

Prisoners Dilemma William Poundstone

*The magnificent second novel from the Pulitzer Prize-winning author of *The Overstory* and the forthcoming *Bewilderment*. "Accomplished . . . mature and assured. . . . A major American novelist."— *New Republic* Something is wrong with Eddie Hobson, Sr., father of four, sometime history teacher, quiz master, black humorist, and virtuoso invalid. His recurring fainting spells have worsened, and given his ingrained aversion to doctors, his worried family tries to discover the nature of his sickness. Meanwhile, in private, Eddie puts the finishing touches on a secret project he calls Hobbstown, a place that he promises will save him, the world, and everything that's in it. A dazzling novel of compassion and imagination, *Prisoner's Dilemma* is a story of the power of individual experience. Offers a critical assessment of fundamental flaws in the American electoral system, looking at how a minor "spoiler" candidate can affect the election by taking enough votes away from the most popular candidate to tip the election to another, and proposes a simple but fair solution designed to transform the electoral system.*

*From the author of the mega-selling *Big Secrets* comes the equally entertaining sequel which unveils the truth about all sorts of things you are never supposed to know. The recipe for Mrs. Fields Cookies... What backward messages on records are really trying to tell you... Frank Sinatra's real age... Why you can't counterfeit a lottery ticket... Barbra Streisand's blue movie... The other Boy Scout rituals... Ingmar Bergman's soap commercials... The formula for Play-Doh... and more.*

"Bestselling popular science author Amir Aczel selects the most fascinating individuals and stories in the history of mathematics, presenting a colorful narrative that explores the quirky personalities behind some of the most profound, enduring theorems. Through such mathematical geniuses as Archimedes, Leonardo of Pisa (a.k.a. Fibonacci), Tartaglia ("the stutterer"), Descartes, Gottfried Leibniz, Carl Gauss, Joseph Fourier (Napoleon's mathematician), Evariste Galois, Georg Cantor, Ramanujan, and "Nicholas Bourbaki," we gather little known details about the alliances and rivalries that profoundly impacted the development of what the scheming doctor-turned-mathematician Geronimo Girolamo

called "The Great Art." This story of mathematics is not your dry "college textbook" account; tales of duels, battlefield heroism, flamboyant arrogance, pranks, secret societies, imprisonment, feuds, theft, and even some fatal errors of judgment fill these pages (clearly, genius doesn't guarantee street smarts). Ultimately, readers will come away from this book entertained, with a newfound appreciation of the tenacity, complexity, eccentricity, and brilliance of the mathematical genius"--

Prisoner's Dilemma/John Von Neumann, Game Theory and the Puzzle of the Bomb

The Iterated Prisoners' Dilemma

Game Theory and Strategy

A Strange Wilderness

Fortune's Formula

An Introduction to Game Theory

Game Theory and the Law

Professor Zagare provides methods for analysing the structure of the game; considers zero and nonzero-sum games and the fundamental 'minimax theorem'; and investigates games with more than two players, including the possibility of coalitions between players.

*For years, Microsoft and other high-tech companies have been posing riddles and logic puzzles like these in their notoriously grueling job interviews. Now "puzzle interviews" have become a hot new trend in hiring. From Wall Street to Silicon Valley, employers are using tough and tricky questions to gauge job candidates' intelligence, imagination, and problem-solving ability -- qualities needed to survive in today's hypercompetitive global marketplace. For the first time, William Poundstone reveals the toughest questions used at Microsoft and other Fortune 500 companies -- and supplies the answers. He traces the rise and controversial fall of employer-mandated IQ tests, the peculiar obsessions of Bill Gates (who plays jigsaw puzzles as a competitive sport), the sadistic mind games of Wall Street (which reportedly led one job seeker to smash a forty-third-story window), and the bizarre excesses of today's hiring managers (who may start off your interview with a box of Legos or a game of virtual Russian roulette). *How Would You Move Mount Fuji?* is an indispensable book for anyone in business. Managers seeking the most talented employees will learn to incorporate puzzle interviews in their search for the top candidates. Job seekers will discover how to tackle even the most brain-busting questions, and gain the advantage that could win the job of a lifetime. And anyone who has ever dreamed of going up against the best minds in business may discover that these puzzles are simply a lot of fun. Why are beer cans tapered on the end, anyway?*

