders University, Adelaide. She tweets as @drspacejunk.

“To read [this book] is to marvel at what we have achieved in our nascent efforts to inhabit space, and to recognize that we have barely begun that quest.”

—*Nature*

September | 5 3/8 x 8, 304 pp.

\$16.95T paper

978-0-262-53965-4

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978-0-262-04343-4

Not for sale in Australia or New Zealand

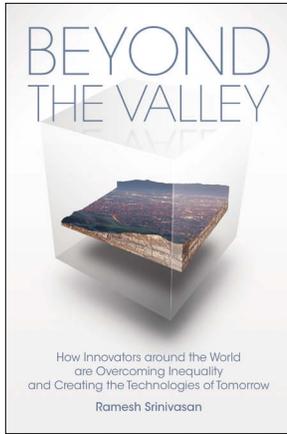
Beyond the Valley

How Innovators around the World are Overcoming Inequality and Creating the Technologies of Tomorrow

Ramesh Srinivasan

foreword by Douglas Rushkoff

In this provocative book, Ramesh Srinivasan describes the internet as both an enabler of frictionless efficiency and a dirty tangle of politics, economics, and other inefficient, inharmonious human activities. We may love the immediacy of Google search results, the convenience of buying from Amazon, and the elegance and power of our Apple devices, but it's a one-way, top-down process. We're not asked for our input—only for our data. Srinivasan focuses on the disconnection between designers and users, producers and consumers, and the tech elites in Silicon Valley and China and the rest of us.



Ramesh Srinivasan is Professor of Information Studies and Design Media Arts at UCLA. He makes regular appearances on NPR, MSNBC, and Public Radio International, and his writings have been published in the *Washington Post*, *Quartz*, *Huffington Post*, CNN, and elsewhere.

"Insightful."

—**Forbes Top Ten Technology Books Of 2019**

"This kind of global, multipolar discourse is sorely needed."

—**Times Higher Education**

"*Beyond the Valley* shows how we got to a place where a few big tech companies pull the strings and the rest of us work on command and, like the Green New Deal, it also shows us a way out."

—**Van Jones, CEO of REFORM Alliance; Host of *The Redemption Project* and *The Van Jones Show* on CNN**

September | 6 x 9, 424 pp. | 30 illus.

\$19.95T paper
978-0-262-53960-9

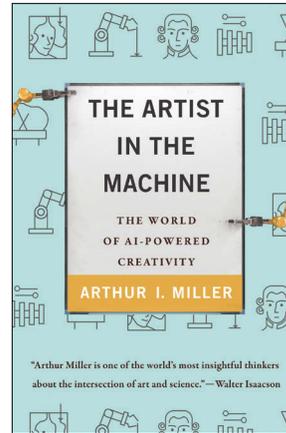
cloth
978-0-262-04313-7

The Artist in the Machine

The World of AI-Powered Creativity

Arthur I. Miller

Today's computers are composing music that sounds "more Bach than Bach," turning photographs into paintings in the style of Van Gogh's *Starry Night*, and even writing screenplays. But are computers truly creative—or are they merely tools to be used by musicians, artists, and writers? In this book, Arthur I. Miller takes us on a tour of creativity in the age of machines. He offers in-depth interviews with people on the cutting edge of artificial intelligence, encountering computers that mimic the brain and machines that have defeated champions in chess, *Jeopardy!*, and Go. Miller explores the riches of computer-created art, introducing us to artists and computer scientists who have, among much else, taught AI to imagine; created algorithms for poetry; and produced the world's first computer-composed musical staged by Android Lloyd Webber and friends. He probes the nature of consciousness and speaks with researchers trying to develop emotions and consciousness in computers. While Miller argues that computers can already be as creative as humans—and someday will surpass us, he celebrates the creative possibilities of artificial intelligence in art, music, and literature.



Arthur I. Miller is Emeritus Professor of History and Philosophy of Science at University College London. He is the author of *Colliding Worlds: How Cutting-Edge Science Is Redefining Contemporary Art* and other books including *Einstein, Picasso: Space, Time, and the Beauty That Causes Havoc*.

"The questions that Miller pursues in his book are some of the most exciting ones you can ask about artificial intelligence today."

—**New Scientist**

September | 6 x 9, 432 pp. | 32 color illus.

\$19.95T paper
978-0-262-53962-3

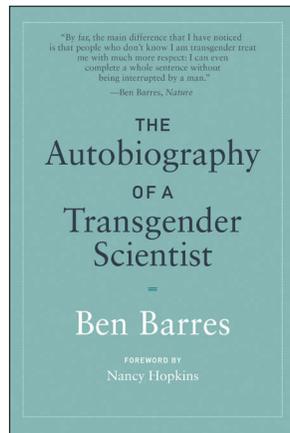
cloth
978-0-262-04285-7

The Autobiography of a Transgender Scientist

Ben Barres

foreword by Nancy Hopkins

In this book, completed shortly before his death from pancreatic cancer in December 2017, neuroscientist Ben Barres describes a



life full of remarkable accomplishments. Barres recounts his early life, including his interest in science, which first manifested as a fascination with the mad scientist in Superman. Barres felt even as a very young child that he was assigned the wrong gender. After years of being acutely uncomfortable in his own skin, Barres transitioned from female to male. He reports he felt nothing but relief on becoming his true self. As an undergraduate at MIT, Barres experienced discrimination,

but it was after transitioning that he realized how differently male and female scientists are treated. He became an advocate for gender equality in science, and later in life responded pointedly to Larry Summers's speculation that women were innately unsuited to be scientists. At Stanford, Barres describes his important discoveries about glia, the most numerous cells in the brain. "The most rewarding part of his job," however, was mentoring young scientists. That, and his advocacy for women and transgender scientists, ensures his legacy.

Ben Barres (1954–2017) was Professor and Chair of the Department of Neurology at Stanford University and one of the world's leading researchers on the role of the brain cells known as glia.

"Intriguing snapshot of a life cut short."

—**Publishers Weekly**

"Barres is as open in memoir as he was in life, and the book teaches important, deceptively simple lessons."

—**Nature**

September | 5 3/8 x 8, 160 pp.

\$16.95T paper
978-0-262-53954-8

cloth
978-0-262-03911-6

Fighting Corruption Is Dangerous

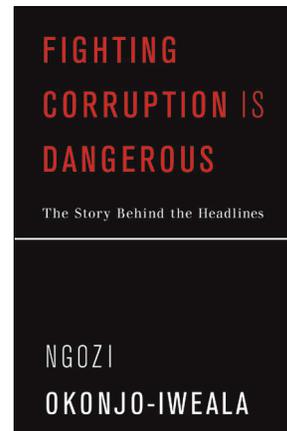
The Story Behind the Headlines

Ngozi Okonjo-Iweala

In *Fighting Corruption Is Dangerous*, Ngozi Okonjo-Iweala has written a primer for those working to root out corruption

and disrupt vested interests.

Drawing on her experience as Nigeria's Finance Minister and that of her team, she describes dangers, pitfalls, and successes in fighting corruption. She provides practical lessons learned and tells how anticorruption advocates need to equip themselves. Okonjo-Iweala details the numerous ways in which corruption can divert resources away from development, rewarding the unscrupulous and depriving poor people of services. She discovered just



how dangerous fighting corruption could be when her 83-year-old mother was kidnapped in 2012 by forces who objected to some of the government's efforts at reforms led by Okonjo-Iweala—in particular a crackdown on fraudulent claims for oil subsidy payments, a huge drain on the country's finances. Her book ultimately leaves us with hope, showing that victories are possible in the fight against corruption.

Ngozi Okonjo-Iweala was Nigeria's Minister of Finance from 2003 to 2006 and from 2011 to 2015, and Foreign Minister in 2006. She was Managing Director of the World Bank from 2007 to 2011, overseeing South Asia, Europe, Central Asia, and Africa, and is currently Board Chair of Gavi, the Vaccine Alliance and Chair of the African Risk Capacity (ARC). She is the author of *Reforming the Unreformable: Lessons from Nigeria* (MIT Press).

"A courageous account of the battle against graft in Nigeria."

—**Financial Times**

"A book about grit and also about what it means to be patriotic."

—**Devox**

"An inspiring story."

—**Brookings Institution blog**

September | 6 x 9, 192 pp.

\$19.95T paper
978-0-262-53967-8

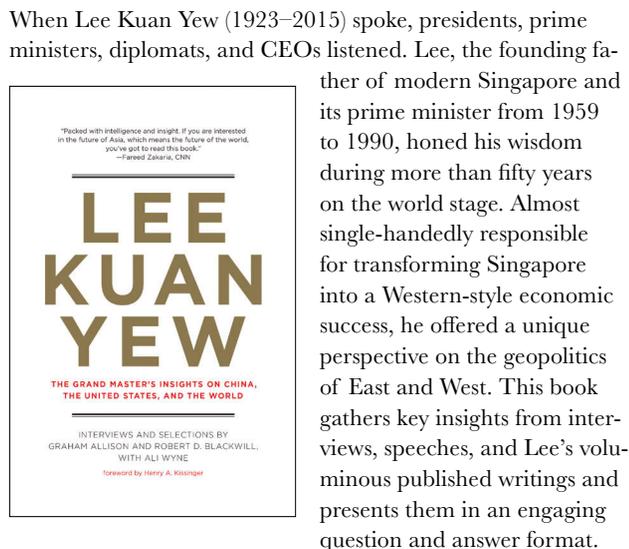
cloth
978-0-262-03801-0

Lee Kuan Yew

The Grand Master's Insights on China, the United States, and the World

Interviews and Selections by Graham Allison and Robert D. Blackwill, with Ali Wyne

foreword by Henry A. Kissinger



When Lee Kuan Yew (1923–2015) spoke, presidents, prime ministers, diplomats, and CEOs listened. Lee, the founding father of modern Singapore and its prime minister from 1959 to 1990, honed his wisdom during more than fifty years on the world stage. Almost single-handedly responsible for transforming Singapore into a Western-style economic success, he offered a unique perspective on the geopolitics of East and West. This book gathers key insights from interviews, speeches, and Lee's voluminous published writings and presents them in an engaging question and answer format.

Lee offers strategic advice for dealing with China and goes on to discuss India's future, Islamic terrorism, economic growth, geopolitics and globalization, and democracy. He does not pull his punches, offering his unvarnished opinions on multiculturalism, the welfare state, education, and the free market. This little book belongs on the reading list of every world leader.

Graham Allison is Douglas Dillon Professor of Government and Director of the Belfer Center for Science and International Affairs at the Harvard Kennedy School. **Robert D. Blackwill** is Henry A. Kissinger Senior Fellow for U.S. Foreign Policy at the Council on Foreign Relations. **Ali Wyne** is an Associate at the Belfer Center.

"Lee's powerful intellect is captured in [this book]."

—*Time Magazine*

"A kind of last testament."

—*Wall Street Journal*

September | 5 3/8 x 8, 224 pp.

\$18.95T paper
978-0-262-53950-0

cloth
978-0-262-01912-5

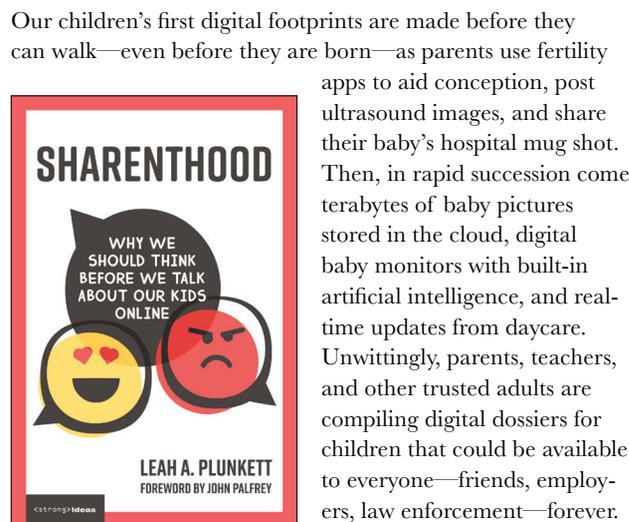
Belfer Center Studies in International Security

Sharent hood

Why We Should Think before We Talk about Our Kids Online

Leah A. Plunkett

foreword by John Palfrey



Our children's first digital footprints are made before they can walk—even before they are born—as parents use fertility apps to aid conception, post ultrasound images, and share their baby's hospital mug shot. Then, in rapid succession come terabytes of baby pictures stored in the cloud, digital baby monitors with built-in artificial intelligence, and real-time updates from daycare. Unwittingly, parents, teachers, and other trusted adults are compiling digital dossiers for children that could be available to everyone—friends, employers, law enforcement—forever. In this incisive book, Leah Plunkett examines the implications of "sharent hood"—adults' excessive digital sharing of children's data. She outlines the mistakes adults make with kids' private information, the risks that result, and the legal system that enables "sharenting." Plunkett describes "commercial sharenting," efforts by parents to use their families' private experiences to make money—and unpacks the faulty assumptions made by our legal system about children, parents, and privacy. She proposes a "thought compass" to guide adults in their decision making about children's digital data: play, forget, connect, and respect. The internet needs to forget. We need to remember.

Leah A. Plunkett is Associate Dean for Administration, Associate Professor of Legal Skills, and Director of Academic Success at the University of New Hampshire School of Law. She is Faculty Associate at the Berkman Klein Center for Internet and Society at Harvard University.

"Plunkett is describing a set of questions, about data and privacy, that many of us already grapple with."

—*New Yorker*

September | 6 x 9, 240 pp. | 9 illus.

\$16.95T paper
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978-0-262-04269-7

Strong Ideas series

Innovation + Equality

How to Create a Future That Is More *Star Trek* Than *Terminator*

Joshua Gans and Andrew Leigh

foreword by Lawrence H. Summers

The amazing technological advances of the last two decades have benefited society collectively and rewarded innovators handsomely: we get cool smartphones and technology moguls become billionaires. This contributes to a growing wealth gap; in the United States, the wealth controlled by the top 0.1 percent of households equals that of the bottom ninety percent. Is this the inevitable cost of an innovation-driven economy? Economist Joshua Gans and policy maker Andrew Leigh make the case that pursuing innovation does not mean giving up on equality—precisely the opposite. In this book, they outline ways that society can become both more entrepreneurial and more egalitarian. Gans and Leigh argue, rather than betting on the future of particular professions, we should consider policies that embrace uncertainty and protect people from unfavorable outcomes.

Joshua Gans is Professor of Strategic Management and holds the Jeffrey S. Skoll Chair of Technical Innovation and Entrepreneurship at the University of Toronto's Rotman School of Management. He is the author of *The Disruption Dilemma* (MIT Press), *Prediction Machines*, and other books. **Andrew Leigh** is a Member of the Australian House of Representatives, a former economics professor, and author of *Battlers and Billionaires*, *Randomistas*, and other books.

"So much government policy is developed through a myopic view that people only do things for profit and that the more profit they can make the more likely they will be to pursue innovation. Gans and Leigh provide a strong counter to this."

—**Guardian**

September | 6 x 9, 192 pp.

\$19.95T paper
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cloth
978-0-262-04322-9

Changing Minds

How Aging Affects Language and How Language Affects Aging

Roger Kreuz and Richard Roberts

We acquire our native language, seemingly without effort, in infancy and early childhood. And compared with other aspects of cognition, language seems to be fairly resilient through the process of aging. In *Changing Minds*, Roger Kreuz and Richard Roberts examine how aging affects language—and how language affects aging. Kreuz and Roberts report that what appear to be changes in an older person's language ability are actually produced by declines in such other cognitive processes as memory and perception. Some language abilities, including vocabulary size and writing ability, may even improve with age. And certain language activities—including reading fiction and engaging in conversation—may even help us live fuller and healthier lives. They explain the cognitive processes underlying our language ability and consider why older people can be better storytellers, and how their perceived tendency toward off-topic verbosity may actually reflect communicative goals.

Roger Kreuz is Associate Dean and Director of Graduate Studies in the College of Arts and Sciences and Professor of Psychology at the University of Memphis. **Richard Roberts** is a Foreign Service Officer currently serving as the Public Affairs Officer at the US Consulate General in Okinawa, Japan. Kreuz and Roberts are coauthors of *Becoming Fluent: How Cognitive Science Can Help Adults Learn a Foreign Language* and *Getting Through: The Pleasures and Perils of Cross-Cultural Communication*, both published by the MIT Press.

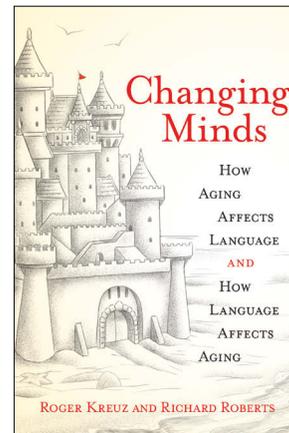
"How our language abilities change as we get older, and not just for the worse."

—**Science Focus, Best Science Books on Linguistics**

September | 5 3/8 x 8, 288 pp. | 13 illus.

\$16.95T paper
978-0-262-53958-6

cloth
978-0-262-04259-8



A Theory of Jerks and Other Philosophical Misadventures

Eric Schwitzgebel

Have you ever wondered about why some people are jerks? Asked whether your driverless car should kill you so that others may live? Found a robot adorable? In this engaging, entertaining, and enlightening book, Eric Schwitzgebel turns a philosopher's eye on these and other burning questions. In a series of quirky and accessible short pieces that cover a mind-boggling variety of philosophical topics, Schwitzgebel offers incisive takes on matters both small (the consciousness of garden snails) and large (time, space, and causation). A common theme might be the ragged edge of the human intellect, where moral or philosophical reflection begins to turn against itself, lost among doubts and improbable conclusions. Some of the texts resist thematic categorization—thoughts on the philosophical implications of dreidels, the diminishing offensiveness of the most profane profanity, and fatherly optimism—but are no less interesting. Schwitzgebel has selected these pieces from the more than one thousand that have appeared since 2006 in various publications and on his popular blog, *The Splintered Mind*, revising and updating them for this book. Philosophy has never been this much fun.

Eric Schwitzgebel is Professor of Philosophy at the University of California, Riverside, and the author of *Perplexities of Consciousness* (MIT Press). His short, accessible essays on philosophical topics have appeared in a range of publications and on his popular blog, *The Splintered Mind*.

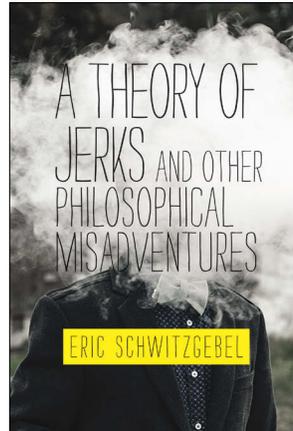
"A killer book precisely because it performs the kinds of daily philosophical thinking that interest and occupy all of us."

—**PopMatters**

September | 5 3/8 x 8, 384 pp. | 14 illus.

\$19.95T paper
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978-0-262-04309-0



Walking in Berlin

A Flaneur in the Capital

Franz Hessel

with an essay by Walter Benjamin

translated by Amanda DeMarco

Franz Hessel (1880–1941), a German-born writer, grew up in Berlin, studied in Munich, and then lived in Paris, where he moved in artistic and literary circles and was even an inspiration for Henri-Pierre Roche's novel *Jules et Jim*. In collaboration with Walter Benjamin, Hessel reinvented the Parisian figure of the flaneur. This 1929 book—here in its first English translation—offers Hessel's version of a flaneur in Berlin. Hessel captures the rhythm of Weimar-era Berlin, recording the seismic shifts in the German culture of that time. Nearly all of the essays take the form of a walk or outing,

focusing on either a theme or part of the city, and many end at a theater, cinema, or club. *Walking in Berlin* was a central model for Benjamin's Arcades Project and remains a classic of "walking literature" that ranges from surrealist perambulation to situationist "psychogeography." This MIT Press edition includes the complete text in translation as well as Benjamin's essay, "The Flaneur's Return," written as a review of the book's original edition.

Franz Hessel, the Berlin-born son of a Jewish banking family, was a writer and translator, translating works by Casanova, Stendhal, and Balzac, as well as collaborating with Walter Benjamin on a translation of Proust's *À la recherche du temps perdu* into German. Hessel died in early 1941, shortly after his release from an internment camp.

"The next best thing to traveling back in time to visit the capital of the Weimar Republic as it was in 1929."

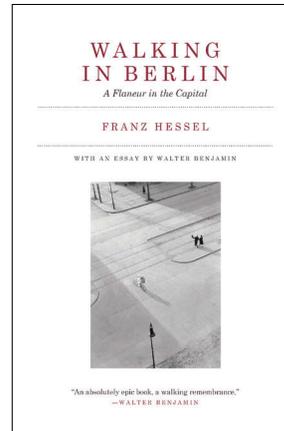
—**PopMatters**

September | 5 3/8 x 8, 304 pp.

\$16.95T paper
978-0-262-53966-1

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978-0-262-03635-1

For sale in North America only



Break On Through

Radical Psychiatry and the American Counterculture

Lucas Richert

The upheavals of the 1960s gave way to a decade of disruptions in the 1970s, and among the rattled fixtures of American society was mainstream psychiatry. Critics charged that the mental health establishment was complicit with the military-industrial complex and powerful antipsychotic drugs became available. Meanwhile, practitioners and patients experimented with new approaches to mental health. In *Break On Through*, Lucas Richert investigates the radical challenges to psychiatry and to the conventional treatment of mental health that emerged in the 1970s and the lessons they

offer for current debates. Drawing on government documents, medical journals, and interviews, and interweaving references to pop (counter)culture into his account, Richert offers fascinating stories of the decade's radical mental health practices. He discusses anti-Vietnam War activism and the new diagnosis of post-traumatic stress disorder given to some veterans; the entry of New Age-style therapies into the laissez-faire therapeutic marketplace of the 1970s; the development of DSM III; and the use of LSD, cannabis, and MDMA. With rising rates of such disorders as anxiety and depression, practitioners and patients continue to search for therapeutic breakthroughs.

Lucas Richert is George Urdang Chair in the History of Pharmacy at the University of Wisconsin–Madison. He is the author of *Strange Trips: Science, Culture, and the Regulation of Drugs* and coeditor-in-chief of *Social History of Alcohol and Drugs: An Interdisciplinary Journal*.

"Richert picks through the explosive developments alongside the multitude of figures involved."

—*Nature*

September | 6 x 9, 224 pp. | 7 illus.

\$17.95T paper
978-0-262-53957-9

cloth
978-0-262-04282-6

Food Routes

Growing Bananas in Iceland and Other Tales from the Logistics of Eating

Robyn Metcalfe

Even if we think we know a lot about good and healthy food—even if we buy organic, believe in slow food, and read *Eater*—we probably don't know much about how food gets to the table. In *Food Routes*, Robyn Metcalfe explores an often-overlooked aspect of the global food system: how food moves from producer to consumer. Networked, digital tools will improve the food system but will also challenge our relationship to food in anxiety-provoking ways. It might not be easy to transfer our affections from verdant fields of organic tomatoes to high-rise green-

houses tended by robots. And yet, argues Metcalfe—a cautious technology optimist—technological advances offer opportunities for innovations that can get better food to more people in an increasingly urbanized world. Metcalfe follows a slice of New York pizza and a club sandwich through the food supply chain; investigates the processing, packaging, and storage of food; and explains how food can be tracked using sensors and the Internet of Things. New technologies can make the food system more efficient—but at what cost to our traditionally close human relationship with food?

Robyn Metcalfe, a food historian and food futurist, is a Lecturer and Research Scholar at the University of Texas at Austin and Director of Food+City.

"This is a book about a hidden side of food. . . . A neglected story, but a vital one."

—*Times Higher Education*

September | 6 x 9, 208 pp.

\$16.95T paper
978-0-262-53952-4

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978-0-262-03965-9

Beverly Buchanan

Marsh Ruins

Amelia Groom

Marsh Ruins (1981) is an environmental sculpture by the African American artist Beverly Buchanan. Located in the marshlands in Brunswick, on the coast of Georgia, the work consists of three solid mounds of rock, accompanied by a roughly modelled plaque bearing the artist's signature. *Marsh Ruins* is designed to blend in with its surroundings, conditioned by environmental forces—to exist in a state of ongoing ruination. This volume in Afterall's One Work series offers a detailed, generously illustrated examination of *Marsh Ruins*.

In *Marsh Ruins*, Buchanan makes implicit reference to the many plantations, sustained by the labor of enslaved people, that once occupied the area around Brunswick—both through her choice of location and her use of tabby, a type of concrete commonly used for building structures on plantations. Buchanan said adamantly that she did not want *Marsh Ruins* to become a tourist attraction, and its subtle presence is precisely the opposite; the shifting rhythms of light, season, weather, and climate determine how the work appears, and how it gradually disappears.

Amelia Groom is an art historian and a postdoctoral Fellow at ICI Berlin Cultural Institute. Her writing on art has been published *e-flux journal*, *Frieze*, *Art Agenda*, and other publications. She edited *Time*, a volume in the Documents of Contemporary Art series (White-chapel Gallery/MIT Press).



Beverly Buchanan *Marsh Ruins*

Amelia Groom



Afterall Books: One Work

An illustrated examination of Beverly Buchanan's 1981 environmental sculpture, which exists in an ongoing state of ruination.

October
6 x 8 1/2, 96 pp.
32 color plates

\$19.95T paper
978-1-84638-218-5

Distributed for Afterall Books
One Work series

Also in this series

Pierre Huyghe
Untitled (Human Mask)
Mark Lewis
978-1-84638-213-0
\$19.95T

Photography After Capitalism

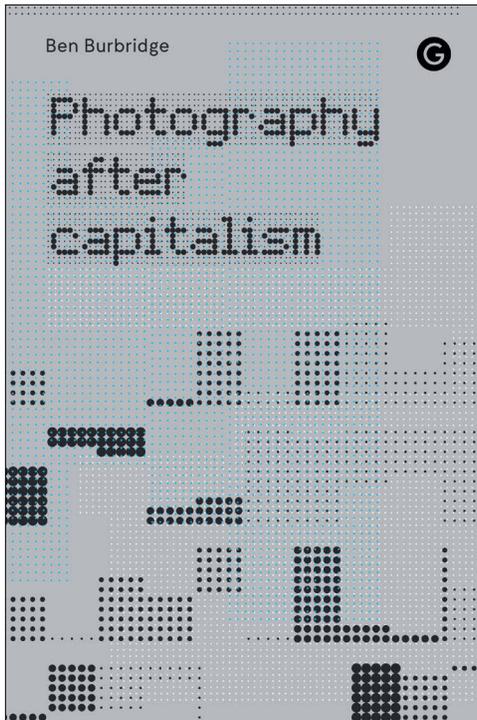
Ben Burbridge

In *Photography After Capitalism*, Ben Burbridge makes the case for a radically expanded conception of photography, encompassing the types of labor too often obscured by black-boxed technologies, slick platform interfaces, and the compulsion to display lives to others. His lively and polemical analysis of today's vernacular photographic cultures shines new light on the hidden work of smartphone assembly teams, digital content moderators, Street View car drivers, Google "Scan-Ops," low-paid gallery interns, homeless participant photographers, and the photo-sharing masses.

Bringing together cultural criticism, social history, and political philosophy, Burbridge examines how representations of our photographic lives—in advertising, journalism, scholarship and, particularly, contemporary art—shape a sense of what photography is and the social relations that comprise it. More precisely, he focuses on how different critical and creative strategies—from the appropriation of social media imagery to performative traversals of the network, from documentaries about secretive manual labor to science fiction fantasies of future sabotage—affect our understanding of photography's interactions with political and economic systems.

Drawing insight and inspiration from recent analyses of digital labor, community economies, and post-capitalism, Burbridge harnesses the ubiquity of photography to cognitively map contemporary capitalism in search of its weak spots and levers, sites of resistance, and opportunities to build better worlds.

Ben Burbridge is a writer, curator, and academic. A former Editor of *Photoworks* magazine, he has edited two books about photography. He is Senior Lecturer in Art History and Codirector of the Centre for Photography and Visual Culture at the University of Sussex.



A lively and polemical analysis of photography and today's vernacular photographic culture.

November
6 x 9, 256 pp.
40 photographs

\$36.00T cloth
978-1-912685-99-8

Distributed for Goldsmiths Press

The New Internationalists

Activist Volunteers in the European Refugee Crisis

Sue Clayton

An account of the mobilization of thousands of volunteers who rescued, supported, and welcomed refugees during the recent European refugee crisis.

In *The New Internationalists*, Sue Clayton tells the story of the largest civic mobilization since the Second World War, when volunteers—many young and untrained—took on unimaginable responsibilities and saved thousands of lives. During the European refugee crisis of 2015–2019, they witnessed firsthand the catastrophic failure of established NGOs, and the indifference—and frequently, the open hostility—of the EU and national governments. Many faced state hostility themselves. Their accounts show how activist volunteers have shaped today’s European humanitarian agenda, and provide a powerful critique of the failures of current policy.

With *The New Internationalists*, Clayton offers a contemporary history and critical contextualization of this powerful new force. Mapping key flashpoint locations and curating unique firsthand testimonies, she explores how during the crisis, when almost two million people reached Europe by deadly sea-crossings, more than 100,000 citizens came together in new grassroots social formations to rescue, support, and welcome them.

Sue Clayton is a film director, writer, and composer. Her films include *The Stansted 15 on Trial*, about a group of peaceful protesters charged with terrorism; *Calais Children: A Case to Answer*, made in the Calais Jungle refugee camp and winner of seven international awards; and *Hamedullah: The Road Home*, which follows a young refugee in the UK who was deported back to Afghanistan. Professor of Film and Television at Goldsmiths University of London, she is also the coauthor of *Unaccompanied Young Migrants: Identity, Care and Justice*.

December | 7 x 9, 320 pp. | 84 illus.

\$30.00T paper
978-1-912685-66-0

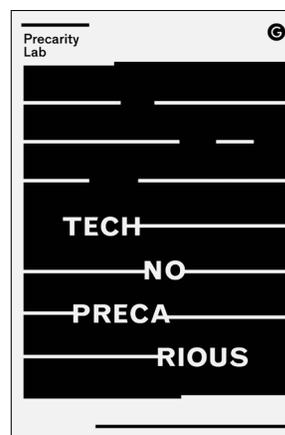
Distributed for Goldsmiths Press

Technoprecarious

Precarity Lab

An analysis that traces the role of digital technology in multiplying precarity.

Technoprecarious advances a new analytic for tracing how precarity unfolds across disparate geographical sites and cultural



practices in the digital age. Digital technologies—whether apps like Uber, built on flexible labor, or platforms like Airbnb that shift accountability to users—have assisted in consolidating the wealth and influence of a small number of players. These platforms have also exacerbated increasingly insecure conditions of work and life for racial, ethnic, and sexual minorities; women; indigenous people; migrants; and peoples in the global south. At the same time, precarity has become in-

creasingly generalized, expanding to include even the creative class and digital producers themselves.

This collaboratively authored multigraph analyzes the role of digital technology in multiplying precarity. The authors use the term precarity to characterize those populations disproportionately affected by the forms of inequality and insecurity that digital technologies have generated despite the new affordances and possibilities they offer. The book maps a broad range of digital precarity—from the placement of Palestinian Internet cables to the manufacture of electronics by Navajo women and from the production and deployment of drones on the U.S.–Mexico border to the technocultural productions of Chinese makers.

Precarity Lab brings together an intergenerational network of scholars and activists at the University of Michigan, Ann Arbor, to explore how digital cultures produce, reproduce, and intervene in precarity. **Anna Watkins Fisher, Silvia Lindtner, Ivan Chaar-Lopez, Cengiz Salman, McKenzie Wark, Kalindi Vora, Jackie Wang, Cass Adair, Lisa Nakamura, Cindy Lin, with Meryem Kamil.**

November | 5 x 8, 132 pp.

\$20.00T cloth
978-1-912685-98-1

Distributed for Goldsmiths Press

sound studies

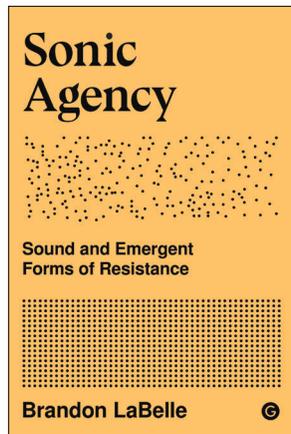
Sonic Agency

Sound and Emergent Forms of Resistance

Brandon LaBelle

A timely exploration of whether sound and listening can be the basis of political change.

In a world dominated by the visual, could contemporary resistances be auditory? This timely and important book from



Goldsmiths Press highlights sound's invisible, disruptive, and affective qualities and asks whether the unseen nature of sound can support a political transformation. In *Sonic Agency*, Brandon LaBelle sets out to engage contemporary social and political crises by way of sonic thought and imagination. He divides sound's functions into four figures of resistance—the invisible, the overheard, the itinerant, and the weak—and argues for their role in creating alternative “unlikely publics”

in which to foster mutuality and dissent. He highlights existing sonic cultures and social initiatives that utilize or deploy sound and listening to address conflict, and points to their work as models for a wider movement. He considers issues of disappearance and hidden culture, nonviolence and noise, creole poetics, and networked life, aiming to unsettle traditional notions of the “space of appearance” as the condition for political action and survival.

