An Evolutionary Theory Of Economic Change

Introduces current evolutionary game theory--where ideas from evolutionary biology and rationalistic economics meet--emphasizing the links between static and dynamic approaches and noncooperative game theory. This text introduces current evolutionary game theory--where ideas from evolutionary biology and rationalistic economics meet--emphasizing the links between static and dynamic approaches and noncooperative game theory. Much of the text is devoted to the key concepts of evolutionary stability and replicator dynamics. The former highlights the role of mutations and the latter the mechanisms of selection. Moreover, set-valued static and dynamic stability concepts, as well as processes of social evolution, are discussed. Separate background chapters are devoted to noncooperative game theory and the theory of ordinary differential equations. There are examples throughout as well as individual chapter summaries. Because evolutionary game theory is a fast-moving field that is itself branching out and rapidly evolving, Jörgen Weibull has judiciously focused on clarifying and explaining core elements of the theory in an up-to-date, comprehensive, and self-contained treatment. The result is a text for second-year graduate students in economic theory, other social sciences, and evolutionary biology. The book goes beyond filling the gap between texts by Maynard-Smith and Hofbauer and Sigmund that are currently being used in the field. Evolutionary Game Theory will also serve as an introduction for those embarking on research in this area as well as a reference for those already familiar with the field. Weibull provides an overview of the developments that have taken place in this branch of game theory, discusses the mathematical tools needed to understand the area, describes both the motivation and intuition for the concepts involved, and explains why and how it is relevant to economics.
not gentle to the capitalists" (Schumpeter, 1991). Thus, by instead portraying the conflict between entreprenuerial activity and the sociology of the modern state, he came quite close to the analysis carried out by Thorstein Veblen some decades earlier, who emphasized the conflict between p- gressive technology and the institutions of a contemporary "predatory dynastic State of early modern times, superficially altered by a suffusion of democratic and parliamentary institutions" (Veblen, 1964, p. 398). Modern neo-Schumpeterian approaches have continued to build on this groundwork provided by their master. During recent years there has been a great upsurge of discussion on technology, innovations, technological regimes, etc. from the dynamic perspective provided by Schumpeter (Dosi, 1984, Rosegger, 1985; Dosi et al., 1988). Thus the search process for (t- poral) extra profits has been stressed and has been used for modelling attempts. The wider institutional framework for technological change and innovation activity has also been strongly developed more recently. Hence emphasis has grown in the study of technological and industrial regimes, path dependency, and the network approach, developed recently, that social relationships structure the opportunities and constraints that face firms and agents that, for example, carry out innovations (Snehota, 1990).
It has always been an important task of economics to assess individual and social welfare. The traditional approach has assumed that the measuring rod for welfare is the satisfaction of the individual’s given and unchanging preferences, but recent work in behavioural economics has called this into question by pointing out the inconsistencies and context-dependencies of human behaviour. When preferences are no longer consistent, we have to ask whether a different measure for individual welfare can, and should, be found. This book goes beyond the level of preference and instead considers whether a hedonistic view of welfare represents a viable alternative, and what its normative implications are. Offering a welfare theory with stronger behavioural and evolutionary foundations, Binder follows a naturalistic methodology to examine the foundations of welfare, connecting the concept with a dynamic theory of preference learning, and providing a more realistic account of human behaviour. This book will be of interest to researchers and those working in the fields of welfare economics, behavioural and evolutionary economics.
With increasing innovations, the economy seems to be changing rapidly at a global scale. Are there any laws governing the incessant process of economic and social transformations? What does economic theory have to say on this change, and how do institutions and our democracies cope with the challenges that come with it? This volume discusses the advances which evolutionary economics has made in exploring questions like these. Leading international experts in the field review its development, outlining across three parts how the evolutionary approach is increasingly expanding into other domains in economics. The first part of the book focuses on the political economy and welfare effects of transformation. The second part discusses how economic theory can be extended to account for the salient features of the process of change. The third and final part deals with the paradigmatic shift that an evolutionary approach implies for economics.
Modern economies never come to rest. From institutions to activities of production, trade, and consumption, everything is locked in processes of perpetual transformation – and so are our daily lives. Why and how do such transformations occur? What can economic theory tell us about these changes and where they might lead? Ulrich Witt’s book discusses why evolutionary concepts are necessary to answer such questions. While economic evolution is in many respects unique, it nonetheless needs to be seen within the broader context of natural evolution. By exploring this complex relationship, Rethinking Economic Evolution demonstrates the significance of an evolutionary economic theory.
The world is in turmoil, the dynamics of political economy seem to have entered a phase where a ‘return to normal’ cannot be expected. Since the financial crisis, conventional economic theory has proven itself to be rather helpless and political decision makers have become suspicious about this type of economic consultancy. This book offers a different approach. It promises to describe political and economic dynamics as interwoven as they are in real life and it adds to that an evolutionary perspective. The latter allows for a long-run view, which makes it possible to discuss the emergence and exit of social institutions. The essays in this volume explore the theoretical and methodological aspects of evolutionary political economy. In part one, the authors consider the foundational contributions of some of the great economists of the past, while the second part demonstrates

