

Game Theory For The Social Sciences

Requiring no more than basic arithmetic, this book provides a careful and accessible introduction to the basic pillars of Game Theory, tracing its intellectual origins and philosophical premises.

This textbook connects three vibrant areas at the interface between economics and computer science: algorithmic game theory, computational social choice, and fair division. It thus offers an interdisciplinary treatment of collective decision making from an economic and computational perspective. Part I introduces to algorithmic game theory, focusing on both noncooperative and cooperative game theory. Part II introduces to computational social choice, focusing on both preference aggregation (voting) and judgment aggregation. Part III introduces to fair division, focusing on the division of both a single divisible resource ("cake-cutting") and multiple indivisible and unshareable resources ("multiagent resource allocation"). In all these parts, much weight is given to the algorithmic and complexity-theoretic aspects of problems arising in these areas, and the interconnections between the three parts are of central interest. In large-scale media-sharing social networks, where millions of users create, share, link and reuse media content, there are clear challenges in protecting content security and intellectual property, and in designing scalable and reliable networks capable of handling high levels of traffic. This comprehensive resource demonstrates how game theory can be used to model user dynamics and optimize design of media-sharing networks. It reviews the fundamental methodologies used to model and analyze human behavior, using examples from real-world multimedia social networks. With a thorough investigation of the impact of human factors on multimedia system design, this accessible book shows how an understanding of human behavior can be used to improve system performance. Bringing together mathematical tools and engineering concepts with ideas from sociology and human behavior analysis, this one-stop guide will enable researchers to explore this emerging field further and ultimately design media-sharing systems with more efficient, secure and personalized services.

The book brings together an overview of standard concepts in cooperative game theory with applications to the analysis of social networks and hierarchical authority organizations. The standard concepts covered include the multi-linear extension, the Core, the Shapley value, and the cooperative potential. Also discussed are the Core for a restricted collection of formable coalitions, various Core covers, the Myerson value, value-based potentials, and share potentials. Within the context of social networks this book discusses the measurement of centrality and power as well as allocation rules such as the Myerson value and hierarchical allocation rules. For hierarchical organizations, two basic approaches to the exercise of authority are explored; for each approach the allocation of the generated output is developed. Each chapter is accompanied by a problem section, allowing this book to be used as a textbook for an advanced graduate course on game theory.

Game Theory and Experimental Games

Game Theory and the Emergence of Collaboration

Concepts and Solutions

Game Theory for Political Scientists

A Problem-Centered Introduction to Modeling Strategic Interaction,

Second Edition

Game Theory for Economic Analysis

This volume in the Encyclopedia of Complexity and Systems Science, Second Edition, combines the main features of Game Theory, covering most of the fundamental theoretical aspects under the cooperative and non-cooperative approaches, with the procedures of Agent-Based Modeling for studying complex systems composed of a large number of interacting entities with many degrees of freedom. In Game Theory, the cooperative approach focuses on the possible outcomes of the decision-makers' interaction by abstracting from the "rational" actions or decisions that may lead to these outcomes. The non-cooperative approach focuses on the actions that the decision-makers can take. As John von Neumann and Oskar Morgenstern argued in their path-breaking book of 1944 entitled Theory of Games and Economic Behavior, most economic questions should be analyzed as games. The models of game theory are abstract representations of a number of real-life situations and have applications to economics, political science, computer science, evolutionary biology, social psychology, and law among others. Agent-Based Modeling (ABM) is a relatively new computational modeling paradigm which aims to construct the computational counterpart of a conceptual model of the system under study on the basis of discrete entities (i.e., the agent) with some properties and behavioral rules, and then to simulate them in a computer to mimic the real phenomena. Given the relative immaturity of this modeling paradigm, and the broad spectrum of disciplines in which it is applied, a clear cut and widely accepted definition of high level concepts of agents, environment, interactions and so on, is still lacking. This volume explores the state-of-the-art in the development of a real ABM ontology to address the epistemological issues related to this emerging paradigm for modeling complex systems.

