Republican values embodied in the French model have lost credibility and await a crisis to shake protectionist France out of its lethargy.

The Future of the Welfare State
Francis G. Castles

This book uses data from 21 OECD countries for the period 1980 to 1998 to test a variety of hypotheses suggesting that contemporary welfare states are in crisis and to establish the factors shaping the trajectory of welfare state development during these years. It assesses the validity of arguments that globalization leads to a ‘race to the bottom’ in social spending and that population ageing poses a threat to public budgets. It finds both of these arguments wanting and, instead, suggests that contemporary welfare states have been converging to a steady state over recent decades. The book also examines the extent to which welfare states across the OECD have been restructured in recent years and whether there are signs of the emergence of a distinctive European ‘social model’. Again, it finds that accounts of substantial welfare state restructuring and of the Europeanization of the welfare state are much exaggerated. Finally, the book identifies a potential threat to the viability of existing societies in a trend to declining fertility throughout the advanced world, but argues that the welfare state in the form of family-friendly policy is actually our best protection against this trend.
Feferman on Gödel and free will
J.R. LUCAS

in Free Will and Modern Science

Published in print: 2011 Published Online: January 2013
Item type: chapter

Publisher: British Academy
DOI: 10.5871/bacad/9780197264898.003.0008

This chapter presents a response to Solomon Feferman's discussion in Chapter 6. Feferman is right to dismiss logical determinism perfunctorily, although it puzzled Aristotle and the mediaeval Schoolmen and many people still. Feferman also gives a careful account of the much-criticized Gödelian argument against mechanism. Like many other critics he highlights the assumption that any plausible mechanical model of the mind must be consistent. It is shown that both Feferman's Formalist-Mechanist Thesis I aand the general mechanist thesis are false.

Income Distribution
Fred Campano and Dominick Salvatore

Published in print: 2006 Published Online: May 2006
Item type: book

Publisher: Oxford University Press
DOI: 10.1093/0195300912.001.0001

Intended as an introductory textbook for advanced undergraduates and first year graduate students, this book leads the reader from familiar basic micro- and macroeconomic concepts in the introduction to not so familiar concepts relating to income distribution in the subsequent chapters. The income concept and household sample surveys are examined first, followed by descriptive statistics techniques commonly used to present the survey results. The commonality found in the shape of the income density function leads to statistical modeling, parameter estimation, and goodness of fit tests. Alternative models are then introduced along with the related summary measures of income distribution, including the Gini coefficient. This is followed by a sequence of chapters that deal with normative issues such as inequality, poverty, and country comparisons. The remaining chapters cover an assortment of topics including: economic development and globalization and their impact on income distribution, redistribution of income, and integrating macroeconomic models with income distribution models.
This book mounts an argument against one of the fundamental tenets of much contemporary philosophy, the idea that we can make sense of reality as existing objectively, independently of our capacities to come to know it. Part One argues that traditional realism can be explicated as a doctrine about truth — that truth is objective, that is, public, bivalent, and epistemically independent. Part Two argues that a form of Hilary Putnam’s model-theoretic argument demonstrates that no such notion of truth can be founded on the idea of correspondence, as explained in model-theoretic terms. Part Three argues that non-correspondence accounts of truth—truth as superassertibility or idealized rational acceptability, formal conceptions of truth, and Tarskian truth also fail to meet the criteria for objectivity. Along the way, it also dismisses the claims of the latter-day views of Putnam, and of similar views articulated by John McDowell, to constitute a new, less traditional, form of realism. The Coda bolsters some of the considerations advanced in Part Three in evaluating formal conceptions of truth, by assessing and rejecting the claims of Robert Brandom to have combined such an account of truth with a satisfactory account of semantic structure. The book concludes that there is no defensible notion of truth that preserves the theses of traditional realism, nor any extant position sufficiently true to the ideals of that doctrine to inherit its title. So the only question remaining is which form of antirealism to adopt.