By examining the experience of listening and being heard, LaBelle illuminates a path from the fringes toward hope, citizenship, and vibrancy. In a current climate that has left many feeling they have lost their voices, it may be sound itself that restores it to them.

Brandon LaBelle is Professor in New Media in the Faculty of Fine Art, Music and Design at the University of Bergen. He is the author of *Lexicon of the Mouth: Poetics and Politics of Voice and the Oral Imaginary* and other books.

September | 6 x 9, 224 pp.

\$23.50X paper
978-1-912685-95-0

cloth
978-1-906897-51-2

Distributed for Goldsmiths Press

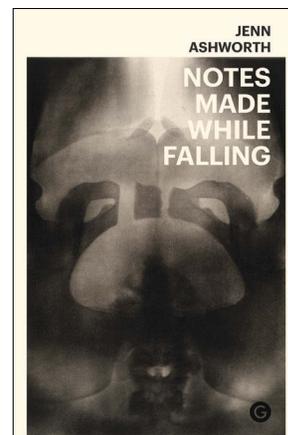
literature | biography

Notes Made While Falling

Jenn Ashworth

A genre-bending meditation on sickness, spirituality, creativity, and the redemptive powers of writing.

Notes Made While Falling is both a genre-bending memoir and a cultural study of traumatized and sickened selves in fiction and



film. It offers a fresh, visceral, and idiosyncratic perspective on creativity, spirituality, illness, and the limits of fiction itself. At its heart is a story of a disastrously traumatic childbirth, its long aftermath, and the out-of-time roots of both trauma and creativity in an extraordinary childhood.

Moving from fairgrounds to Agatha Christie, from literary festivals to neuroscience and the Bible, from Chernobyl to King Lear, Ashworth takes us on a fantastic journey through

familiar landscapes transformed through unexpected encounters and comic combinations. The everyday provides the ground for the macabre and the absurd, as the narration twists and stretches time. Hovering on the edge of madness, writing, it seems, might keep us sane—or might just allow us to keep on living.

In *Notes Made While Falling*, Ashworth calls for a redefinition of the creative work of thinking, writing, teaching, and being, and she underlines the necessity of a fearlessly compassionate and empathic attention to vulnerability and fragility.

Jenn Ashworth is a Fellow of the Royal Society of Literature and author of the novels *A Kind of Intimacy*, *Cold Light*, *The Friday Gospels*, and *Fell*. She is Senior Lecturer in the Department of English Literature and Creative Writing at Lancaster University.

September | 5 x 7 3/4, 200 pp. | 1 illus.

\$20.00T paper
978-1-912685-73-8

cloth
978-1-912685-19-6

Distributed for Goldsmiths Press

Revisions

Essays by Apollo Musagète, Yvonne Rainer, and Others

Yvonne Rainer

introduction by Gregg Bordowitz

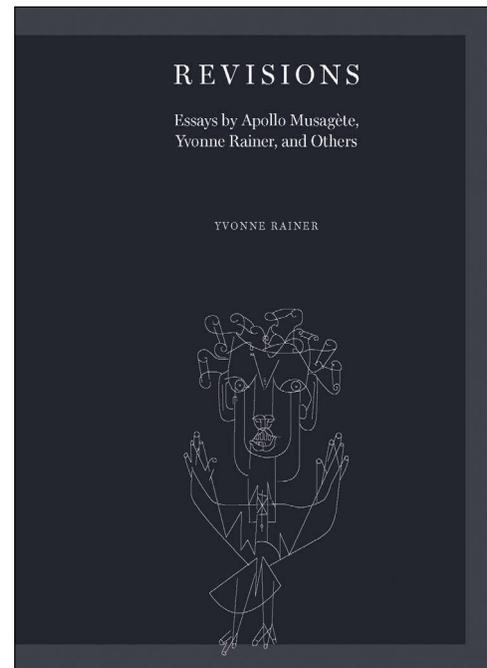
with Anna Staniczenko

Choreographer and filmmaker Yvonne Rainer has long investigated the ways in which movement can be a political act in and of itself—on the stage, on the screen, or at the lectern. In *Revisions*, Rainer pushes her interest in embodied activism to a new arena: what she calls the “dance rant.” This volume includes the final iteration of Rainer’s latest dance rant, entitled *A Truncated History of the Universe for Dummies*. This performance piece evolved in live presentations in Dublin, Stockholm, and New York before being expanded and adapted in written form here. In this now-completed work, Rainer mobilizes her rage and bafflement at contemporary political events through the guise of Apollo, Leader of the Muses.

Revisions also includes a compilation of emails and diary entries that provide a real-time account of Rainer’s process of creating and workshopping a dance. “Pedagogical Vaudeville 3” reveals Rainer’s consistent interest in reworking and reconsidering material across multiple mediums, formats, and contexts, and offers a unique glimpse at the working methods of one of this century’s preeminent dance artists.

Bookended with an introduction by artist and scholar Gregg Bordowitz and an analysis of Rainer’s *AG Indexical with a Little Help from H. M.* by dance historian Anna Staniczenko, these texts serve not only as a revision of the conventional understanding of five decades of Rainer’s production, but also as a timely manual for performance as an act of resistance.

Yvonne Rainer (b. 1934) is a dancer, choreographer, and filmmaker. She is the author of *Feelings Are Facts: A Life* (MIT Press).

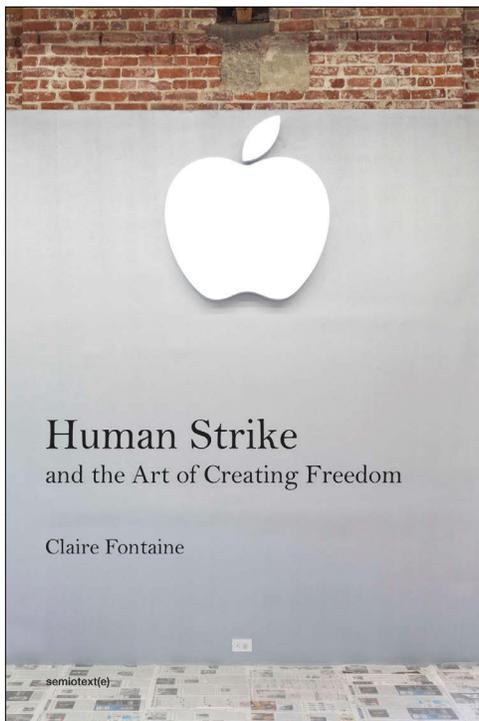


The final iteration of Rainer’s dance rant *A Truncated History of the Universe for Dummies*, accompanied by texts offering a real-time account of Rainer’s creative process.

October
5 1/4 x 7 1/2, 112 pp.

\$25.00T paper
978-1-949484-05-2

Distributed for no place press



The first English-language publication of writings by the collective artist Claire Fontaine, addressing our complicity with anything that limits our freedom.

November
6 x 9, 320 pp.

\$18.95T paper
978-1-63590-136-8

Active Agents series

Distributed for Semiotext(e)

Also in this series

Social Practices
Chris Kraus

\$17.95T paper
978-1-63590-039-2

Human Strike and the Art of Creating Freedom

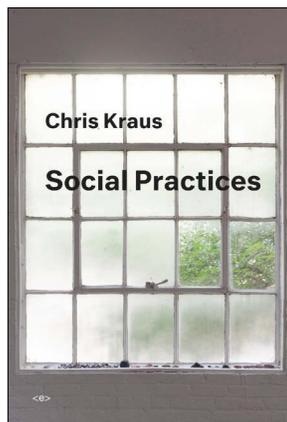
Claire Fontaine

foreword by Hal Foster

This anthology presents, in chronological order, all the texts by Claire Fontaine from 2004 to today. Created in 2004 in Paris by James Thornhill and Fulvia Carnevale, the collective artist Claire Fontaine creates texts that are as experimental and politically charged as her visual practice. In these writings, she uses the concept of “human strike” and adopts the radical feminist position that can be found in *Tiqqun*, a two-issue magazine cofounded by Carnevale.

Human strike is a movement that is broader and more radical than any general strike. It addresses our inevitable subjective complicity with everything that limits our freedom and shows how to abandon these self-destructive behaviors through desubjectivization. Human strike, Claire Fontaine writes, is a subjective struggle to separate from the inevitable harm we do to ourselves and others simply by living within postindustrial neoliberalism. *Human Strike* is the first English-language publication of Claire Fontaine’s influential and important theoretical writings.

Claire Fontaine is a collective artist who exhibits internationally. Founded in Paris in 2004, she works and lives in Palermo, Italy. Recent solo exhibitions include: *Your Money and Your Life*, Galerias Municipais, Lisbon, 2019; *Too Late to Read*, Longtang, Zurich, 2019; *Les printemps seront silencieux*, Le Confort Moderne, Poitiers, 2019; *La borsa e la vita*, Palazzo Ducale, Genoa, 2019; *#displaced*, Städtische Galerie, Nordhorn, 2018; *The Crack-up*, Neuer Berliner Kunstverein, Berlin, 2017; and *Camp*, Villa Medici, Rome, 2017. Claire Fontaine’s writings have previously been published in Germany, Italy, France, Spain, and the UK.



The Freezer Door

Mattilda Bernstein Sycamore

When you turn the music off, and suddenly you feel an unbearable sadness, that means turn the music back on, right? When you still feel the sadness, even with the music, that means there's something wrong with this music. Sometimes I feel like sex without context isn't sex at all. And sometimes I feel like sex without context is what sex should always be.

— *The Freezer Door*

The Freezer Door records the ebb and flow of desire in daily life. Crossing through loneliness in search of communal pleasure in Seattle, Mattilda Bernstein Sycamore exposes the failure and persistence of queer dreams, the hypocritical allure of gay male sexual culture, and the stranglehold of the suburban imagination over city life.

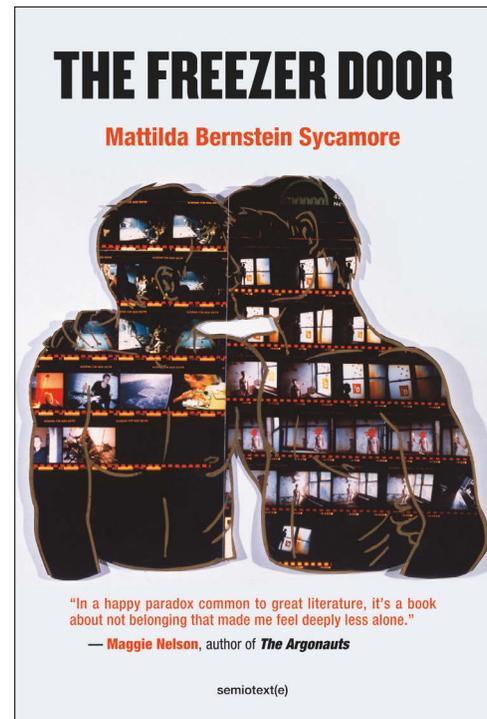
Ferocious and tender, *The Freezer Door* offers a complex meditation on the trauma and possibility of searching for connection in a world that relentlessly enforces bland norms of gender, sexual, and social conformity while claiming to celebrate diversity.

Mattilda Bernstein Sycamore (mattildabernsteinsycamore.com) is the author of three novels and a memoir and the editor of five nonfiction anthologies. Her memoir, *The End of San Francisco*, won a Lambda Literary Award in 2014, and her previous book, *Why Are Faggots So Afraid of Faggots? Flaming Challenges to Masculinity, Objectification, and the Desire to Conform*, was an American Library Association Stonewall Honor Book. Her novel *Sketchtasy* was one of NPR's Best Books of 2018. She lives in Seattle.

Praise for Mattilda Bernstein Sycamore

"Descending into Mattilda Bernstein Sycamore's writing is like diving into a lake and submerging yourself into a more authentically emotional world."

— *BOMB*



A meditation on the trauma and possibility of searching for connection in a world of gender, sexual, and social conformity.

November
5 3/8 x 8, 264 pp.

\$17.95T paper
978-1-63590-128-3

Native Agents series

Distributed for Semiotext(e)

fiction

The Superrationals

Stephanie LaCava

An erotic and comic novel about female friendship, set at the intersection between counterculture and the multimillion-dollar art industry.

Over the course of a few days in the fall of 2015, the sophisticated and awkward, wry, and beautiful Mathilde upends her tidy world. She takes a short leave from her job at one of New York's leading auction houses and follows her best friend Gretchen on an impromptu trip to Paris. While there, she confronts her late mother's hidden life, attempts to rein in Gretchen's encounters with an aloof and withholding sometime-boyfriend, and faces the traumatic loss of both her parents when she was a teenager.

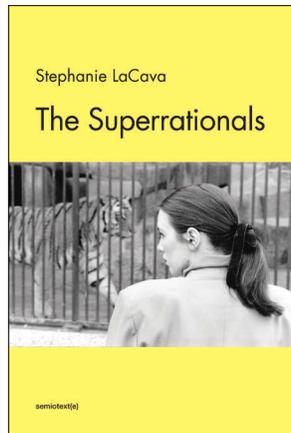
Reeling between New York, Paris, Munich, London, and Berlin, *The Superrationals* is an erotic and darkly comic story about female friendship, set at the intersection between counterculture and the multimillion-dollar art industry. Mathilde takes short, perceptive notes on artworks as a way to organize her own chaotic thoughts and life. Featuring a bitchy gossip chorus within a larger carousel of voices, *The Superrationals* coolly surveys the international art and media worlds while exploring game theory, the uncanny, and psychoanalysis. Written in the "Young Girl" tradition of Michelle Bernstein's *All The King's Horses*, Bernadette Corporation's *Reena Spaulings*, and Natasha Stagg's *Surveys*, *The Superrationals* confronts the complexity of building narrative in life and on the page and the instability that lies at the heart of everything.

Stephanie LaCava is a writer based in New York City. Her work has appeared in *Harper's Magazine*, *Artforum*, *Texte zur Kunst*, the *New York Times*, the *New York Review of Books*, *Vogue*, and *Interview*.

September | 5 3/8 x 8, 160 pp.

\$15.95T paper
978-1-63590-132-0

Native Agents series
Distributed for Semiotext(e)



fiction

Castle Faggot

Derek McCormack

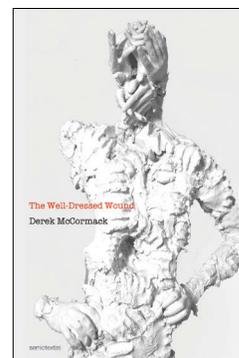
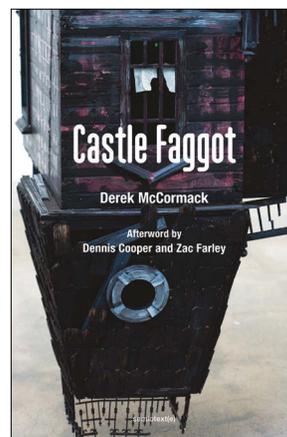
afterword by Dennis Cooper and Zac Farley

A dark satire about an amusement park more deranged than anything Disney could imagine: a playland for gay men called Faggotland.

Castle Faggot is Derek McCormack's darkest and most delicious book yet, a satire of sugary cereals and Saturday morning cartoons set in an amusement park more deranged than anything Disney dreamed up. At the heart of the park is Faggotland, a playland for gay men, and Castle Faggot, the darkest dark ride in the world. Home to a cartoon Dracula called Count Choc-o-log, the castle is decorated with the corpses of gays—some were killed, some killed themselves, all ended up as décor.

The book includes a map of Faggotland, a photobook of the castle, the instructions for a castle-shaped dollhouse, and the novelization of a TV puppet show about Count Choc-o-log and his friends—reminiscent of the classic stop-motion special *Rudolph the Red-Nosed Reindeer*, but even gayer and more grotesque. As scatological as Sade but with a Hanna-Barbera vibe, *Castle Faggot* transmutes McCormack's love of the lurid and the childlike, of funhouses and sickhouses, into something furiously funny: as Edmund White says, "the mystery of objects, the lyricism of neglected lives, the menace and nostalgia of the past—these are all ingredients in this weird and beautiful parallel universe."

Derek McCormack is a writer who lives in Toronto. His previous books include *The Show that Smells* and *The Well-Dressed Wound* (Semiotext(e)).



November | 5 3/8 x 8, 144 pp.

\$15.95T paper
978-1-63590-137-5

Native Agents series
Distributed for Semiotext(e)

Also in this series

The Well-Dressed Wound
Derek McCormack
\$12.95T paper
978-1-58435-174-0

The Murder Factory

Life and Work of H. H. Holmes, First American Serial Killer

Alexandra Midal

In 1896, at the age of 35, Henry Howard Holmes, whose real name was Herman Webster Mudgett, became the first serial killer in the United States, confessing to dozens of crimes. To carry out his activities quietly, he built in Chicago a building so vast that his neighbors called it the “Château.” Located just a stone’s throw from the most sophisticated slaughterhouses in the world, lethal, practical, and comfortable, Holmes’s building was equipped with the latest innovations. A rational, cozy masterpiece of crime dressed in slippers, Holmes’s project fit perfectly into the functionalist project of the modern world.

In *The Murder Factory*, Alexandra Midal examines the almost simultaneous emergence of the industrial revolution and the figure of the serial killer. Far from being a coincidence, it marks the rationality of new production methods—of which the assembly line and serial murder are two expressions. In the Holmes case, an antihero of modern history can shed light on the treatment of living things brought about by this economic, mechanical, and cultural revolution.

H. H. Holmes’s confessions, published in the *Philadelphia Enquirer* just before his execution in April 1896, follow Midal’s text.

Alexandra Midal is a curator and Professor of History and Theory of Design at HEAD–Genève. She is former director of the the Regional Contemporary Art Funds of Haute-Normandie (FRAC) and a former assistant to the artist Dan Graham for public commissions.

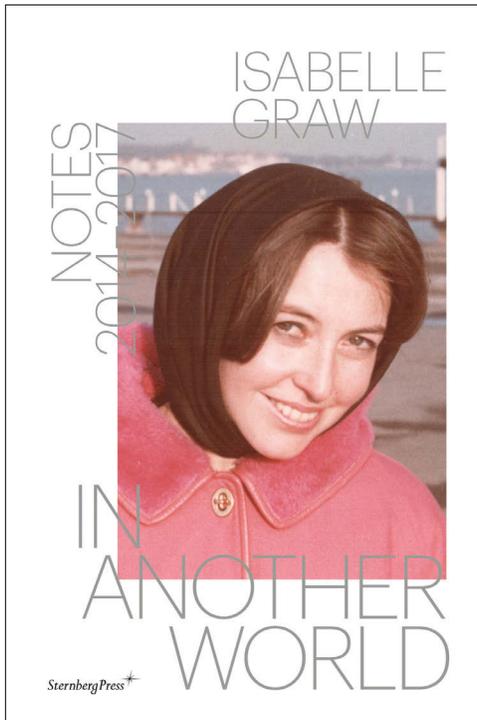
The simultaneous emergence of the serial killer and the assembly line as expressions of the rationality of modern production methods.

August
5 1/2 x 8, 120 pp.

\$19.95T paper
978-3-95679-543-5

Distributed for Sternberg Press

Not for sale in the UK or Europe



In Another World

Notes 2014–2017

Isabelle Graw

translated by Daniel Spaulding

This book merges memoir and social critique in an original fashion. By combining personal observations with a general systemic analysis, it seeks to propose a new genre of writing. Isabelle Graw manages to capture radical political, social, and cultural changes that have occurred since 2014 in elegantly written observations, also analyzing how these macro-shifts reach into her own life.

Addressing topics that range from Brexit, Trump, and a general rightward turn to #MeToo, men with beards, and Balenciaga, Graw registers the symptoms of a world that clearly feels different. Meditating on irretrievable personal losses, she describes how we find ourselves literally “in another world” after the death of our parents. With a theme of mourning running throughout, her book is an attempt at exposing and analyzing painful emotions.

Isabelle Graw is Professor of Art Theory and Art History at the Staatliche Hochschule für bildende Künste–Städelschule, Frankfurt am Main. In 1990 Graw and Stefan Germer founded the quarterly magazine *Texte zur Kunst*. In 2003, Graw and Daniel Birnbaum founded the Institut für Kunstkritik at the Städelschule.

Blending memoir and social critique, elegantly written essays explore a world that feels different, from Brexit and Trump to #MeToo and the death of parents.

November
4 1/2 x 7, 184 pp.

\$29.95T paper
978-3-95679-536-7

Distributed for Sternberg Books

Not for sale in the UK or Europe

Radical Futurisms

Ecologies of Collapse / Chronopolitics / Justice to Come

T. J. Demos

There is widespread consensus that we are living at the end—of democracy, of liberalism, of capitalism, of a healthy planet, of the Holocene, of civilization as we know it. In this book, drawing on radical futurisms and visions of justice-to-come emerging from the traditions of the oppressed—Indigenous, African-American, multispecies, anti-capitalist—as materialized in experimental visual cultural, new media, aesthetic practices, and social movements, T. J. Demos poses speculative questions about what comes after end-of-world narratives. He argues that it's as vital to defeat fatalistic nihilism as it is to defeat the false solutions of green capitalism and algorithmic governance.

How might we decolonize the future and cultivate an emancipated chronopolitics in relation to an undetermined not-yet? If we are to avoid climate emergency's cooptation by technofixes and the defuturing of multitudes by xenophobic eco-fascism, Demos argues, we must cultivate visions of just futurity and multispecies flourishing.

T. J. Demos, an award-winning writer, is Professor of Visual Culture at the University of California, Santa Cruz, and Director of its Center for Creative Ecologies. He writes widely about contemporary art, global politics, and ecology, and is the author, most recently, of *Against the Anthropocene: Visual Culture and Environment Today* (Sternberg Press).

**What comes after
end-of-world narratives:
visions of just futurity
and multispecies
flourishing.**

August
5 3/8 x 8, 304 pp.

\$22.95T paper
978-3-95679-527-5

Distributed for Sternberg Press

Not for sale in the UK or Europe

JOSEPH
KOSUTH:
REDEFINING
THE CONTEXT
OF ART, 1968
AND AFTER

THE SECOND
INVESTIGATION

The first comprehensive survey of Joseph Kosuth's media work, centering on *The Second Investigation* (1968–74).

October
7 x 10 1/2, 520 pp.

\$40.00T cloth
978-3-95679-158-1

Distributed for Sternberg Press

Not for sale in the UK or Europe

art

Joseph Kosuth

Redefining the Context of Art, 1968 and After
The Second Investigation

John C. Welchman and Gabriele Guercio

This first comprehensive survey of Joseph Kosuth's work with public media centers on his pioneering project *The Second Investigation* (1968–74). This indexical work takes the form of anonymous advertisements in media—newspapers, magazines, billboards, television—based on a taxonomy of the world developed in the early nineteenth century by Roget for use in his thesaurus. Marking the start of Kosuth's sustained engagement with public media, this work anticipated the media orientation of New York postmodernism beginning in the late 1970s.

Featuring a significant reexamination of Kosuth's work with language and media by art historian John C. Welchman, an appendix by art historian Gabriele Guercio, as well as the artist's own reflections on art and media, the book is richly illustrated with unpublished material from the artist's archive along with documentation of the artist's eponymous 1997 exhibition at the MIT List Visual Arts Center and his 2004 retrospective at the Van Abbemuseum, Eindhoven.

John C. Welchman is Professor of Modern Art History in the Visual Arts Department at the University of California, San Diego. He is the editor of *Minor Histories: Statements, Conversations, Proposals*, a collection of writings by the artist Mike Kelley (MIT Press). **Gabriele Guercio** is an independent writer living in Milan. He has lectured at the Universities of Rome and Naples and has been a Fellow at the Center for Advanced Studies in the Visual Arts at the National Gallery and a recipient of a J. P. Getty Postdoctoral Fellowship in the History of Art and the Humanities. He is the author of *Art as Existence: The Artist's Monograph and Its Project* and the editor of a volume of Joseph Kosuth's writings, *Art After Philosophy and After* (both published by the MIT Press).

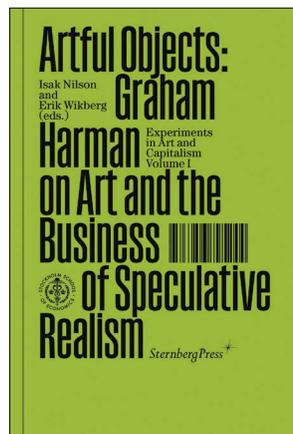
Artful Objects

Graham Harman on Art and the Business of Speculative Realism

Graham Harman

A lecture by the originator of object-oriented philosophy, delivered on the occasion of the Sculpture after Sculpture exhibition at Moderna Museet, Stockholm.

Can objects be traumatized? How does the commercial value of an art object relate to its aesthetic qualities? How do objects interact? These are some of the questions addressed by Graham Harman, the originator of object-oriented philosophy and a central figure of the Speculative Realism school of thought in contemporary philosophy. This book includes Harman's lecture "What Is an Object?" delivered at Moderna Museet in Stockholm, on the occasion of the exhibition *Sculpture after Sculpture*, with Jeff Koons, Charles Ray, and Katharina Fritsch—artists who have expanded the notion of the object



in art and society at large.

In his lecture, Harman gives a thorough exposition of the object from an ontological standpoint and puts forward a concept of the object that goes beyond reductionist orientations. He declares a philosophical approach bringing philosophy and the arts closely together, where objects are impenetrable to direct knowledge and paraphrase and instead must be approached obliquely and indirectly. The publication also includes a symposium in which thirteen questions to Harman—in relation to the thirteen sculptures of the show—are posed about the implications of object-oriented philosophy for art, business administration, and philosophy.

Graham Harman is Distinguished Professor of Philosophy at SCI-Arc in Los Angeles. His work on the metaphysics of objects led to the development of object-oriented ontology. He is a central figure in the speculative realism trend in contemporary philosophy.

July | 5 x 7 1/2, 120 pp. | 13 color illus.

\$19.95T paper
978-3-95679-524-4

Copublished with the Stockholm School of Economics

Distributed for Sternberg Press

Not for sale in the UK or Europe

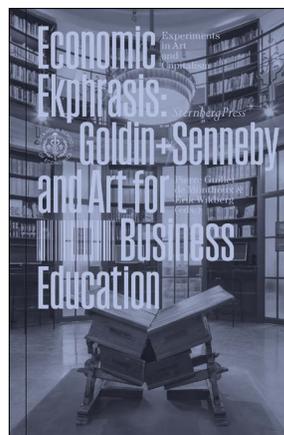
Economic Ekphrasis

Goldin+Senneby and Art for Business Education

edited by Pierre Guillet de Monthoux and Erik Wikberg

What happens when social scientists write about artworks: helping people blind to economic ideas see something for the first time.

What happens when social scientists write about artworks? How does it affect the academic environment of a business



school and how does it change the perception of art? Can it be used as a novel scientific method in business studies? This book investigates these matters by analyzing the Goldin+Senneby's retrospective exhibition *Standard Length of a Miracle* set up in Tensta konsthall and multiple other venues in Stockholm in the spring of 2016.

While the use of ekphrases goes back to ancient times in our Western literary canon, it is new and unexplored territory

for social scientists at business schools—to describe artworks for people who are blind to economic concepts and ideas, helping them see what they did not see before.

Economic Ekphrasis is part of the SSE Art Initiative series Experiments in Art and Capitalism.

Goldin+Senneby is a Stockholm-based artist subject. Since 2004 their work has explored the structural correspondence between conceptual art and finance capital, drawn to its (il)logical conclusions. **Pierre Guillet de Monthoux** is Professor at Stockholm University, Docent at Åbo Akademi in Turku, Finland, Adjunct Professor at Copenhagen Business School, and Docent at Universität Witten-Hendecke. **Erik Wikberg** is a Researcher at Stockholm School of Economics.

Contributors

Maria Lind, Marie-Louise Fendin, Örjan Sjöberg, Ismail Ertürk, Anastasia Seregina, Jonas Hassen Khemiri, Pamela Schultz Nybacka, Emma Stenström, Katie Kitamura, Clare Birchall, Brian Kuan Wood

July | 5 x 7 1/2, 152 pp. | 25 color illus.

\$19.95T paper
978-3-95679-544-2

Distributed for Sternberg Press

Not for sale in the UK or Europe

political science | art

Unpayable Debt

Denise Ferreira da Silva

Coloniality, raciality, and global capitalism from a black feminist “poethical” perspective.

Unpayable Debt examines the relationships among coloniality, raciality, and global capital from a black feminist “poethical” perspective. Inspired by Octavia E. Butler’s 1979 sci-fi novel *Kindred*, in which an African-American writer is transported back in time to the antebellum South to save her owner-ancestor, *Unpayable Debt* relates the notion of value to coloniality—both economic and ethical. Focusing on the philosophy behind value, Denise Ferreira da Silva exposes capital as the juridical architecture and ethical grammar of the world. Here, raciality—a symbol of coloniality—justifies deployments of total violence to enable expropriation and land extraction.

This is the first volume in the On the Political series.

Denise Ferreira da Silva is Professor and Director of the Institute for Gender, Race, Sexuality, and Social Justice at the University of British Columbia, Vancouver. She is also a Visiting Professor at the School of Law at Birkbeck, University of London.

November | 4 3/4 x 7, 152 pp. | 15 illus.

\$25.00T paper
978-3-95679-542-8

Distributed for Sternberg Press

Not for sale in the UK or Europe

art

In Pieces

Writings on Art, Etc.

Brian Dillon

Essays and criticism on artists, writers, and living as a European writer in the midst of Brexit.

In Pieces offers critical, polemic, and personal essays written by Brian Dillon over the past decade. Writing about such major artists as Diane Arbus, Claude Cahun, and William Eggleston, Dillon investigates the slippages between life, work, and reputation. He attends to the formal strangeness of the art of Julia Margaret Cameron, Hannah Höch, Eileen Gray, and Loie Fuller. And he finds contemporary echoes of their dissident modernism in the sculpture of Helen Marten, Eva Rothschild, and Enrico David.

In writing about such contemporary writers as Eimear McBride and Claire Louise Bennett, he looks for the kind of formal adventure he is convinced can and must accompany the personal or political. Dillon’s personal essays include his memories of the Prozac craze of the 1990s, a discussion of the influence of David Bowie, and a piece about a family member’s paranoid relationship with photography. Finally, Dillon reflects on England and Englishness, offering direct and oblique perspectives on living as a European writer in the midst of the Brexit crisis.

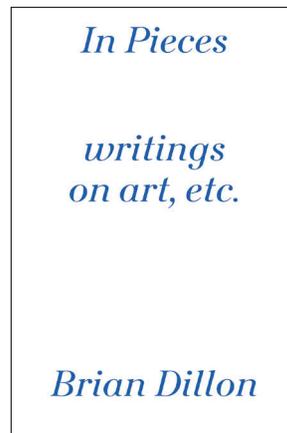
Brian Dillon’s books include *Essayism*, *In the Dark Room*, *Objects in This Mirror*, and *Sanctuary*. His writing has appeared in the *New Yorker*, the *London Review of Books*, the *Guardian*, *frieze*, and *Artforum*. He is Professor of Creative Writing at Queen Mary, University of London, and Visiting Professor in Writing at the Royal College of Art.

September | 4 1/2 x 7 1/2, 304 pp. | 25 illus.

\$24.95T paper
978-3-95679-287-8

Distributed for Sternberg Press

Not for sale in the UK or Europe



Logic of the Collection

Boris Groys

A prominent critic and theorist considers the criteria of value for collecting and storing works of art.

In the world of contemporary art, “serious” art is produced primarily with the aim of being collected. As a result, today’s art production differs significantly from contemporary forms of production that are primarily intended for consumption (and thus destruction.) A work of art, on the other hand, is not consumed; it is protected from use and consumption. How does a particular work of art deserve the right to be collected and preserved? In this book, Boris Groys considers the criteria of value for collecting and storing works of art, finding them not outside but within the collection and according to its inherent logic.

Just as an individual artwork does not necessarily depict external reality, an art collection in its entirety does not depict external social contexts but follows its own, autonomous logic. Every collection aims at the most exhaustive representation of its specific topic. At the same time, every collection is limited in terms of space and capabilities for maintenance of its items. Ultimately, it is the tension between its goal and the limitations of its ability to achieve it that defines every collection, including art collections.

Boris Groys is an art critic, media theorist, and philosopher. He is Global Distinguished Professor of Russian and Slavic Studies at New York University and Professor of Philosophy at the European Graduate School in Saas-Fee, Switzerland.

November | 5 1/4 x 8, 200 pp.

