

#### DEAR FRIENDS AND READERS.

Since its founding in 1962, the MIT Press has been changing the rules of engagement between authors and readers as the publisher



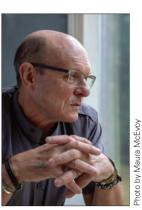
**Amy Brand** 

of groundbreaking works across the arts and sciences. That ethos is well represented in our Spring 2019 list, with forceful books as varied as Cass Sunstein's How Change Happens, Chris Bernhardt's Quantum Computing for Everyone, and Damon Krukowski's Ways of Hearing. We've chosen an image from art historian John Blakinger's new study of artist, designer, and visual theorist Gyorgy Kepes for the cover of our Spring 2019 catalog because it reflects that ethos so well, in its treatment of the relationship between art, science, and military power during the Cold

War, and of Kepes himself, who founded the Center for Advanced Visual Studies at MIT in 1967. It is also one way we choose to honor

our incomparable program in art and architecture, and the peerless Roger Conover, who is stepping back from his full-time editorial role this year. During his extraordinary forty-year tenure as Executive Editor for Art and Architecture, Roger's curatorial vision has had an enormous impact on the publishing world and on the shape of writing about art. He leaves his mark not only in the 1,400+ works on art, design, architecture, and cultural theory that he acquired for the MIT Press during his tenure, but also-indelibly-in the sensibility and soul of the MIT Press and all of us who work here.

Amy Brand Director, The MIT Press



Roger Conover

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## **How Change Happens**

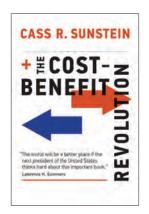
#### Cass R. Sunstein

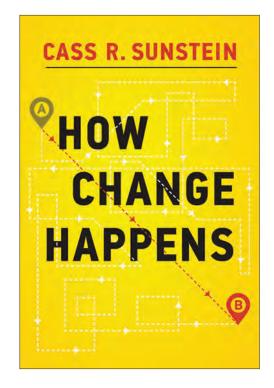
How does social change happen? When do social movements take off? Sexual harassment was once something that women had to endure; now a movement has risen up against it. White nationalist sentiments, on the other hand, were largely kept out of mainstream discourse; now there is no shortage of media outlets for them. In this book, with the help of behavioral economics, psychology, and other fields, Cass Sunstein casts a bright new light on how change happens.

Sunstein focuses on the crucial role of social norms—and on their frequent collapse. When norms lead people to silence themselves, even an unpopular status quo can persist. Then one day, someone challenges the norm—a child who exclaims that the emperor has no clothes; a woman who says "me too." Sometimes suppressed outrage is unleashed, and long-standing practices fall.

Sometimes change is more gradual, as "nudges" help produce new and different decisions—apps that count calories; texted reminders of deadlines; automatic enrollment in green energy or pension plans. Sunstein explores what kinds of nudges are effective and shows why nudges sometimes give way to bans and mandates. Finally, he considers social divisions, social cascades, and "partyism," when identification with a political party creates a strong bias against all members of an opposing party—which can both fuel and block social change.

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* (MIT Press), *Nudge: Improving Decisions about Health, Wealth, and Happiness* (with Richard H.Thaler), and other books.





The different ways that social change happens, from unleashing to nudging to social cascades.

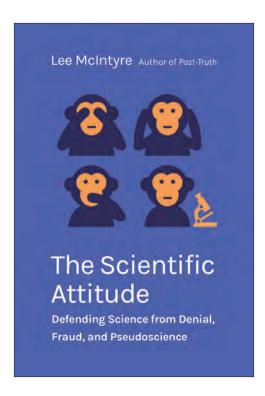
April 6 x 9, 312 pp.

**\$29.95T/£24.00 cloth** 978-0-262-03957-4

Also available

The Cost-Benefit Revolution

Cass R. Sunstein \$27.95T/£22.00 cloth 978-0-262-03814-0



An argument that what makes science distinctive is its emphasis on evidence and scientists' willingness to change theories on the basis of new evidence.

May 6 x 9, 280 pp.

**\$27.95T/£22.00 cloth** 978-0-262-03983-3

Also available

**Post-Truth** Lee McIntyre 978-0-262-53504-5 \$15.95T/£11.95 paper

## The Scientific Attitude

Defending Science from Denial, Fraud, and Pseudoscience

#### Lee McIntyre

Attacks on science have become commonplace. Claims that climate change isn't settled science, that evolution is "only a theory," and that scientists are conspiring to keep the truth about vaccines from the public are staples of some politicians' rhetorical repertoire. Defenders of science often point to its discoveries (penicillin! relativity!) without explaining exactly why scientific claims are superior. In this book, Lee McIntyre argues that what distinguishes science from its rivals is what he calls "the scientific attitude"—caring about evidence and being willing to change theories on the basis of new evidence. The history of science is littered with theories that were scientific but turned out to be wrong; the scientific attitude reveals why even a failed theory can help us to understand what is special about science.

McIntyre offers examples that illustrate both scientific success (a reduction in childbed fever in the nineteenth century) and failure (the flawed "discovery" of cold fusion in the twentieth century). He describes the transformation of medicine from a practice based largely on hunches into a science based on evidence; considers scientific fraud; examines the positions of ideology-driven denialists, pseudoscientists, and "skeptics" who reject scientific findings; and argues that social science, no less than natural science, should embrace the scientific attitude. McIntyre argues that the scientific attitude—the grounding of science in evidence—offers a uniquely powerful tool in the defense of science.

**Lee McIntyre** is a Research Fellow at the Center for Philosophy and History of Science at Boston University. He is the author of *Dark Ages: The Case for a Science of Human Behavior* and *Post-Truth*, both published by the MIT Press.



## Ways of Hearing

#### Damon Krukowski

foreword by Emily Thompson

Our voices carry farther than ever before, thanks to digital media. But how are they being heard? In this book, Damon Krukowski examines how the switch from analog to digital audio is changing our perceptions of time, space, love, money, and power. In *Ways of Hearing*—modeled on *Ways of Seeing*, John Berger's influential 1972 book on visual culture—Krukowski offers readers a set of tools for critical listening in the digital age. Just as *Ways of Seeing* began as a BBC television series, *Ways of Hearing* is based on a six-part podcast produced for the groundbreaking public radio podcast network Radiotopia. Inventive uses of text and design help bring the message beyond the range of earbuds.

Each chapter of *Ways of Hearing* explores a different aspect of listening in the digital age: time, space, love, money, and power. Digital time, for example, is designed for machines. When we trade broadcast for podcast, or analog for digital in the recording studio, we give up the opportunity to perceive time together through our media. On the street, we experience public space privately, as our headphones allow us to avoid "ear contact" with the city. Heard on a cell phone, our loved ones' voices are compressed, stripped of context by digital technology. Music has been dematerialized, no longer an object to be bought and sold. With recommendation algorithms and playlists, digital corporations have created a media universe that adapts to us, eliminating the pleasures of brick-and-mortar browsing. Krukowski lays out a choice: do we want a world enriched by the messiness of noise, or one that strives toward the purity of signal only?

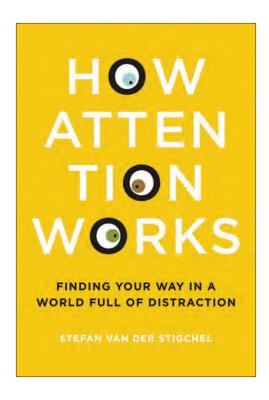
**Damon Krukowski** is a writer and musician. Author of *The New Analog: Listening and Reconnecting in a Digital World,* he has taught writing and sound (and writing about sound) at Harvard University. He was in the indie rock band Galaxie 500 and is currently one half of the folk-rock duo Damon & Naomi. He lives in Cambridge, Massachusetts.



A writer-musician examines how the switch from analog to digital audio is changing our perceptions of time, space, love, money, and power.

April 5 x 7, 104 pp. 40 color illus.

**\$19.95T/£14.99** paper 978-0-262-03964-2



How we filter out what is irrelevant so we can focus on what we need to know.

March 6 x 9, 152 pp. 13 illus.

**\$24.95T/£20.00 cloth** 978-0-262-03926-0

## **How Attention Works**

Finding Your Way in a World Full of Distraction

#### Stefan Van der Stigchel

translated by Danny Guinan

We are surrounded by a world rich with visual information, but we pay attention to very little of it, filtering out what is irrelevant so we can focus on what we think we need to know. Advertisers, web designers, and other "attention architects" try hard to get our attention, promoting products with videos on huge outdoor screens, adding flashing banners to websites, and developing computer programs with blinking icons that tempt us to click. Often they succeed in distracting us from what we are supposed to be doing. In *How Attention Works*, Stefan Van der Stigchel explains the process of attention and what the implications are for our everyday lives.

The visual attention system is efficient, Van der Stigchel writes, because it doesn't waste energy processing every scrap of visual data it receives; it gathers only relevant information. We focus on one snippet of information and assume that everything else is stable and consistent with past experience; that's why most people miss even the most glaring continuity errors in films. If an object doesn't meet our expectations, chances are we won't see it. Van der Stigchel makes his case with examples from real life, explaining, among other things, the limitations of color perception (and why fire trucks shouldn't be red); the importance of location (security guards and radiologists, for example, have to know where to look); the attention-getting properties of faces and spiders; what we can learn from someone else's eye movements; why we see what we expect to see (magicians take advantage of this); and visual neglect and unattended information.

**Stefan Van der Stigchel** is Associate Professor in the Department of Experimental Psychology at Utrecht University.

## **Experiencing the Impossible**

The Science of Magic

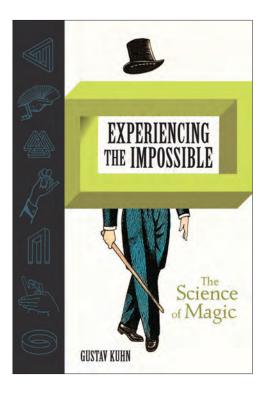
#### **Gustav Kuhn**

What do we see when we watch a magician pull a rabbit out of a hat or read a person's mind? We are captivated by an illusion; we applaud the fact that we have been fooled. Why do we enjoy experiencing what seems clearly impossible, or at least beyond our powers of explanation? In *Experiencing the Impossible*, Gustav Kuhn examines the psychological processes that underpin our experience of magic. Kuhn, a psychologist and a magician, reveals the intriguing—and often unsettling—insights into the human mind that the scientific study of magic provides.

Magic, Kuhn explains, creates a cognitive conflict between what we believe to be true (for example, a rabbit could not be in that hat) and what we experience (a rabbit has just come out of that hat!). Drawing on the latest psychological, neurological, and philosophical research, he suggests that misdirection is at the heart of all magic tricks, and he offers a scientific theory of misdirection. He explores, among other topics, our propensity for magical thinking, the malleability of our perceptual experiences, forgetting and misremembering, free will and mind control, and how magic is applied outside entertaiment—the use of illusion in human-computer interaction, politics, warfare, and elsewhere.

We may be surprised to learn how little of the world we actually perceive, how little we can trust what we see and remember, and how little we are in charge of our thoughts and actions. Exploring magic, Kuhn illuminates the complex—and almost magical—mechanisms underlying our daily activities.

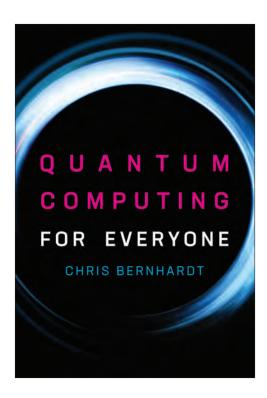
Gustav Kuhn is Reader in Psychology at Goldsmiths, University of London.



How the scientific study of magic reveals intriguing—and often unsettling—insights into the mysteries of the human mind.

March 6 x 9, 296 pp. 43 illus.

**\$27.95T/£22.00 cloth** 978-0-262-03946-8



An accessible introduction to an exciting new area in computation, explaining such topics as qubits, entanglement, and quantum teleportation for the general reader.

March 6 x 9, 224 pp. 60 illus.

**\$24.95T/£20.00 cloth** 978-0-262-03925-3

## **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—which, he says, is easier to describe mathematically than verbally—and what it means when two qubits are entangled (citing Einstein's characterization of what happens when the measurement of one entangled qubit affects the second as "spooky action at a distance"); and introduces quantum cryptography. He recaps standard topics in classical computing—bits, gates, and logic—and describes Edward Fredkin's ingenious billiard ball computer. He defines quantum gates, considers the speed of quantum algorithms, and describes the building of quantum computers. 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).

## **Finding Our Place in the Universe**

How We Discovered Laniakea—the Milky Way's Home

#### Hélène Courtois

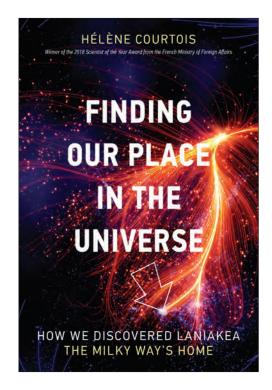
translated by Nikki Kopelman

You are here: on Earth, which is part of the solar system, which is in the Milky Way galaxy, which itself is within the extragalactic supercluster Laniakea. And how can we pinpoint our location so precisely? For twenty years, astrophysicist Hélène Courtois surfed the cosmos with an international team of researchers, working to map our local universe. In this book, Courtois describes this quest and the discovery of our home supercluster.

Courtois explains that Laniakea (which means "immeasurable heaven" in Hawaiian) is the largest galaxy structure known to which we belong; it is huge, almost too large to comprehend—about five million light-years in diameter. It contains about 100,000 large galaxies like our own, and a million smaller ones. Writing accessibly for nonspecialists, Courtois describes the visualization and analysis that allowed her team to map the large structures of the universe. She highlights the work of individual researchers, including portraits of several exceptional women astrophysicists—presenting another side of astronomy. Key ideas are highlighted in text insets; illustrations accompany the main text.

The French edition of this book was named the Best Astronomy Book of 2017 by the astronomy magazine *Ciel et espace*. For this MIT Press English-language edition, Courtois has added descriptions of discoveries made after Laniakea: the cosmic velocity web and the Dipole and Cold Spot repellers. An engaging account of how scientists made one of the most important discoveries in astrophysics in recent years, her story is a tribute to teamwork and international collaboration.

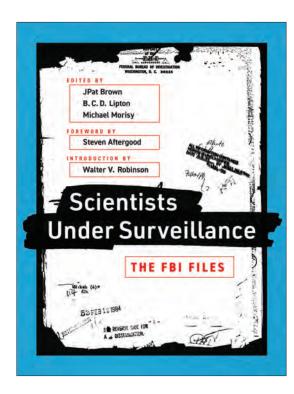
**Hélène Courtois** is a French astrophysicist specializing in cosmography. She is Professor and Vice President at the University of Lyon 1 and the director of a research team at the Lyon Institute of Nuclear Physics. She received the 2018 Scientist of the Year Award from the French Ministry of Foreign Affairs for her international influence. She is featured in the 2019 Nova documentary *Cosmic Flows: The Cartographers of the Universe.* 



How a team of researchers, led by the author, discovered our home galaxy's location in the universe.

May 5 3/8 x 8, 192 pp. 69 illus.

**\$24.95T/£20.00 cloth** 978-0-262-03995-6



Cold War-era FBI files on famous scientists, including Neil Armstrong, Isaac Asimov, Albert Einstein, Richard Feynman, Alfred Kinsey, and Timothy Leary.

> March 8 x 10 1/2 432 pp.

**\$24.95T/£20.00** paper 978-0-262-53688-2

Also available

Writers Under Surveillance The FBI Files

JPat Brown, B. C. D. Lipton, and Michael Morisy \$24.95T/£20.00 978-0-262-53638-7

## **Scientists Under Surveillance**

The FBI Files

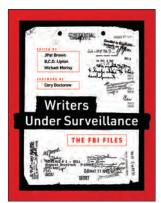
JPat Brown, B. C. D. Lipton, and Michael Morisy foreword by Steven Aftergood introduction by Walter V. Robinson

Armed with ignorance, misinformation, and unfounded suspicions, the FBI under J. Edgar Hoover cast a suspicious eye on scientists in disciplines ranging from physics to sex research. If the Bureau surveilled writers because of what they believed (as documented in *Writers Under Surveillance*), it surveilled scientists because of what they knew. Such scientific ideals as the free exchange of information seemed dangerous when the Soviet Union and the United States regarded each other with mutual suspicion that seemed likely to lead to mutual destruction. *Scientists Under Surveillance* gathers FBI files on some of the most famous scientists in America, reproducing them in their original typewritten, teletyped, hand-annotated, form.

Readers learn that Isaac Asimov, at the time a professor at Boston University's School of Medicine, was a prime suspect in the hunt for a Soviet informant codenamed ROBPROF (the rationale perhaps being that he wrote about robots and was a professor). Richard Feynman had a "hefty" FBI file, some of which was based on documents agents found when going through the Soviet ambassador's trash (an invitation to a physics conference in Moscow); other documents in Feynman's file cite an informant who called him a "master of deception" (the informant may have been Feynman's ex-wife). And the Bureau's relationship with Alfred Kinsey, the author of *The Kinsey Report*, was mutually beneficial, with each drawing on the other's data.

The files collected in *Scientists Under Surveillance* were obtained through Freedom of Information Act requests by MuckRock, a nonprofit engaged in the ongoing project of freeing American history from the locked filing cabinets of government agencies.

JPat Brown is Executive Editor of MuckRock. B. C. D. Lipton is Senior Reporter at MuckRock. Michael Morisy is cofounder of MuckRock.



#### The Scientists

Neil Armstrong, Isaac Asimov, Hans Bethe, John P. Craven, Albert Einstein, Paul Erdos, Richard Feynman, Mikhail Kalashnikov, Alfred Kinsey, Timothy Leary, William Masters, Arthur Rosenfeld, Vera Rubin, Carl Sagan, Nikola Tesla

## Atlas of Poetic Zoology

#### **Emmanuelle Pouydebat**

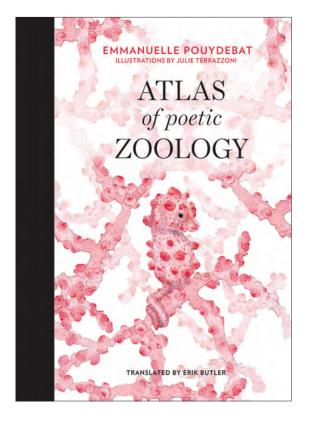
illustrations by Julie Terrazzoni translated by Erik Butler

This Atlas of Poetic Zoology leads readers into a world of wonders where turtles fly under the sea, lizards walk on water, insects impersonate flowers, birds don't fly, frogs come back from the dead, and virgin sharks give birth. Animals, writes Emmanuelle Pouydebat, are lyric poets; they discover and shape the world when they sing, dance, explore, and reproduce. The animal kingdom has been evolving for 700,000 million years, weathering many crises of extinction; this book allows us to draw inspiration from animals' enduring vitality.

Pouydebat's text, accompanied by striking color illustrations by artist Julie Terrazzoni, offers a catalog of wondrous beings. Pouydebat describes the African bush elephant—the biggest land mammal of them all, but the evolutionary descendant of a tiny animal that stood less than fifty centimeters (nineteen inches) high sixty million years ago; the scaly, toothless pangolin, the world's most endangered mammal—and perhaps its most atypical; the red-lipped batfish, which walks, rather than swims, across the ocean floor; and the great black cockatoo, a gifted percussionist. Chimpanzees, she tells us, self-medicate with medicinal plants; the jellyfish, under stress, reverts to juvenile polyp-hood; and the sweetly named honey badger feeds on reptiles, termites, scorpions, and earthworms.

Pouydebat, a researcher at the French Museum of Natural History, and Terrazzoni capture the astonishment promised by any excursion into nature—the happiness that comes from watching a dragonfly, spider, frog, lizard, elephant, parrot, mouse, orangutan, or ladybug. It's the joy of witnessing life itself. We need only open our eyes to see.

**Emmanuelle Pouydebat** is a permanent researcher employed by the CNRS (French National Center for Scientific Research), working at the Muséum National d'Histoire Naturelle in Paris.



A catalog of wonders, from walking fish to selfmedicating chimpanzees.

7 1/2 x 10 1/2, 152 pp. 36 color illus.

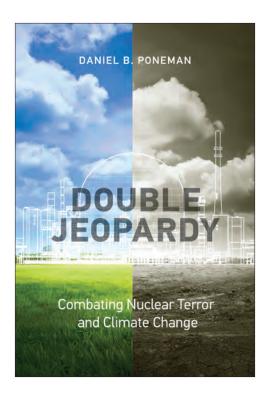
**\$24.95T/£20.00 cloth** 978-0-262-03997-0







Illustrations by Julie Terrazzoni, from The Atlas of Poetic Zoology



Making the case that we can use nuclear power to combat climate change even as we reduce the risks of nuclear terror.

February 6 1/8 x 9 1/4, 152 pp. 17 illus.

**\$27.95T/£22.00 cloth** 978-0-262-03730-3

Belfer Center Studies in International Security

## **Double Jeopardy**

Combating Nuclear Terror and Climate Change

#### Daniel B. Poneman

Humanity faces two existential threats: nuclear annihilation and catastrophic climate change. Both have human origins, and both are linked to the use of nuclear energy. Inherent in the use of atomic fission is the risk that the technology and materials can be diverted to terrorists or hostile nations and used to make nuclear weapons. The key question is whether we can use nuclear energy to reduce the threat of climate change without increasing the risk that nuclear weapons will be used.

In *Double Jeopardy*, Daniel Poneman argues that the world needs an "all-of-the-above" energy policy, one that advances the goal of decarbonizing the environment through all available means—including nuclear power. Poneman makes a compelling case that we can enhance the ability of nuclear power to combat climate change even as we reduce the risks of nuclear terror. Doing so will require well-crafted laws and policies, implemented with an ethos of constant vigilance and embedded in a culture that weaves safety and security goals into the fabric of our nuclear programs. This will enable government and industry to work together to maximize energy and climate benefits while minimizing safety and security risks.

**Daniel B. Poneman** is a Senior Fellow with the Belfer Center at the Harvard Kennedy School and the President and Chief Executive Officer of Centrus Energy Corp., which provides enrichment, fuel, and fuel services to utilities that operate nuclear reactors throughout the world. Poneman previously served as Deputy Secretary of the U.S. Department of Energy, as Acting Secretary of Energy, and on the National Security Council staff. He is the coauthor of *Going Critical: The First North Korean Nuclear Crisis*.

## **Iterate**

Ten Lessons in Design and Failure

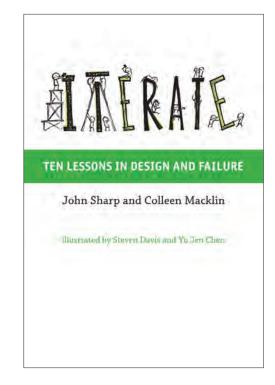
#### John Sharp and Colleen Macklin

illustrated by Steven Davis and Yu Jen Chen diagrams by Tuba Ozkan and Carla Molins Pitarch

Failure is an inevitable part of any creative practice. As game designers, John Sharp and Colleen Macklin have grappled with crises of creativity, false starts, and bad outcomes. Their tool for coping with the many varieties of failure: iteration, the cyclical process of conceptualizing, prototyping, testing, and evaluating. Sharp and Macklin have found that failure—often hidden, covered up, a source of embarrassment—is the secret ingredient of iterative creative process. In *Iterate*, they explain how to fail better.

After laying out the four components of creative practice—intention, outcome, process, and evaluation—Sharp and Macklin describe iterative methods from a wide variety of fields. They show, for example, how *Radiolab* cohosts Jad Abumrad and Robert Krulwich experiment with radio as a storytelling medium; how professional skateboarder Amelia Bródka develops skateboarding tricks through trial and error; and how artistic polymath Miranda July explores human frailty through a variety of media and techniques. Whimsical illustrations tell parallel stories of iteration, as hard-working cartoon figures bake cupcakes, experiment with levitating office chairs, and think outside the box in toothbrush design ("let's add propellers!"). All, in their various ways, use iteration to transform failure into creative outcomes. With *Iterate*, Sharp and Macklin offer useful lessons for anyone interested in the creative process.

John Sharp and Colleen Macklin are both Associate Professors in the School of Art, Media, and Technology at Parsons School of Design at the New School. They are the coauthors of Games, Design, and Play: A Detailed Approach to Iterative Game Design. John Sharp is also the author of Works of Game: On the Aesthetics of Games and Art (MIT Press) and coauthor of Fun, Taste, & Games: An Aesthetics of the Idle, Unproductive, and Otherwise Playful (MIT Press). Sharp and Macklin are Codirectors of PETLab (Prototyping Education and Technology Lab) at Parsons.



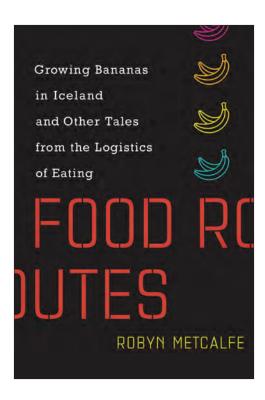
How to confront, embrace, and learn from the unavoidable failures of creative practice; with case studies that range from winemaking to animation.

April 6 x 9, 296 pp. 92 illus.

**\$29.95T/£24.00 cloth** 978-0-262-03963-5

#### **CASE STUDIES**

Allison Tauziet, winemaker • Matthew Maloney, animator • Jad Abumrad and Robert Krulwich, Radiolab cohosts • Wylie Dufresne, chef • Nathalie Pozzi, architect, and Eric Zimmerman, game designer • Andy Milne, jazz musician • Amelia Bródka, skateboarder • Baratunde Thurston, comedian • Cas Holman, toy designer • Miranda July, writer and filmmaker



Finding opportunities for innovation on the path between farmer and table.

March 6 x 9, 208 pp.

**\$24.95T/£20.00 cloth** 978-0-262-03965-9

## **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. What happens between the farm and the kitchen? Why are all avocadoes from Mexico? Why does a restaurant in Maine order lamb from New Zealand? In *Food Routes*, Robyn Metcalfe explores an often-overlooked aspect of the global food system: how food moves from producer to consumer. She finds that the food supply chain is adapting to our increasingly complex demands for both personalization and convenience—but, she says, it won't be an easy ride.

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 greenhouses 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; considers local foods, global foods, and food deserts; investigates the processing, packaging, and storage of food; explores the transportation networks that connect farm to plate; and explains how food can be tracked using sensors and the Internet of Things. Future food may be engineered, networked, and nearly independent of crops grown in fields. New technologies can make the food system more efficient—but at what cost to our traditionally close 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.

## **Fables and Futures**

Biotechnology, Disability, and the Stories We Tell Ourselves

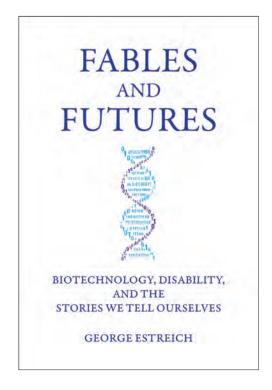
#### **George Estreich**

From next-generation prenatal tests, to virtual children, to the genome-editing tool CRISPR-Cas9, new biotechnologies grant us unprecedented power to predict and shape future people. That power implies a question about belonging: which people, which variations, will we welcome? How will we square new biotech advances with the real but fragile gains for people with disabilities—especially when their voices are all but absent from the conversation?

This book explores that conversation, the troubled territory where biotechnology and disability meet. In it, George Estreich—an award-winning poet and memoirist, and the father of a young woman with Down syndrome—delves into popular representations of cutting-edge biotech: websites advertising next-generation prenatal tests, feature articles on "three-parent IVF," a scientist's memoir of constructing a semisynthetic cell, and more. As Estreich shows, each new application of biotechnology is accompanied by a persuasive story, one that minimizes downsides and promises enormous benefits. In this story, people with disabilities are both invisible and essential: a key promise of new technologies is that disability will be repaired or prevented.

In chapters that blend personal narrative and scholarship, Estreich restores disability to our narratives of technology. He also considers broader themes: the place of people with disabilities in a world built for the able; the echoes of eugenic history in the genomic present; and the equation of intellect and human value. Examining the stories we tell ourselves, the fables already creating our futures, Estreich argues that, given biotech that can select and shape who we are, we need to imagine, as broadly as possible, what it means to belong.

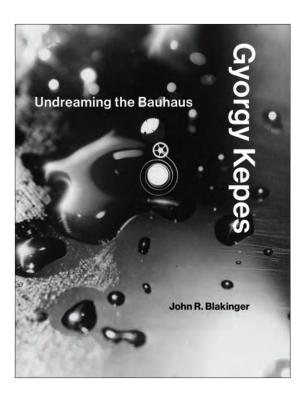
**George Estreich** is the author of *The Shape of the Eye: A Memoir*. His writing has appeared in *Tin House*, the *New York Times*, *Salon*, and other publications. He teaches writing at Oregon State University.



How new biomedical technologies—from prenatal testing to gene-editing techniques—require us to imagine who counts as human and what it means to belong.

March 6 x 9, 232 pp.

**\$27.95T/£22.00 cloth** 978-0-262-03956-7



How Gyorgy Kepes, the last disciple of Bauhaus modernism, became the single most significant artist within a network of scientific experts and elites.

July 7 x 9, 480 pp. 6 color illus.. 195 b&w illus.

**\$55.00T/£43.00 cloth** 978-0-262-03986-4

## **Gyorgy Kepes**

Undreaming the Bauhaus

#### John R. Blakinger

Gyorgy Kepes (1906–2001) was the last disciple of Bauhaus modernism, an acolyte of László Moholy-Nagy and a self-styled revolutionary artist. But by midcentury, transplanted to America, Kepes found he was trapped in the military-industrial-aesthetic complex. In this first booklength study of Kepes, John Blakinger argues that Kepes, by opening the research laboratory to the arts, established a new paradigm for creative practice: the artist as technocrat. First at Chicago's New Bauhaus and then for many years at MIT, Kepes pioneered interdisciplinary collaboration between the arts and sciences—what he termed "interthinking" and "interseeing." Kepes and his colleagues—ranging from metallurgists to mathematicians—became part of an important but little-explored constellation: the Cold War avant-garde.

Blakinger traces Kepes's career in the United States through a series of episodes: Kepes's work with the military on camouflage techniques; his development of a visual design pedagogy, as seen in the exhibition *The New Landscape* and his book *The New Landscape in Art and Science*; his encyclopedic *Vision* + *Value* series; his unpublished magnum opus, the Light Book; the Center for Advanced Visual Studies (CAVS), an art-science research institute established by Kepes at MIT in 1967; and the Center's proposals for massive environmental installations that would animate the urban landscape. CAVS was entangled in the antiwar politics of the late 1960s, as many students and faculty protested MIT's partnerships with defense contractors—some of whom had ties to the Center. In attempting to "undream" the Bauhaus into existence in the postwar world, Kepes faced profound resistance.

Generously illustrated, drawing on the vast archive of Kepes's papers at Stanford and MIT's CAVS Special Collection, this book supplies a missing chapter in our understanding of midcentury modern and Cold War visual culture.

**John R. Blakinger** is the 2018–2019 Terra Foundation Visiting Professor of American Art at the University of Oxford.

## The Evolving Animal Orchestra

In Search of What Makes Us Musical

#### **Henkjan Honing**

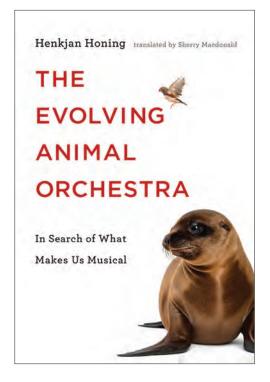
translated by Sherry Macdonald

Even those of us who can't play a musical instrument or lack a sense of rhythm can perceive and enjoy music. Research shows that all humans possess the trait of musicality. We are a musical species—but are we the only musical species? Is our musical predisposition unique, like our linguistic ability? In *The Evolving Animal Orchestra*, Henkjan Honing embarks upon a quest to discover if humans share the trait of musicality with other animals.

Charles Darwin believed that musicality was a capacity of all animals, human and nonhuman, with a clear biological basis. Taking this as his starting point, Honing—a music cognition researcher—visits a series of biological research centers to observe the ways that animals respond to music. He has studied scientists' accounts of Snowball, the cockatoo who could dance to a musical beat, and of Ronan, the sea lion, who was trained to move his head to a beat. Now Honing will be able to make his own observations.

Honing tests a rhesus monkey for beat perception via an EEG; performs a listening experiment with zebra finches; considers why birds sing, and if they intend their songs to be musical; explains why many animals have perfect pitch; and watches marine mammals respond to sounds. He reports on the unforeseen twists and turns, doubts, and oversights that are a part of any scientific research—and which point to as many questions as answers. But, as he shows us, science is closing in on the biological and evolutionary source of our musicality.

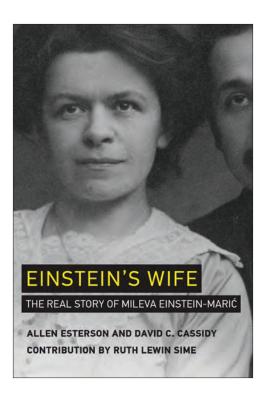
**Henkjan Honing** is Professor of Music Cognition at the University of Amsterdam and editor of *The Origins of Musicality* (MIT Press).



A music researcher's quest to discover other musical species.

March 6 x 9, 160 pp. 9 illus.

**\$27.95T/£22.00 cloth** 978-0-262-03932-1



Was Einstein's first wife his uncredited coauthor, unpaid assistant, or unacknowledged helpmeet? The real "Mileva Story."

April 5 3/8 x 8, 336 pp. 6 illus.

**\$29.95T/£24.00 cloth** 978-0-262-03961-1

## **Einstein's Wife**

The Real Story of Mileva Einstein-Marić

Allen Esterson and David C. Cassidy contribution by Ruth Lewin Sime

Albert Einstein's first wife, Mileva Einstein-Marić, was forgotten for decades. When a trove of correspondence between them beginning in their student days was discovered in 1986, her story began to be told. Some of the tellers of the "Mileva Story" made startling claims: that she was a brilliant mathematician who surpassed her husband, and that she made uncredited contributions to his most celebrated papers in 1905, including his paper on special relativity. This book, based on extensive historical research, uncovers the real "Mileva Story."

Mileva was one of the few women of her era to pursue higher education in science; she and Einstein were students together at the Zurich Polytechnic. Mileva's ambitions for a science career, however, suffered a series of setbacks—failed diploma examinations, a disagreement with her doctoral dissertation adviser, an out-of-wedlock pregnancy by Einstein. She and Einstein married in 1903 and had two sons, but the marriage failed. Was Mileva her husband's uncredited coauthor, unpaid assistant, or essential helpmeet? It's tempting to believe that she was her husband's secret collaborator, but the authors of Einstein's Wife look at the actual evidence, and a chapter by Ruth Lewin Sime offers important historical context. The story they tell is that of a brave and determined young woman who struggled against a variety of obstacles at a time when science was not very welcoming to women.

**Allen Esterson** was a Lecturer in Mathematics and Physics at Southwark College in London before his retirement. **David C. Cassidy** is Professor Emeritus at Hofstra University. **Ruth Lewin Sime** is Professor Emerita in the Department of Chemistry at Sacramento City College.

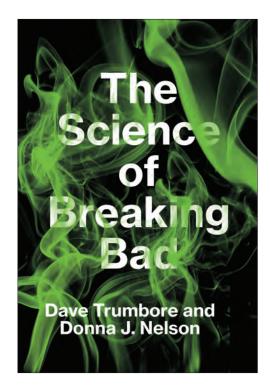
## The Science of Breaking Bad

#### Dave Trumbore and Donna J. Nelson

Breaking Bad's (anti)hero Walter White (played by Emmy-winner Bryan Cranston) is a scientist, a high school chemistry teacher who displays a plaque that recognizes his "contributions to research awarded the Nobel Prize." During the course of five seasons, Walt practices a lot of ad hoc chemistry—from experiments that explode to acid-based evidence destruction to an amazing repertoire of methodologies for illicit meth making. But how much of Walt's science is actually scientific? In The Science of "Breaking Bad," Dave Trumbore and Donna Nelson explain, analyze, and evaluate the show's portayal of science, from the pilot's opening credits to the final moments of the series finale. The intent is not, of course, to provide a how-to manual for wannabe meth moguls but to decode the show's most head-turning, jaw-dropping moments. Trumbore, a science and entertainment writer, and Nelson, a professor of chemistry and Breaking Bad's science advisor, are the perfect scientific tour guides.

Trumbore and Nelson cover the show's portrayal of chemistry, biology, physics, and subdivisions of each area including toxicology and electromagnetism. They explain, among other things, Walt's DIY battery making; the dangers of Mylar balloons; the feasibility of using hydrofluoric acid to dissolve bodies; and the chemistry of methamphetamine itself. Nelson adds interesting behind-the-scenes anecdotes and describes her work with the show's creator and writers. This is a book for every science buff who appreciated the show's scientific moments and every diehard *Breaking Bad* fan who wondered just how smart Walt really was.