Game theory is central to modern understandings of how people deal with problems of coordination and cooperation. Yet, ironically, it cannot give a straightforward explanation of some of the simplest forms of human coordination and cooperation--most famously, that people can use the apparently arbitrary features of "focal points" to solve coordination problems, and that people sometimes cooperate in "prisoner's dilemmas." Addressing a wide readership of economists, sociologists, psychologists, and philosophers, Michael Bacharach here proposes a revision of game theory that resolves these long-standing problems. In the classical tradition of game theory, Bacharach models human beings as rational actors, but he revises the standard definition of rationality to incorporate two major new ideas. He enlarges the model of a game so that it includes the ways agents describe to themselves (or "frame") their decision problems. And he allows the possibility that people reason as members of groups (or "teams"), each taking herself to have reason to perform her component of the combination of actions that best achieves the group's common goal. Bacharach shows that certain tendencies for individuals to engage in team reasoning are consistent with recent findings in social psychology and evolutionary biology. As the culmination of Bacharach's long-standing program of pathbreaking work on the foundations of game theory, this book has been eagerly awaited. Following Bacharach's premature death, Natalie Gold and Robert Sugden edited the unfinished work and added two substantial chapters that allow the book to be read as a coherent whole.

Political Game Theory is a self-contained introduction to game theory and its applications to political science. The book presents choice theory, social choice theory, static and dynamic games of complete information, static and dynamic games of incomplete information, repeated games, bargaining theory, mechanism design and a mathematical appendix covering, logic, real

analysis, calculus and probability theory. The methods employed have many applications in various disciplines including comparative politics, international relations and American politics. Political Game Theory is tailored to students without extensive backgrounds in mathematics, and traditional economics, however there are also many special sections that present technical material that will appeal to more advanced students. A large number of exercises are also provided to practice the skills and techniques discussed.

This fascinating, newly revised edition offers an overview of game theory, plus lucid coverage of two-person zero-sum game with equilibrium points; general, two-person zero-sum game; utility theory; and other topics.

A Text on Game Theory

Beautiful Game Theory

A Nontechnical Introduction

Game Theory, Social Choice and Ethics

Social Media Marketing

Game Theory and Society

The second edition of Herve Moulin's highly successful book outlines the fundamental concepts of game theory—one of the most provocative and fruitful applications of mathematics to the human sciences—and demonstrates its uses in economic and political discourse.

Thoroughly revised, and now published with an accompanying workbook of 89 exercises, this rigorous yet accessible text explains the uses of game theory in largely nontechnical terms.

Moulin carefully discusses the behavioral scenarios underlying the various equilibrium concepts. He provides a self-contained exposition of basic equilibrium concepts for strategic games: perfect (sophisticated) equilibrium, Nash's noncooperative example, Aumann's strong and correlated example, and several versions of the core. The author is concerned less with mathematical refinements than with helping the reader understand the strategic stories backing these concepts. His examples therefore give a fair account of the current game models used in economics, politics, and sociology. Addressed here are oligopoly theory, the provision of public goods, auctions, voting procedures, and cost allocation problems, as well as the classic prisoner's dilemma, tic-tac-toe, and Marienbad games. Extremely popular in its original French edition and in its first English version, Moulin's excellent introductory text is now, more than ever, the book to answer the essential questions about the application of game theory to the social sciences.

Game Theory for Economic Analysis

Game Theory and Experimental Games: The Study of Strategic Interaction focuses on the development of game theory, taking into consideration empirical research, theoretical formulations, and research procedures involved. The book proceeds with a discussion on the theory of one-person games. The individual decision that a player makes in these kinds of games is noted as influential as to the outcome of these games. This discussion is followed by a presentation of pure coordination games and minimal situation. The ability of players to anticipate the choices of others to achieve a mutually beneficial outcome is emphasized. A favorable social situation is also influential in these kinds of games. The text moves forward by presenting studies on various kinds of competitive games. The research studies presented are coupled with empirical evidence and discussion designed to support the claims that are pointed out. The book also discusses several kinds of approaches in the study of games.

Voting as a way to resolve multi-person games is also emphasized, including voting procedures, the preferences of voters, and voting strategies. The book is a valuable source of data for readers and scholars who are interested in the exploration of game theories.