\$22.95T paper
978-3-95679-526-8

Distributed for Sternberg Press

Not for sale in the UK or Europe

EP

Post-Craft

edited by Alex Coles and Catharine Rossi

An examination of the notion of craft as it moves from “modern craft” to “post-craft” amid new economies of making.

The notion of the handmade has shifted from the margins to center stage. Craft’s value is increasingly recognized across creative, economic, social, cultural, and political contexts. Amid dissolving disciplinary boundaries and the widespread appropriation of craft, its meaning is changing. While its claims to values such as authenticity and anti-consumerism are questionable, the role of craft is poised to be optimized within the contemporary climate. Amid new economies of making, as craft moves from “modern craft” to “post-craft,” we need to examine not only the practice of craft but also its mediation and interpretation.



Alex Coles is a critic, editor, and Professor of Transdisciplinary Studies at the School of Art, Design, and Architecture at the University of Huddersfield, UK. **Catharine Rossi** is Senior Lecturer in Design History at Kingston University, London.

October | 5 x 7 3/8, 176 pp. | 49 color illus., 20 b&w illus.

\$28.00T paper
978-3-95679-395-0

Distributed for Sternberg Press

Not for sale in the UK or Europe

Futurity Report

edited by Eric C. H. de Bruyn and Sven Lütticken

Theorists, historians, and artists address the precarious futurity of the notion of the future itself.

Not long ago, a melancholic left and a manic neoliberalism seemed to arrive at an awkward consensus: the foreclosure of futurity. Whereas the former mourned the failure of its utopian project, the latter celebrated the triumph of a global marketplace. The radical hope of realizing a singularly different, more equitable future was displaced by a belief that the future had already come to pass, limiting post-historical society to an uneventful life of endless accumulation. Today, amidst an abundance of neofuturisms, posthuman-

isms, futurologies, speculative philosophies, and accelerationist scenarios, there is as well an expanding awareness of a looming planetary catastrophe driven by the extractionist logic of capitalism. Despite this return to the future, the temporal horizon of our present moment is perhaps more aptly characterized by the “shrinking future” of just-in-time production, risk management, high-frequency trading, and the futures market. In *Futurity Report*, theorists, historians, and artists address the precarious futurity of the notion of the future itself.

Eric C. H. de Bruyn is Professor of Modern and Contemporary Art at Freie Universität, Berlin. **Sven Lütticken**, an art historian and critic, teaches at Vrije Universiteit, Amsterdam.

Contributors

McKenzie Wark, China Miéville, Kerstin Stakemeier, Diedrich Diederichsen, Natascha Sadr Haghghian, Marina Vishmidt, Johannes Paul Raether, Felicity D. Scott, Silvia Maglioni, Graeme Thomson, Doreen Mende, Pedro Neves Marques, Achille Mbembe, Kodwo Eshun, Haytham El-Wardany, T. J. Demos, Ana Teixeira Pinto

June | 6 1/2 x 8 1/2, 280 pp. | 30 illus.

\$29.95T paper

978-3-95679-423-0

Distributed for Sternberg Press

Not for sale in the UK or Europe

White West

The Afterlife of Fascism

edited by Ana Teixeira Pinto and Kader Attia

Tracing the relation between fascism and settler colonialism.

In the aftermath of World War II, the recently liberated nations in Europe were swift to resume colonial oppression abroad. On May 8, 1945, the day victory was celebrated by the Allies, the French police massacred hundreds of townspeople in Sétif, leading the French editor Claude Bourdet to ask, “Are we the Gestapo in Algeria?”

In Europe, what is called “fascism,” poet Aimé Césaire argued in his famous essay “Discourse on Colonialism,” is just colonial violence finding its way back home. In *White West*, contributors challenge the Eurocentrism that undergirds the current concept of fascism, tackling the under-theorized relation between settler colonialism and National Socialism via the “proto-totalitarian” scene of colonial expansion and its racialized concept of personhood, in order to counter the antipolitical nature of a concept such as the West, and the resurgence of fascist doctrines this notion engenders.

Ana Teixeira Pinto is a writer and theorist, based in Berlin. **Kader Attia** is a French/Algerian artist and the founder of La Colonie, an institution devoted to decolonial theory.

Contributors

Norman Ajari, Florian Cramer, Angela Dimitrakaki, Denise Ferreira da Silva, Quinsy Gario, Larne Abse Gogarty, Rose-Anne Gush, Natascha Sadr Haghghian, Sven Lütticken, Olivier Marboeuf, Rijin Sahakian, Nikhil Pal Singh, Françoise Vergès, Marina Vishmidt, Giovanna Zapperi

October | 6 1/2 x 8 1/2, 152 pp.

\$22.95T paper

978-3-95679-533-6

Distributed for Sternberg Press

Not for sale in the UK or Europe

Konrad Wachsmann's Television

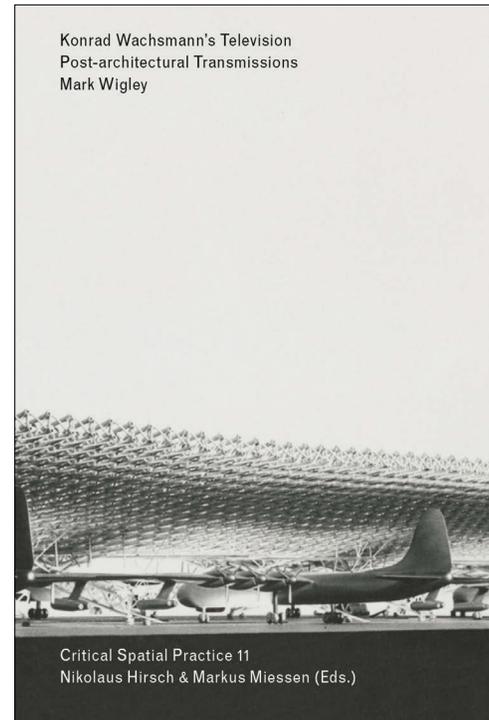
Post-architectural Transmissions

Mark Wigley

In this provocative intellectual biography, architectural historian Mark Wigley makes the surprising claim that the thinking behind modernist architect Konrad Wachsmann's legendary projects was dominated by the idea of television. Investigating the archives of one of the most influential designers of the twentieth century, Wigley scrutinizes Wachsmann's design, research, and teaching, closely reading a succession of unseen drawings, models, photographs, correspondence, publications, syllabi, reports, and manuscripts to argue that Wachsmann is an anti-architect—a student of some of the most influential designers of the 1920s who dedicated thirty-five post-Second World War years to the disappearance of architecture.

Wachsmann turned architecture against itself. His hypnotic projects for a new kind of space were organized around the thought that television enables a different way of living together. While architecture is typically embarrassed by television, preferring to act as if it never happened, Wachsmann fully embraced it. He dissolved buildings into pulsating mirages that influenced the experimental avant-gardes of the 1960s and 1970s; but Wigley demonstrates that this work was even more extreme than the experiments it inspired. Wigley's forensic analysis of a career shows that Wachsmann developed one of the most compelling manifestos of what architecture would need to become in the age of ubiquitous electronics.

Mark Wigley is Professor and Dean Emeritus at Columbia University Graduate School of Architecture, Planning, and Preservation.



A novel reading of the work of one of the most influential designers of the twentieth century.

September
4 1/4 x 6, 256 pp.
jacketed paper

\$17.95T paper
978-3-95679-535-0

Distributed for Sternberg Press

Not for sale in the UK or Europe

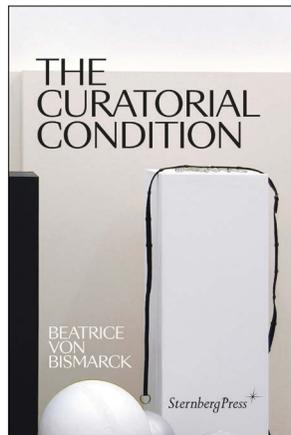
art

The Curatorial Condition

Beatrice von Bismarck

An analysis of the relations created by the curatorial—relations that also constitute it.

In spite of the heightened interest in the curatorial since the late twentieth century, the structural conditions and poten-



tials underpinning its special sociocultural status have yet to be defined. Taking this as a starting point, in this book Beatrice von Bismarck outlines the curatorial—that field of cultural activity and knowledge which relates to the becoming-public of art and culture—as a domain of practice and meaning with its own structures, conditions, rules, and procedures.

Von Bismarck focuses on the relations created by the curatorial—relations that also constitute it. By concentrating

on the dynamic fabric of relations between human and nonhuman participants, she carries out a shift within the discourse on the curatorial: rather than foregrounding partial definitions of the activity of curating, the subjectivization of the curator, and the presentation format of the exhibition, she emphasizes the interplay of all these factors. She proposes a conceptual framework geared toward highlighting the activity, the subject position, and the resulting product as always already dynamically interrelated in its genesis, articulation, and function. Not least, this situates the curatorial condition in the context of key parameters of societal developments over the last half century.

Beatrice von Bismarck is Professor of Art History at the Academy of Fine Arts (Hochschule für Grafik und Buchkunst) Leipzig, where she also teaches Visual Culture and Cultures of the Curatorial. In 2018 she was Philippe Jabre Visiting Professor of Art History and Curating at the American University of Beirut.

November | 4 3/4 x 8, 304 pp. | 35 illus.

\$25.00T paper

978-3-95679-534-3

Distributed for Sternberg Press

Not for sale in the UK or Europe

film

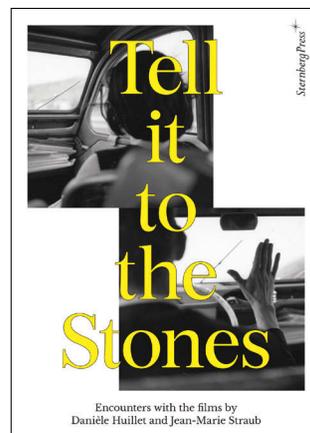
Tell It to the Stones

Encounters with the Films by Danièle Huillet and Jean-Marie Straub

edited by Annett Busch and Tobias Hering

Artists, scholars, filmmakers, and writers revisit the films of Danièle Huillet and Jean-Marie Straub.

Jean-Marie Straub (b. 1933) and Danièle Huillet (1936–2006) met in Paris in 1954. Straub wanted to make a film about



Johann Sebastian Bach, to which Huillet thought: “He’s planning to do far too much; he won’t manage it alone.” It was the beginning of a fifty-year collaboration, which brought about one of the most unconventional and controversial bodies of work in modern cinema. *Tell it to the Stones* presents variations from a prolonged re-encounter with Huillet and Straub’s work that was sparked by a three-month exhibition, complete cinema

retrospective, workshops, and music performances in Berlin in the fall of 2017.

Contributing artists, scholars, filmmakers, and writers have revisited this collective experience in new texts, revised transcripts, conceptual essays, and visual montages. What happens during an encounter happens in between: between language and image, gestures and words, looks and everything unsaid. “To help us build the in-between,” is how Huillet once imagined a task for those who come to see their films. The present compendium revives these encounters and reveals the urgencies of how Straub and Huillet’s oeuvre matters today, perhaps more than ever.

Annett Busch is a freelance curator, editor, writer, and translator. **Tobias Hering** is an independent film curator and writer.

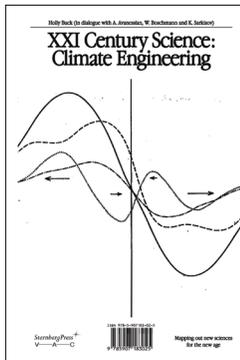
October | 7 x 9 1/4, 304 pp. | 40 color illus.

\$25.00T paper

978-3-95679-532-9

Distributed for Sternberg Press

Not for sale in the UK or Europe



environmental science

Climate Engineering

edited by Holly Buck

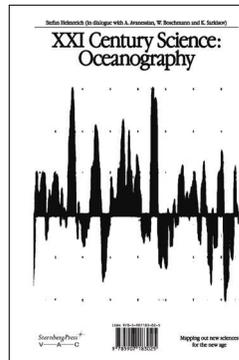
An examination of schemes for large-scale interventions in Earth's natural systems—oceans, soils, and atmosphere—to reduce the adverse effects of climate change.

Holly Buck is a postdoctoral research fellow at the Institute of the Environment and Sustainability at the University of California, Los Angeles.

October | 6 x 9, 152 pp. | 8 illus.

\$19.95T paper

978-3-95679-540-4

Distributed for Sternberg Press**Not for sale in the UK or Europe**

environmental science

Oceanography

edited by Stefan Helmreich

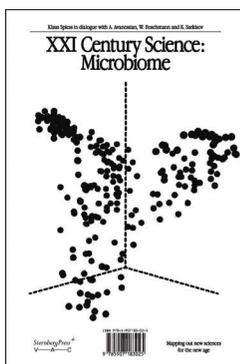
New approaches to the ocean enabled by the new field of (microbial) oceanography.

Stefan Helmreich is Elting E. Morison Professor of Anthropology at MIT. He is the author of *Alien Ocean*, *Sounding the Limits of Life*, and *Silicon Second Nature*.

August | 6 x 9, 152 pp.

\$19.95T paper

978-3-95679-541-1

Distributed for Sternberg Press**Not for sale in the UK or Europe**

biology

Microbiome

edited by Klaus Spiess

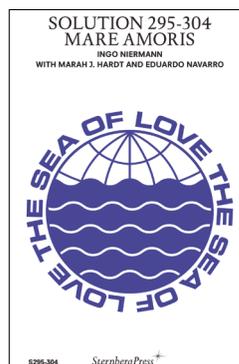
The microbiome and the coming micro-biopolitics.

Klaus Spiess is an endocrinologist, psychosomaticist, and medical anthropologist who works as an Associate Professor in the field of art and science at the Medical University of Vienna.

August | 6 x 9, 152 pp. | 8 illus.

\$19.95T paper

978-3-95679-539-8

Distributed for Sternberg Press**Not for sale in the UK or Europe**

environment | essays

Solution 295–304

Mare Amoris

Ingo Niermann

with Marah J. Hardt

illustrated by Eduardo Navarro

New practical, technological, and metaphysical scenarios of how to fall in love with the sea, and, eventually, have the sea fall in love with us.

Ingo Niermann is a writer and the editor of the Solution Series. **Marah J. Hardt**, marine biologist and storyteller, is the author of *Sex and the Sea*. **Eduardo Navarro** is an artist in Argentina.

May | 4 1/2 x 7, 104 pp. | 13 illus.

\$17.95T paper

978-3-95679-522-0

Solutions series**Distributed for Sternberg Press****Not for sale in the UK or Europe**

art

Agnieszka Kurant

Collective Intelligence

edited by Stefanie Hessler and Jenny Jaskey

Newly commissioned texts on the work of the artist Agnieszka Kurant by Anselm Frank, Caroline A. Jones, Franco (Bifo) Berardi, and others.

Agnieszka Kurant: Collective Intelligence explores the artist's work over the last ten years, examining her interdisciplinary practice, which focuses on collective intelligence—a phenomenon observed in bacteria, animals, social movements, internet, cities, and inside our brains—where novel forms emerge in unpredictable ways out of interactions among thousands of elements or agents in a complex system.

This book brings together newly commissioned texts by some of the most renowned thinkers in their fields: curator and writer Anselm Franke, art historian Caroline A. Jones, media theorists Jussi Parikka and Matteo Pasquinelli, anthropologists Stefan Helmreich and Tobias Rees, philosophers Rosi Braidotti, Franco (Bifo) Berardi, Manuel Delanda, and Yuk Hui, science writer Philip Ball, writers Elvia Wilk and Esther Leslie, science fiction writer Ted Chiang, and many others.

Stefanie Hessler, Director of Kunsthall Trondheim in Norway, is a curator, writer, and editor. **Jenny Jaskey** is the Director and Curator of the Artist's Institute, New York. **Agnieszka Kurant** is the recipient of the 2019 Frontier Art Prize. In 2020 she will launch her permanent commission for MIT List Visual Arts Center.

Contributors

Philip Ball, Franco (Bifo) Berardi, Rosi Braidotti, Ted Chiang, Anselm Franke, Stefan Helmreich, Stefanie Hessler, Yuk Hui, Jenny Jaskey, Caroline A. Jones, Manuel de Landa, Esther Leslie, Jussi Parikka, Matteo Pasquinelli, Tobias Rees, Elvia Wilk, and others

November | 8 1/2 x 11, 352 pp. | 230 color illus.

\$27.95T cloth

978-3-95679-529-9

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Not for sale in the UK or Europe

art

Tensta Museum

Reports from New Sweden

edited by Maria Lind

Documenting a project that turned a suburb of Stockholm into a museum that produced concrete images of a Sweden where divides are intensifying.

This book documents and discusses Tensta konsthall's experimental multiyear project "Tensta Museum: Reports from New Sweden" that ran from 2013–18 in the Stockholm suburb of Tensta and beyond. Tensta is dominated by a late modernist housing estate, built on old farmland with traces from both the Iron Age and the Viking era, where today nearly 20,000 people live, a majority with a trans-local backgrounds. More than fifty artists, architects, performers, sociologists, cultural geographers, philosophers, and others contributed artworks, research projects, seminars, guided walks, workshops, and much more, reporting on the past and present of Tensta, creating a "museum."

The project produced concrete images of what can be described as the New Sweden—a place with people of vastly different backgrounds, where economic and social divides are intensifying. Tensta Museum also engaged with the concept of cultural heritage and the complicated matter of how it is used in Sweden and elsewhere.

Maria Lind is Director of the Tensta Konsthall, Stockholm, and former Director of the graduate program at the Center for Curatorial Studies at Bard College.

Contributors

Action Archive, Adam Tensta, Ahmet Ögüt, Babi Badalov, Carl Larsson, Dominique Gonzalez Foerster, Emily Fahlén, Erik Stenberg, Irene Molina, the Kurdish Association, Lawrence Abu Hamdan, Mekonen Tekeste, Meron Mangasha, Petra Bauer, Ricardo-Osvaldo Alvarado, Spånga Local Heritage Association, Tarek Atoui, the Tensta Hjulsta Women's Center, Tensta Library, Beatrice von Bismarck, Boris Buden, Christina Zetterlund

October | 9 1/2 x 12, 304 pp. | 15 color illus., 79 b&w illus.

\$29.95T paper

978-3-95679-450-6

Copublished with Tensta konsthall

Distributed for Sternberg Press

Not for sale in the UK or Europe

music

Muse, Odalisque, Squaw

A Girl's Life in the Incredible String Band

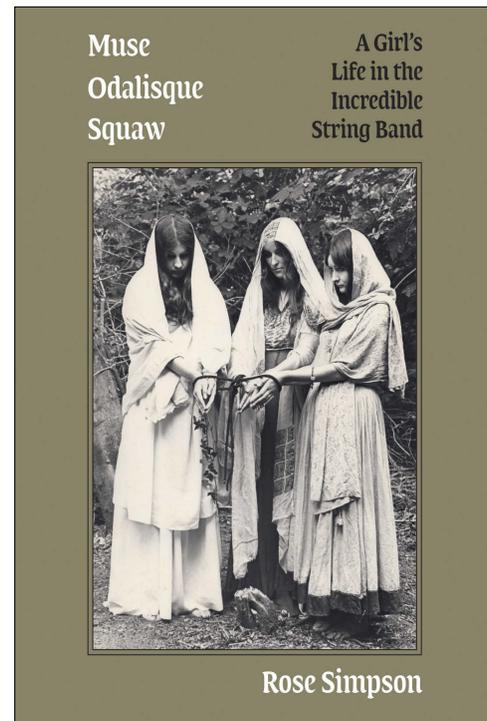
Rose Simpson

Between 1967 and 1971 Rose Simpson lived with the Incredible String Band (Mike Heron, Robin Williamson, and Licorice McKechnie), morphing from English student to West Coast hippie and, finally, bassist in leathers. The band's image adorned psychedelic posters and its music was the theme song for an alternative lifestyle.

Rose and partner Mike Heron believed in, and lived, a naive vision of utopia in Scotland. But they were also a band on tour, enjoying the thrills of that life. They were at the center of "Swinging London" and at the Chelsea Hotel with Andy Warhol's superstars. They shared stages with rock idols and played at Woodstock in 1969. Rose and fellow ISB member Licorice were hippie pin-ups, while Heron and Robin Williamson the seers and prophets of a new world.

Through a haze of incense and marijuana, they played out their Arcadian dreams on stages brilliant with the colors of clothes, light-shows, rugs, cushions, and exotic instruments. Like most utopias, the ISB's imploded. Never seeing herself as a professional musician, Rose retained an outsider's detachment even while living the life of a hippie chick. Her memoir gives a voice to those flower-wreathed girls whose photographs have become symbols of the psychedelic sixties.

Rose Simpson is an English former musician. Between 1968 and 1971, she was a member of the Incredible String Band, with whom she sang and played bass guitar, violin, and percussion. She later became Lady Mayoress of the Welsh town of Aberystwyth.



A memoir by a member of the Incredible String Band that charts a journey from hippie utopia to post-Woodstock implosion.

December
5 3/8 x 8, 256 pp.
20 illus.

\$22.00T paper
978-1-907222-67-2

Distributed for Strange Attractor Press

game studies

Grimdark

A Very British Hell

Tim Linward

On Warhammer 40,000, Britain's most excessive sci-fi franchise, and its vision of a hellish postindustrial future.

In the grim darkness of the British imagination, there is only Warhammer 40,000. . . . Featuring demons, chain swords, and supermen in power armor, Warhammer 40,000 is Britain's most excessive sci-fi franchise. For thirty years this cult war game and its tie-in media have enticed thousands of fans to build, paint, and play with armies of toy soldiers taken from the battlefields of the worst possible future. Why has this fantasy proven so irresistible? Part collection of essays, part ravings of a cult prophet, *Grimdark* examines Warhammer 40,000's place and impact in pop culture, and how this

unique vision of a hellish future arose from the subconscious of postindustrial Britain.

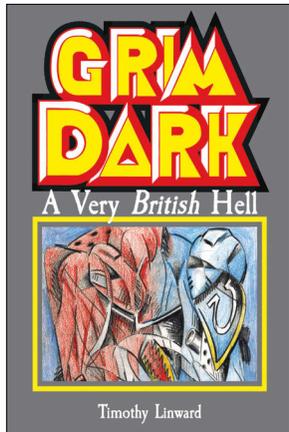
Tim Lindward, born under a dying star, channels his terror at late capitalist ecocide into a pathological lust for toy soldiers. In his naivete he had hoped that writing this book would stop the dreams. He lives with his broodmate, brooding, vertebrate and invertebrate pets near Eboracum in Britain, where he does bad things to spreadsheets.

December | 4 1/2 x 7, 248 pp.

\$24.95T paper

978-1-907222-09-2

Distributed for Strange Attractor Press



game studies

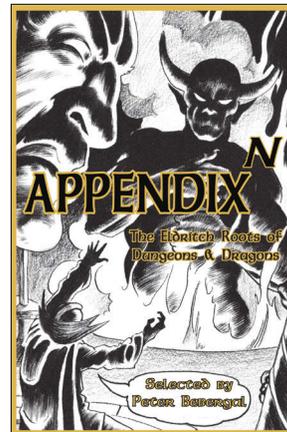
Appendix N

The Eldritch Roots of *Dungeons & Dragons*

Peter Bebergal

An investigation of the literary influences behind the most popular role-playing games.

Drawing upon the original list of “inspirational reading” provided by Gary Gygax in the first *Dungeon Master's Guide*, published in 1979, as well as hobbyist magazines and gaming periodicals that helped to define the modern role-playing game, *Appendix N* offers a collection of short fiction and resonant fragments that reveal the literary influences that shaped *Dungeons & Dragons*, the world's most popular RPG. *Appendix N* also explores and contextualizes the ambitious lyrical excursions that helped set the adventurous tone and dank, dungeon-crawling atmospheres of fantasy roleplay as we know it today.



Peter Bebergal is a writer based in Cambridge, Massachusetts. His writing on speculative and fringe cultures have been published by the *Believer*, the *Times Literary Supplement*, the *New Yorker*, *Boing Boing*, and the *Paris Review*. He is the author *Strange Frequencies: The Extraordinary Story of the Technological Quest for the Supernatural*, *Season of the Witch: How the Occult Saved Rock and Roll*, and *Too Much to Dream: A Psychedelic American Boyhood*.

December | 5 3/4 x 8 1/4, 312 pp. | 20 illus.

\$19.95T paper

978-1-907222-74-0

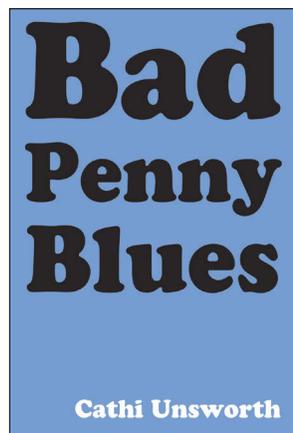
Distributed for Strange Attractor Press

Bad Penny Blues

Cathi Unsworth

A gripping crime novel inspired by the “Jack the Stripper” killings in 1960s London.

Bad Penny Blues is the latest gripping crime fiction from Cathi Unsworth, London’s undisputed queen of noir. Set in late 1950s and early 1960s London, it is loosely based on the West London “Jack the Stripper” killings that rocked the city. The narrative follows police officer Pete Bradley, who investigates the serial killings of a series of prostitutes, and, in a parallel story, Stella, part of the art and fashion worlds of 1960s “Swinging London,” who is haunted by visions of the murdered women.



Cathi Unsworth is an English writer and journalist. After working for *Melody*

Maker and *Bizarre*, she began writing novels, publishing *The Not Knowing* in 2005 and *The Singer* in 2007. She is the editor of the anthology *London Noir*.

December | 5 1/4 x 8 1/4, 400 pp.

\$15.00T paper
978-1-907222-19-1

Distributed for Strange Attractor Press

Cabarets of Death

Death, Dance and Dining in Early Twentieth-Century Paris

Mel Gordon

edited by Joanna Ebenstein

Three idiosyncratically macabre cabaret-restaurants in Monmartre, each with its own grotesque portrayal of the afterworlds of Hell, Heaven, and Nothingness.

From 1892 until 1954, three cabaret-restaurants in the Montmartre district of Paris captivated tourists with their grotesque portrayals of death in the afterworlds of Hell, Heaven, and Nothingness. Each had specialized cuisines and morbid visual displays with flashes of nudity and shocking optical illusions. These cabarets were considered the most curious and widely featured amusements in the city. Entrepreneurs even hawked graphic postcards of their ironic spectacles and otherworldly

interiors.

Cabarets of Death documents the dinner shows, the character interactions with guests, and the theatrical goings-on in these unique establishments. Presenting original images and drawings from contemporary journals, postcards, tourist brochures, and menus, Mel Gordon leads a tour of these idiosyncratically macabre institutions, and grants us unique access to a form of popular spectacle now gone.

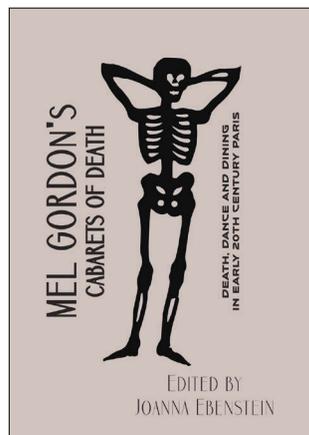
Mel Gordon (1947–2018), called a “drama scholar of the fringe” by the *New York Times*, published books on the grisly Grand Guignol theater, the deviant sexual worlds of Weimar Berlin and Paris, and Hitler’s Jewish clairvoyant.

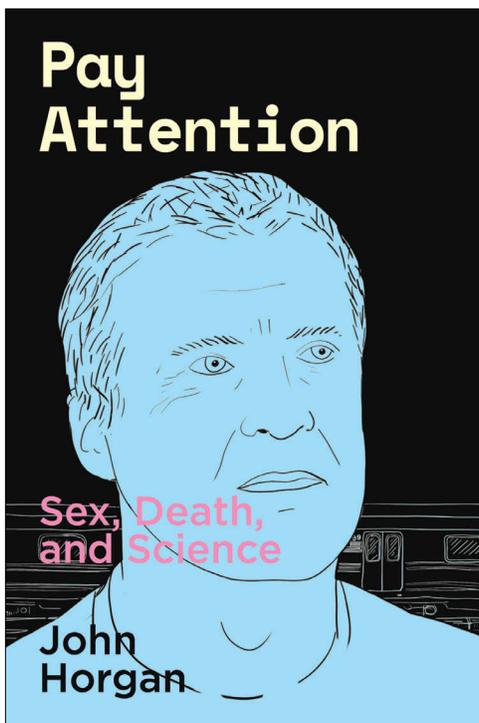
Joanna Ebenstein is a Brooklyn-based artist, curator, writer, and graphic designer. She is the founder of the Morbid Anatomy blog, library, and event series, and was cofounder and creative director of the recently shuttered Morbid Anatomy Museum in Brooklyn, New York.

December | 7 x 8 1/2, 200 pp. | 200 color illus.

\$24.95 paper
978-1-907222-26-9

Distributed for Strange Attractor Press





A day in the inner and outer lives of a college professor, blogger, divorced father, thinker, and yearner.

November
5 1/2 x 8 1/4, 234 pp.

\$25.95T paper
978-1-949597-09-7

Distributed for Terra Nova Press

fiction

Pay Attention

Sex, Death, and Science

John Horgan

What would it feel like to wake up inside the head of someone who writes about science for a living? John Horgan, acclaimed author of the bestseller *The End of Science*, answers that question in his genre-bending new book *Pay Attention*, a stream-of-consciousness account of a day in the life of his alter ego, Eamon Toole—a blogger, college professor, and divorced father.

This work of fact-based fiction, or “faction,” follows Toole as he wakes up in his rented apartment in upstate New York, meditates with the mantra “Duh,” commutes via train and subway to an engineering school in New Jersey, teaches a William James essay on consciousness to freshmen, squabbles about Thomas Kuhn with colleagues over lunch, takes a ferry to Manhattan and spends the evening with his bossy, Tarot-reading girlfriend, Emily, on whom he plans to spring a big question. Throughout the day, Toole struggles to be rational while buffeted by fears and yearnings. Thoughts of sex and death keep intruding on his ruminations over quantum spookiness, the neural code, the Singularity, and free will. *Pay Attention* is a profane, profound meditation on the entanglements of our inner and outer worlds and the elusiveness of truth.

John Horgan, an award-winning science journalist, is Director of the Center for Science Writings at Stevens Institute of Technology. He is the author of *The End of Science*, a U.S. bestseller translated into thirteen languages; and *Mind-Body Problems*, which he made available online for free.

fiction

X-Risk

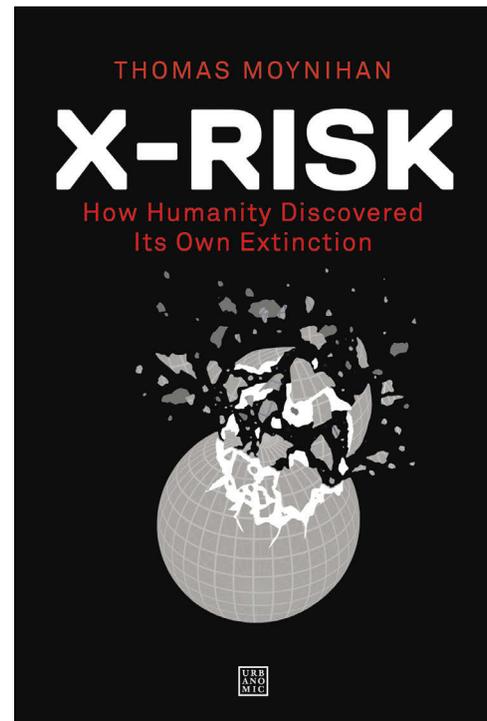
How Humanity Discovered Its Own Extinction

Thomas Moynihan

From forecasts of disastrous climate change to prophecies of evil AI superintelligences and the impending perils of genome editing, our species is increasingly concerned with the prospects of its own extinction. With humanity's future on this planet seeming more insecure by the day, in the twenty-first century, existential risk has become the object of a growing field of serious scientific inquiry. But, as Thomas Moynihan shows in *X-Risk*, this preoccupation is not exclusive to the post-atomic age of global warming and synthetic biology. Our growing concern with human extinction itself has a history.

Tracing this untold story, Moynihan revisits the pioneers who first contemplated the possibility of human extinction and stages the historical drama of this momentous discovery. He shows how, far from being a secular reprise of religious prophecies of apocalypse, existential risk is a thoroughly modern idea, made possible by the burgeoning sciences and philosophical tumult of the Enlightenment era. In recollecting how we first came to care for our extinction, Moynihan reveals how today's attempts to measure and mitigate existential threats are the continuation of a project initiated over two centuries ago, which concerns the very vocation of the human as a rational, responsible, and future-oriented being.

Thomas Moynihan focuses on intellectual history and existential risk, aiming to supply a historically reflective dimension to the emerging field of "future studies."



How humanity came to contemplate its possible extinction.

September
5 1/4 x 7 3/4, 224 pp.