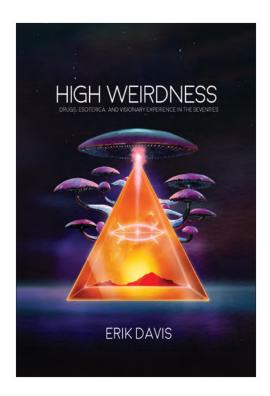
**Dave Trumbore** is an editor at Collider.com and a freelance science writer. **Donna J. Nelson** is Professor of Chemistry at the University of Oklahoma and past President of the American Chemical Society. She was the science advisor to *Breaking Bad*.



All the science in *Breaking*Bad—from explosive experiments to acid-based evidence destruction—explained and analyzed for authenticity.

June 6 x 9, 184 pp. 8 illus.

**\$21.95T/£16.99** paper 978-0-262-53715-5



An exploration of the emergence of a new psychedelic spirituality in the work of Philip K. Dick, Terrence McKenna, and Robert Anton Wilson.

> July 6 x 9, 500 pp. 10 illus.

**\$34.95T/£27.00 cloth** 978-1-907222-76-4

Copublished with Strange Attractor Press

## **High Weirdness**

Drugs, Visions, and Esoterica in the Seventies

#### **Erik Davis**

A study of the spiritual provocations to be found in the work of Philip K. Dick, Terrence McKenna, and Robert Anton Wilson, *High Weirdness* charts the emergence of a new psychedelic spirituality that arose from the American counterculture of the 1970s. These three authors changed the way millions of readers thought, dreamed, and experienced reality—but how did their writings reflect, as well as shape, the seismic cultural shifts taking place in America?

In *High Weirdness*, Erik Davis—America's leading scholar of high strangeness—examines the published and unpublished writings of these vital, iconoclastic thinkers, as well as their own life-changing mystical experiences. Davis explores the complex lattice of the strange that flowed through America's West Coast at a time of radical technological, political, and social upheaval to present a new theory of the weird as a viable mode for a renewed engagement with reality.

Erik Davis is an American journalist, critic, podcaster, and counter-public intellectual whose writings have run the gamut from rock criticism to cultural analysis to creative explorations of esoteric mysticism. He is the author of Techgnosis: Myth, Magic and Mysticism in the Age of Information, The Visionary State: A Journey through California's Spiritual Landscape, and Nomad Codes: Adventures in Modern Esoterica.

## **Thermodynamic Weirdness**

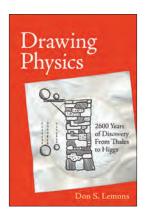
From Fahrenheit to Clausius

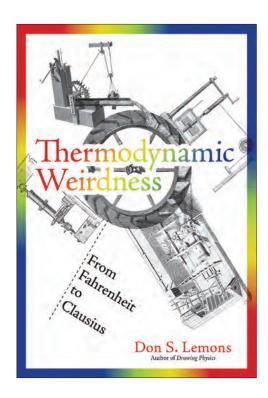
#### Don S. Lemons

Students of physics, chemistry, and engineering are taught classical thermodynamics through its methods—a "problems first" approach that neglects the subject's concepts and intellectual structure. In *Thermodynamic Weirdness*, Don Lemons fills this gap, offering a nonmathematical account of the ideas of classical thermodynamics in all its non-Newtonian "weirdness." By emphasizing the ideas and their relationship to one another, Lemons reveals the simplicity and coherence of classical thermodynamics.

Lemons presents concepts in an order that is both chronological and logical, mapping the rise and fall of ideas in such a way that the ideas that were abandoned illuminate the ideas that took their place. Selections from primary sources, including writings by Daniel Fahrenheit, Antoine Lavoisier, James Joule, and others, appear at the end of most chapters. Lemons covers the invention of temperature; heat as a form of motion or as a material fluid; Carnot's analysis of heat engines; William Thomson (later Lord Kelvin) and his two definitions of absolute temperature; and energy as the mechanical equivalent of heat. He explains early versions of the first and second laws of thermodynamics; entropy and the law of entropy non-decrease; the differing views of Lord Kelvin and Rudolf Clausius on the fate of the universe; the zeroth and third laws of thermodynamics; and Einstein's assessment of classical thermodynamics as "the only physical theory of universal content which I am convinced will never be overthrown."

**Don S. Lemons** is Professor of Physics Emeritus at Bethel College in North Newton, Kansas, and the author of *Drawing Physics: 2,600 Years of Discovery From Thales to Higgs*.





An account of the concepts and intellectual structure of classical thermodynamics that reveals the subject's simplicity and coherence.

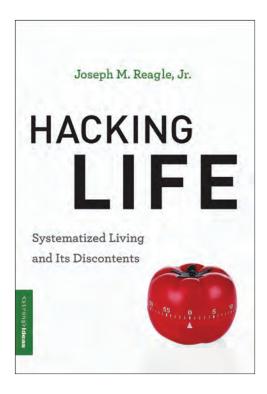
March 5 3/8 x 8, 200 pp. 20 illus.

**\$24.95T/£20.00 cloth** 978-0-262-03939-0

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Life hacking as self-help for the creative class in the digital age: using systems in pursuit of health, wealth, and productivity.

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## **Hacking Life**

Systematized Living and Its Discontents

#### Joseph M. Reagle, Jr.

Life hackers track and analyze the food they eat, the hours they sleep, the money they spend, and how they're feeling on any given day. They share tips on the most efficient ways to tie shoelaces and load the dishwasher; they employ a tomato-shaped kitchen timer as a time-management tool. They see everything as a system composed of parts that can be decomposed and recomposed, with algorithmic rules that can be understood, optimized, and subverted. In *Hacking Life*, Joseph Reagle examines these attempts to systematize living and finds that they are the latest in a long series of self-improvement methods. Life hacking, he writes, is self-help for the digital age's creative class.

Reagle chronicles the history of life hacking, from Benjamin Franklin's *Poor Richard's Almanack* through Stephen Covey's 7 *Habits of Highly Effective People* and Timothy Ferriss's *The 4-Hour Workweek*. He describes personal outsourcing, polyphasic sleep, the quantified self movement, and hacks for pickup artists. Life hacks can be useful, useless, and sometimes harmful (for example, if you treat others as cogs in your machine). Life hacks have strengths and weaknesses, which are sometimes like two sides of a coin: being efficient is not the same thing as being effective; being precious about minimalism does not mean you are living life unfettered; and compulsively checking your vital signs is its own sort of illness. With *Hacking Life*, Reagle sheds light on a question even non-hackers ponder: what does it mean to live a good life in the new millennium?

**Joseph M. Reagle Jr.** is Associate Professor of Communication Studies at Northeastern University. He is the author of *Good Faith Collaboration: The Culture of Wikipedia* and *Reading the Comments: Likers, Haters, and Manipulators at the Bottom of the Web*, both published by the MIT Press.





## The Importance of Small Decisions

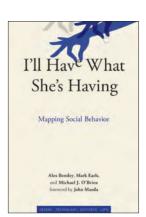
## Michael J. O'Brien, R. Alexander Bentley, and William A. Brock

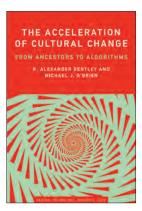
foreword by John Maeda

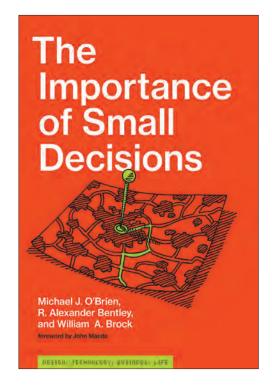
Humans originally evolved in a world of few choices. Prehistoric, preindustrial, and predigital eras required fewer decisions than today's all-access, always-on world of too much information. Economists have largely discarded the idea that agents act rationally and the market follows suit. It seems that no matter how small or innocuous a decision might seem, there's almost no way to guess the effect it might have. The authors of *The Importance of Small Decisions* view decisions and their outcomes from a different perspective: as key elements in the evolution of culture. In this trailblazing book, they examine different kinds of decisions and map the outcomes, both short- and long-term. Drawing on this, they introduce a map of social behavior that captures the essential elements of human decision-making.

The authors look at the New England Patriots' decision in 2000 to draft an underachieving college quarterback named Tom Brady; they consider Warren Buffett's investment strategy; and they chart the "dancing landscape" of a college applicant's decision-making environment. Finally, they show that decisions can be ranked according to transparency of choice and social influence. When fake news seems indistinguishable from real news and when the internet offers a cacophony of voices, they warn, we can't afford to crowdsource our decisions.

Michael J. O'Brien is Provost and Professor of History at Texas A&M University–San Antonio. R. Alexander Bentley is Professor and Chair of Anthropology at the University of Tennessee. William A. Brock is Professor Emeritus of Economics at the University of Wisconsin–Madison, Research Professor at the University of Missouri, and a member of the National Academy of Science. O'Brien and Bentley are coauthors of I'll Have What She's Having: Mapping Social Behavior and The Acceleration of Cultural Change: From Ancestors to Algorithms (both published by the MIT Press).







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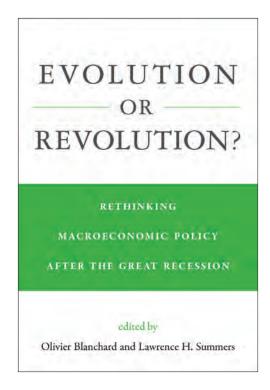
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## **Evolution or Revolution?**

Rethinking Macroeconomic Policy after the Great Recession

#### edited by Olivier Blanchard and Lawrence H. Summers

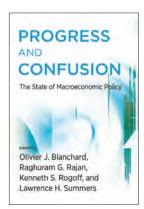
The Great Depression led to the Keynesian revolution and dramatic shifts in macroeconomic theory and macroeconomic policy. Similarly, the stagflation of the 1970s led to the adoption of the natural rate hypothesis and to a major reassessment of the role of macroeconomic policy. Should the financial crisis and the Great Recession lead to yet another major reassessment, to another intellectual revolution? Will it? If so, what form should it, or will it, take? These are the questions taken up in this book, in a series of contributions by policymakers and academics.

The contributors discuss the complex role of the financial sector, the relative roles of monetary and fiscal policy, the limits of monetary policy to address financial stability, the need for fiscal policy to play a more active role in stabilization, and the relative roles of financial regulation and macroprudential tools. The general message is a warning against going back to precrisis ways—to narrow inflation targeting, little use of fiscal policy for stabilization, and insufficient financial regulation.

Olivier Blanchard is C. Fred Bergsten Senior Fellow at the Peterson Institute for International Economics in Washington, DC. He was Chief Economist at the International Monetary Fund from 2008 to 2015. Lawrence H. Summers is Charles W. Eliot Professor and President Emeritus at Harvard University. He served as Secretary of the Treasury in the Clinton administration and as Director of the National Economic Council in the Obama administration.

#### Contributors

David Aikman, Alan J. Auerbach, Ben S. Bernanke, Olivier Blanchard, Lael Brainard, Markus K. Brunnermeier, Marco Buti, Benoît Coeuré, Mario Draghi, Barry Eichengreen, Jason Furman, Gita Gopinath, Pierre-Olivier Gourinchas, Andrew G. Haldane, Philipp Hildebrand, Marc Hinterschweiger, Sujit Kapadia, Nellie Liang, Adam S. Posen, Raghuram Rajan, Valerie Ramey, Carmen Reinhart, Dani Rodrik, Robert E. Rubin, Jay C. Shambaugh, Tharman Shanmugaratnam, Jeremy C. Stein, Lawrence H. Summers



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edited by Olivier Blanchard, Raghuram Rajan, Kenneth Rogoff, and Lawrence H. Summers \$21.95T/£16.99 paper 978-0-262-53599-1

## How to Be Human in the Digital Economy

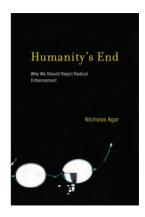
#### Nicholas Agar

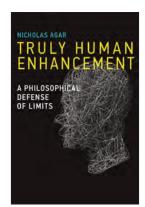
In the digital economy, accountants, baristas, and cashiers can be automated out of employment; so can surgeons, airline pilots, and cab drivers. Machines will be able to do these jobs more efficiently, accurately, and inexpensively. But, Nicholas Agar warns in this provocative book, these developments could result in a radically disempowered humanity.

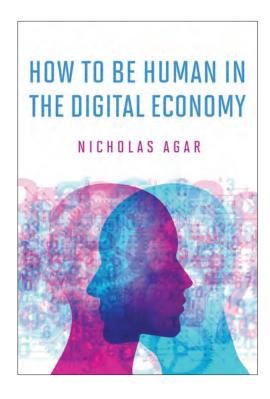
The digital revolution has brought us new gadgets and new things to do with them. The digital revolution also brings the digital economy, with machines capable of doing humans' jobs. Agar explains that developments in artificial intelligence enable computers to take over not just routine tasks but also the kind of "mind work" that previously relied on human intellect, and that this threatens human agency. The solution, Agar argues, is a hybrid social-digital economy. The key value of the digital economy is efficiency. The key value of the social economy is humanness.

A social economy would be centered on connections between human minds. We should reject some digital automation because machines will always be poor substitutes for humans in roles that involve direct contact with other humans. A machine can count out pills and pour out coffee, but we want our nurses and baristas to have minds like ours. In a hybrid social-digital economy, people do the jobs for which feelings matter and machines take on data-intensive work. But humans will have to insist on their relevance in a digital age.

**Nicholas Agar** is Professor of Ethics at Victoria University of Wellington, New Zealand. He is the author of *Humanity's End: Why We Should Reject Radical Enhancement* and *Truly Human Enhancement: A Philosophical Defense of Limits*, both published by the MIT Press.







An argument in favor of finding a place for humans (and humanness) in the future digital economy.

March 6 x 9, 232 pp.

**\$26.95T/£21.00 cloth** 978-0-262-03874-4

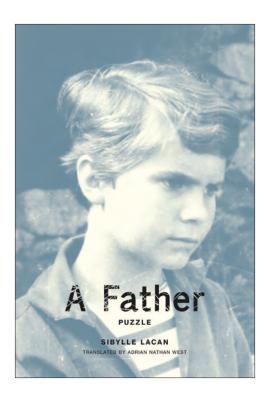
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Nicholas Agar \$24.00S/£18.99 paper 978-0-262-52517-6

Truly Human Enhancement
A Philosophical Defense of Limits

Nicholas Agar \$39.00S/£30.00 cloth 978-0-262-02663-5



The daughter of French psychoanalyst Jacques Lacan tries to make sense of her relationship with her father.

May 5 x 7, 112 pp.

\$19.95T/£14.99 cloth 978-0-262-03931-4

## **A Father**

Puzzle

#### Sibylle Lacan

translated by Adrian Nathan West

"When I was born, my father was already no longer there." Sibylle Lacan's memoir of her father, the influential French psychoanalyst Jacques Lacan, is told through fragmentary, elliptical episodes, and describes a figure who had defined himself to her as much by his absence as by his presence. Sibylle was the second daughter and unhappy last child of Lacan's first marriage: the fruit of despair ("some will say of desire, but I do not believe them"). Lacan abandoned his old family for a new one: a new partner, Sylvia Bataille (the wife of Georges Bataille), and another daughter, born a few months after Sibylle. For years, this daughter, Judith, was the only publicly recognized child of Lacan—even if, due to French law, she lacked his name.

In one sense, then, A Father presents the voice of one who, while bearing his name, had been erased. If Jacques Lacan had described the word as a "presence made of absence," Sibylle Lacan here turns to the language of the memoir as a means of piecing together the presence of a man who had entered her life in absence, and in his passing, finished in it. In its interplay of absence, naming, and the despair engendered by both, A Father ultimately poses an essential question: what is a father? This first-person account offers both a riposte and a complement to the concept (and the name) of the father as Lacan had defined him in his work, and raises difficult issues about the influence biography can have on theory—and vice versa—and the sometimes yawning divide that can open up between theory and the lives we lead.

**Sibylle Lacan** (1940–2013) was Jacques Lacan's second daughter from his first marriage. A translator of Spanish, English, and Russian, she followed *A Father* with a book devoted to her mother (*Points de suspension*).

## Walter Benjamin Reimagined

A Graphic Translation of Poetry, Prose, Aphorisms, and Dreams

#### **Frances Cannon**

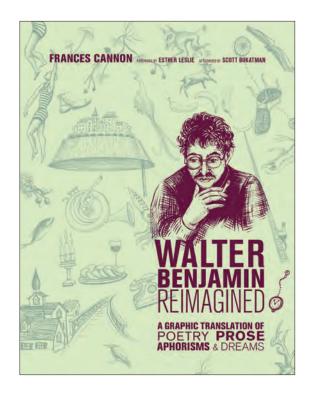
foreword by Esther Leslie afterword by Scott Bukatman

Walter Benjamin was a man of letters, an art critic, an essayist, a translator, a philosopher, a collector, and an urban flâneur. In his writings, he ambles, samples, and explores. With *Walter Benjamin Reimagined*, Frances Cannon offers a visual and literary response to Benjamin's work. With detailed and dream-like pen-and-ink drawings and hand-lettered text, Cannon gives readers an illuminated tour of Walter Benjamin's thoughts—a graphic translation, an encyclopedia of fragments.

Cannon has not created a guide to Benjamin's greatest ideas—this is not an illustrated Walter Benjamin cheat sheet—but rather a beautifully rendered work of graphic literature. Cannon doesn't plod through thickets of minutiae, she strolls—a flâneuse herself—using Benjamin's words and her own drawings to construct a creative topography of Benjamin's writing. Phrases from "Unpacking My Library," for example, are accompanied by images of flying papers, stray books, stacked books—books "not yet touched by the mild boredom of order"—and a bearded mage. Cannon takes the reader through different periods of Benjamin's writing: "Artifacts of Youth," nostalgic musings on his childhood; "Fragments of a Critical Eye," early writings, political observations, and cultural criticism; "Athenaeum of Imagination," meditations on philosophy and psychology; "A Stroll through the Arcades," Benjamin's unfinished magnum opus; and "A Collection of Dreams and Stories," experimental and fantastical writings.

With drawings and text, Cannon offers a phantasmagorical tribute to Benjamin's wandering eye.

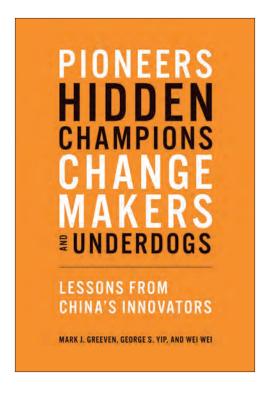
**Frances Cannon** is a writer and artist. She is the author and illustrator of the graphic memoir *The Highs and Lows of Shapeshift Ma and Big-Little Frank* and has published several other books of poems, translations, and artworks. She received an MFA in Creative Nonfiction Writing from the lowa Writer's Workshop.



An illuminated tour of Walter Benjamin's ideas; a graphic translation; an encyclopedia of fragments.

May 7 x 9, 176 pp. 141 line drawings

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An insider's view of China's under-the-radar, globally competitive innovators.

April 6 x 9, 224 pp. 10 illus.

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# Pioneers, Hidden Champions, Changemakers, and Underdogs

Lessons from China's Innovators

#### Mark J. Greeven, George S. Yip, and Wei Wei

Chinese innovators are making their mark globally. Not only do such giants as Alibaba and Huawei continue to thrive and grow through innovation, thousands of younger Chinese entrepreneurs are poised to enter the global marketplace. In this book, Mark Greeven, George Yip, and Wei Wei offer an insider's view of China's under-the-radar, globally competitive innovators.

The authors, all experts on Chinese innovation, distinguish four types of innovators in China: pioneers, large companies that are globally known; hidden champions, midsize enterprises that are market leaders in their niches; underdogs, technology-driven ventures with significant intellectual property; and changemakers, newer firms characterized by digital disruption, exponential growth, and cross-industry innovations. They investigate what kinds of innovations these companies develop (product, process, or business model), their competitive strategies, and key drivers of innovation. They identify six typical ways Chinese entrepreneurs innovate, including swarm innovation (collectively pursuing opportunities) and rapid centralized decision making. Finally, they look at how Chinese innovators are going global, whether building R&D networks internationally or exporting disruptive business models. The book includes many examples of Chinese innovators and innovations, drawn from a range of companies—from pioneers to changemakers—including Alibaba, Haier, Hikvision, Malong Technology, Weihu Solar, Mobike, and Cheetah Mobile.

Greeven, Yip, and Wei offer an essential guide to what makes China a heavyweight competitor in the global marketplace.

Mark J. Greeven is an academic, author, and speaker on innovation in China and a Research Fellow at the National Institute for Innovation Management at Zhejiang University in Hangzhou and the Center for China and Globalization in Beijing. George S. Yip is Professor of Marketing and Strategy at Imperial College Business School in London and coauthor of China's Next Strategic Advantage: From Imitation to Innovation (MIT Press). Wei Wei is Founder and CEO of the Shanghai-based consulting firm GSL Innovation.

## The Technology Fallacy

How People Are the Real Key to Digital Transformation

#### Gerald C. Kane, Anh Nguyen Phillips, Jonathan R. Copulsky, and Garth R. Andrus

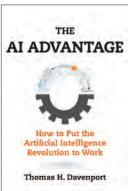
Digital technologies are disrupting organizations of every size and shape, leaving managers scrambling to find a technology fix that will help their organizations compete. This book offers managers and business leaders a guide for surviving digital disruptions—but it is not a book about technology. It is about the organizational changes required to harness the power of technology. The authors argue that digital disruption is primarily about people and that effective digital transformation involves changes to organizational dynamics and how work gets done. A focus only on selecting and implementing the right digital technologies is not likely to lead to success. The best way to respond to digital disruption is by changing the company culture to be more agile, risk tolerant, and experimental.

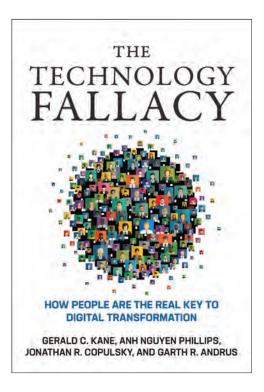
The authors draw on four years of research, conducted in partner-ship with MIT Sloan Management Review and Deloitte, surveying more than 16,000 people and conducting interviews with managers at such companies as Walmart, Google, and Salesforce. They introduce the concept of digital maturity—the ability to take advantage of opportunities offered by new technology—and address the specifics of digital transformation, including cultivating a digital environment, enabling intentional collaboration, and fostering an experimental mindset. Every organization needs to understand its "digital DNA" in order to stop "doing digital" and start "being digital."

Digital disruption won't end anytime soon; the average worker will probably experience numerous waves of disruption during the course of a career. The insights offered by *The Technology Fallacy* will hold true through them all.

Gerald C. Kane is Professor of Information Systems at Boston College.

Anh Nguyen Phillips is the Digital Transformation Research Lead at Deloitte
Center for Integrated Research. Jonathan R. Copulsky, a retired Principal of
Deloitte Consulting LLP, teaches marketing, branding, and marketing technology
at Northwestern University. Garth R. Andrus
is a Principal at Deloitte Consulting LLP.





Why an organization's response to digital disruption should focus on people and processes and not necessarily on technology.

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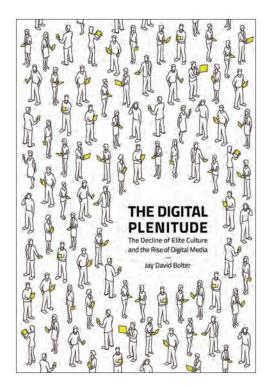
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## The Digital Plenitude

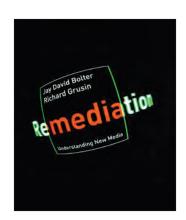
The Decline of Elite Culture and the Rise of Digital Media

#### Jay David Bolter

Media culture today encompasses a universe of forms—websites, video games, blogs, books, films, television and radio programs, magazines, and more—and a multitude of practices that include making, remixing, sharing, and critiquing. This multiplicity is so vast that it cannot be comprehended as a whole. In this book, Jay David Bolter traces the roots of our media multiverse to two developments in the second half of the twentieth century: the decline of elite art and the rise of digital media. Bolter explains that we no longer have a collective belief in "Culture with a capital C." The hierarchies that ranked, for example, classical music as more important than pop, literary novels as more worthy than comic books, and television and movies as unserious have broken down. The art formerly known as high takes its place in the media plenitude. The elite culture of the twentieth century has left its mark on our current media landscape in the form of what Bolter calls "popular modernism." Meanwhile, new forms of digital media have emerged and magnified these changes, offering new platforms for communication and expression.

Bolter outlines a series of dichotomies that characterize our current media culture: catharsis and flow, the continuous rhythm of digital experience; remix (fueled by the internet's vast resources for sampling and mixing) and originality; history (not replayable) and simulation (endlessly replayable); and social media and coherent politics. Donald Trump, Bolter says, is a master of the politics of flow.

**Jay David Bolter** is Wesley Chair of New Media and Codirector of the Augmented Media Lab at Georgia Institute of Technology. He is the author of *Remediation: Understanding New Media* (with Richard Grusin), published by the MIT Press, and other books.



## Who Wins in a Digital World?

Strategies to Make Your Organization Fit for the Future

#### **MIT Sloan Management Review**

In the new digital world, the unknowns are never-ending. Our ability to embrace the demands of change has become a prerequisite for success. It's not easy. We don't work the way we did last year. Next year, it will all change again. If an organization doesn't embrace the realities of change, it will be under siege from those that do. Who Wins in a Digital World? explains how organizations can adapt to a constantly changing business environment by being flexible but focused, embracing change in all its messiness, and moving fast.

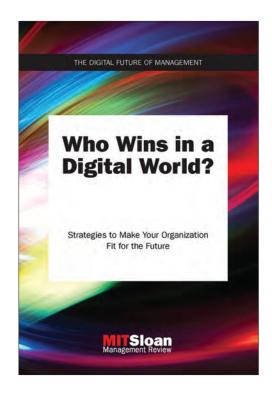
In articles that originally appeared in *MIT Sloan Management Review*, experts from business and academia discuss digital adaptability, explaining how both organizations and individuals need the ability to excel in what their roles will become as technology and their competitive ecosystem evolve. They highlight strategies and mindsets that can foster change, including boldness in the face of digitization, a focus on collaboration, and an artificial intelligence game plan. And they explore the need for speed, with one contributor declaring: "Implement first, ask questions later (or not at all)."

Once an organization accepts the fact that technological change is ongoing and inevitable, it becomes more about opportunity and less about challenge. This book shows that change can be stimulating, exhilarating, and something to be welcomed.

#### Contributors

Stephen J. Andriole, Jacques Bughin, Thomas H. Davenport, Nathan Furr, Lynn J. Good, David Kiron, Edward E. Lawler III, Vikram Mahidhar, Paul Michelman, Jeanne Ross, Paul J. H. Schoemaker, Andrew Shipilov, Charles Sull, Donald Sull, Philip E. Tetlock, Stefano Turconi, Nicolas van Zeebroeck, Peter Weill, Thomas Williams, Stephanie L. Woerner, Christopher G. Worley, James Yoder





How organizations can adapt to a constantly changing business environment by being flexible but focused, embracing change, and moving fast.

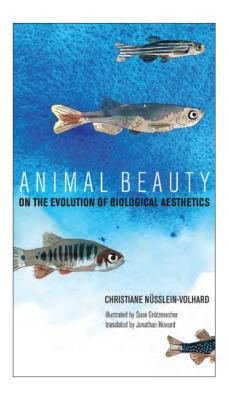
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## **Animal Beauty**

On the Evolution of Biological Aesthetics

#### Christiane Nüsslein-Volhard

illustrated by Suse Grützmacher translated by Jonathan Howard

Are animals able to appreciate what humans refer to as "beauty"? The term scarcely ever appears nowadays in a scientific description of living things, but we humans may nonetheless find the colors, patterns, and songs of animals to be beautiful in apparently the same way that we see beauty in works of art. In *Animal Beauty*, Nobel Prize—winning biologist Christiane Nüsslein-Volhard describes how the colors and patterns displayed by animals arise, what they communicate, and how they function in the social life of animals. Watercolor drawings illustrate these amazing instances of animal beauty.

Darwin addressed the topic of ornament in his 1871 book *The Descent of Man and Selection in Relation to Sex*, and did not hesitate to engage with criteria of beauty, convinced that animals experienced color and ornament as attractive and agreeable in the same way that we do, and that the role this played in mate choice pointed to a "sexual selection" distinct from natural selection. Nüsslein-Volhard examines key examples of ornament and sexual selection in the animal kingdom and lays the groundwork for biological aesthetics. Noting that color patterns have not been a research priority—perhaps because they appeared to be nonessential luxuries rather than functional necessities—Nüsslein-Volhard looks at recent scientific developments on the topic. In part because of Nüsslein-Volhard's own research on the zebrafish, it is now possible to decipher the molecular genetic mechanisms that lead to production of colors in animal skin and its appendages and control its pattern and distribution.

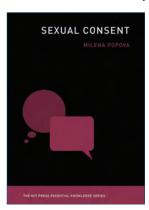
Christiane Nüsslein-Volhard is a German developmental biologist. She received the Albert Lasker Award for Basic Medical Research in 1991 and the Nobel Prize in Physiology or Medicine in 1995, with Eric Wieschaus and Edward B. Lewis, for research on the genetic control of embryonic development. Since 1985 she has been Director of the Max Planck Institute for Developmental Biology in Tübingen, where she also leads the Genetics Department.

gender studies

#### **Sexual Consent**

#### Milena Popova

The #MeToo movement has focused public attention on the issue of sexual consent. People of all genders, from all walks of



life, have stepped forward to tell their stories of sexual harassment and violation. In a predictable backlash, others have taken to mass media to inquire plaintively if "flirting" is now forbidden. This volume in the MIT Press Essential Knowledge series offers a nuanced introduction to sexual consent by a writer who is both a scholar and an activist on this issue.

It has become clear from discussions of the recent highprofile cases of Harvey Wein-

stein, Bill Cosby, and others that there is no clear agreement over what constitutes consent or non-consent and how they are expressed and perceived in sexual situations. This book presents key strands of feminist thought on the subject of sexual consent from across academic and activist communities and covers the history of research on consent in such fields as psychology and feminist legal studies. It discusses how sexual consent is negotiated in practice, from "No means no" to "Yes means yes," and describes what factors might limit individual agency in such negotiations. It examines how popular culture, including pornography, romance fiction, and sex advice manuals, shapes our ideas of consent; explores the communities at the forefront of consent activism; and considers what meaningful social change in this area might look like. Going beyond the conventional cisgender, heterosexual norm, the book lists additional resources for those seeking to improve their practice of consent, survivors of sexual violence, and readers who want to understand contemporary debates on this issue in more depth.

**Milena Popova** is an independent scholar, activist, and consultant working on culture and sexual consent.

May | 5 x 7, 168 pp.

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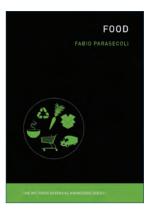
The MIT Press Essential Knowledge series

food | cultural studies

#### Food

#### Fabio Parasecoli

Everybody eats. We may even consider ourselves experts on the topic, or at least Instagram experts. But are we aware that the



shrimp in our freezer may be farmed and frozen in Vietnam, the grapes in our fruit bowl shipped from Chile, and the coffee in our coffee maker grown in Nicaragua, roasted in Germany, and distributed in Canada? Whether we know it or not, every time we shop for food, cook, and eat, we connect ourselves to complex supply networks, institutions, and organizations that enable our food choices. Even locavores may not know the

whole story of the produce they buy at the farmers market. In this volume in the MIT Press Essential Knowledge series, food writer and scholar Fabio Parasecoli offers a consumer's guide to the food system, from local to global.

Parasecoli describes a system made up of open-ended, shifting, and unstable networks rather than well-defined chains; considers healthy food and the contradictory advice about it consumers receive; discusses food waste and the implications for sustainability; explores food technologies (and "culinary luddism"); and examines hunger and food insecurity in both developing and developed countries. Parasecoli reminds us that we are not only consumers but also citizens, and as citizens we have more power to improve the food system than we do by our individual food choices.

Fabio Parasecoli is Professor in the Department of Nutrition and Food Studies at New York University. He is the author of *Bite Me!*Food in Popular Culture, Al Dente: A History of Food in Italy, and Knowing Where It Comes From: Labeling Traditional Foods to Compete in a Global Market.

March | 5 x 7, 192 pp.

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The MIT Press Essential Knowledge series

technology

## **3D Printing**

#### John Jordan

The use of 3D printing—digitally controlled additive manufacturing—is growing rapidly. Consumer models of 3D printers



allow people to fabricate small plastic objects, from cabinet knobs to wedding cake toppers. Industrial uses are becoming widespread, as businesses use the technology to fabricate prototypes, spare parts, custom-fitted prosthetics, and other plastic or metal items, often at lower cost and with greater efficiency than standard manufacturing. In this volume in the MIT Press Essential Knowledge series, John Jordan offers an accessible introduction to 3D printing, describ-

ing the printing process, industrial and household markets, and emerging uses.

Jordan outlines the stages of 3D printing, from idea to software model to a printable file that slices the planned object into printable layers to the finished object itself. He describes additive technologies, consumer 3D printing in homes and schools, mass customization (which can create tens of millions of unique items), and industrial uses. Jordan explains that although 3D printers have not become the ubiquitous home appliance once predicted, they are making inroads into mass markets; and he discusses the business factors that may hinder industry adoption of 3D printing technologies. He considers the possible unintended consequences of 3D printing on jobs, as companies scramble to find employees with an uncommon skill set; on business models and supply chains, as manufacturing is decentralized; and on patent law, as machines can be programmed to copy protected property. Finally, Jordan looks at new and emerging uses, including bioprinting, building construction, and micromachines.

**John Jordan** is Clinical Professor of Supply Chain and Information Systems in Smeal College of Business at Penn State University. He is the author of *Robots*, also in the MIT Press Essential Knowledge series.

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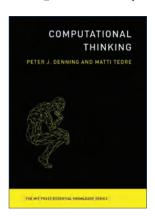
The MIT Press Essential Knowledge series

computer science

## **Computational Thinking**

#### Peter J. Denning and Matti Tedre

A few decades into the digital era, scientists discovered that thinking in terms of computation made possible an entirely



new way of organizing scientific investigation; eventually, every field had a computational branch: computational physics, computational biology, computational sociology. More recently, "computational thinking" has become part of the K–12 curriculum. But what is computational thinking? This volume in the MIT Press Essential Knowledge series offers an accessible overview, tracing a genealogy that begins centuries before digital computers and

portraying computational thinking as pioneers of computing have described it.

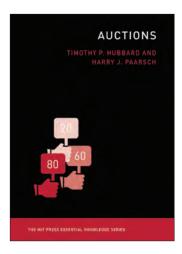
The authors explain that computational thinking (CT) is not a set of concepts for programming; it is a way of thinking that is honed through practice: the mental skills for designing computations to do jobs for us, and for explaining and interpreting the world as a complex of information processes. Mathematically trained experts (known as "computers") who performed complex calculations as teams engaged in CT long before electronic computers. The authors identify six dimensions of today's highly developed CT—methods, machines, computing education, software engineering, computational science, and design—and cover each in a chapter. Along the way, they debunk inflated claims for CT and computation while making clear the power of CT in all its complexity and multiplicity.

**Peter J. Denning** is Distinguished Professor of Computer Science at the Naval Postgraduate School, Monterey, California. He is the coauthor of *The Innovator's Way: Essential Practices for Successful Innovation* and *Great Principles of Computing*, both published by the MIT Press. **Matti Tedre** is a Professor in the School of Computing at the University of Eastern Finland, Associate Professor in the Department of Computer and Systems Science at Stockholm University, and the author of *The Science of Computing: Shaping a Discipline*.