the benefits of adopting the methods of computer simulation and agent-based modelling. Together, the contributions to this volume demonstrate the richness, diversity and great explanatory potential of evolutionary political economy. This volume is extremely useful for social scientists in the fields of economics, politics, and sociology who are interested to learn what evolutionary political economy is, how it proceeds and what it can provide.

Neoclassical economics as-sumes that people are highly rational and can reason their way through even the most complex economic problems. In Individual Strategy and Social Structure, Peyton Young argues for a more realistic view in which people have a limited understanding of their environment, are sometimes short-sighted, and occasionally act in perverse ways. He shows how the cumulative experiences of many such individuals coalesce over time into customs, norms, and institutions that govern economic and social life. He develops a theory that predicts how such institutions evolve and characterizes their welfare properties. The ideas are illustrated through a variety of examples, including patterns of residential segregation, rules of the road, claims on property, forms of economic contracts, and norms of equity. The book relies on new results in evolutionary game theory and stochastic dynamical systems theory, many of them originated by the author. It can serve as an introductory text, or be read on its own as a contribution to the study of economic and social institutions.

The central theme of this book is competition treated as an evolutionary process in which the focus is upon economic change and not economic equilibrium. This theme is explored by linking together differences in economic behaviour with the role of markets as co-ordinating institutions. In this picture innovation plays a central role as a primary source of differential behaviour of firms and the purpose of the book is to identify the consequences of these differences for competition and competitive advantage.

Argues that ecologist Charles Darwin's understanding of competition describes economic reality far more accurately than economist Adam Smith's theories ever did.

An exploration of how approaches that draw on evolutionary theory and complexity science can advance our understanding of economics. Two widely heralded yet contested approaches to economics have emerged in recent years: one emphasizes evolutionary theory in terms of individuals and institutions; the other views economies as complex adaptive systems. In this book, leading scholars examine these two bodies of theory, exploring their possible impact on economics. Relevant concepts from evolutionary theory drawn on by the contributors include the distinction between proximate and ultimate causation, multilevel selection, cultural change as an evolutionary process, and human psychology as a product of gene-culture coevolution. Applicable ideas from complexity theory include self-organization, fractals, chaos theory, sensitive dependence, basins of attraction, and path dependence. The contributors discuss a synthesis of complexity and evolutionary approaches and the challenges that emerge. Focusing on evolutionary behavioral economics, and the evolution of institutions, they offer practical applications and point to avenues for future research. Contributors Robert Axtell, Jenna Bednar, Eric D. Beinhocker, Adrian V. Bell, Terence C. Burnham, Julia Chelen, David Colander, Iain D. Couzin, Thomas E. Currie, Joshua M. Epstein, Daniel Fricke, Herbert Gintis, Paul W. Glimcher, John Gowdy, Thorsten Hens, Michael E. Hochberg, Alan Kirman, Robert Kurzban, Leonhard Lades, Stephen E. G. Lea, John E. Mayfield, Mariana Mazzucato, Kevin McCabe, John F. Padgett, Scott E. Page, Karthik Panchanathan, Peter J. Richerson, Peter Schuster, Georg Schwesinger, Rajiv Sethi, Enrico Spolaore, Sven Steinmo, Miriam Teschl, Peter Turchin, Jeroen C. J. M. van den Bergh, Sander E. van der Leeuw, Romain Wacziarg, John J. Wallis, David S. Wilson, Ulrich Witt