Millions have seen the movie and thousands have read the book but few have fully appreciated the mathematics developed by John Nash's beautiful mind. Today Nash's beautiful math has become a universal language for research in the social sciences and has infiltrated the realms of evolutionary biology, neuroscience, and even quantum

physics. John Nash won the 1994 Nobel Prize in economics for pioneering research published in the 1950s on a new branch of mathematics known as game theory. At the time of Nash's early work, game theory was briefly popular among some mathematicians and Cold War analysts. But it remained obscure until the 1970s when evolutionary biologists began applying it to their work. In the 1980s economists began to embrace game theory. Since then it has found an ever expanding repertoire of applications among a wide range of scientific disciplines. Today neuroscientists peer into game players' brains, anthropologists play games with people from primitive cultures, biologists use games to explain the evolution of human language, and mathematicians exploit games to better understand social networks. A common thread connecting much of this research is its relevance to the ancient quest for a science of human social behavior, or a Code of Nature, in the spirit of the fictional science of psychohistory described in the famous Foundation novels by the late Isaac Asimov. In *A Beautiful Math*, acclaimed science writer Tom Siegfried describes how game theory links the life sciences, social sciences, and physical sciences in a way that may bring Asimov's dream closer to reality. Learn how to succeed at interview mind games and win job offers at A-list companies, with more than eighty difficult and devious questions, puzzles, and brain teasers Each year about 28 million Americans begin a search for a new job. Many more live in the age of the permanent job search, their online profiles eternally awaiting a better offer. Job seekers are more mobile and better informed than ever, aspiring to work for employers offering an appealing culture, a robust menu of perks, and opportunities for personal fulfillment and advancement. The result is that millions of applications stream to the handful of companies that regularly top listings of the best companies to work for: Apple, Netflix, Amazon, Alphabet, Disney, SpaceX, Oracle, Pricewaterhouse-Coopers, and others. Tesla has received as many as 200 applications for each open position. How do selective employers choose which people to hire? It's through interviews asking uniquely demanding questions testing imagination, persistence, and creativity, like: Can an astronaut throw a baseball so it hits Earth? If you had \$2,000, how would you double it in 24 hours? How is a milk carton like a plane seat? Chicken McNuggets come in boxes of 6, 9, and 20. What's the largest number of McNuggets that McDonald's can't sell you? How many dogs in the world have the exact same number of hairs? *How Do You Fight a Horse-Sized Duck?* explores the new world of interviewing at A-list employers. It reveals more than eighty notoriously challenging interview questions and supplies both answers and a general strategy for creative problem-solving.

Game Theory

Trick Questions, Zen-like Riddles, Insanely Difficult Puzzles, and Other Devious Interviewing Techniques You Need to Know to Get a Job Anywhere in the New Economy

Cosmic Complexity and the Limits of Scientific Knowledge

The Formula Transforming What We Know About Life and the Universe

The Lives of the Great Mathematicians

A Practical Guide to Outguessing and Outwitting Almost Everybody

John Nash, Game Theory, and the Modern Quest for a Code of Nature

The definitive introduction to game theory This comprehensive textbook introduces

readers to the principal ideas and applications of game theory, in a style that combines rigor with accessibility. Steven Tadelis begins with a concise description of rational decision making, and goes on to discuss strategic and extensive form games with complete information, Bayesian games, and extensive form games with imperfect information. He covers a host of topics, including multistage and repeated games, bargaining theory, auctions, rent-seeking games, mechanism design, signaling games, reputation building, and information transmission games. Unlike other books on game theory, this one begins with the idea of rationality and explores its implications for multiperson decision problems through concepts like dominated strategies and rationalizability. Only then does it present the subject of Nash equilibrium and its derivatives. Game Theory is the ideal textbook for advanced undergraduate and beginning graduate students. Throughout, concepts and methods are explained using real-world examples backed by precise analytic material. The book features many important applications to economics and political science, as well as numerous exercises that focus on how to formalize informal situations and then analyze them. Introduces the core ideas and applications of game theory Covers static and dynamic games, with complete and incomplete information Features a variety of examples, applications, and exercises Topics include repeated games, bargaining, auctions, signaling, reputation, and information transmission Ideal for advanced undergraduate and beginning graduate students Complete solutions available to teachers and selected solutions available to students

