

WANDERING GREEKS

The Ancient Greek Diaspora from the Age of Homer to the Death of Alexander the Great

ROBERT GARLAND

Most classical authors and modern historians depict the ancient Greek world as essentially stable and even static, once the so-called colonization movement came to an end. But Robert Garland argues that the Greeks were highly mobile, that their movement was essential to the survival, success, and sheer sustainability of their society, and that this wandering became a defining characteristic of their culture. Addressing a neglected but essential subject, *Wandering Greeks* focuses on the diaspora of tens of thousands of people between about 700 and 325 BCE, demonstrating the degree to which Greeks were liable to be forced to leave their homes due to political upheaval, oppression, poverty, warfare, or simply a desire to better themselves.

Attempting to enter into the mind-set of these wanderers, the book provides an insightful and sympathetic account of what it meant for ancient Greeks to part from everyone and everything they held dear, to start a new life elsewhere—or even to become homeless, living on the open road or on the high seas with no end to their journey in sight. Each chapter identifies a specific kind of “wanderer,” including the overseas settler, the deportee, the evacuee, the asylum-seeker, the fugitive, the economic migrant, and the itinerant, and the book also addresses repatriation and the idea of the “portable polis.” The result is a vivid and unique portrait of ancient Greece as a culture of displaced persons.

Robert Garland is the Roy D. and Margaret B. Wooster Professor of the Classics at Colgate University. His many books include *The Eye of the Beholder: Deformity and Disability in the Graeco-Roman World* and *The Greek Way of Death*.

JUNE

Cloth \$35.00S

978-0-691-16105-1

320 pages. 16 halftones. 7 maps. 6 x 9.

ANCIENT HISTORY ■ CLASSICS

A PUBLIC EMPIRE

Property and the Quest for the Common Good in Imperial Russia

EKATERINA PRAVILOVA

“Property rights” and “Russia” do not usually belong in the same sentence. Rather, our general image of the nation is of insecurity of private ownership and defenselessness in the face of the state. Many scholars have attributed Russia’s long-term development problems to a failure to advance property rights for the modern age and blamed Russian intellectuals for their indifference to the issues of ownership. *A Public Empire* refutes this widely shared conventional wisdom and analyzes the emergence of Russian property regimes from the time of Catherine the Great through World War I and the revolutions of 1917. Most importantly, *A Public Empire* shows the emergence of the new practices of owning “public things” in imperial Russia and the attempts of Russian intellectuals to reconcile the security of property with the ideals of the common good.

The book analyzes how the belief that certain objects—rivers, forests, minerals, historical monuments, icons, and Russian literary classics—should accede to some kind of public status developed in Russia in the mid-nineteenth century. Professional experts and liberal politicians advocated for a property reform that aimed at exempting public things from private ownership, while the tsars and the imperial government employed the rhetoric of protecting the sanctity of private property and resisted attempts at its limitation.

Exploring the Russian ways of thinking about property, *A Public Empire* looks at problems of state reform and the formation of civil society, which, as the book argues, should be rethought as a process of constructing “the public” through the reform of property rights.

Ekaterina Pravilova is associate professor of history at Princeton University.

MAY

Cloth \$45.00S

978-0-691-15905-8

416 pages. 13 halftones. 6 x 9.

HISTORY ■ RUSSIAN HISTORY

WHY ISLAM IS MORE POLITICAL—AND MORE
FUNDAMENTALIST—THAN OTHER RELIGIONS

ANCIENT RELIGIONS, MODERN POLITICS

The Islamic Case in Comparative Perspective

MICHAEL COOK

“This is a work of enormous erudition and considerable subtlety. Cook’s learning is vast, his insight profound, his treatment of sources fair. *Ancient Religions, Modern Politics* is a most impressive achievement.”

—Martin E. Marty, author of *Dietrich Bonhoeffer’s “Letters and Papers from Prison”*

“Michael Cook’s book is truly a tour de force. Cook covers an impressive range of material and deals meticulously with key issues. *Ancient Religions, Modern Politics* is destined to be a landmark in the comparison of religions.”

—Christophe Jaffrelot, author of *The Hindu Nationalist Movement in India*

“*Ancient Religions, Modern Politics* is at once painstaking and panoramic. It draws on a lifetime of learning and erudition, yet is audacious in its willingness to pose—and answer—bold questions. Rich in its use of sources and convincing in its arguments, this book will be widely read and very influential.”

—Andrew F. March, author of *Islam and Liberal Citizenship*

Why does Islam play a larger role in contemporary politics than other religions? Is there something about the Islamic heritage that makes Muslims more likely than adherents of other faiths to invoke it in their political life? If so, what is it? *Ancient Religions, Modern Politics* seeks to answer these questions by examining the roles of Islam, Hinduism, and Christianity in modern political life, placing special emphasis on the relevance—or irrelevance—of their heritages to today’s social and political concerns.

Michael Cook takes an in-depth, comparative look at political identity, social values, attitudes to warfare, views about the role of religion in various cultural domains, and conceptions of the polity. In all these fields he finds that the Islamic heritage offers richer resources for those engaged in current politics than either the Hindu or the Christian heritages. He uses this finding to explain the fact that, despite the existence of Hindu and Christian counterparts to some aspects of Islamism, the phenomenon as a whole is unique in the world today. The book also shows that fundamentalism—in the sense of a determination to return to the original sources of the religion—is politically more adaptive for Muslims than it is for Hindus or Christians.

A sweeping comparative analysis by one of the world’s leading scholars of premodern Islam, *Ancient Religions, Modern Politics* sheds important light on the relationship between the foundational texts of these three great religious traditions and the politics of their followers today.

Michael Cook is the Class of 1943 University Professor of Near Eastern Studies at Princeton University. He is the author of *Commanding Right and Forbidding Wrong in Islamic Thought* and *A Brief History of the Human Race*, among other books, and he is also the general editor of *The New Cambridge History of Islam*.

APRIL

Cloth \$39.50S

978-0-691-14490-0

560 pages. 6 x 9.

HISTORY ■ RELIGION ■ ISLAMIC STUDIES

PRESS.PRINCETON.EDU

CITIZENSHIP BETWEEN EMPIRE AND NATION

Remaking France and French Africa, 1945–1960

FREDERICK COOPER

As the French public debates its present diversity and its colonial past, few remember that between 1946 and 1960 the inhabitants of French colonies possessed the rights of French citizens. Moreover, they did not have to conform to the French civil code that regulated marriage and inheritance. One could, in principle, be a citizen and different too. *Citizenship between Empire and Nation* examines momentous changes in notions of citizenship, sovereignty, nation, state, and empire in a time of acute uncertainty about the future of a world that had earlier been divided into colonial empires.

Frederick Cooper explains how African political leaders at the end of World War II strove to abolish the entrenched distinction between colonial “subject” and “citizen.” They then used their new status to claim social, economic, and political equality with other French citizens, in the face of resistance from defenders of a colonial order. Africans balanced their quest for equality with a desire to express an African political personality. They hoped to combine a degree of autonomy with participation in a larger, Franco-African ensemble. French leaders, trying to hold on to a large French polity, debated how much autonomy and how much equality they could concede. Both sides looked to versions of federalism as alternatives to empire and the nation-state. The French government had to confront the high costs of an empire of citizens, while Africans could not agree with French leaders or among themselves on how to balance their contradictory imperatives. Cooper shows how both France and its former colonies backed into more “national” conceptions of the state than either had sought.

Frederick Cooper is professor of history at New York University and has been visiting professor at the École des Hautes Études en Sciences Sociales, the École Normale Supérieure, and the Université de Paris VII. His many books include *Colonialism in Question* and *Empires in World History* (Princeton).

A GROUNDBREAKING HISTORY OF THE
LAST DAYS OF THE FRENCH EMPIRE IN AFRICA

“With its exhaustive research, clear and persuasive argument, and boldly original questions, this book is nothing short of magisterial. It is quite simply the best comprehensive study that I have read regarding the final stages of France’s empire in Africa. There is nothing like it in depth, scope, or analytical acuity.”

—Alice L. Conklin, Ohio State University

“This is the first book to provide a much-needed exploration of the time and space in between empire and postcolony in sub-Saharan Francophone Africa. Cooper expertly navigates between African and French perspectives, bringing to life the negotiations over the future of Africa. Timely and significant, this excellent, wide-ranging, and original book uses dazzling research to elaborate a completely new and compelling argument.”

—Eric Jennings, University of Toronto

JULY

Cloth \$45.00S

978-0-691-16131-0

552 pages. 6 halftones. 2 maps. 6 x 9.