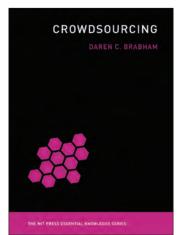
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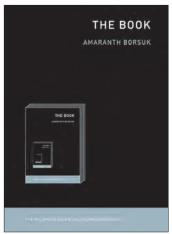
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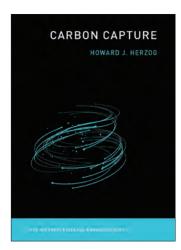


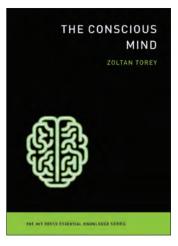


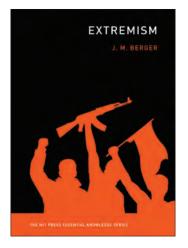












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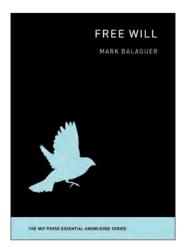
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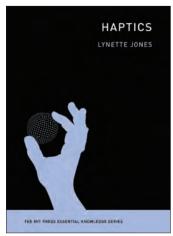
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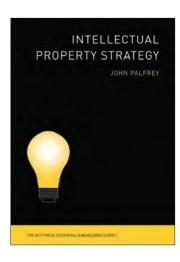
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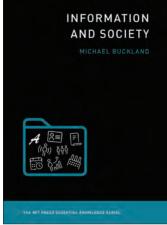
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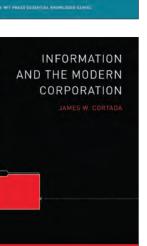


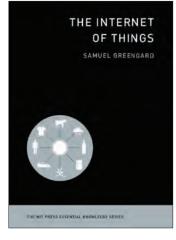




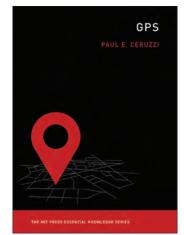




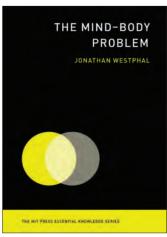










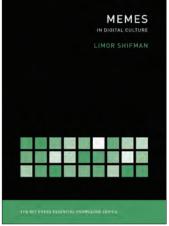




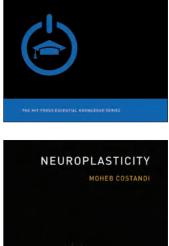


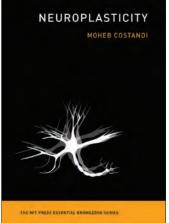












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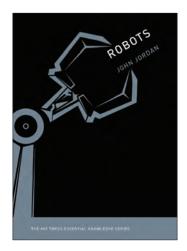
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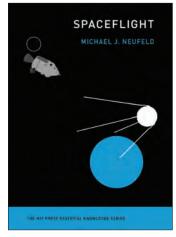
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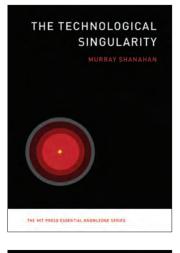
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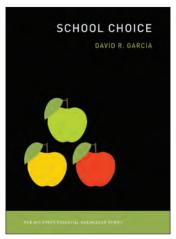
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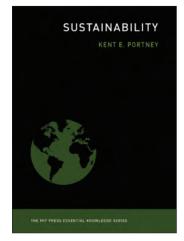
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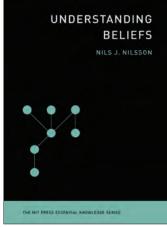




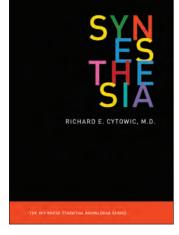


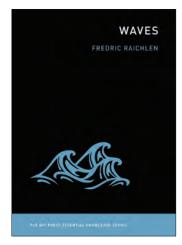












# **GMOs Decoded**

A Skeptic's View of Genetically Modified Foods

# **Sheldon Krimsky**

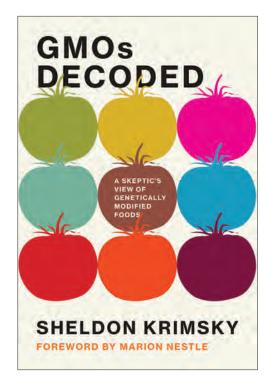
foreword by Marion Nestle

Since they were introduced to the market in the late 1990s, GMOs (genetically modified organisms, including genetically modified crops), have been subject to a barrage of criticism. Agriculture has welcomed this new technology, but public opposition has been loud and scientific opinion mixed. In *GMOs Decoded*, Sheldon Krimsky examines the controversies over GMOs—health and safety concerns, environmental issues, the implications for world hunger, and the scientific consensus (or lack of one). He explores the viewpoints of a range of GMO skeptics, from public advocacy groups and nongovernmental organizations to scientists with differing views on risk and environmental impact.

Krimsky explains the differences between traditional plant breeding and "molecular breeding" through genetic engineering (GE); describes early GMO products, including the infamous Flavr Savr tomato; and discusses herbicide-, disease-, and insect-resistant GE plants. He considers the different American and European approaches to risk assessment, dueling scientific interpretations of plant genetics, and the controversy over labeling GMO products. He analyzes a key 2016 report from the National Academies of Sciences on GMO health effects and considers the controversy over biofortified rice (Golden Rice)—which some saw as a humanitarian project and others as an exercise in public relations.

Do GMO crops hold promise or peril? By offering an accessible review of the risks and benefits of GMO crops, and a guide to the controversies over them, Krimsky helps readers judge for themselves.

**Sheldon Krimsky** is Lenore Stern Professor of Humanities and Social Sciences and Adjunct Professor in Public Health and Community Medicine in the Department of Urban and Environmental Policy and Planning at Tufts University. He is the author, coauthor, or editor of fourteen books, including *Science in the Private Interest* and *Stem Cell Dialogues*.

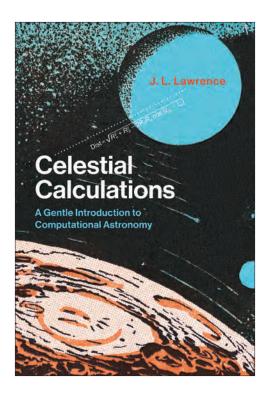


The debate over genetically modified organisms: health and safety concerns, environmental impact, and scientific opinions.

March 6 x 9, 216 pp. 5 illus.

**\$24.95T/£20.00 cloth** 978-0-262-03919-2

Food, Health, and the Environment series



How to predict and calculate the positions of stars, planets, the sun, the moon, and satellites using a personal computer and high school mathematics.

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# **Celestial Calculations**

A Gentle Introduction to Computational Astronomy

#### J. L. Lawrence

Our knowledge of the universe is expanding rapidly, as space probes launched decades ago begin to send information back to earth. There has never been a better time to learn about how planets, stars, and satellites move through the heavens. This book is for amateur astronomers who want to move beyond pictures of constellations in star guides and solve the mysteries of a starry night. It is a book for readers who have wondered, for example, where Saturn will appear in the night sky, when the sun will rise and set, or how long the space station will be over their location. In *Celestial Calculations*, J. L. Lawrence shows readers how to find the answers to these and other astronomy questions with only a personal computer and high school math. Using an easy-to-follow step-by-step approach, Lawrence explains what calculations are required, why they are needed, and how they all fit together.

Lawrence begins with basic principles: unit of measure conversions, time conversions, and coordinate systems. He combines these concepts into a computer program that can calculate the location of a star, and uses the same methods for predicting the locations of the sun, moon, and planets. He then shows how to use these methods for locating the many satellites we have sent into orbit. Finally, he describes a variety of resources and tools available to the amateur astronomer, including star charts and astronomical tables. Diagrams illustrate the major concepts, and computer programs that implement the algorithms are included. Photographs of actual celestial objects accompany the text, and interesting astronomical facts are interspersed throughout.

**J. L. Lawrence** is ChiefTechnology Officer for a company that builds computer systems for the government and commercial satellite customers.

# **Pretense Design**

Surface over Substance

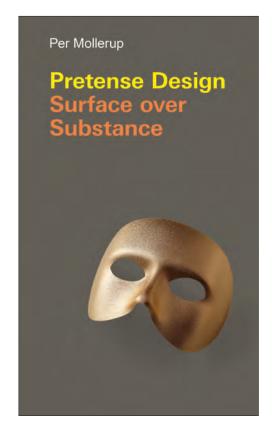
# Per Mollerup

Pretense design pretends to be something that it is not. Pretense design includes all kinds of designed objects: a pair of glasses that looks like a fashion accessory rather than a medical necessity, a hotel in Las Vegas that simulates a Venetian ambience complete with canals and gondolas, boiler plates that look like steel but are vinyl. In this book, Danish designer Per Mollerup defines and describes a ubiquitous design category that until now has not had a name: designed objects with an intentional discrepancy between surface and substance, between appearance and reality. Pretense design, he shows us, is a type of material rhetoric; it is a way for physical objects to speak persuasively, most often to benefit users but sometimes to deceive them.

After explaining the means and the meanings of pretense design, Mollerup describes four pretense design applications, providing a range of examples for each: beautification, amusement, substitution, and deception. Beautification, he explains, includes sunless tanning, high heels, and even sporty accessories for a family car. Amusement includes forms of irrational otherness—columns that don't hold anything up, an old building's façade that hides a new building, a new Chinese town that mimics an old European town. Substitution pretends to be a natural thing: plastic laminate is a substitute for wood, Corian a substitute for marble, and prosthetics a substitute for human organs. Deception doesn't just bend the truth; it suspends it. Soldiers wear camouflage to hide; hunters use decoys to attract their prey; malware hides in a harmless program only to wreak havoc on a user's computer. With *Pretense Design*, Per Mollerup adds a new concept to design thinking.

**Per Mollerup** is Professor Emeritus of Communication Design at Swinburne University of Technology, Melbourne. He is the author of *Wayshowing: A Guide to Environmental Signage, Simplicity: A Matter of Design*, and other books.





How some design appears to be something that it is not—by beautifying, amusing, substituting, or deceiving.

March 6 x 10, 224 pp. 103 color illus.

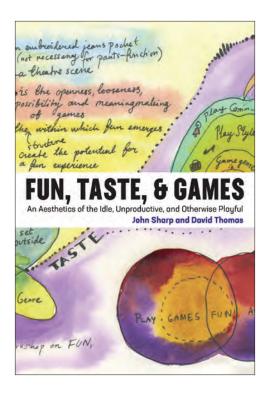
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# Fun, Taste, & Games

An Aesthetics of the Idle, Unproductive, and Otherwise Playful

# John Sharp and David Thomas

"Fun" is somewhat ambiguous. If something is fun, is it pleasant? Entertaining? Silly? A way to trick students into learning? Fun also has baggage—it seems inconsequential, embarrassing, child's play. In Fun, Taste, & Games, John Sharp and David Thomas reclaim fun as a productive and meaningful tool for understanding and appreciating play and games. They position fun at the heart of the aesthetics of games. As beauty was to art, they argue, fun is to play and games—the aesthetic goal that we measure our experiences and interpretations against.

Sharp and Thomas use this fun-centered aesthetic framework to explore a range of games and game issues—from workplace bingo to Meow Wolf, from basketball to *Myst*, from the consumer marketplace to Marcel Duchamp. They begin by outlining three elements for understanding the drive, creation, and experience of fun: set-outsideness, ludic forms, and ambiguity. Moving from theory to practice and back again, they explore the complicated relationships among the titular fun, taste, and games. They consider, among other things, the dismissal of fun by game journalists and designers; the seminal but underinfluential game *Myst*, and how tastes change over time; the shattering of the gamer community in Gamergate; and an aesthetics of play that goes beyond games.

John Sharp is Associate Professor in the School of Art, Media, and Technology at Parsons School of Design at the New School. He is the author of Works of Game: On the Aesthetics of Games and Art and coauthor of Iterate: Ten Lessons in Design and Failure (both published by the MIT Press). David Thomas is Assistant Professor in the College of Architecture and Planning at the University of Colorado Denver. A former game journalist, he runs the website Buzzcut.com.



# The Smart Enough City

Putting Technology in Its Place to Reclaim Our Urban Future

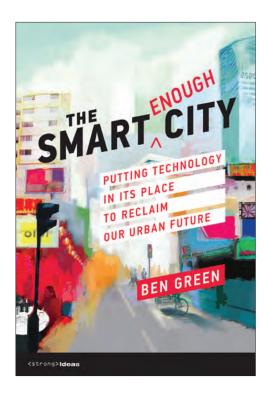
#### Ben Green

foreword by Jascha Franklin-Hodge

Smart cities, where technology is used to solve every problem, are hailed as futuristic urban utopias. We are promised that apps, algorithms, and artificial intelligence will relieve congestion, restore democracy, prevent crime, and improve public services. In *The Smart Enough City*, Ben Green warns against seeing the city only through the lens of technology; taking an exclusively technical view of urban life will lead to cities that appear smart but under the surface are rife with injustice and inequality. He proposes instead that cities strive to be "smart enough": to embrace technology as a powerful tool when used in conjunction with other forms of social change—but not to value technology as an end in itself.

In a technology-centric smart city, self-driving cars have the run of downtown and force out pedestrians, civic engagement is limited to requesting services through an app, police use algorithms to justify and perpetuate racist practices, and governments and private companies surveil public space to control behavior. Green describes smart city efforts gone wrong but also smart enough alternatives, attainable with the help of technology but not reducible to technology: a livable city, a democratic city, a just city, a responsible city, and an innovative city. By recognizing the complexity of urban life rather than merely seeing the city as something to optimize, these smart enough cities successfully incorporate technology into a holistic vision of justice and equity.

**Ben Green** is an Affiliate and former Fellow at the Berkman Klein Center for Internet and Society at Harvard University and a PhD candidate in Applied Mathematics at Harvard's John A. Paulsen School of Engineering and Applied Sciences. From 2016 to 2017 he was a Data Scientist in the City of Boston's Department of Innovation and Technology.



Why technology is not an end in itself, and how cities can be "smart enough," using technology to promote democracy and equity.

April 6 x 9, 256 pp. 11 illus.

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<strong> Ideas series

# LAW AS REFUGE OF ANARCHY SOCIETIES WITHOUT HEGEMONY OR STATE HERMANN AMBORN

A study of communities in the Horn of Africa where reciprocity is a dominant social principle, offering a concrete countermodel to the hierarchical state.

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**Untimely Meditations** 

# Law as Refuge of Anarchy

Societies without Hegemony or State

#### Hermann Amborn

translated by Adrian Nathan West

Over the course of history, people have developed many varieties of communal life; the state, with its hierarchical structure, is only one of the possibilities for society. In this book, leading anthropologist Hermann Amborn identifies a countermodel to the state, describing communities where reciprocity is a dominant social principle and where egalitarianism is a matter of course. He pays particular attention to such communities in the Horn of Africa, where nonhierarchical, nonstate societies exist within the borders of a hierarchical structured state. This form of community, Amborn shows, is not a historical forerunner to monarchy or the primitive state, nor is it obsolete as a social model. These communities offer a concrete counterexample to societies with strict hierarchical structures.

Amborn investigates social forms of expression, ideas, practices, and institutions that oppose the hegemony of one group over another, exploring how conceptions of values and laws counteract tendencies toward the accumulation of power. He examines not only how the nonhegemonic ethos is reflected in law but also how anarchic social formations can exist. In the Horn of Africa, the autonomous jurisdiction of these societies protects against destructive outside influences, offers a counterweight to hegemonic violence, and contributes to the stabilization of communal life. In an era of widespread dissatisfaction with Western political systems, Amborn's study offers an opportunity to shift from traditional theories of anarchism and nonhegemony that project a stateless society to consider instead stateless societies already in operation.

**Hermann Amborn** is Professor Emeritus of Anthropology at the Ludwig-Maximilians-Universität München.

# **Enlivenment**

Toward a Poetics for the Anthropocene

### **Andreas Weber**

We have been told that we are living in the Anthropocene, a geological era shaped by humans rather than by nature. In *Enlivenment*, German philosopher Andreas Weber presents an alternative understanding of our relationship with nature, arguing not that humans control nature but that humans and nature exist in a commons of mutual transformation. There is no nature—human dualism, he contends, because the fundamental dimension of existence is shared: aliveness. All subjectivity is intersubjectivity. Self is self-through-other. Seeing all beings in a common household of matter, desire, and imagination, an economy of metabolic and economic transformation, is "enlivenment." This perspective allows us to move beyond Enlightenment-style thinking that strips material reality of any subjectivity.

To take this step, Weber argues, we need to supplant the concept of techné with the concept of poiesis as the element that brings forth reality. In a world not divided into things and ideas, culture and nature, reality arises from the creation of relationships and continuous fertile transformations; any thinking in terms of relationships comes about as a poetics. The self is always a function of the whole; the whole is equally a function of the individual. Only this integrated freedom allows humanity to reconcile with the natural world.

This first English edition of *Enlivenment* has been expanded and updated from the German edition.

Andreas Weber is a Berlin-based philosopher, biologist, and writer. He is the author of *The Biology of Wonder: Aliveness, Feeling, and the Metamorphosis of Science; Biopoetics: Towards an Existential Biology; Matter and Desire: An Erotic Ecology;* and other books. He teaches philosophy at Leuphana University, Lüneberg, and the University of Fine Arts, Berlin.



A new understanding of the Anthropocene that is based on mutual transformation with nature rather than control over nature.

March 4 1/2 x 7, 208 pp.

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**Untimely Meditations** 

# AGAINST NATURE LORRAINE DASTON

A pithy work of philosophical anthropology that explores why humans find moral orders in natural orders.

May 4 1/2 x 7, 104 pp.

**\$13.95T/£10.99 paper** 978-0-262-53733-9

**Untimely Meditations** 

# **Against Nature**

# **Lorraine Daston**

Why have human beings, in many different cultures and epochs, looked to nature as a source of norms for human behavior? From ancient India and ancient Greece, medieval France and Enlightenment America, up to the latest controversies over gay marriage and cloning, natural orders have been enlisted to illustrate and buttress moral orders. Revolutionaries and reactionaries alike have appealed to nature to shore up their causes. No amount of philosophical argument or political critique deters the persistent and pervasive temptation to conflate the "is" of natural orders with the "ought" of moral orders.

In this short, pithy work of philosophical anthropology, Lorraine Daston asks why we continually seek moral orders in natural orders, despite so much good counsel to the contrary. She outlines three specific forms of natural order in the Western philosophical tradition—specific natures, local natures, and universal natural laws—and describes how each of these three natural orders has been used to define and oppose a distinctive form of the unnatural. She argues that each of these forms of the unnatural triggers equally distinctive emotions: horror, terror, and wonder.

Daston proposes that human reason practiced in human bodies should command the attention of philosophers, who have traditionally yearned for a transcendent reason, valid for all species, all epochs, even all planets.

**Lorraine Daston** is Director at the Max Planck Institute for the History of Science in Berlin and Visiting Professor in the Committee on Social Thought at the University of Chicago. She is the coauthor (with Katharine Park) of *Wonders and the Order of Nature, 1150–1750* and (with Peter Galison) *Objectivity* and the editor of *Things that Talk: Object Lessons from Art and Science,* all three published by Zone Books.

# **Power and Care**

Toward Balance for Our Common Future—Science, Society, and Spirituality

# edited by Tania Singer and Matthieu Ricard, with Kate Karius

with contributions by His Holiness the Dalai Lama

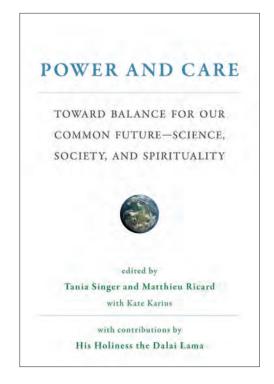
For more than thirty years, the Dalai Lama has been in dialogue with thinkers from a range of disciplines, helping to support pathways for knowledge to increase human wellbeing and compassion. These conversations, which began as private meetings, are now part of the Mind & Life Institute and Mind & Life Europe. This book documents a recent Mind & Life Institute dialogue with the Dalai Lama and others on two fundamental forces: power and care—power over and care for others in human societies.

The notion of power is essentially neutral; power can be used to benefit others or to harm them, to build or to destroy. Care, on the other hand, is not a neutral force; it aims at increasing the wellbeing of others. Power and care are not incompatible: power, imbued with care, can achieve more than a powerless motivation to care; power, without the intention to benefit others, can be ruthless. The contributors—who include such celebrated figures as Frans B. M. de Waal, Olafur Eliasson, Sarah Blaffer Hrdy, and Jody Williams—discuss topics including the interaction of power and care among our closest relatives, the chimpanzees; the effect of meditation and mental training practices on the brain; the role of religion in promoting peace and compassion; and the new field of Caring Economics.

Tania Singer is Director of the Department of Social Science at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig. Matthieu Ricard, a Buddhist monk, trained as a molecular biologist before moving to Nepal to study Buddhism. He is the author (with his father, Jean-François Revel) of The Monk and the Philosopher, The Quantum and the Lotus (with Trinh Thuan), Happiness, The Art of Meditation, Altruism: The Power of Compassion, A Plea for the Animals, and (with Wolf Singer) Beyond the Self: Conversations between Buddhism and Neuroscience (MIT Press). Kate Karius serves to make the world a healthier, more beautiful place by supporting luminaries and mission-driven organizations in bringing their messages out into the world.

#### Contributors

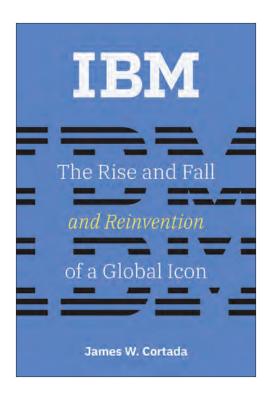
Paul Collier, Brother Thierry-Marie Courau, Frans B. M. de Waal, Olafur Eliasson, Scilla Elworthy, Alexandra M. Freund, Tenzin Gyatso (His Holiness the Dalai Lama), Markus Heinrichs, Sarah Blaffer Hrdy, Frédéric Laloux, Alaa Murabit, Matthieu Ricard, Johan Rockström, Richard Schwartz, Tania Singer, Dennis J. Snower, Rabbi Awraham Soetendorp, Theo Sowa, Pauline Tangiora, Jody Williams



Leading thinkers from a range of disciplines discuss the compatibility of power and care, in conversation with the Dalai Lama.

March 6 x 9, 208 pp. 48 illus.

**\$27.95T/£22.00 cloth** 978-0-262-03952-9



A history of one of the most influential American companies of the last century.

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**History of Computing series** 

# **IBM**

The Rise and Fall and Reinvention of a Global Icon

### James W. Cortada

For decades, IBM shaped the way the world did business. IBM products were in every large organization, and IBM corporate culture established a management style that was imitated by companies around the globe. It was "Big Blue," an icon. And yet over the years, IBM has gone through both failure and success, surviving flatlining revenue and forced reinvention. The company almost went out of business in the early 1990s, then came back strong with new business strategies and an emphasis on artificial intelligence. In this authoritative, monumental history, James Cortada tells the story of one of the most influential American companies of the last century.

Cortada, a historian who worked at IBM for many years, describes IBM's technology breakthroughs, including the development of the punch card (used for automatic tabulation in the 1890 census), the calculation and printing of the first Social Security checks in the 1930s, the introduction of the P.C. to a mass audience in the 1980s, and the company's shift in focus from hardware to software. He discusses IBM's business culture and its orientation toward employees and customers; its global expansion; regulatory and legal issues, including antitrust litigation; and the track records of its CEOs. The secret to IBM's unequalled longevity in the information technology market, Cortada shows, is its capacity to adapt to changing circumstances and technologies.

**James W. Cortada** is Senior Research Fellow at the Charles Babbage Institute at the University of Minnesota and the author of *Information and the Modern Corporation* (MIT Press) and other books. He worked at IBM for thirty-eight years in sales, consulting, managerial, and research positions.

# The Craft of Dying

The Modern Face of Death anniversary edition

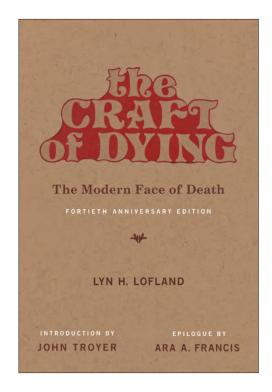
# Lyn H. Lofland

introduction by John Troyer epilogue by Ara A. Francis

Much of today's literature on end-of-life issues overlooks the importance of 1970s social movements in shaping our understanding of death, dying, and the dead body. This anniversary edition of Lyn Lofland's *The Craft of Dying* begins to repair this omission. Lofland identifies, critiques, and theorizes 1970s death movements, including the Death Acceptance Movement, the Death with Dignity Movement, and the Natural Death movement. All these groups attempted to transform death into a "positive experience," anticipating what is now known as the Death Positivity Movement.

Lofland turns a sociologist's eye on the era's increased interest in death, considering, among other things, the components of the modern "face of death" and the "craft of dying," the construction of a dying role or identity by those who are dying, and the constraints on their freedom to do this. Lofland wrote just before the AIDS epidemic transformed the landscape of death and dying in the West; many of the trends she identified became the building blocks of AIDS activism in the 1980s and 1990s. *The Craft of Dying* will help readers understand the relation of the contemporary Death Positivity movement to race and class and the unintended consequences of its neoliberal ethos—issues often forgotten by today's mostly white middle-class death-positive activists.

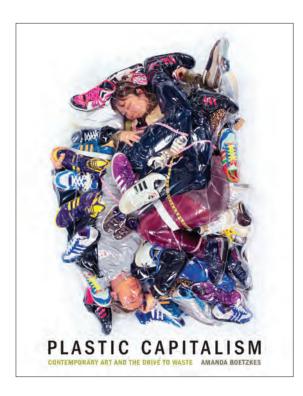
**Lyn H. Lofland** is Professor Emerita in the Department of Sociology at the University of California, Davis. **John Troyer** is Director of the Centre for Death and Society and the University of Bath. **Ara A. Francis** is Associate Professor in the Sociology and Anthropology Department at the College of the Holy Cross.



The fortieth-anniversary edition of a classic and prescient work on death and dying.

May 5 3/8 x 8, 160 pp.

**\$19.95T/£14.99 paper** 978-0-262-53734-6



An argument for the centrality of the visual culture of waste—as seen in works by international contemporary artists—to the study of our ecological condition.

March 7 x 9, 280 pp. 81 color illus.. 5 b&w illus.

> **\$34.95T/£27.00 cloth** 978-0-262-03933-8

# **Plastic Capitalism**

Contemporary Art and the Drive to Waste

### **Amanda Boetzkes**

Ecological crisis has driven contemporary artists to engage with waste in its most non-biodegradable forms: plastics, e-waste, toxic waste, garbage hermetically sealed in landfills. In this provocative and original book, Amanda Boetzkes links the increasing visualization of waste in contemporary art to the rise of the global oil economy and the emergence of ecological thinking. Often, when art is analyzed in relation to the political, scientific, or ecological climate, it is considered merely illustrative. Boetzkes argues that art is constitutive of an ecological consciousness, not simply an extension of it. The visual culture of waste is central to the study of the ecological condition.

Boetzkes examines a series of works by an international roster of celebrated artists, including Thomas Hirschhorn, Francis Alÿs, Song Dong, Tara Donovan, Agnès Varda, Gabriel Orozco, and Mel Chin, among others, mapping waste art from its modernist origins to the development of a new waste imaginary generated by contemporary artists. Boetzkes argues that these artists do not offer a predictable or facile critique of consumer culture. Bearing this in mind, she explores the ambivalent relationship between waste (both aestheticized and reviled) and a global economic regime that curbs energy expenditure while promoting profitable forms of resource consumption.

**Amanda Boetzkes** is Professor of Contemporary Art History and Theory at the University of Guelph in Ontario, Canada, and the author of *The Ethics of Earth Art*. She was a Carson Fellow at the Rachel Carson Center for Environment and Society in Munich in 2017.

# March 4

Scientists, Students, and Society anniversary edition

# edited by Jonathan Allen

foreword by Kurt Gottfried

On March 4, 1969, MIT faculty and students joined together for an extraordinary day of protest. Growing out of the MIT community's anguish over the Vietnam War and concern over the perceived complicity of academic science with the American war machine, the events of March 4 and the days following were a "positive protest"—a forum not only for addressing political and moral priorities but also for mapping out a course of action. Soon afterward, some of the participants founded the Union of Concerned Scientists. This book documents the March 4 protest with transcripts of talks and panel discussions. Speakers included Noam Chomsky, Howard Zinn, Lionel Trilling, and Nobel Laureate George Wald, whose memorable speech, "A Generation in Search of a Future," was widely circulated. Topics of discussion ranged from general considerations of the intellectuals' political responsibility to specific comments on the Vietnam War and nuclear disarmament.

This fiftieth anniversary edition adds a foreword by Kurt Gottfried, a physicist, participant in the March 4 protest, and cofounder of the Union of Concerned Scientists. He writes, forcefully and hopefully, "Fifty years ago, a remarkable awakening was occurring among American scientists about their role in society. This volume offers a fascinating snapshot of that moment on March 4, 1969 and the activities and discussions collected here remain relevant and resonant today." In an era when many politicians routinely devalue science, we can take inspiration from the March 4 protests.

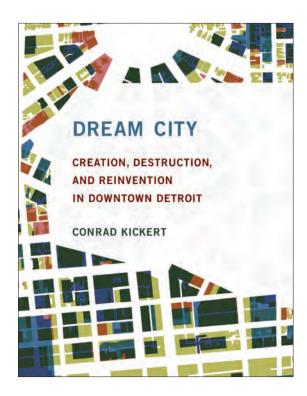
Jonathan Allen joined the faculty of MIT in 1968; from 1981 until his death in 2000, he was Director of MIT's Research Laboratory of Electronics (RLE). Kurt Gottfried, a cofounder of the Union of Concerned Scientists, is Professor Emeritus of Physics at Cornell University. He was a Visiting Professor at MIT from 1968 to 1969.



Scientists debate the role of scientific research in the military-industrial complex and consider the complicity of academic science in American wars.

February 5 3/8 x 8, 200 pp.

**\$24.95T/£20.00** paper 978-0-262-53665-3



Tracing two centuries of rise, fall, and rebirth in the heart of downtown Detroit.

May 7 x 9, 384 pp. 62 color illus., 67 b&w illus.

**\$44.00T/£35.00 cloth** 978-0-262-03934-5

# **Dream City**

Creation, Destruction, and Reinvention in Downtown Detroit

# **Conrad Kickert**

Downtown Detroit is in the midst of an astonishing rebirth. Its side-walks have become a dreamland for an aspiring creative class, filled with shoppers, office workers, and restaurant-goers. Cranes dot the skyline, replacing the wrecking balls seen there only a few years ago. But venture a few blocks in any direction and this liveliness gives way to urban blight, a nightmare cityscape of crumbling concrete, barbed wire, and debris. In *Dream City*, urban designer Conrad Kickert examines the paradoxes of Detroit's landscape of extremes, arguing that the current reinvention of downtown is the expression of two centuries of Detroiters' conflicting hopes and dreams. Kickert demonstrates the materialization of these dreams with a series of detailed original morphological maps that trace downtown's rise, fall, and rebirth.

Kickert writes that downtown Detroit has always been different from other neighborhoods; it grew faster than other parts of the city, and it declined differently, forced to reinvent itself again and again. Downtown has been in constant battle with its own offspring—the automobile and the suburbs the automobile enabled—and modernized itself though parking attrition and land consolidation. *Dream City* is populated by a varied cast of downtown power players, from a 1920s parking lot baron to the pizza tycoon family and mortgage billionaire who control downtown's fate today. Even the most renowned planners and designers have consistently yielded to those with power, land, and finances to shape downtown. Kickert thus finds rhyme and rhythm in downtown's contemporary cacophony.

Kickert argues that Detroit's case is extreme but not unique; many other American cities have seen a similar decline—and many others may see a similar revitalization.

**Conrad Kickert** is an urban designer and Assistant Professor of Urban Design at the University of Cincinnati.

# **Quantum Strangeness**

Wrestling with Bell's Theorem and the Ultimate Nature of Reality

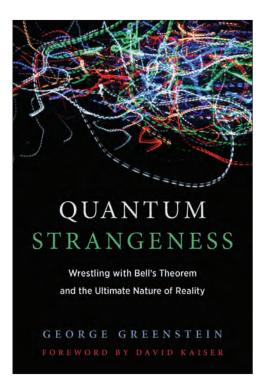
# George Greenstein

foreword by David Kaiser

Quantum mechanics is one of the glories of our age. The theory lies at the heart of modern society. Quantum mechanics is one of our most valuable forecasters—a "great predictor." It has immeasurably altered our conception of the natural world. Its philosophical implications are earthshaking. But quantum mechanics steadfastly refuses to speak of many things; it deals in probabilities rather than giving explicit descriptions. It never explains. Einstein, one of its creators, considered the theory incomplete. Even now, many years after the creation of quantum mechanics, physicists continue to argue about it. Astrophysicist George Greenstein has been both fascinated and confused by quantum mechanics for his entire career. In this book, he describes, engagingly and accessibly, his efforts to understand the enigma that is quantum mechanics.

The fastest route to the insight into the ultimate nature of reality revealed by quantum mechanics, Greenstein writes, is through Bell's Theorem, which concerns reality at the quantum level; and Bell's 1964 discovery drives Greenstein's quest. Greenstein recounts a scientific odyssey that begins with Einstein, continues with Bell, and culminates with today's push to develop an industry of quantum machines. Along the way, he discusses spin, entanglement, experimental metaphysics, and quantum teleportation, often with easy-to-grasp analogies. We have known for decades that the world of the quantum was strange, but, Greenstein says, not until John Bell came along did we know just how strange.

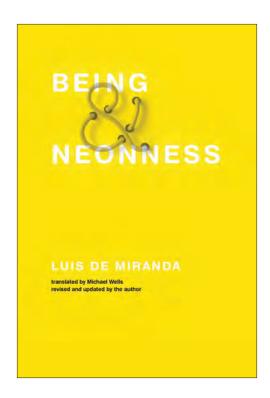
**George Greenstein** is Sidney Dillon Emeritus Professor of Astronomy at Amherst College. He is the author of *Frozen Star: Of Pulsars, Black Holes, and the Nature of Stars, The Symbiotic Universe: Life and Mind in the Cosmos, The Quantum Challenge: Modern Research on the Foundations of Quantum Mechanics (with Arthur Zajonc), and other books.* 



A physicist's efforts to understand the enigma that is quantum mechanics.

May 6 x 9, 160 pp. 20 illus.

**\$19.95T/£14.99 cloth** 978-0-262-03993-2



A cultural and philosophical history of neon, from Paris in the twentieth century to the perpetually switched-on present day.

May 6 x 8, 96 pp.

**\$14.95T/£11.99 cloth** 978-0-262-03988-8

# **Being and Neonness**

# Luis de Miranda

translated by Michael Wells revised and updated by the author

For most of us, the word neon conjures images of lights, colors, nightlife, and streets. It evokes the poetry of city nights. For Luis de Miranda, neon is a subject of philosophical curiosity. *Being and Neonness* is a cultural and philosophical history of neon, from early twentieth-century Paris to the electric, perpetually switched-on present day Manhattan. It is an inspired journey through a century of night, deciphering the halos of the past and the reflections of the present to shed some light on the future.

Invented in Paris in 1912, neon first appeared on a modest but arresting sign outside a small barbershop; the sign lit up number 14, Boulevard Montmartre, attracting so many passers by that the barber's revenues soon doubled. A century later, neon is no longer just a sign; it is a mythic object—a metonymy of contemporary identity and a metaphor for the present, signifying the ubiquity of commerce and the tautology of hypermodernity. But perhaps the noble gas of neon whispers something more, something deeper? In ten short, poetic yet precise chapters, de Miranda explores the neon lights of the twentieth century. He considers, among other historical curiosities, the neon compulsions of the Italian Futurists; the Soviet program of "neonization"; the Nazi's deployment of neon for propaganda purposes; Baudelaire's "halo" and Benjamin's "aura"; neon as a gas and crystallized chaos; neon and power; neon and capitalism all of this backlit by an original reading of Sartre's Being and Nothingness. This English edition has been thoroughly revised and adapted from the French edition, L'être et le neon.

**Luis de Miranda** is a postdoctoral researcher in the Humanities Department at Örebro University and a philosophical counselor at the Philosophical Parlour in Sweden. He has published both nonfiction and fiction in France.

# **Energies in the Arts**

# edited by Douglas Kahn

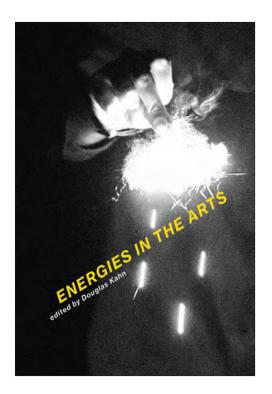
This book investigates energies—in the plural, the energies embedded and embodied in everything under the sun—as they are expressed in the arts. With contributions from scholars and critics from the visual arts, art history, anthropology, music, literature, and the history of science, it offers the first multidisciplinary investigation of the concepts and material realities of energy coursing through the arts. Just as Douglas Kahn's earlier books helped introduce sound as a category for study in the arts, this new volume will be a foundational volume for future explorers in a largely uncharted domain.

The modern concept of energy is only two hundred years old—an abstraction grounded in extraction—but this book takes a more expansive view. It opens with a clap: the sonic energies in a ceremony of the indigenous Goolarabooloo people of Australia. Other chapters explore the energies of photography; responses of artists in the early twentieth century—including Marcel Duchamp—to scientific discoveries in electricity and electromagnetism; the aestheticization of entropy in works by Hans Haacke and Robert Smithson; free-jazz musician Milford Graves's cross-cultural engagement with music, science, and spiritualism; energy field performance; and the self-generating energy of rumor and gossip as artwork. Contributors include such leading scholars as Linda Dalrymple Henderson, John Tresch, and Caroline A. Jones. Practicing artists and students of art history will find *Energies in the Arts* an essential work.

**Douglas Kahn** is Professor at the National Institute for Experimental Arts at the University of New South Wales in Sydney, Australia. He is the author of *Noise Water Meat: A History of Sound in the Arts* (MIT Press) and *Earth Sound Earth Signal: Energies and Earth Magnitude in the Arts* and coeditor of *Wireless Imagination: Sound, Radio, and the Avant-Garde* (MIT Press).