'It is difficult to summarize in a short space the extreme richness of this book, which involves arguments taken from physics, philosophy, history of science and epistemology, as well as economic thought and recent developments in econometrics. . . . Louçã's book makes for extremely interesting and useful reading: it provides a solid criticism of the foundations of neoclassical theory and constitutes the unavoidable starting point for any theoretical construction aiming to understand real societies. . . . The vast erudition of the author - who moves easily in many fields of the social and natural sciences - makes the book a mine of information and a valuable source of new ideas.' - Angelo Reati, Review of Political Economy 'This book will be a landmark in the history of economic thought. It is an extremely powerful and original critique of mainstream econometrics, based on a thorough knowledge of its historical origins and its contemporary applications. It will be essential reading for everyone involved in teaching or learning economic theory and model-building. The book also provides new insights into the work of Frisch, Keynes and Schumpeter . . . it is also a very important contribution to philosophy in the social sciences and in particular, to the development of evolutionary theory in economics. The rapid recent growth of interest in evolutionary theory means that the book will be of special interest to those concerned with these exciting new developments.' - Christopher Freeman, SPRU - Science and Technology Policy Research, University of Sussex, UK and Maastricht University, The Netherlands

Evolutionary economics sees the economy as always in motion with change being driven largely by continuing innovation. This approach to economics, heavily influenced by the work of Joseph Schumpeter, saw a revival as an alternative way of thinking about economic advancement as a result of Richard Nelson and Sidney Winter's seminal book, An Evolutionary Theory of Economic Change, first published in 1982. In this long-awaited follow-up, Nelson is joined by leading figures in the field of evolutionary economics, reviewing in detail how this perspective has been manifest in various areas of economic inquiry where evolutionary economists have been active. Providing the perfect overview for interested economists and social scientists, readers will learn how in each of the diverse fields featured, evolutionary economics has enabled an improved understanding of how and why economic progress occurs.

The disruptive impacts of technological innovation on established industrial structures has been one of the distinguishing features of modern capitalism. In this book, four leading figures in the field of Schumpeterian and evolutionary economic theory draw on decades of research to offer a new, 'history-friendly' perspective on the process of creative destruction. This 'history-friendly' methodology models the complex dynamics of innovation, competition and industrial evolution in a way that combines analytical rigour with an acknowledgement of the chaotic nature of history. The book presents a comprehensive analysis of the determinants and patterns of industrial evolution, and investigates its complex dynamics within three key industries: computers, semiconductors, and pharmaceuticals. It will be of great value to scholars and students of innovation and industrial change, from backgrounds as varied as history, economics and management. Its coverage of new methodological tools is also useful for students who are new to evolutionary economic theory.

This book contains the most sustained and serious attack on mainstream, neoclassical economics in more than forty years. Nelson and Winter focus their critique on the basic question of how firms and industries change overtime. They marshal significant objections to the fundamental neoclassical assumptions of profit maximization and market equilibrium, which they find ineffective in the analysis of technological innovation and the dynamics of competition among firms. To replace these assumptions, they borrow from biology the concept of natural selection to construct a precise and detailed evolutionary theory of business behavior. They grant that films are motivated by profit and engage in search for ways of improving profits, but they do not consider them to be profit maximizing. Likewise, they emphasize the tendency for the more profitable firms to drive the less profitable ones out of business, but they do not focus their analysis on hypothetical states of industry equilibrium. The results of their new paradigm and analytical framework are impressive. Not only have they been able to develop more coherent and powerful models of competitive firm dynamics under conditions of growth and technological change, but their approach is compatible with findings in psychology and other social sciences. Finally, their work has important implications for welfare economics and for government policy toward industry.