\$19.95T paper
978-1-913029-84-5

Distributed for Urbanomic

sound studies | philosophy

Social Dissonance

Mattin

foreword by Ray Brassier

An argument that by amplifying alienation in performance, we can shift the emphasis from the sonic to the social.

Works in sound studies continue to seek out sound “itself”—but, today, when the aesthetic can claim no autonomy and the agency of both artist and audience is socially constituted, why not explore the social mediation already present within our experience of the sonorous? In this work, artist, musician, performer, and theorist Mattin sets out an understanding of alienation as a constitutive part of subjectivity and as an enabling condition for exploring social dissonance—the discrepancy between our individual narcissism and our social capacity.



Mattin’s theoretical investigation is intertwined

with documentation of a concrete experiment in the form of an instructional score (performed at documenta 14, 2017, in Athens and Kassel) which explores these conceptual connotations in practice, as players use members of the audience as instruments, who then hear themselves and reflect on their own conception and self-presentation. *Social Dissonance* claims that, by amplifying alienation in performance and participation in order to understand how we are constructed through various forms of mediation, we can shift the emphasis from the sonic to the social, and in doing so, discover for ourselves that social dissonance is the territory within which we already find ourselves, the condition we inhabit.

Mattin is an artist from Bilbao who works mostly with noise and improvisation, and has more than seventy releases on different labels around the world. He runs the experimental record labels w.m.o/r and Free Software Series, and the netlabel Desetxea and is the coeditor, with Anthony Iles, of the book *Noise & Capitalism*.

November | 4 1/2 x 7, 224 pp.

\$17.95T paper

978-1-913029-81-4

Distributed for Urbanomic

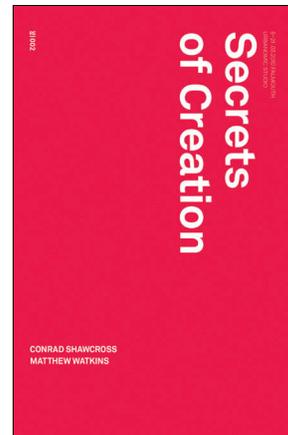
philosophy

Secrets of Creation

edited by Robin Mackay

An artist and a mathematician debate, find common ground, and jointly create an assemblage that is neither (or both) an artwork and a mathematical model.

A week-long residency project brought together artist Conrad Shawcross and mathematician Matthew Watkins to reflect on the ways in which artists use (or misuse) scientific and mathematical concepts. *Secrets of Creation* documents this fascinating meeting of worlds, presenting both the week’s discussions and debates, and the project upon which Shawcross and Watkins subsequently embarked.



Navigating a route that tacked between formalism and natural language, experts and laymen, quantity and quality, poetics and mechanics, Shawcross and Watkins gradually forged a shared discourse in

which the concerns of the artist and those of the mathematician could find a common ground. The project ended with their joint creation of an assemblage that was neither (or both) an artwork and a mathematical model.

Robin Mackay is a philosopher, Director of the UK arts organization Urbanomic, and Associate Researcher at Goldsmiths University of London.

Conrad Shawcross is a British artist specializing in mechanical sculptures based on philosophical and scientific ideas, well known for his sculptures and installations including the *The Nervous System*, *Fraction* and *Three Perpetual Chords*. **Matthew Watkins** is a non-academic mathematician who has spent time as a nomadic musician and often teaches informally at festivals and other events. He is the author of *Useful Mathematical and Physical Formulae*, *Secrets of Creation: The Mystery of the Prime Numbers*, and *You Are Here: The Biography of a Moment*.

September | 5 3/8 x 8 1/4, 80 pp. | 10 illus.

\$12.95T paper

978-0-9575295-1-9

Distributed for Urbanomic

Pleromatica, or Elsinor's Trance

Gabriel Catren

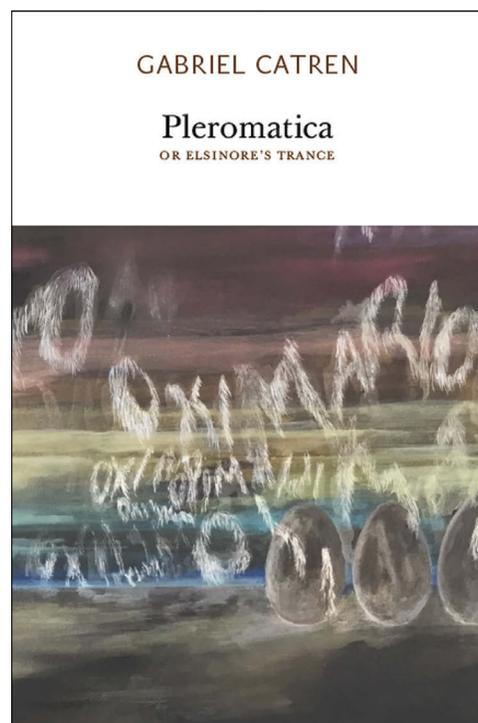
translated by Thomas Murphy

The great poets and thinkers of modernity described a situation we still inhabit today: the catastrophic undermining of all foundations, the disorienting relativization of all reference points, the prospect of abandonment to chance and contingency alone—the shipwreck of Mallarmé's Coup de dés. In this precise and poetic work of philosophy, Gabriel Catren sketches out a new “phenomenodelic” solution to this momentous ungrounding, defiantly refusing both unrestrained contingency and arbitrary refoundation.

Mobilizing a formidable knowledge of the major currents of modern thought, deftly articulating Kantian transcendentalism and Spinozan immanentism, phenomenological reduction and scientific realism, Catren argues that the projects oriented by the infinite ideas of reason (Truth, Beauty, Justice, Love) need not be abandoned in the face of the “exquisite crisis” of modernity. Instead, the “shipwreck” is to be understood as a suspension of finite subjectivity in the fullness of a “phenomenodelic pleroma,” an atonal milieu ringing with unheard-of possibilities.

Announcing an ambitious program for the renewal of transcendental philosophy, in *Pleromatica* Catren recomposes the primary elements of modern thought into a startling new configuration, introducing a vivid constellation of new concepts with which to map out and navigate the vast space of this “worldless daydream.”

Gabriel Catren is a philosopher and a physicist working at the Institut SPHERE—Science, Philosophie, Histoire (Université Paris Diderot—CNRS, Paris).



A precise and poetic argument for the renewal of transcendental philosophy.

November
4 1/2 x 7, 128 pp.

\$17.95T paper
978-1-7336281-4-3

Distributed for Urbanomic/Sequence Press

Epidemic Illusions

On the Coloniality of Global Public Health

Eugene T. Richardson

foreword by Paul Farmer, cofounder of Partners In Health

A physician-anthropologist explores how public health practices—from epidemiological modeling to outbreak containment—help perpetuate global inequities.

In *Epidemic Illusions*, Eugene Richardson, a physician and an anthropologist, contends that public health practices—from epidemiological modeling and outbreak containment to big data and causal inference—play an essential role in perpetuating a range of global inequities. Drawing on postcolonial theory, medical anthropology, and critical science studies, Richardson demonstrates the ways in which the flagship discipline of epidemiology has been shaped by the colonial, racist, and patriarchal system that had its inception in 1492.

Deploying a range of rhetorical tools, including ironism, “re-descriptions” of public health crises, Platonic dialogue, flash fiction, allegory, and koan, Richardson describes how epidemiology uses models of disease causation that serve protected affluence (the possessing classes) by setting epistemic confines to the understanding of why some groups live sicker lives than others—confines that sustain predatory accumulation rather than challenge it. Drawing on his clinical work in a variety of epidemics, including Ebola in West Africa and the Democratic Republic of Congo, leishmania in the Sudan, HIV/TB in southern Africa, diphtheria in Bangladesh, and SARS-CoV-2 in the United States, he concludes that the biggest epidemic we currently face is an epidemic of illusions—one that is propagated by the coloniality of knowledge production.

Eugene T. Richardson, MD, PhD, is Assistant Professor of Global Health and Social Medicine at Harvard Medical School, Visiting Faculty at the University of Global Health Equity in Butaro, Rwanda, and Chair of the Lancet Commission on Reparations and Redistributive Justice.

December | 5 3/8 x 8, 176 pp. | 9 color illus., 43 b&w illus.

\$25.00X paper

978-0-262-04560-5

Cultural Analytics

Lev Manovich

A book at the intersection of data science and media studies, presenting concepts and methods for computational analysis of cultural data.

How can we see a billion images? What analytical methods can we bring to bear on the astonishing scale of digital culture—the terabytes of photographs shared on social media every day, the hundreds of millions of songs created by twenty million musicians on Sound Cloud, the content of four billion Pinterest boards? In *Cultural Analytics*, Lev Manovich presents concepts and methods for computational analysis of cultural data, with particular focus on visual media. Drawing on more than a decade of research and projects from his own lab, Manovich—the founder of the field of cultural analytics—offers a gentle, non-technical introduction to selected key concepts of data science and discusses the ways that our society uses data and algorithms.

Manovich offers examples of computational cultural analysis and discusses the shift from “new media” to “more media”; explains how to turn cultural processes into computational data; and introduces concepts for exploring cultural datasets using data visualization as well other recently developed methods for analyzing image and video datasets. He considers both the possibilities and the limitations of computational methods, and how using them challenges our existing ideas about culture and how to study it.

Cultural Analytics is a book of media theory. Arguing that before we can theorize digital culture, we need to see it, and that, because of its scale, to see it we need computers, Manovich provides scholars with practical tools for studying contemporary media.

Lev Manovich is Professor in the PhD Program in Computer Science at The Graduate Center, City University of New York. He is the author of *The Language of New Media* (MIT Press), hailed as “the most suggestive and broad-ranging media history since Marshall McLuhan,” and other books.

October | 7 x 9, 296 pp. | 16 color plates, 11 b&w illus.

\$35.00X cloth

978-0-262-03710-5

Who's Laughing Now?

Feminist Tactics in Social Media

Jenny Sundén and Susanna Paasonen

Exploring feminist social media tactics that use humor as a form of resistance to misogyny, the affective dynamics of shame, shaming, and shamelessness.

Online sexism, hate, and harassment aim to silence women through shaming and fear. In *Who's Laughing Now?* Jenny Sundén and Susanna Paasonen examine a somewhat counterintuitive form of resistance: humor. Sundén and Paasonen argue that feminist social media tactics that use humor, laughter, and a sense of the absurd to answer name-calling, offensive language, and unsolicited dick pics can rewire the affective circuits of sexual shame and acts of shaming.

Using laughter as both a theme and a methodological tool, Sundén and Paasonen explore examples of the subversive deployment of humor that range from @assholesonline to the Tumblr “Congrats, you have an all-male panel!” They consider the distribution and redistribution of shame, discuss Hannah Gadsby's *Nanette*, and describe tactical retweeting and commenting (as practiced by Stormy Daniels, among others). They explore the appropriation of terms meant to hurt and insult—for example, self-proclaimed Finnish “tolerance whores”—and what effect this rerouting of labels may have. They are interested not in lulz (amusement at another's expense)—not in what laughter pins down, limits, or suppresses but rather in what grows with and in it. The contagiousness of laughter drives the emergence of networked forms of feminism, bringing people together (although it may also create rifts). Sundén and Paasonen break new ground in exploring the intersection of networked feminism, humor, and affect, arguing for the political necessity of inappropriate laughter.

Jenny Sundén is Professor of Gender Studies at Södertörn University in Sweden. **Susanna Paasonen** is Professor of Media Studies at the University of Turku in Finland. She is the coauthor of *NSFW: Sex, Humor, and Risk in Social Media* (MIT Press).

November | 6 x 9, 208 pp. | 14 illus.

\$30.00X cloth
978-0-262-04472-1

The Elusive Shift

How Role-Playing Games Forged Their Identity

Jon Peterson

How the early *Dungeons & Dragons* community grappled with the nature of role-playing games, theorizing a new game genre.

When *Dungeons & Dragons* made its debut in the mid-1970s, followed shortly thereafter by other, similar tabletop games, it sparked a renaissance in game design and critical thinking about games. *D&D* is now popularly considered to be the first role-playing game. But in the original rules, the term “role-playing” is nowhere to be found; *D&D* was marketed as a wargame. In *The Elusive Shift*, Jon Peterson describes how players and scholars in the *D&D* community began to apply the term to *D&D* and similar games—and by doing so, established a new genre of games.

Peterson examines key essays by *D&D* early adopters, rescuing from obscurity many first published in now-defunct fanzines. He traces the evolution of *D&D* theorizing, as writers attempted to frame problems, define terms, and engage with prior literature. He describes the two cultures of wargames and science fiction fandom that provided *D&D*'s first players; examines the dialogue at the core of the game; explains how game design began to accommodate role-playing; and considers the purpose of the referee or gamesmaster. By 1977, game scholars and critics began to theorize more systematically, and Peterson explores their discussions of the transformative nature of role-playing games, their responsibility to a mass audience, and other topics. Peterson finds that the foundational concepts defined in the 1970s helped theorize role-playing, laying the foundation for the genre's shift into maturity in the 1980s.

Jon Peterson, a leading scholar of *Dungeons & Dragons* and role-playing games, is the author of *Playing at the World* and coauthor of *Dungeons & Dragons Art & Arcana: A Visual History*.

December | 6 x 9, 328 pp. | 8 illus.

\$35.00X cloth
978-0-262-04464-6

Game Histories series

Algorithms Are Not Enough

Creating General Artificial Intelligence

Herbert L. Roitblat

Why a new approach is needed in the quest for general artificial intelligence.

Since the inception of artificial intelligence, we have been warned about the imminent arrival of computational systems that can replicate human thought processes. Before we know it, computers will become so intelligent that humans will be lucky to be kept as pets. And yet, although artificial intelligence has become increasingly sophisticated—with such achievements as driverless cars and humanless chess-playing—computer science has not yet created general artificial intelligence. In *Algorithms Are Not Enough*, Herbert Roitblat explains how artificial general intelligence may be possible and why a robocalypse is neither imminent, nor likely.

Existing artificial intelligence, Roitblat shows, has been limited to solving path problems, in which the entire problem consists of navigating a path of choices—finding specific solutions to well-structured problems. Human problem-solving, on the other hand, includes problems that consist of ill-structured situations, including the design of problem-solving paths themselves. These are insight problems, and insight is an essential part of intelligence that has not been addressed by computer science. Roitblat draws on cognitive science, including psychology, philosophy, and history, to identify the essential features of intelligence needed to achieve general artificial intelligence.

Roitblat describes current computational approaches to intelligence, including the Turing Test, machine learning, and neural networks. He identifies building blocks of natural intelligence, including perception, analogy, ambiguity, common sense, and creativity. General intelligence can create new representations to solve new problems, but current computational intelligence cannot. The human brain, like the computer, uses algorithms; but general intelligence, he argues, is more than algorithmic processes.

Herbert L. Roitblat is Principal Data Scientist at Mimecast.

October | 6 x 9, 344 pp. | 9 illus.

\$35.00X cloth

978-0-262-04412-7

Making Art Work

How Cold War Engineers and Artists Forged a New Creative Culture

W. Patrick McCray

The creative collaborations of engineers, artists, scientists, and curators over the past fifty years.

Artwork as opposed to experiment? Engineer versus artist? We often see two different cultural realms separated by impervious walls. But some fifty years ago, the borders between technology and art began to be breached. In this book, W. Patrick McCray shows how in this era, artists eagerly collaborated with engineers and scientists to explore new technologies and create visually and sonically compelling multimedia works. This art emerged from corporate laboratories, artists' studios, publishing houses, art galleries, and university campuses. Many of the biggest stars of the art world—Robert Rauschenberg, Yvonne Rainer, Andy Warhol, Carolee Schneemann, and John Cage—participated, but the technologists who contributed essential expertise and aesthetic input often went unrecognized.

Coming from diverse personal backgrounds, this roster of engineers and scientists includes Frank J. Malina, the American rocket pioneer-turned-kinetic artist who launched the art-science journal *Leonardo*, and Swedish-born engineer Billy Klüver, who established the group Experiments in Art and Technology (E.A.T). At schools ranging from MIT to Caltech, engineers engaged with such figures as artist Gyorgy Kepes and celebrity curator Maurice Tuchman.

Today, we are in the midst of a new surge of corporate and academic promotion of projects and programs combining art, technology, and science. *Making Art Work* reveals how artists and technologists have continually constructed new communities in which they exercise imagination, display creative expertise, and pursue commercial innovation.

W. Patrick McCray, Professor in the History Department at the University of California, Santa Barbara, is the author of four other books, including the prize-winning *The Visioneers*.

October | 7 x 9, 344 pp. | 52 illus.

\$45.00X cloth

978-0-262-04425-7

The Good Drone

How Social Movements Democratize Surveillance

Austin Choi-Fitzpatrick

How small-scale drones, satellites, kites, and balloons are used by social movements for the greater good.

Drones are famous for doing bad things: weaponized, they implement remote-control war; used for surveillance, they threaten civil liberties and violate privacy. In *The Good Drone*, Austin Choi-Fitzpatrick examines a different range of uses: the deployment of drones for the greater good. Choi-Fitzpatrick analyzes the way small-scale drones—as well as satellites, kites, and balloons—are used for a great many things, including documenting human rights abuses, estimating demonstration crowd size, supporting anti-poaching advocacy, and advancing climate change research. In fact, he finds, small drones are used disproportionately for good; nonviolent prosocial uses predominate.

Choi-Fitzpatrick's broader point is that the use of technology by social movements goes beyond social media—and began before social media. From the barricades in *Les Misérables* to hacking attacks on corporate servers to the spread of #MeToo on Twitter, technology is used to raise awareness, but is also crucial in raising the cost of the status quo.

New technology in the air changes politics on the ground, and suggests provocative questions along the way. What is the nature and future of the camera, when it is taken out of human hands? How will our ideas about privacy evolve when the altitude of a penthouse suite no longer guarantees it? Working at the leading edge of an emerging technology, Choi-Fitzpatrick takes a broad view, suggesting social change efforts rely on technology in new and unexpected ways.

Austin Choi-Fitzpatrick is Associate Professor of Political Sociology at the Kroc School of Peace Studies at the University of San Diego and concurrent Rights Lab Associate Professor of Social Movements and Human Rights at the University of Nottingham's School of Sociology and Social Policy.

July | 5 3/8 x 8, 328 pp. | 17 illus.

\$25.00X paper
978-0-262-53888-6

Acting with Technology series

Idea Colliders

The Future of Science Museums

Michael John Gorman

A provocative call for the transformation of science museums into “idea colliders” that spark creative collaborations and connections.

Today's science museums descend from the *Kunst-und Wunderkammern* of the Renaissance—collectors' private cabinets of curiosities—through the Crystal Palace exhibition of 1851 to today's “interactive” exhibits promising educational fun. In this book, Michael John Gorman issues a provocative call for the transformation of science museums and science centers from institutions dedicated to the transmission of cultural capital to dynamic “idea colliders” that spark creative collaborations and connections. This new kind of science museum would not stage structured tableaux of science facts but would draw scientists into conversation with artists, designers, policymakers, and the public. Rather than insulating visitors from each other with apps and audio guides, the science museum would consider each visitor a resource, bringing questions, ideas, and experiences from a unique perspective.

Gorman, founder of the trailblazing Science Gallery, describes three scenarios for science museums of the future—the Megamuseum Mall, “the Cirque de Soleil of the science museum world”; the Cloud Chamber, a local space for conversations and co-creation; and the invisible museum, digital device-driven informal science learning. He discusses hybrids that experiment with science and art and science galleries that engage with current research, encouraging connection, participation and surprise. Finally, he identifies ten key shifts in the evolution of science museums, including those from large to small, from interactive to participatory, from enclosed to porous, and from subject-specific to cross-disciplinary.

Michael John Gorman is Founding Director of BIOTOPIA Naturkundemuseum Bayern and Professor of Life Sciences in Society at Ludwig Maximilians University Munich. He was founder and CEO of Science Gallery International and Founding Director of Science Gallery at Trinity College Dublin.

September | 5 3/8 x 8, 176 pp. | 42 illus.

\$25.00X paper
978-0-262-53924-1

metaLABprojects series

‘Aṣḫūriyyeh

A History of Madness, Modernity, and War
in the Middle East

Joelle M. Abi-Rached

The development of psychiatry in the Middle East, viewed through the history of one of the first modern mental hospitals in the region.

‘Aṣḫūriyyeh (formally, the Lebanon Hospital for the Insane) was founded by a Swiss Quaker missionary in 1896, one of the first modern psychiatric hospitals in the Middle East. It closed its doors in 1982, a victim of Lebanon’s brutal fifteen-year civil war. In this book, Joelle Abi-Rached uses the rise and fall of ‘Aṣḫūriyyeh as a lens through which to examine the development of modern psychiatric theory and practice in the region as well as the sociopolitical history of modern Lebanon.

Abi-Rached shows how ‘Aṣḫūriyyeh’s role shifted from a missionary enterprise to a national institution with wide regional influence. She offers a gripping chronicle of patients’ and staff members’ experiences during the Lebanese Civil War and analyzes the hospital’s distinctive nonsectarian philosophy. When ‘Aṣḫūriyyeh closed down, health in general and mental health in particular became more visibly “sectarianized”—monopolized by various religious and political actors. Once hailed for its progressive approach to mental illness and its cosmopolitanism, ‘Aṣḫūriyyeh became a stigmatizing term, a byword for madness and deviance, ultimately epitomizing a failed project of modernity. Reflecting on the afterlife of this and other medical institutions, especially those affected by war, Abi-Rached calls for a new “ethics of memory,” more attuned to our global yet increasingly fragmented, unstable, and violent present.

‘Aṣḫūriyyeh is the first volume in the MIT Press’s new Culture and Psychiatry series.

Joelle M. Abi-Rached, MD, PhD, is a Fellow at Columbia University’s Society of Fellows in the Humanities and an invited researcher at the École normale supérieure and the École des hautes études en sciences sociales. She is the coauthor of *Neuro: The New Brain Sciences and the Management of the Mind*.

October | 6 x 9, 312 pp. | 20 illus.

\$45.00X cloth

978-0-262-04474-5

Culture and Psychiatry series

American Trip

Set, Setting, and the Psychedelic Experience
in the Twentieth Century

Ido Hartogsohn

How historical, social, and cultural forces shaped the psychedelic experience in midcentury America, from CIA experiments with LSD to Timothy Leary’s Harvard Psilocybin Project.

Are psychedelics invaluable therapeutic medicines, or dangerously unpredictable drugs that precipitate psychosis? Tools for spiritual communion or cognitive enhancers that spark innovation? Activators for one’s private muse or part of a political movement? In the 1950s and 1960s, researchers studied psychedelics in all these incarnations, often arriving at contradictory results. In *American Trip*, Ido Hartogsohn examines how the psychedelic experience in midcentury America was shaped by historical, social, and cultural forces—by set (the mindset of the user) and setting (the environments in which the experience takes place). He explores uses of psychedelics that range from CIA and military experimentation to psychedelic-inspired styles in music, fashion, design, architecture, and film. Along the way, he introduces us to a memorable cast of characters including Betty Eisner, a psychologist who drew on her own experience to argue for the therapeutic potential of LSD, and Timothy Leary, who founded the Harvard Psilocybin Project and went on to become psychedelics’ most famous advocate.

Hartogsohn chronicles these developments in the context of the era’s cultural trends, including the cold war, the counter-culture, the anti-psychiatric movement, and the rise of cybernetics. Drawing on insights from the study of science, technology, and society, he develops the idea of LSD as a *suggestible technology*, the properties of which are shaped by suggestion. He proposes the concept of *collective set and setting*, arguing that the historical and sociocultural context of midcentury America offered a particular set and setting—creating the conditions for what he calls the American trip.

Ido Hartogsohn is Assistant Professor in the Graduate Program in Science, Technology, and Society at Bar Ilan University.

July | 6 x 9, 432 pp.

\$35.00X paper

978-0-262-53914-2

To Know the World

A New Vision for Environmental Learning

Mitchell Thomashow

Why environmental learning is crucial for understanding the connected challenges of climate justice, tribalism, inequity, democracy, and human flourishing.

How can we respond to the current planetary ecological emergency? In *To Know the World*, Mitchell Thomashow proposes that we revitalize, revisit, and reinvigorate how we think about our residency on Earth. First, we must understand that the major challenges of our time—migration, race, inequity, climate justice, and democracy—connect to the biosphere. Traditional environmental education has accomplished much, but it has not been able to stem the inexorable decline of global ecosystems. Thomashow, the former president of a college dedicated to sustainability, describes instead *environmental learning*, a term signifying that our relationship to the biosphere must be front and center in all aspects of our daily lives. In this illuminating book, he provides rationales, narratives, and approaches for doing just that.

Mixing memoir, theory, mindfulness, pedagogy, and compelling storytelling, Thomashow discusses how to navigate the Anthropocene's rapid pace of change without further separating psyche from biosphere; why we should understand migration both ecologically and culturally; how to achieve constructive connectivity in both social and ecological networks; and why we should take a cosmopolitan bioregionalism perspective that unites local and global. Throughout, Thomashow invites readers to participate as educational explorers, encouraging them to better understand how and why environmental learning is crucial to human flourishing.

Mitchell Thomashow is the author of *Ecological Identity: Becoming a Reflective Environmentalist*, *Bringing the Biosphere Home: Learning to Perceive Global Environmental Change*, and *The Nine Elements of a Sustainable Campus* (all published by the MIT Press).

October | 6 x 9, 272 pp. | 9 illus.

\$30.00X paper
978-0-262-53982-1

Deep Time Reckoning

How Future Thinking Can Help Earth Now

Vincent Ialenti

foreword by Marcia Bjornerud

A guide to long-term thinking: how to envision the far future of Earth.

We live on a planet careening toward environmental collapse that will be largely brought about by our own actions. And yet we struggle to grasp the scale of the crisis, barely able to imagine the effects of climate change just ten years from now, let alone the multi-millennial timescales of Earth's past and future life span. In this book, Vincent Ialenti offers a guide for envisioning the planet's far future—to become, as he terms it, more skilled deep time reckoners. The challenge, he says, is to learn to inhabit a longer now.

Ialenti takes on two overlapping crises: the Anthropocene, our current moment of human-caused environmental transformation; and the deflation of expertise—today's popular mockery and institutional erosion of expert authority. The second crisis, he argues, is worsening the effects of the first. Hearing out scientific experts who study a wider time span than a Facebook timeline is key to tackling our planet's emergency. Astrophysicists, geologists, historians, evolutionary biologists, climatologists, archaeologists, and others can teach us the art of long-termism.

For a case study in long-term thinking, Ialenti turns to Finland's nuclear waste repository "Safety Case" experts. These scientists forecast far future glaciations, climate changes, earthquakes, and more, over the coming tens of thousands—or even hundreds of thousands or millions—of years. They are not pop culture "futurists" but data-driven, disciplined technical experts, using the power of patterns to construct detailed scenarios and quantitative models of the far future. This is the kind of time literacy we need if we are to survive the Anthropocene.

Vincent Ialenti is MacArthur Assistant Research Professor in the Elliott School of International Affairs at George Washington University.

August | 6 x 9, 208 pp.

\$25.00X paper
978-0-262-53926-5

One Planet series

Mercury Stories

Understanding Sustainability through a Volatile Element

Henrik Selin and Noelle Eckley Selin

An interdisciplinary analysis of human interactions with mercury through history that sheds light on efforts to promote and achieve sustainability.

In *Mercury Stories*, Henrik Selin and Noelle Eckley Selin examine sustainability through analyzing human interactions with mercury over thousands of years. They explore how people have made beneficial use of this volatile element, how they have been harmed by its toxic properties, and how they have tried to protect themselves and the environment from its damaging effects. Taking a systems approach, they develop and apply an analytical framework that can inform other efforts to evaluate and promote sustainability.

After introducing the framework, which uses the lens of a human-technical environmental system and a matrix-based approach to analyze mercury use and exposure, the authors examine five topical mercury systems that each illustrate important issues in mercury science and governance: global cycling of mercury through the atmosphere, land, oceans, and societies; mercury's dangers to human health, including from occupational, medical, and dietary exposure; mercury emissions to the atmosphere from industrial sources; mercury in commercial products and production processes; and mercury use in artisanal and small-scale gold mining. Finally, looking across the five mercury systems, they distill insights for sustainability analysis more broadly, and draw lessons for researchers, decision-makers, and concerned citizens.

Henrik Selin is Associate Professor of International Relations at the Frederick S. Pardee School of Global Studies at Boston University. He is the author of *Global Governance of Hazardous Chemicals* (MIT Press). **Noelle Eckley Selin** is Associate Professor in the Institute for Data, Systems, and Society and the Department of Earth, Atmospheric, and Planetary Sciences at MIT. Her research focuses on the environmental transport and fate of mercury and other chemicals.

August | 6 x 9, 352 pp. | 30 illus.

\$32.00X paper
978-0-262-53920-3

Streams of Revenue

The Restoration Economy and the Ecosystems It Creates

Rebecca Lave and Martin Doyle

An analysis of stream mitigation banking and the challenges of implementing market-based approaches to environmental conservation.

Market-based approaches to environmental conservation have been increasingly prevalent since the early 1990s. The goal of these markets is to reduce environmental harm not by preventing it, but by pricing it. A housing development on land threaded with streams, for example, can divert them into underground pipes if the developer pays to restore streams elsewhere. But does this increasingly common approach actually improve environmental well-being? In *Streams of Revenue*, Rebecca Lave and Martin Doyle answer this question by analyzing the history, implementation, and environmental outcomes of one of these markets: stream mitigation banking.

In stream mitigation banking, an entrepreneur speculatively restores a stream, generating “stream credits” that can be purchased by a developer to fulfill regulatory requirements of the Clean Water Act. Tracing mitigation banking from conceptual beginnings to implementation, the authors find that in practice it is very difficult to establish equivalence between the ecosystems harmed and those that are restored, and to cope with the many sources of uncertainty that make positive restoration outcomes unlikely. Lave and Doyle argue that market-based approaches have failed to deliver on conservation goals and call for a radical reconfiguration of the process.

Rebecca Lave is Professor and Chair of the Department of Geography at Indiana University. She is the author of *Fields and Streams: Stream Restoration, Neoliberalism, and the Future of Environmental Science*. **Martin Doyle** is Professor of River Systems Science and Policy and the author of *The Source: How Rivers Made America and America Remade Its Rivers*.

August | 6 x 9, 208 pp. | 22 illus.

\$30.00X paper
978-0-262-53919-7

Moving Planets Around

An Introduction to N-Body Simulations Applied to Exoplanetary Systems

Javier Roa, Adrian S. Hamers, Maxwell X. Cai, and Nathan W. C. Leigh

An introduction to the laws of celestial mechanics and a step-by-step guide to developing software for direct use in astrophysics research.

This book offers both an introduction to the laws of celestial mechanics and a step-by-step guide to developing software for direct use in astrophysics research. It bridges the gap between conventional textbooks, which present a rigorous and exhaustive exposition of theoretical concepts, and applying the theory to tackle real experiments. The text is written engagingly in dialogue form, presenting the research journey of the fictional Alice, Bob, and Professor Starmover. *Moving Planets Around* not only educates students on the laws of Newtonian gravity, it also provides all that they need to start writing their own software, from scratch, for simulating the dynamical evolution of planets and exoplanets, stars, or other heavenly bodies.

The first half of the book develops a fully functional N-body integrator, using state-of-the-art integration techniques, explaining both the techniques and the reasons that they are useful. The second half of the book focuses on using an advanced integration scheme to conduct real research, leading students in an investigation of the long-term dynamical stability of extrasolar circumbinary planets. At the end of the journey, students will be ready to design, conduct, and publish peer-review quality research.

Javier Roa is a Navigation Engineer in the Solar Systems Dynamics Group at the California Institute of Technology's Jet Propulsion Lab. **Adrian S. Hamers** is Max Planck Research Group Leader at the Max Planck Institute for Astrophysics, Garching, Germany. **Maxwell X. Cai** is an advisor on artificial intelligence at the SURF Cooperative (Dutch National Supercomputing Center), and Research Associate at Leiden University. **Nathan W. C. Leigh** is Assistant Professor of Astrophysics at the Universidad de Concepcion, Chile, and Research Scientist at the American Museum of Natural History, New York..

August | 7 x 9, 384 pp. | 56 color illus.

\$55.00X paper
978-0-262-53934-0

Digital Entrepreneurship in Africa

How a Continent Is Escaping Silicon Valley's Long Shadow

Nicolas Friederici, Michel Wahome, and Mark Graham

The hope and hype about African digital entrepreneurship, contrasted with the reality on the ground in local ecosystems.

In recent years, Africa has seen a digital entrepreneurship boom, with hundreds of millions of dollars poured into tech cities, entrepreneurship trainings, coworking spaces, innovation prizes, and investment funds. Politicians and technologists have offered Silicon Valley-influenced narratives of boundless opportunity and exponential growth, in which internet-enabled entrepreneurship allows Africa to "leapfrog" developmental stages to take a leading role in the digital revolution. This book contrasts these aspirations with empirical research about what is actually happening on the ground. The authors find that although the digital revolution has empowered local entrepreneurs, it does not untether local economies from the continent's structural legacies.