#### Contributors

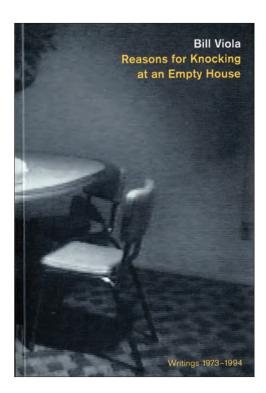
Susan Ballard, Jennifer Biddle, Marcus Boon, Joan Brassil, Steven Connor, Milford Graves, Daniel Hackbarth, Linda Dalrymple Henderson, Caroline A. Jones, Douglas Kahn, David Mather, Stephen Muecke, James Nisbet, Daniela Silvestrin, Michael Taussig, John Tresch, Melissa Warak



Investigating the concepts and material realities of energy coursing through the arts: a foundational text.

May 6 3/4 x 9 1/2, 488 pp. 22 color illus., 96 b&w illus.

\$50.00T/£40.00 cloth 978-0-262-03938-3



Essays, notebook entries, drawings, and descriptions of projects map Bill Viola's artistic process.

January 6 3/4 x 9 1/4, 304 pp. 90 illus.

**\$24.95T/£20.00** paper 978-0-262-72025-0

Writing Art series

# Reasons for Knocking at an Empty House

Writings 1973-1994

# **Bill Viola**

edited by Robert Violette in collaboration with the author

Bill Viola is considered by many to be the leading artist of his generation working in video and sound installations. Over the last forty years, he has created and exhibited video pieces, architectural video installations, sound environments, and works for television broadcast. *Reasons for Knocking at an Empty House* brings together a selection of essays, notebook entries, drawings, and descriptions of projects that map Viola's journey through the readings, observations, experiments, and associations that ground his art. Each work illustrated is accompanied by a description by the artist and comments on the work's origins from the artist's notebooks.

In his writings, Viola distinguishes between inner and outer land-scapes, between the physical world and mental images, without wishing to separate them. He describes nature in art as the raw material of the psyche, and when he points his camera at nature, it is only to turn attention inward, to the space of ideas and self-awareness. In his work, Viola has used multimedia technologies to explore the phenomena of sense perception as a language of the body and avenue to self-knowledge, integrating many disciplines and philosophies to reveal contemporary art's relevance to the modern world. His views have deep roots in mysticism, poetry, philosophy, Eastern art, shamanism, Chinese Taoism, Sufism, and Zen Buddhism.

The book will be essential reading, especially for artists and art students; it offers a rare time capsule, capturing the process of an artist in the first twenty-five years of his creative output.

**Bill Viola** (b. 1951) has exhibited his work at venues including the Museum of Modern Art, New York; the Whitney Museum of American Art; the Guggenheim Museum, New York; the J. Paul Getty Museum, Los Angeles; the National Gallery, London; the Fondación "La Caixa" in Madrid; the National Gallery of Australia; and the Grand Palais in Paris. He represented the United States at the 46th Venice Biennale. In 2017, twenty-three of Viola's works occupied the main galleries at the Guggenheim Museum Bilbao, an exhibition that attracted 710,000 visitors.

# **Publishing Manifestos**

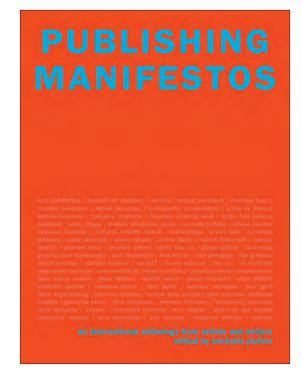
An International Anthology from Artists and Writers

# edited by Michalis Pichler

Independent publishing, art publishing, publishing as artistic practice, publishing counterculture, and the zine, DIY, and POD scenes have proliferated over the last two decades. So too have art book fairs, an increasingly important venue—or even medium—for art. Art publishing experienced a similar boom in the 1960s and 1970s, in response to the culture's "linguistic turn." Today, art publishing confronts the internet and the avalanche of language and images that it enables. The printed book offers artists both visibility and tangibility. *Publishing Manifestos* gathers texts by artists, authors, editors, publishers, designers, zinesters, and activists to explore this rapidly expanding terrain for art practice.

The book begins in the last century, with texts by Gertrude Stein, El Lissitsky, Oswald de Andrade, and Jorge-Luis Borges. But the bulk of the contributions are from the twenty-first century, with an emphasis on diversity, including contributions from Tauba Auerbach, Mariana Castillo Deball, Ntone Edjabe, Girls Like Us, Karl Holmqvist, Temporary Services, and zubaan. Some contributors take on new forms of production and distribution; others examine the political potential of publishing and the power of collectivity inherent in bookmaking. They explore among other topics, artists' books, appropriation, conceptual writing, non-Western communities, queer identities, and post-digital publishing. Many texts are reproduced in facsimile—including a handwritten "speculative, future-forward newspaper" from South Africa. Some are proclamatory mission statements, others are polemical self-positioning; some are playful, others explicitly push the boundaries. All help lay the conceptual foundations of a growing field of practice and theory.

Michalis Pichler, an artist-author, has published conceptual bookworks with Printed Matter, Revolver/Archiv für aktuelle Kunst, cneai (Chatou), and Kunstverein Milano and edited the critical anthology Books and Ideas after Seth Siegelaub. He cofounded Miss Read: The Berlin Art Book Festival, an artist-run public meeting place for discourse around artists' books, conceptual publications, publishing as practice, which has evolved into Europe's largest book fair.

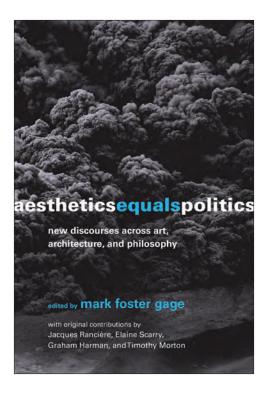


Manifestos by artists, authors, editors, publishers, designers, zinesters explore publishing as artistic practice.

April 7 x 9 1/2, 308 pp. 60 illus.

**\$29.95T/£24.00 cloth** 978-0-262-53718-6

Copublished with Miss Read: The Berlin Art Book Fair



How aesthetics—understood as a more encompassing framework—might become the primary discourse for political and social engagement.

March 6 x 9, 336 pp. 44 illus.

**\$34.95T/£27.00 cloth** 978-0-262-03943-7

# **Aesthetics Equals Politics**

New Discourses Across Art, Architecture, and Philosophy

# edited by Mark Foster Gage

with Matt Shaw

These essays make the case for a reignited understanding of aesthetics—one that casts aesthetics not as illusory, subjective, or superficial, but as a more encompassing framework for human activity. Such an aesthetics, the contributors suggest, could become the primary discourse for political and social engagement. Departing from the "critical" stance of twentieth-century artists and theorists who embraced a counter-aesthetic framework for political engagement, this book documents how a broader understanding of aesthetics can offer insights into our relationships not only with objects, spaces, environments, and ecologies, but also with each other and the political structures in which we are all enmeshed.

The contributors—philosophers, media theorists, artists, curators, writers and architects including such notable figures as Jacques Rancière, Graham Harman, and Elaine Scarry—build a compelling framework for a new aesthetic discourse. The book opens with a conversation in which Rancière tells the volume's editor, Mark Foster Gage, that the aesthetic is "about the experience of a common world." The essays following discuss such topics as the perception of reality; abstraction in ethics, epistemology, and aesthetics as the "first philosophy"; Afrofuturism; Xenofeminism; philosophical realism; the productive force of alienation; and the unbearable lightness of current creative discourse.

Mark Foster Gage is Associate Professor and Assistant Dean at the Yale School of Architecture. A practicing architect, he is the editor of Aesthetic Theory: Essential Texts for Architecture and Design and The Space of Social Equity and author of Designing Democracy: Architecture, Aesthetics and the Pursuit of Equality, and other books. His design work has been exhibited in such venues as the Museum of Modern Art in New York, the Art Institute of Chicago, and the Venice Biennale.

#### Contributors

Mark Foster Gage, Jacques Rancière, Elaine Scarry, Graham Harman, Timothy Morton, Ferda Kolatan, Adam Fure, Michael Young, Nettrice R. Gaskins, Roger Rothman, Diann Bauer, Matt Shaw, Albena Yaneva, Brett Mommersteeg, Lydia Kallipolliti, Ariane Lourie Harrison, Rhett Russo, Peggy Deamer, Caroline Picard

# **Critical Care**

Architecture and Urbanism for a Broken Planet

# edited by Angelika Fitz and Elke Krasny and Architekturzentrum Wien

Today, architecture and urbanism are capital-centric, speculation-driven, and investment-dominated. Many cannot afford housing. Austerity measures have taken a disastrous toll on public infrastructures. The climate crisis has rendered the planet vulnerable, even uninhabitable. This book offers an alternative vision in architecture and urbanism that focuses on caring for a broken planet. Rooted in a radical care perspective that always starts from the given, in the midst of things, this edited collection of essays and illustrated case studies documents ideas and practices from an extraordinarily diverse group of contributors.

Focusing on the three crisis areas of economy, ecology, and labor, the book describes projects including village reconstruction in China; irrigation in Spain; community land trust in Puerto Rico; revitalization of modernist public housing in France; new alliances in informal settlements in Nairobi; and the redevelopment of traditional building methods in flood areas in Pakistan. Essays consider such topics as ethical architecture, land policy, creative ecologies, diverse economies, caring communities, and the exploitation of labor. Taken together, these case studies and essays provide evidence that architecture and urbanism have the capacity to make the planet livable, again.

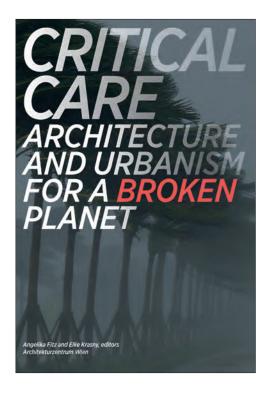
Angelika Fitz is Director of Architekturzentrum Wien. Her curatorial projects include We-Traders: Swapping Crisis for City and Actopolis: The Art of Action (both for the Goethe Institute). She is the coeditor of Assemble: How to Build. Elke Krasny is Professor at the Academy of Fine Arts Vienna. Her curatorial and editorial projects include The Force is in the Mind: The Making of Architecture and The Right to Green: Hands-on Urbanism 1850–2012 (both for the Architekturzentrum Wien, with the latter shown at the 2012 Venice Architecture Biennale). Fitz and Krasny are curators of the exhibition at Architekturzentrum Wien that this book accompanies, Critical Care: Architecture and Urbanism for a Broken Planet.

#### Essays by

Mauro Baracco, Jane da Mosto, Lionel Devlieger, Angelika Fitz, Hélène Frichot, Katherine Gibson, Mauro Gil-Fournier Esquerra, Valeria Graziano, Gabu Heindl, Ann Hill, Elke Krasny, Lisa Law, Ligia Nobre, Meike Schalk, Linda Tegg, Ana Carolina Tonetti, Kim Trogal, Joan Tronto, Anna Tsing, Theresa Williamson, Louise Wright

#### Case studies

aaa atelier d'architecture autogérée, Ayuntamiento BCN, Kashef Mahboob Chowdhury/Urbana, Cíclica [Space.Community.Ecology] + CAVAA arquitectes, Care+Repair Tandems Vienna (including Gabu Heindl, Zissis Kotionis + Phoebe Giannisi, rotor, Meike Schalk, Cristian Stefanescu, Rosario Talevi and many others), Colectivo 720, Estudio Teddy Cruz + Fonna Forman, EAHR Emergency Architecture & Human Rights, Fideicomiso de la Tierra del Caño Martín Peña CLT, Anna Heringer, Anupama Kundoo, KDI Kounkuey Design Initiative, Lacaton & Vassal, Yasmeen Lari, muf architecture/art, Paulo Mendes da Rocha + MMBB, RUF Rural Urban Framework, Studio Vlay Streeruwitz, De Vylder Vinck Taillieu, ZUsammenKUNFT Berlin



How architecture and urbanism can help to care for and repair a broken planet: essays and illustrated case studies.

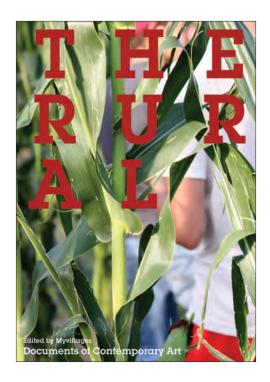
July 6 1/2 x 9 1/4, 300 pp. 180 color illus.

**\$40.00T/£30.00** paper 978-0-262-53683-7

Copublished with Architekturzentrum Wien

#### **EXHIBITION**

Critical Care: Architecture and Urbanism for a Broken Planet
Architekturzentrum Wien
April 24, 2019–September 9, 2019



An investigation through texts, interviews, and documentation of the complex relationship between the urban, the rural, and contemporary cultural production.

March 5 3/4 x 8 1/4, 240 pp.

\$24.95T

978-0-262-53716-2

Documents of Contemporary Art series

Copublished with Whitechapel Gallery, London

Not for sale in the UK or Europe

# The Rural

# edited by Myvillages

What, and where, is "the Rural"? From the rocks that break a farmer's plough on a field in Japan to digital infrastructures that organize geographically dispersed interests and ambitions, vast parts of our lives are still connected and dependent on resources, production, and infrastructures located within rural geographies, and the rural remains a shared cultural space. This anthology offers an urgent and diverse cross-section of rural art, thinking, and practice, with writings that consider ways in which artists respond to the socioeconomic divides between the rural and the urban—from reimagined farming practices and food systems to architecture, community projects, and transnational local networks. Edited by three artists who have been working within rural situations and communities for the last twenty years, this anthology is formed as a document, tool, and navigation device for future artistic practice in which "the rural" is filtered through a lens sharpened by an audience-based model of art that practices from within the culture it addresses.

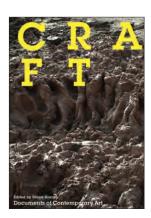
**Myvillages** is an international artist initiative founded and run by Kathrin Böhm (Germany/UK), Wapke Feenstra (Netherlands), and Antje Schiffers (Germany) since 2003.

# Artists, practitioners, and organizations surveyed include

Lara Almarcegui, Archstoyanie Festival, Joseph Beuys, Lina Bo Bardi, Melanie Bonajo, Echigo-Tsumari Art Triennale, Olafur Eliasson, Fieldwork, Amy Franceschini, Rainer Ganahl, Fernando García-Dory, Grizedale Arts, Hans Haacke, Sigrid Holmwood, Jatiwangi Art Factory, Brian Jungen, Anastasia Khoroshilova, Tea Mäkipää, Renzo Martens, M12 Group, Nikolay Polissky, Marjetica Potrc, Kateřina Šeda, Robert Smithson, Rirkrit Tiravanija

#### Writers include

Kenneth Anders, Sacha Bronwasser, Homi K. Bhabha, Hal Foster, Ivan Illich, Steven Jacobs, Julia Kristeva, Henri Lefebvre, Marco Marcon, Georgy Nikich, Carolyn Steel, Vandana Shiva, Paul O'Neill, Mike Pearson, Doina Petrescu, Miranda Pope, Natalie Robertson, Paul Roncken, Rosemary Shirley, Sue Spaid, David Teh, Reinhardt Vanhoe, Colin Ward





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# **Mission Moon 3-D**

A New Perspective on the Space Race

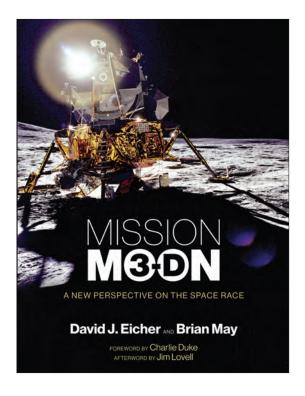
# **David Eicher and Brian May**

foreword by Charlie Duke postscript by Jim Lovell

July 20, 2019 marks the fiftieth anniversary of Apollo 11's epochal lunar landing, when Neil Armstrong and Buzz Aldrin walked on the surface of the moon. This visually rich book offers a new perspective on that historic accomplishment, telling the story of the lunar landing from its beginnings in the Cold War space race to the missions that followed through vivid 3-D images. A 3-D viewer, designed by astrophysicist (and lead guitarist with the rock group Queen) Brian May, is included with the book.

Mission Moon 3-D offers unique access to the Apollo astronauts and Soviet cosmonauts and what they saw. It tells the story of the dueling U.S. and Soviet space programs, from Sputnik and the space dog Laika to Mercury, Gemini, and Apollo. In 1961, President John F. Kennedy declared that the United States would put a man on the moon by the end of the decade. On July 20, 1969, Neil Armstrong guided the Eagle to a safe landing on the edge of the moon's Sea of Tranquility. President Richard Nixon told the astronauts, and the nation, that it was "the greatest week in the history of the world since the Creation." *Mission Moon 3-D* recounts all this and more in memorable and visually stunning fashion.

**David Eicher**, editor-in-chief of Astronomy Magazine, has written or contributed to twenty-one books on science and history, including *The New Cosmos* and the forthcoming *Galaxies*. **Brian May** is a founding member of the legendary rock band Queen and an astrophysicist. He is the author of eight books on astronomy and stereo photography. **Charlie Duke** is a retired astronaut and test pilot. As the lunar module pilot on Apollo 16, he became the tenth and youngest person to walk on the Moon. **Jim Lovell**, retired astronaut and Navy pilot, was commander of the Apollo 13 mission.



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David A. Mindell \$27.95T/£22.00 paper 978-0-262-51610-5 art

# Sharon Lockhart Pine Flat Howard Singerman Afterall Books: One Work

A nuanced reading of an artwork that explores a place, transitory and pastoral, where childhood might be lived and imagined differently.

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

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One Work series

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# **Sharon Lockhart**

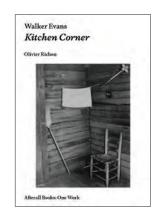
Pine Flat

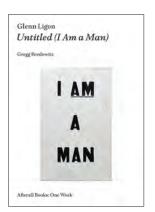
# **Howard Singerman**

Sharon Lockhart's *Pine Flat* (2006) takes its name from a small hamlet in the foothills of the western slope of the Sierra Nevadas, just inside the Giant Sequoia National Monument. The work itself comprises three distinct parts: a set of three photographs of landscapes; a larger set of posed studio portraits of children and young teenagers; and a 138-minute 16-millimeter film, which is itself assembled from twelve tenminute scenes—each a single immobile take—divided in half by a ten-minute intermission. This volume in Afterall's One Work series offers a nuanced reading of Lockhart's work, with color illustrations from both series of photographs and the film.

Art historian Howard Singerman sees in *Pine Flat* not a straightforward portrait of a community of children or ethnography of a place. Rather, the work explores the possibility of a space for childhood in which children have the right to intimacy, innocence, and interest outside adult narratives. The children in *Pine Flat* are posed formally and conventionally, but the space they occupy and the identities they construct are their own. Youth culture has long been exploited, to sell itself in order to be sold to; today, the rights of children to their own childhoods are constantly eroded. In *Pine Flat*, Singerman argues, Lockhart proposes a place, transitory and pastoral, "where childhood might be lived differently, imagined under a different order of power and possibility."

**Howard Singerman** is Phyllis and Joseph Caroff Chair of the Department of Art and Art History at Hunter College, City University of New York. He is the author of *Art Subjects: Making Artists in the American University* and *Art History, after Sherrie Levine* and editor of *Sherrie Levine* (MIT Press).





political science

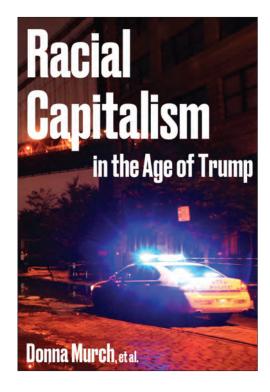
# Racial Capitalism in the Age of Trump

# Donna Murch, et al.

Two years ago, Boston Review's Race Capitalism Justice helped introduce the general reading public to the concept of "racial capitalism": the idea that slavery was not an aberration from capitalism, but central to its founding. Racial Capitalism in the Age of Trump revisits this theme, exploring how capitalism continues to subjugate minorities in Trump's America. In the lead essay, Donna Murch looks at how Trump's revived war on drugs racializes the opiate crisis, blaming Latino and black street gangs to distract the public from the true twin culprits: government deregulation and rapacious drug executives.

Murch's wide-ranging essay touches on the most crucial aspects of racial disparity in the United States today, including public health, hyperincarceration, and the turn to punitive immigration practices. Other essays in the volume look at how assisted reproductive technologies (ARTs) incentivize the reproduction of whiteness while relying on the exploited labor of women of color; how for-profit universities disproportionately prey on communities of color; and how the reform of predatory lending practices has done little to alleviate the disadvantages faced by would-be black homeowners. Contributors not only explore the institutional structures that profit from black suffering, but also point the way to a vision of racial justice.

**Donna Murch**, Associate Professor of History at Rutgers University, is the author of *Living for the City: Migration, Education, and the Rise of the Black Panther Party in Oakland* and the forthcoming *AssataTaught Me: State Violence, Mass Incarceration, and the Movement for Black Lives*.



Essays examine how capitalism continues to subjugate minorities in Trump's America, considering the most crucial aspects of racial disparity in the United States today.

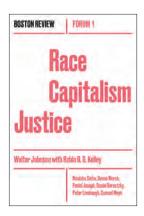
June 6 5/8 x 10 1/4, 128 pp.

**\$16.00T/£12.99** paper 978-1-946511-36-2

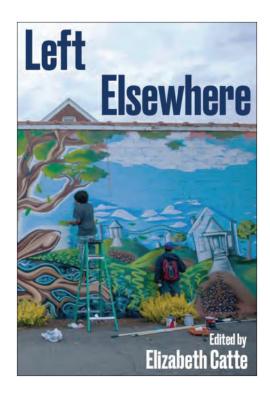
Distributed for Boston Review

 $Also\ from\ Boston\ Review$ 

Race Capitalism Justice edited by Walter Johnson and Robin D. G. Kelley \$20.00T/£14.99 paper 978-1-946511-00-3



political science



An examination of the emerging rural left, from environmentalists blocking pipeline construction to teachers on strike.

April 6 5/8 x 10 1/4, 128 pp.

\$16.00T/£12.99 paper 978-1-946511-40-9

Distributed for Boston Review

Also from Boston Review

Once and Future Feminist edited by Merve Emre \$16.00T/£12.99 paper 978-1-946511-10-2

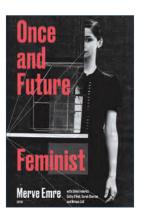
# **Left Elsewhere**

# edited by Elizabeth Catte

In *Left Elsewhere*, volume editor and lead essayist Elizabeth Catte turns a skeptical eye toward "purple" politicians, such as West Virginia Democrat Richard Ojeda, who are hailed by many as the best hope for U.S. progressives outside the urban coasts. By offering a survey of what the left actually looks like outside major urban centers, Catte shows how an emerging rural left is developing new strategies that do not easily fit into typical ideas of liberals, leftists, and Democratic politics. From environmentalists who successfully block pipeline construction to advocates for "radical" health care solutions such as needle exchanges to school teachers who go on strike, these newly energized activists may offer a better path forward for both policy and candidates to represent the needs of poor and working Americans.

By engaging activists and scholars outside the coastal bubbles, this collection offers insights into several overlooked areas, including working-class women's activism, victories in new labor struggle (especially in staunchly right-to-work states) and new organizing principles in Jackson, Mississippi—"America's most radical city"—that are bringing about meaningful racial and economic change on the ground. Taken together, the essays in *Left Elsewhere* show that today's political language is insufficient to convey what's happening in these areas and examine what, if any, coherent set of politics can be assigned to them.

Elizabeth Catte, a public historian and activist based in the Shenandoah Valley, Virginia, is the author of What You Are Getting Wrong about Appalachia, and coeditor of 55 Strong: Inside the West Virginia Teachers' Strike. Her work has been featured in All Things Considered, the Guardian, the Nation, the New Yorker, Bookforum, On the Media, Guernica, the Los Angeles Times, and the New York Review of Books.



fiction

# The Ghosting of Anne Armstrong

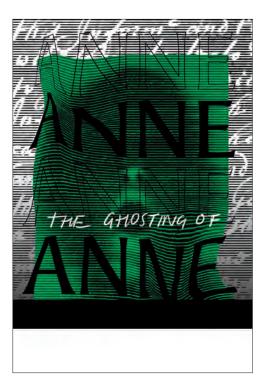
# Michael Cawood Green

Michael Cawood Green's novel *The Ghosting of Anne Armstrong* calls up the lost voice of a fourteen-year-old girl who, between January and May 1673, made some of the most dramatic accusations in the history of English witchcraft and then disappeared, leaving behind the mystery of what drove her to insist, in the face of rejection after rejection, on telling so strange a story—ultimately at the cost of her own life.

Fantastic yet compelling, Anne Armstrong's accusations against her neighbors in an isolated part of the Tyne Valley were recorded in the court depositions that form the basis for this literary thriller from Goldsmiths Press. Following a fictional historian who becomes obsessed with tracking Anne through each twist and turn of the legal proceedings, the reader is drawn ineluctably into the shadowy world where Anne's dark tale plays out to its devastating end.

The narrative is shot through with questions: Why does Anne risk being suspected of witchcraft herself as she accuses an ever-increasing number of others? Is she seeking revenge, or does she want to earn money as a witch finder? How does a young, illiterate woman have such detailed knowledge of esoteric forms of witchcraft? How does she learn to understand and manipulate the legal process? Is she a victim of her own hallucinations? Or is she telling the truth—the truth as she sees it, as perhaps only she can see it? And, finally, how does she meet her lonely death in the building which—if reports about appearances of her ghost are to be believed—she has never left?

**Michael Cawood Green** is a writer and Professor in English and Creative Writing at Northumbria University.



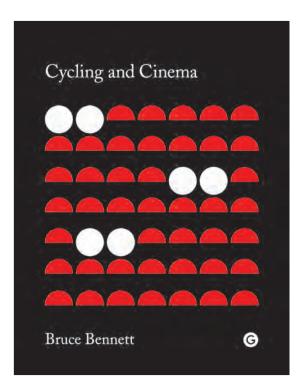
A novel that tells a fourhundred-year-old tale of witchcraft and intrigue, reimagining the life of a servant girl who accuses her neighbors of being witches.

April 6 x 9, 344 pp. 10 illus.

**\$24.95T/£20.00 cloth** 978-1-906897-95-6

**Distributed for Goldsmiths Press** 

cultural studies | film



# **Cycling and Cinema**

#### **Bruce Bennett**

Cycling and Cinema explores the history of the bicycle in cinema from the late nineteenth century through to the present day. In this new book from Goldsmiths Press, Bruce Bennett examines a wide variety of films from around the world, ranging from Hollywood blockbusters and slapstick comedies to documentaries, realist dramas, and experimental films, to consider the complex, shifting cultural significance of the bicycle.

The bicycle is an everyday technology, but in examining the ways in which bicycles are used in films, Bennett reveals the rich social and cultural importance of this apparently unremarkable machine. The cinematic bicycles discussed in this book have various functions. They are the source of absurd comedy in silent films, and the vehicles that allow their owners to work in sports films and social realist cinema. They are a means of independence and escape for children in melodramas and kids' films, and the tools that offer political agency and freedom to women, as depicted in films from around the world.

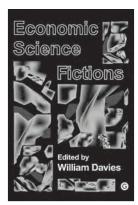
**Bruce Bennett** is Senior Lecturer in Film Studies in the Lancaster Institute for the Contemporary Arts (LICA) at Lancaster University

A unique exploration of the history of the bicycle in cinema, from Hollywood blockbusters and slapstick comedies to documentaries, realist dramas, and experimental films.

> April 7 x 9, 248 pp. 8 illus.

\$30.00S/£24.00 cloth 978-1-906897-99-4

**Distributed for Goldsmiths Press** 



economics | cultural studies

NOW IN PAPER

# **Economic Science Fictions**

# edited by William Davies

Rooted in the sense that our current economic reality is no longer credible or viable, this collection treats our economy as a series of fictions and science fiction as a means of anticipating different economic futures.

**William Davies** is Reader in Political Economy and Codirector of PERC at Goldsmiths, University of London.

"What Davies and his contributors ultimately carve out is a space of hope. Nothing is inevitable, and the ending to our story remains to be written."

-Hua Hsu, New Yorker

March | 5 3/8 x 8, 312 pp. | 17 illus.

**\$22.00T/£15.99** paper 978-1-912685-07-3

**PERC Papers series** 

**Distributed for Goldsmiths Press** 

art criticism

# The Glen Park Library

A Fairy Tale of Disruption

### Pamela M. Lee

foreword by Michelle Kuo

Connecting the current production of art to the management science of the future, Lee deftly deflates the cultural politics of technoutopia and technodystopia alike. From her dissection of postmodernism's endgames to the art world's fall to earth amid globalization, Lee is the critic we need in the age of Cambridge Analytica.

-from the foreword by Michelle Kuo, Marlene Hess Curator of Painting and Sculpture at The Museum of Modern Art, New York.

In October 2013, twenty-nine-year-old Ross William Ulbricht was arrested at the Glen Park Public Branch Library in San Francisco, accused of being the "Dread Pirate Roberts" and mastermind of a dark net drug marketplace known as Silk Road. Ulbricht was an ardent libertarian who believed Silk Road—described by the *New York Times* as "the largest, most sophisticated criminal enterprise the internet has ever seen"—was battling the forces of big government. He was convicted two years later of money laundering, computer hacking, and conspiracy to traffic narcotics and sentenced to life in prison.

Art historian Pamela Lee reads this event as a fairy tale of disruption rather than an isolated episode in the history of the dark net, Silicon Valley, and the relationship between public libraries and digital culture. Lee argues that the notion of "disruptive" technology in contemporary culture has radically affected our relationship to knowledge, history, language, aesthetics, reading, and truth. Against the backdrop of her account of Ulbricht and his exploits, Lee provides original readings of five women artists—Gretchen Bender, Cecile B. Evans, Josephine Pryde, Carissa Rodriguez, and Martine Syms—who weigh in, either explicitly or inadvertently, on the nature of contemporary media and technology. Written as a work of experimental art criticism, The Glen Park Library is both a homage to the Bay Area and an excoriation of the ethos of Silicon Valley. As with all fairy tales, the book's ultimate subjects are much greater, however, and Lee casts a critical eye on collisions between privacy and publicity, knowledge and information, and the past and future that are enabled by the technocratic worldview.

**Pamela M. Lee** is Professor of the History of Art at Yale University and the author of *Object to Be Destroyed:The Work of Gordon Matta-Clark* (MIT Press), *Chronophobia: On Time in the Art of the 1960s* (MIT Press), *New Games: Post-modernism after Contemporary Art*, and *Forgetting the Art World* (MIT Press).



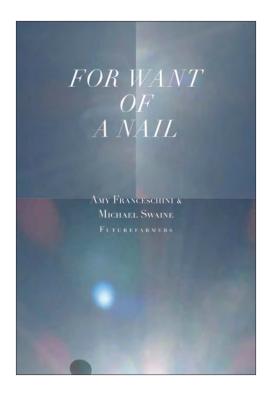
How Silicon Valley, the dark net, and digital culture have affected our relationship to knowledge, history, language, aesthetics, reading, and truth.

April 5 1/4 x 7 1/2, 144 pp. 15 color illus.

**\$30.00T/£24.00 cloth** 978-1-949484-02-1

Distributed for no place press

art



Three nails for J. Robert Oppenheimer, more than half a century after the Manhattan Project.

April 5 3/4 x 8 1/4, 144 pp. 110 color illus.

\$30.00T/£24.00 paper 978-1-949484-04-5

Distributed for no place press

# For Want of a Nail

# Amy Franceschini and Michael Swaine, Futurefarmers edited by Rachel Churner

"As [Futurefarmers] participatory operations suck viewers into place and history, the disconcerting focus on what initially appear to be insignificant details blossoms, blows up, forges ahead into unknown territory. Their "open practice" is based on exchange rather than imposition, enticing us out of our familiar cubicles into unfamiliar lands, even when we are already living there."

#### -Lucy Lippard, For Want of a Nail

For Want of a Nail takes as its starting point a series of curious memoranda sent from J. Robert Oppenheimer's office in October 1943 and archived in the Los Alamos Historical Museum, in which the eminent scientist repeatedly requests a nail in the wall upon which he could hang his hat. The persistence and specificity of the request for this nail inspired the international art collective Futurefarmers to create, by hand (and after more than a half-century delay), three nails for the theoretical physicist: one forged from a meteorite, one cast using 1943 steel pennies, and a third made by re-fusing Trinitite, a material formed by residue from the Trinity nuclear bomb test.

Growing out of a site-specific contribution to an exhibition in Santa Fe, New Mexico, this book engages the region's complex nuclear history as it relates to land use, resource extraction, and the far-reaching decisions that were made within the Manhattan Project. Throughout this multidisciplinary project, Futurefarmers constructs a narrative that runs parallel, and in some cases counter to, the conventional accounts of the Manhattan Project and Oppenheimer, its chief architect. Through video stills, production shots, essays, and interviews—presented in a book with uncut, unopened pages that the reader may cut to access more images—
For Want of a Nail not only opens new ways to think about the region's particular atomic history, but also prompts more general reflections on how knowledge and narrative are embedded and communicated in material objects, both ephemeral and ancient.

**Futurefarmers** (for this project **Amy Franceschini** and **Michael Swaine**), founded in 1994 in San Francisco, is an international group of artists, activists, farmers, and architects who work collaboratively to reimagine the environment and one's place in it.

#### Contributors

Peter Galison, Peter Kiley, Lucy Lippard, Megan Prelinger and Rick Prelinger, Anne Walsh

"Can you imagine? Living in a world where a nail is more precious than an A-bomb? Take your hat off to Franchesini and Swaine and hang it on the paradox of our age, which they evoke with wit, simplicity, and Zen-like mystery."

—Michael T. Taussig, Class of 1933 Professor of Anthropology,

Columbia University

poetry

# A Frank O'Hara Notebook

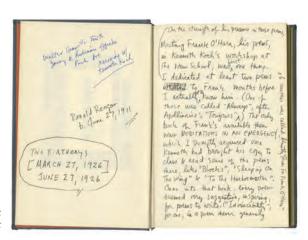
# **Bill Berkson**

introduction by Ron Padgett afterword by Constance Lewallen edited by Jordan Kantor

Poet and art critic Bill Berkson (1939–2016) had planned for many years to write a lengthy study on his friend and mentor Frank O'Hara (1926-1966) but died with the project still incomplete. This volume reproduces the sketchbook in which Berkson gathered notes, images, and poems about O'Hara, focusing on his memories of their collaborations in New York, from their initial meeting in 1960 to O'Hara's untimely death in 1966. A Frank O'Hara Notebook offers a fascinating first-person account of the hevday of O'Hara's creative life, and memorably sketches the heady social milieus of the poetry and art worlds of New York that O'Hara inhabited in the early 1960s. In addition to an exact-scale photographic reproduction of Berkson's handwritten notebook, this volume includes a typesetting of Berkson's notes and two texts on O'Hara derived from these notes published under Berkson's direction, titled "A Frank O'Hara File" and "What Frank O'Hara Was Like." The book shows the evolution of Berkson's ideas from notes to fragmentary phrases and sentences into finished pieces of writing. Ultimately, this collection reveals as much about Berkson's writing practice as it does about his famous subject and friend.

The book's translation of Berkson's handwritten notes and collaged material into type honors the idiosyncratic format of Berkson's handwritten text, precisely following the line breaks, capitalizations, and drawn graphic elements in the holograph. The book also includes an introduction by fellow New York School poet Ron Padgett and an afterword by Berkson's wife, curator Constance Lewallen.

**Bill Berkson** (1939–2016) was a poet, critic, teacher, and occasional curator, active in the art and literary worlds of New York and the San Francisco Bay Area for six decades. He published some twenty volumes of poetry, including *Portrait and Dream: New & Selected Poems* in 2009 and *Expect Delays* in 2014.





A fascinating account of Frank O'Hara in the prime of his creative life in New York, told through notes, images, and poems by his friend Bill Berkson.

April 6 3/4 x 9 3/4, 278 pp. 60 color illus.

**\$45.00T/£35.00 cloth** 978-1-949484-01-4

Distributed for no place press

art

# HELLO LEONORA, SOY ANNE WALSH

Video and performance artist
Anne Walsh's encounter with
and multipart response to
surrealist painter Leonora
Carrington's novel The
Hearing Trumpet.

April 7 x 9 1/2, 196 pp. 225 color illus.