Game theory, the formalized study of strategy, began in the 1940s by asking how emotionless geniuses should play games, but ignored until recently how average people with emotions and limited foresight actually play games. This book marks the first substantial and authoritative

effort to close this gap. Colin Camerer, one of the field's leading figures, uses psychological principles and hundreds of experiments to develop mathematical theories of reciprocity, limited strategizing, and learning, which help predict what real people and companies do in strategic situations. Unifying a wealth of information from ongoing studies in strategic behavior, he takes the experimental science of behavioral economics a major step forward. He does so in lucid, friendly prose. Behavioral game theory has three ingredients that come clearly into focus in this book: mathematical theories of how moral obligation and vengeance affect the way people bargain and trust each other; a theory of how limits in the brain constrain the number of steps of "I think he thinks . . ." reasoning people naturally do; and a theory of how people learn from experience to make better strategic decisions. Strategic interactions that can be explained by behavioral game theory include bargaining, games of bluffing as in sports and poker, strikes, how conventions help coordinate a joint activity, price competition and patent races, and building up reputations for trustworthiness or ruthlessness in business or life. While there are many books on standard game theory that address the way ideally rational actors operate, Behavioral Game Theory stands alone in blending experimental evidence and psychology in a mathematical theory of normal strategic behavior. It is must reading for anyone who seeks a more complete understanding of strategic thinking, from professional economists to scholars and students of economics, management studies, psychology, political science, anthropology, and biology.

Social and Economic Networks in Cooperative Game Theory

Behavioral Game Theory

The Fascinating Math Behind Decision-Making

An Introduction to Algorithmic Game Theory, Computational Social Choice, and Fair Division
Game Theory Evolving

Game Theory in the Social Sciences

Using fascinating examples from a range of disciplines, this textbook provides social science, philosophy and economics students with an engaging introduction to the tools they need to understand and predict strategic interactions. Beginning with an introduction to the most famous games, the book uses clear, jargon-free language and accessible maths as it guides the reader through whole games with full, worked-through examples. End-of-chapter exercises help to consolidate understanding along the way. With an applied approach that draws upon real-life case-studies, this book highlights the insights that game theory can offer each situation. It is an ideal textbook for students approaching game theory from various fields across the social sciences, and for curious general readers who are looking for a thorough introduction to this intriguing subject. Accompanying online resources for this title can be found at bloomsburyonlineresources.com/game-theory. These resources are designed to support teaching and learning when using this textbook and are available at no extra cost.

There are problems to whose solution I would attach an infinitely greater import and value than to those of mathematics, for example touching ethics, or our relation to God, or concerning our destiny and our future; but their solution lies wholly beyond us and completely outside the province of science. J. F. C. Gauss For all his prescience in matters physical and mathematical, the great Gauss apparently did not foresee one development peculiar to our own time. The development I have in mind is the use of mathematical reasoning - in particular the axiomatic method - to explicate alternative concepts of rationality and morality. The present bipartite collection of essays (Vol. 11, Nos. 2 and 3 of this journal) is entitled 'Game Theory, Social Choice, and Ethics'. The eight papers represent state-of-the-art research in formal moral theory. Their intended aim is to demonstrate how the methods of game theory, decision theory, and axiomatic

social choice theory can help to illuminate ethical questions central not only to moral theory, but also to normative public policy analysis. Before discussion of the contents of the papers, it should prove helpful to recall a number of pioneering papers that appeared during the decade of the 1950s. These papers contained a series of mathematical and conceptual breakthroughs which laid the basis for much of today's research in formal moral theory. The papers deal with two somewhat distinct topics: the concept of individual and collective rationality, and the concept of social justice. 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 provide insight into 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.

This textbook presents the basics of game theory both on an undergraduate level and on a more advanced mathematical level. It is the second, revised version of the successful 2008 edition. The book covers most topics of interest in game theory, including cooperative game theory. Part I presents introductions to all these topics on a basic yet formally precise level. It includes chapters on repeated games, social choice theory, and selected topics such as bargaining theory, exchange economies, and matching. Part II goes deeper into noncooperative theory and treats the theory of zero-sum games, refinements of Nash equilibrium in strategic as well as extensive form games, and evolutionary games. Part III covers basic concepts in the theory of transferable utility games, such as core and balancedness, Shapley value and variations, and nucleolus. Some mathematical tools on duality and convexity are collected in Part IV. Every chapter in the book contains a problem section. Hints, answers and solutions are included.

The Complete Idiot's Guide to Game Theory

Game Theory and Politics

From Chess to Social Science, 1900-1960

A Reader-friendly Guide

Complex Social and Behavioral Systems

Game Theory, Alive

Many illuminating and instructive examples of the applications of game theoretic models to problems in political science appear in this volume, which requires minimal mathematical background. 1975 edition. 24 figures. /div

A reconstruction of the creation of game theory in the twentieth century by John von Neumann and Oskar Morgenstern.