Praised by Entertainment Weekly as “ the man who put the fizz into physics, ” Dr. Len Fisher turns his attention to the science of cooperation in his lively and thought-provoking book. Fisher shows how the modern science of game theory has helped biologists to understand the evolution of cooperation in nature, and investigates how we might apply those lessons to our own society. In a series of experiments that take him from the polite confines of an English dinner party to crowded supermarkets, congested Indian roads, and the wilds of outback Australia, not to mention baseball strategies and the intricacies of quantum mechanics, Fisher sheds light on the problem of global cooperation. The outcomes are sometimes hilarious, sometimes alarming, but always revealing. A witty romp through a serious science, Rock, Paper, Scissors will both teach and delight anyone interested in what it takes to get people to work together.

Two MIT economists show how game theory—the ultimate theory of rationality—explains irrational behavior We like to think of ourselves as rational. This idea is the foundation for classical economic analysis of human behavior, including the awesome achievements of game theory. But as behavioral economics shows, most behavior doesn ’ t seem rational at all—which, unfortunately, to cast doubt on game theory ’ s real-world credibility. In Hidden Games, Moshe Hoffman and Erez Yoeli find a surprising middle ground between the hyperrationality of classical economics and the hyper-irrationality of behavioral economics. They call it hidden games. Reviving game theory, Hoffman and Yoeli use it to explain our most puzzling behavior, from the mechanics of Stockholm syndrome and internalized misogyny to why we help strangers and have a sense of fairness. Fun and powerfully insightful, Hidden Games is an eye-opening argument for using game theory to explain all the irrational things we think, feel, and do.

An electrifying biography of one of the most extraordinary scientists of the twentieth century and the world he made. The smartphones in our pockets and computers like brains. The vagaries of game theory and evolutionary biology. Nuclear weapons and self-replicating spacecrafts. All bear the fingerprints of one remarkable, yet largely overlooked, man: John von Neumann. Born in Budapest at the turn of the century, von Neumann is one of the most influential scientists to have ever lived. A child prodigy, he mastered calculus by the age of eight, and in high school made lasting contributions to mathematics. In Germany, where he helped lay the foundations of quantum mechanics, and later at Princeton, von Neumann's colleagues believed he had the fastest brain on the planet—bar none. He was instrumental in the Manhattan Project and the design of the atom bomb; he helped formulate the bedrock of Cold War geopolitics and modern economic theory; he created the first ever programmable digital computer; he prophesized the potential of nanotechnology; and, from his deathbed, he expounded on the limits of brains and computers—and how they might be overcome. Taking us on an astonishing journey, Ananyo Bhattacharya explores how a combination of genius and unique historical circumstance allowed a single man to sweep through a stunningly diverse array of fields, sparking revolutions wherever he went. *The Man from the Future* is an insightful and thrilling intellectual biography of the visionary thinker who shaped our century.

Prisoner's Dilemma

Biggest Secrets

Concepts and Applications

The Causes and Consequences of Left-Handedness

Labyrinths of Reason

Consciousness Explained

Rock Breaks Scissors

A practical guide to outguessing everything, from multiple-choice tests to the office football pool to the stock market. People are predictable even when they try not to be. William Poundstone demonstrates how to turn this fact to personal advantage in scores of everyday situations, from playing the lottery to buying a home. Rock Breaks Scissors is mind-reading for real life. Will the next tennis serve go right or left? Will the market go up or down? Most people are poor at that kind of predicting. We are hard-wired to make bum bets on "trends" and "winning streaks" that are illusions. Yet ultimately we're all in the business of anticipating the actions of others. Poundstone reveals how to overcome the errors and improve the accuracy of your own outguessing. Rock Breaks Scissors is a hands-on guide to turning life's odds in your favor.