Drawing on a five-year research project, the authors show how entrepreneurs creatively and productively adapt digital technologies to local markets rather than dreaming of global dominance, achieving sustainable businesses by scaling based on relationships and customizing digital platform business models for African infrastructure challenges. The authors examine African entrepreneurial ecosystems; show that African digital entrepreneurs have begun to form a new professional class, becoming part of a relatively exclusive cultural and economic elite; and discuss the impact of Silicon Valley's mythologies and expectations. Finally, they consider the implications of their findings and offer recommendations to policymakers and others.

Nicolas Friederici is Head of the Innovation and Entrepreneurship Group at the Humboldt Institute for Internet and Society in Berlin. **Michel Wahome** is Responsible Research and Innovation Fellow at the University of Strathclyde. **Mark Graham** is Professor of Internet Geography at the Oxford Internet Institute.

July | 6 x 9, 336 pp. | 9 illus.

\$40.00X paper
978-0-262-53818-3

The Social Brain

A Developmental Perspective

edited by Jean Decety

A range of empirical and theoretical perspectives on the relationship between biology and social cognition from infancy through childhood.

Recent research on the developmental origins of the social mind supports the view that social cognition is present early in infancy and childhood in surprisingly sophisticated forms. Developmental psychologists have found ingenious ways to test the social abilities of infants and young children, and neuroscientists have begun to study the neurobiological mechanisms that implement and guide early social cognition. Their work suggests that, far from being unfinished adults, babies are exquisitely designed by evolution to capture relevant social information, learn, and explore their social environments. This volume offers a range of empirical and theoretical perspectives on the relationship between biology and social cognition from infancy through childhood.

The contributors consider scientific advances in early social perception and cognition, including findings on the development of face processing and social perceptual biases; explore recent research on early infant competencies for language and theory of mind, including a developmental account of how young children become moral agents and the role of electrophysiology in identifying psychological processes that underpin social cognition; discuss the origins and development of prosocial behavior, reviewing evidence for a set of innate predispositions to be social, cooperative, and altruistic; examine how young children make social categories; and analyze atypical social cognition, including autism spectrum disorder and psychopathy.

Jean Decety is Irving B. Harris Distinguished Service Professor at the University of Chicago, where he is also Director of the Child Neurosuite. He is the coeditor of *The Social Neuroscience of Empathy* and *The Moral Brain* and the editor of *Empathy: From Bench to Bedside*, all published by the MIT Press.

August | 6 x 9, 440 pp. | 11 illus.

\$45.00X cloth
978-0-262-04414-1

Reckonings

Numerals, Cognition, and History

Stephen Chrisomalis

Insights from the history of numerical notation suggest that how humans write numbers is an active choice involving cognitive and social factors.

Over the past 5,000 years, more than 100 methods of numerical notation—distinct ways of writing numbers—have been developed and used by specific communities. Most of these are barely known today; where they are known, they are often derided as cognitively cumbersome and outdated. In *Reckonings*, Stephen Chrisomalis considers how humans past and present use numerals, reinterpreting historical and archaeological representations of numerical notation and exploring the implications of why we write numbers with figures rather than words.

Chrisomalis shows that numeration is a social practice. He argues that written numerals are conceptual tools that are transformed to fit the perceived needs of their users, and that the sorts of cognitive processes that affect decision-making around numerical activity are complex and involve social factors. Drawing on the triple meaning of reckon—to think, to calculate, and to judge—as a framing device, Chrisomalis argues that the history of numeral systems is best considered as a cognitive history of language, writing, mathematics, and technology.

Chrisomalis offers seven interlinked essays that are both macro-historical and cross-cultural, with a particular focus, throughout, on Roman numerals. Countering the common narrative that Roman numerals are archaic and clumsy, Chrisomalis presents examples of Roman numeral use in classical, medieval, and early modern contexts. Readers will think more deeply about written numbers as a cognitive technology that each of us uses every single day, and will question the assumption that whatever happened historically was destined to have happened, leading inevitably to the present.

Stephen Chrisomalis is Associate Professor of Anthropology at Wayne State University.

December | 6 x 9, 256 pp. | 54 illus.

\$35.00X cloth
978-0-262-04463-9

The Psychology of Learning

An Introduction from a Functional–Cognitive Perspective

Jan De Houwer and Sean Hughes

An introduction to the psychology of learning that summarizes and integrates findings from both functional psychology and cognitive psychology.

Learning unites all living creatures, from simple microbes to complex human beings. But what is learning? And how does it work? For over a century, psychologists have considered such questions. Behavior analysts examined the ways in which the environment shapes behavior, whereas cognitive scientists have sought to understand the mental processes that enable us to learn. This book offers an introduction to the psychology of learning that draws on the key findings and major insights from both functional (behavior analysis) and cognitive approaches.

After an introductory overview, the book reviews research showing how seemingly simple regularities in the environment lead to powerful changes in behavior, from habituation and classical conditioning to operant conditioning effects. It introduces the concept of complex learning and considers the idea that for verbal human beings even seemingly simple types of learning might qualify as instances of complex learning. Finally, it offers many examples of how psychological research on learning is being used to promote human well-being and alleviate such societal problems as climate change.

Throughout the book, boxed text extends the discussion of selected topics and “think it through” questions help readers gain deeper understanding of what they have read. The book can be used as an introductory textbook on the psychology of learning for both undergraduate and postgraduate students or as a reference for researchers who study behavior and thinking.

Jan De Houwer is a Professor in the Department of Experimental-Clinical and Health Psychology at Ghent University. **Sean Hughes** is a Postdoctoral Researcher in the Department of Experimental-Clinical and Health Psychology at Ghent University.

August | 7 x 9, 320 pp. | 59 illus.

\$50.00X paper
978-0-262-53923-4

Memory as Prediction

From Looking Back to Looking Forward

Tomaso Vecchi and Daniele Gatti

Theoretical reflections on memory and prediction, linking these concepts to the role of the cerebellum in higher cognition.

What is memory? What is memory for? Where is memory in the brain? Although memory is probably the most studied function in cognition, these fundamental questions remain challenging. We can try to answer the question of memory’s purpose by defining the function of memory as remembering the past. And yet this definition is not consistent with the many errors that characterize our memory, or with the phylogenetic and ontogenetic origin of memory. In this book, Tomaso Vecchi and Daniele Gatti argue that the purpose of memory is not to remember the past but to predict the future.

Vecchi and Gatti link memory and prediction to the role of the cerebellum in higher cognition, relying on recent empirical data to support theoretical reflections. They propose a new model of memory functions that comprises a system devoted to prediction, based in the cerebellum and mediated by the hippocampus, and a parallel system with a major role for cortical structures and mediated by the amygdala. Although memory is often conceived as a kind of storehouse, this storehouse is constantly changing, integrating new information in a continual process of modification. In order to explain these characteristics, Vecchi and Gatti argue, we must change our interpretation of the nature and functions of the memory system.

Tomaso Vecchi is Professor of Cognitive Psychology, Head of the Department of Brain and Behavioral Sciences, and Vice-Rector at the University of Pavia, Italy. He is also Head of the Cognitive Neurostimulation Lab at the National Neurological Institute, IRCCS Mondino Foundation. **Daniele Gatti** is a Research Fellow at the University of Pavia.

August | 6 x 9, 216 pp. | 13 illus.

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The Elements of Computing Systems

Building a Modern Computer from First Principles

second edition

Noam Nisan and Shimon Schocken

The best way to understand how computers work is to build one from scratch, and this textbook leads learners through twelve chapters and projects that gradually build the hardware platform and software hierarchy for a simple but powerful computer system. In the process, learners gain hands-on knowledge of hardware, architecture, operating systems, programming languages, compilers, data structures and algorithms, and software engineering. Using this constructive approach, the book introduces learners to a significant body of computer science knowledge and demonstrates how theoretical and applied techniques taught in other computer science courses fit into the overall picture. The outcome of these efforts is known as Nand to Tetris: a journey that starts with the most elementary logic gate, called Nand, and ends, twelve projects later, with a general-purpose computer system capable of running Tetris.

The first edition of this popular textbook inspired Nand to Tetris classes in universities, coding boot camps, hacker clubs, and online course platforms. This second edition has been extensively revised. It has been restructured into two distinct parts—Part I, hardware, and Part II, software—with six projects in each part. All chapters and projects have been rewritten, with an emphasis on separating abstraction from implementation, and many new sections, figures, and examples have been added. Substantial new appendixes offer focused presentation on technical and theoretical topics.

Noam Nisan is Dean of the School of Computer Science and Engineering at the Hebrew University of Jerusalem. **Shimon Schocken** is Professor of Computer Science, and Founding Dean, Efi Arazi School of Computer Science, IDC Herzliya, Israel.

A new and extensively revised edition of a popular textbook used in universities, coding boot camps, hacker clubs, and online courses.

November
8 x 9, 320 pp.
116 illus.

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978-0-262-53980-7

Part I: Hardware

Boolean Logic
Boolean Arithmetic
Memory
Machine Language
Computer Architecture
Assembler

Part II: Software

Virtual Machine I: Stack Processing
Virtual Machine II: Program Control
High-Level Language
Compiler I: Syntax Analysis
Compiler II: Code Generation
Operating System
Postscript: More Fun to Go

Appendixes

Boolean Functions Synthesis
Hardware Description Language
Test Description Language
The Hack Chip Set
The Jack Character Set
The Jack OS API

Multi-Agent Oriented Programming

Programming Multi-Agent Systems Using JaCaMo

**Olivier Boissier, Rafael H. Bordini, Jomi F. Hübner,
and Alessandro Ricci**

The main concepts and techniques of multi-agent oriented programming, which supports the multi-agent systems paradigm at the programming level.

A multi-agent system is an organized ensemble of autonomous, intelligent, goal-oriented entities called agents, communicating with each other and interacting within an environment. This book introduces the main concepts and techniques of multi-agent oriented programming, (MAOP) which supports the multi-agent systems paradigm at the programming level. MAOP provides a structured approach based on three integrated dimensions, which the book examines in detail: the agent dimension, used to design the individual (interacting) entities; the environment dimension, which allows the development of shared resources and connections to the real world; and the organization dimension, which structures the interactions among the autonomous agents and the shared environment.

The book puts the approach into practice using the JaCaMo programming model and platform. It employs an easy-to-follow, step-by-step style, showing solutions to increasingly complex scenarios. The book also discusses the integration of MAOP into existing technologies and application domains, including mobile computing, web-based computing, and robotics. Finally, it considers artificial intelligence (AI)-related classical problems from an MAOP perspective and discusses an agent-oriented approach to software engineering.

Olivier Boissier is Full Professor of Computer Science at Mines Saint-Etienne, France. **Rafael H. Bordini** is Associate Professor in the Faculty of Informatics at Pontificia Universidade Católica de Rio Grande do Sul, Brazil. **Jomi F. Hübner** is Associate Professor at University of Santa Catarina, Brazil, in the Department of Automation and Systems Engineering. **Alessandro Ricci** is Associate Professor of Computer Science and Engineering at the University of Bologna.

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Intelligent Robotics and Autonomous Agents series

Fundamentals of Machine Learning for Predictive Analytics

Algorithms, Worked Examples, and Case Studies

second edition

John D. Kelleher, Brian Mac Namee, and Aoife D'Arcy

The second edition of a comprehensive introduction to machine learning approaches used in predictive data analytics, covering both theory and practice.

Machine learning is often used to build predictive models by extracting patterns from large datasets. These models are used in predictive data analytics applications including price prediction, risk assessment, predicting customer behavior, and document classification. This introductory textbook offers a detailed and focused treatment of the most important machine learning approaches used in predictive data analytics, covering both theoretical concepts and practical applications. Technical and mathematical material is augmented with explanatory worked examples, and case studies illustrate the application of these models in the broader business context. This second edition covers recent developments in machine learning, especially in a new chapter on deep learning, and two new chapters that go beyond predictive analytics to cover unsupervised learning and reinforcement learning.

The book is accessible, offering nontechnical explanations of the ideas underpinning each approach before introducing mathematical models and algorithms. It is focused and deep, providing students with detailed knowledge on core concepts, giving them a solid basis for exploring the field on their own. Both early chapters and later case studies illustrate how the process of learning predictive models fits into the broader business context. The two case studies describe specific data analytics projects through each phase of development, from formulating the business problem to implementation of the analytics solution. The book can be used as a textbook at the introductory level or as a reference for professionals.

John D. Kelleher is Academic Leader of the Information, Communication, and Entertainment Research Institute at Technological University Dublin.

Brian Mac Namee is Associate Professor at the School of Computer Science at University College Dublin. **Aoife D'Arcy** is CEO of Krisolis, a data analytics company based in Dublin.

October | 7 x 9, 856 pp. | 227 illus.

\$80.00X cloth
978-0-262-04469-1

How Artifacts Afford

The Power and Politics of Everyday Things

Jenny L. Davis

A conceptual update of affordance theory that introduces the mechanisms and conditions framework, providing both a vocabulary and critical perspective for affordance analyses.

Technological affordances mediate between the features of a technology and the outcomes of engagement with that technology. The concept of affordances, which migrated from psychology to design with Donald Norman's influential 1988 book, *The Design of Everyday Things*, offers a useful analytical tool in technology studies—but, Jenny Davis argues in *How Artifacts Afford*, it is in need of a conceptual update. Davis provides just such an update, introducing the mechanisms and conditions framework, which offers both a vocabulary and necessary critical perspective for affordance analyses.

The mechanisms and conditions framework shifts the question from what objects afford to how objects afford, for whom, and under what circumstances. Davis shows that through this framework, analyses can account for the power and politics of technological artifacts. She situates the framework within a critical approach that views technology as materialized action. She explains how request, demand, encourage, discourage, refuse, and allow are mechanisms of affordance, and shows how these mechanisms take shape through variable conditions—perception, dexterity, and cultural and institutional legitimacy. Putting the framework into action, Davis identifies existing methodological approaches that complement it, including critical technocultural discourse analysis (CTDA), app feature analysis, and adversarial design. In today's rapidly changing sociotechnical landscape, the stakes of affordance analyses are high. Davis's mechanisms and conditions framework offers a timely theoretical reboot, providing tools for the crucial tasks of both analysis and design.

Jenny L. Davis is a sociologist at the Australian National University.

August | 5 3/8 x 8, 208 pp. | 1 illus.

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Design Thinking, Design Theory series

Visualization and Interpretation

Humanistic Approaches to Display

Johanna Drucker

An analysis of visual epistemology in the digital humanities, with attention to the need for interpretive digital tools within humanities contexts.

In the several decades since humanists have taken up computational tools, they have borrowed many techniques from other fields, including visualization methods to create charts, graphs, diagrams, maps, and other graphic displays of information. But are these visualizations actually adequate for the interpretive approach that distinguishes much of the work in the humanities? Information visualization, as practiced today, lacks the interpretive frameworks required for humanities-oriented methodologies. In this book, Johanna Drucker continues her interrogation of visual epistemology in the digital humanities, reorienting the creation of digital tools within humanities contexts.

Drucker examines various theoretical understandings of visual images and their relation to knowledge and how the specifics of the graphical are to be engaged directly as a primary means of knowledge production for digital humanities. She draws on work from aesthetics, critical theory, and formal study of graphical systems, addressing them within the specific framework of computational and digital activity as they apply to digital humanities. Finally, she presents a series of standard problems in visualization for the humanities (including time/temporality, space/spatial relations, and data analysis), posing the investigation in terms of innovative graphical systems informed by probabilistic critical hermeneutics. She concludes with a final brief sketch of discovery tools as an additional interface into which modeling can be worked.

Johanna Drucker, book artist, visual theorist, and cultural critic, is Martin and Bernard Breslauer Professor in the Department of Information Studies at the Graduate School of Education and Information Studies at the University of California, Los Angeles.

October | 6 x 9, 216 pp. | 40 illus.

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978-0-262-04473-8

Tactics of Interfacing

Encoding Affect in Art and Technology

Ksenia Fedorova

How digital technologies affect the way we conceive of the self and its relation to the world, considered through the lens of media art practices.

In *Tactics of Interfacing*, Ksenia Fedorova explores how digital technologies affect the way we conceive of the self and its relation to the world. With the advent of ubiquitous computing, the self becomes an object of technological application, increasingly defined by data received from tracking technologies. Subtly, these technologies encourage versions of ourselves that are easier to interpret computationally. Fedorova views these shifts in self-perception through the lens of contemporary media art practices, examining a range of artistic tactics that enable embodied and intimate experiences of machinic operations on our lives.

At the center of Fedorova's analysis are the mechanisms that structure the relations between the self and the world at the level of the interface; she considers "interfacing" a process in which interrelation happens and different agencies play off against each other. She discusses such topics as interfaciality and the face as a medium; self-image and the boundaries of the self, understood through technological mediation of an embodied experience; the relation between the self and the other, reshaped by algorithmic technologies; and the augmentation and alteration of spatial perception.

The artworks Fedorova discusses present scenarios of interfacing that range from responsive environments to artificial intelligence conversational agents. She shows that art and aesthetic experience offer fruitful ways to reflect on the effects of contemporary technological culture, enabling encounters that shift our perspectives on the boundaries of the self and challenge the very capacity to feel human.

Ksenia Fedorova is Alexander von Humboldt Postdoctoral Research Fellow at the Institute for Art and Visual History at Humboldt University in Berlin and a Research Associate at the Ural Federal University.

July | 6 x 9, 320 pp. | 62 illus.

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A Leonardo Book

Wine Economics

Stefano Castriota

translated by Judith Turnbull

foreword by Orley Ashenfelter

A comprehensive and interdisciplinary approach to the economics of the production, distribution, and consumption of wine.

Wine economics is a growing subfield that examines the economics of the production, distribution, and consumption of wine. In this book, Stefano Castriota takes a comprehensive and interdisciplinary approach to the study of wine economics, drawing on literature from industrial organization, welfare economics, economic policy, political economy, management, finance, health economics, law, and criminology.

Castriota explores how wine markets operate and how they are regulated, covering such diverse topics as the health economics of wine consumption (both the positive health effects associated with moderate wine intake and the negative effects of alcohol abuse), the competition and profitability of wineries, the function of wine as an investment, and the quality of wine. He examines differences between the wine industries in the Old World and the New World, comparing small, family-owned wineries with larger conglomerates, and analyzes the regulation of wine in the United States versus the European Union. He concludes with a series of recommendations to ensure open and efficient wine markets while protecting public health.

Originally published in Italy as *Economia del Vino*, this English translation has been extensively revised. It includes additional material focusing on the English-speaking countries of the New World, particularly the regulatory environment of the United States and the lingering effects of Prohibition.

Stefano Castriota is Professor of Economics at the University of Pisa and a Certified Sommelier.

October | 7 x 9, 328 pp. | 54 illus.

\$55.00X cloth
978-0-262-04467-7

Monetary Policy and Macroprudential Regulation with Financial Frictions

Pierre-Richard Agénor

An integrated analysis of how financial frictions can be accounted for in macroeconomic models built to study monetary policy and macroprudential regulation.

Since the global financial crisis, there has been a renewed effort to emphasize financial frictions in designing closed- and open-economy macroeconomic models for monetary and macroprudential policy analysis. Drawing on the extensive literature of the past decade as well as his own contributions, in this book Pierre-Richard Agénor provides a unified set of theoretical and quantitative macroeconomic models with financial frictions to explore issues that have emerged in the wake of the crisis. These include the need to understand better how the financial system amplifies and propagates shocks originating elsewhere in the economy; how it can itself be a source of aggregate fluctuations; the extent to which central banks should account for financial stability considerations in the conduct of monetary policy; whether national central banks and regulators should coordinate their policies to promote macroeconomic and financial stability; and how much countercyclical macroprudential policies should be coordinated at the international level to mitigate financial spillovers across countries.

Agénor focuses on upper middle-income countries, which differ from advanced economies in terms of both their structural features (which include a financial sector dominated by banks, weak supervisory capacity, and a high degree of vulnerability to external shocks) and their long-standing policy challenges (such as managing volatile capital flows). Some of the analytical insights and broad policy lessons that can be drawn from the book will be of relevance to advanced economies as well.

Pierre-Richard Agénor is Hallsworth Professor of International Macroeconomics and Development Economics at the University of Manchester. He is the author of *Development Macroeconomics* (now in its fourth edition) and other books.

November | 6 x 9, 656 pp. | 43 illus.

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978-0-262-04422-6

Intermediate Microeconomic Theory

Tools and Step-by-Step Examples

Ana Espinola-Arredondo and Felix Muñoz-García

A short, rigorous introduction to intermediate microeconomic theory that offers worked-out examples, tools for solving exercises, algebra support, and self assessment exercises.

This book takes a concise, example-filled approach to intermediate microeconomic theory. It avoids lengthy conceptual description and focuses on worked-out examples and step-by-step solutions. Each chapter presents the basic theoretical elements, reducing them to their main ingredients, and offering several worked-out examples and applications as well as the intuition behind each mathematical assumption and result. The book provides step-by-step tools for solving standard exercises, offering students a common approach for solving similar problems. The book walks readers through each algebra step and calculation, so only a basic background in algebra and calculus is assumed. The book includes 140 self-assessment exercises, giving students an opportunity to apply concepts from previous worked-out examples.

Topics covered include consumer theory; substitution and income effect; welfare gain or loss from a price change; and choice under uncertainty. Shifting to firm theory, the book discusses production functions, cost minimization, perfectly competitive markets, and monopolies. Two chapters on game theory provide building blocks for subsequent chapters that treat imperfect markets; games of incomplete information and auctions; contract theory; and externalities, public goods, and common pool resources. The book is suitable for use in undergraduate intermediate microeconomics courses, rigorous introduction to microeconomics courses, and managerial economics at the masters level.

Ana Espinola-Arredondo is Associate Director and Professor in the School of Economic Sciences at Washington State University. **Felix Muñoz-García** is Professor in the School of Economic Sciences at Washington State University.

October | 8 x 9, 504 pp. | 126 illus.

\$90.00X cloth
978-0-262-04423-3

Also available

Practice Exercises for Intermediate Microeconomic Theory

Eric Dunaway, John C. Strandholm, Ana Espinola-Arredondo, and Felix Muñoz-García

October | 8 1/2 x 11, 415 pp.

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Microeconomic Essentials

Understanding Economics in the News

Jay Prag

A concise and nontechnical introduction to microeconomics, emphasizing concepts over mathematics, with real-world examples and applications.

This concise and nontechnical introduction to microeconomics emphasizes concepts over mathematics. Keeping in mind that sometimes the most accurate model is not very useful in the real world, *Microeconomic Essentials* balances economics as mathematics with economics as a social process. Microeconomics is part of daily life; gas prices, wage increases, the rising cost of health care, international trade: all are microeconomic topics. Therefore, like its predecessor, *Macroeconomic Essentials*, this textbook accompanies its explanations with examples and real-world applications.

The book covers the basic market model of supply and demand, showing how this “powerhouse” model can explain most price changes in the market. It discusses government intervention in the market; consumer theory and utility maximization, considering both concepts and real-world issues; the theory of the firm, “de-mathematizing” marginal revenue, marginal cost, and other topics; monopolies; perfect competition; and imperfect competition and oligopolies, as illustrated by OPEC, Coke, and Pepsi. It discusses game theory, reviewing the familiar models and concepts—while cautioning that game theory is best thought of as “a state of mind”; input markets; welfare and public economics, applying the tools presented in previous chapters; and international trade. Each chapter ends with examples and exercises. Appendixes supply answers to sample exam questions and solutions to even-numbered exercises.

Jay Prag is Clinical Full Professor at Claremont Graduate University's Drucker School of Management. He is the coauthor (with Peter E. Kennedy) of *Macroeconomic Essentials*, fourth edition (MIT Press).

September | 8 x 9, 248 pp. | 69 illus.

\$65.00X paper
978-0-262-53927-2

Bitcoin, Blockchain, and Cryptoassets

A Comprehensive Introduction

Fabian Schär and Aleksander Berentsen

An introduction to cryptocurrencies and blockchain technology and their potential to change the financial system fundamentally; a guide for practitioners and students.

Bitcoin and blockchain enable the ownership of virtual property without the need for a central authority. Additionally, Bitcoin and other cryptocurrencies make up an entirely new class of assets that have the potential for fundamental change in the current financial system. This book offers an introduction to cryptocurrencies and blockchain technology that begins from the perspective of monetary economics.

The book first presents a nontechnical discussion of monetary theory, enabling readers to understand how cryptocurrencies are a radical departure from existing monetary instruments, and provides an overview of blockchain technology and the Bitcoin system. It then takes up technical aspects of Bitcoin in more detail, covering such topics as the Bitcoin network, its communications protocol, the mathematics underpinning decentralized validation, transaction types, the data structure of blocks, the proof-of-work consensus mechanism, and game theory. Finally, the book discusses specific issues and applications, including price volatility, regulatory uncertainty, and central bank cryptocurrencies, as well as such alternative applications as decentralized verification and attestation, tokens, and smart contracts. The concluding chapter offers practical advice on getting started with Bitcoin. End-of-chapter exercises allow readers to test their knowledge. *Bitcoin, Blockchain, and Cryptoassets* is suitable for classroom use and as a reference for practitioners.

Fabian Schär is Professor of Blockchain, Distributed Ledger Technology, and Fintech at the University of Basel and Director of the Center for Innovative Finance. **Aleksander Berentsen** is Professor of Economic Theory at the Faculty of Business and Economics at the University of Basel and Chairman of the Board of the Center for Innovative Finance.

August | 7 x 9, 288 pp. | 93 illus.

\$50.00X paper
978-0-262-53916-6

Innovation Matters

Competition Policy for the High-Technology Economy

Richard J. Gilbert

A proposal for moving from price-centric to innovation-centric competition policy, reviewing theory and available evidence on economic incentives for innovation.

Competition policy and antitrust enforcement have traditionally focused on prices rather than innovation. Economic theory shows the ways that price competition benefits consumers; and courts, antitrust agencies, and economists have developed tools for the quantitative evaluation of price impacts. Antitrust law does not preclude interventions to encourage innovation, but over time the interpretation of the laws has raised obstacles to enforcement policies for innovation. In this book, economist Richard Gilbert proposes a shift from *price-centric* to *innovation-centric* competition policy. Antitrust enforcement should be concerned with protecting incentives for innovation and preserving opportunities for dynamic, rather than static, competition. In a high-technology economy, Gilbert argues, innovation matters.

Gilbert considers both theory and available empirical evidence on the relationships among market structure, firm behavior, and the production of new products and services. He reviews the distinctive features of the high-tech economy and why current analytical tools used by antitrust enforcers aren't up to the task of assessing innovation concerns. He considers, from the perspective of innovation competition, Kenneth Arrow's "replacement effect" and the Schumpeterian theory of market power and appropriation; discusses the effect of mergers on innovation and future price competition; and reviews the empirical literature on competition, mergers, and innovation. He describes examples of merger enforcement by US and European antitrust agencies; examines cases brought against Microsoft and Google; and discusses the risks and benefits of interoperability standards. Finally, he offers recommendations for competition policy.

Richard J. Gilbert is Emeritus Professor of Economics at the University of California, Berkeley. He worked as Deputy Assistant Attorney General for Economics in the US Department of Justice's Antitrust Division from 1993 to 1995.

July | 6 x 9, 336 pp. | 16 illus.

\$45.00X cloth
978-0-262-04404-2

The Regulation of International Trade

volume 3: The General Agreement on Trade in Services

Petros C. Mavroidis

A comprehensive analysis of GATS that considers its historical context, the national preferences that shaped it, and a path to a GATS 2.0.

The previous two volumes in *The Regulation of International Trade* analyzed the General Agreement on Tariffs and Trade (GATT), the first successful agreement to generate multilateral trade liberalization, and the World Trade Organization (WTO), for which the GATT laid the groundwork. In this third volume, Petros Mavroidis turns to the General Agreement on Trade in Services (GATS), a WTO treaty that took effect in 1995, and offers a comprehensive analysis that considers the historical context of the GATS, the national preferences that shaped it, and a path to a GATS 2.0.

Mavroidis examines the GATS through its negotiating record, considering whether the GATS as it is can appropriately address the concerns of the world trading community. The GATS deals exclusively with non-tariff barriers (NTBs)—precisely the instrument that the WTO has not managed to tame, and one of some significance in light of the digital revolution, which has enlarged the scope of cross-border transactions in which neither supplier nor consumer needs to travel for a service to be consumed. Mavroidis argues that the GATS has brought about a platform to liberalize services, and has locked in some pre-GATS liberalization. What is missing, he contends, is a "GATS-Think" that would generate liberalization from now on.

Petros C. Mavroidis is Edwin B. Parker Professor of Law at Columbia Law School. He was previously a member of the Legal Affairs Division at the World Trade Organization.

November | 7 x 9, 760 pp. | 3 illus.

\$120.00X cloth
978-0-262-04455-4

Distributed Ledgers

Design and Regulation of Financial Infrastructure
and Payment Systems

Robert M. Townsend

An economic analysis of the transformative potential and optimal design of distributed ledger technology, discussing key components and applications.

Distributed ledger technology (DLT) has the potential to transform economic organization and financial structures. In this book, Robert Townsend steps back from the hype and controversy surrounding DLT (and the related, but not synonymous, innovations of blockchain and Bitcoin) to offer an economic analysis of what distributed ledgers can do and a blueprint for the optimal design and regulation of financial systems. Townsend examines the key components of distributed ledgers, discussing, evaluating, and illustrating each in the context of historical and contemporary economies, reviewing featured applications in both developed economies and emerging-market countries, and indicating where future innovations can have large impact.

Throughout, Townsend emphasizes the general equilibrium impact of DLT innovations, the welfare gains from these innovations, and related regulatory innovations. He analyzes four crucial components of distributed ledgers—ledgers as accounts, e-messages and e-value transfers, cryptography, and contracts—assessing each in terms of both economics and computer science, and forges some middle ground. Relatedly, Townsend highlights hybrid systems in which some of these components allow useful innovation while legacy or alternative pieces deal with the problem of scale. The specific applications he analyzes include an intelligent financial automated system that provides financial services to unbanked and under-banked populations, and cross-border payments systems, including financial systems that can integrate credit and insurance with clearing and settlement. Finally, Townsend considers cryptocurrencies, discussing the role and value of tokens in economies with distributed ledger systems.

Robert M. Townsend is Elizabeth & James Killian Professor of Economics at MIT and the coauthor of *Chronicles from the Field: The Townsend Thai Project* (MIT Press).

September | 5 3/8 x 8, 192 pp. | 11 illus.

\$35.00X paper
978-0-262-53987-6

Living Literacies

Rethinking Literacy Research and Practice
through the Everyday

Kate Pahl and Jennifer Rowsell

with Diane Collier, Steve Pool, Zanib Rasool, and Terry Trzeciak

An approach to literacy that understands it as lived and experienced in the everyday across varied spaces and populations.

This book approaches literacy as lived and experienced in the everyday. A living literacies approach draws not only on such official, schooled activities as reading, writing, speaking, and listening but also on such routine, tacit activities as scrolling through Instagram, watching news footage, and listening to music. It goes beyond well-worn framings of literacy as an object of study to reimagine literacy as constantly in motion, vital, and dynamic, filled with affective intensities.

A lived literacies approach implies a turn to activism, to hopeful practice, and to creativity. The authors examine literacies through a series of active verbs: seeing, disrupting, hoping, knowing, creating, and making. Case studies—ranging from an exploration of photography as a way to shift perspectives to a project in which adults teach young people how to fish—show lived literacies in both theory and practice. With these chapters, the authors position literacy differently. They make it possible to see literacy in everyday activities, woven into the modes of seeing and knowing. By disruption and activism, literacy can encompass a wide array of practices—exchanging information at a school gate or making a collage. Grounding theory in the sites and spaces of their research, working with artists, photographers, poets, and makers, the authors issue a call to action for literacy education.

Kate Pahl is Professor of Arts and Literacy in the Faculty of Education at Manchester Metropolitan University, UK. **Jennifer Rowsell** is Professor of Literacies and Social Innovation in the School of Education at the University of Bristol, UK.

September | 6 x 9, 224 pp. | 40 illus.

\$35.00X paper
978-0-262-53971-5

The Manifesto for Teaching Online

Siân Bayne, Peter Evans, Rory Ewins, Jeremy Knox, James Lamb, Hamish Macleod, Clara O'Shea, Jen Ross, Philippa Sheail, and Christine Sinclair

illustrated by Kirsty Johnston

An update to a provocative manifesto intended to serve as a platform for debate and as a resource and inspiration for those teaching in online environments.