Illustrates relational approaches to the study of social movements and collective action. Contributors analyse most recent developments in the analysis of the role of networks as facilitators or constraints of individual recruitment, various forms of interorganizational networks, and the relationship between social networks and the political context in which social movements operate. They also relate the growing attention to social networks by social movement analysis to broader theoretical debates. Both quantitative and qualitative network analysis
are considered, and attention is paid to the time dimension and the evolution of networks, through both simulation models and empirical data. Empirical chapters cover both contemporary and historical episodes of collective action, in reference to authoritarian as well as progressive, left-libertarian movements. Chapters focusing on individual networks specify different effects of network embeddedness over participation in different types of collective action (Passy, Anheier). Interorganizational relations are explored by looking at leadership dynamics (Diani), the relationship between categorical traits and network position within coalitions (Ansell), and the role of individuals in linking different organizations both synchronically and diachronically (Osa). Network approaches to the political process illustrate shifts in alliance and conflict networks at a time of regime change (Tilly and Wood), the evolution of social networks during protest cycles (Oliver and Myers), and the role of local elites in shaping protest networks in the community (Broadbent). Theoretical chapters discuss network perspectives on social movements in relation to recent theoretical developments in rational choice theory (Gould), cultural analysis (Mische), and the analysis of social mechanisms (McAdam). A radical case is also made for a reorientation of the whole social movement agenda along network lines (Diani).

Reflective Democracy

Robert E. Goodin

Democracy used to be seen as a relatively mechanical matter of merely adding up everyone's votes in free and fair elections. That mechanistic model has many virtues, among them allowing democracy to 'track the truth', where purely factual issues are all that is at stake. Political disputes invariably mix facts with values, however, and then it is essential to listen to what people are saying rather than merely note how they are voting. The great challenge is how to implement that deliberative ideal among millions of people at once. In this book, Goodin offers a solution: 'democratic deliberation within'. Building on models of ordinary conversational dynamics, he suggests that people simply imagine themselves in the position of various other people they have heard or read about and ask, 'What would they say about this proposal'? Informing the democratic imaginary then becomes the key to making deliberations more reflective—more empathetic, more considered, and more expansive across time and distance. After an introductory chapter, the book has eleven further chapters arranged in three sections:
Preference Democracy (two chapters); Belief Democracy (four chapters); and Value Democracy (five chapters, including a conclusion).

Beyond Varieties of Capitalism
Bob Hancké, Martin Rhodes, and Mark Thatcher (eds)

Since the early 1990s, Europe's economies have been facing several new challenges: the 1992 single market programme, the collapse of the Berlin wall and eastward enlargement, and monetary unification. Building on the influential Varieties of Capitalism (VoC) perspective, this book critically analyses these developments in the European political economy and their effects on the continental European economies. The chapters include debate about how VoC can help understand the political-economic challenges that Europe is facing today, and how understanding these new challenges can in turn enrich and enhance the VoC perspective. Thematically, the contributions to this volume are organised in four sections: how the macro-economics of EMU influenced different European models of capitalism; how the Single Market programme was received in the different institutional regimes in European capitalism; how welfare and labour market reforms are debated and implemented; and how European capitalism travelled east after 1989. The book aims to demonstrate that the VoC approach remains — as the editors put it in their introduction — a rich seam to mine, capable of accommodating new developments, and theoretically flexible enough to branch out into new arguments.

Modeling Credit Markets
Phillippe Aghion and Abhijit Banerjee

One of the core assumptions of the neoclassical model is that there is a single market interest rate and every firm invests to the point where their marginal product is equal to this rate. There is a large body of research showing that this neoclassical postulate often does a very poor job of describing reality. It is shown that there seems to be clear evidence that the typical firm, at least in the developing world, has a
marginal product which is substantially above the market interest rate. This suggests that the firm cannot borrow as much as it wants at the going market rate. In other words, the supply curve of capital to the firm must be upward sloping, or even vertical (a hard limit on how much the firm can borrow). A simple model is sketched that explains why lenders impose limits on how much firms can borrow.

Social Democracy Inside Out
David Rueda

The analysis in this book disputes entrenched interpretations of the comparative political economy of industrialized democracies. It questions, in particular, the widely-held assumption that social democratic governments will defend the interests of labour. The evidence shows that labour has become split into two clearly differentiated constituencies: those with secure employment (insiders) and those without (outsiders). The book focuses on three policy areas: employment protection (representing the main concern of insiders), and active and passive labour market policies (the main concern of outsiders). The main thrust of the argument is that the goals of social democratic parties are often best served by pursuing policies that benefit only insiders. The implication of the book's insider-outsider model is that social democratic government is associated with higher levels of employment protection legislation but not with labour market policy. The book also argues that there are factors that can reduce insider-outsider differences and weaken their influence on social democratic governments. These hypotheses are explored through the triangulation of different methodologies. The book provides an analysis of surveys and macrodata and a detailed comparison of three case-studies: Spain, the UK, and the Netherlands.