From the author of *Are You Smart Enough to Work at Google?*, a fascinating look at how an equation that foretells the future is transforming everything we know about life, business, and the universe. In the 18th century, the British minister and mathematician Thomas Bayes devised a theorem that allowed him to assign probabilities to events that had never happened before. It languished in obscurity for centuries until computers came along and made it easy to crunch the numbers. Now, as the foundation of big data, Bayes' formula has become a linchpin of the digital economy. But here's where things get really interesting: Bayes' theorem can also be used to lay odds on the existence

of extraterrestrial intelligence; on whether we live in a Matrix-like counterfeit of reality; on the "many worlds" interpretation of quantum theory being correct; and on the biggest question of all: how long will humanity survive? The Doomsday Calculation tells how Silicon Valley's profitable formula became a controversial pivot of contemporary thought. Drawing on interviews with thought leaders around the globe, it's the story of a group of intellectual mavericks who are challenging what we thought we knew about our place in the universe. The Doomsday Calculation is compelling reading for anyone interested in our culture and its future.

The authors of Thinking Strategically demonstrate how to apply the principles in game theory to achieve greater personal and professional successes, drawing on a diverse array of case studies to explain how to develop a win-oriented way of seeing the world.

This book deals with applications of game theory in a wide variety of disciplines.

**A Game Theorist's Guide to Success in Business & Life
20 Years On**

The Surprising Power of Game Theory to Explain Irrational Human Behavior

How Would You Move Mount Fuji?

Power Questions

How to Predict Everything

The Recursive Universe

"Brilliant...as audacious as its title....Mr. Dennett's exposition is nothing short of brilliant." --George Johnson, New York Times Book Review
Consciousness Explained is a full-scale exploration of human consciousness. In this landmark book, Daniel Dennett refutes the traditional, commonsense theory of consciousness and presents a new model, based on a wealth of information from the fields of neuroscience, psychology, and artificial intelligence. Our current theories about conscious life--of people, animal, even robots--are transformed by the new perspectives found in this book.

An arsenal of powerful questions that will transform every conversation
Skillfully redefine problems. Make an immediate connection with anyone.
Rapidly determine if a client is ready to buy. Access the deepest dreams of others. Power Questions sets out a series of strategic questions that will help you win new business and dramatically deepen your professional and personal relationships. The book showcases thirty-five riveting, real conversations with CEOs, billionaires, clients, colleagues, and friends. Each story illustrates the extraordinary power and impact of a thought-provoking, incisive power question. To help readers navigate a variety of professional challenges, over 200 additional, thought-provoking questions are also summarized at the end of the book. In Power Questions you'll discover:
The question that stopped an angry executive in his tracks
The sales question CEOs expect you to ask versus the questions they want you to ask
The question that will radically refocus any meeting
The penetrating question that can transform a friend or colleague's

life A simple question that helped restore a marriage When you use power questions, you magnify your professional and personal influence, create intimate connections with others, and drive to the true heart of the issue every time.

Filled with exciting stories and details behind life's biggest mysteries, from cold cases to UFOs to biblical puzzles. Each chapter presents a different theme: the art world, mistaken identities, historical myths, secret societies, and more. Read articles about the Freemasons, the Philadelphia Experiment, the Mothman, Hitler's "diaries," and forgotten books of the Bible. Hardcover, 632 pages.

During the 1940s "game theory" emerged from the fields of mathematics and economics to provide a revolutionary new method of analysis. Today game theory provides a language for discussing conflict and cooperation not only for economists, but also for business analysts, sociologists, war planners, international relations theorists, and evolutionary biologists. *Toward a History of Game Theory* offers the first history of the development, reception, and dissemination of this crucial theory. Drawing on interviews with original members of the game theory community and on the Morgenstern diaries, the first section of the book examines early work in game theory. It focuses on the groundbreaking role of the von Neumann-Morgenstern collaborative work, *The Theory of Games and Economic Behavior* (1944). The second section recounts the reception of this new theory, revealing just how game theory made its way into the literatures of the time and thus became known among relevant communities of scholars. The contributors explore how game theory became a wedge in opening up the social sciences to mathematical tools and use the personal recollections of scholars who taught at Michigan and Princeton in the late 1940s to show why the theory captivated those practitioners now considered to be "giants" in the field. The final section traces the flow of the ideas of game theory into political science, operations research, and experimental economics. Contributors. Mary Ann Dimand, Robert W. Dimand, Robert J. Leonard, Philip Mirowski, Angela M. O'Rand, Howard Raiffa, Urs Rellstab, Robin E. Rider, William H. Riker, Andrew Schotter, Martin Shubik, Vernon L. Smith

How an Equation that Predicts the Future Is Transforming Everything We Know About Life and the Universe

Head in the Cloud

Toward a History of Game Theory

Build Relationships, Win New Business, and Influence Others

Dispatches from a Post-Fact World

Secrets to Succeeding at Interview Mind Games and Getting the Job You Want

The Left-Hander Syndrome

This text emphasizes the ideas behind modern game theory rather than their mathematical expression, but defines all

concepts precisely. It covers strategic, extensive and coalitional games and includes the topics of repeated games, bargaining theory and evolutionary equilibrium.