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.

The aim of this Handbook is twofold: to educate and to inspire. It is meant for researchers and graduate students who are interested in taking a data-based and behavioral approach to the study of game theory. Educators and students of economics will find the Handbook useful as a companion book to conventional upper-level game theory textbooks, enabling them to compare and contrast actual behavior with theoretical predictions. Researchers and non-specialists will find valuable examples of laboratory and field experiments that test game theoretic propositions and suggest new ways of modeling strategic behavior. Chapters are organized into several sections; each section concludes with an inspirational chapter, offering suggestions on new directions and cutting-edge topics of research in experimental game theory.

Teams and Frames in Game Theory

Game Theory for Networks

Beyond Individual Choice

Economics and Computation

A Multi-Leveled Approach

Gain some insight into the game of life... Game Theory means rigorous strategic thinking. It is based on the idea that everyone acts competitively and in his own best interest. With the help of mathematical models, it is possible to anticipate the actions of others in nearly all life's enterprises. This book includes down-to-earth examples and solutions, as well as charts and illustrations designed to help teach the concept. In The Complete Idiot's Guide® to Game Theory, Dr. Edward C. Rosenthal makes it easy to understand game theory with insights into: ? The history of the discipline made popular by John Nash, the mathematician dramatized in the film A Beautiful Mind ? The role of social behavior and psychology in this amazing discipline ? How important game theory has become in our society and why

What motives underlie the ways humans interact socially? Are these the same for all societies? Are these part of our nature, or influenced by our environments? Over the last decade, research in experimental economics has emphatically falsified the textbook representation of Homo economicus. Literally hundreds of experiments suggest that people care not only about their own material payoffs, but also about such things as fairness, equity and reciprocity. However, this research left fundamental questions unanswered: Are such social preferences stable components of human nature; or, are they modulated by economic, social and cultural environments? Until now, experimental research could not address this question because virtually all subjects had been university students, and while there are cultural differences among student populations throughout the world, these differences are small compared to the full range of human social and cultural environments. A vast amount of ethnographic and historical research suggests that people's motives are influenced by economic, social, and cultural environments, yet such methods can only yield circumstantial evidence about human motives. Combining ethnographic and experimental approaches to fill this gap, this book breaks new ground in reporting the results of a large cross-cultural study aimed at determining the sources of social (non-selfish) preferences that underlie the diversity of human sociality. The same experiments which provided evidence for social preferences among university students were performed in

fifteen small-scale societies exhibiting a wide variety of social, economic and cultural conditions by experienced field researchers who had also done long-term ethnographic field work in these societies. The findings of these experiments demonstrated that no society in which experimental behaviour is consistent with the canonical model of self-interest. Indeed, results showed that the variation in behaviour is far greater than previously thought, and that the differences between societies in market integration and the importance of cooperation explain a substantial portion of this variation, which individual-level economic and demographic variables could not. Finally, the extent to which experimental play mirrors patterns of interaction found in everyday life is traced. The book starts with a succinct but substantive introduction to the use of game theory as an analytical tool and its use in the social sciences for the rigorous testing of hypotheses about fundamental aspects of social behaviour outside artificially constructed laboratories. The results of the fifteen case studies are summarized in a suggestive chapter about the scope of the project.

Game Theory in the Social Sciences
A Reader-friendly Guide
Taylor & Francis
Preface Social media marketing has been heralded as a sea change in the market-consumer relationship, but its rapid growth and rabid following among marketers has also produced a sea of confusion. Lacking any durable framework for understanding how, why, and on what terms the consumer relationship has changed under social media, marketers pursue new venues for their newness alone - with decidedly mixed results. This book finds a theoretical framework for social media marketing in the science of game theory, with its focus on adversarial but mutually dependent relationships. Originally developed to guide nuclear brinkmanship policy during the Cold War, game theory provides the foundation for an evolutionary view of social media marketing. Through fascinating game theory concepts like the Prisoner's Dilemma, the Stag Hunt, Self-Command, and Job Market Signaling, this study uncovers the cooperative trends that brought marketing to its present state and points the way toward marketing's future course.