Finite Sample Econometrics
Aman Ullah

This book presents a comprehensive and unified treatment of finite sample theory, and its application to estimators and test statistics used in various econometric models. Time series, cross section, and panel
data models are considered. The results are explored for linear and nonlinear models, as well as models with normal and nonnormal errors. The book contains seven chapters. Chapter 1 presents an introduction to finite sample econometrics. Chapter 2 gives methods of obtaining the moments of econometric statistics. Chapter 3 provides methods for analysing distributions. Finite sample results for various econometric models are discussed in Chapters 4-7.

Flips for 3-folds and 4-folds
Alessio Corti (ed.)

The minimal model program in algebraic geometry is a conjectural sequence of algebraic surgery operations that simplifies any algebraic variety to a point where it can be decomposed into pieces with negative, zero, and positive curvature, in a similar vein as the geometrization program in topology decomposes a three-manifold into pieces with a standard geometry. The last few years have seen dramatic advances in the minimal model program for higher dimensional algebraic varieties, with the proof of the existence of minimal models under appropriate conditions, and the prospect within a few years of having a complete generalization of the minimal model program and the classification of varieties in all dimensions, comparable to the known results for surfaces and 3-folds. This edited collection of chapters, authored by leading experts, provides a complete and self-contained construction of 3-fold and 4-fold flips, and n-dimensional flips assuming minimal models in dimension n-1. A large part of the text is an elaboration of the work of Shokurov, and a complete and pedagogical proof of the existence of 3-fold flips is presented. The book contains a self-contained treatment of many topics that could only be found, with difficulty, in the specialized literature. The text includes a ten-page glossary.

The Structure of Models of Peano Arithmetic
Roman Kossak and James Schmerl

This book gives an account of the present state of research on lattices of elementary substructures and automorphisms of nonstandard models of arithmetic. Major representation theorems are proved, and the important
particular case of countable recursively saturated models is discussed in detail. All necessary technical tools are developed. The list includes: constructions of elementary simple extensions; a partial classification of arithmetic types, in particular Gaifman's theory of definable types; forcing in arithmetic; elements of the Kirby-Paris combinatorial theory of cuts; Lascar's generic automorphisms; and applications of Abramson and Harrington's generalization of Ramsey's theorem. There are also chapters discussing \( \omega_1 \) models with interesting second order properties, and a chapter on order types of nonstandard models.

Conclusion
Mark Tatham and Katherine Morton

in Expression in Speech: Analysis and Synthesis

Published in print: 2003 Published Online: September 2007
Publisher: Oxford University Press
DOI: 10.1093/acprof:oso/9780199250677.003.0018
Item type: chapter

The book concludes with a brief summary of the approach to modelling speech production and perception. The relationship between linguistic and biological modelling is emphasized. Focus is given to the wrapper model and the way in which speech production and perception are probably tightly integrated in the human being, and certainly usefully modelled as such.

Computational Methods for the Study of Dynamic Economies
Ramon Marimon and Andrew Scott (eds)

Published in print: 2001 Published Online: November 2003
Publisher: Oxford University Press
DOI: 10.1093/0199248273.001.0001
Item type: book

Macroeconomics increasingly uses stochastic dynamic general equilibrium models to understand theoretical and policy issues. Unless very strong assumptions are made, understanding the properties of particular models requires solving the model using a computer. This volume brings together leading contributors in the field who explain in detail how to implement the computational techniques needed to solve dynamic economics models. It is based on lectures presented at the 7th Summer School of the European Economic Association on computational methods for the study of dynamic economies, held in 1996. A broad spread of techniques is covered, and their application to a wide range of subjects discussed. The book provides the basics of a tool kit that researchers and graduate students can use to solve and
analyse their own theoretical models. It is oriented towards economists who already have the equivalent of a first year of graduate studies or to any advanced undergraduates or researchers with a solid mathematical background. No competence with writing computer codes is assumed. After an introduction by the editors, it is arranged in three parts: I Almost linear methods; II Nonlinear methods; and III Solving some dynamic economies.