The Book That Gives the Inside Story on Hundreds of Secrets of American Life --Big Secrets. Are there really secret backward messages in rock music, or is somebody nuts? We tested suspect tunes at a recording studio to find out. What goes on at Freemason initiations? Here's the whole story, including -- yes! -- the electric carpet. Colonel Sanders boasted that Kentucky Fried Chicken's eleven secret herbs and spices "stand on everybody's shelf." We got a sample of the seasoning mix and sent it to a food chemist for analysis. Feverish rumor has it that Walt Disney's body was frozen and now lies in a secret cryonic vault somewhere beneath the Pirates of the Caribbean exhibit at Disneyland. Read the certified stranger-than-fiction truth. Don't bother trying to figure out how Doug Henning, David Copperfield, and Harry Blackstone, Jr., perform their illusions. *Big Secrets* has complete explanations and diagrams, nothing left to the imagination.

In 1956, two Bell Labs scientists discovered the scientific formula for getting rich. One was mathematician Claude Shannon, neurotic father of our digital age, whose genius is ranked with Einstein's. The other was John L. Kelly Jr., a Texas-born, gun-toting physicist. Together they applied the science of information theory--the basis of computers and the Internet--to the problem of making as much money as possible, as fast as possible. Shannon and MIT mathematician Edward O. Thorp took the "Kelly formula" to Las Vegas. It worked. They realized that there was even more money to be made in the stock market. Thorp used the Kelly system with his phenomenally successful hedge fund, Princeton-Newport Partners. Shannon became a successful investor, too, topping even Warren Buffett's rate of return. *Fortune's Formula* traces how the Kelly formula sparked controversy even as it made fortunes at racetracks, casinos, and trading desks. It reveals the dark side of this alluring scheme, which is founded on exploiting an insider's edge. Shannon believed it was possible for a smart investor to beat the market--and William Poundstone's *Fortune's Formula* will convince you that he was right.

Should you watch public television without pledging?...Exceed the posted speed limit?...Hop a subway

turnstile without paying? These questions illustrate the so-called "prisoner's dilemma", a social puzzle that we all face every day. Though the answers may seem simple, their profound implications make the prisoner's dilemma one of the great unifying concepts of science. Watching players bluff in a poker game inspired John von Neumann—father of the modern computer and one of the sharpest minds of the century—to construct game theory, a mathematical study of conflict and deception. Game theory was readily embraced at the RAND Corporation, the archetypical think tank charged with formulating military strategy for the atomic age, and in 1950 two RAND scientists made a momentous discovery. Called the "prisoner's dilemma," it is a disturbing and mind-bending game where two or more people may betray the common good for individual gain. Introduced shortly after the Soviet Union acquired the atomic bomb, the prisoner's dilemma quickly became a popular allegory of the nuclear arms race. Intellectuals such as von Neumann and Bertrand Russell joined military and political leaders in rallying to the "preventive war" movement, which advocated a nuclear first strike against the Soviet Union. Though the Truman administration rejected preventive war the United States entered into an arms race with the Soviets and game theory developed into a controversial tool of public policy—alternately accused of justifying arms races and touted as the only hope of preventing them. A masterful work of science writing, *Prisoner's Dilemma* weaves together a biography of the brilliant and tragic von Neumann, a history of pivotal phases of the cold war, and an investigation of game theory's far-reaching influence on public policy today. Most important, *Prisoner's Dilemma* is the incisive story of a revolutionary idea that has been hailed as a landmark of twentieth-century thought.

Revised Edition

Hidden Games

The SAGE Encyclopedia of Political Behavior

Are You Smart Enough to Work at Google?

Rock, Paper, Scissors

How Do You Fight a Horse-Sized Duck?