In 2011, a group of scholars associated with the Centre for Research in Digital Education at the University of Edinburgh released “A Manifesto for Teaching Online,” a series of provocative statements intended to articulate their pedagogical philosophy. In the original manifesto and a 2016 update, the authors counter both the “impoverished” vision of education being advanced by corporate and governmental edtech and higher education’s traditional view of online students and teachers as second-class citizens. The two versions of the manifesto were much discussed, shared, and debated. In this book, the authors have expanded the text of the 2016 manifesto, revealing the sources and larger arguments behind the abbreviated provocations.

The book groups the twenty-one statements (“Openness is neither neutral nor natural: it creates and depends on closures”; “Don’t succumb to campus envy: we are the campus”) into five thematic sections examining place and identity, politics and instrumentality, the primacy of text and the ethics of remixing, the way algorithms and analytics “recode” educational intent, and how surveillance culture can be resisted. Much like the original manifestos, this book is intended as a platform for debate, as a resource and inspiration for those teaching in online environments, and as a challenge to the techno-instrumentalism of current edtech approaches.

Siân Bayne, Peter Evans, Rory Ewins, Jeremy Knox, James Lamb, Hamish Macleod, Clara O'Shea, Jen Ross, Philippa Sheail, and Christine Sinclair are on the faculty of Moray House School of Education and Sport at the University of Edinburgh.

August | 5 3/8 x 8, 224 pp. | 11 illus.

\$25.00X paper
978-0-262-53983-8

Peer Pedagogies on Digital Platforms

Learning with Minecraft Let's Play Videos

Michael Dezuanni

How a popular entertainment genre on YouTube—Let's Play videos created by Minecraft players—offers opportunities for children to learn from their peers.

Every day millions of children around the world watch video gameplay on YouTube in the form of a popular entertainment genre known as Let's Play videos. These videos, which present a player's gameplay and commentary, offer children opportunities for interaction and learning not available in traditional television viewing or solo video gameplay. In this book, Michael Dezuanni examines why Let's Play videos are so appealing to children, looking in particular at videos of Minecraft gameplay. He finds that a significant aspect of the popularity of these videos is the opportunity for knowledge and skill exchange.

Focusing on Let's Play practices, the videos themselves, and fans' responses, Dezuanni argues that learning takes place through what he terms *peer pedagogy*—a type of nonhierarchical learning that is grounded in the personal relationships fans and players feel toward one another. Moreover, the Let's Play platform is part of a larger digital ecosystem that enables children to learn from one another in unique ways. Dezuanni explores how Let's Players enable learning opportunities, examining digital literacies, the Let's Play genre, and *peer pedagogies*. He then presents case studies of three successful family-friendly Let's Players of Minecraft: Stampylonghead, StacyPlays, and KarinaOMG, microcelebrities in a microindustry. Dezuanni analyzes the specific practices and characteristics of these players, paying particular attention to how they create opportunities for *peer pedagogies* to emerge.

Michael Dezuanni is Associate Professor in the School of Communication and Associate Director of the Digital Media Research Centre at Queensland University of Technology in Australia. He is the coeditor of *Serious Play: Literacy, Learning, and Digital Games*.

September | 6 x 9, 224 pp.

\$35.00X paper
978-0-262-53972-2

Learning in Large-Scale Environments series

Designing Constructionist Futures

The Art, Theory, and Practice of Learning Designs

edited by **Nathan Holbert**, **Matthew Berland**,
and **Yasmin B. Kafai**

A diverse group of scholars redefine constructionism—introduced by Seymour Papert in 1980—in light of new technologies and theories.

Constructionism, first introduced by Seymour Papert in 1980, is a framework for learning to understand something by making an artifact for and with other people. A core goal of constructionists is to respect learners as creators, to enable them to engage in making meaning for themselves through construction, and to do this by democratizing access to the world's most creative and powerful tools. In this volume, an international and diverse group of scholars examine, reconstruct, and evolve the constructionist paradigm in light of new technologies and theories. Taken together, their contributions show that constructionism has advanced in educational research and practice—and also that, in turn, researchers and practitioners can learn from constructionism how to foster learning in ways that respect learners' creativity and communities.

The contributors examine how constructionist design can function within contexts ranging from school and home to virtual spaces; explore ways to support learners who have been under-resourced, overlooked, or oppressed; discuss learning by collaboration; and consider the implications of learning as a creative process of construction, exploring ways to support creative enterprises within the constraints of formal classrooms. Finally, leading visionaries imagine where constructionism, design, and research will go next.

Nathan Holbert is Assistant Professor of Communication, Media, and Learning Technologies Design at Teachers College, Columbia University. **Matthew Berland** is Associate Professor of Design, Creative, and Informal Education in the School of Education at the University of Wisconsin–Madison. **Yasmin B. Kafai** is Lori and Michael Milken President's Distinguished Professor at the University of Pennsylvania Graduate School of Education, and coauthor of *Connected Gaming*, *Connected Code*, and *Connected Play* (all published by MIT Press) and other books.

October | 6 x 9, 384 pp. | 20 illus.

\$50.00X paper
978-0-262-53984-5

If Schools Didn't Exist

A Study in the Sociology of Schools

Nils Christie

translated and edited by Lucas Cone and Joachim Wiewiura
foreword by Judith Suissa

A classic in the philosophy of education, considering the fundamental purpose and function of schools, translated into English for the first time.

This classic 1971 work on the fundamental purpose and function of schools belongs on the same shelf as other landmark works of the era, including Ivan Illich's *Deschooling Society*, Paulo Freire's *Pedagogy of the Oppressed*, and John Holt's *How Children Fail*. Nils Christie's *If School Didn't Exist*, translated into English for the first time, departs from these works by not considering *schooling* (and *deschooling*) as much as *schools* and their specific community and social contexts. Christie argues that schools should be proving grounds for how to live together in society rather than assembly lines producing future citizens and employees.

Christie presents three examples of schools in different settings—a French village school that became the bedrock of its community; federal government–run schools for Native Americans that facilitated the experience of inferiority; and a British secondary school that reinforced class stratification. He considers the school's function as a storage space (for an unproductive segment of society), as a means for differentiation (based on merit), and as distributor of knowledge. He introduces the idea of the school-society, a self-governing body of students, teachers, parents, and community; and he offers a vision of a society based on normalizing the needs and values of local communities.

Nils Christie (1929–2015) was a Norwegian sociologist. **Lucas Cone** is a PhD Fellow at the Danish School of Education at Aarhus University. **Joachim Wiewiura** is a PhD Fellow in Philosophy at the Center for Information and Bubble Studies at the University of Copenhagen.

July | 5 3/8 x 8, 248 pp. | 5 illus.

\$35.00X paper
978-0-262-53889-3

Education Crossing Borders

How Singapore and MIT Created a New University

Dara R. Fisher

The chronicle of a ten-year partnership between MIT and Singapore's Education Ministry that shows cross-border collaboration in higher education in action.

In this book, Dara Fisher chronicles the decade-long collaboration between MIT and Singapore's Education Ministry to establish the Singapore University of Technology and Design (SUTD). Fisher shows how what began as an effort by MIT to export its vision and practices to Singapore became an exercise in adaptation by actors on the ground. As cross-border higher education partnerships become more widespread, Fisher's account of one such collaboration in theory and practice is especially timely.

Despite the prevalence of cross-border higher education initiatives, there is little understanding of how these partnerships work. This book fills the gap, offering an in-depth ethnographic case study that draws on organizational behavior literature for theoretical support. Fisher describes the sometimes divergent priorities of the Singapore government and MIT as planning began in 2007; chronicles how the founding faculty, staff, and students sought to shape the new university; shows that MIT left decision making to local actors on matters it regarded as low priority (only to discover later that some of these decisions did not align with MIT values); and examines SUTD's efforts to build an independent identity as Singapore's fourth major public university within the Singaporean higher education ecosystem. Finally, Fisher develops a framework for understanding how MIT's identity and practices were communicated to and then localized by Singaporeans, examining this in terms of politics, culture, institutions, and individuals.

Dara R. Fisher is Associate Dean at Hult International Business School, Boston Campus.

August | 6 x 9, 272 pp. | 8 illus.

\$30.00X paper

978-0-262-53903-6

Biomechanics of Movement

The Science of Sports, Robotics, and Rehabilitation

Thomas K. Uchida and Scott L. Delp

illustrations by David Delp

An engaging introduction to human and animal movement seen through the lens of mechanics.

How do Olympic sprinters run so fast? Why do astronauts adopt a bounding gait on the moon? How do running shoes improve performance while preventing injuries? This engaging and generously illustrated book answers these questions by examining human and animal movement through the lens of mechanics. The authors present simple conceptual models to study walking and running and apply mechanical principles to a range of interesting examples. They explore the biology of how movement is produced, examining the structure of a muscle down to its microscopic force-generating motors. Drawing on their deep expertise, the authors describe how to create simulations that provide insight into muscle coordination during walking and running, suggest treatments to improve function following injury, and help design devices that enhance human performance.

Throughout, the book emphasizes established principles that provide a foundation for understanding movement. It also describes innovations in computer simulation, mobile motion monitoring, wearable robotics, and other technologies that build on these fundamentals. The book is suitable for use as a textbook by students and researchers studying human and animal movement. It is equally valuable for clinicians, roboticists, engineers, sports scientists, designers, computer scientists, and others who want to understand the biomechanics of movement.

Thomas K. Uchida is an Assistant Professor in the Department of Mechanical Engineering at the University of Ottawa. **Scott L. Delp** is the James H. Clark Professor of Bioengineering, Mechanical Engineering, and Orthopedic Surgery at Stanford University. **David Delp** is a user experience designer, graphic designer, and illustrator in San Francisco.

October | 8 x 9, 304 pp. | 229 color illus.

\$75.00X cloth

978-0-262-04420-2

Forgotten Values

The World Bank and Environmental Partnerships

Teresa Kramarz

An examination of the conflict between values and bureaucracy in World Bank biodiversity partnerships that sheds light on this model of global environmental governance.

Multi-stakeholder partnerships have become an increasingly common form of global governance. Partnerships, usually between international organizations (IOs) or state agencies and such private actors as NGOs, businesses, and academic institutions, have even been promoted as the gold standard of good governance—participatory, innovative, and well-funded. And yet these partnerships often fail to live up to the values that motivated their establishment. In this book, Teresa Kramarz examines this gap between promise and performance by analyzing partnerships in biodiversity conservation initiatives launched by the World Bank.

Kramarz reviews World Bank biodiversity partnerships over a twenty-year period, with in-depth studies of two: the Critical Ecosystem Partnership Fund and the Global Invasive Species Program. She finds that partnerships fall short when established in the shadow of a large, mature bureaucracy. Bureaucrats have trouble relinquishing control, and they distrust partners who do not abide by set policies and procedures. The partnership's potential contribution to biodiversity conservation succumbs to the goals of bureaucratic efficiency. Kramarz develops a theoretical framework to explain the gap between values and practice, combining rationalist and constructivist approaches. Viewing World Bank biodiversity partnerships through this theoretical lens, she shows how the World Bank's risk aversion, hierarchy, focus on rules and procedures, and division of labor have a significant influence on partnership outcomes.

Teresa Kramarz is Director of the Munk One Foundation Program, Codirector of the Environmental Governance Lab, and Associate Professor and Research Associate in Global Affairs at the University of Toronto. She is coeditor of *Global Environmental Governance and the Accountability Trap* (MIT Press).

August | 6 x 9, 232 pp. | 11 illus.

\$35.00X paper
978-0-262-53918-0

Earth System Governance series

Alternatives to Multilateralism

New Forms of Social and Environmental Governance

Lena Partzsch

Analysis and case studies of emerging forms of private, public, and hybrid social and environmental governance.

The effects of globalization on governance are complex and uncertain. As markets integrate, governments have become increasingly hesitant to enforce regulations inside their own jurisdictions. At the same time, multilateralism has proven unsuccessful in coordinating states' responses to global challenges. In this book, Lena Partzsch describes alternatives to multilateralism, offering analyses and case studies of emerging—alternative—forms of private, public, and hybrid social and environmental regulation. In doing so, she offers a unique overview of cutting-edge approaches to global governance.

After laying the theoretical and empirical foundation of her argument, Partzsch presents three case studies from the countries most affected by these new forms of governance. Drawing on primary documents, interviews, and participatory observations, she analyzes cotton supply chains and voluntary (private) cotton certification in Ethiopia; public supply-chain regulation of “conflict resources” from the Democratic Republic of the Congo; and hybrid governance of palm oil production in Indonesia. Partzsch finds that the new entanglement of public and private regulation fails to address social and environmental considerations in mainstream markets; argues that only in exceptional cases do alternative forms of regulation overcome the power asymmetries between actors in the consuming countries of the Global North and those in the producing countries of the Global South; and concludes that, while the paradigm of free trade fades, we must continue to develop viable alternatives in order to pursue collective norms of environmental sustainability and social justice.

Lena Partzsch is Professor at the University of Freiburg and Interim Chair of Comparative Government at the University of Erfurt.

August | 6 x 9, 264 pp. | 16 illus.

\$34.00X paper
978-0-262-53922-7

Earth System Governance series

How Pac-Man Eats

Noah Wardrip-Fruin

How the tools and concepts for making games are connected to what games can and do mean; with examples ranging from *Papers, Please* to *Dys4ia*.

In *How Pac-Man Eats*, Noah Wardrip-Fruin considers two questions: What are the fundamental ways that games work? And how can games be *about* something? Wardrip-Fruin argues that the two issues are related. Bridging formalist and culturally engaged approaches, he shows how the tools and concepts for making games are connected to what games can and do mean.

Wardrip-Fruin proposes that games work at a fundamental level on which their mechanics depend: *operational logics*. Games are about things because they use play to address topics; they do this through *playable models* (of which operational logics are the primary building blocks): larger structures used to represent what happens in a game world that relate meaningfully to a theme. Game creators can expand the expressiveness of games, Wardrip-Fruin explains, by expanding an operational logic. Pac-Man can eat, for example, because a game designer expanded the meaning of collision from hitting things to consuming them. Wardrip-Fruin describes strategies game creators use to expand what can be said through games, with examples drawn from indie games, art games, and research games that address themes ranging from border policy to gender transition. These include *Papers, Please*, which illustrates expansive uses of pattern matching; *Prom Week*, for which the game's developers created a model of social volition to enable richer relationships between characters; and *Dys4ia*, which demonstrates a design approach that supports game metaphors of high complexity.

Noah Wardrip-Fruin is Professor of Computational Media at the University of California, Santa Cruz, where he codirects the Expressive Intelligent Studio. He is the author of *Expressive Processing: Digital Fictions, Computer Games, and Software Studies* (MIT Press).

December | 7 x 9, 368 pp. | 80 illus.

\$35.00X cloth
978-0-262-04465-3

Elements of Game Design

Robert Zubek

An introduction to the basic concepts of game design, focusing on techniques used in commercial game production.

This textbook by a well-known game designer introduces the basics of game design, covering tools and techniques used by practitioners in commercial game production. It presents a model for analyzing game design in terms of three interconnected levels—mechanics and systems, gameplay, and player experience—and explains how novice game designers can use these three levels as a framework to guide their design process. The text is notable for emphasizing models and vocabulary used in industry practice and focusing on the design of games as dynamic systems of gameplay.

The book first introduces the core model and framework for analyzing and designing games. It then discusses the three levels in detail, explaining player experience and identifying design goals; introducing low-level structural analysis of gameplay in terms of basic mechanics; describing how mechanics build up into systems; and presenting concepts for understanding gameplay, defined as the dynamic behavior of players when they interact with mechanics and systems. Finally, the book offers students advice on creating game prototypes using an iterative, user-centered process. Each chapter offers a set of exercises for individuals and design challenges for groups.

Robert Zubek is a game designer and developer and cofounder of SomaSim, an independent game studio in Chicago. Previously, he built large-scale social online games at Zynga, MMO game and analytics infrastructure at Three Rings Design, and console games at Electronic Arts/Maxis. He holds a PhD in computer science from Northwestern University, with a specialty in artificial intelligence and robotics.

August | 6 x 9, 256 pp. | 59 illus.

\$30.00X cloth
978-0-262-04391-5

Making Open Development Inclusive

Lessons from IDRC Research

edited by **Matthew L. Smith** and **Ruhiya Kristine Seward**

foreword by Robin Mansell

Drawing on ten years of empirical work and research, analyses of how open development has played out in practice.

A decade ago, a significant trend toward openness emerged in international development. “Open development” can describe initiatives as disparate as open government, open health data, open science, open education, and open innovation. The theory was that open systems related to data, science, and innovation would enable more inclusive processes of human development. This volume, drawing on ten years of empirical work and research, analyzes how open development has played out in practice

Focusing on development practices in the Global South, the contributors explore the crucial questions of who is allowed to participate when an initiative is “open” and who benefits—or not—from them, finding that processes characterized as open can sometimes be exclusionary in their implementation. Examining a wide range of cases, they consider the governance of open development ecosystems and the implementation of a variety of applications, including open educational resources, collaborative science, and the uses of crowdsourcing.

Matthew L. Smith is Senior Program Specialist at the International Development Research Centre in Ottawa. He is coeditor of *Open Development: Networked Innovation in International Development* (MIT Press and IDRC).

Ruhiya Kristine Seward is Senior Program Officer at the International Development Research Centre.

Contributors

Denisse Albornoz, Chris Armstrong, Savita Bailur, Roxana Barrantes, Carla Bonina, Michael Cañares, Leslie Chan, Laura Czerniewicz, Jeremy de Beer, Stefano De Sabbata, Shirin Elahi, Alison Gillwald, Mark Graham, Rebecca Hillyer, Cheryl Hodgkinson-Williams, Dick Kawooya, Erika Kramer-Mbula, Paulo Matos, Caroline Ncube, Chidi Oguamanam, Angela Okune, Alejandro Posada, Nagla Rizk, Isaac Rutenberg, Tobias Schonwetter, Fabrizio Scrollini, Ruhiya Kristine Seward, Raed Sharif, Matthew Smith, William Randall Spence, Henry Trotter, François van Schalkwyk, Sonal Zavaeri

July | 7 x 9, 512 pp. | 29 illus.

\$55.00X paper

978-0-262-53911-1

International Development Research Centre series

Reassembling Scholarly Communications

Histories, Infrastructures, and Global Politics of Open Access

edited by **Martin Paul Eve** and **Jonathan Gray**

A critical inquiry into the politics, practices, and infrastructures of open access and the reconfiguration of scholarly communication in digital societies.

The Open Access Movement proposes to remove price and permission barriers for accessing peer-reviewed research work—to use the power of the internet to duplicate material at an infinitesimal cost-per-copy. In this volume, contributors show that open access does not exist in a technological or policy vacuum; there are complex social, political, cultural, philosophical, and economic implications for opening research through digital technologies. The contributors examine open access from the perspectives of colonial legacies, knowledge frameworks, publics and politics, archives and digital preservation, infrastructures and platforms, and global communities.

The contributors consider such topics as the perpetuation of colonial-era inequalities in research production and promotion; the historical evolution of peer review; the problematic histories and discriminatory politics that shape our choices of what materials to preserve; the idea of scholarship as data; and resistance to the commercialization of platforms. Case studies report on such initiatives as the *Making and Knowing Project*, which created an openly accessible critical digital edition of a sixteenth-century French manuscript, the role of formats in Bruno Latour’s *An Inquiry into Modes of Existence*, and the Scientific Electronic Library Online (SciELO), a network of more than 1,200 journals from sixteen countries. Taken together, the contributions represent a substantive critical engagement with the politics, practices, infrastructures, and imaginaries of open access, suggesting alternative trajectories, values, and possible futures.

Martin Paul Eve is Professor of Literature, Technology, and Publishing at Birkbeck, University of London, and Visiting Professor of Digital Humanities at Sheffield Hallam University. **Jonathan Gray** is a Lecturer in Critical Infrastructure Studies in the Department of Digital Humanities at King’s College London.

October | 6 x 9, 448 pp. | 14 illus.

\$30.00X paper

978-0-262-53624-0

Researching Internet Governance

Methods, Frameworks, Futures

edited by **Laura DeNardis, Derrick L. Cogburn, Nanette S. Levinson, and Francesca Musiani**

A multidisciplinary book that takes internet governance research as a research subject in its own right, discussing methods and conceptual approaches.

The design and governance of the internet has become one of the most pressing geopolitical issues of our era. The stability of the economy, democracy, and the public sphere depend on the stability and security of the internet. Revelations about election hacking, facial recognition technology, and government surveillance have gotten the public's attention and made clear the need for scholarly research that examines internet governance both empirically and conceptually. In this volume, scholars from a range of disciplines consider research methods, theories, and conceptual approaches in the study of internet governance.

The contributors show that internet governance is not only about governments; it is enacted through technical design, resource coordination, and conflicts at various invisible control points. They discuss such topics as the emergence of "internet governance" as an area of academic study and a real-world policy arena; the scholarly perspectives of STS, the law, computer science, and political science; the use of big data and text mining in internet governance studies; and cybersecurity.

Laura DeNardis is Professor in the School of Communication at American University. **Derrick L. Cogburn** is Professor in the School of International Service and Kogod School of Business at American University. **Nanette S. Levinson** is Associate Professor in the School of International Service at American University. Professors DeNardis, Cogburn, and Levinson also serve as Faculty Directors of the American University Internet Governance Lab. **Francesca Musiani** is Associate Research Professor and Deputy Director of the Center for Internet and Society at CNRS, Paris, as well as a Fellow at the Internet Governance Lab.

August | 6 x 9, 328 pp. | 34 illus.

\$35.00X paper
978-0-262-53975-3

Information Policy series

Child | Data | Citizen

How Tech Companies Are Profiling Us from before Birth

Veronica Barassi

An examination of the datafication of family life—in particular, the construction of our children into data subjects.

Our families are being turned into data, as the digital traces we leave are shared, sold, and commodified. Children are datafied even before birth, with pregnancy apps and social media postings, and then tracked through childhood with learning apps, smart home devices, and medical records. In *Child | Data | Citizen*, Veronica Barassi examines the construction of children into data subjects, describing how their personal information is collected, archived, sold, and aggregated into unique profiles that can follow them across a lifetime. Children today are the very first generation of citizens to be datafied from before birth, and Barassi points to critical implications for our democratic futures.

Barassi draws on a three-year research project with parents in London and Los Angeles, which included the collection of fifty in-depth interviews, a digital ethnography of "sharenting" activities on social media by eight families over the course of eight months, and a two-year exploration of the datafication of her own family. She complements her ethnographic findings with a platform analysis of four social media platforms, ten health tracking apps, four home hubs, and four educational platforms, investigating the privacy policies, business models, and patent applications that enable the mining of children's data. Barassi considers the implications of building a society where data traces are made to speak for and about citizens across a lifetime. What should we do when we realize that the narratives that algorithms construct about individuals are inaccurate and biased?

Veronica Barassi is a Professor in Media and Communications at the School of Humanities and Social Sciences at the University of St. Gallen in Switzerland. She is the author of *Activism on the Web: Everyday Struggles against Digital Capitalism*.

December | 6 x 9, 224 pp. | 11 illus.

\$35.00X paper
978-0-262-04471-4

Type-Logical Syntax

Yusuke Kubota and Robert D. Levine

A novel logic-based framework for representing the syntax–semantics interface of natural language, applicable to a range of phenomena.

In this book, Yusuke Kubota and Robert Levine propose a type-logical version of categorial grammar as a viable alternative model of natural language syntax and semantics. They show that this novel logic-based framework is applicable to a range of phenomena—especially in the domains of coordination and ellipsis—that have proven problematic for traditional approaches.

The type-logical syntax the authors propose takes derivations of natural language sentences to be proofs in a particular kind of logic governing the way words and phrases are combined. This logic builds on and unifies two deductive systems from the tradition of categorial grammar; the resulting system, Hybrid Type-Logical Categorial Grammar (Hybrid TLCG) enables comprehensive approaches to coordination (gapping, dependent cluster coordination, and right-node raising) and ellipsis (VP ellipsis, pseudogapping, and extraction/ellipsis interaction). It captures a number of intricate patterns of interaction between scopal operators and seemingly incomplete constituents that are frequently found in these two empirical domains. Kubota and Levine show that the hybrid calculus underlying their framework incorporates key analytic ideas from competing approaches in the generative syntax literature to offer a unified and systematic treatment of data that have posed considerable difficulties for previous accounts. Their account demonstrates that logic is a powerful tool for analyzing the deeper principles underlying the syntax and semantics of natural language.

Yusuke Kubota is Associate Professor in the Theory and Typology Division at the National Institute for Japanese Language and Linguistics. **Robert D. Levine** is Professor of Linguistics at Ohio State University.

September | 8 x 9, 424 pp.

\$60.00X paper
978-0-262-53974-6

A Theory of Indexical Shift

Meaning, Grammar, and Crosslinguistic Variation

Amy Rose Deal

A comprehensive overview of the semantics and syntax of indexical shift that develops a constrained typology of the phenomenon across languages.

The phenomenon of indexical shift—whereby indexicals embedded in speech or attitude reports draw their meaning from an attitude event rather than the utterance context—has been reported in languages spanning five continents and at least ten language families. In this book, Amy Rose Deal offers a comprehensive overview of the semantics and syntax of indexical shift and develops a constrained typology of the phenomenon across languages—a picture of variation that is both rich enough to capture the known facts and restrictive enough to make predictions about currently unknown data points. Deal draws on studies of indexical shift in a broad range of languages, focusing especially on Nez Perce, Zazaki, Korean, and Uyghur.

Using new data from fieldwork, Deal presents an in-depth case study of indexical shift in the Nez Perce language, and uses this evidence to propose a novel theoretical approach based on the meaning and grammar of *shifty operators*. She explores several dimensions of variation related to indexical shift across and within languages, showing how the cross-linguistic patterns can be explained (and constrained) within the shifty operator view. Finally, she contrasts indexical shift with surface-similar phenomena, clarifying the controls needed to test the constrained typology on new data sets.

Amy Rose Deal is Associate Professor of Linguistics at the University of California, Berkeley, where she is also Affiliated Faculty in the Philosophy Department.

August | 6 x 9, 200 pp.

\$50.00X paper
978-0-262-53921-0

\$90.00X cloth
978-0-262-04418-9

Linguistic Inquiry Monographs series

Born to Parse

How Children Select Their Languages

David W. Lightfoot

An argument that children are born to assign structures to their ambient language, which feeds a view of language variation not based on parameters defined at UG.

In this book, David Lightfoot argues that just as some birds are born to chirp, humans are born to parse—predisposed to assign linguistic structures to their ambient external language. This approach to language acquisition makes two contributions to the development of Minimalist thinking. First, it minimizes grammatical theory, dispensing with three major entities: parameters; an evaluation metric for the selection of grammars; and any independent parsing mechanism. Instead, Lightfoot argues, children parse their ambient external language using their internal language. Universal Grammar is “open,” consistent with what children learn through parsing with their internal language system. Second, this understanding of language acquisition yields a new view of variable properties in language—properties that occur only in certain languages. Under the open UG vision, very specific language particularities arise in response to new parses. Both external and internal languages play crucial, interacting roles: unstructured, amorphous external language is parsed and an internal language system results.

Lightfoot explores case studies that show such innovative parses of external language in the history of English: development of modal verbs, loss of verb movement, and nineteenth-century changes in the syntax of the verb *to be*. He then discusses how children learn through parsing; the role of parsing at the syntactic structure’s interface with the externalization system and logical form; language change; and variable properties seen through the lens of an open UG.

David W. Lightfoot is Professor of Linguistics, Director of the Communication, Culture, and Technology Program, and Codirector of the Interdisciplinary PhD Concentration in Cognitive Science at Georgetown University.

August | 5 3/8 x 8, 216 pp. | 7 illus.

\$30.00X cloth

978-0-262-04409-7

Proof and the Art of Mathematics

Joel David Hamkins

An introduction to writing proofs, presented through compelling mathematical statements with interesting elementary proofs.

This book offers an introduction to the art and craft of proof-writing. The author, a leading research mathematician, presents a series of engaging and compelling mathematical statements with interesting elementary proofs. These proofs capture a wide range of topics, including number theory, combinatorics, graph theory, the theory of games, geometry, infinity, order theory, and real analysis. The goal is to show students and aspiring mathematicians how to write proofs with elegance and precision.

The book is organized around mathematically rich topics (rather than methods of proof), allowing students to learn to write proofs with material that is itself intrinsically interesting. Students will find the early chapters the easiest. Chapter 4 explains the method of mathematical induction, which is used in many arguments throughout the book. Later chapters offer chapter-length developments of major theorems, and the final chapters are more abstract. The book is generously illustrated; an extended chapter on proofs-without-words shows the power of figures and diagrams to communicate mathematical ideas—but also acknowledges the dangers of such an approach. Each chapter includes exercises, and sample answers are provided at the end of the book.

Joel David Hamkins is Professor of Logic at Oxford University and Sir Peter Strawson Fellow in Philosophy at University College, Oxford. He has published widely in refereed research journals in mathematical logic and set theory and is the creator of the popular blog *Mathematics and Philosophy of the Infinite*. He is a prominent contributor to *MathOverflow*, where he has posted more than 1,000 mathematical arguments.

September | 7 x 9, 240 pp. | 112 color illus., 8 b&w illus.

\$30.00X paper

978-0-262-53979-1

Perceptual Learning

How Experience Shapes Visual Perception

Barbara Doshier and Zhong-Lin Lu

A comprehensive and integrated introduction to the phenomena and theories of perceptual learning, focusing on the visual domain.

Practice or training in perceptual tasks improves the quality of perceptual performance, often by a substantial amount. This improvement is called perceptual learning (in contrast to learning in the cognitive or motor domains), and it has become an active area of research of both theoretical and practical significance. This book offers a comprehensive introduction to the phenomena and theories of perceptual learning, focusing on the visual domain.

Perceptual Learning explores the tradeoff between the competing goals of system stability and system adaptability, signal and noise, retuning and reweighting, and top-down versus bottom-down processes. It examines and evaluates existing research and potential future directions, including evidence from behavior, physiology, and brain imaging, and existing perceptual learning applications, with a focus on important theories and computational models. It also compares visual learning to learning in other perceptual domains, and considers the application of visual training methods in the development of perceptual expertise and education as well as in remediation for limiting visual conditions. It provides an integrated treatment of the subject for students and researchers and for practitioners who want to incorporate perceptual learning into their practice.

Barbara Doshier is Distinguished Professor of Cognitive Sciences at the University of California, Irvine. **Zhong-Lin Lu** is Chief Scientist, Associate Provost for Sciences, Director of the NYU-ECNU Institute of Brain and Cognitive Science, Professor of Neural Science and Psychology at NYU Shanghai, as well as Professor of Neural Science and Psychology and Global Network Professor at NYU. Doshier and Lu are coauthors of *Visual Psychophysics: From Laboratory to Theory* (MIT Press).

October | 7 x 9, 472 pp. | 16 color illus., 140 b&w illus.

\$60.00X cloth
978-0-262-04456-1

Computational Psychiatry

A Primer

Peggy Seriès

with contributions by X. J. Wang, P. Dayan, T. Braver, R. Adams, M. Browning, D. Redish, T. Maia, M. Ferrante, and others

The first introductory textbook in the emerging, fast-developing field of computational psychiatry.

Computational psychiatry applies computational modeling and theoretical approaches to psychiatric questions, focusing on building mathematical models of neural or cognitive phenomena relevant to psychiatric diseases. It is a young and rapidly growing field, drawing on concepts from psychiatry, psychology, computer science, neuroscience, electrical and chemical engineering, mathematics, and physics. This book, accessible to nonspecialists, offers the first introductory textbook in computational psychiatry.

After more than 100 years of psychological theories, psychopharmacological research, and clinical experience, the challenges of understanding and treating mental illness remain. Computational psychiatry seeks to explain how psychiatric dysfunction may emerge mechanistically, and how it may be classified, predicted, and clinically addressed. It has the potential to bridge advances in neuroscience and clinical applications, connecting low-level biological features with high-level cognitive features. After a survey of computational psychiatry methods, the book covers biologically detailed models of working memory and decision making and computational models of cognitive control. It then describes the application of computational approaches to schizophrenia, depression, anxiety, addiction, and Tourette's syndrome. Finally, the book briefly discusses additional disorders and offers guidelines for future research. Chapters also offer discussions of related issues, chapter summaries, and suggestions for further study. The book can be used as a textbook by students and as a reference for scientists and clinicians interested in applying computational models to diagnosis and treatment strategies.

Peggy Seriès is Senior Lecturer in Computational Neuroscience and Psychiatry at the Institute for Adaptive and Neural Computation at the University of Edinburgh.

November | 7 x 9, 344 pp. | 45 color illus.

\$60.00X cloth
978-0-262-04459-2

Changing Connectomes

Evolution, Development, and Dynamics
in Network Neuroscience

Marcus Kaiser

An up-to-date overview of the field of connectomics, introducing concepts and mechanisms underlying brain network change at different stages.