**\$40.00T/£30.00 cloth** 978-1-949484-03-8

Distributed for no place press

# Hello Leonora, Soy Anne Walsh

# **Anne Walsh**

edited by Rachel Churner

Over the past decade, artist Anne Walsh has created an ongoing, multipart response to surrealist painter Leonora Carrington's novel *The Hearing Trumpet* (written in the early 1960s, published in 1974). Walsh's interdisciplinary works, encompassing video, writing, and performance, chronicle her time with the nonagenarian author and, ultimately, her assumption of the identity of the aging artist. *Hello Leonora, Soy Anne Walsh* is a visual and written "adaptation" of Carrington's feminist novella, offering a narrative in fragments: a middle-aged artist named Anne Walsh falls in love with the 92-year-old author of a book about a 92-year-old woman who is placed in a sinister and increasingly surreal retirement home.

Walsh courts the author, travels to Mexico to meet her, fantasizes about adapting the book for film, and spends the next decade searching for *The Hearing Trumpet*'s form and cast. Having discovered in Carrington's novel a thrilling, subversive example of old age, Walsh casts herself as an "Apprentice Crone." She stalks old people and takes selfies with them. She becomes a mother, passes through menopause. She sings her daughter's Disney movie songs at "elder theater" classes. She studies and rehearses the trauma, the affliction, the indignity that is old age, and she writes to Leonora Carrington.

The story is told through facsimiles of hand-written letters, annotated research notes, post-it note flow charts, cast lists, scripts, and a photographic essay that loosely narrates Walsh's visits to Carrington in Mexico City, with additional texts by writer Dodie Bellamy, art historian Julia Bryan-Wilson, and poet and critic Claudia La Rocco.

**Anne Walsh** produces works in video, performance, audio, photography, and text. Her work has been shown at galleries and museums including Artists Space, CCS Bard Galleries, Whitney Museum of American Art, Royal College of Art, and The J. Paul Getty Museum. She is Associate Professor of Art Practice at University of California, Berkeley.



Illustration from Hello Leonora, Soy Anne Walsh

politics | Latin American studies

# **Field of Battle**

# Sergio González Rodríguez

translated by Joshua Neuhouser

In times of war the law is silent.

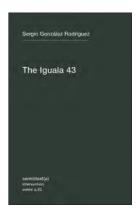
-from Field of Battle

Field of Battle presents the world today as nothing less than a war in progress, with Mexico an illustrative microcosm of the developing geopolitical scenario: a battlefield in which violence, drug trafficking, and organized crime—as well as the alegal state that works alongside all of this in the guise of fighting against it—hold sway. The rule of law has been replaced by the dominance of alegality and the rise of the "a-state."

This war scenario is establishing a form of global governance that utilizes methods of surveillance and control developed by the United States government and enforced through its global network of military bases and the multinational corporations that work in synergy with its espionage agencies. Geopolitics take advantage of social instability, drug cartels, state repression, and paramilitarism to establish the foundations of a world order.

Sergio González Rodríguez argues that this surveillance and control model has been imposed on the international community through extreme neoliberal ideology, free markets, the globalized economy, and the rise of the information society. The threats are clear. Nation-states are increasingly unable to respond to societal needs, and the individual has been displaced by money and technique—the axis of the transhumanist future foretold by today's electronic devices. The human being as the prosthesis of an artificial world and as an object of networks and systems: citizens are the victims of a perverse vision of reality, caught between the defense of their rights and their will to insurrection.

**Sergio González Rodríguez** (1950–2017), was a writer, journalist, and critic for the Mexico City newspaper *Reforma*. His works include *The Iguala 43* and *The Femicide Machine* (both published by Semiotext(e)).







The emergence of a geopolitical war scenario, establishing a form of global governance that utilizes methods of surveillance and control.

April 4 1/2 x 7, 160 pp.

**\$13.95T/£10.99 paper** 978-1-63590-088-0

Intervention Series

Distributed for Semiotext(e)

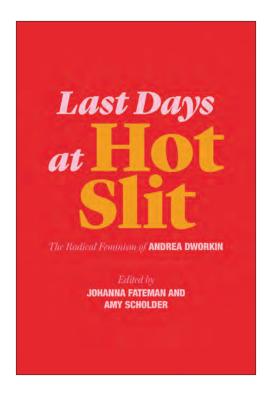
Also available

#### The Iguala 43

Sergio González Rodríguez 978-1-58435-197-9 \$13.95T/£10.95 paper

#### **Femicide Machine**

Sergio González Rodríguez 978-1-58435-110-8 \$12.95T/£9.95 paper gender studies



Selections from the work of radical feminist author Andrea Dworkin, famous for her antipornography stance and role in the feminist sex wars of the 1980s.

March 5 3/8 x 8, 408 pp.

**\$17.95T/£13.99 paper** 978-1-63590-080-4

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Distributed for Semiotext(e)

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Cookie Mueller \$13.95T/£10.99 paper 978-0-936756-61-5

# Last Days at Hot Slit

The Radical Feminism of Andrea Dworkin

### Andrea Dworkin

edited by Johanna Fateman and Amy Scholder

Radical feminist author Andrea Dworkin was a caricature of misandrist extremism in the popular imagination and a polarizing figure within the women's movement, infamous for her antipornography stance and her role in the feminist sex wars of the 1980s. She still looms large in feminist demands for sexual freedom, evoked as a censorial demagogue, more than a decade after her death. Among the very first writers to use her own experiences of rape and battery in a revolutionary analysis of male supremacy, Dworkin was a philosopher outside and against the academy who wrote with a singular, apocalyptic urgency.

Last Days at Hot Slit brings together selections from Dworkin's work, both fiction and nonfiction, with the aim of putting the contentious positions she's best known for in dialogue with her literary oeuvre. The collection charts her path from the militant primer Woman Hating (1974), to the formally complex polemics of Pornography (1979) and Intercourse (1987) and the raw experimentalism of her final novel Mercy (1990). It also includes "Goodbye to All This" (1983), a scathing chapter from an unpublished manuscript that calls out her feminist adversaries, and "My Suicide" (1999), a despairing long-form essay found on her hard drive after her death in 2005.

Andrea Dworkin (1946–2005) was an American radical feminist author associated with antipornography, antirape, and battered women's movements of the 1970s and 80s. She wrote more than ten books, both nonfiction and fiction, and she coauthored, with feminist law professor Catherine Mackinnon, the highly controversial Antipornography Civil Rights Ordinance of 1983.

Johanna Fateman is a writer, musician, and coowner of Seagull Salon in New York. Her art criticism appears regularly in the New Yorker and Artforum.

Amy Scholder is an editor and writer. She is currently producing a documentary feature, Disclosure: Trans Lives on Screen, and serves as board president of Lambda Literary.

literature

### **Appendix Project**

Talks and Essays

#### Kate Zambreno

I came up with the idea of writing these notes, or talks, out of a primary desire to not read from *Book of Mutter*, and instead to keep gesturing to its incompleteness and ongoingness, which connects, for me, to the fragmentary project of literature, and what I long for in writing.

#### -from Appendix Project

Beginning on March 16, 2017, the fifteenth anniversary of her mother's death, Kate Zambreno gave a series of talks on and around the material in her *Book of Mutter*, which had just been published. *Book of Mutter*, a tender, disquieting meditation on the capacity of writing, photography, and memory to embrace the shadows while in the throes of grief, was composed over thirteen years. Many things Zambreno explored in the process of writing that book were left out. In *Appendix Project*, which was written much faster, during the first year of her daughter's life and in a state of exhausted "aphasic openness," she picks up these threads.

Everything, in this state, is at once blurred and frozen in time. It's no coincidence that *Appendix Project* begins with a brilliant consideration of On Kawara's *Today* series of 3,000 paintings that bear only the date. Investigating the ongoing project of writing about grief, Zambreno considers the nature of time, memory, the maternal, and death over the course of her daily life, and through her readings of other writers and artists. In *Appendix Project*, she comes close to the heart of writing itself.

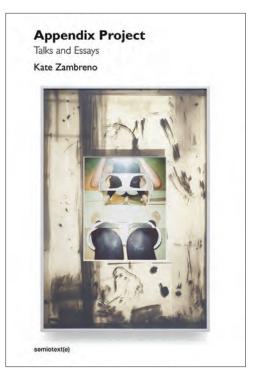
**Kate Zambreno** is the author of the novels *Green Girl* and *O Fallen Angel* as well as the nonfiction *Heroines* and *Book of Mutter* (both published by Semiotexte(e)).

"'But it still interests me'—so writes Kate Zambreno in *Appendix Project*, a powerful, necessary, and defiantly untimely defense of what Richard Howard, translating Roland Barthes, called 'continuance.' By way of the books she persists in reading and rereading, the mother whom she is still mourning, the questions she keeps on asking, rephrasing, and finding new ways of asking, Zambreno claims her right to stay with what is not yet exhausted. This is a book about how things—interests, attachments, experiences, projects—don't finish; in Zambreno's hands, this means it is also a book about openness."

#### -Kate Briggs, author of This Little Art

"I love these talks, these essays set in the specificity of a day, this generous thinking about photography, sleep, time. As much a form of artful reading as of writing, Zambreno makes an exhibition of the text, a space you can walk through with her, inhabited like a conversation. I am grateful for the chance to mark time with this writer, to move through the world of the appendices with this original and surprising thinker."

#### -T. Clutch Fleischmann



On the ongoing project of writing about grief; Zambreno's addendum to *Book of Mutter*.

May 5 3/8 x 8, 200 pp.

**\$15.95T/£12.99 paper** 978-1-63590-076-7

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Distributed for Semiotext(e)

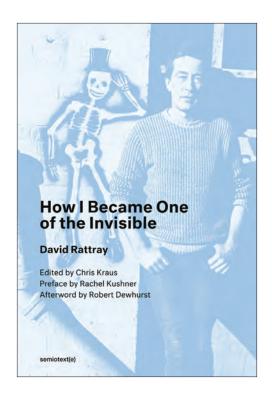
Also available from Semiotext(e)

#### **Book of Mutter**

Kate Zambreno \$17.95T/£13.99 cloth 978-1-58435-196-2

#### Heroines

Kate Zambreno \$17.95T/£13.99 paper 978-1-58435-114-6 literature



The only collection of Rattray's prose: essays that offer a secret history and guidebook to a poetic and mystical tradition.

May 5 3/8 x 8, 288 pp.

**\$17.95T/£13.99 paper** 978-1-63590-072-9

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Robert Glück \$18.95T/£14.99 paper 978-1-58435-175-7

### How I Became One of the Invisible

New Edition

### **David Rattray**

edited by Chris Kraus preface by Rachel Kushner afterword by Robert Dewhurst

In order to become one of the invisible, it is necessary to throw oneself into the arms of God. . . Some of us stayed for weeks, some for months, some forever.

—from How I Became One of the Invisible

Since its first publication in 1992, David Rattray's *How I Became One of the Invisible* has functioned as a secret history and guidebook to a poetic and mystical tradition running through Western civilization from Pythagoras to In Nomine music to Hölderlin and Antonin Artaud. Rattray not only excavated this tradition, he embodied and lived it. He studied at Harvard and the Sorbonne but remained a poet, outside the academy. His stories "Van" and "The Angel" chronicle his travels in southern Mexico with his friend, the poet Van Buskirk, and his adventures after graduating from Dartmouth in the mid-1950s. Eclipsed by the more mediagenic Beat writers during his lifetime, Rattray has become a powerful influence on contemporary artists and writers.

Living in Paris, Rattray became the first English translator of Antonin Artaud, and he understood Artaud's incisive scholarship and technological prophecies as few others would. As he writes of his translations in *How I Became One of the Invisible*, "You have to identify with the man or the woman. If you don't, then you shouldn't be translating it. Why would you translate something that you didn't think had an important message for other people? I translated Artaud because I wanted to turn my friends on and pass a message that had relevance to our lives. Not to get a grant, or be hired by an English department."

Compiled in the months before his untimely death at age 57, *How I Became One of the Invisible* is the only volume of Rattray's prose. This new edition includes five additional pieces, two of them previously unpublished.

**David Rattray** (1946–1993) was a poet, translator and scholar, fluent in most Western languages, Sanskrit, Latin, and Greek. He translated the works of Antonin Artaud, René Crevel, Roger Gilbert-Lecomte, among others.

"David Rattray was a terrific writer, just not read enough. How I Became One of The Invisible is a collection of classic essays of preoccupations and musing and information and experience...a beautiful book."

-Robert Creeley

"Fantastic and calm stowaway information. . . a charge of true love."

-Thurston Moore

literary criticism | cultural studies

### The Ribbon at Olympia's Throat

#### **Michel Leiris**

translated by Christine Pichini

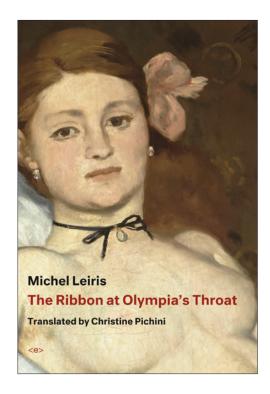
That the nude painted by Manet (in a painting so conceptually new that it created a scandal in its day) achieves so much truth through such a minor detail, that ribbon that modernizes Olympia and, even more than a beauty mark or a patch of freckles would, renders her more precise and more immediately visible, making her a woman with ties to a particular milieu and era: that is what lends itself to reflection, if not divagation!

#### -from The Ribbon at Olympia's Throat

In *The Ribbon at Olympia's Throat*, Michel Leiris investigates what Lydia Davis has called the "expressive power of fetishism": how a seemingly irrelevant aesthetic detail may cause the eruption of sublimity within the mundane.

Written in 1981, toward the end of Leiris's life, *The Ribbon at Olympia's Throat* serves as a coda to his autobiographical masterwork, *The Rules of the Game*, taking the form of both shorter fragments (poems, memory scraps, notes) that are as formally disarming as the fetishistic experiences they describe, and longer essays, more exhaustive critical meditations on writing, apprehension, and the nature of the modern. Rooted in remembrance, devoted to the kaleidoscopic intricacies of wordplay, Leiris draws from his own aesthetic experiences as writer and spectator to explore the fetish that "exposes and disarms the sinister passage of time," conferring "an undeniable realness upon the whole by essentially causing it to crystallize in a reality it would never have possessed if that sturdy fragment hadn't acted as bait."

**Michel Leiris** (1901–1990) was a French surrealist writer and ethnographer. Part of the Surrealist group in Paris, Leiris became a key member of the College of Sociology with Georges Bataille and head of research in ethnography at the CNRS.



Short fragments and essays that explore how a seemingly irrelevant aesthetic detail may cause the eruption of sublimity within the mundane.

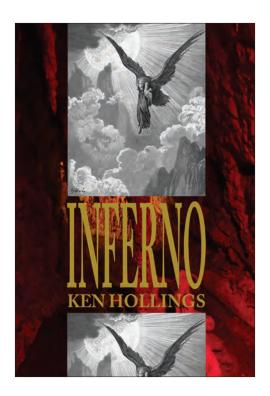
March 6 x 9, 304 pp.

**\$24.95T/£20.00 cloth** 978-1-63590-084-2

Native Agents series

Distributed for Semiotext(e)

cultural studies



A journey deep into the heart of the trash experience: tales from the underground and exploitation movie scene in America during the 1960s.

> May 5 3/4 x 8, 196 pp. 24 illus.

**\$19.95T/£14.99 paper** 978-1-907222-79-5

**Distributed for Strange Attractor Press** 

### Inferno

The Trash Project

### Ken Hollings

Trash has always served me well—over the years it has become the outer form and material expression of my dreams: of tomorrow, of life in space, of the blissful alienation from this world that I have always craved.

-from Inferno

So begins the first part of this personal inquiry into the world of trash by writer and theorist Ken Hollings. Why do we find ourselves so attracted to the cheap and vulgar, the discarded, the misshapen and the abject? What do we really mean when we say that something is "so bad it's good," and what finally does it say about us? Part personal confession and part historical roadmap of tales from the underground and exploitation movie scene in America during the 1960s, *Inferno* takes the reader on a journey deep into the heart of the trash experience.

With *Inferno*, Hollings offers a complex and intricate timeline of connections, coincidences, and resonances that have mostly gone unnoticed. He traces the transmission of "the Purple Death," a deadly and exotic virus first depicted in an old episode of a Flash Gordon movie serial, through the films of Jack Smith, Andy Warhol, and Kenneth Anger and into the output of such exploitation pioneers as Ray Dennis Steckler, Hershel Gordon Lewis, and Russ Meyer. Hollings also turns his idiosyncratic gaze upon key aspects of teenage culture during the 1960s, including hot rods, "Rat Fink," surfers, bikers, and beach parties, uncovering a secretive and hidden universe of masks, fake identities, and secret desires. Even Dante would think twice about taking this trip into Hell.

**Ken Hollings** is a writer, broadcaster, and cultural theorist based in London and the author of *Welcome to Mars* and *The Bright Labyrinth* (both published by Strange Attractor Press). He teaches at the Royal College of Art.

cultural studies

### **Divine Rascal**

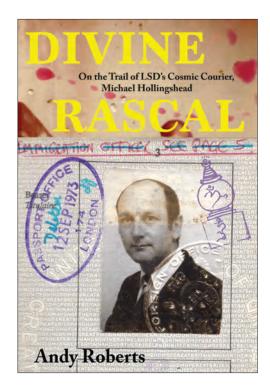
On the Trail of LSD's Cosmic Courier, Michael Hollingshead

#### **Andy Roberts**

Of all the figures associated with the history of LSD there is none more enigmatic than Michael Hollingshead. Appearing as if from nowhere, he turned Timothy Leary on to LSD in 1962, and was influential in Leary's years at Harvard, Millbrook, and beyond. A Zelig-like character, Hollingshead was a key player in London's early LSD scene. In 1965 he went to London to establish a cultural beachhead for Leary's LSD philosophy at the World Psychedelic Centre in Chelsea. Following a spell in prison, where he dosed KGB spy George Blake, he continued to pursue adventures with the Brotherhood of Eternal Love, established a psychedelic commune, created the first electronic I Ching installation, published an underground magazine, and spent time in Nepal, before dying a mysterious death in Bolivia in the 1980s.

Psychedelic trickster guru, or conman and charlatan? Exactly who Hollingshead was and what his motives were remain unclear. Some believed he was working for the secret services, others that he was just a Leary wannabe, his aspirations destroyed by his deviant personality and addiction to alcohol and opiates. *Divine Rascal* is the first reliable biography of one of psychedelia's key figures, without whom the trajectory of LSD in the world would have been radically different.

**Andy Roberts**, widely regarded as an authority on contemporary folklore and psychedelic history, is the author of *Albion Dreaming: A Popular History of LSD in Britain*.



A biography of a key figure in psychedelic history: the man who turned Timothy Leary on to LSD.

July 5 3/8 x 8, 336 pp. 25 illus.

**\$21.95T/£16.99** paper 978-1-907222-78-8

**Distributed for Strange Attractor Press** 

cultural studies | music



An oral history of the UK's soundsystem culture, featuring interviews with Dubmaster Dennis Bovell, Neneh Cherry, Youth, Goldie, Adrian Sherwood, Bok Bok, and others.

July 8 3/4 x 9, 224 pp. 100 photographs

**\$32.95T/£26.00** paper 978-1-907222-77-1

**Distributed for Strange Attractor Press** 

### Bass, Mids, Tops

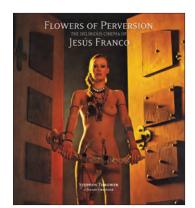
An Oral History of Sound System Culture

### Joe Muggs and Brian David Stevens

Emerging from the post-Windrush streets of West London's Ladbroke Grove, the UK's soundsystem culture would become the most important influence on contemporary pop music since rock and roll. Pumped through towering, home-built speakers, often directly onto the thronged streets of the Notting Hill Carnival, the pulsating bass lines of reggae, dub, rave, dubstep, and grime have shaped the worlds of several generations of British youth culture but have often been overlooked by historians obsessed with Swinging London, Punk, and Britpop.

This oral history, based on new interviews conducted by respected dance music writer Joe Muggs, and accompanied by dramatic portraits by Brian David Stevens, presents the story of the bass line of Britain, in the words of those who lived and shaped it. Featuring interviews with Dubmaster Dennis Bovell, Neneh Cherry, Youth, Goldie, Adrian Sherwood, Bok Bok, and many others.

**Joe Muggs** has been a fixture in underground music for quarter of a century as a DJ, promoter, and most notably as a journalist for the *Guardian*, the *Telegraph*, *FACT*, *Mixmag*, and the *Wire*. **Brian David Stevens** is a photographer based in London.



### Flowers of Perversion

The Delirious Cinema of Jesús Franco

#### **Stephen Thrower**

The disturbing, exciting, and defiantly avant-garde films of Jesús "Jess" Franco, director of such films as *Vampyros Lesbos* and *Lilian the Perverted Virgin*.

AVAILABLE | 9 1/2 x 11, 512 pp. color throughout

**\$55.00T/£45.00 cloth** 978-1-907222-60-3

politics | literature

### The Trumpiad

### **Evan Eisenberg**

drawings by Steve Brodner

Few politicians in history have deserved lampooning as richly as Donald Trump. And few have gotten their just deserts served up as deliciously as they are in *The Trumpiad*, a work perceptively characterized by Stuart Klawans as "a true epic about a mock President." In their caustic, uproarious *Trumpiad*, poet Evan Eisenberg and artist Steve Brodner present a satire in verse for our demented times. Inspired by Swift, Byron, and Ogden Nash as much as by John Oliver and Stephen Colbert, Eisenberg sets the stage ("Muse, you're fired") and then traces our hero from the murk of his ancestry in the form of his grandfather Friedrich (an enterprising immigrant who ran a bordello) to the latest presidential high crimes and misadventures .

Using a rakish, endlessly flexible five-line stanza he calls the Emilick—the love child of Emily Dickinson and Edward Lear—Eisenberg follows the arc of Trump's career as it bends toward injustice, hits it, and then sinks still lower. Brodner matches the poet punch for punch, in the spirit of such great satiric artists as Hogarth, Goya, and Daumier.

**Evan Eisenberg**'s essays and satire have appeared in the *New Yorker*, the *Atlantic*, the *Nation*, the *New Republic*, *Time*, *Esquire*, and the *New York Times*. He is the author of *The Ecology of Eden* and *The Recording Angel*. **Steve Brodner** is a regular contributor to the *New Yorker*, *Rolling Stone*, the *New York Times*, *Harper's*, *Esquire*, *Playboy*, *Mother Jones*, the *Nation*, and the *Los Angeles Times*.

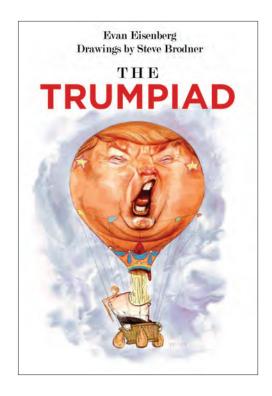
"A whacked-out high-rococo comedy to be cherished alongside Alec Baldwin's and Melissa McCarthy's down-and-dirty burlesques on SNL."

-Jed Perl

"A must-read (and laugh-till-you-weep) for our times."

-Sharon Dolin, winner of the Donald Hall Prize for Poetry

TERRA NOVA PRESS, founded by David Rothenberg, aims to publish high quality editions in the areas of music, culture, and nature, in between the lines of the scholarly and the creative, the intellectual and the beautiful.



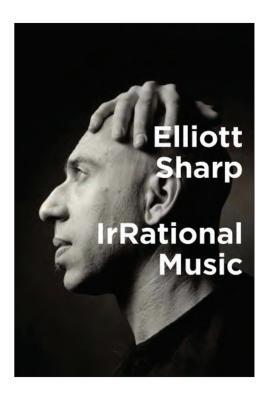
A satire for our demented times, following the arc of Donald Trump's career as it bends toward injustice, hits it, and then sinks still lower.

March 4 1/2 x 7, 128 pp. 50 color illus.

**\$14.95T/£11.99 cloth** 978-1-949597-03-5

**Distributed for Terra Nova Press** 

For Trump our government is one Gargantuan selfie stick; Likewise a Pantagruely grand Prosthesis for his stumpy hand The public purse to pick. music | memoir



A memoir and manifesto by a pivotal figure at the junction of rock, the avant-garde, and an ever-widening spiral of art, theater, film, and dance.

March 5 1/2 x 8 1/4, 248 pp. 43 illus.

**\$24.95T/£20.00 cloth** 978-1-949597-00-4

**Distributed for Terra Nova Press** 

### **IrRational Music**

### **Elliott Sharp**

For over five decades, Elliott Sharp has been engaged in a quest at once quixotic and down to earth: to take the music he hears in his inner ear and bring it to life in the real world. In this vivid memoir and manifesto, Sharp takes us along on that quest, through some of the most rugged, anarchically fertile cultural terrain of our time. Sharp, a mainstay of the New York Downtown scene beginning in the 1980s, has been a pivotal figure at the junction of rock, experimental music, and an ever-widening spiral of art, theater, film, and dance. Rooted in blues, rock, jazz, and the twentieth-century avant-garde, Sharp's innovative music has encompassed fractal geometry, chaos theory, algorithms, genetic metaphors, and new strategies for graphic notation.

In IrRational Music, Sharp dodges fake cowboys' real bullets by the side of a highway near Colby, Kansas; is called on the carpet by a prickly, pompadoured Morton Feldman ("Improvisation... I don't buy it"); segues from Zen tea to single malt with an elfin John Cage; conjures an extraterrestrial opera from a group of high-school students in Munich; and—back in his own high-school days—looks up from strumming Van Morrison's "Gloria" in Manny's Music on 48th Street to see Jimi Hendrix smiling benignly upon him. A mix of tales from the road with thoughts on music, art, politics, technology, and the process of thinking itself, IrRational Music is a glimpse inside the mind of one of our most exacting, exciting creative artists.

**Elliott Sharp** is a composer and multi-instrumentalist. He was awarded the Berlin Prize in Music in 2015 and a Guggenheim Fellowship in 2014. His composition "Storm of the Eye" for violinist Hilary Hahn appeared on her Grammy-winning album *In 27 Pieces*.

"Elliott Sharp's writing, like his music, recombines the scrupulously discursive with the deeply humane and reflective. What a joy it is to be informed by this remarkable account of the coming-of-age of his psyche, his curiosity, and his methodology. . . . The reader joins Sharp in the step-by-step reinvigoration of intentional sound itself—sound as culture, as science, as art—a process that can never be finished."

-Jonathan Lethem

philosophy

### **Abducting the Outside**

Collected Writings 2003-2018

### Reza Negarestani

A collection of Reza Negarestani's writings from 2003–2018, Abducting the Outside begins with texts in which horror, decay, cruelty, and barbarism assail the solidity of thought. It goes on to chart the sustained development of a "geophilosophical realism" in which the Nietzschean/DeleuzoGuattarian inquiry into human thought's relation to its contingent material origins is pushed beyond the localist obsession with the planet: geotraumatic thought descends to the core of the earth, only to expand outward according to other (physical, chemical, topological) modes of distribution.

Negarestani's "universalism" refuses all allegiance to the planet or its solar hegemon, dissipates all parochial territories into an unbound "Outside," and yields increasingly sophisticated formalisms to account for the universal's self-differentiation via incomplete traumatic cuts. Pledged to the powers of reason and the universal, but never losing the disconcerting edge of its idiosyncratic strangeness, its last dizzying acceleration takes us from a "true-to-the-universe thought" to the rationalist inhumanism developed in Negarestani's recent major work *Intelligence and Spirit*.

Each time a conclusion seems to come into view, Negarestani moves on to new gestures and more powerful models that render the line of thought unrecognizable once again. Allowing the reader to experience this original and unique trajectory in one collection, *Abducting the Outside* presents an encyclopedic view of what it means to depart from the human, to descend into the abyss, and to see thinking as an infinite drift outside of our established habitats and perspectives.

**Reza Negarestani** is an Iranian philosopher best known for pioneering the genre of 'theory-fiction' with his book *Cyclonopedia*. He has contributed extensively to journals and anthologies and lectured at numerous international universities and institutes. He is the author of *Intelligence and Spirit* (Urbanomic/Sequence Press).

SEQUENCE PRESS was established in 2010 on New York's Lower East Side. It is dedicated to publishing primary texts in contemporary philosophy and the arts, and bringing them to a wide audience.

Since 2006 URBANOMIC has played a crucial role in fostering new movements in contemporary thought. With a firm commitment to cross-disciplinary thinking outside the academy, it publishes works that assemble new audiences and forge new alliances in thought.

# REZA NEGARESTANI Abducting the Outside COLLECTED WRITINGS 2003-2018



From decay to geotrauma to universalism to rationalist inhumanism, a collection that charts the evolution of a uniquely radical thinker.

May 4 1/2 x 7, 650 pp.

**\$31.95T/£25.00** paper 978-0-9975674-8-9

Distributed for Urbanomic/ Sequence Press

Also available from Urbanomic/Sequence Press

Intelligence and Spirit

Reza Negarestani \$34.95T/£27.00 paper 978-0-9975674-0-3 cultural studies

#### JASON BAHBAK MOHAGHEGH

### Omnicide

MANIA, FATALITY, AND THE FUTURE-IN-DELIRIUM



A fragmentary catalogue of poetic derangements that reveals the ways in which mania communicates with an extreme will to annihilation.

April 4 1/2 x 7, 600 pp.

**\$29.95T/£24.00 paper** 978-0-9975674-6-5

Distributed for Urbanomic/ Sequence Press

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From Decision to Heresy François Laruelle

> 978-0-9832169-0-2 \$27.95T/£17.99 paper

### **Omnicide**

Mania, Fatality, and the Future-in-Delirium

### Jason Bahbak Mohaghegh

What kind of circumstances provoke an obsessive focus on the most minute object or activity? And what causes such mania to blossom into the lethal conviction that everything must be annihilated? There is no turning away from the imperative to study this riddle in all its mystifying complexity and its disturbing contemporary resonance—to trace the obscure passage between a lone state of delirium and the will to world-erasure.

A fragmentary catalogue of the thousand-and-one varieties of manic disposition (augomania, dromomania, catoptromania, colossomania. . .), *Omnicide* enters the chaotic imaginations of the most significant poetic talents of the Middle East in order to instigate a new discourse on obsession, entrancement, excess, and delirium. Placing these voices into direct conversation, Jason Bahbak Mohaghegh excavates an elaborate network of subterranean ideas and interpretive chambers, byways, and burrows by which mania communicates with fatality. Like secret passages leading from one of the multitudinous details of a bustling Persian miniature to the blank burning immanence of the desert, each is a contorted yet effective channel connecting some attractive universe (of adoration, worship, or astonishment) to the instinct for all-engulfing oblivion (through hatred, envy, indifference, rage, or forgetting).

A captivating fractal of conceptual prisms in half-storytelling, half-theoretical prose, a rhythmic, poetic, insidious work that commands submission, *Omnicide* absorbs the reader into unfamiliar and estranging landscapes whose every subtle euphoric aspect threatens to become an irresistible invitation to the end of all things.

Jason Bahbak Mohaghegh is Associate Professor of Comparative Literature at Babson College. He is the author of *The Chaotic Imagination; Inflictions; The Radical Unspoken; Insurgent, Poet, Mystic, Sectarian;* and *Elemental Disappearances* (with Dejan Lukic). He is coeditor of *Manifestos for World Thought,* and Cofounder of the 5th Disappearance Lab (www.5dal.com).

philosophy

### ContraContemporary

Modernity's Unknown Future

#### **Suhail Malik**

The modern vision was characterized by a future that had the potential to transform the present through human foresight and planning. With the depletion of modernity, however, the institutions and operations of the "contemporary" offer new configurations of time-sequencing and history. Theses such as "posthistory," "presentism," or the "cancellation of the future" diagnose our postmodern condition as that of a progress-less contemporaneity haunted by the ghosts of futures past.

In this incisive intervention, Suhail Malik contends that such claims fatally misidentify the rigorously postmodern time-innovations of neoliberalism, which instead enable a torrent of futures, a condition of superfluous and multitudinous newness in which futures are continually enacted upon and factored into a "speculative present."

In ContraContemporary, Malik seeks to describe this intensely futural composition of time, which is at once true to the premises of modernity yet far outstrips its anthropometric limitations—a condition of overwhelmed modernity that Malik calls the pretermodern. Malik demonstrates how the fate of the avant-garde and its successors in contemporary art indicates the shifting registers of futurity and the new, confronts the violent colonial origins of global modernity and their transmutation into postmodern racisms, and radicalizes the analysis of "risk societies." He contests the widespread image of a postmodernity deserted by the future, presenting instead a trenchant vision of the task of constructing an art and a politics adequate to the speculative present. When the future is happening now. Everywhere. All the time.

**Suhail Malik** is Codirector of the MFA Fine Art program at Goldsmiths, London, where he holds a Readership in Critical Studies.



An incisive analysis of neoliberalism's intensely futural composition of time—the pretermodern, a condition of overwhelmed modernity.

April 4 1/2 x 7, 120 pp.

**\$12.95T/£9.99** paper 978-1-9164052-5-7

Mono

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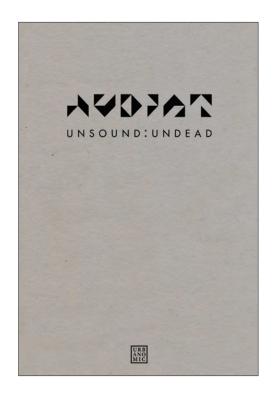
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Tracing the the potential of sound, infrasound, and ultrasound to access anomalous zones of transmission between the realms of the living and the dead.

May 6 3/3 x 9 1/4, 264 pp.

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Éric Alliez 978-1-9164052-0-2 \$31.95T/£25.00 paper

### **Unsound: Undead**

### edited by AUDINT

For as long as recording and communications technologies have existed, operators have evoked the potential of sound, infrasound, and ultrasound to access anomalous zones of transmission between the realms of the living and the dead. In *Unsound:Undead*, contributors from a variety of disciplines chart these undead zones, mapping out a nonlinear timeline populated by sonic events stretching from the 8th century BC (the song of the Sirens), to 2013 (acoustic levitation), with a speculative extension into 2057 (the emergence of holographic and holosonic phenomena).

For the past seven years the AUDINT group has been researching peripheral sonic perception (unsound) and the ways in which frequencies are utilized to modulate our understanding of presence/non-presence, entertainment/torture, and ultimately life/death. Concurrently, themes of hauntology have inflected the musical zeitgeist, resonating with the notion of a general cultural malaise and a reinvestment in traces of lost futures inhabiting the present.

This undead culture has already spawned a Lazarus economy in which Tupac, ODB, and Eazy-E are digitally revivified as laser-lit holograms. The obscure otherworldly dimensions of sound have also been explored in the sonic fictions produced by the likes of Drexciya, Sun Ra, and Underground Resistance, where hauntology is virtually extended: the future appears in the cracks of the present.

The contributions to this volume reveal how the sonic nurtures new dimensions in which the real and the imagined (fictional, hyperstitional, speculative) bleed into one another, where actual sonic events collide with spatiotemporal anomalies and time-travelling entities, and where the unsound serves to summon the undead.

**AUDINT** is a sonic research unit exploring the weaponization of vibration, developing cartographies of liminal waveformed perception (unsound), and investigating the ways in which frequencies are utilized to modulate our understanding of presence/non-presence, entertainment/torture, and ultimately life/death. More information can be found at www.audint.net.

sound studies

### **Irreversible Noise**

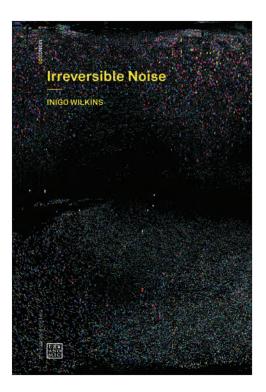
### **Inigo Wilkins**

In this wide-ranging inquiry, Inigo Wilkins elaborates the theoretical and practical significance of the concept of noise with regard to current debates concerning realism, materialism, and rationality. Drawing on contemporary scientific thinking, Wilkins develops a multilevel analysis of noise, exploring the associated notions of randomness and unpredictability across different disciplinary contexts.

Wilkins articulates noise within a functionalist-computationalist philosophical framework that follows Wilfrid Sellars's inferentialist account of reason through his commentaries on Hume and Kant. Outlining the significance of noise to information theory and cybernetics, its relation to thermodynamics, dynamic systems theory, evolutionary biology, and complexity theory, and to recent theories in cognitive science and AI, he goes on to examine how randomness and noise are pertinent to political economy and contemporary finance. Finally, Wilkins explores noise in its specifically sonic guise, looking in particular at the phenomenology of listening and neurophenomenological models of auditory cognition, and situating the use of noise in experimental and popular music within a deep historical account of its evolutionary development.

The central aim of this pioneering critical work is to demystify noise—to counter the neoliberal politics of self-organizing systems and the tendency to fetishize indeterminacy in contemporary art—by showing how constrained randomness is intrinsic to the functional organization of complex hierarchically nested systems, including higher cognition, and how the navigation of noise is a necessary condition of reason and consequently of freedom.

**Inigo Wilkins** is Codirector of Glass Bead. He has published articles on sonic culture and other topics in such journals as *Litteraria Pragensia*, *Mute Magazine*, and *HFT Review*.



The theoretical and practical significance of the concept of noise, considered in the context of current debates over realism, materialism, and rationality.

May | 4 1/2 x 7, 330 pp.