Joseph Schumpeter’s views on innovation, entrepreneurship and creative destruction are widely cited in many fields of the social sciences, and are influential in policy and decision making, yet they have often been misinterpreted and misunderstood. ‘Schumpeter’s Evolutionary Economics’ fills this void of analysis by introducing novel interpretations of Schumpeter’s five major works, and tracing the development of his intellectual theory and framework. In so doing it places our understanding of Schumpeter on a new and firmer footing. Esben Sloth Andersen was awarded the Gunnar Myrdal Prize for 2010 for ‘Schumpeter’s Evolutionary Economics’. The Myrdal Prize is awarded annually for the best monograph on a theme broadly in accord with the research perspectives of the European Association for Evolutionary Political Economy.

Economic geographers increasingly consider the significance of history in shaping the contemporary socio-economic landscape, and increasingly believe that experiences and competencies, acquired over time by individuals and entities in particular localities, to a large degree determine present configurations as well as future regional trajectories. Attempts to trace, understand, and investigate the pathways from past to present have given rise to the thriving and exciting sub-field of Evolutionary Economic Geography (EEG). EEG highlights the important factors that initiate, inhibit, or consolidate the contextual settings and relationships in which regions and their respective agents, which comprise and shape economic activity and social reproduction, change over time. It has at its core the production and destruction of novelty in space, and the links between innovation and regional economic fortunes. The creation of knowledge, its movement and recombination within different regional ensembles of economic agents and institutions plays a critical role in the evolution of the space-economy. EEG provides a framework to disentangle the complexity of technological change and regional economic development based on a variety of theoretical and methodological approaches. In only a short time, EEG has established itself as a promising and rapidly evolving research framework with its focus on the driving forces of regional development across various scales and its attempt to translate findings into public policy. This book advances the theoretical foundations of EEG, and demonstrates how EEG utilises and operationalises conceptual frameworks, both established and new. Contributions also point to future research avenues and extensions of EEG, attempting to build stronger ties between theory, empirical evidence, and relevance to policy. This book was originally published as a special issue of Regional Studies.

This book explores the question of whether and how meme theory or “memetics” can be fruitfully utilized in evolutionary economics and proposes an approach known as “econommetics” which is a combination of meme theory and complexity theory that has the potential to combat the fragmentation of evolutionary economics while re-connecting the field with cultural evolutionary theory. By studying the intersection of cultural and economic evolution, complexity economics, computational economics, and network science, the authors establish a connection between memetics and evolutionary economics at different levels of investigation. The book first demonstrates how a memetic approach to economic evolution can help to reveal links and build bridges between different but complementary concepts in evolutionary economics. Secondly, it shows how organizational memetics can help to capture the complexity of organizational culture using meme mapping. Thirdly, it presents an agent-based simulation model of knowledge diffusion and assimilation in innovation networks from a memetic perspective. The authors then use agent-based modeling and social network analysis to evaluate the diffusion pattern of the Ice Bucket Challenge as an example of a “viral meme.” Lastly, the book discusses the central issues of agency, creativity, and normativity in the context of econommetics and suggests promising avenues for further research.