AFRICAN HISTORY

PRESS.PRINCETON.EDU

A ONE-OF-A-KIND ANTHOLOGY OF PRIMARY
TEXTS IN AMERICAN FOREIGN RELATIONS

AMERICA IN THE WORLD

A History in Documents from the
War with Spain to the War on Terror

EDITED BY JEFFREY A. ENGEL,
MARK ATWOOD LAWRENCE &
ANDREW PRESTON

“A superb collection. The editors have researched hundreds of sources and selected some of the best. *America in the World* goes a long way in supplanting standard texts.”

—Thomas W. Zeiler, author of *Annihilation: A Global Military History of World War II*

“Comprehensive. Edited by three of the finest young historians in the field, *America in the World* offers what may be the best collection of primary documents on the topic. It will be welcomed in many classrooms.”

—Thomas Borstelmann, author of *The 1970s: A New Global History from Civil Rights to Economic Inequality*

“*America in the World* fills a significant gap. No other collection comes close to providing the number and range of sources and diversity of voices offered here.”

—Bradley R. Simpson, author of *Economists with Guns: Authoritarian Development and U.S.-Indonesian Relations, 1960–1968*

How should America wield its enormous power beyond its borders? Should it adhere to grand principles or act on narrow self-interest? Should it partner with other nations or avoid entangling alliances? Americans have been grappling with questions like these throughout the nation’s history, and especially since the emergence of the United States as a major world power in the late nineteenth century. *America in the World* illuminates this history by capturing the diverse voices and viewpoints of some of the most colorful and eloquent people who participated in these momentous debates.

Spanning the era from the Gilded Age to the Obama years, this unique reader collects more than two hundred documents—everything from presidential addresses and diplomatic cables to political cartoons and song lyrics. It encompasses various phases of American diplomatic history that are typically treated separately, such as the First World War, the Cold War, and 9/11. The book presents the perspectives of elite policymakers—presidents, secretaries of state, generals, and diplomats—alongside those of other kinds of Americans, such as newspaper columnists, clergymen, songwriters, poets, and novelists. It also features numerous documents from other countries, illustrating how foreigners viewed America’s role in the world.

Ideal for classroom use, *America in the World* sheds light on the complex interplay of political, economic, ideological, and cultural factors underlying the exercise of American power on the global stage.

Jeffrey A. Engel is director of the Center for Presidential History at Southern Methodist University. **Mark Atwood Lawrence** is associate professor of history at the University of Texas at Austin. **Andrew Preston** is reader in American history at the University of Cambridge.

MAY

Paper \$27.95S

978-0-691-16175-4

Cloth \$65.00S

978-0-691-13335-5

400 pages. 23 halftones. 6 x 9.

AMERICAN HISTORY ■
INTERNATIONAL RELATIONS

PRESS.PRINCETON.EDU

AMERICAN BIG BUSINESS IN BRITAIN AND GERMANY

A Comparative History of
Two “Special Relationships” in the 20th Century

VOLKER R. BERGHAHN

While America’s relationship with Britain has often been deemed unique, especially during the two world wars when Germany was a common enemy, the American business sector actually had a greater affinity with Germany for most of the twentieth century. *American Big Business in Britain and Germany* examines the triangular relationship between the American, British, and German business communities and how the special relationship that Britain believed it had with the United States was supplanted by one between America and Germany.

Volker Berghahn begins during the pre-1914 period and moves through the 1920s, when American investments supported German reconstruction rather than British industry. The Nazi seizure of power in 1933 led to a reversal in German-American relations, forcing American corporations to consider cutting their losses or collaborating with a regime that was inexorably moving toward war. Although Britain hoped that the wartime economic alliance with the United States would continue after World War II, the American business community reconnected with West Germany to rebuild Europe’s economy. And while Britain thought they had established their special relationship with America once again in the 1980s and 90s, in actuality it was the Germans who, with American help, had acquired an informal economic empire on the European Continent.

American Big Business in Britain and Germany uncovers the surprising and differing relationships of the American business community with two major European trading partners from 1900 through the twentieth century.

Volker R. Berghahn is the Seth Low Professor of History at Columbia University.

JUNE

Cloth \$49.50S

978-0-691-16109-9

368 pages. 6 x 9.

AMERICAN HISTORY ■
BUSINESS HISTORY

BAYESIAN NON- AND SEMI-PARAMETRIC METHODS AND APPLICATIONS

PETER E. ROSSI

This book reviews and develops Bayesian non-parametric and semi-parametric methods for applications in microeconometrics and quantitative marketing. Most econometric models used in microeconomics and marketing applications involve arbitrary distributional assumptions. As more data becomes available, a natural desire to provide methods that relax these assumptions arises. Peter Rossi advocates a Bayesian approach in which specific distributional assumptions are replaced with more flexible distributions based on mixtures of normals. The Bayesian approach can use either a large but fixed number of normal components in the mixture or an infinite number bounded only by the sample size. By using flexible distributional approximations instead of fixed parametric models, the Bayesian approach can reap the advantages of an efficient method that models all of the structure in the data while retaining desirable smoothing properties. Non-Bayesian non-parametric methods often require additional ad hoc rules to avoid “overfitting,” in which resulting density approximates are nonsmooth. With proper priors, the Bayesian approach largely avoids overfitting, while retaining flexibility. This book provides methods for assessing informative priors that require only simple data normalizations. The book also applies the mixture of the normals approximation method to a number of important models in microeconometrics and marketing, and Rossi’s R software package, “Bayesm,” implements all of the non-parametric models discussed in the book.

Peter E. Rossi is the James Collins Professor of Marketing, Economics, and Statistics at UCLA’s Anderson School of Management.

THE ECONOMETRIC AND TINBERGEN INSTITUTES LECTURES
Herman K. van Dijk and Philip Hans Franses, Series Editors

MAY

Cloth \$45.00S

978-0-691-14532-7

176 pages. 66 line illus.

7 tables. 5 ½ x 8 ½.

ECONOMICS

THE FIRST BOOK TO USE THE WORLD'S MOST
POPULAR SPORT TO TEST ECONOMIC THEORIES
AND DOCUMENT NOVEL HUMAN BEHAVIOR

BEAUTIFUL GAME THEORY

How Soccer Can Help Economics

IGNACIO PALACIOS-HUERTA

“This is an excellent book by an author who has made innovative and powerful contributions to our understanding of soccer and economics.”

—Stefan Szymanski, coauthor of
Soccernomics

“Palacios-Huerta is perhaps the preeminent economist using sports applications to help us learn about economics.”

—J. James Reade, University of Reading

A wealth of research in recent decades has seen the economic approach to human behavior extended over many areas previously considered to belong to sociology, political science, law, and other fields. Research has also shown that economics can illuminate many aspects of sports, including soccer. *Beautiful Game Theory* is the first book that uses soccer to test economic theories and document novel human behavior.

In this brilliant and entertaining book, Ignacio Palacios-Huerta illuminates economics through the world's most popular sport. He offers unique and often startling insights into game theory and microeconomics, covering topics such as mixed strategies, discrimination, incentives, and human preferences. He also looks at finance, experimental economics, behavioral economics, and neuroeconomics. Soccer provides rich data sets and environments that shed light on universal economic principles in interesting and useful ways.

Essential reading for students, researchers, and sports enthusiasts, *Beautiful Game Theory* is the first book to show what soccer can do for economics.

Ignacio Palacios-Huerta is professor of management, economics, and strategy at the London School of Economics and Political Science, fellow at the Ikerbasque Foundation at UPV/EHU, and head of talent identification at Athletic Club de Bilbao, a professional soccer club in Spain.

JUNE

Cloth \$35.00S

978-0-691-14402-3

200 pages. 30 line illus. 6 x 9.

ECONOMICS ■ SPORTS

PRESS.PRINCETON.EDU

HIGH-FREQUENCY FINANCIAL ECONOMETRICS

YACINE AÏT-SAHALIA & JEAN JACOD

High-frequency trading is an algorithm-based computerized trading practice that allows firms to trade stocks in milliseconds. Over the last fifteen years, the use of statistical and econometric methods for analyzing high-frequency financial data has grown exponentially. This growth has been driven by the increasing availability of such data, the technological advancements that make high-frequency trading strategies possible, and the need of practitioners to analyze these data. This comprehensive book introduces readers to these emerging methods and tools of analysis.