**\$19.95T/£14.99 paper** 978-0-9954550-3-0

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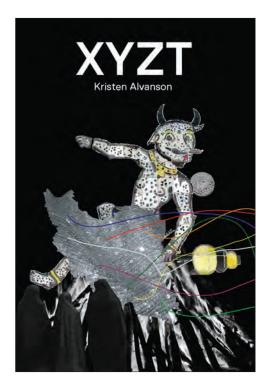
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The Order of Sounds A Sonorous Archipelago

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Genre-defying fiction that accelerates "cross-cultural dialogue" into a kaleidoscopic rush of sensory estrangements, fairy tales, and alien encounters.

April 5 1/4 x 7 3/4, 300 pp.

**\$23.95T/£18.99** paper 978-1-9164052-3-3

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Applied Ballardianism Memoir from a Parallel Universe

> Simon Sellars 978-0-9954550-7-8 \$23.95T/£18.99 paper

### **XYZT**

#### Kristen Alvanson

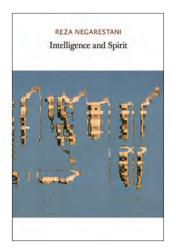
"We've been told that there's no difference between us and them." On this premise the protagonists of XYZT contrive a device capable of shuttling volunteers back and forth between the United States and Iran, hidden from the watchful eyes of immigration police and state bureaucracies. Each volunteer will have a single opportunity to be received by a local host and to have a brief authentic experience of what it means to live as "them" before being transported back home.

Set against the backdrop of escalating hostilities between Iran and the United States, and based on her experiences living in Iran at the end of the first decade of the twenty-first century, Kristen Alvanson's XYZT builds on the idea of a "dialogue between civilizations" only to demonstrate the potentially outlandish ramifications that might result from such a seemingly innocuous idea.

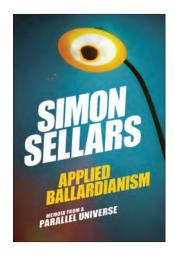
As the tests continue and the "dialogue" progresses, the very fabric of reality begins to deteriorate. Ordinary people become entangled in extraordinary situations where the deep state, mythological fauna, and counterfactual universes start to erupt into our world. Terra firma is exposed as an illusion, but far from heralding the bliss of mutual recognition, this final disillusionment may unleash a terrible malediction.

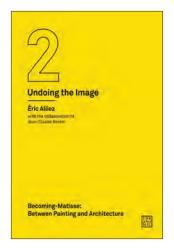
An audacious cross-genre experiment, a firsthand memoir of what it means to see what "they" see, and a science-fictional, non-standard engagement with anthropology, XYZT reveals fissures and cracks in what the media calls reality, but which in fact is liable to take on all the unpredictable features of a contemporary fairy tale.

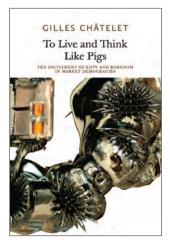
Kristen Alvanson is an artist who lives and works in New York.

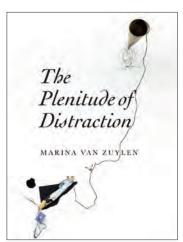


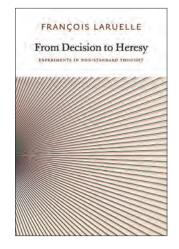


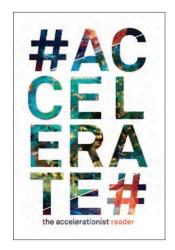












### Intelligence and Spirit

Reza Negarestani

**\$34.95T/£27.00 paper** 978-0-9975674-0-3 Urbanomic/Sequence Press

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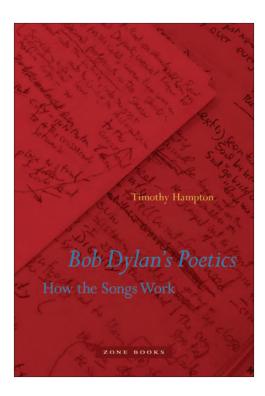
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### #Accelerate The Accelerationist Reader

edited by Robin Mackay and Armen Avanessian

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music | literature



A close examination of Bob Dylan's songs that locates his transgressive style within a long history of modern (and modernist) art.

> May 6 x 9, 304 pp.

**\$29.95T/£24.00 cloth** 978-1-942130-15-4

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### **Bob Dylan's Poetics**

How the Songs Work

### **Timothy Hampton**

The 2016 Nobel Prize in Literature recognized Bob Dylan as a major modern artist, elevating his work beyond the world of popular music. In this book, Timothy Hampton focuses on the details and nuances of Dylan's songs, showing how they work as artistic statements designed to create meaning and elicit emotion. With *Bob Dylan's Poetics*, Hampton offers a unique examination of both the poetics and politics of Dylan's compositions. He studies Dylan not as a pop hero, but as an artist, as a maker of songs.

Focusing on the interplay of music and lyric, Hampton traces Dylan's innovative use of musical form, his complex manipulation of poetic diction, and his dialogues with other artists, from Woody Guthrie to Arthur Rimbaud. Moving from Dylan's earliest experiments with the blues through his mastery of rock and country to his densely allusive more recent recordings, Hampton offers a detailed account of Dylan's achievement. Locating Dylan in the long history of artistic modernism, he examines the relationships among form, genre, and the political and social themes that crisscross Dylan's work. With this book, Hampton offers both a nuanced engagement with the work of a major artist and a meditation on the contribution of song at times of political and social change.

**Timothy Hampton** teaches literature at the University of California, Berkeley, where he also directs the Doreen B. Townsend Center for the Humanities. He has written widely about literature and culture across several languages and is the author, most recently, of *Fictions of Embassy: Literature and Diplomacy in Early Modern Europe*.

"This is a truly powerful book written by one of the leading scholars of the history of poetry today.... Dylan's idiosyncratic genius is explained more compellingly than ever before.... Bob Dylan's Poetics will become a standard account, destined to appear in class lists under 'required reading'; it contains the searching close readings of songs that will both enable future study and require contestation for an alternative account: the study sets a gold standard."

-Nigel Smith, Princeton University

art history

### Into the White

The Renaissance Arctic and the End of the Image

### **Christopher P. Heuer**

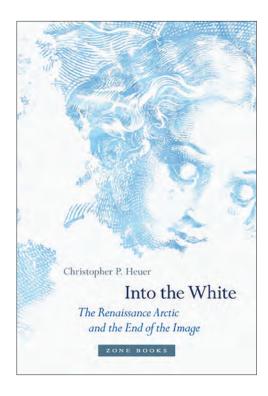
European narratives of the Atlantic New World tell stories of people and things: strange flora, wondrous animals, sun-drenched populations for Europeans to mythologize or exploit. Yet, as Christopher Heuer explains, between 1500 and 1700, one region upended all of these conventions in travel writing, science, and, most unexpectedly, art: the Arctic. Icy, unpopulated, visually and temporally "abstract," the far North—a different kind of terra incognita for the Renaissance imagination—offered more than new stuff to be mapped, plundered, or even seen. Neither a continent, an ocean, nor a meteorological circumstance, the Arctic forced visitors from England, the Netherlands, Germany, and Italy, to grapple with what we would now call a "non-site," spurring dozens of previously unknown works, objects, and texts—and this all in an intellectual and political milieu crackling with Reformation debates over art's very legitimacy.

In *Into the White*, Heuer uses five case studies to probe how the early modern Arctic (as site, myth, and ecology) affected contemporary debates over perception and matter, representation, discovery, and the time of the earth—long before the nineteenth century Romanticized the polar landscape. In the far North, he argues, the Renaissance exotic became something far stranger than the marvelous or the curious, something darkly material and impossible to be mastered, something beyond the idea of image itself.

**Christopher P. Heuer** is Associate Professor of Art History at the University of Rochester, author of *The City Rehearsed*, and coauthor of *Ecologies, Agents, and Terrains* and *Vision and Communism*.

"A rigorous and innovative study of sixteenth-century attitudes toward the Arctic, *Into the White* is broadly and seamlessly interdisciplinary—treating religion, environmental history, print history, book history, art history navigational history, philosophy—but never subordinates the visual or treats images as mere illustrations of other concerns. Its dexterity with both sixteenth- and twentieth/twenty-first century art is remarkable. While deploying a rigorous attention to the material and historical specificity of the sixteenth century, it gets at the heart of the most urgent questions of spatial history and representation animating contemporary scholarship."

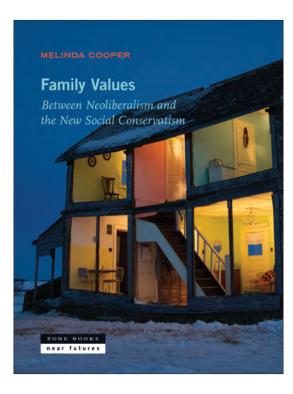
-Jennifer L. Roberts, Elizabeth Cary Agassiz Professor of the Humanities, Harvard University



How the far North offered a different kind of terra incognita for the Renaissance imagination.

May 6 x 9, 256 pp. 69 b&w illus.

**\$32.95T/£26.00 cloth** 978-1-942130-14-7



An investigation of the roots of the alliance between free-market neoliberals and social conservatives.

April 6 x 8, 416 pp.

**\$18.95T/£14.99** paper 978-1-935408-34-5

cloth 2017 978-1-935408-84-0

Near Futures series

Distributed for Zone Books

political philosophy

NOW IN PAPER

### Family Values

Between Neoliberalism and the New Social Conservatism

### **Melinda Cooper**

Why was the discourse of family values so pivotal to the conservative and free-market revolution of the 1980s and why has it continued to exert such a profound influence on American political life? Why have free-market neoliberals so often made common cause with social conservatives on the question of family, despite their differences on all other issues?

In Family Values, Melinda Cooper shows how a sense of impending moral crisis infused the battles of the era, and that neoliberals and new conservatives formed their alliance in response to this perceived threat. They believed that the racial and sexual foundations of the postwar family were undergoing an ominous shift that was encouraged by the grand macroeconomic issues of the time—including inflation, budget deficits, and progressive tax reform. They unequivocally saw the reinvention of the family as the most appropriate solution to this crisis.

In a series of case studies ranging from the AIDS epidemic to Bill Clinton's welfare reform, from same-sex marriage to the student loan market, Cooper shows how the imperative of family responsibility was simultaneously federalized in welfare law and refashioned in the idiom of expanding household debt. Combining a sharp theoretical sensibility with close attention to social, political, and economic history, Cooper challenges received wisdom about the crisis of the 1970s and established accounts of neoliberalism.

**Melinda Cooper** is Associate Professor in the School of Social and Political Science at the University of Sydney, Australia. She is the author of *Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era*.

"Cooper's book leaves us with a bleakly realistic account of the (often Christian) rightwing patriarchal forces whose resoundingly angry response to feminist and pro-welfare activism has sought to stifle the impact of the women's movement from the 1960s onwards, especially in regard to economic, racial, and reproductive freedoms. One might assume that similar ideas are at work in the Trump administration today."

- openDemocracy

### **Artificial Unintelligence**

How Computers Misunderstand the World

#### Meredith Broussard

In *Artificial Unintelligence*, Meredith Broussard offers a guide to understanding the inner workings and outer limits of technology—and issues a warning that we should never assume that computers always get things right.

Broussard, a software developer and data journalist, makes a case against technochauvinism—the belief that technology is always the best solution. She takes readers on a series of adventures in computer programming in order to explore the dark side of digital Utopianism, touching on timely issues of fairness and diversity in technology. She goes for an alarming ride in a driverless car, concluding that autonomous vehicles don't work well and "the cyborg future is not coming any time soon"; uses artificial intelligence to investigate why students can't pass standardized tests; deploys machine learning to predict which passengers survived the Titanic disaster; and attempts to repair the U.S. campaign finance system by building AI software. If we understand the limits of what we can do with technology, Broussard tells us, we can make better choices about what we should do with it to make the world better for everyone.

**Meredith Broussard** is an Assistant Professor in the Arthur L. Carter Journalism Institute at New York University. A former features editor at the *Philadelphia Inquirer* and software developer at AT&T Bell Labs and the MIT Media Lab, she has written articles and essays for the *Atlantic, Harper's, Slate,* the *Washington Post,* and other publications.

"As someone with a grasp of both code and rhetoric, Broussard lays out clearly and firmly just how duped we've been by the unique brand of technological boosterism that develops when technologists, and even whole fields of technology, have little to no social accountability."

#### -Marie Hicks, American Scientist

"Illustrated with examples from Broussard's own work and experience, this is an intensely personal journey that gives a real sense of travelling with a friend . . . It deserves to become a classic—but, even more, it deserves to be read and debated."

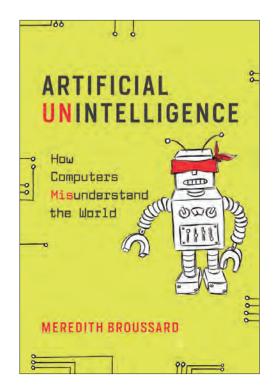
#### - Times Higher Education

"Finally! A book by a clear-headed, articulate expert who not only dwells on all manner of nerdly delights but has the wisdom to anticipate the problems with blind faith, projected Al consciousness, and illogical magical thinking that so often comes with computers and artificial intelligence. Meredith Broussard has a superpower and it's not (only) that she can program—it's that she can explain what that means and what it doesn't."

#### -Cathy O'Neil, author of Weapons of Math Destruction

"If you want to grasp the practical implications of the turn to artificial intelligence, read this book. Broussard provides an insightful, personal glimpse into a complex field."

-Kate Crawford, Distinguished Research Professor, New York University; cofounder of the Al Now Institute

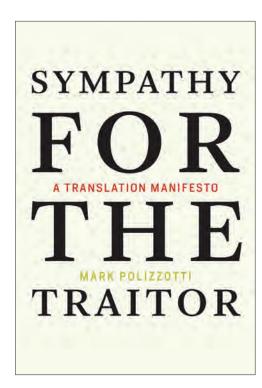


A guide to understanding the inner workings and outer limits of technology and why we should never assume that computers always get it right.

March 6 x 9, 248 pp. 11 ills.

**\$15.95T/£12.99 paper** 978-0-262-53701-8

cloth 2018 978-0-262-03800-3



An engaging and unabashedly opinionated examination of what translation is and isn't.

March 5 3/8 x 8, 200 pp.

**\$15.95T/£12.99** paper 978-0-262-53702-5

cloth 2018 978-0-262-03799-0

### Sympathy for the Traitor

A Translation Manifesto

#### Mark Polizzotti

For some, translation is the poor cousin of literature, a necessary evil if not an outright travesty—summed up by the old Italian play on words, *traduttore*, *traditore* (translator, traitor). For others, translation is the royal road to cross-cultural understanding and literary enrichment. In this nuanced and provocative study, Mark Polizzotti reframes the debate along more fruitful lines. Eschewing both these easy polarities and the increasingly abstract discourse of translation theory, he brings the main questions into clearer focus: What is the ultimate goal of a translation? Is something inevitably lost in translation, and can something also be gained?

Unashamedly opinionated, both a manual and a manifesto, this book invites us to sympathize with the translator not as a "traitor" but as the author's creative partner. Polizzotti shows us how to read not only translations but also the act of translation itself, treating it not as a problem to be solved but as an achievement to be celebrated—something, as Goethe put it, "impossible, necessary, and important."

**Mark Polizzotti** has translated more than fifty books, including works by Patrick Modiano, Gustave Flaubert, Raymond Roussel, Marguerite Duras, and Paul Virilio. Publisher and Editor-in-Chief at the Metropolitan Museum of Art, he is also the author of *Revolution of the Mind:The Life of André Breton* and other books.

"Polizzotti has written a lively, likeable idiosyncratic sequence of essays on a topic that is of more importance than ever in our globalized world."

-New York Review of Books

"Polizzotti's book is suffused with expertise and displays his decades of experience in incisively capturing the nuances of an esoteric discipline, while also offering a passionate defense of his trade's larger value."

-Publishers Weekly

science | natural history

### The Art of Naming

#### Michael Ohl

translated by Elisabeth Lauffer

Tyrannosaurus rex. Homo sapiens. Heteropoda davidbowie. Behind each act of scientific naming is a story. In this entertaining and



illuminating book, Michael Ohl considers scientific naming as a joyful and creative act. Naming is the necessary next step after discovery; it is through the naming of species that we perceive and understand nature. Ohl explains the process, with examples, anecdotes, and a wildly varied cast of characters. He describes the rules for scientific naming; the vernacular isn't adequate. A lizard is designated *Barbaturex morrisoni* (in honor of the Doors' Jim Morrison, the Lizard King); a member of

the horsefly family *Scaptia beyonceae*. Ohl, a specialist in "winged things that sting," confesses that among the many wasp species he has named is *Ampulex dementor*, after the dementors in the Harry Potter novels.

The Art of Naming takes us on a surprising and fascinating journey, in the footsteps of the discoverers of species and the authors of names, into the nooks and crannies and drawers and cabinets of museums, and through the natural world of named and not-yet-named species.

**Michael Ohl** is a biologist at the Natural History Museum of Berlin and an Associate Professor at Humboldt University in Berlin.

"Brilliant."

-Natural History

"If you've ever wondered what's in a name—and haven't we all? then *The Art of Naming* is the book for you. Smart, funny, packed with tales of scientific feuds, enraged politicians, outsized adventure, and egos."

-Deborah Blum, Pulitzer Prize winner; author of The Poisoner's Handbook and The Poison Squad

March | 6 x 9, 312 pp. | 61 illus.

**\$16.95T/£13.99** paper 978-0-262-53703-2

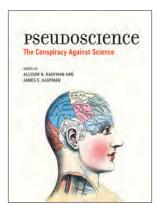
cloth 2018 978-0-262-03776-1 science | psychology

### **Pseudoscience**

The Conspiracy Against Science

#### edited by Allison B. Kaufman and James C. Kaufman

In a post-truth, fake news world, we are particularly susceptible to the claims of pseudoscience. When emotions and opinions are



more widely disseminated than scientific findings, and self-proclaimed experts get their expertise from Google, how can the average person distinguish real science from fake? This book examines pseudoscience from a variety of perspectives, through case studies, analysis, and personal accounts that show how to recognize pseudoscience, why it is so widely accepted, and how to advocate for real science.

Contributors examine the

basics of pseudoscience, including issues of cognitive bias; the costs of pseudoscience, with accounts of naturopathy and logical fallacies in the anti-vaccination movement; perceptions of scientific soundness; the mainstream presence of "integrative medicine," hypnosis, and parapsychology; and the use of case studies and new media in science advocacy.

Allison B. Kaufman is Research Scientist in the Department of Ecology and Evolutionary Biology at the University of Connecticut, where she is also Adjunct Professor in the Department of Psychology.

James C. Kaufman is Professor of Educational Psychology at the University of Connecticut's Neag School of Education.

#### Contributors

David Ball, Paul Joseph Barnett, Jeffrey Beall, Mark Benisz, Fernando Blanco, Ron Dumont, Stacy Ellenberg, Kevin M. Folta, Christopher C. French, Ashwin Gautam, Dennis M. Gorman, David Gorski, David K. Hecht, Britt Merle Hermes, Clyde Freeman Herreid, Jonathan Howard, Seth C. Kalichman, Leif Edward Ottesen Kennair, Arnold Kozak, Scott O. Lilienfeld, Emilio J. C. Lobato, Steven Jay Lynn, Adam Marcus, Helena Matute, Ivan Oransky, Chad Orzel, Dorit Rubinstein Reiss, Ellen Beate Hansen Sandseter, Kavin Senapathy, Dean Keith Simonton, Indre Viskontas, John O. Willis, Corrine Zimmerman

March | 7 x 9, 536 pp. | 19 illus.

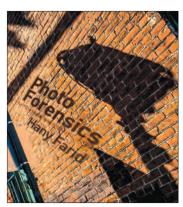
**\$19.95T/£14.99 paper** 978-0-262-53704-9

cloth 2018 978-0-262-03742-6 computer science

### **Photo Forensics**

Hany Farid

Photographs have been doctored since photography was invented. Dictators have erased people from photographs and



from history. Politicians have manipulated photos for short-term political gain. Altering photographs in the predigital era required time-consuming darkroom work. Today, powerful and low-cost digital technology makes it relatively easy to alter digital images, and the resulting fakes are difficult to detect. The field of photo forensics—

pioneered in Hany Farid's lab at Dartmouth College—restores some trust to photography. In this book, Farid describes techniques that can be used to authenticate photos. He provides the intuition and background as well as the mathematical and algorithmic details needed to understand, implement, and utilize a variety of photo forensic techniques.

Tracing the entire imaging pipeline, Farid shows how modeling the path of light during image creation reveals physical, geometric, and statistical regularities that are disrupted during the creation of a fake. Various forensic techniques exploit these irregularities to detect traces of tampering. A chapter of case studies examines the authenticity of viral videos and famously questionable photographs including "Golden Eagle Snatches Kid" and the Lee Harvey Oswald backyard photo.

Hany Farid is Professor of Computer Science at Dartmouth College and Cofounder and ChiefTechnology Officer for FourandsixTechnologies.

"Likely to become the bible of the field."

– Enterprise

"An excellent treatise on image forensics."

- Choice

March | 8 x 9, 336 pp. | 207 color photographs, 74 halftones

\$24.95T/£20.00 paper

978-0-262-53700-1

cloth 2016 978-0-262-03534-7 gay studies

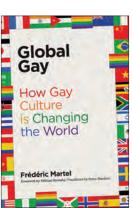
### **Global Gay**

How Gay Culture Is Changing the World

#### Frédéric Martel

foreword by Michael Bronski translated by Patsy Baudoin

In Global Gay, Frédéric Martel visits more than fifty countries and documents a revolution underway around the world: the



globalization of LGBT rights. From Saudi Arabia to South Africa, from Amsterdam to Tel Aviv, from Singapore to the United States, activists, culture warriors, and ordinary people are part of a movement. Martel interviews more than 600 key figures, including the proprietor of a "gayfriendly" café in Amman, Jordan; a South African jurist who worked with Nelson Mandela to enshrine gay rights in the country's constitution; and an American lawyer who worked on the campaign for

marriage equality. As the West progresses from the criminalization of homosexuality to the penalization of homophobia, and the "gay American way of life" offers a global template for gay activism and culture, Martel finds that every country offers distinctly local variations. And around the world, the status of gay rights has become a measure of a country's democracy and modernity.

Global Gay has been translated into seven languages and adapted into an award-winning television documentary. This English edition, which has been thoroughly revised and updated, has received the French Voices Award for excellence in publication and translation, supported by a grant from the French-American Book Fund.

**Frédéric Martel**, a researcher at Sciences-Po Paris and ZHdK Zurich, is the author of nine books, the host and producer of the French radio show *Soft Power*, and foreign affairs columnist at Slate.fr.

"An abundance of material attesting to the diversity of gay men's experiences today."

-Times Higher Education

April | 6 x 9, 296 pp. | 2 illus.

**\$16.95T/£13.99 paper** 978-0-262-53705-6

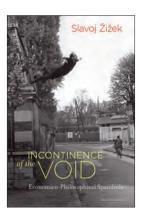
cloth 2018 978-0-262-03781-5 philosophy

### Incontinence of the Void

Economico-Philosophical Spandrels

### Slavoj Žižek

If the most interesting theoretical interventions emerge today from the interspaces between fields, then the foremost



interspaceman is Slavoj Žižek. In Incontinence of the Void, Žižek explores the empty spaces between philosophy, psychoanalysis, and the critique of political economy. He proceeds from the universal dimension of philosophy to the particular dimension of sexuality to the singular dimension of the critique of political economy.

Responding to his colleague and fellow Short Circuits author Alenka Zupančič's What Is Sex?, Žižek examines the notion of an excessive element in ontology that

gives body to radical negativity, which becomes the antagonism of sexual difference. From the economico-philosophical perspective, Žižek extrapolates from ontological excess to Marxian surplus value to Lacan's surplus enjoyment. In true Žižekian fashion, Incontinence of the Void focuses on eternal topics while detouring freely into contemporary issues from the Internet of Things to Danish TV series.

Slavoj Žižek, a philosopher and cultural critic, is Senior Researcher in the Department of Philosophy at the University of Ljubljana, Global Distinguished Professor of German at New York University, and International Director of the Birkbeck Institute for the Humanities at the University of London. He is the author of more than thirty books, including Looking Awry: An Introduction to Jacques Lacan through Popular Culture, The Puppet and the Dwarf: The Perverse Core of Christianity, The Parallax View, The Monstrosity of Christ: Paradox or Dialectic (with John Milbank), and Žižek's Jokes (Did you hear the one about Hegel and negation?), these five published by the MIT Press.

April | 6 x 9, 328 pp. | 1 illus.

\$16.95T/£13.99 paper 978-0-262-53706-3

cloth 2017 978-0-262-03681-8

Short Circuits series, edited by Mladen Dolar, Alenka Zupančič, and Slavoj Žižek

energy

### Taming the Sun

Innovations to Harness Solar Energy and Power the Planet

#### Varun Sivaram

Solar energy has become the cheapest and fastest-growing power source on earth. What's more, its potential is nearly lim-



itless—every hour the sun beams down more energy than the world uses in a year. But in Taming the Sun, energy expert Varun Sivaram warns that the world is not yet equipped to harness erratic sunshine to meet most of its energy needs. Innovation can brighten those prospects, Sivaram explains, drawing on firsthand experience and original research spanning science, business, and government. Financial innovation is already enticing deep-pocketed investors to fund solar projects around the

world. Technological innovation could replace today's solar panels with coatings as cheap as paint and employ artificial photosynthesis to store intermittent sunshine as convenient fuels. And systemic innovation could add flexibility to the world's power grids and other energy systems. Although solar can't power the planet by itself, it can be the centerpiece of a global clean energy revolution.

Varun Sivaram is a physicist and Chief Technology Officer at ReNew Power Ventures, a multibillion-dollar renewable energy firm that is India's largest. He was a fellow at the Council on Foreign Relations, where he directed its energy program. PV Magazine called him "The Hamilton of the Solar Industry."

Selected for the Best Books of 2018 lists of Goodreads, YCombinator, and the Center for Global Development

"The best available overview of where the solar industry finds itself today, and a road map for how it can reach a brighter future." - Financial Times

6 x 9, 392 pp. | 46 illus.

\$19.95T/£14.99 paper 978-0-262-53707-0

cloth 2018 978-0-262-03768-6

A Council on Foreign Relations Book

psychology | linguistics

### **Translating Happiness**

A Cross-Cultural Lexicon of Well-Being

#### **Tim Lomas**

Western psychology is rooted in the philosophies and epistemologies of Western culture. But what of concepts and



insights from outside this frame of reference? Certain terms not easily translatable into English—for example,  $agáp\bar{e}$  (from Classical Greek)—are rich with meaning but largely unavailable to Englishspeaking students and seekers of well-being. In this book, Tim Lomas argues that engaging with "untranslatable" terms can enrich not only our understanding but also our experience.

Lomas examines 400 words from 80 languages, arranges them thematically, and develops a

theoretical framework that highlights the varied dimensions of well-being and traces the connections between them. The Japanese concept of *koi no yokan* means a premonition or presentiment of love, capturing the elusive and vertiginous feeling of being about to fall for someone, imbued with melancholy and uncertainty; the Yiddish term *mensch* has been borrowed from its Judaic and religious connotations to describe an all-around good human being; and Finnish offers *sisu*—inner determination in the face of adversity. Expanding the lexicon of well-being in this way showcases the richness of cultural diversity while reminding us powerfully of our common humanity.

**Tim Lomas** is a Lecturer in Positive Psychology in the School of Psychology at the University of East London.

"Lomas describes each word as an invitation for people to experience happy phenomena that may previously have been 'unfamiliar to or hidden from them.'"

– Time

March | 6 x 9, 240 pp. | 11 illus.

**\$17.95T/£13.99 paper** 978-0-262-53708-7

cloth 2018 978-0-262-03748-8 science

### The Synthetic Age

Outdesigning Evolution, Resurrecting Species, and Reengineering Our World

#### **Christopher J. Preston**

We have all heard that there are no longer any places left on Earth untouched by humans. The significance of this goes



beyond statistics documenting melting glaciers and shrinking species counts. It signals a new geological epoch. In *The Synthetic Age*, Christopher Preston argues that what is most startling about this coming epoch is not only how much impact humans have had but, more important, how much deliberate shaping they will start to do. A world designed by engineers and technicians means the birth of the planet's first Synthetic Age.

Preston describes a range of technologies that will give us the

power to take over some of Nature's most basic operations: nanotechnologies that can restructure natural forms of matter; "molecular manufacturing" that offers unlimited repurposing; synthetic biology's potential to build, not just read, a genome; "biological mini-machines" that can outdesign evolution; and the relocation and resurrection of species. What does it mean when humans shift from being caretakers of Earth to being shapers of it? And in whom should we trust to decide the contours of our synthetic future?

**Christopher J. Preston** is Professor of Philosophy and a Research Fellow in the Mansfield Center's Program on Ethics and Public Affairs at the University of Montana.

- "Essential."
- Geographical Magazine
- "The Synthetic Age is a powerful exposé of our ability to play nature and outperform evolution."
- -Calestous Juma, Professor, Harvard Kennedy School; author of Innovation and Its Enemies: Why People Resist New Technologies

March | 6 x 9, 224 pp.

**\$15.95T/£12.99 paper** 978-0-262-53709-4

cloth 2018 978-0-262-03761-7

#### business | economics

### **Being Ecological**

### **Timothy Morton**

Ecology books can be confusing information dumps that are out of date by the time they hit you. Slapping you upside the



head to make you feel bad. Grabbing you by the lapels while yelling disturbing facts. Handwringing in agony about "What are we going to do?" This book has none of that. Being Ecological doesn't preach to the eco-choir. It's for you—even, Timothy Morton explains, if you're not in the choir, even if you have no idea what choirs are. You might already be ecological.

After establishing the approach of the book (no facts allowed!), Morton draws on Kant and Heidegger to help us understand

living in an age of mass extinction caused by global warming. He discusses what sorts of actions count as ecological—starting a revolution? Going to the garden center to smell the plants? And finally, he explores a variety of current styles of being ecological—a range of overlapping orientations rather than preformatted self-labeling. Caught up in the us-versus-them (or you-versus-everything else) urgency of ecological crisis, Morton suggests, it's easy to forget that you are a symbiotic being entangled with other symbiotic beings.

**Timothy Morton** is Rita Shea Guffey Chair in English at Rice University. He is the author of *Dark Ecology: For a Logic of Future Coexistence* and other books.

"To read *Being Ecological* is to be caught up in a brilliant display of intellectual pyrotechnics."

- Guardian

"A freewheeling, essential guide from one of our foremost ecological philosophers."

-Jeff VanderMeer

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

**\$15.95T paper** 978-0-262-53712-4

cloth 2018 978-0-262-03804-1

For sale in USA only

### **Big Is Beautiful**

Debunking the Myth of Small Business

#### Robert D. Atkinson and Michael Lind

In this provocative book, Robert Atkinson and Michael Lind argue that small business is not, as is widely claimed, the basis



of American prosperity. Rather, they argue, small businesses are not the fount of jobs because most small businesses fail. The only kind of small firm that contributes to technological innovation is the technological start-up, and its success depends on scaling up. The idea that self-employed citizens are the foundation of democracy is a relic of Jeffersonian dreams of an agrarian society. And governments, motivated by a confused mix of populist and free market ideology, in fact go out of their

way to promote small business.

Pointing to the advantages of scale for job creation, productivity, innovation, and virtually all other economic benefits, Atkinson and Lind argue for a "size neutral" policy approach in both the United States and around the world that would encourage growth rather than enshrine an anachronism. If we overthrow the "small is beautiful" ideology, we will be able to recognize large firms as the engines of progress and prosperity that they are.

Robert D. Atkinson is Founder and President of the Information Technology and Innovation Foundation, a Washington, D.C. think tank, and coauthor of *Innovation Economics: The Race for Global Advantage.* Michael Lind is a Visiting Professor at the Lyndon B. Johnson School of Public Affairs of the University of Texas and author of *Land of Promise: An Economic History of the United States.* 

"Big Is Beautiful succeeds in highlighting why it is in our collective interest to find ways to help the biggest corporations earn back our trust."

- New York Times

March | 6 x 9, 368 pp. | 9 illus.

**\$19.95T/£14.99 paper** 978-0-262-53710-0

cloth 2018 978-0-262-03770-9 higher education | memoir

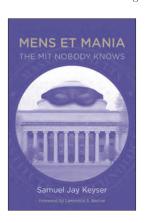
### Mens et Mania

The MIT Nobody Knows

#### Samuel Jay Keyser

foreword by Lawrence S. Bacow

In Mens et Mania, Jay Keyser recounts his academic and administrative adventures during a career of more than thirty years



at MIT, where Noam Chomsky called him "boss" (double SOB spelled backward?). As both head of the Department of Linguistics and Philosophy and Associate Provost and Special Assistant to the Chancellor, he had to run a department and negotiate student grievances—from the legality of showing *Deep Throat* in a dormitory to the uproar caused by the arrests of students for anti-apartheid demonstrations. Keyser describes a visiting Japanese delegation horrified by the disrepair of the

linguistics department offices, convincing a student not to jump off the roof of the Green Building, and recent attempts to look at MIT through a corporate lens. Keyser observes that MIT is hard to get into and even harder to leave, for faculty as well as for students. This entertaining and thought-provoking memoir will make readers glad that Keyser hasn't quite left.

**Samuel Jay Keyser** is Professor Emeritus in MIT's Department of Linguistics and Philosophy and Special Assistant to the Chancellor. Head of the Department of Linguistics and Philosophy from 1977 to 1998, he also held the positions of Director of the Center for Cognitive Science and Associate Provost.

"Keyser is a great writer and story teller. . . . I loved this book."

-Brad Feld, Feld Thoughts, Business Insider

"S. J. Keyser is a shrewd and insightful observer of academe. . . . [H]is exploration of the culture of MIT is brilliant."

-Paul E. Gray, Professor and President Emeritus, MIT

March | 5 3/8 x 8, 248 pp.

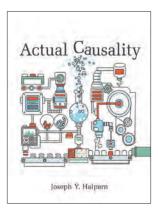
**\$19.95T/£14.99** paper 978-0-262-53711-7

cloth 2011 978-0-262-01594-3 philosophy | computer science

### **Actual Causality**

### Joseph Y. Halpern

Causality plays a central role in the way people structure the world. But what does it even mean that an event C "actually



caused" event E? The philosophy literature has been struggling with the problem of defining causality since Hume. In this book, Joseph Halpern explores actual causality, and such related notions as degree of responsibility, degree of blame, and causal explanation. The goal is to arrive at a definition of causality that matches our natural language usage and is helpful, for example, to a jury deciding a legal case, a pro-

grammer looking for the line of code that causes some software to fail, or an economist trying to determine whether austerity caused a subsequent depression. Halpern applies and expands an approach to causality that he and Judea Pearl developed, based on structural equations. He concludes by discussing how these ideas can be applied to such practical problems as accountability and program verification.

**Joseph Y. Halpern** is Professor in the Computer Science Department at Cornell University. He is the coauthor of *Reasoning about Knowledge* and the author of *Reasoning about Uncertainty* (both published by the MIT Press).

"What it might mean to say that some event was an 'actual cause' of some outcome—a conclusion that can be of crucial importance in deciding a legal case—is surprisingly difficult to characterize. This unique book describes the author's thoughtful quest to capture these subtleties in a formal language based on structural equations."

-Philip Dawid, Emeritus Professor of Statistics, University of Cambridge

March | 7 x 9, 240 pp.

**\$37.00S/£29.00** paper 978-0-262-53713-1

cloth 2016 978-0-262-03502-6

### **Evolution of the Sensitive Soul**

Learning and the Origins of Consciousness

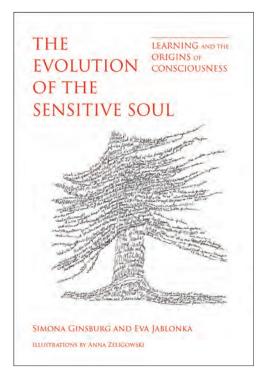
### Simona Ginsburg and Eva Jablonka

with illustrations by Anna Zeligowski

What marked the evolutionary transition from organisms that lacked consciousness to those with consciousness—to minimal subjective experiencing, or, as Aristotle described it, "the sensitive soul"? In this book, Simona Ginsburg and Eva Jablonka propose a new theory about the origin of consciousness that finds learning to be the driving force in the transition to basic consciousness. Using a methodology similar to that used by scientists when they identified the transition from non-life to life, Ginsburg and Jablonka suggest a set of criteria, identify a marker for the transition to minimal consciousness, and explore the far-reaching biological, psychological, and philosophical implications.

After presenting the historical, neurobiological, and philosophical foundations of their analysis, Ginsburg and Jablonka propose that the evolutionary marker of basic or minimal consciousness is a complex form of associative learning, which they term unlimited associative learning (UAL). UAL enables an organism to ascribe motivational value to a novel, compound, non-reflex-inducing stimulus or action, and use it as the basis for future learning. Associative learning, Ginsburg and Jablonka argue, drove the Cambrian explosion and its massive diversification of organisms. Finally, Ginsburg and Jablonka propose symbolic language as a similar type of marker for the evolutionary transition to human rationality—to Aristotle's "rational soul."