Evolutionary theory belongs to the rare species of theories that are simultaneously fundamental and over-arching, implicating as it does numerous life contexts as well as an array of scholarly disciplines. Armed with a profound grasp of evolutionary theory and its implications to social research, Professors Zumbansen and Calliess have mobilized an appropriately diverse and truly stellar group of academics to investigate how this theory may provide new insights about law, economics, and their inter-relations. Cast against an especially broad intellectual backdrop set by the editors, this volume is sure to become a standard reference in literature. Amir N. Licht, Radzyner School of Law, Israel Zumbansen and Calliess have done a wonderful job in assembling papers from the leading scholars in the field, who draw on evolutionary approaches for explaining developments in both economics and the law. Anybody interested in issues of institutional change will be inspired by the wealth of ideas and the diversity of perspectives. Stefan Voigt, University of Hamburg, Germany Law and economics has arguably become one of the most influential theories in contemporary legal theory and adjudication. The essays in this volume, authored by both legal scholars and economists, constitute lively and critical engagements between law and economics and new institutional economics from the perspectives of legal and evolutionary theory. The result is a fresh look at core concepts in law and economics such as institutions , institutional change and market failure that offer new perspectives on the relationship between economic and legal governance. The increasingly transnational dimension of regulatory governance presents lawyers, economists and social scientists with an unprecedented number of complex analytical and conceptual questions. The contributions to this volume engage with legal theory, new institutional economics, economic sociology and evolutionary economics in an interdisciplinary assessment of the capacities and limits of the state, markets and institutions. Drawing as well upon legal sociology and the philosophy of law, the authors expand and transform the known terrain of law and economics by applying evolutionary theory to both law and economics from a domestic and transnational perspective. Legal scholars, evolutionary and regulatory theorists, economists, economic sociologists, economic historians and political scientists will find this cutting-edge volume both challenging and engaging.

David Hamilton is a leader in the American institutionalist school of heterodox economics that emerged after WWII. This volume includes 25 articles written by Hamilton over a period of nearly half a century. In these articles he examines the philosophical foundations and practical problems of economics. The result of this is a unique institutionalist view of how economies evolve and how economics itself has evolved with them. Hamilton applies insight gained from his study of culture to send the message that human actions situated in culture determine our economic situation. David Hamilton has advanced heterodox economics by replacing intellectual concepts from orthodox economics that hinder us with concepts that help us. In particular, Hamilton has helped replace equilibrium with evolution, make-believe with reality, ideological distortion of government with practical use of government, the economy as a product of natural law with the economy as a product of human law and, last, he has helped us replace the

entrepreneur as a hero with the entrepreneur as a real person. These articles provide an alternative to the self-adjusting market. They provide an explanation of how the interaction of cultural patterns and technology determine the evolutionary path of the economic development of a nation. This is not a simple materialist depiction of economic history as some Marxists have advocated, instead Hamilton treats technology and culture as endogenous forces, embedded and inseparable from each other and therefore, economic development. This volume will be of most interest and value to professional economists and graduate students who are looking for an in-depth explanation of the origins and significance of institutional economics.

This two-volume work is intended to map the theoretical heartland of the institutionalist perspective on political economy. Volume I, "Foundations of Institutional Thought", identifies the origins of institutional economics and explores the primary analytical tools in its development. The papers included in Volume II, "Institutional Theory and Policy", consider basic economic processes, institutions for stabilizing and planning economic activities, the role of power and accountability, and emerging global interdependence. Marc R. Tool is the editor of "Journal of Economic Issues".

The growth of evolutionary thinking has had a profound impact on economic theory and related fields such as strategy and technological innovation. An important paradigm that underlies the evolutionary theory of innovation is neo-Darwinian evolution. According to this paradigm, evolution is gradualist and based on the mechanisms of variation, selection, and retention. Since the 1970s, theoretical advancements in evolutionary biology have recognised the central role of punctuated equilibrium, speciation, and exaptation. However, despite their significant influence in evolutionary biology, these advancements have been reflected only partially in evolutionary approaches to economics, strategy, and innovation. The aim of this book is to review these advancements and explore their implications, with a particular emphasis on the role of serendipity and unprestateability in innovation and novelty creation.