Yacine Aït-Sahalia and Jean Jacod cover the mathematical foundations of stochastic processes, describe the primary characteristics of high-frequency financial data, and present the asymptotic concepts that their analysis relies on. Aït-Sahalia and Jacod also deal with estimation of the volatility portion of the model, including methods that are robust to market microstructure noise, and address estimation and testing questions involving the jump part of the model. As they demonstrate, the practical importance and relevance of jumps in financial data are universally recognized, but only recently have econometric methods become available to rigorously analyze jump processes.

Aït-Sahalia and Jacod approach high-frequency econometrics with a distinct focus on the financial side of matters while maintaining technical rigor, which makes this book invaluable to researchers and practitioners alike.

Yacine Aït-Sahalia is the Otto A. Hack 1903 Professor of Finance and Economics and director of the Bendheim Center for Finance at Princeton University. He is the coeditor of the *Handbook of Financial Econometrics*. **Jean Jacod** is professor at the Institut de Mathématiques de Jussieu in Paris. His books include *Discretization of Processes*.

A COMPREHENSIVE INTRODUCTION TO THE
STATISTICAL AND ECONOMETRIC METHODS FOR
ANALYZING HIGH-FREQUENCY FINANCIAL DATA

“This comprehensive and accessible book provides a valuable introduction to the recently developed tools for modeling and inference based on very high-frequency financial data. A wonderful achievement, *High-Frequency Financial Econometrics* is destined to become a classic.”

—Torben G. Andersen, Northwestern University

“This book is simply breathtaking. *High-Frequency Financial Econometrics* is a serious scholarly contribution that, wonderfully, will also be of great interest to practitioners.”

—Francis X. Diebold, coauthor of *Yield Curve Modeling and Forecasting: The Dynamic Nelson-Siegel Approach*

JUNE

Cloth \$55.00S

978-0-691-16143-3

592 pages. 35 line illus. 3 tables. 6 x 9.

FINANCE ■ ECONOMICS

PRESS.PRINCETON.EDU

BETWEEN MONOPOLY AND FREE TRADE

The English East India Company, 1600–1757

EMILY ERIKSON

The English East India Company was one of the most powerful and enduring organizations in history. *Between Monopoly and Free Trade* locates the source of that success in the innovative policy by which the Company's Court of Directors granted employees the right to pursue their own commercial interests while in the firm's employ. Exploring trade network dynamics, decision-making processes, and ports and organizational context, Emily Erikson demonstrates why the English East India Company was a dominant force in the expansion of trade between Europe and Asia, and she sheds light on the related problems of why England experienced rapid economic development and how the relationship between Europe and Asia shifted in the eighteenth and nineteenth centuries.

Though the Company held a monopoly on English overseas trade to Asia, the Court of Directors extended the right to trade in Asia to their employees, creating an unusual situation in which employees worked both for themselves and for the Company as overseas merchants. Building on the organizational infrastructure of the Company and the sophisticated commercial institutions of the markets of the East, employees constructed a cohesive internal network of peer communications that directed English trading ships during their voyages. This network integrated Company operations, encouraged innovation, and increased the Company's flexibility, adaptability, and responsiveness to local circumstance.

Between Monopoly and Free Trade highlights the dynamic potential of social networks in the early modern era.

Emily Erikson is an assistant professor in the department of sociology and the school of management (by courtesy) at Yale University, as well as a member of the Council of South Asian Studies.

PRINCETON ANALYTICAL SOCIOLOGY SERIES
Peter Bearman and Peter Hedström, Series Editors

JUNE

Cloth \$35.00S

978-0-691-15906-5

232 pages. 12 line illus.

8 tables. 1 map. 6 x 9.

SOCIOLOGY ■ ECONOMIC HISTORY

THE MORAL BACKGROUND

An Inquiry into the History of Business Ethics

GABRIEL ABEND

In recent years, many disciplines have become interested in the scientific study of morality. However, a conceptual framework for this work is still lacking. In *The Moral Background*, Gabriel Abend develops just such a framework and uses it to investigate the history of business ethics in the United States from the 1850s to the 1930s.

According to Abend, morality consists of three levels: moral and immoral behavior, or the behavioral level; moral understandings and norms, or the normative level; and the moral background, which includes what moral concepts exist in a society, what moral methods can be used, what reasons can be given, and what objects can be morally evaluated at all. This background underlies the behavioral and normative levels; it supports, facilitates, and enables them.

Through this perspective, Abend historically examines the work of numerous business ethicists and organizations—such as Protestant ministers, business associations, and business schools—and identifies two types of moral background. “Standards of Practice” is characterized by its scientific worldview, moral relativism, and emphasis on individuals' actions and decisions. The “Christian Merchant” type is characterized by its Christian worldview, moral objectivism, and conception of a person's life as a unity.

The Moral Background offers both an original account of the history of business ethics and a novel framework for understanding and investigating morality in general.

Gabriel Abend is assistant professor of sociology at New York University.

PRINCETON STUDIES IN CULTURAL SOCIOLOGY
Paul J. DiMaggio, Michèle Lamont, Robert J. Wuthnow,
and Viviana A. Zelizer, Series Editors

APRIL

Cloth \$39.50S

978-0-691-15944-7

392 pages. 14 line illus. 6 x 9.

SOCIOLOGY ■ BUSINESS

THE ART OF SOCIAL THEORY

A PRACTICAL GUIDE TO THE ART OF
THEORIZING IN THE SOCIAL SCIENCES

RICHARD SWEDBERG

In the social sciences today, students are taught theory by reading and analyzing the works of Karl Marx, Max Weber, and other foundational figures of the discipline. What they rarely learn, however, is how to actually theorize. *The Art of Social Theory* is a practical guide to doing just that, written by a well-known sociologist.

In this one-of-a-kind user's manual for social theorists, Richard Swedberg explains how theorizing occurs in what he calls the context of discovery, a process in which the researcher gathers preliminary data and thinks creatively about it using tools such as metaphor, analogy, and typology. He guides readers through each step of the theorist's art, from observation and naming to concept formation and explanation. To theorize well, you also need a sound knowledge of existing social theory. Swedberg introduces readers to the most important theories and concepts, and discusses how to go about mastering them. If you can think, you can also learn to theorize. This book shows you how.

Concise and accessible, *The Art of Social Theory* features helpful examples throughout, and also provides practical exercises that enable readers to learn through doing.

Richard Swedberg is professor of sociology at Cornell University. His books include *Tocqueville's Political Economy*, *Principles of Economic Sociology*, and *Max Weber and the Idea of Economic Sociology* (all Princeton).

"This is book about how to go about theorizing in the social sciences. It speaks to graduate students preparing for a dissertation and, perhaps more, to their mentors. It is a perfect textbook for a graduate seminar, and offers a stimulating challenge to any social scientist who is curious about how his or her own 'art of theorizing' compares with Swedberg's. I've been a theoretical social scientist for more than half a century, and I was captivated."

—Thomas C. Schelling, winner of the Nobel Prize in economics

"Who expected new ideas about 'the art of social theory,' or even knew that it was an 'art'? Vintage Swedberg: wry and erudite yet engaging and accessible, drawing on philosophy, epistemology, and cognitive science to argue that though theorizing requires creativity and imagination, it can be effectively taught. Read this."

—Mark Granovetter, Stanford University

AUGUST

Cloth \$27.955

978-0-691-15522-7

328 pages. 1 line illus. 1 table. 6 x 9.

SOCIOLOGY

PRESS.PRINCETON.EDU

THE NATIONAL ORIGINS OF POLICY IDEAS

Knowledge Regimes in the United States,
France, Germany, and Denmark

JOHN L. CAMPBELL &
OVE K. PEDERSEN

In politics, ideas matter. They provide the foundation for economic policymaking, which in turn shapes what is possible in domestic and international politics. Yet until now, little attention has been paid to how these ideas are produced and disseminated, and how this process varies between countries. *The National Origins of Policy Ideas* provides the first comparative analysis of how “knowledge regimes”—communities of policy research organizations like think tanks, political party foundations, ad hoc commissions, and state research offices, and the institutions that govern them—generate ideas and communicate them to policymakers.

John Campbell and Ove Pedersen examine how knowledge regimes are organized, operate, and have changed over the last thirty years in the United States, France, Germany, and Denmark. They show how there are persistent national differences in how policy ideas are produced. Some countries do so in contentious, politically partisan ways, while others are cooperative and consensus oriented. They find that while knowledge regimes have adopted some common practices since the 1970s, tendencies toward convergence have been limited and outcomes have been heavily shaped by national contexts.

This book demonstrates why knowledge regimes are as important to capitalism as the state and the firm, and sheds new light on debates about the effects of globalization and the rise of neoliberalism.