Game Theory, Diplomatic History and Security Studies

Hofstadter's collection of quirky essays is unified by its primary concern: to examine the way people perceive and think.

This fascinating popular science journey explores key concepts in information

theory in terms of Conway's "Game of Life" program. The author explains the application of natural law to a random system and demonstrates the necessity of limits. Other topics include the limits of knowledge, paradox of complexity, Maxwell's demon, Big Bang theory, and much more. 1985 edition.

Never before have we had so much information at our fingertips. You might think that we are better-informed than ever, but there's one thing we can't ask Google: 'What should I be googling?' The way we consume information in the digital age has been blamed for driving political polarisation and leaving us unable to agree on basic facts. It's also making us stupider. Personalised news feeds and social media echo chambers narrow our potential knowledge base. By now, we don't even know what we don't know. In *Head in the Cloud*, William Poundstone investigates the true worth of knowledge. An entertaining manifesto underpinned by big data analysis and illustrated by eye-opening anecdotes, it reveals the surprising benefits of broadening your horizons and provides an unnerving look at the consequences of being ill-informed.

Prisoner's Dilemma Anchor

The Art of Strategy

Paradox, Puzzles, and the Frailty of Knowledge

The Evolution of Cooperation

Game Theory in Everyday Life

Microsoft's Cult of the Puzzle - How the World's Smartest Companies Select the Most Creative Thinkers

Questing For The Essence Of Mind And Pattern

Are you Smart Enough to Work at Google? guides readers through the surprising solutions to dozens of the most challenging interview questions. Learn the importance of creative thinking, how to get a leg up on the competition, what your Facebook page says about you, and much more. You are shrunk to the height of a nickel and thrown in a blender. The blades start moving in 60 seconds. What do you do? If you want to work at Google, or any of America's best companies, you need to have an answer to this and other puzzling questions. *Are you Smart Enough to Work at Google?* is a must read for anyone who wants to succeed in today's job market.

In 1984, Robert Axelrod published a book, relating the story of two competitions which he ran, where invited academics entered strategies for the Iterated Prisoners Dilemma. The book, almost 20 years on, is still widely read and cited by academics and the general public. As a celebration of that landmark work, we have recreated those competitions to celebrate its 20th anniversary, by again inviting academics to submit prisoners dilemma strategies. The first of these new competitions was run in July 2004, and the second in April 2005. *Iterated Prisoners Dilemma: 20 Years On* essentially provides an update of the Axelrod's book. Specifically, it presents the prisoners dilemma, its history and variants. It highlights original Axelrod's work and its impact. It discusses results of new competitions. It showcases selected papers that reflect the latest researches in the area."

John von Neumann was a Jewish refugee from Hungary — considered a "genius"

like fellow Hungarians Leo Szilard, Eugene Wigner and Edward Teller — who played key roles developing the A-bomb at Los Alamos during World War II. As a mathematician at Princeton's Institute for Advanced Study (where Einstein was also a professor), von Neumann was a leader in the development of early computers. Later, he developed the new field of game theory in economics and became a top nuclear arms policy adviser to the Truman and Eisenhower administrations. "I always thought [von Neumann's] brain indicated that he belonged to a new species, an evolution beyond man. Macrae shows us in a lively way how this brain was nurtured and then left its great imprint on the world." — Hans A. Bethe, Cornell University "The book makes for utterly captivating reading. Von Neumann was, of course, one of this century's geniuses, and it is surprising that we have had to wait so long... for a fully fleshed and sympathetic biography of the man. But now, happily, we have one. Macrae nicely delineates the cultural, familial, and educational environment from which von Neumann sprang and sketches the mathematical and scientific environment in which he flourished. It's no small task to render a genius like von Neumann in ordinary language, yet Macrae manages the trick, providing more than a glimpse of what von Neumann accomplished intellectually without expecting the reader to have a Ph.D. in mathematics. Beyond that, he captures von Neumann's qualities of temperament, mind, and personality, including his effortless wit and humor. And [Macrae] frames and accounts for von Neumann's politics in ways that even critics of them, among whom I include myself, will find provocative and illuminating." — Daniel J. Kevles, California Institute of Technology "A lively portrait of the hugely consequential nonmathematician-physicist-et al., whose genius has left an enduring impress on our thought, technology, society, and culture. A double salute to Steve White, who started this grand book designed for us avid, nonmathematical readers, and to Norman Macrae, who brought it to a triumphant conclusion." — Robert K. Merton, Columbia University "The first full-scale biography of this polymath, who was born Jewish in Hungary in 1903 and died Roman Catholic in the United States at the age of 53. And Mr. Macrae has some great stories to tell... Mr. Macrae's biography has rescued a lot of good science gossip from probable extinction, and has introduced many of us to the life story of a man we ought to know better." — Ed Regis, The New York Times "A nice and fascinating picture of a genius who was active in so many domains." —Zentralblatt MATH "Biographer Macrae takes a 'viewspaperman' approach which stresses the context and personalities associated with von Neumann's remarkable life, rather than attempting to give a detailed scholarly analysis of von Neumann's papers. The resulting book is a highly entertaining account that is difficult to put down." — Journal of Mathematical Psychology "A full and intimate biography of 'the man who consciously and deliberately set mankind moving along the road that led us into the Age of Computers.'" — Freeman Dyson, Princeton, NJ "It is good to have a biography of one of the most important mathematicians of the twentieth century, even if it is a biography that focuses much more on the man than on the mathematics." — Fernando Q. Gouvêa, Mathematical Association of America "Based on much research, his own and that of others (especially of Stephen