Simona Ginsburg is Associate Professor in the Department of Natural Sciences, retired from the Open University of Israel. **Eva Jablonka** is Professor at Tel-Aviv University. She is the coauthor of *Evolution in Four Dimensions: Genetic, Epigenetic, Behavioral, and Symbolic Variation in the History of Life* and the coeditor of *Transformations of Lamarckism: From Subtle Fluids to Molecular Biology*, both published by the MIT Press.

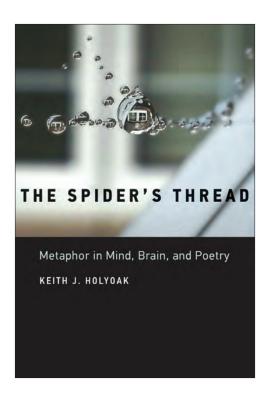


A new theory about the origins of consciousness that finds learning to be the driving force in the evolutionary transition to basic consciousness.

March 6 x 9, 640 pp. 98 illus.

**\$45.00S/£35.00 cloth** 978-0-262-03930-7

Cover illustration by Anna Zeligowski. A calligram of the poem "what is the mind?" written by Ikkyu Sojun in the fiftheenth century, drawn with the words of the poem in English and Hebrew.



An examination of metaphor in poetry as a microcosm of the human imagination—
a way to understand the mechanisms of creativity.

March 6 x 9, 288 pp. 13 illus.

**\$35.00S/£27.00 cloth** 978-0-262-03922-2

### The Spider's Thread

Metaphor in Mind, Brain, and Poetry

### Keith J. Holyoak

In *The Spider's Thread*, Keith Holyoak looks at metaphor as a microcosm of the creative imagination. Holyoak, a psychologist and poet, draws on the perspectives of thinkers from the humanities—poets, philosophers, and critics—and from the sciences—psychologists, neuroscientists, linguists, and computer scientists. He begins each chapter with a poem—by poets including Samuel Taylor Coleridge, Sylvia Plath, Walt Whitman, Emily Dickinson, Robert Frost, Theodore Roethke, Du Fu, William Butler Yeats, and Pablo Neruda—and then widens the discussion to broader notions of metaphor and mind.

Holyoak uses Whitman's poem "A Noiseless Patient Spider" to illustrate the process of interpreting a poem, and explains the relevance of two psychological mechanisms, analogy and conceptual combination, to metaphor. He outlines ideas first sketched by Coleridge—who called poetry "the best words in their best order"—and links them to modern research on the interplay between cognition and emotion, controlled and associative thinking, memory and creativity. Building on Emily Dickinson's declaration "the brain is wider than the sky," Holyoak suggests that the control and default networks in the brain may combine to support creativity. He also considers, among other things, the interplay of sound and meaning in poetry; symbolism in the work of Yeats, Jung, and others; indirect communication in poems; the mixture of active and passive processes in creativity; and whether artificial intelligence could ever achieve poetic authenticity. Guided by Holyoak, we can begin to trace the outlines of creativity through the mechanisms of metaphor.

**Keith J. Holyoak**, Distinguished Professor of Psychology at the University of California, Los Angeles, is a psychologist and poet. He is the coauthor or editor of a number of books on cognitive psychology and has published three volumes of poetry.

### **The Social Fact**

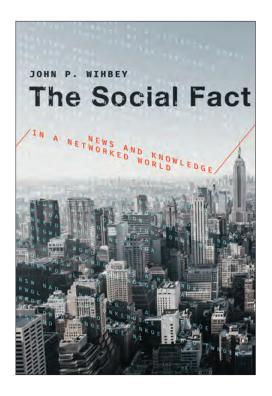
News and Knowledge in a Networked World

### John P. Wihbey

While the public believes that journalism remains crucial for democracy, there is a general sense that the news media are performing this role poorly. In *The Social Fact*, John Wihbey makes the case that journalism can better serve democracy by focusing on ways of fostering social connection. Wihbey explores how the structure of news, information, and knowledge and their flow through society are changing, and he considers ways in which news media can demonstrate the highest possible societal value in the context of these changes.

Wihbey examines network science as well as the interplay between information and communications technologies (ICTs) and the structure of knowledge in society. He discusses the underlying patterns that characterize our increasingly networked world of information—with its viral phenomena and whiplash-inducing trends, its extremes and surprises. How can the traditional media world be reconciled with the world of social, peer-to-peer platforms, crowdsourcing, and user-generated content? Wihbey outlines a synthesis for news producers and advocates innovation in approach, form, and purpose. *The Social Fact* provides a valuable framework for doing audience-engaged media work of many kinds in our networked, hybrid media environment. It will be of interest to all those concerned about the future of news and public affairs.

**John Wihbey** is an Assistant Professor of Journalism and Media Innovation at Northeastern University, where he heads the graduate programs in the School of Journalism.



How the structure of news, information, and knowledge is evolving and how news media can foster social connection.

April 6 x 9, 328 pp. 10 illus.

**\$35.00S/£27.00 cloth** 978-0-262-03959-8

How the perception of shadows, studied by vision scientists and visual artists, reveals the inner workings of the visual system.

> June 8 x 9, 400 pp. 509 illus.

**\$45.00S/£35.00 cloth** 978-0-262-03958-1



### The Visual World of Shadows

### **Roberto Casati and Patrick Cavanagh**

In *The Visual World of Shadows*, Roberto Casati and Patrick Cavanagh examine how the perception of shadows, as studied by vision scientists and visual artists, reveals the inner workings of the visual system. Shadows are at once a massive problem for vision—which must distinguish them from objects or material features of objects—and a resource, signaling the presence, location, shape, and size of objects.

Casati and Cavanagh draw up an inventory of information retrievable from shadows, showing their amazing variety. They present an overview of the visual system, distinguishing between measurement and inference. They discuss the shadow mission, the work done by the visual brain to parse, and perhaps discard, the information from shadows; shadow ownership, the association of a shadow with the object that casts it; shadow labeling, the visual system's ability to tell shadows from nonshadows; and the shadow concept, our knowledge about shadows as a category. Casati and Cavanagh then apply the theoretical apparatus they have developed for shadows to other phenomena: illumination, reflection, and transparency. Finally, they examine the art of the shadow, paying tribute to artists' exploration of shadow, analyzing a series of artworks (reproduced in color) from this rich and fascinating art historical corpus.

Robert Casati is the Director of the Jean Nicod Institute and Professor at EHESS in Paris. He is the coauthor of *Holes and Other Superficialities* and *Parts and Places:The Structures of Spatial Representation*, both published by the MIT Press. **Patrick Cavanagh** is a Senior Research Fellow at Glendon College of York University, Toronto, and Research Professor at Dartmouth College.

Illustration from  $\it The \ Visual \ World \ of \ Shadows$  by Roberto Casati and Patrick Cavanagh

### All Data Are Local

Thinking Critically in a Data-Driven Society

#### Yanni Alexander Loukissas

foreword by Geoffrey C. Bowker

In our data-driven society, it is too easy to assume the transparency of data. Instead, Yanni Loukissas argues in *All Data Are Local*, we should approach data sets with an awareness that data are created by humans and their dutiful machines, at a time, in a place, with the instruments at hand, for audiences that are conditioned to receive them. All data are local. The term data set implies something discrete, complete, and portable, but it is none of those things. Examining a series of data sources important for understanding the state of public life in the United States—Harvard's Arnold Arboretum, the Digital Public Library of America, UCLA's Television News Archive, and the real estate market-place Zillow—Loukissas shows us how to analyze data settings rather than data sets.

Loukissas sets out six principles: all data are local; data have complex attachments to place; data are collected from heterogeneous sources; data and algorithms are inextricably entangled; interfaces recontextualize data; and data are indexes to local knowledge. He then provides a set of practical guidelines to follow. To make his argument, Loukissas employs a combination of qualitative research on data cultures and exploratory data visualizations. Rebutting the "myth of digital universalism," Loukissas reminds us of the meaning-making power of the local.

Yanni Alexander Loukissas is Assistant Professor of Digital Media in the School of Literature, Media, and Communication at Georgia Institute of Technology. He is the author of Co-Designers: Cultures of Computer Simulation in Architecture.



How to analyze data settings rather than data sets, acknowledging the meaning-making power of the local.

May 7 x 9, 224 pp. 60 color illus.

**\$30.00S/£24.00 cloth** 978-0-262-03966-6

design

### **Value Sensitive Design**

Shaping Technology with Moral Imagination

### Batya Friedman and David G. Hendry

Implantable medical devices and human dignity. Private and secure access to information. Engineering projects that transform the Earth. Multigenerational information systems for international justice. How should designers, engineers, architects, policy makers, and others design such technology? Who should be involved and what values are implicated? In *Value Sensitive Design*, Batya Friedman and David Hendry describe how both moral and technical imagination can be brought to bear on the design of technology. With value sensitive design, under development for more than two decades, Friedman and Hendry bring together theory, methods, and applications for a design process that engages human values at every stage.

After presenting the theoretical foundations of value sensitive design, which lead to a deep rethinking of technical design, Friedman and Hendry explain seventeen methods, including stakeholder analysis, value scenarios, and multilifespan timelines. Following this, experts from ten application domains report on value sensitive design practice. Finally, Friedman and Hendry explore such open questions as the need for deeper investigation of indirect stakeholders and further method development.

This definitive account of the state of the art in value sensitive design is an essential resource for designers and researchers working in academia and industry, students in design and computer science, and anyone working at the intersection of technology and society.

**Batya Friedman** is Professor in the Information School at the University of Washington. **David G. Hendry** is Associate Professor in the Information School at the University of Washington. Friedman and Hendry codirect the University of Washington's Value Sensitive Design Research Lab.

Using our moral and technical imaginations to create responsible innovations: theory, method, and applications for value sensitive design.

May 6 x 9, 232 pp. 71 illus.

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Illustration from Value Sensitive Design by Batya Friedman and David G. Hendry

### Feeding the Other

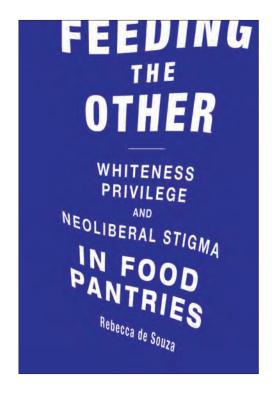
Whiteness, Privilege, and Neoliberal Stigma in Food Pantries

#### Rebecca de Souza

The United States has one of the highest rates of hunger and food insecurity in the industrialized world, with poor households, single parents, and communities of color disproportionately affected. Food pantries—run by charitable and faith-based organizations—rather than legal entitlements have become a cornerstone of the government's efforts to end hunger. In *Feeding the Other*, Rebecca de Souza argues that food pantries stigmatize their clients through a discourse that emphasizes hard work, self help, and economic productivity rather than food justice and equity. De Souza describes this "framing, blaming, and shaming" as "neoliberal stigma" that recasts the structural issue of hunger as a problem for the individual hungry person.

De Souza shows how neoliberal stigma plays out in practice through a comparative case analysis of two food pantries in Duluth, Minnesota. Doing so, she documents the seldom-acknowledged voices, experiences, and realities of people living with hunger. She describes the failure of public institutions to protect citizens from poverty and hunger; the white privilege of pantry volunteers caught between neoliberal narratives and social justice concerns; the evangelical conviction that food assistance should be "a hand up, not a handout"; the culture of suspicion in food pantry spaces; and the constraints on food choice. It is only by rejecting the neoliberal narrative and giving voice to the hungry rather than the privileged, de Souza argues, that food pantries can become agents of food justice.

**Rebecca de Souza** is Associate Professor in the Department of Communication at the University of Minnesota Duluth.



How food pantries stigmatize their clients through a discourse that emphasizes hard work, self help, and economic productivity rather than food justice and equity.

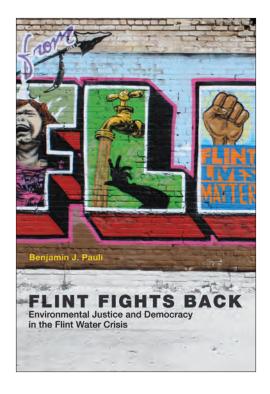
May 6 x 9, 272 pp.

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Food, Health, and the Environment series

environment



An account of the Flint water crisis shows that Flint's struggle for safe and affordable water is part of a broader struggle for democracy.

April 6 x 9, 384 pp. 18 illus.

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### **Flint Fights Back**

Environmental Justice and Democracy in the Flint Water Crisis

### Benjamin J. Pauli

When Flint, Michigan, changed its source of municipal water from Lake Huron to the Flint River, Flint residents were repeatedly assured that the water was of the highest quality. At the switchover ceremony, the mayor and other officials performed a celebratory toast, declaring "Here's to Flint!" and downing glasses of freshly treated water. But as we now know, the water coming out of residents' taps harbored a variety of contaminants, including high levels of lead. In *Flint Fights Back*, Benjamin Pauli examines the water crisis and the political activism that it inspired, arguing that Flint's struggle for safe and affordable water was part of a broader struggle for democracy. Pauli connects Flint's water activism with the ongoing movement protesting the state of Michigan's policy of replacing elected officials in financially troubled cities like Flint and Detroit with appointed "emergency managers."

Pauli distinguishes the political narrative of the water crisis from the historical and technical narratives, showing that Flint activists' emphasis on democracy helped them to overcome some of the limitations of standard environmental justice frameworks. He discusses the pro-democracy (anti-emergency manager) movement and traces the rise of the "water warriors"; describes the uncompromising activist culture that developed out of the experience of being dismissed and disparaged by officials; and examines the interplay of activism and scientific expertise. Finally, he explores efforts by activists to expand the struggle for water justice and to organize newly mobilized residents into a movement for a radically democratic Flint.

**Benjamin J. Pauli** is Assistant Professor of Social Science at Kettering University in Flint, Michigan.

art | media

### **Performing Image**

#### **Isobel Harbison**

In *Performing Image*, Isobel Harbison examines how artists have combined performance and moving image in their work since

An examination of how artists have combined performance and moving image for decades, anticipating our changing relation to images in the internet era.

the 1960s, and how this work anticipates our changing relations to images since the advent of smart phones and the spread of online prosumerism. Over this period, artists have used a variety of DIY modes of self-imaging and circulation—from home

video to social media—suggesting how and why Western subjects might seek alternative platforms for self-expression and self-representation. In the course of her argument, Harbison offers close analyses of works by such artists as Robert Rauschenberg, Yvonne Rainer, Mark Leckey, Wu Tsang, and Martine Syms.

Harbison argues that while we produce images, images also produce us—those that we take and share, those that we see and assimilate through mass media and social media, those that we encounter in museums and galleries. Although all the artists she examines express their relation to images uniquely, they also offer a vantage point on today's productive-consumptive image circuits in which billions of us are caught. This unregulated, all-encompassing image performativity, Harbison writes, puts us to work, for free, in the service of global corporate expansion. Harbison offers a three-part interpretive framework for understanding this new proximity to images as it is negotiated by these artworks, a detailed outline of a set of connected practices—and a declaration of the value of art in an economy of attention and a crisis of representation.

**Isobel Harbison**, an art historian and critic, is Lecturer in the Department of Art at Goldsmiths College, London.

March | 6 x 9, 248 pp. | 23 illus.

**\$35.00S/£27.00 cloth** 978-0-262-03921-5

cognitive science | music

### Foundations in Music Psychology

Theory and Research

#### edited by Peter Jason Rentfrow and Daniel J. Levitin

This authoritative, landmark volume offers a comprehensive state-of-the-art overview of the latest theory and research

A state-of-the-art overview of the latest theory and research in music psychology, written by leaders in the field. in music perception and cognition. Eminent scholars from a range of disciplines, employing a variety of methodologies, describe important findings from core areas of the field, including music

cognition, the neuroscience of music, musical performance, and music therapy. The book can be used as a textbook for courses in music cognition, auditory perception, science of music, psychology of music, philosophy of music, and music therapy, and as a reference for researchers, teachers, and musicians.

The book's sections cover music perception; music cognition; music, neurobiology, and evolution; musical training, ability, and performance; and musical experience in everyday life. Chapters treat such topics as pitch, rhythm, and timbre; musical expectancy, musicality, musical disorders, and absolute pitch; brain processes involved in music perception, cross-species studies of music cognition, and music across cultures; improvisation, the assessment of musical ability, and singing; and music and emotions, musical preferences, and music therapy.

Peter Jason Rentfrow is Reader in Personality and Individual Differences in the Department of Psychology at the University of Cambridge. Daniel J. Levitin is Founding Dean of Arts and Humanities at the Minerva Schools at Keck Graduate Institute and James McGill Professor Emeritus of Neuroscience and Music at McGill University. He is the author of four bestselling books, including This Is Your Brain on Music: The Science of a Human Obsession.

March | 7 x 9, 960 pp. | 82 illus.

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computer science

## A Course in Networks and Markets

Game-theoretic Models and Reasoning

#### **Rafael Pass**

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A graduate-level, mathematically rigorous introduction to strategic behavior in a networked world. tures and network effects in economic and information markets. The goal is for students to develop an intuitive and mathematically rigorous understanding of how strategic agents interact in a con-

nected world. The text synthesizes some of the central results in the field while also simplifying their treatment to make them more accessible to nonexperts. Thus, students at the introductory level will gain an understanding of key ideas in the field that are usually only taught at the advanced graduate level.

The book introduces basic concepts from game theory and graph theory as well as some fundamental algorithms for exploring graphs. These tools are then applied to analyze strategic interactions over social networks, to explore different types of markets and mechanisms for networks, and to study the role of beliefs and higher-level beliefs (beliefs about beliefs). Specific topics discussed include coordination and contagion on social networks, traffic networks, matchings and matching markets, exchange networks, auctions, voting, web search, models of belief and knowledge, and how beliefs affect auctions and markets. An appendix offers a "Primer on Probability." Mathematically rigorous, the text assumes a level of mathematical maturity (comfort with definitions and proofs) in the reader.

**Rafael Pass** is Professor of Computer Science at CornellTech and Cornell University.

April | 7 x 9, 344 pp. | 40 color illus., 3 b&w illus.

**\$55.00X/£43.00 cloth** 978-0-262-03978-9

computer science

### **Algorithms for Optimization**

### Mykel J. Kochenderfer and Tim A. Wheeler

This book offers a comprehensive introduction to optimization with a focus on practical algorithms. The book approaches

A comprehensive introduction to optimization with a focus on practical algorithms for the design of engineering systems. optimization from an engineering perspective, where the objective is to design a system that optimizes a set of metrics subject to constraints. Readers will learn about computational

approaches for a range of challenges, including searching high-dimensional spaces, handling problems where there are multiple competing objectives, and accommodating uncertainty in the metrics. Figures, examples, and exercises convey the intuition behind the mathematical approaches. The text provides concrete implementations in the Julia programming language.

Topics covered include derivatives and their generalization to multiple dimensions; local descent and first- and secondorder methods that inform local descent; stochastic methods, which introduce randomness into the optimization process; linear constrained optimization, when both the objective function and the constraints are linear; surrogate models, probabilistic surrogate models, and using probabilistic surrogate models to guide optimization; optimization under uncertainty; uncertainty propagation; expression optimization; and multidisciplinary design optimization. Appendixes offer an introduction to the Julia language, test functions for evaluating algorithm performance, and mathematical concepts used in the derivation and analysis of the optimization methods discussed in the text. The book can be used by advanced undergraduates and graduate students in mathematics, statistics, computer science, any engineering field, (including electrical engineering and aerospace engineering), and operations research, and as a reference for professionals.

Mykel J. Kochenderfer is Assistant Professor in the Department of Aeronautics and Astronautics at Stanford University and the author of *Decision Making Under Uncertainty: Theory and Application*. Tim A. Wheeler is a software engineer at Kitty Hawk Corporation in Mountain View, California.

March | 8 x 9, 528 pp. | 237 color illus.

**\$85.00X/£66.00 cloth** 978-0-262-03942-0

computer science

computer science

# **Essential Logic for Computer Science**

#### Rex Page and Ruben Gamboa

Computer scientists use logic for testing and verification of software and digital circuits, but many computer science stu-

An introduction to applying predicate logic to testing and verification of software and digital circuits that focuses on applications rather than theory.

dents study logic only in the context of traditional mathematics, encountering the subject in a few lectures and a handful of problem sets in a discrete math course. This book offers a more substantive and rigorous approach to logic that focuses on appli-

cations in computer science. Topics covered include predicate logic, equation-based software, automated testing and theorem proving, and large-scale computation.

Formalism is emphasized, and the book employs three formal notations: traditional algebraic formulas of propositional and predicate logic; digital circuit diagrams; and the widely used partially automated theorem prover, ACL2, which provides an accessible introduction to mechanized formalism. For readers who want to see formalization in action, the text presents examples using Proof Pad, a lightweight ACL2 environment. Readers will not become ALC2 experts, but will learn how mechanized logic can benefit software and hardware engineers. In addition, 180 exercises, some of them extremely challenging, offer opportunities for problem solving. There are no prerequisites beyond high school algebra. Programming experience is not required to understand the book's equationbased approach. The book can be used in undergraduate courses in logic for computer science and introduction to computer science and in math courses for computer science students.

**Rex Page** is Professor Emeritus in the School of Computer Science at the University of Wyoming. **Ruben Gamboa** is Professor in the Department of Computer Science at the University of Wyoming.

February | 7 x 9, 304 pp. | 81 illus.

\$50.00X/£40.00 cloth 978-0-262-03918-5

# Log-Linear Models, Extensions, and Applications

edited by Aleksandr Aravkin, Anna Choromanska, Li Deng, Georg Heigold, Tony Jebara, Dimitri Kanevsky, and Stephen J. Wright

Log-linear models play a key role in modern big data and machine learning applications. From simple binary classification

Advances in training models with log-linear structures, with topics including variable selection, the geometry of neural nets, and applications.

models through partition functions, conditional random fields, and neural nets, log-linear structure is closely related to performance in certain applications and influences fitting techniques used to train models. This volume covers recent ad-

vances in training models with log-linear structures, covering the underlying geometry, optimization techniques, and multiple applications. The first chapter shows readers the inner workings of machine learning, providing insights into the geometry of log-linear and neural net models. The other chapters range from introductory material to optimization techniques to involved use cases. The book, which grew out of a NIPS workshop, is suitable for graduate students doing research in machine learning, in particular deep learning, variable selection, and applications to speech recognition. The contributors come from academia and industry, allowing readers to view the field from both perspectives.

Aleksandr Aravkin is Assistant Professor of Applied Mathematics at the University of Washington. Anna Choromanska is Assistant Professor at New York University's Tandon School of Engineering.

Li Deng is Chief Artificial Intelligence Officer of Citadel. Georg Heigold is Research Scientist at Google. Tony Jebara is Associate Professor of Computer Science at Columbia University. Dimitri Kanevsky is Research Scientist at Google. Stephen J. Wright is Professor of Computer Science at the University of Wisconsin–Madison.

February | 8 x 10, 216 pp. | 51 color illus.

**\$75.00X/£58.00 cloth** 978-0-262-03950-5

**Neural Information Processing series** 

computer science | machine learning

## **Foundations of Machine Learning**

## Mehryar Mohri, Afshin Rostamizadeh, and Ameet Talwalkar

second edition

This book is a general introduction to machine learning that can serve as a textbook for graduate students and a reference

A new edition of a graduate-level machine learning textbook that focuses on the analysis and theory of algorithms. for researchers. It covers fundamental modern topics in machine learning while providing the theoretical basis and conceptual tools needed for the discussion and justification of algo-

rithms. It also describes several key aspects of the application of these algorithms. The authors aim to present novel theoretical tools and concepts while giving concise proofs even for relatively advanced topics.

Foundations of Machine Learning is unique in its focus on the analysis and theory of algorithms. The first four chapters lay the theoretical foundation for what follows; subsequent chapters are mostly self-contained. Topics covered include the Probably Approximately Correct (PAC) learning framework; generalization bounds based on Rademacher complexity and VC-dimension; Support Vector Machines (SVM); kernel methods; boosting; online learning; multi-class classification; ranking; regression; algorithmic stability; dimensionality reduction; learning automata and languages; and reinforcement learning. Each chapter ends with a set of exercises. Appendixes offer additional material including concise probability review.

This second edition offers three new chapters, on model selection, maximum entropy models, and conditional entropy models. New material in the appendix includes a major section on Fenchel duality, expanded coverage of concentration inequalities, and an entirely new entry on information theory. More than half of the exercises are new to this edition.

Mehryar Mohri is Professor of Computer Science at New York University's Courant Institute of Mathematical Sciences and a Research Scientist at Google Research. Afshin Rostamizadeh is a Research Scientist at Google Research. Ameet Talwalkar is Assistant Professor in the Machine Learning Department at Carnegie Mellon University.

January | 7 x 9, 504 pp. | 64 color illus., 35 b&w illus.

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computer science | urbanism

## **Urban Computing**

#### Yu Zheng

Urban computing brings powerful computational techniques to bear on such urban challenges as pollution, energy consump-

An authoritative treatment of urban computing, offering an overview of the field, fundamental techniques, advanced models, and novel applications.

tion, and traffic congestion. Using today's large-scale computing infrastructure and data gathered from sensing technologies, urban computing combines computer science with urban planning, transportation, environmental science, sociology, and

other areas of urban studies, tackling specific problems with concrete methodologies in a data-centric computing framework. This authoritative treatment of urban computing offers an overview of the field, fundamental techniques, advanced models, and novel applications.

Each chapter acts as a tutorial that introduces readers to an important aspect of urban computing, with references to relevant research. The book outlines key concepts, sources of data, and typical applications; describes four paradigms of urban sensing in sensor-centric and human-centric categories; introduces data management for spatial and spatio-temporal data, from basic indexing and retrieval algorithms to cloud computing platforms; and covers beginning and advanced topics in mining knowledge from urban big data, beginning with fundamental data mining algorithms and progressing to advanced machine learning techniques. *Urban Computing* provides students, researchers, and application developers with an essential handbook to an evolving interdisciplinary field.

Yu Zheng is Vice President and Chief Data Scientist at JD Finance, where he is also President of the Urban Computing Business Unit and Director of the Urban Computing Lab. He is Chair Professor at Shanghai Jiao Tong University and Adjunct Professor at Hong Kong University of Science and Technology. He is the coeditor of Computing with Spatial Technologies and Editor-in-Chief of ACM Transactions on Intelligent Systems and Technology.

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Information Systems series

## **Introduction to Deep Learning**

#### **Eugene Charniak**

This concise, project-driven guide to deep learning takes students through a series of program-writing tasks that introduce them to the use of deep learning in such areas of artificial intelligence as computer vision, natural-language processing, and reinforcement learning. The author, a longtime artificial intelligence researcher specializing in natural-language processing, covers feed-forward neural nets, convolutional neural nets, word embeddings, recurrent neural nets, sequence-to-sequence learning, deep reinforcement learning, unsupervised models, and other fundamental concepts and techniques. Students learn the basics of deep learning by working through programs in Tensorflow, an open-source machine learning framework. "I find I learn computer science material best by sitting down and writing programs," the author writes, and the book reflects this approach.

Each chapter includes a programming project, exercises, and references for further reading. An early chapter is devoted to Tensorflow and its interface with Python, the widely used programming language. Familiarity with linear algebra, multivariate calculus, and probability and statistics is required, as is a rudimentary knowledge of programming in Python. The book can be used in both undergraduate and graduate courses, and as a reference for practitioners.

**Eugene Charniak** is Professor of Computer Science at Brown University. He is the author of *Statistical Language Learning* (MIT Press) and other books.

# A project-based guide to the basics of deep learning.

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- 4 Word Embeddings and Recurrent NNs
- 5 Sequence-to-Sequence Learning
- 6 Deep Reinforcement Learning
- 7 Unsupervised Neural-Network Models

digital humanities | software studies

### The Software Arts

#### Warren Sack

In *The Software Arts*, Warren Sack offers an alternative history of computing that places the arts at the very center of

An alternative history of software that places the liberal arts at the very center of software's evolution.

software's evolution. Tracing the origins of software to eighteenth-century French encyclopedists' step-by-step descriptions of how things were made in the workshops of artists and artisans, Sack

shows that programming languages are the offspring of an effort to describe the mechanical arts in the language of the liberal arts.

Sack offers a reading of the texts of computing—code, algorithms, and technical papers—that emphasizes continuity between prose and programs. He translates concepts and categories from the liberal and mechanical arts—including logic, rhetoric, grammar, learning, algorithm, language, and simulation—into terms of computer science and then considers their further translation into popular culture, where they circulate as forms of digital life. He considers, among other topics, the "arithmetization" of knowledge that presaged digitization; today's multitude of logics; the history of demonstration, from deduction to newer forms of persuasion; and the post-Chomsky absence of meaning in grammar. With *The Software Arts*, Sack invites artists and humanists to see how their ideas are at the root of software and invites computer scientists to envision themselves as artists and humanists.

Warren Sack is a media theorist, software designer, and artist whose work has been exhibited at SFMoMA, the Whitney Museum of American Art, the Walker Art Center, and the ZKM Center for Art and Media. He is Chair and Professor of Film and Digital Media at the University of California, Santa Cruz.

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Software Studies series

economics

## **Disrupted Economic Relationships**

Disasters, Sanctions, Dissolutions

#### edited by Tibor Besedeš and Volker Nitsch

Cross-border economic relationships gradually strengthened in the decades after World War II; for most of the postwar period,

Empirical studies and theoretical analyses examine the causes and consequences of disruptions in cross-border economic relationships, including political conflict, economic sanctions, and institutional collapse.

international trade and investment have grown faster than output, a process often termed "globalization." In recent years, however, economic relationships have grown more fragile, subject to disruption by such factors as political conflict, economic sanctions, and the dissolution of institutional arrange-

ments. This timely CESifo volume offers empirical studies and theoretical analyses that examine the causes and consequences of these disrupted economic relationships.

Contributors propose a new theoretical framework for understanding the economic impact of intergroup conflict and develop a predictive model to analyze the contagion of regional wars. They offer empirical studies of the economic effect of targeted sanctions and boycotts, including those imposed upon Iran, Russia, and Myanmar; argue provocatively that natural disasters are associated with increased international trade; analyze trade duration, finding previously identified explanatory factors to be insufficient for explaining variations in trade survival over time; and critically review the hypothesis that oil was a crucial factor in the collapse of the Soviet Union.

**Tibor Besedeš** is Associate Professor in the School of Economics at Georgia Institute of Technology. **Volker Nitsch** is Professor for International Economics at Darmstadt University of Technology.

#### Contributors

Daniel P. Ahn, Tibor Besedeš, Kilian Heilmann, Wolfgang Hess, Julian Hinz, Melise Jaud, Tristan Kohl, Madina Kukenova, Chenmei Li, Rodney D. Ludema, Volker Nitsch, Maria Persson, Chiel Klein Reesink, Arthur Silve, Enrico Spolaore, Martin Strieborny, Marvin Suesse, Peter A. G. van Bergeijk, Thierry Verdier, Romain Wacziarg

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**CESifo Seminar series** 

economics

## **Empirical Asset Pricing**

Models and Methods

#### **Wayne Ferson**

This book offers a comprehensive advanced introduction to asset pricing, the study of models for the prices and returns of

An introduction to the theory and methods of empirical asset pricing, integrating classical foundations with recent developments.

various securities. The focus is empirical, emphasizing how the models relate to the data. The book offers a uniquely integrated treatment, combining classical foundations with more recent developments in the literature

and relating some of the material to applications in investment management. It covers the theory of empirical asset pricing, the main empirical methods, and a range of applied topics.

The book introduces the theory of empirical asset pricing through three main paradigms: mean variance analysis, stochastic discount factors, and beta pricing models. It describes empirical methods, beginning with the generalized method of moments (GMM) and viewing other methods as special cases of GMM; offers a comprehensive review of fund performance evaluation; and presents selected applied topics, including a substantial chapter on predictability in asset markets that covers predicting the level of returns, volatility and higher moments, and predicting cross-sectional differences in returns. Other chapters cover production-based asset pricing, long-run risk models, the Campbell-Shiller approximation, the debate on covariance versus characteristics, and the relation of volatility to the cross-section of stock returns. An extensive reference section captures the current state of the field. The book is intended for use by graduate students in finance and economics; it can also serve as a reference for professionals.

**Wayne Ferson** is Ivadelle and Theodore Johnson Chair of Banking and Finance at the University of Southern California.

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economics

## **Evolving Households**

The Imprint of Technology on Life

#### Jeremy Greenwood

In Evolving Households, Jeremy Greenwood argues that technological progress has had as significant an effect on households

The transformative effect of technological change on households and culture, seen from a macroeconomic perspective through simple economic models.

as it had on industry. Taking a macroeconomic perspective, Greenwood develops simple economic models to study such phenomena as the rise in married female labor force participation, changes in fertility rates, the decline in marriage, and increased

longevity. These trends represent a dramatic transformation in everyday life, and they were made possible by advancements in technology. Greenwood also addresses how technological progress can cause social change.

Greenwood shows, for example, how electricity and labor-saving appliances freed women from full-time household drudgery and enabled them to enter the labor market. He explains that fertility dropped when higher wages increased the opportunity cost of having children; he attributes the post-World War II baby boom to a combination of labor-saving household technology and advances in obstetrics and pediatrics. Marriage rates declined when single households became more economically feasible; people could be more discriminating in their choice of a mate. Technological progress also affects social and cultural norms. Innovation in contraception ushered in a sexual revolution. Labor-saving technological progress at home, together with mechanization in industry that led to an increase in the value of brain relative to brawn for jobs, fostered the advancement of women's rights in the workplace. Finally, Greenwood attributes increased longevity to advances in medical technology and rising living standards, and he examines healthcare spending, the development of new drugs, and the growing portion of life now spent in retirement.

**Jeremy Greenwood** is Professor of Economics at the University of Pennsylvania.

February | 6 x 9, 336 pp. | 71 illus.

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economics

# Macroeconomic Fluctuations and Policies

#### **Edouard Challe**

translated by Susan Emanuel

This textbook presents the basic tools for analyzing macroeconomic fluctuations and policies and applies them to contem-

The basic tools for analyzing macroeconomic fluctuations and policies, applied to concrete issues and presented within an integrated New Keynesian framework.

porary issues. It employs a unified New Keynesian framework for understanding business cycles, major crises, and macroeconomic policies, introducing students to the approach most often used in academic macroeconomic analysis and by central banks

and international institutions. The book addresses such topics as how recessions and crises spread; what instruments central banks and governments have to stimulate activity when private demand is weak; and what "unconventional" macroeconomic policies might work when conventional monetary policy loses its effectiveness (as has happened in many countries in the aftermath of the Great Recession.).

The text introduces the foundations of modern business cycle theory through the notions of aggregate demand and aggregate supply, and then applies the theory to the study of regular business-cycle fluctuations in output, inflation, and employment. It considers conventional monetary and fiscal policies aimed at stabilizing the business cycle, and examines unconventional macroeconomic policies, including forward guidance and quantitative easing, in situations of "liquidity trap"—deep crises in which conventional policies are either ineffective or have very different effects than in normal time.

This book is the first to use the New Keynesian framework at the advanced undergraduate level, connecting undergraduate learning not only with the more advanced tools taught at the graduate level but also with the large body of policy-oriented research in academic journals. End-of-chapter problems help students master the materials presented.

**Edouard Challe** is Professor of Economics at Ecole Polytechnique and Director of Research at CNRS (the French National Center for Scientific Research).

May | 7 x 9, 440 pp. | 67 illus.

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economics

# Reform of the International Monetary System

Why and How?

#### John B. Taylor

In this book, the economist John Taylor argues that the apparent correlation of monetary policy decisions among different

An argument that a rules-based reform of the international monetary system, achieved by applying basic economic theory, would improve economic performance.

countries—largely the result of countries' concerns about the exchange rate—causes monetary policy to deviate from effective policies that stabilize inflation and the economy. He argues that a rules-based reform of the international monetary system, achieved by applying basic

economic theory, would improve economic performance.

Taylor shows that monetary polices in recent years have been deployed either defensively, as central banks counteract forces from abroad that affect the exchange rate, or offensively, as central banks attempt to move the exchange rate to gain a competitive advantage. Focusing on the years from 2005 to 2017, he develops an empirical framework to examine two monetary policy instruments: the policy interest rate (the more conventional of the two) and the size of the balance sheet. He finds that an international contagion in central bank decisions about the policy interest rate has accentuated the deviation from standard interest rate rules that have worked in the past. He finds a similar contagion in decisions about the size of the balance sheet. By considering a counterfactual policy in the estimated model, Taylor is able to estimate by how much the policy of recent years has increased exchange rate volatility. After several rounds of monetary actions and reactions aimed at exchange rates, Taylor finds, the international monetary system is left with roughly the same interest rate configuration, but much larger balance sheets to unwind.