John L. Campbell is the Class of 1925 Professor of Sociology at Dartmouth College and professor of political economy at the Copenhagen Business School.

Ove K. Pedersen is professor of comparative political economy at the Copenhagen Business School.

MAY

Paper \$29.95S

978-0-691-16116-7

Cloth \$85.00S

978-0-691-15031-4

368 pages. 2 line illus. 2 tables. 6 x 9.

SOCIOLOGY ■ POLITICAL SCIENCE ■
ECONOMICS

SELLING OUR SOULS

The Commodification of Hospital Care
in the United States

ADAM D. REICH

Health care costs make up nearly a fifth of U.S. gross domestic product, but health care is a peculiar thing to buy and sell. Both a scarce resource and a basic need, it involves physical and emotional vulnerability and at the same time it operates as big business. Patients have little choice but to trust those who provide them care, but even those providers confront a great deal of medical uncertainty about the services they offer. *Selling Our Souls* looks at the contradictions inherent in one particular health care market—hospital care. Based on extensive interviews and observations across the three hospitals of one California city, the book explores the tensions embedded in the market for hospital care, how different hospitals manage these tensions, the historical trajectories driving disparities in contemporary hospital practice, and the perils and possibilities of various models of care.

As Adam Reich shows, the book's three featured hospitals could not be more different in background or contemporary practice. PubliCare was founded in the late nineteenth century as an almshouse in order to address the needs of the destitute. HolyCare was founded by an order of nuns in the mid-twentieth century, offering spiritual comfort to the paying patient. And GroupCare was founded in the late twentieth century to rationalize and economize care for middle-class patients and their employers. Reich explains how these legacies play out today in terms of the hospitals' different responses to similar market pressures, and the varieties of care that result.

Selling Our Souls is an in-depth investigation into how hospital organizations and the people who work in them make sense of and respond to the modern health care market.

Adam D. Reich is assistant professor of sociology at Columbia University. He is the author of *Hidden Truth* and *With God on Our Side*.

AUGUST

Cloth \$39.50S

978-0-691-16040-5

248 pages. 11 line illus. 6 x 9.

SOCIOLOGY ■ CURRENT AFFAIRS

MORE THAN YOU WANTED TO KNOW

The Failure of Mandated Disclosure

OMRI BEN-SHAHAR &
CARL E. SCHNEIDER

Perhaps no kind of regulation is more common or less useful than mandated disclosure—requiring one party to a transaction to give the other information. It is the iTunes terms you assent to, the doctor’s consent form you sign, the pile of papers you get with your mortgage. Reading the terms, the form, and the papers is supposed to equip you to choose your purchase, your treatment, and your loan well. *More Than You Wanted to Know* surveys the evidence and finds that mandated disclosure rarely works. But how could it? Who reads these disclosures? Who understands them? Who uses them to make better choices?

Omri Ben-Shahar and Carl Schneider put the regulatory problem in human terms. Most people find disclosures complex, obscure, and dull. Most people make choices by stripping information away, not layering it on. Most people find they can safely ignore most disclosures and that they lack the literacy to analyze them anyway. And so many disclosures are mandated that nobody could heed them all. Nor can all this be changed by simpler forms in plainer English, since complex things cannot be made simple by better writing. Furthermore, disclosure is a lawmakers’ panacea, so they keep issuing new mandates and expanding old ones, often instead of taking on the hard work of writing regulations with bite.

Timely and provocative, *More Than You Wanted to Know* takes on the form of regulation we encounter daily and asks why we must encounter it at all.

Omri Ben-Shahar is the Leo and Eileen Herzel Professor of Law at the University of Chicago. His books include *Boilerplate: The Foundation of Market Contracts*. **Carl E. Schneider** is the Chauncey Stillman Professor of Law and professor of medicine at the University of Michigan. His books include *The Practice of Autonomy: Patients, Doctors, and Medical Decisions*.

HOW MANDATED DISCLOSURE
TOOK OVER THE REGULATORY
LANDSCAPE—AND WHY IT FAILED

“I read this book with rapt attention. It is magnificent. Ben-Shahar and Schneider have done a masterful job of setting out their case clearly, plainly, and persuasively.”

—Tom Baker, University of Pennsylvania

“Significant and original. The research is prodigious. I am not aware of another treatment of disclosure that crosses disciplinary lines to this extent, and the analysis is all the more worthwhile for it. Ben-Shahar and Schneider show how disclosures have become pervasive in our society yet are largely ignored and misunderstood.”

—Clayton Gillette, New York University

“Ben-Shahar and Schneider present a compelling argument. They contend that mandated disclosure is a policy failure that is not easily remedied.”

—Zev J. Eigen, Northwestern University

MAY

Cloth \$29.955

978-0-691-16170-9

272 pages. 4 color illus. 6 x 9.

LAW ■ PUBLIC POLICY

PRESS.PRINCETON.EDU

HOW TORT, CONTRACT, AND RESTITUTION LAW CAN
BE REFORMED TO BETTER SERVE THE SOCIAL GOOD

GETTING INCENTIVES RIGHT

Improving Torts, Contracts, and Restitution

ROBERT D. COOTER & ARIEL PORAT

“Cooter and Porat are the most innovative and inspirational law and economics scholars of our generation. This book brings them together to unveil common threads and exploit analytical synergies between different concepts. This is a work that every scholar in the field and every respectable academic library will want to own.”

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“This timely book presents Cooter and Porat’s full perspective on the challenges that three important bodies of law—torts, contracts, and restitution—face in inducing optimal behavior. The result is a unique book that I have no doubt will become one of the leading texts in its field. Thought-provoking, original, and useful, it fills a void in the current legal literature.”

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“*Getting Incentives Right* does just as the book’s title says, and does so in a way that will startle and educate novices as well as seasoned economists and lawyers, not to mention law professors and their students. The book guides readers to places where multiple parties and margins are accounted for, casting brilliant light on important legal problems.”

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Lawyers, judges, and scholars have long debated whether incentives in tort, contract, and restitution law effectively promote the welfare of society. If these incentives were ideal, tort law would reduce the cost and frequency of accidents, contract law would lubricate transactions, and restitution law would encourage people to benefit others. Unfortunately, the incentives in these laws lead to too many injuries, too little contractual cooperation, and too few unrequested benefits. *Getting Incentives Right* explains how law might better serve the social good.

In tort law, Robert Cooter and Ariel Porat propose that all foreseeable risks should be included when setting standards of care and awarding damages. Failure to do so causes accidents that better legal incentives would avoid. In contract law, they show that making a promise often causes the person who receives it to change behavior and undermine the cooperation between the parties. They recommend several solutions, including a novel contract called “anti-insurance.” In restitution law, people who convey unrequested benefits to others are seldom entitled to compensation. Restitution law should compensate them more than it currently does, so that they will provide more unrequested benefits. In these three areas of law, *Getting Incentives Right* demonstrates that better law can promote the well-being of people by providing better incentives for the private regulation of conduct.

Robert D. Cooter is the Herman F. Selvin Professor of Law at the University of California, Berkeley. His books include *Solomon’s Knot*, *The Strategic Constitution* (both Princeton), and *Law and Economics*. **Ariel Porat** is the Alain Poher Professor of Law at Tel Aviv University and the Fischel-Neil Distinguished Visiting Professor of Law at the University of Chicago. His books include *Tort Liability under Uncertainty*, *Torts*, and *Contributory Fault in the Law of Contracts*.

MARCH

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LAW ■ ECONOMICS

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NUCLEAR STRATEGY IN THE MODERN ERA

Regional Powers and International Conflict

VIPIN NARANG

The world is in a second nuclear age in which regional powers play an increasingly prominent role. These states have small nuclear arsenals, often face multiple active conflicts, and sometimes have weak institutions. How do these nuclear states—and potential future ones—manage their nuclear forces and influence international conflict? Examining the reasoning and deterrence consequences of regional power nuclear strategies, this book demonstrates that these strategies matter greatly to international stability and it provides new insights into conflict dynamics across important areas of the world such as the Middle East, East Asia, and South Asia.

Vipin Narang identifies the diversity of regional power nuclear strategies and describes in detail the posture each regional power has adopted over time. Developing a theory for the sources of regional power nuclear strategies, he offers the first systematic explanation of why states choose the postures they do and under what conditions they might shift strategies. Narang then analyzes the effects of these choices on a state's ability to deter conflict. Using both quantitative and qualitative analysis, he shows that, contrary to a bedrock article of faith in the canon of nuclear deterrence, the acquisition of nuclear weapons does not produce a uniform deterrent effect against opponents. Rather, some postures deter conflict more successfully than others.