The human brain undergoes massive changes during its development, from early childhood and the teenage years to adulthood and old age. Across a wide range of species, from *C. elegans* and fruit flies to mice, monkeys, and humans, information about brain connectivity (connectomes) at different stages is now becoming available. New approaches in network neuroscience can be used to analyze the topological, spatial, and dynamical organization of such connectomes. In *Changing Connectomes*, Marcus Kaiser provides an up-to-date overview of the field of connectomics and introduces concepts and mechanisms underlying brain network changes during evolution and development.

Drawing on a range of results from experimental, clinical, and computational studies, Kaiser describes changes during healthy brain maturation and during brain network disorders (including such neurodevelopmental conditions as schizophrenia and depression), brain injury, and neurodegenerative disorders including dementia. He argues that brain stimulation is an area where understanding connectome development could help in assessing long-term effects of interventions. *Changing Connectomes* is a suitable starting point for researchers who are new to the field of connectomics, and also for researchers who are interested in the link between brain network organization and brain and cognitive development in health and disease. Matlab/Octave code examples available at the MIT Press website will allow computational neuroscience researchers to understand and extend the shown mechanisms of connectome development.

Marcus Kaiser is Professor of Neuroinformatics in the School of Computing at Newcastle University and Visiting Professor at Shanghai Jiao Tong University. He is a Fellow of the Royal Society of Biology and is Chair of Neuroinformatics UK.

August | 7 x 9, 264 pp. | 56 color illus.

\$45.00X cloth
978-0-262-04461-5

Vigor

Neuroeconomics of Movement Control

Reza Shadmehr and Alaa A. Ahmed

An examination of the link between the vigor with which we move and the value that the brain assigns to the goal of the movement.

Why do we reflexively run toward people we love, but only walk toward others? In *Vigor*, Reza Shadmehr and Alaa Ahmed examine the link between how the brain assigns value to things and how it controls our movements. They find that brain regions thought to be principally involved in decision making also affect movement vigor—and that brain regions thought to be principally responsible for movement also bias patterns of decision making.

Shadmehr and Ahmed first consider the relationship of value and vigor from a behavioral and mathematical perspective, considering a series of fascinating observations—including, for example, data showing that people in certain cities tend to walk faster than those living elsewhere—through the lens of optimal foraging theory. They then go on to explore the neural basis of vigor and valuation, synthesizing results from experiments that have measured activity in various brain structures and neuromodulators, including dopamine and serotonin. They speculate that in the future, technologies may be able to predict our personal preferences by measuring our movements; through the vigor with which we move, we unwittingly reveal one of our well-guarded secrets: how much we value the object of our attention.

Reza Shadmehr is Professor of Bioengineering and Professor of Neuroscience at the Johns Hopkins University School of Medicine. He is the coauthor of *The Computational Neurobiology of Reaching and Pointing* and *Biological Learning and Control* (both published by the MIT Press). **Alaa A. Ahmed** is Associate Professor in the Departments of Integrative Physiology and Mechanical Engineering at the University of Colorado.

July | 7 x 9, 368 pp. | 121 illus.

\$40.00X cloth
978-0-262-04405-9

The Natural Method

Essays on Mind, Ethics, and Self in Honor
of Owen Flanagan

edited by **Eddy Nahmias, Thomas W. Polger,
and Wenqing Zhao**

Prominent philosophers explore themes in the work of Owen Flanagan, focusing on debates about the nature of mind, the self, and morality.

Owen Flanagan's work offers a model for how to be a naturalistic and scientifically informed philosopher who writes beautifully and deeply about topics as varied as consciousness and Buddhism, moral psychology and dreaming, identity and addiction, literature and neuroscience. In this volume, leading philosophers—Flanagan's friends, colleagues, and former students—explore themes in his work, focusing on debates over the nature of mind, the self, and morality. Some contributors address Flanagan's work directly; others are inspired by his work or methodology. Their essays are variously penetrating and synoptic, cautious and speculative.

The contributors offer proposals for productive interdisciplinary research exploring consciousness, personhood, religious cognition, mental disorders, addiction, the narrative self, virtue, the social sciences, forgiveness, and comparative philosophy. The authors share a commitment to virtues exemplified in Flanagan's work—interdisciplinary inquiry, an optimistic temperament, and a willingness to change one's mind.

Eddy Nahmias is Professor and Chair of Philosophy at Georgia State University. **Thomas W. Polger** is Professor and Department Head in the Department of Philosophy at the University of Cincinnati. **Wenqing Zhao** is Assistant Professor of Philosophy at Whitman College.

Contributors

Jack Bauer, Patricia S. Churchland, Peggy DesAutels, George Graham, Philip J. Ivanhoe, Alasdair MacIntyre, Robert N. McCauley, Eddy Nahmias, Thomas W. Polger, Galen Strawson, Şerife Tekin, Robert Van Gulick, David B. Wong, Wenqing Zhao

July | 6 x 9, 278 pp. | 1 illus.

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978-0-262-04399-1

Unconscionable Crimes

How Norms Explain and Constrain Mass Atrocities

Paul C. Morrow

The first general theory of the influence of norms—moral, legal and social—on genocide and mass atrocity.

How can we explain—and prevent—such large-scale atrocities as the Holocaust? In *Unconscionable Crimes*, Paul Morrow presents the first general theory of the influence of norms on genocide and mass atrocity. After offering a clear overview of norms and norm transformation, rooted in recent work in moral and political philosophy, Morrow examines numerous twentieth-century cases of mass atrocity, drawing on documentary and testimonial sources to illustrate the influence of norms before, during, and after such crimes.

Morrow considers such key explanatory pathways as the erosion of moral norms through brutalization and demoralization, the exploitation of legal norms to legitimize persecution and deny violence, and the enduring influence of gender-based social norms on targets and perpetrators of atrocities. Key constraints on atrocities would include the revision of moral norms that have traditionally guided the conduct of soldiers and humanitarian aid workers, the strengthening of legal prohibitions on large-scale crimes through statutory and institutional reform, and the elimination of social norms prescribing silence about personal experience of atrocities. Throughout, Morrow emphasizes the differences among moral, legal, and social norms, which stand in different relations to real or perceived social practices, and exhibit different patterns of creation, modification, and elimination. Ultimately, he argues, norms of each kind are integral to the explanation and the prevention of mass atrocities.

Paul C. Morrow is John M. Meagher Human Rights Fellow at the Human Rights Center of the University of Dayton. He was previously a visiting researcher at Utrecht University.

August | 6 x 9, 288 pp.

\$40.00X cloth
978-0-262-04462-2

Beyond 9/11

Homeland Security for the Twenty-First Century

edited by **Chappell Lawson, Alan Bersin,
and Juliette Kayyem**

Drawing on two decades of government efforts to “secure the homeland,” experts offer crucial strategic lessons and detailed recommendations for homeland security.

For Americans, the terrorist attacks of September 11, 2001, crystallized the notion of homeland security. But what does it mean to “secure the homeland” in the twenty-first century? What lessons can be drawn from the first two decades of US government efforts to do so? In *Beyond 9/11*, leading academic experts and former senior government officials address the most salient challenges of homeland security today.

The contributors discuss counterterrorism, cybersecurity, and critical infrastructure protection; border security and immigration; transportation security; emergency management; combating transnational crime; protecting privacy in a world of increasingly intrusive government scrutiny; and managing the sprawling homeland security bureaucracy. They offer crucial strategic lessons and detailed recommendations on how to improve the US homeland security enterprise.

Chappell Lawson is Associate Professor of Political Science at MIT.

Alan Bersin is Senior Advisor to Covington & Burling; Inaugural Fellow in the Homeland Security Project at the Belfer Center for Science and International Affairs at the Harvard Kennedy School; and Global Fellow and Inaugural North America Fellow at the Canada Institute and the Mexico Institute at the Woodrow Wilson Center for International Scholars. **Juliette Kayyem** is the Faculty Director of the Homeland Security Project at the Belfer Center for Science and International Affairs, where she serves as the Robert and Renée Belfer Senior Lecturer. She was previously Assistant Secretary at DHS.

August | 6 x 9 1/4, 400 pp. | 5 illus.

\$35.00S cloth
978-0-262-04482-0

Belfer Center Studies in International Security

Infrastructural Brutalism

Art and the Necropolitics of Infrastructure

Michael Truscello

How “drowned town” literature, road movies, energy landscape photography, and “death train” narratives represent the ecological, political, and psychological brutality of industrial infrastructures.

In this book, Michael Truscello looks at the industrial infrastructure not as an invisible system of connectivity and mobility that keeps capitalism humming in the background but as a manufactured miasma of despair, toxicity, and death. Truscello terms this “infrastructural brutality”—a formulation that not only alludes to the historical nexus of infrastructure and the concrete aesthetic of Brutalist architecture but also describes the ecological, political, and psychological brutality of industrial infrastructures.

Truscello explores the necropolitics of infrastructure—how infrastructure determines who may live and who must die—through the lens of artistic media. He examines the white settler nostalgia of “drowned town” fiction written after the Tennessee Valley Authority flooded rural areas for hydroelectric projects; argues that the road movie represents a struggle with liberal governmentality; considers the ruins of oil capitalism, as seen in photographic landscapes of postindustrial waste; and offers an account of “death train narratives” ranging from the history of the Holocaust to postapocalyptic fiction. Finally, he calls for “brisantic politics,” a culture of unmaking that is capable of slowing the advance of capitalist suicide. “Brisance” refers to the shattering effect of an explosive, but Truscello uses the term to signal a variety of practices for defeating infrastructural power. Brisantic politics, he warns, would require a reorientation of radical politics toward infrastructure, sabotage, and cascading destruction in an interconnected world.

Michael Truscello is Associate Professor in the Departments of English and General Education at Mount Royal University, Calgary.

August | 6 x 9, 384 pp. | 8 illus.

\$45.00X paper
978-0-262-53904-3

Infrastructures series

Repairing Infrastructures

The Maintenance of Materiality and Power

Christopher R. Henke and Benjamin Sims

An investigation of the causes and consequences of the strange, ambivalent, and increasingly central role of infrastructure repair in modern life.

Infrastructures—communication, food, transportation, energy, and information—are all around us, and their enduring function and influence depend on the constant work of repair. In this book, Christopher Henke and Benjamin Sims explore the causes and consequences of the strange, ambivalent, and increasingly central role of infrastructure repair in modern life. Henke and Sims offer examples, from local to global, to investigate not only the role of repair in maintaining infrastructures themselves but also the social and political orders that are created and sustained through them. Repair can encompass not only the kind of work we most commonly associate with the term but also any set of practices aimed at restoring a sense of normalcy or credibility to the places and institutions we inhabit in everyday life.

From cases as diverse as the repair of building systems on a university campus, a conflict over retrofitting a bridge while protecting murals painted on it, and the global challenge posed by climate change, Henke and Sims assemble a range of examples to illustrate key conceptual points about the role of repair. They show that repair is an essential if often overlooked aspect of understanding the broader impact and politics of infrastructures. Understanding repair helps us better understand infrastructures and the scope of their influence on our lives.

Christopher R. Henke is Associate Professor of Sociology at Colgate University. He is the author of *Cultivating Science, Harvesting Power* (MIT Press). **Benjamin Sims** is a sociologist and scientist with the Statistical Sciences Group at Los Alamos National Laboratory.

October | 6 x 9, 192 pp. | 13 illus.

\$40.00X paper
978-0-262-53970-8

Infrastructures series

Assetization

Turning Things into Assets in Technoscientific Capitalism

edited by Kean Birch and Fabian Muniesa

How the asset—anything that can be controlled, traded, and capitalized as a revenue stream—has become the primary basis of technoscientific capitalism.

In this book, scholars from a range of disciplines argue that the asset—meaning anything that can be controlled, traded, and capitalized as a revenue stream—has become the primary basis of technoscientific capitalism. An asset can be an object or an experience, a sum of money or a life form, a patent or a bodily function. A process of assetization prevails, imposing investment and return as the key rationale, and overtaking commodification and its speculative logic. Although assets can be bought and sold, the point is to get a durable economic rent from them rather than make a killing on the market. *Assetization* examines how assets are constructed and how a variety of things can be turned into assets, analyzing the interests, activities, skills, organizations, and relations entangled in this process.

The contributors consider the assetization of knowledge, including patents, personal data, and biomedical innovation; of infrastructure, including railways and energy; of nature, including mineral deposits, agricultural seeds, and “natural capital”; and of publics, including such public goods as higher education and “monetizable social ills.” Taken together, the chapters show the usefulness of assetization as an analytical tool and as an element in the critique of capitalism.

Kean Birch is Associate Professor in the Department of Geography at York University, Toronto. **Fabian Muniesa** is Senior Researcher at the Centre de Sociologie de l'Innovation (CSI), a research center of Mines ParisTech.

July | 6 x 9, 344 pp.

\$40.00X paper
978-0-262-53917-3

Inside Technology series

States of Childhood

From the Junior Republic to the American Republic,
1895–1945

Jennifer S. Light

How “virtual adulthood” — children’s role play in simulated cities, states, and nations — helped construct a new kind of “sheltered” childhood for American young people.

A number of curious communities sprang up across the United States in the late nineteenth and early twentieth century: simulated cities, states, and nations in which children played the roles of legislators, police officers, bankers, journalists, shopkeepers, and other adults. They performed real work—passing laws, growing food, and constructing buildings, among other tasks—inside virtual worlds. In this book, Jennifer Light examines the phenomena of “junior republics” and argues that they marked the transition to a new kind of “sheltered” childhood for American youth. Banished from the labor force and public life, children inhabited worlds that mirrored the one they had left.

Light describes the invention of junior republics as independent institutions and how they were later established at schools, on playgrounds, in housing projects, and on city streets, as public officials discovered children’s role playing helped their bottom line. The junior republic movement aligned with cutting-edge developmental psychology and educational philosophy, and complemented the era’s fascination with models and miniatures, shaping educational and recreational programs across the nation. Light’s account of how earlier generations distinguished “real life” from role playing reveals a hidden history of child labor in America and offers insights into the deep roots of such contemporary concepts as gamification, play labor, and virtuality.

Jennifer S. Light is Director of the Program in Science, Technology, and Society at MIT, where she is Bern Dibner Professor of the History of Science and Technology and Professor of Urban Studies and Planning. She is also Senior Research Fellow at the Charles Babbage Institute at the University of Minnesota.

July | 7 x 9, 480 pp. | 54 illus.

\$40.00X paper
978-0-262-53901-2

Remaking Berlin

A History of the City through Infrastructure, 1920–2020

Timothy Moss

An examination of Berlin’s turbulent history through the lens of its water and energy infrastructures.

In *Remaking Berlin*, Timothy Moss takes a novel perspective on Berlin’s turbulent twentieth-century history, examining it through the lens of its water and energy infrastructures. He shows that, through a century of changing regimes, geopolitical interventions, and socioeconomic volatility, Berlin’s networked urban infrastructures have acted as medium and manifestation of municipal, national, and international politics and policies. Moss traces the coevolution of Berlin and its infrastructure systems from the creation of Greater Berlin in 1920 to remunicipalization of services in 2020, encompassing democratic, fascist, and socialist regimes. Throughout, he explores the tension between obduracy and change in Berlin’s infrastructures. Examining the choices made by utility managers, politicians, and government officials, Moss makes visible systems that we often take for granted.

Moss describes the reorganization of infrastructure systems to meet the needs of a new unitary city after Berlin’s incorporation in 1920, and how utilities delivered on political promises; the insidious embedding of repression, racism, autarky, and militarization within the networked city under the Nazis; and the resilience of Berlin’s infrastructures during wartime and political division. He examines East Berlin’s socialist infrastructural ideal (and its under-resourced systems), West Berlin’s insular existence (and its aspirations of system autarky), and reunified Berlin’s privatization of utilities (subsequently challenged by social movements). Taking Berlin as an exemplar, Moss’s account will inspire researchers to take a fresh look at urban infrastructure histories, offering new ways of conceptualizing the multiple temporalities and spatialities of the networked city.

Timothy Moss is Senior Researcher at the Integrative Research Institute on Transformations of Human–Environment Systems at Humboldt University of Berlin.

September | 7 x 9, 448 pp. | 20 color illus., 60 b&w illus.

\$50.00X
978-0-262-53977-7

Infrastructures series

Social Science for What?

Battles over Public Funding for the “Other Sciences” at the National Science Foundation

Mark Solovey

How the NSF became an important yet controversial patron for the social sciences, with consequences for ongoing debates over their scientific status and social relevance.

In the early Cold War years, the U.S. government established the National Science Foundation (NSF), a civilian agency that soon became widely known for its dedication to supporting first-rate science. The agency’s 1950 enabling legislation made no mention of the social sciences, although it included a vague reference to “other sciences.” Nevertheless, as Mark Solovey shows in this book, the NSF also soon became a major—albeit controversial—source of public funding for them.

Solovey’s analysis underscores the long-term impact of early developments, when the NSF embraced a “scientistic” strategy wherein the natural sciences represented the gold standard, and created a social science program limited to “hard-core” studies. Along the way, Solovey shows how the NSF’s efforts to support scholarship, advanced training, and educational programs were shaped by landmark scientific and political developments, including McCarthyism, Sputnik, reform liberalism during the 1960s, and a newly energized conservative movement during the 1970s and 1980s. Finally, he assesses the NSF’s relevance in a “post-truth” era, questions the legacy of its scientistic strategy, and calls for a separate social science agency—a National Social Science Foundation.

Solovey’s study of the battles over public funding is crucial for understanding the recent history of the social sciences as well as ongoing debates over their scientific status and social value.

Mark Solovey is Associate Professor in the Institute for the History and Philosophy of Science and Technology at the University of Toronto. He is the author of *Shaky Foundations: The Politics-Patronage-Social Science Nexus in Cold War America*.

June | 6 x 9, 408 pp. | 31 illus.

\$50.00X paper
978-0-262-53905-0

Technoscience in History

Prussia, 1750–1850

Ursula Klein

The relationship of the current technosciences and the older engineering sciences, examined through the history of the “useful” sciences in Prussia from 1750 to 1850.

Do today’s technoscientific disciplines—including materials science, genetic engineering, nanotechnology, and robotics—signal a radical departure from traditional science? In *Technoscience in History*, Ursula Klein argues that these novel disciplines and projects are not an “epochal break,” but are part of a history that can be traced back to German “useful” sciences and beyond. Klein’s account traces a deeper history of technoscience, mapping the relationship between today’s cutting-edge disciplines and the development of the useful and technological sciences in Prussia from 1750 to 1850.

Klein shows that institutions that coupled natural-scientific and technological inquiry existed well before the twentieth century. Focusing on the science of mining, technical chemistry, the science of forestry, and the science of building (later known as civil engineering), she examines the emergence of practitioners who were recognized as men of science as well as inventive technologists—key figures that she calls “scientific-technological experts.”

Klein describes the Prussian state’s recruitment of experts for technical projects and manufacturing, including land surveys, the apothecary trade, and porcelain production; state-directed mining, mining science, and mining academies; the history and epistemology of useful science; and the founding of Prussian scientific institutions in the nineteenth century, including the University of Berlin, the Academy of Building, the Technical Deputation, and the Industrial Institute.

Ursula Klein is Permanent Senior Researcher at the Max Planck Institute for the History of Science in Berlin and coauthor of *Materials in Eighteenth-Century Science: A Historical Ontology* (MIT Press).

August | 6 x 9, 328 pp. | 23 illus.

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Transformations: Studies in the History of Science and Technology

Urban Operating Systems

Producing the Computational City

Andrés Luque-Ayala and Simon Marvin

An exploration of the politics and contradictions of reconfiguring urban life through computational operating systems.

A new wave of enthusiasm for smart cities, urban data, and the Internet of Things has created the impression that computation can solve almost any urban problem. Subjecting this claim to critical scrutiny, in this book, Andrés Luque-Ayala and Simon Marvin examine the cultural, historical, and contemporary contexts in which urban computational logics have emerged. They consider the rationalities and techniques that constitute emerging computational forms of urbanization, including work on digital urbanism, smart cities, and, more recently, platform urbanism. They explore the modest potentials and serious contradictions of reconfiguring urban life, city services, and urban-networked infrastructure through computational operating systems—an urban OS.

Luque-Ayala and Marvin argue that in order to understand how digital technologies transform and shape the city, it is necessary to analyze the underlying computational logics themselves. Drawing on fieldwork that stretches across eleven cities in American, European, and Asian contexts, they investigate how digital products, services, and ecosystems are reshaping the ways in which the city is imagined, known, and governed. They discuss the reconstitution of the contemporary city through digital technologies, practices, and techniques, including data-driven governance, predictive analytics, digital mapping, urban sensing, digitally enabled control rooms, civic hacking, and open data narratives. Focusing on the relationship between the emerging operating systems of the city and their traditional infrastructures, they shed light on the political implications of using computer technologies to understand and generate new urban spaces and flows.

Andrés Luque-Ayala is Associate Professor in the Department of Geography at Durham University, UK. **Simon Marvin** is Director of The Urban Institute at the University of Sheffield, UK.

January | 6 x 9, 304 pp. | 58 illus.

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Infrastructures series

Between the Tracks

Musicians on Selected Electronic Music

edited by Miller Puckette and Kerry L. Hagan

A collection that goes beyond the canon to analyze influential yet under-examined works of electronic music.

This collection of writings on electronic music goes outside the canon to analyze influential works by under-recognized musicians. The contributors, many of whom are composers and performers themselves, offer their unsung musical heroes the sort of in-depth examinations usually reserved for more well-known composers and works. They analyze music from around the world and across genders, race, nationality, and age, discussing works that range from soundscapes of rushing water and resonating pipes to compositions by algorithm. Subjects include the collaboration of performer and composer, as seen in the work of Anne La Berge, Luciano Berio and Cathy Berberian, and others; the choice by Asian composers Zhang Xiaofu and Unsuk Chin to embrace (or not) Eastern themes and styles; and how technologies used by composers created the sound of the works, as exemplified by Bülent Aral's use of voltage-control components as compositional tools and Charles Dodge's resynthesizing of the human voice.

Miller Puckette is Professor in the Music Department at the University of California, San Diego. He has authored *Max* and *Pure Data* ("Pd"), programming environments for music and multimedia works. **Kerry L. Hagan** is a composer and researcher working in both acoustic and computer media. She is on the faculty of the Digital Media and Arts Research Centre at the University of Limerick.

Contributors

Marc Battier, Valentina Bertolani, Kerry L. Hagan, Yvette Janine Jackson, Leigh Landy, Pamela Madsen, Miller Puckette, David Rosenboom, Jøran Rudi, Margaret Anne Schedel, Juliana Snapper, Laura Zattra

August | 7 x 9, 304 pp. | 59 illus.

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Studying Sound

A Theory and Practice of Sound Design

Karen Collins

An introduction to the concepts and principles of sound design practice, with more than 175 exercises that teach readers to put theory into practice.

This book offers an introduction to the principles and concepts of sound design practice, from technical aspects of sound effects to the creative use of sound in storytelling. Most books on sound design focus on sound for the moving image. *Studying Sound* is unique in its exploration of sound on its own as a medium and rhetorical device. It includes more than 175 exercises that enable readers to put theory into practice as they progress through the chapters.

The book begins with an examination of the distinction between hearing and listening (with exercises to train the ears) and then offers an overview of sound as an acoustic phenomenon. It introduces recording sound, covering basic recording accessories as well as theories about recording and perception; explores such spatial effects as reverberation and echo; and surveys other common digital sound effects, including tremolo, vibrato, and distortion. It introduces the theory and practice of mixing; explains surround and spatial sound; and considers sound and meaning, discussing ideas from semiotics and psychology. Finally, drawing on material presented in the preceding chapters, the book explores in detail using sound to support story, with examples from radio plays, audio dramas, and podcasts. *Studying Sound* is suitable for classroom use or independent study.

Karen Collins is Associate Professor in the Department of Communication Arts at the University of Waterloo. She is the author of ten books on sound, including *Game Sound* and *Playing with Sound* (both published by the MIT Press), and is the director of the film *Beep: A Documentary History of Game Sound*.

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Bayesian Statistics for Experimental Scientists

A General Introduction Using Distribution-Free Methods

Richard A. Chechile

An introduction to the Bayesian approach to statistical inference that demonstrates its superiority to orthodox frequentist statistical analysis, especially for experimental scientists.

This book offers an introduction to the Bayesian approach to statistical inference, with a focus on nonparametric and distribution-free methods. It covers not only well-developed methods for doing Bayesian statistics but also novel tools that enable Bayesian statistical analyses for cases that previously did not have a full Bayesian solution. The book's premise is that there are fundamental problems with orthodox frequentist statistical analyses that distort the scientific process. Side-by-side comparisons of Bayesian and frequentist methods illustrate the mismatch between the needs of experimental scientists in making inferences from data and the properties of the standard tools of classical statistics.

The book first covers elementary probability theory, the binomial model, the multinomial model, and methods for comparing different experimental conditions or groups. It then turns its focus to distribution-free statistics that are based on having ranked data, examining data from experimental studies and rank-based correlative methods. Each chapter includes exercises that help readers achieve a more complete understanding of the material.

The book devotes considerable attention not only to the linkage of statistics to practices in experimental science but also to the theoretical foundations of statistics. Frequentist statistical practices often violate their own theoretical premises. The beauty of Bayesian statistics, readers will learn, is that it is an internally coherent system of scientific inference that can be proved from probability theory.

Richard A. Chechile is Professor of Psychology and Cognitive and Brain Science at Tufts University. He is the author of *Analyzing Memory: The Formation, Retention, and Measurement of Memory* (MIT Press).

August | 7 x 9, 472 pp. | 150 illus.

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Topology

A Categorical Approach

Tai-Danae Bradley, Tyler Bryson, and John Terilla

A graduate-level textbook that presents basic topology from the perspective of category theory.

This graduate-level textbook on topology takes a unique approach: it reintroduces basic, point-set topology from a more modern, categorical perspective. Many graduate students are familiar with the ideas of point-set topology and they are ready to learn something new about them. Teaching the subject using category theory—a contemporary branch of mathematics that provides a way to represent abstract concepts—both deepens students’ understanding of elementary topology and lays a solid foundation for future work in advanced topics.

After presenting the basics of both category theory and topology, the book covers the universal properties of familiar constructions and three main topological properties—connectedness, Hausdorff, and compactness. It presents a fine-grained approach to convergence of sequences and filters; explores categorical limits and colimits, with examples; looks in detail at adjunctions in topology, particularly in mapping spaces; and examines additional adjunctions, presenting ideas from homotopy theory, the fundamental groupoid, and the Seifert van Kampen theorem. End-of-chapter exercises allow students to apply what they have learned. The book expertly guides students of topology through the important transition from undergraduate student with a solid background in analysis or point-set topology to graduate student preparing to work on contemporary problems in mathematics.

Tai-Danae Bradley is a PhD candidate in mathematics at the CUNY Graduate Center and the creator of the popular math blog, Math3ma. **Tyler Bryson** is a PhD candidate in mathematics at the CUNY Graduate Center. **John Terilla** is Professor of Mathematics at Queens College and on the Doctoral Faculty at the CUNY Graduate Center.

August | 7 x 9, 168 pp. | 3 illus.

\$35.00X paper
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Owning the Street

The Everyday Life of Property

Amelia Thorpe

foreword by Davina Cooper

How local, personal, and materially grounded understandings about belonging, ownership, and agency intersect with law to shape the city.

In *Owning the Street*, Amelia Thorpe examines everyday experiences of and feelings about property and belonging in contemporary cities. She grounds her account in an empirical study of PARK(ing) Day, an annual event that reclaims street space from cars. A highly recognizable example of DIY urbanism, PARK(ing) Day has attracted considerable media attention, but not close scholarly examination. Focusing on the event’s trajectories in San Francisco, Sydney, and Montréal, Thorpe addresses this gap, making use of extensive fieldwork to explore these tiny, temporary, and yet often transformative interventions.

PARK(ing) Day is based on a creative interpretation of the property producible by paying a parking meter. Paying a meter, the organizers explained, amounts to taking out a lease on the space; while most “lessees” use that property to store a car, the space could be put to other uses, engaging politics (a free health clinic for migrant workers, a same sex wedding, a protest against fossil fuels) and play (a dance floor, giant Jenga, a pocket park). Through this novel rereading of everyday regulation, PARK(ing) Day provides an example of the connection between belief and action—a connection at the heart of Thorpe’s argument. Thorpe examines ways in which local, personal, and materially grounded understandings about belonging, ownership, and agency intersect with law to shape the city. Her analysis offers insights into the ways in which citizens can shape the governance of urban space, particularly in contested environments.

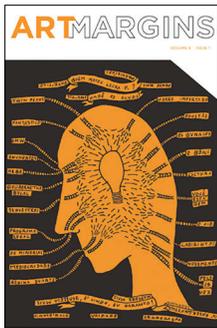
Amelia Thorpe is Associate Professor in Law at the University of New South Wales.

November | 6 x 9, 344 pp. | 86 illus.

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Urban and Industrial Environments series

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Sven Spieker, Karen Benezra, Octavian Eșanu, Anthony Gardner, Angela Harutyunyan, Saloni Mathur, and Andrew Weiner, editors

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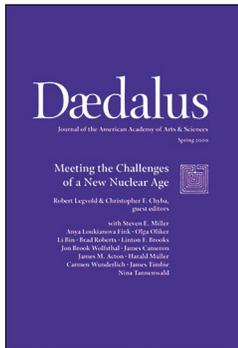
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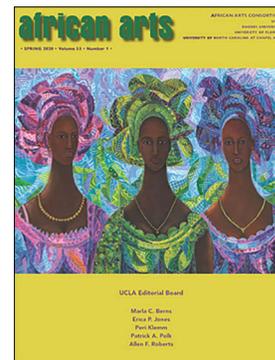


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Phyllis S. Bendell, managing editor

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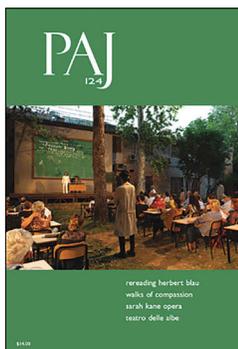


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edited by the African Arts Consortium: UCLA, Rhodes University, University of Florida, and University of North Carolina at Chapel Hill

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Bonnie Marranca, editor

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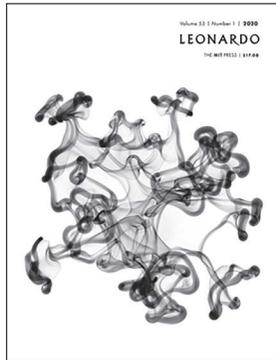
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Bruce Brown, Richard Buchanan, Carl DiSalvo, Dennis P. Doordan, Kipum Lee, Victor Margolin (1941–2019), and Ramia Mazé, editors

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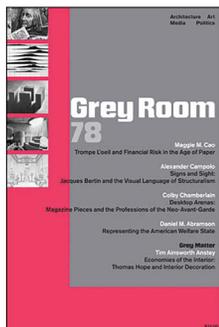
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Roger F. Malina, executive editor

Leonardo is the leading international journal in the application of contemporary science and technology to the arts and music. The companion annual journal, *Leonardo Music Journal* (including Annual Audio Series), features the latest in music, multimedia art, sound science, and technology.

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science and technology



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Ludo Waltman, editor-in-chief

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Emphasis will be placed on studies that provide insight into the system of science, general laws of scientific work, scholarly communication, science indicators, science policy, and the scientific workforce.