It is widely recognised that mainstream economics has failed to translate micro consistently into macro economics and to provide endogenous explanations for the continual changes in the economic system. Since the early 1980s, a growing number of economists have been trying to provide answers to these two key questions by applying an evolutionary approach. This new departure has yielded a rich literature with enormous variety, but the unifying principles connecting the various ideas and views presented are, as yet, not apparent. This 2005 volume brings together fifteen original articles from scholars - each of whom has made a significant contribution to the field - in their common effort to reconstruct economics as an evolutionary science. Using meso economics as an analytical entity to bridge micro and macro economics as well as static and dynamic realms, a unified economic theory emerges.

Recently, evolutionary theories of economic and technological change have attracted a considerable amount of attention which reflects the problems encountered by mainstream analysis of dynamic phenomena and quantitative change. This book, originally published in 1991, develops the debate and draws on the concepts of evolutionary biology, nonequilibrium thermodynamics, systems and organization theory. While recognizing that new technology is not the cause of quantitative change, the editors claim it should play a more central role in economic theory and policy. At the same time, the ground is laid for a more generalized concept of innovation and experimentation and their relation to routine activities. The book is intended for economists.

Ever since Charles Darwin published The Origin of Species in 1859, genetic evolutionary theory has increasingly served as the foundation for fields that deal with organisms that arose by natural selection. This thesis argues that economic theory should integrate with Darwinian theory through the creation of a "genetic evolutionary economics". The promise of genetic evolutionary economics is a better understanding of human nature and, consequently, a more accurate and comprehensive economic science. Economic theory rests on a set of assumptions about human nature. These economic axioms concern human genes, but there is no explicit connection between genetic evolution and economic theory. As a result, human behavior and economic predictions of that behavior diverge in a variety of important settings. Why, for example, do most people save too little for the future when economics assumes that they will save enough? Chapter 2 discusses the difficulties inherent in the standard economic approach. Natural selection theory, the chapter argues, is the best tool for refining the axioms of economics. Genetic evolutionary economics allows the derivation of parameters that are intractable with standard economic techniques. There is, for instance, an ancient debate within economics about the role of self-interest in human affairs. Chapter 3 builds a genetic evolutionary model relevant to this issue, and concludes that a Darwinian lens removes many of the apparent paradoxes. Genetic evolutionary economics is a scientific endeavor. As such, it produces specific, testable hypotheses concerning behavior in economically relevant situations. Chapter 4 reports on a theoretical and experimental investigation of gift giving. A genetic evolutionary model organizes the existing data on gift giving and makes novel, testable predictions. Laboratory experiments, performed to test the theory, confirm the evolutionary model's predictions.

Evolutionary Economics: Program and Scope offers a fresh look at the paradigmatic foundations and basic theoretical propositions of economics. Twelve authors - each of them with his own distinct contribution to economics - make a step forward by reinterpreting major areas of micro and macroeconomics in line with modern evolutionary thinking. This volume offers a unified approach to economics that allows recent developments in various strands of Evolutionary Economics to be integrated and major positions of Neoclassical Economics to be reconsidered. The chapters on `Evolutionary Macro Economics' explore macro areas such as the division of labor and knowledge, technology and institutions, population thinking, meso economics, techno-economic trajectories and industrial sectors. By telescoping structure into time, they highlight the processes of structural change and co-evolution between technologies and institutions, and provide a causal-explanatory core for a modern - evolutionary - theory of economic growth and economic development. The chapters on `Evolutionary Micro Economics' offer insights into the knowledge based theories of the firm and take up the issues of cognitive and behavioral routines. The contributions explore the processes of complex human choice, creativity, and adaptation in selective and path-dependent environments. The discussions make an essential contribution to the cognitive and behavioral foundations of a modern institutional economics.

A complete account of evolutionary thought in the social, environmental and policy sciences, creating bridges with biology.