Vipin Narang is assistant professor of political science and member of the Security Studies Program at the Massachusetts Institute of Technology.

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POLITICAL SCIENCE ■
INTERNATIONAL RELATIONS

KNOWING THE ADVERSARY

Leaders, Intelligence, and Assessment
of Intentions in International Relations

KEREN YARHI-MILO

States are more likely to engage in risky and destabilizing actions such as military buildups and preemptive strikes if they believe their adversaries pose a tangible threat. Yet despite the crucial importance of this issue, we don't know enough about how states and their leaders draw inferences about their adversaries' long-term intentions. *Knowing the Adversary* draws on a wealth of historical archival evidence to shed new light on how world leaders and intelligence organizations actually make these assessments.

Keren Yarhi-Milo examines three cases: Britain's assessments of Nazi Germany's intentions in the 1930s, America's assessments of the Soviet Union's intentions during the Carter administration, and the Reagan administration's assessments of Soviet intentions near the end of the Cold War. She advances a new theoretical framework—called selective attention—that emphasizes organizational dynamics, personal diplomatic interactions, and cognitive and affective factors. Yarhi-Milo finds that decision makers don't pay as much attention to those aspects of state behavior that major theories of international politics claim they do. Instead, they tend to determine the intentions of adversaries on the basis of preexisting beliefs, theories, and personal impressions. Yarhi-Milo also shows how intelligence organizations rely on very different indicators than decision makers, focusing more on changes in the military capabilities of adversaries.

Keren Yarhi-Milo is assistant professor of politics and international affairs at Princeton University.

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POLITICAL SCIENCE ■
INTERNATIONAL RELATIONS

GOOD-BYE HEGEMONY!

Power and Influence in the Global System

SIMON REICH &
RICHARD NED LEBOW

Many policymakers, journalists, and scholars insist that U.S. hegemony is essential for warding off global chaos. *Good-Bye Hegemony!* argues that hegemony is a fiction propagated to support a large defense establishment, justify American claims to world leadership, and buttress the self-esteem of voters. It is also contrary to American interests and the global order. Simon Reich and Richard Ned Lebow argue that hegemony should instead find expression in agenda setting, economic custodianship, and the sponsorship of global initiatives. Today, these functions are diffused through the system, with European countries, China, and lesser powers making important contributions. In contrast, the United States has often been a source of political and economic instability.

Rejecting the focus on power common to American realists and liberals, the authors offer a novel analysis of influence. In the process, they differentiate influence from power and power from material resources. Their analysis shows why the United States, the greatest power the world has ever seen, is increasingly incapable of translating its power into influence. Reich and Lebow use their analysis to formulate a more realistic place for America in world affairs.

Simon Reich is professor of global affairs and political science at Rutgers University, Newark. **Richard Ned Lebow** is professor of international political theory at King's College London and the James O. Freedman Presidential Professor of Government Emeritus at Dartmouth College.

MARCH

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POLITICAL SCIENCE ■
INTERNATIONAL RELATIONS

EQUAL RECOGNITION

The Moral Foundations of Minority Rights

ALAN PATTEN

Conflicting claims about culture are a familiar refrain of political life in the contemporary world. On one side, majorities seek to fashion the state in their own image, while on the other, cultural minorities press for greater recognition and accommodation. Theories of liberal democracy are at odds about the merits of these competing claims. Multicultural liberals hold that particular minority rights are a requirement of justice conceived of in a broadly liberal fashion. Critics, in turn, have questioned the motivations, coherence, and normative validity of such defenses of multiculturalism. In *Equal Recognition*, Alan Patten reasserts the case in favor of liberal multiculturalism by developing a new ethical defense of minority rights.

Patten seeks to restate the case for liberal multiculturalism in a form that is responsive to the major concerns of critics. He describes a new, nonessentialist account of culture, and he rehabilitates and reconceptualizes the idea of liberal neutrality and uses this idea to develop a distinctive normative argument for minority rights. The book elaborates and applies its core theoretical framework by exploring several important contexts in which minority rights have been considered, including debates about language rights, secession, and immigrant integration.

Demonstrating that traditional, nonmulticultural versions of liberalism are unsatisfactory, *Equal Recognition* will engage readers interested in connections among liberal democracy, nationalism, and current multicultural issues.

Alan Patten is professor of politics at Princeton University. He is the author of *Hegel's Idea of Freedom* and the editor of the journal *Philosophy and Public Affairs*.

AUGUST

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344 pages. 6 x 9.

POLITICAL THEORY

PHILOSOPHY OF BIOLOGY

PETER GODFREY-SMITH

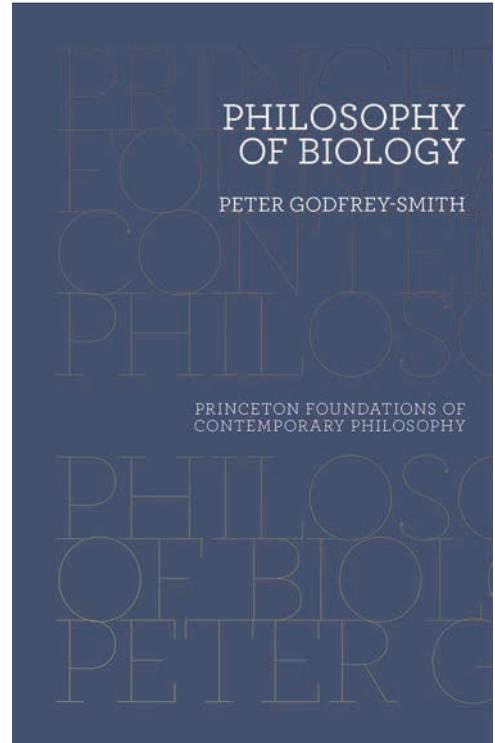
This is a concise, comprehensive, and accessible introduction to the philosophy of biology written by a leading authority on the subject. Geared to philosophers, biologists, and students of both, the book provides sophisticated and innovative coverage of the central topics and many of the latest developments in the field. Emphasizing connections between biological theories and other areas of philosophy, and carefully explaining both philosophical and biological terms, Peter Godfrey-Smith discusses the relation between philosophy and science; examines the role of laws, mechanistic explanation, and idealized models in biological theories; describes evolution by natural selection; and assesses attempts to extend Darwin's mechanism to explain changes in ideas, culture, and other phenomena. Further topics include functions and teleology, individuality and organisms, species, the tree of life, and human nature. The book closes with detailed, cutting-edge treatments of the evolution of cooperation, of information in biology, and of the role of communication in living systems at all scales.

Authoritative and up-to-date, this is an essential guide for anyone interested in the important philosophical issues raised by the biological sciences.

Peter Godfrey-Smith is Distinguished Professor of Philosophy at the CUNY Graduate Center. He is the author of *Theory and Reality: An Introduction to the Philosophy of Science* and *Darwinian Populations and Natural Selection*.

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PHILOSOPHY ■ BIOLOGY

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THE ANALYTIC TRADITION IN PHILOSOPHY, VOLUME I

The Founding Giants

SCOTT SOAMES

This is the first of five volumes of a definitive history of analytic philosophy from the invention of modern logic in 1879 to the end of the twentieth century. Scott Soames, a leading philosopher of language and historian of analytic philosophy, provides the fullest and most detailed account of the analytic tradition yet published, one that is unmatched in its chronological range, topics covered, and depth of treatment. Focusing on the major milestones and distinguishing them from the dead ends, Soames gives a seminal account of where the analytic tradition has been and where it appears to be heading.

Volume 1 examines the initial phase of the analytic tradition through the major contributions of three of its four founding giants—Gottlob Frege, Bertrand Russell, and G. E. Moore. Soames describes and analyzes their work in logic, the philosophy of mathematics, epistemology, metaphysics, ethics, and the philosophy of language. He explains how by about 1920 their efforts had made logic, language, and mathematics central to philosophy in an unprecedented way. But although logic, language, and mathematics were now seen as powerful tools to attain traditional ends, they did not yet define philosophy. As volume 1 comes to a close, that was all about to change with the advent of the fourth founding giant, Ludwig Wittgenstein, and the 1922 English publication of his *Tractatus*, which ushered in a “linguistic turn” in philosophy that was to last for decades.