White), Macrae has written a valuable biography of this remarkable genius of our century, without the opacity of technical (mathematical) dimensions that are part of the hero's intellectual contributions to humanity. Interesting, informative, illuminating, and insightful." — Choice Review "Macrae paints a highly readable, humanizing portrait of a man whose legacy still influences and shapes modern science and knowledge." — Resonance, Journal of Science Education "In this affectionate, humanizing biography, former Economist editor Macrae limns a prescient pragmatist who actively fought against fascism and who advocated a policy of nuclear deterrence because he foresaw that Stalin's Soviet Union would rapidly acquire the bomb and develop rocketry... Macrae makes [von Neumann's] contributions accessible to the lay reader, and also discusses von Neumann's relationships with two long-suffering wives, his political differences with Einstein and the cancer that killed him." — Publishers Weekly "Macrae's life of the great mathematician shows dramatically what proper care and feeding can do for an unusually capacious mind." — John Wilkes, Los Angeles Times

A famed political scientist's classic argument for a more cooperative world We assume that, in a world ruled by natural selection, selfishness pays. So why cooperate? In *The Evolution of Cooperation*, political scientist Robert Axelrod seeks to answer this question. In 1980, he organized the famed Computer Prisoners Dilemma Tournament, which sought to find the optimal strategy for survival in a particular game. Over and over, the simplest strategy, a cooperative program called Tit for Tat, shut out the competition. In other words, cooperation, not unfettered competition, turns out to be our best chance for survival. A vital book for leaders and decision makers, *The Evolution of Cooperation* reveals how cooperative principles help us think better about everything from military strategy, to political elections, to family dynamics.

The Big Book of Big Secrets

Adventures of a Mathematician

The Doomsday Calculation

Gaming the Vote

Metamagical Themas

John von Neumann: The Scientific Genius Who Pioneered the Modern Computer, Game Theory, Nuclear Deterrence, and Much More

Why Elections Aren't Fair (and What We Can Do About It)

The SAGE Encyclopedia of Political Behavior explores the intersection of psychology, political science, sociology, and human behavior. This encyclopedia integrates theories, research, and case studies from a variety of disciplines that inform this established area of study. Aimed at college and university students, this one-of-a-kind book covers voting patterns, interactions between groups, what makes different types of government systems appealing to different societies, and the impact of early childhood development on political beliefs, among others. Topics explored by political psychologists are of great interest in fields beyond either psychology or political science, with implications, for instance, within business and

management.

Game Theory and the Law promises to be the definitive guide to the field. It provides a highly sophisticated yet exceptionally clear explanation of game theory, with a host of applications to legal issues. The authors have not only synthesized the existing scholarship, but also created the foundation for the next generation of research in law and economics."

This sharply intelligent, consistently provocative book takes the reader on an astonishing, thought-provoking voyage into the realm of delightful uncertainty--a world of paradox in which logical argument leads to contradiction and common sense is seemingly rendered irrelevant.