Economics is traditionally taken to be the social science concerned with the production, consumption, exchange, and distribution of wealth and commodities. Economists carefully track the comings and goings of the human household, whether written small (microeconomics) or large (macroeconomics) and attempt to predict future patterns under different situations. However, in constructing their models of economic behavior, economists often lose sight of the actual characteristics and motivations of their human subjects. In consequence, they have found the goal of an explanatory and predictive science to be elusive. Economics as an Evolutionary Science reorients economics toward a more direct appreciation of human nature, with an emphasis on what we have learned from recent advances in evolutionary science. The authors integrate economics and evolution to produce a social science that is rigorous, internally coherent, testable, and consistent with the natural sciences. The authors suggest an expanded definition of "fitness," as in Darwin's survival of the fittest, emphasizing not only the importance of reproduction and the quality of offspring, but also the unique ability of humans to provide material wealth to their children. The book offers a coherent explanation for the recent decline in fertility, which is shown to be consistent with the evolutionary goal of maximizing genetic success. In addition, the authors demonstrate the relevance to economics of several core concepts derived from biologists, including the genetics of parent-offspring conflict, inclusive fitness theory, and the phenomena of R-selection and K-selection. The keystone of their presentation is a cogent critique of the traditional concept of "utility." As the authors demonstrate, the concept can be modified to reflect the fundamental evolutionary principle whereby living things-including human beings-have been selected to behave in a manner that maximizes their genetic representation in future generations. Despite the extraordinary interest in applying

evolutionary biology to other disciplines, Economics as an Evolutionary Science marks the first major attempt at a synthesis of biology and economics. Scholarly yet accessible, this volume offers unique and original perspectives on an entire discipline.

A theoretical study dealing chiefly with matters of definition and clarification of terms and concepts involved in using Darwinian notions to model social phenomena.

Overview and motivation; Organization-theoretic foundations of economic evolutionary theory; Textbook economics revisited; Growth theory; Schumpeterian competition; Economic welfare and policy; Conclusion.

DIVAn exploration of the role of altruism in the discipline of economics /div

Evolutionary game theory is one of the most active and rapidly growing areas of research in economics. Unlike traditional game theory models, which assume that all players are fully rational and have complete knowledge of details of the game, evolutionary models assume that people choose their strategies through a trial-and-error learning process in which they gradually discover that some strategies work better than others. In games that are repeated many times, low-payoff strategies tend to be weeded out, and an equilibrium may emerge.Larry Samuelson has been one of the main contributors to the evolutionary game theory literature. In Evolutionary Games and Equilibrium Selection, he examines the interplay between evolutionary game theory and the equilibrium selection problem in noncooperative games. After providing an overview of the basic issues of game theory and a presentation of the basic models, the book addresses evolutionary stability, the dynamics of sample paths, the ultimatum game, drift, noise, backward and forward induction, and strict Nash equilibria.

This book aims to discern and distinguish the essential features of basic economic theories and compare them with new theories that have arisen in recent years. The book focuses on seminal economic ideas and theories developed mainly in the 1930s to 1950s because their emergence eventually led to new branches of economics. The book describes an alternative analytical framework spreading through the interdisciplinary fields of socioeconophysics and sociodynamics. The focus is on a set of branching or critical points that separate what has gone before from what has followed. W. Brian Arthur used the term “redomaining” when he referred to technological innovation. In the present volume the author aims to re domain economic theories suited for a new social order. Major technological innovations accompany not only changes in the economy and the market but changes in their meaning as well. In particular, the evolution of trading technology has changed the meaning of the “invisible hand.” At the end of the last century, the advent of socioeconophysics became a decisive factor in the emergence of a new economic science. This emergence has coincided with changes in the implications of the economy and the market, which consequently require a redomaining of economic science. In this new enterprise, the joint efforts of many scientists outside traditional economics have brought brilliant achievements such as power law distribution and network analysis, among others. However, the more diverse the backgrounds of economic scientists, the less integrated the common views among them may be, resulting in a sometimes perplexing potpourri of economic terminology. This book helps to mitigate those differences, shedding light on current alternative economic theories and how they have evolved.