ANALYTIC PHILOSOPHY IN AMERICA

And Other Historical and Contemporary Essays

SCOTT SOAMES

In this collection of recent and unpublished essays, leading analytic philosopher Scott Soames traces milestones in his field from its beginnings in Britain and Germany in the late nineteenth and early twentieth century, through its subsequent growth in the United States, up to its present as the world’s most vigorous philosophical tradition. The central essay chronicles how analytic philosophy developed in the United States out of American pragmatism, the impact of European visitors and immigrants, the midcentury transformation of the Harvard philosophy department, and the rapid spread of the analytic approach that followed. Another essay explains the methodology guiding analytic philosophy, from the logicism of Frege and Russell through Wittgenstein’s linguistic turn and Carnap’s vision of replacing metaphysics with philosophy of science. Further essays review advances in logic and the philosophy of mathematics that laid the foundation for a rigorous, scientific study of language, meaning, and information. Other essays discuss W.V.O. Quine, David K. Lewis, Saul Kripke, the Frege-Russell analysis of quantification, Russell’s attempt to eliminate sets with his “no class theory,” and the Quine-Carnap dispute over meaning and ontology. The collection then turns to topics at the frontier of philosophy of language. The final essays, combining philosophy of language and law, advance a sophisticated originalist theory of interpretation and apply it to U.S. constitutional rulings about due process.

Scott Soames is Distinguished Professor of Philosophy at the University of Southern California. He is the author of *Philosophy of Language*, *What Is Meaning?*, *Reference and Description*, the two-volume *Philosophical Essays*, and the two-volume *Philosophical Analysis in the Twentieth Century* (all Princeton).

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PHILOSOPHY

APRIL

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PHILOSOPHY

REANNOUNCING

ABOUTNESS

STEPHEN YABLO

Aboutness has been studied from any number of angles. Brentano made it the defining feature of the mental. Phenomenologists try to pin down the aboutness-features of particular mental states. Materialists sometimes claim to have grounded aboutness in natural regularities. Attempts have even been made, in library science and information theory, to operationalize the notion.

But it has played no real role in philosophical semantics. This is surprising; sentences have aboutness-properties if anything does. *Aboutness* is the first book to examine through a philosophical lens the role of subject matter in meaning.

A long-standing tradition sees meaning as truth-conditions, to be specified by listing the scenarios in which a sentence is true. Nothing is said about the principle of selection—about what in a scenario gets it onto the list. Subject matter is the missing link here. A sentence is true because of how matters stand where its subject matter is concerned.

Stephen Yablo maintains that this is not just a feature of subject matter, but its essence. One indicates what a sentence is about by mapping out logical space according to its changing ways of being true or false. The notion of content that results—directed content—is brought to bear on a range of philosophical topics, including ontology, verisimilitude, knowledge, loose talk, assertive content, and philosophical methodology.

Written by one of today's leading philosophers, *Aboutness* represents a major advance in semantics and the philosophy of language.

Stephen Yablo is professor of linguistics and philosophy at the Massachusetts Institute of Technology. He is the author of *Things: Papers on Objects, Events, and Properties* and *Thoughts: Papers on Mind, Meaning, and Modality*.

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PHILOSOPHY ■ LINGUISTICS

TRADITION AND
THE FORMATION
OF THE TALMUD

MOULIE VIDAS

Tradition and the Formation of the Talmud offers a new perspective on perhaps the most important religious text of the Jewish tradition. It is widely recognized that the creators of the Talmud innovatively interpreted and changed the older traditions on which they drew. Nevertheless, it has been assumed that the ancient rabbis were committed to maintaining continuity with the past. Moulie Vidas argues on the contrary that structural features of the Talmud were designed to produce a discontinuity with tradition, and that this discontinuity was part and parcel of the rabbis' self-conception. Both this self-conception and these structural features were part of a debate within and beyond the Jewish community about the transmission of tradition.

Focusing on the Babylonian Talmud, produced in the rabbinic academies of late ancient Mesopotamia, Vidas analyzes key passages to show how the Talmud's creators contrasted their own voice with that of their predecessors. He also examines Zoroastrian, Christian, and mystical Jewish sources to reconstruct the debates and wide-ranging conversations that shaped the Talmud's literary and intellectual character.

Tradition and the Formation of the Talmud provides an entirely fresh look at the nature of the Talmud and its meanings.

Moulie Vidas is an assistant professor in the Department of Religion and the Program in Judaic Studies at Princeton University.

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JEWISH STUDIES ■ RELIGION

INSIDE *PARADISE LOST*

Reading the Designs of Milton's Epic

DAVID QUINT

Inside "Paradise Lost" opens up new readings and ways of reading Milton's epic poem by mapping out the intricacies of its narrative and symbolic designs and by revealing and exploring the deeply allusive texture of its verse. David Quint's comprehensive study demonstrates how systematic patterns of allusion and keywords give structure and coherence both to individual books of *Paradise Lost* and to the overarching relationship among its books and episodes. Looking at poems within the poem, Quint provides new interpretations as he takes readers through the major subjects of *Paradise Lost*—its relationship to epic tradition and the Bible, its cosmology and politics, and its dramas of human choice.

Quint shows how Milton radically revises the epic tradition and the Genesis story itself by arguing that it is better to create than destroy, by telling the reader to make love, not war, and by appearing to ratify Adam's decision to fall and die with his wife. The Milton of this *Paradise Lost* is a Christian humanist who believes in the power and freedom of human moral agency. As this indispensable guide and reference takes us inside the poetry of Milton's masterpiece, *Paradise Lost* reveals itself in new formal configurations and unsuspected levels of meaning and design.

David Quint is Sterling Professor of Comparative Literature at Yale University. His books include *Epic and Empire*, *Cervantes's Novel of Modern Times*, and *Montaigne and the Quality of Mercy* (all Princeton).

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LITERATURE

ART AS HISTORY

Essays on Chinese Painting History

WEN C. FONG

This richly illustrated book provides an anthology and summation of the work of one of the world's leading historians of Chinese painting and calligraphy. Wen Fong helped create the field of East Asian art history during a distinguished five-decade career at Princeton University and the Metropolitan Museum of Art. Few if any other writers in English have such a broad knowledge of the history and practice of calligraphy and Chinese painting. In this collection of some of his most recent essays, Fong gives a sweeping tour through the history of Chinese painting and calligraphy as he offers new and revised views on a broad range of important subjects.

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Throughout the book, Fong skillfully combines close analysis and detailed contextualization of individual works to reveal how the study of Chinese painting and calligraphy yields deep insights about Chinese culture and history.

Wen C. Fong is professor emeritus of Chinese art history at Princeton University, where he taught from 1954 to 1999, established the country's first PhD program in Chinese and Japanese art and archaeology, and served for many years as faculty curator of Asian art at the Princeton University Art Museum. He also served as consultative chairman of the Department of Asian Art at the Metropolitan Museum of Art for three decades before retiring in 2000.

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Chih-p'ing Chou is professor of East Asian studies at Princeton University and director of the university's Chinese language and Princeton in Beijing programs. **Jing Wang** is senior lecturer in Chinese at Princeton. **Jun Lei** is a former lecturer in Chinese at Princeton.

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Thomas W. Cronin is professor of biological sciences at the University of Maryland, Baltimore County. **Sönke Johnsen** is professor of biology at Duke University. **N. Justin Marshall** is professor of biomedical sciences at the University of Queensland in Australia. **Eric J. Warrant** is professor of zoology at Lund University in Sweden.

AUGUST

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BIOLOGY ■ ECOLOGY

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40 YEARS OF EVOLUTION

Darwin's Finches on Daphne Major Island

AN IMPORTANT LOOK AT A GROUNDBREAKING
FORTY-YEAR STUDY OF DARWIN'S FINCHES

PETER R. GRANT & B. ROSEMARY GRANT

Renowned evolutionary biologists Peter and Rosemary Grant have produced landmark studies of the Galápagos finches first made famous by Charles Darwin. In *How and Why Species Multiply*, they offered a complete evolutionary history of Darwin's finches since their origin almost 3 million years ago. Now, in their richly illustrated new book, *40 Years of Evolution*, the authors turn their attention to events taking place on a contemporary scale. By continuously tracking finch populations over a period of four decades, they uncover the causes and consequences of significant events leading to evolutionary changes in species.

The authors used a vast and unparalleled range of ecological, behavioral, and genetic data—including song recordings, DNA analyses, and feeding and breeding behavior—to measure changes in finch populations on the small island of Daphne Major in the Galápagos archipelago. They find that natural selection happens repeatedly, that finches hybridize and exchange genes rarely, and that they compete for scarce food in times of drought, with the remarkable result that the finch populations today differ significantly in average beak size and shape from those of forty years ago. The authors' most spectacular discovery is the initiation and establishment of a new lineage that now behaves as a new species, differing from others in size, song, and other characteristics. The authors emphasize the immeasurable value of continuous long-term studies of natural populations and of critical opportunities for detecting and understanding rare but significant events.