An Introduction to Auction Theory
Flavio M. Menezes and Paulo K. Monteiro

Published in print: 2004 Published Online: April 2005
Item type: book

This book presents an in-depth discussion of the auction theory. It introduces the concept of Bayesian Nash equilibrium and the idea of studying auctions as games. Private, common, and affiliated values models and multi-object auction models are described. A general version of the Revenue Equivalence Theorem is derived and the optimal auction is characterized to relate the field of mechanism design to auction theory.

Numerical Methods for Structured Markov Chains
Dario A. Bini, Guy Latouche, and Beatrice Meini

Published in print: 2005 Published Online: September 2007
Item type: book

The book deals with the numerical solution of structured Markov chains which include M/G/1 and G/M/1-type Markov chains, QBD processes, non-skip-free queues, and tree-like stochastic processes and has a wide applicability in queueing theory and stochastic modeling. It presents in a unified language the most up to date algorithms, which are so far scattered in diverse papers, written with different languages and notation. It contains a thorough treatment of numerical algorithms to solve these problems, from the simplest to the most advanced and most efficient. Nonlinear matrix equations are at the heart of the analysis of structured Markov chains, they are analysed both from the theoretical, from the probabilistic, and from the computational point of view. The set of methods for solution contains functional iterations, doubling methods, logarithmic reduction, cyclic reduction, and subspace iteration, all are described and analysed in detail. They are also adapted to interesting specific queueing models coming from applications. The book also offers
a comprehensive and self-contained treatment of the structured matrix tools which are at the basis of the fastest algorithmic techniques for structured Markov chains. Results about Toeplitz matrices, displacement operators, and Wiener-Hopf factorizations are reported to the extent that they are useful for the numerical treatment of Markov chains. Every and all solution methods are reported in detailed algorithmic form so that they can be coded in a high-level language with minimum effort.

Set Theory
John L. Bell

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Item type: book

This is the third edition of a well-known graduate textbook on Boolean-valued models of set theory. The aim of the first and second editions was to provide a systematic and adequately motivated exposition of the theory of Boolean-valued models as developed by Scott and Solovay in the 1960s, deriving along the way the central set theoretic independence proofs of Cohen and others in the particularly elegant form that the Boolean-valued approach enables them to assume. In this edition, the background material has been augmented to include an introduction to Heyting algebras. It includes chapters on Boolean-valued analysis and Heyting-algebra-valued models of intuitionistic set theory.

Expression in Speech
Mark Tatham and Katherine Morton

Published in print: 2003 Published Online: September 2007
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Item type: book

This book is about the nature of expression in speech. It is a comprehensive exploration of how such expression is produced and understood, and of how the emotional content of spoken words may be analysed, modelled, tested, and synthesized. Listeners can interpret tone-of-voice, assess emotional pitch, and effortlessly detect the finest modulations of speaker attitude; yet these processes present almost intractable difficulties to the researchers seeking to identify and understand them. In seeking to explain the production and perception of emotive content, the book reviews the potential of biological and cognitive models. It examines how the features that make up the speech production and perception systems have been studied by biologists, psychologists, and linguists, and assesses how far biological, behavioural,
and linguistic models generate hypotheses that provide insights into the nature of expressive speech.

Thiele: Pioneer in Statistics
Steffen L. Lauritzen

Thorvald Nicolai Thiele was a brilliant Danish researcher of the 19th century. He was a professor of Astronomy at the University of Copenhagen and the founder of Hafnia, the first Danish private insurance company. Thiele worked in astronomy, mathematics, actuarial science, and statistics, his most spectacular contributions were in the latter two areas, where his published work was far ahead of his time. This book is concerned with his statistical work. It evolves around his three main statistical masterpieces, which are now translated into English for the first time: 1) his article from 1880 where he derives the Kalman filter; 2) his book from 1889, where he lays out the subject of statistics in a highly original way, derives the half-invariants (today known as cumulants), the notion of likelihood in the case of binomial experiments, the canonical form of the linear normal model, and develops model criticism via analysis of residuals; and 3) an article from 1899 where he completes the theory of the half-invariants. This book also contains three chapters, written by A. Hald and S. L. Lauritzen, which describe Thiele's statistical work in modern terms and puts it into an historical perspective.