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The Bounds of Reason

Playing for Real

Game Theory and Agent-Based Models

Handbook of Experimental Game Theory

Behavior Dynamics in Media-Sharing Social Networks

The Study of Strategic Interaction

The progress of society can only happen through interpersonal cooperation, because only cooperation can bring about mutual benefit, thus bringing happiness to each person. This should be our collective rationality, but we often see it conflicts with individual interests, which leads to the so-called "Prisoners' Dilemma" and does not

bring happiness to all. From a game theoretical perspective, this book addresses the issue of how people can cooperate better. It has two objectives. The first is to use common language to systematically introduce the basic methodologies and core conclusions of Game Theory, including the Nash equilibrium, multiple equilibriums, dynamic games, etc. Mathematics and theoretical models are used to the minimum necessary scope too, to make this book get access to ordinary readers with elementary mathematical training. The second objective is to utilize these methods and conclusions to analyze various Chinese social issues and institutional arrangements, with a focus on the reasons people exhibit non-cooperative behaviors as well as the institutions and cultures that promote interpersonal cooperation. In addition to economics, specialists in sociology, law, history, politics and management will also be attracted by this book for its insightful analysis on the issue of cooperation in these fields. Also, readers curious about Chinese society will benefit from this book.

Individuals, firms, governments and nations behave strategically, for good and bad. Over the last few decades, game theory has been constructed and progressively refined to become the major tool used by social scientists to understand, predict and regulate strategic interaction among agents who often have conflicting interests. In the surprisingly anodyne jargon of the theory, they 'play games'. This book offers an introduction to the basic tools of game theory and an overview of a number of applications to real-world cases, covering the areas of economics, politics and international relations. Each chapter is accompanied by some suggestions about further reading.

Clear, accessible treatment of mathematical models for resolving conflicts in politics, economics, war, business, and social relationships. Topics include strategy, game tree and game matrix, and much more. Minimal math background required. 1970 edition. Social and Economic Networks in Cooperative Game Theory presents a coherent overview of theoretical literature that studies the influence and formation of networks in social and economic situations in which the relations between participants who are not included in a particular participant's network are not of consequence to this participant. The material is organized in two parts. In Part I the authors concentrate on the question how network structures affect economic outcomes. Part II of the book presents the formation of networks by agents who engage in a network-formation process to be able to realize the possible gains from cooperation.

How Soccer Can Help Economics

Political Game Theory

Foundations of Human Sociality

8th International EAI Conference, GameNets 2019, Paris, France, April 25-26, 2019, Proceedings

Economic Experiments and Ethnographic Evidence from Fifteen Small-Scale Societies
Von Neumann, Morgenstern, and the Creation of Game Theory

This is a light-hearted introduction to game theory suitable for advanced undergraduate students or beginning graduate students. It answers three questions. What is game theory? How is game theory applied? Why is game theory right?

Game theory is central to understanding human behavior and relevant to all of the behavioral sciences—from biology and economics, to anthropology and political science. However, as The Bounds of Reason

demonstrates, game theory alone cannot fully explain human behavior and should instead complement other key concepts championed by the behavioral disciplines. Herbert Gintis shows that just as game theory without broader social theory is merely technical bravado, so social theory without game theory is a handicapped enterprise. This edition has been thoroughly revised and updated. *Reinvigorating game theory, The Bounds of Reason* offers innovative thinking for the behavioral sciences.

We live in a highly connected world with multiple self-interested agents interacting and myriad opportunities for conflict and cooperation. The goal of game theory is to understand these opportunities. This book presents a rigorous introduction to the mathematics of game theory without losing sight of the joy of the subject. This is done by focusing on theoretical highlights (e.g., at least six Nobel Prize winning results are developed from scratch) and by presenting exciting connections of game theory to other fields such as computer science (algorithmic game theory), economics (auctions and matching markets), social choice (voting theory), biology (signaling and evolutionary stability), and learning theory. Both classical topics, such as zero-sum games, and modern topics, such as sponsored search auctions, are covered. Along the way, beautiful mathematical tools used in game theory are introduced, including convexity, fixed-point theorems, and probabilistic arguments. The book is appropriate for a first course in game theory at either the undergraduate or graduate level, whether in mathematics, economics, computer science, or statistics. The importance of game-theoretic thinking transcends the academic setting—for every action we take, we must consider not only its direct effects, but also how it influences the incentives of others.