By following the fates of finches for several generations, *40 Years of Evolution* offers unparalleled insights into ecological and evolutionary changes in natural environments.

Peter R. Grant and **B. Rosemary Grant** are both emeritus professors in the Department of Ecology and Evolutionary Biology at Princeton University. They are the coauthors of *How and Why Species Multiply* and coeditors of *In Search of the Causes of Evolution* (both Princeton).

"A captivating synthesis of arguably the most important research program in evolutionary biology in the last half century. From classic work on Darwin's finches decades ago to groundbreaking new discoveries, it's all here. A must-read for any student of evolution."

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BIOLOGY ■ EVOLUTION

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THE FIRST MAJOR SYNTHESIS OF
HOMOLOGY IN DECADES, WRITTEN BY
A TOP RESEARCHER IN THE FIELD

HOMOLOGY, GENES, AND EVOLUTIONARY INNOVATION

GÜNTER P. WAGNER

“Stimulating. No other book addresses biological homology from this perspective and with this depth of analysis.”

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“I have nothing but enthusiasm for this book. It’s one of the most interesting books about biology I’ve read for quite some time. The examples are wonderful. The writing is engaging and attractive.”

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Homology—a similar trait shared by different species and derived from common ancestry, such as a seal’s fin and a bird’s wing—is one of the most fundamental yet challenging concepts in evolutionary biology. This groundbreaking book provides the first mechanistically based theory of what homology is and how it arises in evolution.

Günter Wagner, one of the preeminent researchers in the field, argues that homology, or character identity, can be explained through the historical continuity of character identity networks—that is, the gene regulatory networks that enable differential gene expression. He shows how character identity is independent of the form and function of the character itself because the same network can activate different effector genes and thus control the development of different shapes, sizes, and qualities of the character. Demonstrating how this theoretical model can provide a foundation for understanding the evolutionary origin of novel characters, Wagner applies it to the origin and evolution of specific systems, such as cell types; skin, hair, and feathers; limbs and digits; and flowers.

The first major synthesis of homology to be published in decades, *Homology, Genes, and Evolutionary Innovation* reveals how a mechanistically based theory can serve as a unifying concept for any branch of science concerned with the structure and development of organisms, and how it can help explain major transitions in evolution and broad patterns of biological diversity.

Günter P. Wagner is the Alison Richard Professor of Ecology and Evolutionary Biology at Yale University and a pioneer of the field of evolutionary developmental biology. He is the editor of *The Character Concept in Evolutionary Biology*.

MAY

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978-0-691-15646-0

520 pages. 25 halftones.

105 line illus. 4 tables. 6 x 9.

BIOLOGY ■ EVOLUTION

PRESS.PRINCETON.EDU

HOW TO DO ECOLOGY

A Concise Handbook
Second Edition

RICHARD KARBAN,
MIKAELA HUNTZINGER & IAN S. PEARSE

Most books and courses in ecology cover facts and concepts but don't explain how to actually do ecological research. *How to Do Ecology* provides nuts-and-bolts advice on organizing and conducting a successful research program. This one-of-a-kind book explains how to choose a research question and answer it through manipulative experiments and systematic observations. Because science is a social endeavor, the book provides strategies for working with other people, including professors and collaborators. It suggests effective ways to communicate your findings in the form of journal articles, oral presentations, posters, and grant and research proposals. The book also includes ideas to help you identify your goals, organize a season of fieldwork, and deal with negative results. In short, it makes explicit many of the unspoken assumptions behind doing good research in ecology and provides an invaluable resource for meaningful conversations between ecologists.

This second edition of *How to Do Ecology* features new sections on conducting and analyzing observational surveys, job hunting, and becoming a more creative researcher, as well as updated sections on statistical analyses.

Richard Karban is professor of entomology at the University of California, Davis. He is the coauthor of *Induced Responses to Herbivory*. **Mikaela Huntzinger** is assistant director of the Center for Excellence in Teaching and Learning at the University of California, Davis. **Ian S. Pearse** is a postdoctoral associate at the Cornell Lab of Ornithology at Cornell University.

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"Reading this book feels like having a good talk during a long walk in the woods with a wise and experienced advisor who really has the time to distill and share years of thinking about how ecological research works. Get it, and keep it handy, and your work will be the richer and more successful for it."

—Jessica Gurevitch, Stony Brook University

JULY

Paper \$24.95S

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224 pages. 8 line illus. 5 x 8.

ECOLOGY ■ BIOLOGY

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BIOMOLECULAR FEEDBACK SYSTEMS

DOMITILLA DEL VECCHIO &
RICHARD M. MURRAY

This book provides an accessible introduction to the principles and tools for modeling, analyzing, and synthesizing biomolecular systems. It begins with modeling tools such as reaction-rate equations, reduced-order models, stochastic models, and specific models of important core processes. It then describes in detail the control and dynamical systems tools used to analyze these models. These include tools for analyzing stability of equilibria, limit cycles, robustness, and parameter uncertainty. Modeling and analysis techniques are then applied to design examples from both natural systems and synthetic biomolecular circuits. In addition, this comprehensive book addresses the problem of modular composition of synthetic circuits, the tools for analyzing the extent of modularity, and the design techniques for ensuring modular behavior. It also looks at design trade-offs, focusing on perturbations due to noise and competition for shared cellular resources.

Featuring numerous exercises and illustrations throughout, *Biomolecular Feedback Systems* is the ideal textbook for advanced undergraduates and graduate students. For researchers, it can also serve as a self-contained reference on the feedback control techniques that can be applied to biomolecular systems.

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Domitilla Del Vecchio is associate professor of mechanical engineering at the Massachusetts Institute of Technology. **Richard M. Murray** is professor of control and dynamical systems and bioengineering at the California Institute of Technology.

AUGUST

Cloth \$85.00S

978-0-691-16153-2

392 pages. 13 halftones.

165 line illus. 6 x 9.

MATHEMATICS ■ ENGINEERING ■
BIOLOGY

HIDDEN MARKOV PROCESSES

Theory and Applications to Biology

M. VIDYASAGAR

This book explores important aspects of Markov and hidden Markov processes and the applications of these ideas to various problems in computational biology. The book starts from first principles, so that no previous knowledge of probability is necessary. However, the work is rigorous and mathematical, making it useful to engineers and mathematicians, even those not interested in biological applications. A range of exercises is provided, including drills to familiarize the reader with concepts and more advanced problems that require deep thinking about the theory. Biological applications are taken mostly from post-genomic biology, especially genomics and proteomics.

The topics discussed include standard material such as the Perron-Frobenius theorem, transient and recurrent states, stopping times, maximum likelihood estimation, and the Baum-Welch algorithm. The book contains extremely useful topics not usually seen at the basic level, such as mixing coefficients between random variables, ergodicity of Markov processes, Markov Chain Monte Carlo (MCMC) methods, information theory, and introductory large-deviation theory. In the area of realization theory for hidden Markov models, the book presents contemporary research. Among biological applications, it presents an in-depth look at the BLAST (Basic Local Alignment Search Technique) algorithm, including a comprehensive explanation of the underlying theory.

M. Vidyasagar is the Cecil and Ida Green Chair in Systems Biology Science at the University of Texas, Dallas. His many books include *Computational Cancer Biology: An Interaction Network Approach* and *Control System Synthesis: A Factorization Approach*.

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MATHEMATICS ■ BIOLOGY

TAMING THE UNKNOWN

A History of Algebra from Antiquity
to the Early Twentieth Century

VICTOR J. KATZ &
KAREN HUNGER PARSHALL

What is algebra? For some, it is an abstract language of x 's and y 's. For mathematics majors and professional mathematicians, it is a world of axiomatically defined constructs like groups, rings, and fields. *Taming the Unknown* considers how these two seemingly different types of algebra evolved and how they relate. Victor Katz and Karen Parshall explore the history of algebra, from its roots in the ancient civilizations of Egypt, Mesopotamia, Greece, China, and India, through its development in the medieval Islamic world and medieval and early modern Europe, to its modern form in the early twentieth century.