**John B. Taylor** is Mary and Robert Raymond Professor of Economics at Stanford University and George P. Schultz Fellow in Economics at the Hoover Institution.

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Karl Brunner Distinguished Lectures Series

economics | energy

# Imperfect Markets and Imperfect Regulation

An Introduction to the Microeconomics and Political Economy of Power Markets

#### Thomas-Olivier Léautier

foreword by Jean Tirole

The power industry is essential in our fight against climate change. This book is the first to examine in detail the micro-

The first textbook to present a comprehensive and detailed economic analysis of electricity markets, analyzing the tensions between microeconomics and political economy.

economics underlying power markets, stemming from peak-load pricing, by which prices are low when the installed generation capacity exceeds demand but can rise a hundred times higher when demand is equal to installed capacity. The outcome of peak-load pricing is often

difficult to accept politically, and the book explores the tensions between microeconomics and political economy.

Understanding peak-load pricing and its implications is essential for designing robust policies and making sound investment decisions. Thomas-Olivier Léautier presents the model in its simplest form, and introduces additional features as different issues are presented. The book covers all segments of electricity markets: electricity generation, under perfect and imperfect competition; retail competition and demand response; transmission pricing, transmission congestion management, and transmission constraints; and the current policy issues arising from the entry of renewables into the market and capacity mechanisms. Combining anecdotes and analysis of real situations with rigorous analytical modeling, each chapter analyzes one specific issue, first presenting findings in nontechnical terms accessible to policy practitioners and graduate students in management or public policy and then presenting a more mathematical analytical exposition for students and researchers specializing in the economics of electricity markets and for those who want to understand and apply the underlying models.

Thomas-Olivier Léautier has more than twenty years' experience in the electric power industry, both as an academic researcher and as a practitioner. He is currently Director of EDF Group University for Management and on the Research Faculty at the Toulouse School of Economics.

March | 7 x 9, 400 pp. | 71 illus.

finance

# Foundations of Global Financial Markets and Institutions

#### Frank J. Fabozzi and Frank J. Jones

with Steven V. Mann and Francesco A. Fabozzi fifth edition

This thoroughly revised and updated edition of a widely used textbook for graduate students in finance now provides

A thoroughly revised and updated edition of a textbook for graduate students in finance, with new coverage of global financial institutions. expanded coverage of global financial institutions, with detailed comparisons of U.S. systems with non-U.S. systems. A focus on the actual practices of financial institutions prepares students for real-world problems.

After an introduction to financial markets and market participants, including asset management firms, credit rating agencies, and investment banking firms, the book covers risks and asset pricing, with a new overview of risk; the structure of interest rates and interest rate and credit risks; the fundamentals of primary and secondary markets; government debt markets, with new material on non-U.S. sovereign debt markets; corporate funding markets, with new coverage of small and medium enterprises and entrepreneurial ventures; residential and commercial real estate markets; collective investment vehicles, in a chapter new to this edition; and financial derivatives, including financial futures and options, interest rate derivatives, foreign exchange derivatives, and credit risk transfer vehicles such as credit default swaps. Each chapter begins with learning objectives and ends with bullet point takeaways and questions.

Frank J. Fabozzi is Professor of Finance at EDHEC Business School, France. He has held positions at Princeton University, Yale School of Management, and MIT Sloan School of Management. He is the author of *Capital Markets* (fifth edition, MIT Press), *Entrepreneurial Finance and Accounting for High-Tech Companies* (MIT Press), and other books. Frank J. Jones is Professor of Finance and Accounting at San Jose State College of Business. His previous positions in finance include Chairman of the International Securities Exchange and Director of Global Fixed Income Research and Economics at Merrill Lynch.

May | 8 x 9, 1088 pp. | 52 illus.

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education

## **Blended Learning in Practice**

A Guide for Practitioners and Researchers

edited by Amanda G. Madden, Lauren Margulieux, Robert S. Kadel, and Ashok K. Goel

foreword by Richard A. DeMillo

Blended learning combines traditional in-person learning with technology-enabled education. Its pedagogical aim is to merge

A guide to both theory and practice of blended learning offering rigorous research, case studies, and methods for the assessment of educational effectiveness. the scale, asynchrony, and flexibility of online learning with the benefits of the traditional classroom—content-rich instruction and the development of learning relationships. This book offers a guide to both theory and practice of blended

learning, offering rigorous research, case studies, and methods for the assessment of educational effectiveness.

The contributors to this volume adopt a range of approaches to blended learning and different models of implementation and offer guidelines for both researchers and instructors, considering such issues as research design and data collection. In these courses, instructors addressed problems they had noted in traditional classrooms, attempting to enhance student engagement, include more active learning strategies, approximate real-world problem solving, and reach non-majors. The volume offers a cross-section of approaches from one institution, Georgia Tech, to provide both depth and breadth. It examines the methodologies of implementation in a variety of courses, ranging from a first-year composition class that incorporated the video game Assassin's Creed II to a research methods class for psychology and computer science students. Blended Learning will be an essential resource for educators, researchers, administrators, and policy makers.

Amanda G. Madden is a Research Scientist at the Center for 21st Century Universities (C21U) at Georgia Institute of Technology.

Lauren Margulieux is Assistant Professor in the Department of Learning Sciences at Georgia State University. Robert S. Kadel is Assistant Director for Research in Education Innovation at C21U.

Ashok K. Goel is Professor of Computer Science at Georgia Institute of Technology.

March | 6 x 9, 408 pp. | 37 illus.

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environmental policy

# Global Environmental Governance and the Accountability Trap

#### edited by Susan Park and Teresa Kramarz

The rapid development of global environmental governance has been accompanied by questions of accountability. Efforts

An examination of whether accountability mechanisms in global environmental governance that focus on monitoring and enforcement necessarily lead to better governance and better environmental outcomes.

to address what has been called "a culture of unaccountability" include greater transparency, public justification for governance decisions, and the establishment of monitoring and enforcement procedures. And yet, as this volume shows, these can lead to an "accountability trap"—a focus on accountability measures rather than

improved environmental outcomes. Through analyses and case studies, the contributors consider how accountability is being used within global environmental governance and if the proliferation of accountability tools enables governance to better address global environmental deterioration. Examining public, private, voluntary, and hybrid types of global environmental governance, the volume shows that the different governance goals of the various actors shape the accompanying accountability processes. These goals—from serving constituents to reaping economic benefits—determine to whom and for what the actors must account.

After laying out a theoretical framework for its analyses, the book addresses governance in the key areas of climate change, biodiversity, fisheries, and trade and global value chains. The contributors find that normative biases shape accountability processes, and they explore the potential of feedback mechanisms between institutions and accountability rules for enabling better governance and better environmental outcomes.

**Susan Park** is Associate Professor of International Relations at the University of Sydney. **Teresa Kramarz** is Associate Professor at the Munk School of Global Affairs at the University of Toronto and Codirector of the Environmental Governance Lab.

April | 6 x 9, 280 pp. | 8 illus.

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**\$90.00X/£70.00 cloth** 978-0-262-03906-2

Earth System Governance series

linguistics

## **Composing Questions**

#### **Hadas Kotek**

In this book, Hadas Kotek investigates the syntax and semantics of wh-questions, offering a new solution to a central

An investigation of the syntax and semantics of wh-questions through the lens of intervention effects, offering a new proposal on overt and covert wh-movement.

question in the study of interrogatives: given that overt wh-movement is cross-linguistically common, is syntactic movement a prerequisite for the interpretation of wh-phrases? Some linguists argue that all wh-phrases undergo

movement to interrogative C, even if covertly; others propose mechanisms of in-situ interpretation that do not require any movement. Kotek moves beyond these positions to argue that wh-in-situ does move covertly, but not necessarily to C. Instead, she contends, wh-in-situ undergoes a short movement step akin to covert scrambling. This makes the LF behavior of English parallel to the overt behavior of German.

Kotek presents a series of self-paced reading experiments, alongside judgment data from German, to substantiate the idea of covert scrambling. She introduces new diagnostics for the underlying structure of questions, using as a principal tool the distribution of intervention effects. This system allows her to offer the first unified account for a range of phenomena of interrogative syntax-semantics as pied-piping, superiority effects, the cross-linguistically varied syntax of questions, and intervention effects.

Kotek develops a theory of interrogative syntax-semantics; studies the phenomena of intervention effects in wh-questions, proposing that the nature of intervention is crucially tied to the availability of wh-movement in a question; and shows that covert wh-movement should be modeled as a short scrambling operation rather than an unbounded, successive-cyclic, and potentially long-distance movement operation.

Hadas Kotek is a Lecturer at Yale University.

March | 6 x 9, 240 pp. | 10 illus.

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**Linguistic Inquiry Monographs** 

linguistics

## **Natural Language Semantics**

Formation and Valuation

#### Brendan S. Gillon

This textbook offers a comprehensive introduction to the fundamentals of those approaches to natural language semantics

An introduction to natural language semantics that offers an overview of the empirical domain and an explanation of the mathematical concepts that underpin the discipline.

that use the insights of logic. Many other texts on the subject focus on presenting a particular theory of natural language semantics. This text instead offers an overview of the empirical domain (drawn largely from standard descriptive

grammars of English) as well as the mathematical tools that are applied to it. Readers are shown where the concepts of logic apply, where they fail to apply, and where they might apply, if suitably adjusted.

The presentation of logic is completely self-contained, with concepts of logic used in the book presented in all the necessary detail. This includes propositional logic, first order predicate logic, generalized quantifier theory, and the Lambek and Lamdba calculi. The chapters on logic are paired with chapters on English grammar. For example, the chapter on propositional logic is paired with a chapter on the grammar of coordination and subordination of English clauses; the chapter on predicate logic is paired with a chapter on the grammar of simple, independent English clauses; and so on.

The book includes more than five hundred exercises, not only for the mathematical concepts introduced, but also for their application to the analysis of natural language. The latter exercises include some aimed at helping the reader to understand how to formulate and test hypotheses.

**Brendan S. Gillon** is Professor of Linguistics and an Associate of the Department of Philosophy at McGill University.

March | 7 x 9, 720 pp. | 1 illus.

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mathematics | computer science | philosophy

# The Collected Works of Alonzo Church

#### edited by Tyler Burge and Herbert Enderton

Alonzo Church's long and distinguished career in mathematics and philosophy can be traced through his influential and

Writings, including articles, letters, and unpublished work, by one of the twentieth century's most influential figures in mathematical logic and philosophy.

wide-ranging writings. Church published his first article as an undergraduate at Princeton in 1924 and his last shortly before his death in 1995. This volume collects all of his published articles, many of his reviews, his monograph *The Calculi* 

of Lambda-Conversion, the introduction to his important and authoritative textbook Introduction to Mathematical Logic, a substantial amount of previously unpublished work (including chapters for the unfinished second volume of Introduction to Mathematical Logic), and a selection of letters to such correspondents as Rudolf Carnap and W. V. O. Quine. With the exception of the reviews, letters, and unpublished work, these appear in chronological order, for the most part in the format in which they were originally published.

Church's work in calculability, especially the monograph on the lambda-calculus, helped lay the foundation for theoretical computer science; it attracted the interest of Alan Turing, who later completed his PhD under Church's supervision. (Church coined the term "Turing machine" in a review.) Church's influential textbook, still in print, defined the field of mathematical logic for a generation of logicians. In addition, his close connection with the Association for Symbolic Logic and his many years as review editor for the Journal of Symbolic Logic are documented in the reviews included here.

**Tyler Burge** is Distinguised Professor in the Department of Philosophy at the University of California, Los Angeles. **Herbert Enderton** was Professor Emeritus in the Department of Mathematics at the University of California, Los Angeles.

March | 7 x 10, 1232 pp. | 10 illus.

\$135.00X/£104.00 cloth 978-0-262-02564-5 neuroscience

## **Brain Signals**

Physics and Mathematics of MEG and EEG

#### Risto Ilmoniemi and Jukka Sarvas

In Brain Signals, Risto Ilmoniemi and Jukka Sarvas present the basic physical and mathematical principles of magneto-

A unified treatment of the generation and analysis of brain-generated electromagnetic fields. encephalography (MEG) and electroencephalography (EEG), describing what kind of information is available in the neuroelectromagnetic field and how the measured

MEG and EEG signals can be analyzed. Unlike most previous works on these topics, which have been collections of writings by different authors using different conventions, this book presents the material in a unified manner, providing the reader with a thorough understanding of basic principles and a firm basis for analyzing data generated by MEG and EEG.

The book first provides a brief introduction to brain states and the early history of EEG and MEG, describes the generation of electromagnetic fields by neuronal activity, and discusses the electromagnetic forward problem. The authors then turn to EEG and MEG analysis, offering a review of linear and matrix algebra and basic statistics needed for analysis of the data, and presenting several analysis methods: dipole fitting; the minimum norm estimate (MNE); beamforming; the multiple signal classification algorithm (MUSIC), including RAP-MUSIC with the RAP dilemma and TRAP-MUSIC, which removes the RAP dilemma; independent component analysis (ICA); and blind source separation (BSS) with joint diagonalization.

**Risto Ilmoniemi** is Professor of Applied Physics and Head of the Department of Neuroscience and Biomedical Engineering at Aalto University, Finland. **Jukka Sarvas** is Professor Emeritus and Senior Adviser in the Department of Neuroscience and Biomedical Engineering at Aalto University.

June | 7 x 9, 288 pp. | 60 color illus.

**\$65.00S/£50.00 cloth** 978-0-262-03982-6

new media

**Virtual Menageries** 

Mediologies of Animal Representation

**Jody Berland** 

From cat videos to corporate logos, digital screens and spaces are crowded with animal bodies. In *Virtual Menageries*, Jody Berland

The close interdependency of animal emissaries and new media from early European colonial encounters with the exotic to today's proliferation of animals in digital networks.

examines the role of animals in the spread of global communications. Her richly illustrated study links the contemporary proliferation of animals on social media to the collection of exotic animals in the formative years of transcontinental exploration and expansion. By trac-

ing previously unseen parallels across the history of exotic and digital menageries, Berland shows how and why animals came to bridge peoples, territories, and technologies in the expansion of colonial and capitalist cultures.

Berland's genealogy of the virtual menagerie begins in 1414 when a ruler in Bengal sent a Kenyan giraffe to join a Chinese emperor's menagerie. It maps the beaver's role in the colonial conquest of Canada and examines the appearances of animals in early moving pictures. The menagerie is reinvented for the digital age when image and sound designers use parts or images of animals to ensure the affective promise and commercial spread of an emergent digital infrastructure. These animal images are emissaries that enliven and domesticate the everexpanding field of mediation. *Virtual Menageries* offers a unique account of animals and animal images as mediators that encourage complicated emotional, economic, and aesthetic investment in changing practices of connection.

Jody Berland is Professor in the Department of Humanities and in Graduate Programs in Communication and Culture, Social and Political Thought, Science and Technology Studies, and Music, at York University, Toronto, and Visiting Professor at the Centre for Human Animal Studies at Edge Hill University, UK. She is the author of North of Empire: Essays on the Cultural Technologies of Space.

April | 6 x 9, 288 pp. | 52 illus.

**\$35.00S/£27.00 cloth** 978-0-262-03960-4

A Leonardo Book

new media | art

## **From Fingers to Digits**

An Artificial Aesthetic

#### Margaret A. Boden and Ernest Edmonds

In *From Fingers to Digits*, a practicing artist and a philosopher examine computer art and how it has been both accepted and

Essays on computer art and its relation to more traditional art, by a pioneering practitioner and a philosopher of artificial intelligence. rejected by the mainstream art world. In a series of essays, Margaret Boden, a philosopher and expert in artificial intelligence, and Ernest Edmonds, a pioneering and internationally recognized computer artist,

grapple with key questions about the aesthetics of computer art. Other modern technologies—photography and film—have been accepted by critics as ways of doing art. Does the use of computers compromise computer art's aesthetic credentials in ways that the use of cameras does not? Is writing a computer program equivalent to painting with a brush?

Essays by Boden identify types of computer art, describe the study of creativity in AI, and explore links between computer art and traditional views in philosophical aesthetics. Essays by Edmonds offer a practitioner's perspective, considering, among other things, how the experience of creating computer art compares to that of traditional art making. Finally, the book presents interviews in which contemporary computer artists offer a wide range of comments on the issues raised in Boden's and Edmonds's essays.

Margaret A. Boden is Research Professor of Cognitive Science at the University of Sussex. She is the author of Artificial Intelligence and Natural Man, expanded second edition (MIT Press), and other books. Ernest Edmonds is an artist who has pioneered the use of computers and computational ideas in his art. He is the author of The Art of Interaction: What HCI Can Learn from Interactive Art and other books.

April | 7 x 9, 344 pp. | 16 color plates, 27 b&w illus.,

**\$50.00S/£40.00 cloth** 978-0-262-03962-8

A Leonardo Book

philosophy

### **Hume's Problem Solved**

The Optimality of Meta-Induction

#### **Gerhard Schurz**

Hume's problem of justifying induction has been among epistemology's greatest challenges for centuries. In this book,

A new approach to Hume's problem of induction that justifies the optimality of induction at the level of meta-induction. Gerhard Schurz proposes a new approach to Hume's problem. Acknowledging the force of Hume's arguments against the possibility of a noncircular justification of the reliability of induction, Schurz demonstrates instead

the possibility of a noncircular justification of the optimality of induction, or, more precisely, of meta-induction (the application of induction to competing prediction models). Drawing on discoveries in computational learning theory, Schurz demonstrates that a regret-based learning strategy, attractivity-weighted meta-induction, is predictively optimal in all possible worlds among all prediction methods accessible to the epistemic agent. Moreover, the a priori justification of meta-induction generates a noncircular a posteriori justification of object induction. Taken together, these two results provide a noncircular solution to Hume's problem.

Schurz discusses the philosophical debate on the problem of induction, addressing all major attempts at a solution to Hume's problem and describing their shortcomings; presents a series of theorems, accompanied by a description of computer simulations illustrating the content of these theorems (with proofs presented in a mathematical appendix); and defends, refines, and applies core insights regarding the optimality of meta-induction, explaining applications in neighboring disciplines including forecasting sciences, cognitive science, social epistemology, and generalized evolution theory. Finally, Schurz generalizes the method of optimality-based justification to a new strategy of justification in epistemology, arguing that optimality justifications can avoid the problems of justificatory circularity and regress.

**Gerhard Schurz** is Director of the Düsseldorf Center for Logic and Philosophy of Science at Heinrich Heine University Düsseldorf.

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philosophy

### The Shared World

Perceptual Common Knowledge, Demonstrative Communication, and Social Space

#### **Axel Seemann**

In *The Shared World*, Axel Seemann offers a new treatment of the capacity to perceive, act on, and know about the world to-

A novel treatment of the capacity for shared attention, joint action, and perceptual common knowledge. gether with others. Seemann argues that creatures capable of joint attention stand in a unique perceptual and epistemic relation to their surroundings; they operate in an environment that they,

through their communication with their fellow perceivers, help constitute. Seemann shows that this relation can be marshaled to address a range of questions about the social aspect of the mind and its perceptual and cognitive capacities.

Seemann begins with a conceptual question about a complex kind of sociocognitive phenomenon—perceptual common knowledge—and develops an empirically informed account of the spatial structure of the environment in and about which such knowledge is possible. In the course of his argument, he addresses such topics as demonstrative reference in communication, common knowledge about jointly perceived objects, and spatial awareness in joint perception and action.

**Axel Seemann** is Associate Professor of Philosophy at Bentley University. He is the editor of *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience* (MIT Press).

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philosophy | mathematics

### On the Brink of Paradox

Highlights from the Intersection of Philosophy and Mathematics

#### Agustín Rayo

This book introduces the reader to awe-inspiring issues at the intersection of philosophy and mathematics. It explores ideas

An introduction to aweinspiring ideas at the brink of paradox: infinities of different sizes, time travel, probability and measure theory, and computability theory. at the brink of paradox: infinities of different sizes, time travel, probability and measure theory, computability theory, the Grandfather Paradox, Newcomb's Problem, the Principle of Countable Additivity. The goal is to present some ex-

ceptionally beautiful ideas in enough detail to enable readers to understand the ideas themselves (rather than watered-down approximations), but without supplying so much detail that they abandon the effort. The philosophical content requires a mind attuned to subtlety; the most demanding of the mathematical ideas require familiarity with college-level mathematics or mathematical proof.

The book covers Cantor's revolutionary thinking about infinity, which leads to the result that some infinities are bigger than others; time travel and free will, decision theory, probability, and the Banach-Tarski Theorem, which states that it is possible to decompose a ball into a finite number of pieces and reassemble the pieces so as to get two balls that are each the same size as the original. Its investigation of computability theory leads to a proof of Gödel's Incompleteness Theorem, which yields the amazing result that arithmetic is so complex that no computer could be programmed to output every arithmetical truth and no falsehood. Each chapter is followed by an appendix with answers to exercises. A list of recommended reading points readers to more advanced discussions. The book is based on a popular course (and MOOC) taught by the author at MIT.

**Agustín Rayo** is Professor of Philosophy at MIT and the author of *The Construction of Logical Space*.

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science, technology, and society

# Does America Need More Innovators?

edited by Matthew Wisnioski, Eric S. Hintz, and Marie Stettler Kleine

Corporate executives, politicians, and school board leaders agree—Americans must innovate. Innovation experts fuel this

A critical exploration of today's global imperative to innovate, by champions, critics, and reformers of innovation.

demand with books and services that instruct aspiring innovators in best practices, personal habits, and workplace cultures for fostering innovation. But critics have begun to question the un-

ceasing promotion of innovation, pointing out its gadget-centric shallowness, the lack of diversity among innovators, and the unequal distribution of innovation's burdens and rewards. Meanwhile, reformers work to make the training of innovators more inclusive and the outcomes of innovation more responsible. This book offers an overdue critical exploration of today's global imperative to innovate by bringing together innovation's champions, critics, and reformers in conversation.

The book presents an overview of innovator training, exploring the history, motivations, and philosophies of programs in private industry, universities, and government; offers a primer on critical innovation studies, with essays that historicize, contextualize, and problematize the drive to create innovators; and considers initiatives that seek to reform and reshape what it means to be an innovator.

Matthew Wisnioski is Associate Professor of Science, Technology, and Society at Virginia Tech and the author of Engineers for Change: Competing Visions of Technology in 1960s America (MIT Press).

Eric S. Hintz is Historian at the Smithsonian Institution's Lemelson Center for the Study of Invention and Innovation at the National Museum of American History. Marie Stettler Kleine is a PhD candidate in Science, Technology, and Society at Virginia Tech.

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### **A Billion Little Pieces**

RFID and the Infrastructures of Identification

#### Jordan Frith

Many people reading this book are likely within reach of an RFID tag. There might be an antenna in their contactless credit card or a chip in their pet. If they checked this book out from the library, an RFID tag might be on the inside cover of the binding. Or readers may have used their smartphone to pay for something using a mobile payment application, which uses a modified form of RFID called Near-Field Communication (NFC). But unless people look closely or start thinking about the impacts of infrastructure, most of these tags will remain out of view, even as RFID technology has the potential to invisibly communicate data about the identity and movement of people and objects.

-from A Billion Little Pieces

How RFID, a ubiquitous but often invisible mobile technology, identifies tens of billions of objects as they move through the world.

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Infrastructures series

RFID (Radio Frequency Identification) is ubiquitous but often invisible, a mobile technology used by more people more often than any flashy smartphone app. RFID systems use radio waves to communicate identifying information, transmitting data from a tag that carries data to a reader that accesses the data. RFID tags can be found in credit cards, passports, key fobs, car windshields, subway passes, consumer electronics, tunnel walls, and even human and animal bodies—identifying tens of billions of objects as they move through the world. In this book, Jordan Frith looks at RFID technology and its social impact, bringing into focus a technology that was designed not to be noticed.

RFID, with its ability to collect unique information about almost any material object, has been hyped as the most important identification technology since the bar code, the linchpin of the Internet of Things—and also seen (by some evangelical Christians) as a harbinger of the end times. Frith views RFID as an infrastructure of identification that simultaneously functions as an infrastructure of communication. He uses RFID to examine such larger issues as big data, privacy, and surveillance, giving specificity to debates about societal trends.

Frith describes how RFID can monitor hand washing in hospitals, change supply chain logistics, communicate wine vintages, and identify rescued pets. He offers an accessible explanation of the technology, looks at privacy concerns, and pushes back against alarmist accounts that exaggerate RFID's capabilities. The increasingly granular practices of identification enabled by RFID and other identification technologies, Frith argues, have become essential to the working of contemporary networks, reshaping the ways we use information.

**Jordan Frith** is Associate Professor in the Department of Technical Communication at the University of North Texas.

sociology | science, technology, and society

### Forms of Life

The Method and Meaning of Sociology

#### **Harry Collins**

In Forms of Life, Harry Collins offers an introduction to social science methodology, drawing on his forty-plus years of

A concise, accessible, and engaging guide for students and practitioners of sociology. conducting high-profile sociological research. In this concise, accessible, and engaging book, Collins explains not only how to do sociology (the method) but

also how to think about sociology (the meaning). For example, he describes the three activities that are the foundations of sociological method (immersing oneself in a society; estranging oneself from that society; and explaining what has been discovered to those who have not been immersed) and goes on to consider broader questions of the meaning of science in relation to social science and the scientific authority of "subjective" methods. He explains that sociology is the study of social collectivities (often overlapping, subdividable, and embedded), and cites Wittgenstein's notion of "forms of life" in his definition of collectivity.

Collins covers such methodological topics as participant comprehension; interview-based fieldwork ("expect plans to fail"); interactional expertise; alternation and methodological relativism; tangible and inferential experiments; tribalism and emotional loyalty; and how to communicate your findings. Finally, he offers recommendations for "saving the science of sociology," considering, among other things, sociology's identity as a discipline and the perils of both "groupism" and being too afraid of it. Appendixes offer a code of conduct for interviews; a list of his relevant publications; and an account, in Q&A form, of a disastrous day in the life of a sociologist doing fieldwork.

Harry Collins is Distinguished Research Professor of Sociology and Director of the Centre for the Study of Knowledge, Expertise, and Science at Cardiff University. A Fellow of the British Academy, he is the author of Gravity's Shadow; Gravity's Ghost; Gravity's Ghost and Big Dog; Gravity's Kiss: The Detection of Gravitational Waves (MIT Press); and many other books.

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science, technology, and society

### The Market in Mind

How Financialization Is Shaping Neuroscience, Translational Medicine, and Innovation in Biotechnology

#### **Mark Dennis Robinson**

A global shift has secretly transformed science and medicine. Starting in 2003, biomedical research in the West has been

A critical examination of translational medicine, when private risk is transferred to the public sector and university research teams become tech startups for global investors.

reshaped by the emergence of translational science and medicine—the idea that the aim of research is to translate findings as quickly as possible into medical products. In *The Market in Mind*, Mark Dennis Robinson charts this shift, arguing that the new research paradigm

has turned university research teams into small biotechnology startups and their industry partners into early-stage investment firms. There is also a larger, surprising consequence from this shift: according to Robinson, translational science and medicine enable biopharmaceutical firms, as part of a broader financial strategy, to outsource the riskiest parts of research to nonprofit universities. Robinson examines the implications of this new configuration. What happens, for example, when universities absorb unknown levels of risk? Robinson argues that in the years since the global financial crisis translational science and medicine has brought about "the financialization of health."

Robinson explores such topics as shareholder anxiety and industry retreat from Alzheimer's and depression research; how laboratory research is understood as health innovation even when there is no product; the emergence of investor networking events as crucial for viewing science in a market context; and the place of patients in research decisions. Although translational medicine justifies itself by the goal of relieving patients' suffering, Robinson finds patients' voices largely marginalized in translational neuroscience.

Mark Dennis Robinson is a Fellow at the Petrie-Flom Center for Biotechnology, Health Policy, and Bioethics at Harvard Law School and Assistant Professor at Creighton University in the Center for Health Policy and Ethics.

June | 6 x 9, 288 pp. | 37 illus.

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# **Transit-Oriented Displacement or Community Dividends?**

Understanding the Effects of Smarter Growth on Communities

#### Karen Chapple and Anastasia Loukaitou-Sideris

Cities and regions throughout the world are encouraging smarter growth patterns and expanding their transit systems to accommodate this growth, reduce greenhouse gas emissions, and satisfy new demands for mobility and accessibility. Yet despite a burgeoning literature and various policy interventions in recent decades, we still understand little about what happens to neighborhoods and residents with the development of transit systems and the trend toward more compact cities. Research has failed to determine why some neighborhoods change both physically and socially while others do not, and how race and class shape change in the twenty-first-century context of growing inequality.

Drawing on novel methodological approaches, this book sheds new light on the question of who benefits and who loses from more compact development around new transit stations. Building on data at multiple levels, it connects quantitative analysis on regional patterns with qualitative research through interviews, field observations, and photographic documentation in twelve different California neighborhoods. From the local to the regional to the global, Chapple and Loukaitou-Sideris examine the phenomena of neighborhood transformation, gentrification, and displacement not only through an empirical lens but also from theoretical and historical perspectives.

Growing out of an in-depth research process that involved close collaboration with dozens of community groups, the book aims to respond to the needs of both advocates and policymakers for ideas that work in the trenches.

**Karen Chapple** is Professor of City and Regional Planning and Carmel P. Friesen Chair in Urban Studies at the University of California, Berkeley.

Anastasia Loukaitou-Sideris is Professor of Urban Planning and Associate

Provost for Academic Planning at the University of California, Los Angeles.
She is the author of Sidewalks: Conflict and Negotiation over Public Space (MIT Press) and other books.

An examination of the neighborhood transformation, gentrification, and displacement that accompany more compact development around transit.

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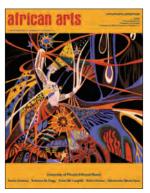


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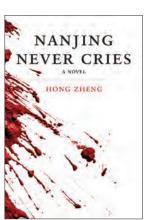
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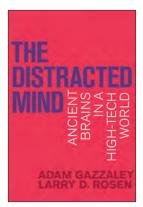
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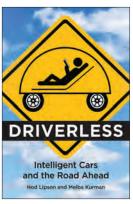
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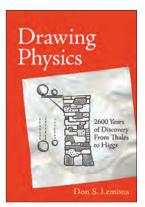
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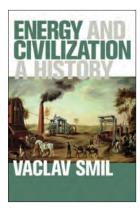
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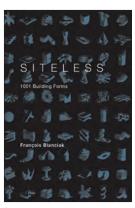
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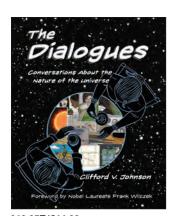
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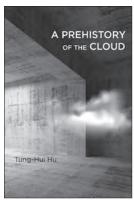
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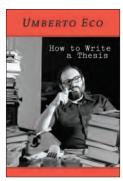
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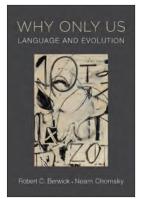
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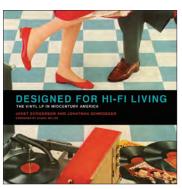
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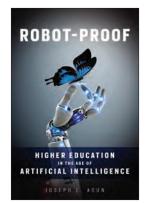
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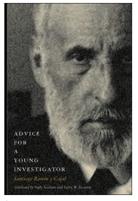
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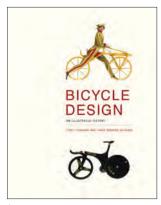
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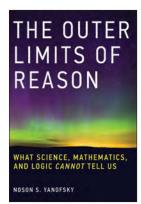
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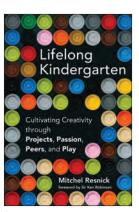
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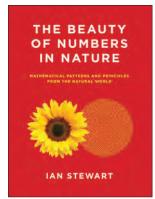
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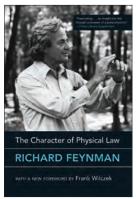
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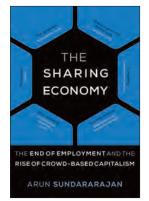
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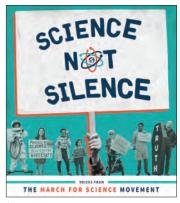
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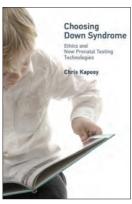
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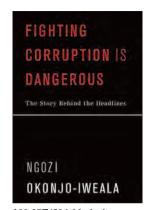
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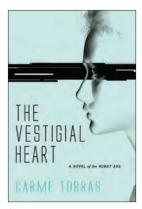
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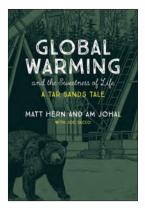
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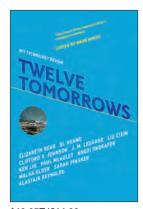
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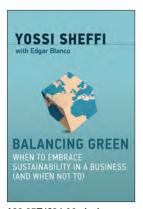
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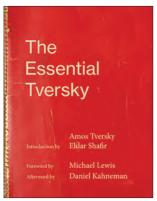
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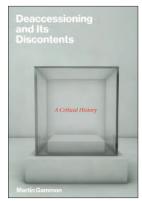
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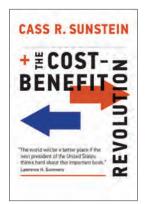
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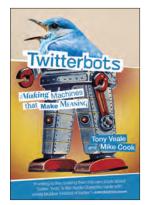
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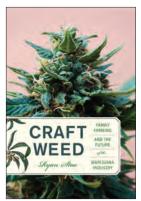
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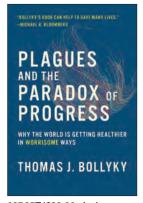
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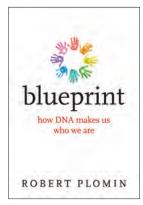
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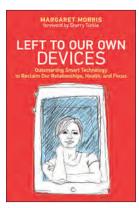
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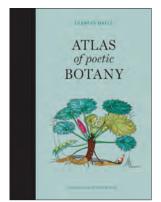
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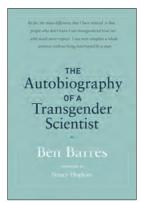
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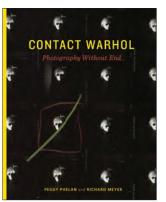
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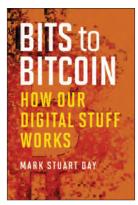
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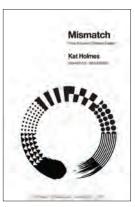
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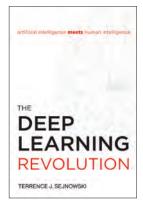
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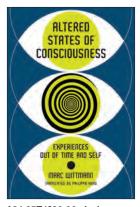
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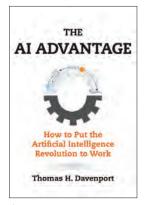
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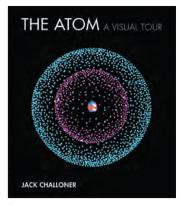
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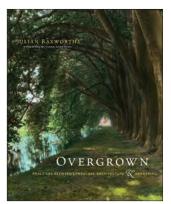
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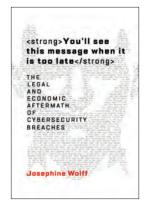
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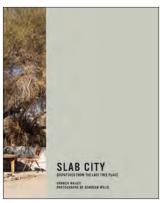
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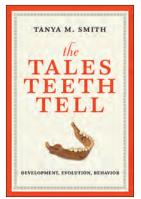
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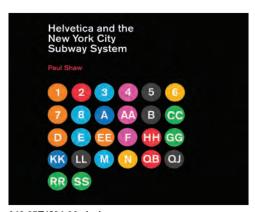
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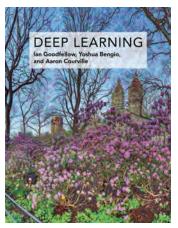
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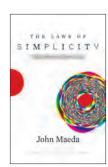
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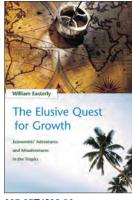
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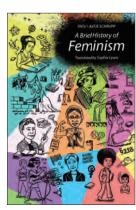
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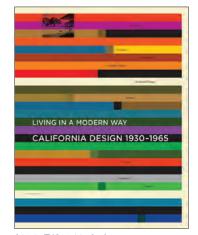
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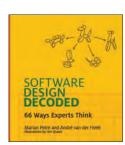
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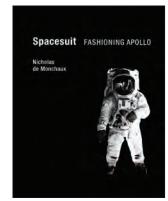
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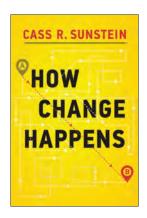
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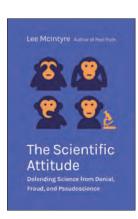


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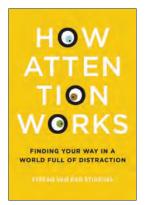
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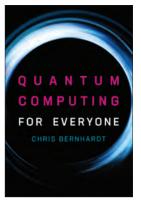




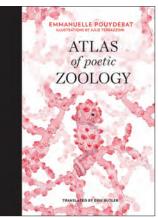












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