The true story that inspired the 2020 film. The autobiography of mathematician Stanislaw Ulam, one of the great scientific minds of the twentieth century, tells a story rich with amazingly prophetic speculations and peppered with lively anecdotes. As a member of the Los Alamos National Laboratory from 1944 on, Ulam helped to precipitate some of the most dramatic changes of the postwar world. He was among the first to use and advocate computers for scientific research, originated ideas for the nuclear propulsion of space vehicles, and made fundamental contributions to many of today's most challenging mathematical projects. With his wide-ranging interests, Ulam never emphasized the importance of his contributions to the research that resulted in the hydrogen bomb. Now Daniel Hirsch and William Mathews reveal the true story of Ulam's pivotal role in the making of the "Super," in their historical introduction to this behind-the-scenes look at the minds and ideas that ushered in the nuclear age. An epilogue by Françoise Ulam and Jan Mycielski sheds new light on Ulam's character and mathematical originality.

An Introduction

The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street

Big Secrets

The Man from the Future: The Visionary Ideas of John von Neumann
A Beautiful Math

How do you predict something that has never happened before? There's a useful calculation being employed by Wall Street, Silicon Valley and maths professors all over the world, and it predicts that the human species will become extinct in 760 years. Unfortunately, there is disagreement over how to apply the formula, and some argue that we might only have twenty years left. Originally devised by British clergyman Thomas Bayes, the theorem languished in obscurity for two hundred years before being resurrected as the lynchpin of the digital economy. With brief detours into archaeology, philology, and overdue library books, William Poundstone explains how we can use it to predict pretty much anything. What is the

chance that there are multiple universes? How long will Hamilton run? Will the US stock market continue to perform as well this century as it has for the last hundred years? And are we really all doomed?

Nine out of every ten human beings are naturally right-handed. Those who were not right-handed were feared, shunned, or forcibly retrained in many periods and cultures. Indeed, some members of fundamentalist sects still regard left-handers as in league with the devil, and prejudices against left-handers are reflected in the multiple associations of right with good and left with bad that have become enshrined in everyday language and folklore. A “left-handed compliment” is actually an insult, and the dictionary definition of left-handed includes the terms “awkward,” “clumsy,” “ill-omened,” and “illegitimate.” In his summary of scientific research into sidedness, Stanley Coren rapidly dismisses the notion of the southpaw as somehow tainted. Increasingly we are coming to understand, however, that left-handedness does have social, educational, medical, and psychological implications. Coren uses entertaining examples to illuminate the paths of research he has followed, and answers vitally important questions such as: What are the neuropsychological and behavioral implications of differences for left-handers themselves, as well as for their parents, teachers, spouses, children, counselors, and physicians? How can we determine our own patterns of sidedness? Are they encoded in our genes? And, very importantly, how can we make the world more comfortable and safer for left-handers? Coren persuasively argues that left-handers are an invisible minority who must define themselves and organize for self-protections in the same way that more visible minorities have done. Much (though not all) of the risk to which left-handers are exposed derives from the fact that the tools they use and the machines they operate are designed for right-handers, a flaw that given heightened public awareness would be easy to correct. Coren advocates a change in the way the right-handed majority treats its left-handed minority to eliminate the risks left-handers face.

Known as the science of strategy, game theory is a branch of mathematics that has gained broad acceptance as a legitimate methodological tool, and has been widely adapted by a number of other fields. Frank C. Zagare provides an introduction to the application of game theory in the fields of security studies and diplomatic history, demonstrating the advantages of using a formal game-theoretic framework to explain complex events and strategic relationships. Comprised of three parts, the first illustrates the basic concepts of game theory, initially with abstract examples but later in the context of real world foreign policy decision-making. The author highlights the methodological problems of using game theory to construct an analytic narrative and the advantages of working around these obstacles. Part II develops three extended case studies that illustrate the theory at work: the First Moroccan Crisis of 1905-1906, the July Crisis of 1914, and the Cuban Missile Crisis of 1962. Finally, in Part III, Zagare describes a general theory of interstate conflict initiation, limitation, escalation, and resolution and rebuts criticisms of the methodology. Logically demanding, *Game Theory, Diplomatic History and Security Studies* conveys an intuitive understanding of the theory of games through the use of real-world examples to exemplify the 'theory in action'.

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