Since its original publication in 2000, *Game Theory Evolving* has been considered the best textbook on evolutionary game theory. This completely revised and updated second edition of *Game Theory Evolving* contains new material and shows students how to apply game theory to model human behavior in ways that reflect the special nature of sociality and individuality. The textbook continues its in-depth look at cooperation in teams, agent-based simulations, experimental economics, the evolution and diffusion of preferences, and the connection between biology and economics. Recognizing that students learn by doing, the textbook introduces principles through practice. Herbert Gintis exposes students to the techniques and applications of game theory through a wealth of sophisticated and surprisingly fun-to-solve problems involving human and animal behavior. The second edition includes solutions to the problems presented and information related to agent-based modeling. In addition, the textbook incorporates instruction in using mathematical software to solve complex problems. *Game Theory Evolving* is perfect for graduate and upper-level undergraduate economics students, and is a terrific introduction for ambitious do-it-yourselfers throughout the behavioral sciences. Revised and updated edition relevant for courses across disciplines Perfect for graduate and upper-level undergraduate economics courses

Solutions to problems presented throughout Incorporates instruction in using computational software for complex problem solving Includes in-depth discussions of agent-based modeling

Game Theory

Game Theory and the Social Contract

An Applied Introduction

Experiments in Strategic Interaction

Concepts and Applications

Game Theory and the Unification of the Behavioral Sciences - Revised Edition

Game theory is the mathematical analysis of strategic interaction. In the fifty years since the appearance of von Neumann and Morgenstern's classic Theory of Games and Economic Behavior (Princeton, 1944), game theory has been widely applied to problems in economics. Until recently, however, its usefulness in political science has been underappreciated, in part because of the technical difficulty of the methods developed by economists. James Morrow's book is the first to provide a standard text adapting contemporary game theory to political analysis. It uses a minimum of mathematics to teach the essentials of game theory and contains problems and their solutions suitable for advanced undergraduate and graduate students in all branches of political science. Morrow begins with classical utility and game theory and ends with current research on repeated games and games of incomplete information. The book focuses on noncooperative game theory and its application to international relations, political economy, and American and comparative politics. Special attention is given to models of four topics: bargaining, legislative voting rules, voting in mass elections, and deterrence. An appendix reviews relevant mathematical techniques. Brief bibliographic essays at the end of each chapter suggest further readings, graded according to difficulty. This rigorous but accessible introduction to game theory will be of use not only to political scientists but also to psychologists, sociologists, and others in the social sciences.

This book constitutes the refereed proceedings of the 8th EAI International Conference on Game Theory for Networks, GameNets 2019, held in Paris, France, in April 2019. The 8 full and 3 short papers presented were carefully reviewed and selected from 17 submissions. They are organized in the following topical sections: Game Theory for Wireless Networks; Games for Economy and Resource Allocation; and Game Theory for Social Networks. Games are everywhere: Drivers maneuvering in heavy traffic are playing a driving game. Bargain hunters bidding on eBay are playing an auctioning game. The supermarket's price for corn flakes is decided by playing an economic game. This Very Short Introduction offers a succinct tour of the fascinating world of game theory, a ground-breaking field that analyzes how to play games in a rational way. Ken Binmore, a renowned game theorist, explains the theory in a way that is both entertaining and non-mathematical

yet also deeply insightful, revealing how game theory can shed light on everything from social gatherings, to ethical decision-making, to successful card-playing strategies, to calculating the sex ratio among bees. With mini-biographies of many fascinating, and occasionally eccentric, founders of the subject--including John Nash, subject of the movie A Beautiful Mind--this book offers a concise overview of a cutting-edge field that has seen spectacular successes in evolutionary biology and economics, and is beginning to revolutionize other disciplines from psychology to political science. About the Series: Oxford's Very Short Introductions offers concise and original introductions to a wide range of subjects--from Islam to Sociology, Politics to Classics, and Literary Theory to History. Not simply a textbook of definitions, each volume provides trenchant and provocative--yet always balanced and complete--discussions of the central issues in a given topic. Every Very Short Introduction gives a readable evolution of the subject in question, demonstrating how it has developed and influenced society. Whatever the area of study, whatever the topic that fascinates the reader, the series has a handy and affordable guide that will likely prove indispensable.

An Introduction

The Cooperative Game Theory of Networks and Hierarchies

Two-Person Game Theory

Game Theory: A Very Short Introduction

Mark II

Game Theory for the Social Sciences