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Mark Johnson, Ani Nenkova, and Brian Roark, editors-in-chief

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science and technology

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Richard N. Aslin, editor

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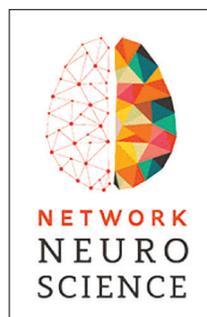
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Peter Dayan and Read Montague, editors

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Steven Bernstein, Matthew Hoffmann, and Erika Weinthal, editors

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International Security

Steven E. Miller, editor-in-chief

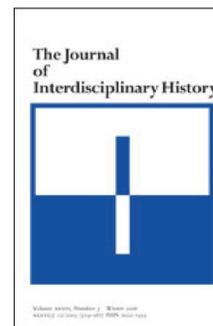
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Diane J. McCree, managing editor

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Robert I. Rotberg, Theodore K. Rabb (1937–2019), and Reed Ueda, editors

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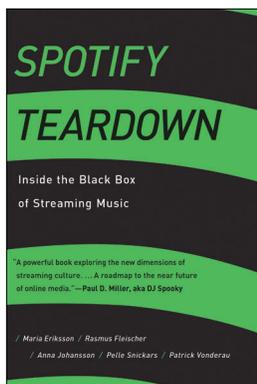
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- Abi-Rached**, ‘Asfūriyyeh 86
Acheatel, *Perspecta* 53 40
Agénor, Monetary Policy and Macroprudential Regulation with Financial Frictions 96
Agnieszka Kurant, **Hessler** 74
AI in the Wild, **Dauvergne** 22
Algorithms Are Not Enough, **Roitblat** 84
Algorithms, **Louridas** 41
Allison, Lee Kuan Yew 51
Alternatives to Multilateralism, **Partzsch** 103
Ambient Play, **Hjorth** 33
American Trip, **Hartogsohn** 86
Anti-vaxxers, **Berman** 14
Anticorruption, **Rotberg** 42
Appendix N, **Bebergal** 76
Architecture of Bathing, **Pearson** 20
Artful Objects, **Harman** 67
Artist in the Machine, **Miller** 49
‘Asfūriyyeh, **Abi-Rached** 86
Ashworth, Notes Made While Falling 58
Assetization, **Birch** 113
Autobiography of a Transgender Scientist, **Barres** 50
Bad Penny Blues, **Unsworth** 77
Barassi, Child Data Citizen 106
Barres, The Autobiography of a Transgender Scientist 50
Bayesian Statistics for Experimental Scientists, **Chechile** 117
Bayne, The Manifesto for Teaching Online 100
Bebergal, Appendix N 76
Behavioral Insights, **Hallsworth** 41
Berman, Anti-vaxxers 14
Bernhardt, Quantum Computing for Everyone 47
Bertini, The Ends Game 17
Between the Tracks, **Puckette** 116
Beverly Buchanan, **Groom** 55
Beyond 9/11, **Lawson** 112
Beyond the Valley, **Srinivasan** 49
Billington, From Insight to Innovation 35
Biomechanics of Movement, **Delp** 102
Birch, Assetization 113
Bitcoin, Blockchain, and Cryptoassets, **Schär** 97
Boissier, Multi-Agent Oriented Programming 93
Bonifazio, The Photoromance 37
Born to Parse, **Lightfoot** 108
Botanicum Medicinale, **Whitlock** 21
Boylan, Visual Culture 41
Bradley, Topology 118
Break On Through, **Richert** 54
Buck, Climate Engineering 73
Burbridge, Photography After Capitalism 56
Busch, Tell It to the Stones 72
Cabarets of Death, **Gordon** 77
Campany, On Photographs 10
Castle Faggot, **McCormack** 62
Castriota, Wine Economics 95
Catren, Pleromatica, or Elsinor’s Trance 81
Changing Connectomes, **Kaiser** 110
Changing Minds, **Kreuz** 52
Chechile, Bayesian Statistics for Experimental Scientists 117
Chess, Play like a Feminist 30
Child Data Citizen, **Barassi** 106
Choi-Fitzpatrick, The Good Drone 85
Chrisomalis, Reckonings 90
Christie, If Schools Didn’t Exist 101
Clayton, The New Internationalists 57
Clegg, Everyday Chaos 34
Climate Engineering, **Buck** 73
Coles, EP, Volume 3 71
Collins, Studying Sound 117
Computational Psychiatry, **Seriès** 109
Contamination of the Earth, **Jarrige** 6
Cosmic Odyssey, **Schweizer** 26
Critical Zones, **Latour** 36
Cultural Analytics, **Manovich** 82
Curatorial Condition, **von Bismarck** 72
Custodio, Who Are You? 32
Cyber Republic, **Zarkadakis** 12
Data Action, **Williams** 28
Dauvergne, AI in the Wild 22
Davis, How Artifacts Afford 94
de Bruyn, Futurity Report 70
De Houwer, The Psychology of Learning 91
De Koven, The Infinite Playground 31
Deal, A Theory of Indexical Shift 107
Decety, The Social Brain 90
Deep Time Reckoning, **Ialenti** 87
Delp, Biomechanics of Movement 102
Democratizing Our Data, **Lane** 13
Demos, Radical Futurisms 65
DeNardis, Researching Internet Governance 106
Deserting from the Culture Wars, **Hlavajova** 36
Designing Constructionist Futures, **Holbert** 101
Devadoss, Mage Merlin’s Unsolved Mathematical Mysteries 19
Dezuanni, Peer Pedagogies on Digital Platforms 100
Digital Entrepreneurship in Africa, **Friederici** 89
Dillon, In Pieces 68
Distributed Ledgers, **Townsend** 99
Documentary in Dispute, **Miller** 38
Dosher, Perceptual Learning 109
Dr Space Junk vs The Universe, **Gorman** 48
Driverless at Last, **Lipson** 23
Drucker, Visualization and Interpretation 94
Dunaway, Practice Exercises for Intermediate Microeconomic Theory 96
Economic Ekphrasis, **Guillet de Monthoux** 67
Edelman, Life, Death, and Other Inconvenient Truths 2
Education Crossing Borders, **Fisher** 102
Elements of Computing Systems, second edition, **Nisan** 92
Elements of Game Design, **Zubek** 104
Elusive Shift, **Peterson** 83
Ends Game, **Bertini** 17
Engelland, Phenomenology 41
Enriquez, Right/Wrong 5
Entanglements, **Williams** 9
EP, Volume 3, **Coles** 71
Epidemic Illusions, **Richardson** 82
Ereditato, Ever Smaller 27
Espinola-Arredondo, Intermediate Microeconomic Theory 96
Eve, Reassembling Scholarly Communications 105
Ever Smaller, **Ereditato** 27
Everyday Chaos, **Clegg** 34
Fedorova, Tactics of Interfacing 95
Feeling of Life Itself, **Koch** 46
Ferreira da Silva, Unpayable Debt 68
Fighting Corruption Is Dangerous, **Okonjo-Iweala** 50
Fire, Ice, and Physics, **Thompson** 48
Fisher, Education Crossing Borders 102
Fontaine, Human Strike and the Art of Creating Freedom 60
Food Routes, **Metcalfe** 54
Forgotten Values, **Kramarz** 103
Free-to-Play, **Paul** 32
Freezer Door, **Sycamore** 61
Friederici, Digital Entrepreneurship in Africa 89
From Insight to Innovation, **Billington** 35

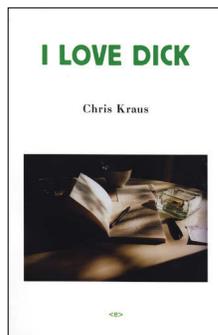
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- Futurity Report, **de Bruyn** 70
- Gans**, Innovation + Equality 52
- Gardner**, A Synthesizing Mind 3
- Gilbert**, Innovation Matters 98
- Godfrey**, The Story of Contemporary Art 11
- Goldstein**, The Mind 25
- Good Drone, **Choi-Fitzpatrick** 85
- Gordon**, Cabarets of Death 77
- Gorman**, Dr Space Junk vs The Universe 48
- Gorman**, Idea Colliders 85
- Graw**, In Another World 64
- Graw**, Three Cases of Value Reflexion 69
- Grimdark**, Linward 76
- Groom**, Beverly Buchanan 55
- Growth, **Smil** 44
- Groys**, Logic of the Collection 69
- Guillet de Monthoux**, Economic Ekphrasis 67
- Hallsworth**, Behavioral Insights 41
- Hamkins**, Proof and the Art of Mathematics 108
- Handprints on Hubble, **Sullivan** 44
- Harman**, Artful Objects 67
- Hartogsohn**, American Trip 86
- Health**, Rodríguez Muñoz 40
- Helmreich**, Oceanography 73
- Henke**, Repairing Infrastructures 113
- Hessel**, Walking in Berlin 53
- Hessler**, Agnieszka Kurant 74
- Hjorth**, Ambient Play 33
- Hlavajova**, Deserting from the Culture Wars 36
- Holbert**, Designing Constructionist Futures 101
- Holmes**, Mismatch 45
- Hon**, A New History of the Future in 100 Objects 8
- Horgan**, Pay Attention 78
- How Artifacts Afford, **Davis** 94
- How Pac-Man Eats, **Wardrip-Fruin** 104
- Human Strike and the Art of Creating Freedom, **Fontaine** 60
- Ialenti**, Deep Time Reckoning 87
- Idea Colliders, **Gorman** 85
- If Schools Didn't Exist, **Christie** 101
- In a Sound World, **Segalen** 73
- In Another World, **Graw** 64
- In Pieces, **Dillon** 68
- Infinite Playground, **De Koven** 31
- Infrastructural Brutalism, **Truscello** 112
- Innovation + Equality, **Gans** 52
- Innovation Matters, **Gilbert** 98
- Intermediate Microeconomic Theory, **Espinola-Arredondo** 96
- Jacobson**, Salt Wars 15
- Jarrige**, The Contamination of the Earth 6
- Joseph Kosuth**, Welchman 66
- Kaiser**, Changing Connectomes 110
- Kelleher**, Fundamentals of Machine Learning for Predictive Data Analytics, second edition 93
- Klein**, Technoscience in History 115
- Koch**, The Feeling of Life Itself 46
- Konrad Wachsmann's Television, **Wigley** 71
- Kramarz**, Forgotten Values 103
- Kreuz**, Changing Minds 52
- Kubota**, Type-Logical Syntax 107
- Kusters**, A Philosophy of Madness 24
- LaBelle**, Sonic Agency 58
- LaCava**, The Superrationals 62
- Lane**, Democratizing Our Data 13
- Latour**, Critical Zones 36
- Lave**, Streams of Revenue 88
- Laws of Simplicity, **Maeda** 45
- Lawson**, Beyond 9/11 112
- Lee Kuan Yew, **Allison** 51
- Leski**, The Storm of Creativity 46
- Life, Death, and Other Inconvenient Truths, **Edelman** 2
- Light**, States of Childhood 114
- Lightfoot**, Born to Parse 108
- Lind**, Tensta Museum 74
- Linward**, Grimdark 76
- Lipson**, Driverless at Last 23
- Living Literacies, **Pahl** 99
- Logic of the Collection, **Groys** 69
- Louridas**, Algorithms 41
- Lovelock**, Novacene 47
- Luque-Ayala**, Urban Operating Systems 116
- Mackay**, Secrets of Creation 80
- Maeda**, The Laws of Simplicity 45
- Mage Merlin's Unsolved Mathematical Mysteries, **Devadoss** 19
- Make It Clear, **Winston** 16
- Making Art Work, **McCray** 84
- Making Open Development Inclusive, **Smith** 105
- Manifesto for Teaching Online, **Bayne** 100
- Manovich**, Cultural Analytics 82
- Massive Science**, Women of Science Tarot 18
- Mattin**, Social Dissonance 80
- Mavroidis**, The Regulation of International Trade, Volume 3 98
- McCormack**, Castle Faggot 62
- McCray**, Making Art Work 84
- Memory as Prediction, **Vecchi** 91
- Mercury Stories, **Selin** 88
- Metcalfe**, Food Routes 54
- Michelson**, On the Wings of Hypothesis 38
- Microbiome, **Spies** 73
- Microeconomic Essentials, **Prag** 97
- Midal**, The Murder Factory 63
- Miller**, Documentary in Dispute 38
- Miller**, The Artist in the Machine 49
- Mind, **Goldstein** 25
- Mismatch, **Holmes** 45
- MIT Sloan Management Review**, A Manager's Guide to the New World of Work 35
- Monetary Policy and Macroprudential Regulation with Financial Frictions, **Agénor** 96
- Morrow**, Unconscionable Crimes 111
- Moss**, Remaking Berlin 114
- Moving Planets Around, **Roa** 89
- Moynihan**, X-Risk 79
- Multi-Agent Oriented Programming, **Boissier** 93
- Murder Factory, **Midal** 63
- Muse**, Odalisque, Squaw, Simpson 75
- Nahmias**, The Natural Method 111
- Natural Method, **Nahmias** 111
- New History of the Future in 100 Objects, **Hon** 8
- New Internationalists, **Clayton** 57
- Niermann**, Solution 295–304 73
- Nisan**, The Elements of Computing Systems, second edition 92
- Notes Made While Falling, **Ashworth** 58
- Novacene, **Lovelock** 47
- Oceanography, **Helmreich** 73
- Okonjo-Iweala**, Fighting Corruption Is Dangerous 50
- On Photographs, **Company** 10
- On the Wings of Hypothesis, **Michelson** 38
- Online Afterlives, **Sisto** 33

- Owning the Street, **Thorpe** 118
Pahl, Living Literacies 99
Partzsch, Alternatives to Multilateralism 103
Paul, Free-to-Play 32
 Pay Attention, **Horgan** 78
Pearson, The Architecture of Bathing 20
 Peer Pedagogies on Digital Platforms, **Dezuanni** 100
 Perceptual Learning, **Dosher** 109
 Perspecta 53, **Acheatel** 40
Peterson, The Elusive Shift 83
 Phenomenology, **Engelland** 41
 Philosophy of Madness, **Kusters** 24
 Photography After Capitalism, **Burbridge** 56
 Photoromance, **Bonifazio** 37
Pinto, White West 70
 Play like a Feminist., **Chess** 30
 Pleromatica, or Elsinor's Trance, **Catren** 81
Plunkett, Sharenthood 51
 Practice Exercises for Intermediate
 Microeconomic Theory, **Dunaway** 96
Prag, Microeconomic Essentials 97
Precurity Lab, Technoprecarious 57
 Proof and the Art of Mathematics, **Hamkins** 108
 Psychology of Learning, **De Houwer** 91
Puckette, Between the Tracks 116
 Quantum Computing for Everyone, **Bernhardt** 47
 Radical Futurisms, **Demos** 65
Rainer, Revisions 59
Reagle, Wikipedia @ 20 29
 Reassembling Scholarly Communications, **Eve** 105
 Reckonings, **Chrisomalis** 90
 Recommendation Engines, **Schrage** 42
 Regulation of International Trade, Volume 3, **Mavroidis** 98
Reichardt, The Themerson Archive Catalogue, 3-vol. set 39
 Remaking Berlin, **Moss** 114
 Repairing Infrastructures, **Henke** 113
 Researching Internet Governance, **DeNardis** 106
 Revisions, **Rainer** 59
Richardson, Epidemic Illusions 82
Richert, Break On Through 54
 Right/Wrong, **Enriquez** 5
Roa, Moving Planets Around 89
Rodríguez Muñoz, Health 40
Roitblat, Algorithms Are Not Enough 84
Rotberg, Anticorruption 42
 Salt Wars, **Jacobson** 15
Schär, Bitcoin, Blockchain, and Cryptoassets 97
Schrage, Recommendation Engines 42
Schweizer, Cosmic Odyssey 26
Schwitzgebel, A Theory of Jerks and Other
 Philosophical Misadventures 53
 Secrets of Creation, **Mackay** 80
Segalen, In a Sound World 73
Selin, Mercury Stories 88
Seriès, Computational Psychiatry 109
 Shadmehr, **Vigor** 110
 Sharenthood, **Plunkett** 51
Simpson, Muse, Odalisque, Squaw 75
Sisto, Online Afterlives 33
 Smart Wife, **Strengers** 1
Smil, Growth 44
Smith, Making Open Development Inclusive 105
 Social Brain, **Decety** 90
 Social Dissonance, **Mattin** 80
 Social Science for What?, **Solovey** 115
Solovey, Social Science for What? 115
 Solution 295–304, **Niermann** 73
 Sonic Agency, **LaBelle** 58
Spiegs, Microbiome 73
Srinivasan, Beyond the Valley 49
 States of Childhood, Light 114
 Storm of Creativity, **Leski** 46
 Story of Contemporary Art, **Godfrey** 11
 Story of Life in 10 1/2 Species, **Taylor** 7
 Streams of Revenue, **Lave** 88
Strengers, The Smart Wife 1
 Studying Sound, **Collins** 117
Sullivan, Handprints on Hubble 44
Sundén, Who's Laughing Now? 83
Sunstein, Too Much Information 4
 Superrationals, **LaCava** 62
Sycamore, The Freezer Door 61
 Synthesizing Mind, **Gardner** 3
 Tactics of Interfacing, **Fedorova** 95
Taylor, The Story of Life in 10 1/2 Species 7
 Technoprecarious, **Precurity Lab** 57
 Technoscience in History, **Klein** 115
 Tell It to the Stones, **Busch** 72
 Tensta Museum, **Lind** 74
 Themerson Archive Catalogue, 3-vol. set, **Reichardt** 39
 Theory of Indexical Shift, **Deal** 107
 Theory of Jerks and Other Philosophical Misadventures, **Schwitzgebel** 53
Thomashow, To Know the World 87
Thompson, Fire, Ice, and Physics 48
Thorpe, Owning the Street 118
 Three Cases of Value Reflexion, **Graw** 69
 To Know the World, **Thomashow** 87
 Too Much Information, **Sunstein** 4
 Topology, **Bradley** 118
Townsend, Distributed Ledgers 99
Truscello, Infrastructural Brutalism 112
 Type-Logical Syntax, **Kubota** 107
 Unconscionable Crimes, **Morrow** 111
 Unpayable Debt, **Ferreira da Silva** 68
Unsworth, Bad Penny Blues 77
 Urban Operating Systems, **Luque-Ayala** 116
Vecchi, Memory as Prediction 91
 Vigor, **Shadmehr** 110
 Visual Culture, **Boylan** 41
 Visualization and Interpretation, **Drucker** 94
von Bismarck, The Curatorial Condition 72
 Walking in Berlin, **Hessel** 53
Wardrip-Fruin, How Pac-Man Eats 104
Welchman, Joseph Kosuth 66
 White West, **Pinto** 70
Whitlock, Botanicum Medicinale 21
 Who Are You?, **Custodio** 32
 Who's Laughing Now?, **Sundén** 83
Wigley, Konrad Wachsmann's Television 71
 Wikipedia @ 20, **Reagle** 29
Williams, Data Action 28
Williams, Entanglements 9
 Wine Economics, **Castriota** 95
Winston, Make It Clear 16
 Women of Science Tarot, **Massive Science** 18
 X-Risk, **Moynihan** 79
Zarkadakis, Cyber Republic 12
Zubek, Elements of Game Design 104

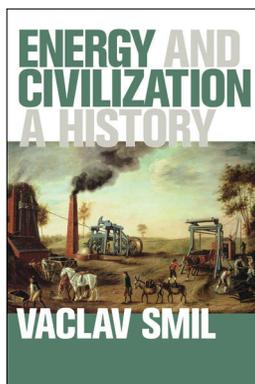
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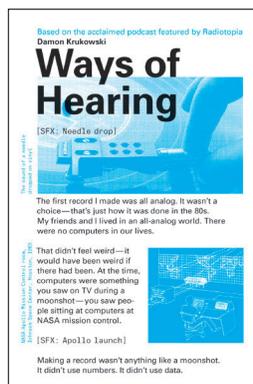
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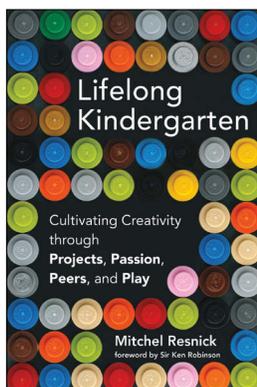
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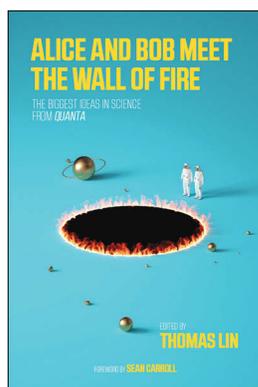
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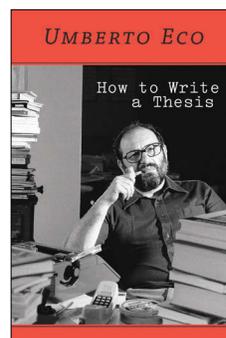
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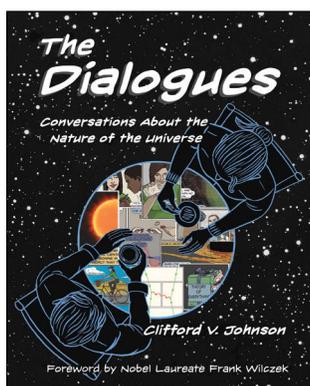
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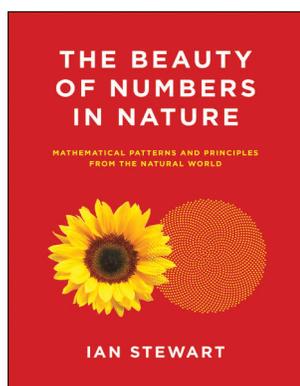
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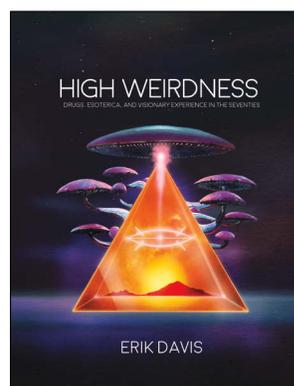
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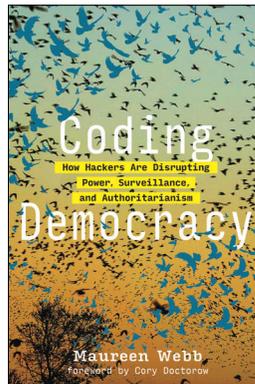
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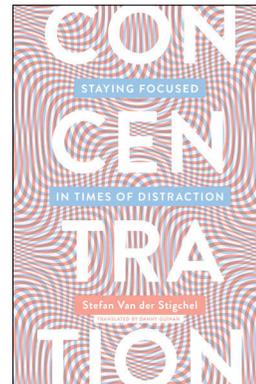
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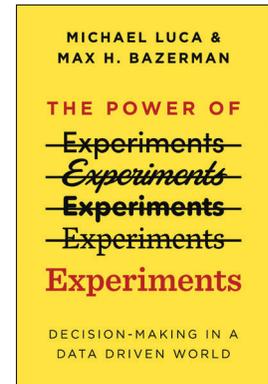
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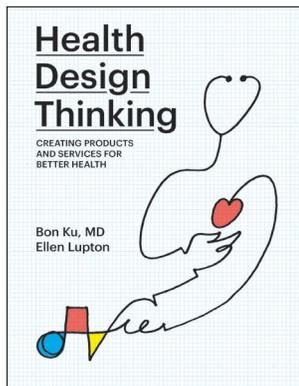
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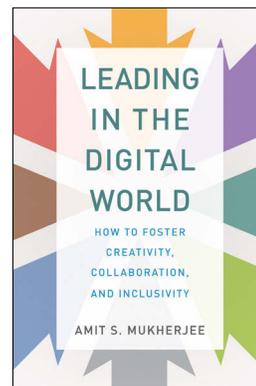
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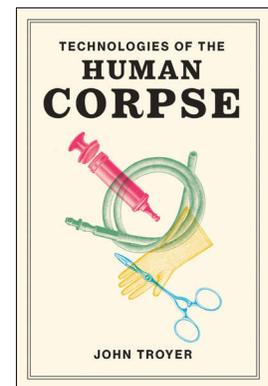
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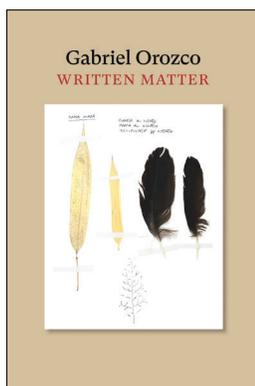
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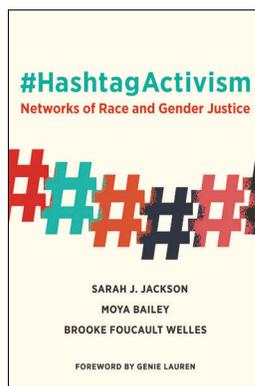
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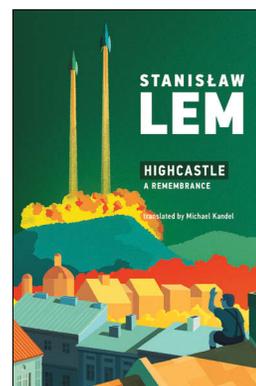
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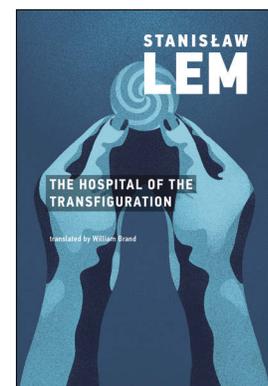
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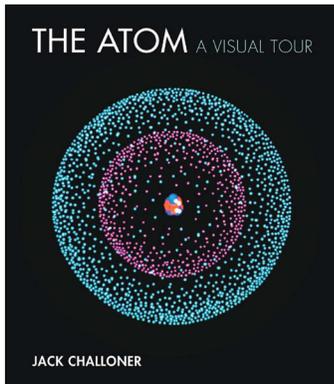


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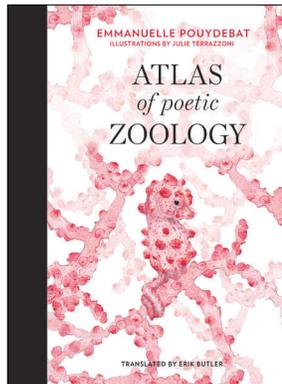


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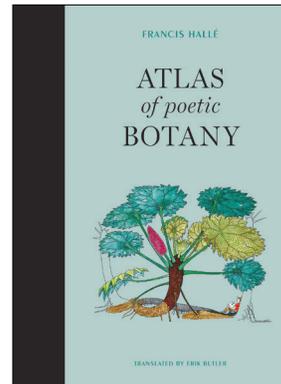
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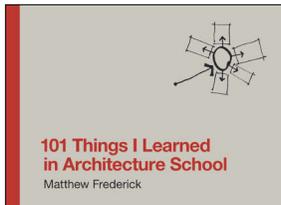
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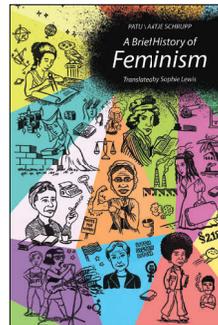
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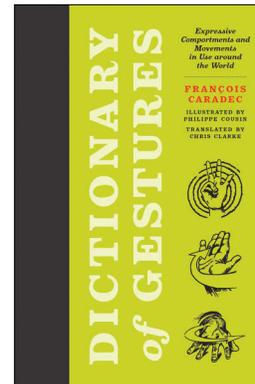
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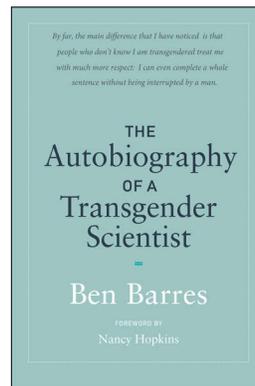
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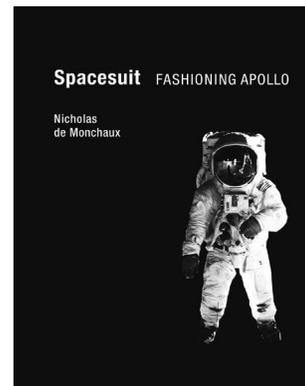
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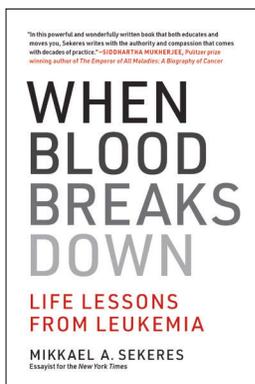
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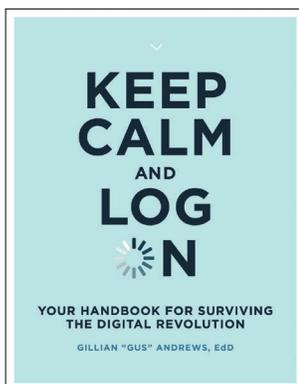
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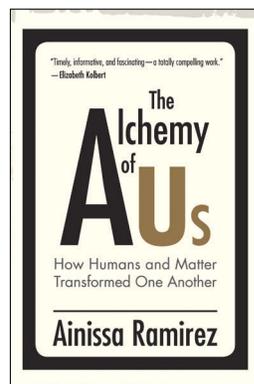
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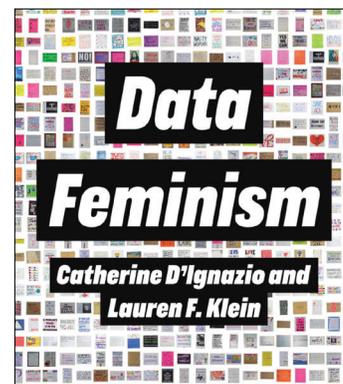
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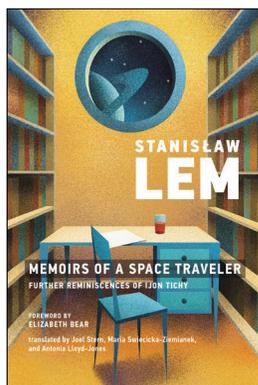
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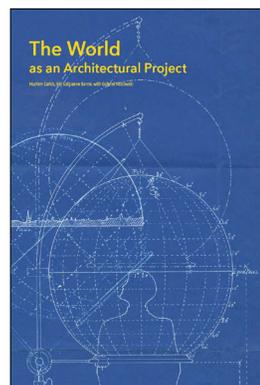
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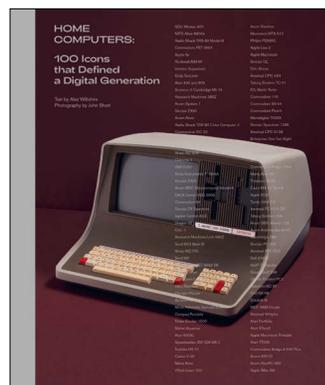
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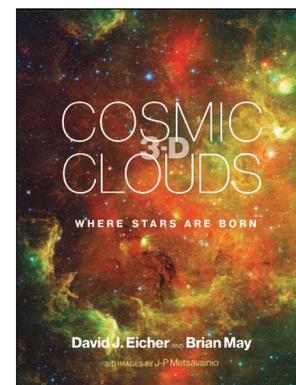
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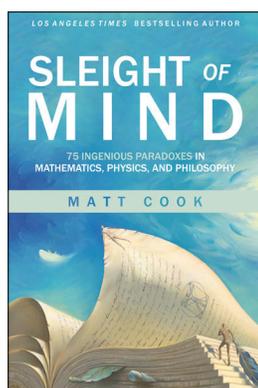
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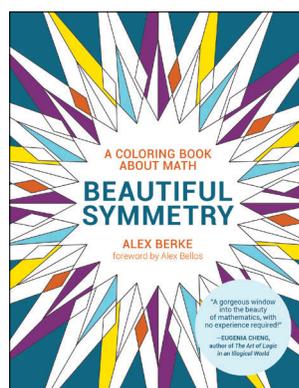
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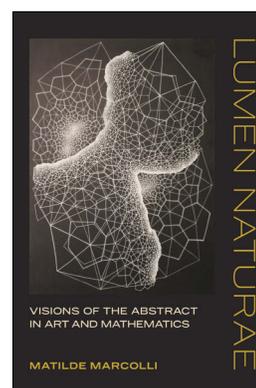
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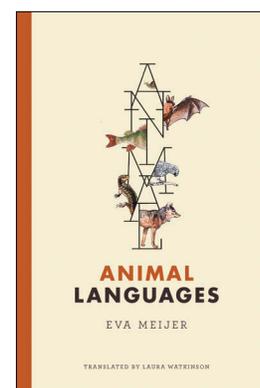
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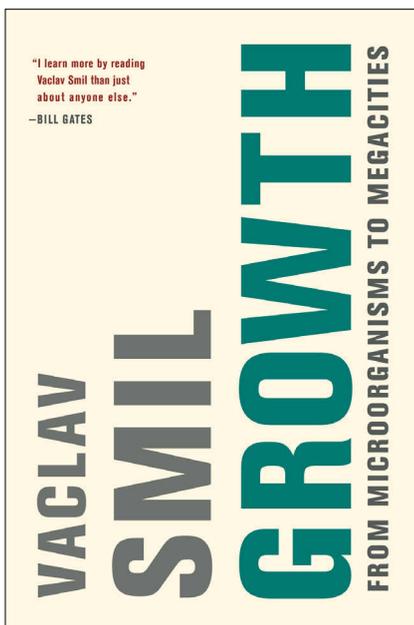


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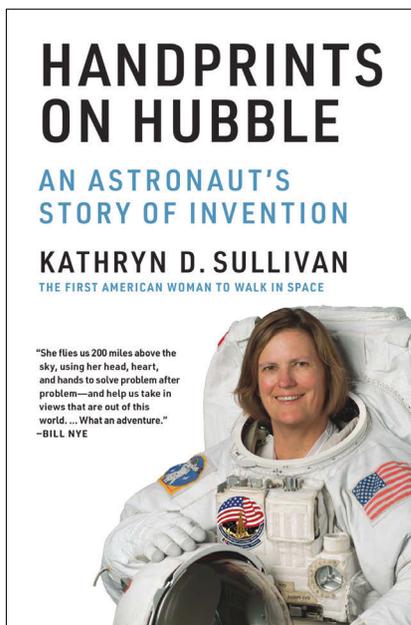
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