Defining algebra originally as a collection of techniques for determining unknowns, the authors trace the development of these techniques from geometric origins in ancient Egypt and Mesopotamia and classical Greece. They show how similar problems were tackled in Alexandrian Greece, in China, and in India, then look at how medieval Islamic scholars shifted to an algorithmic stage, which was further developed by medieval and early modern European mathematicians. With the introduction of a flexible and operative symbolism in the sixteenth and seventeenth centuries, algebra entered into a dynamic period characterized by the analytic geometry that could analyze curves represented by equations in two variables, thereby solving problems in the physics of motion. This new symbolism freed mathematicians to study equations of degrees higher than two and three, ultimately leading to the present abstract era.

Taming the Unknown follows algebra's remarkable growth through different epochs around the globe.

Victor J. Katz is professor of mathematics emeritus at the University of the District of Columbia. **Karen Hunger Parshall** is professor of history and mathematics at the University of Virginia.

JUNE

Cloth \$49.50S

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480 pages. 29 halftones.

51 line illus. 3 maps. 6 x 9.

MATHEMATICS ■ HISTORY OF SCIENCE

HODGE THEORY

Geometric and Arithmetic Aspects

EDITED BY EDUARDO CATTANI,
FOUAD EL ZEIN, PHILLIP A.
GRIFFITHS & LÊ DŨNG TRÁNG

This book provides a comprehensive and up-to-date introduction to Hodge theory—one of the central and most vibrant areas of contemporary mathematics—from leading specialists on the subject. The topics range from the basic topology of algebraic varieties to the study of variations of mixed Hodge structure and the Hodge theory of maps. Of particular interest is the study of algebraic cycles, including the Hodge and Bloch-Beilinson Conjectures. Based on lectures delivered at the 2010 Summer School on Hodge Theory at the ITCP in Trieste, Italy, the book is intended for a broad group of students and researchers. The exposition is as accessible as possible and doesn't require a deep background. At the same time, the book presents some topics at the forefront of current research.

The contributors include Patrick Brosnan, James A. Carlson, Eduardo Cattani, François Charles, Mark Andrea de Cataldo, Fouad El Zein, Mark Green, Phillip A. Griffiths, Matt Kerr, Luca Migliorini, Jacob Murre, Christian Schnell, Lê Dũng Tráng, and Loring Tu.

Eduardo Cattani is professor of mathematics at the University of Massachusetts, Amherst. **Fouad El Zein** is a researcher at the Institut de Mathématiques de Jussieu, Université de Paris VII. **Phillip A. Griffiths** is former director and professor emeritus of mathematics at the Institute for Advanced Study in Princeton. **Lê Dũng Tráng** is professor emeritus of mathematics at the Université d'Aix-Marseille.

MATHEMATICAL NOTES

Phillip A. Griffiths, John N. Mather, and Elias M. Stein, Series Editors

JULY

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464 pages. 10 line illus. 6 x 9.

MATHEMATICS

CHOW RINGS, DECOMPOSITION OF THE DIAGONAL, AND THE TOPOLOGY OF FAMILIES

CLAIRE VOISIN

In this book, Claire Voisin provides an introduction to algebraic cycles on complex algebraic varieties, to the major conjectures relating them to cohomology, and even more precisely to Hodge structures on cohomology. The volume is intended for both students and researchers, and not only presents a survey of the geometric methods developed in the last thirty years to understand the famous Bloch-Beilinson conjectures, but also examines recent work by Voisin. The book focuses on two central objects: the diagonal of a variety—and the partial Bloch-Srinivas type decompositions it may have depending on the size of Chow groups—as well as its small diagonal, which is the right object to consider in order to understand the ring structure on Chow groups and cohomology. An exploration of a sampling of recent works by Voisin looks at the relation, conjectured in general by Bloch and Beilinson, between the coniveau of general complete intersections and their Chow groups and a very particular property satisfied by the Chow ring of K_3 surfaces and conjecturally by hyper-Kähler manifolds. In particular, the book delves into arguments originating in Nori's work that have been further developed by others.

Claire Voisin has been a senior researcher at France's National Center for Scientific Research since 1986.

ANNALS OF MATHEMATICS STUDIES, 187

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MARCH

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176 pages. 6 x 9.

MATHEMATICS

HANGZHOU LECTURES ON EIGENFUNCTIONS OF THE LAPLACIAN

CHRISTOPHER D. SOGGE

Based on lectures given at Zhejiang University in Hangzhou, China, and Johns Hopkins University, this book introduces eigenfunctions on Riemannian manifolds. Christopher Sogge gives a proof of the sharp Weyl formula for the distribution of eigenvalues of Laplace-Beltrami operators, as well as an improved version of the Weyl formula, the Duistermaat-Guillemin theorem under natural assumptions on the geodesic flow. Sogge shows that there is quantum ergodicity of eigenfunctions if the geodesic flow is ergodic.

Sogge begins with a treatment of the Hadamard parametrix before proving the first main result, the sharp Weyl formula. He avoids the use of Tauberian estimates and instead relies on sup-norm estimates for eigenfunctions. The author also gives a rapid introduction to the stationary phase and the basics of the theory of pseudodifferential operators and microlocal analysis. These are used to prove the Duistermaat-Guillemin theorem. Turning to the related topic of quantum ergodicity, Sogge demonstrates that if the long-term geodesic flow is uniformly distributed, most eigenfunctions exhibit a similar behavior, in the sense that their mass becomes equidistributed as their frequencies go to infinity.

Christopher D. Sogge is the J. J. Sylvester Professor of Mathematics at Johns Hopkins University. He is the author of *Fourier Integrals in Classical Analysis* and *Lectures on Nonlinear Wave Equations*.

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250 pages. 1 line illus. 7 x 10.

MATHEMATICS

INTRODUCTION TO COMPUTATIONAL SCIENCE

Modeling and Simulation for the Sciences

Second Edition

ANGELA B. SHIFLET &
GEORGE W. SHIFLET

Computational science is an exciting new field at the intersection of the sciences, computer science, and mathematics because much scientific investigation now involves computing as well as theory and experiment. This textbook provides students with a versatile and accessible introduction to the subject. It assumes only a background in high school algebra, enables instructors to follow tailored pathways through the material, and is the only textbook of its kind designed specifically for an introductory course in the computational science and engineering curriculum. While the text itself is generic, an accompanying website offers tutorials and files in a variety of software packages.

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Angela B. Shiflet is the Larry Hearn McCalla Professor of Mathematics and Computer Science and director of computational science at Wofford College. **George W. Shiflet** is the Larry Hearn McCalla Professor of Biology at Wofford College.

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APRIL

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816 pages. 3 halftones.

192 line illus. 82 tables. 7 x 10.

COMPUTER SCIENCE ■ MATHEMATICS

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A SOPHISTICATED INTRODUCTION
TO HOW ASTRONOMERS IDENTIFY,
OBSERVE, AND UNDERSTAND BLACK HOLES

WHAT DOES A BLACK HOLE LOOK LIKE?

CHARLES D. BAILYN

“This book goes straight to the heart of astronomical intuition and evidence about black holes. Written in a highly accessible style, it provides enough information to educate an undergraduate astronomy or physics major without going into the many details required in a graduate class. I think students will greatly enjoy this book and derive significant insight from it.”

—Coleman Miller, University of Maryland, College Park

“Providing the essential information on all the key topics, this concise and authoritative book covers the whole field of empirical black-hole studies.”

—W. Niel Brandt, Pennsylvania State University

Emitting no radiation or any other kind of information, black holes mark the edge of the universe—both physically and in our scientific understanding. Yet astronomers have found clear evidence for the existence of black holes, employing the same tools and techniques used to explore other celestial objects. In this sophisticated introduction, leading astronomer Charles Bailyn goes behind the theory and physics of black holes to describe how astronomers are observing these enigmatic objects and developing a remarkably detailed picture of what they look like and how they interact with their surroundings.

Accessible to undergraduates and others with some knowledge of introductory college-level physics, this book presents the techniques used to identify and measure the mass and spin of celestial black holes. These key measurements demonstrate the existence of two kinds of black holes, those with masses a few times that of a typical star, and those with masses comparable to whole galaxies—supermassive black holes. The book provides a detailed account of the nature, formation, and growth of both kinds of black holes. The book also describes the possibility of observing theoretically predicted phenomena such as gravitational waves, wormholes, and Hawking radiation.

A cutting-edge introduction to a subject that was once on the border between physics and science fiction, this book shows how black holes are becoming routine objects of empirical scientific study.

Charles D. Bailyn is the A. Bartlett Giamatti Professor of Astronomy and Physics at Yale University. He was awarded the 2009 Bruno Rossi Prize from the American Astronomical Society for his work on measuring the masses of black holes.

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