Does globalization erode the nation state's capacity to act? Are nation states forced to change their policies even if this goes against the democratic will of their electorates? How does government action change under conditions of globalization? Questions like these have not only featured highly in political debates in recent years, but also in academic discourse. This book contributes to that debate. The general question it addresses is whether globalization leads to policy convergence — a central, but contested topic in the debate, as theoretical arguments can be advanced both in favour of and against the likelihood of such a development. More specifically, the book contains detailed empirical case studies of four countries (the United States, the United Kingdom, Germany, and Switzerland) in a policy area where state action has been particularly challenged by the emergence of world-wide, around-the-clock financial markets in the last few decades, namely that of the regulation and supervision of the banking industry. Based on careful analysis of historical developments, specific challenges, the character of policy networks and institutions, and their interaction in the political process, this book argues that nation states still possess considerable room for manoeuvre in pursuing their policies. Even if they choose supranational coordination and cooperation, their national institutional configurations still function as filters in the globalization process.
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).

Beyond Regression: The Need for Predictive Models
Rein Taagepera
in Making Social Sciences More Scientific: The Need for Predictive Models
Published in print: 2008 Published Online: September 2008
DOI: 10.1093/
Item type: chapter

Society needs more from social sciences than they have delivered, and this book offers openings. To the society at large, quantitative social scientists presently seem no better at prediction than qualitative historians, philosophers, and journalists — they just look more boring. Computers could be a boon to social sciences, but they have turned out a curse in disguise, by enabling people with insufficient understanding of scientific process to use canned computer programs and grind out reams
of numbers parading as “results,” to be printed — and hardly ever used again. One may discard this book on the basis of errors of detail, but the problems it points out will still be there. Unless corrected, they will lead to a Ptolemaic dead end.

The Labyrinths of Information
Claudio Ciborra

The use of information and communication technologies (ICT) in organizations and the management of their impact has been the traditional domain of computer specialists and management consultants. The former have offered multiple ways to represent, model, and build applications that streamline and accelerate data flows, while the latter have been busy linking the deployment of ICTs with strategy and the redesign of business processes. This book takes quite a different approach altogether. It uses a string of metaphors, such as Bricolage, Krisis, Gestell, etc., to place a concern for human existence and our working lives at the centre of the study of ICTs and their diffusion in business organizations, and looks at our practices, improvisations, and moods. It draws upon the author’s own extensive research and consulting experience to throw a fresh light on some key questions: why are systems ambiguous? Why do they not give us more time to do things? Is there strategic value in tinkering even in high-tech settings? What is the value of age-old practices in dealing with new technologies? What is the role of moods and affections in influencing action and cognition? The book presents an alternative to the current approaches in management, software-engineering, and strategy.

Evidence, Inference and Enquiry
Philip Dawid, William Twining, and Mimi Vasilaki (eds)

Evidence — its nature and interpretation — is the key to many topical debates and concerns such as global warming, evolution, the search for weapons of mass destruction, DNA profiling, and evidence-based medicine. In 2004, University College London launched a cross-disciplinary research programme ‘Evidence, Inference and Enquiry’ to explore the question: ‘Can there be an integrated multidisciplinary
science of evidence?’ While this question was hotly contested and no clear final consensus emerged, much was learned on the journey. This book, based on the closing conference of the programme held at the British Academy in December 2007, illustrates the complexity of the subject, with seventeen chapters written from a diversity of perspectives including Archaeology, Computer Science, Economics, Education, Health, History, Law, Psychology, Philosophy, and Statistics. General issues covered include principles and systems for handling complex evidence, evidence for policy-making, and human evidence-processing, as well as the very possibility of systematising the study of evidence.

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

Published in print: 2005 Published Online: September 2007
Published Online: DOI: 10.1093/acprof:oso/9780198527688.001.0001
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.
Numerical Methods for Image Registration
Jan Modersitzki
Published in print: 2003 Published Online: September 2007
Publisher: Oxford University Press
DOI: 10.1093/acprof:oso/9780198528418.001.0001
Item type: book

This text provides an introduction to the theoretical, practical, and numerical aspects of image registration, with special emphasis on medical imaging. Given a so-called reference and template image, the goal of image registration is to find a reasonable transformation such that the transformed template is similar to the reference image. Image registration is utilized whenever information obtained from different viewpoints times and sensors needs to be combined or compared, and unwanted distortion needs to be eliminated. The book provides a systematic introduction to image registration and discusses the basic mathematical principles, including aspects from approximations theory, image processing, numerics, optimization, partial differential equations, and statistics, with a strong focus on numerical methods. A unified variational approach is introduced and enables a separation into data-related issues like image feature or image intensity-based similarity measures, and problem inherent regularization like elastic or diffusion registration. This general framework is further used for the explanation and classification of established methods as well as the design of new schemes and building blocks including landmark-, thin-plate-spline, mutual information, elastic, fluid, demon, diffusion, and curvature registration.

Image to Interpretation
Melissa Terras
Published in print: 2006 Published Online: September 2007
Publisher: Oxford University Press
DOI: 10.1093/acprof:oso/9780199204557.001.0001
Item type: book

The ink and stylus tablets discovered at the Roman fort of Vindolanda are a unique resource for scholars of ancient history. However, the stylus tablets in particular are extremely difficult to read. This book details the development of what appears to be the first system constructed to aid experts in the process of reading an ancient document, exploring the extent to which techniques from artificial intelligence can be used to develop a system that could aid historians in reading the stylus texts. Using knowledge elicitation techniques (borrowed from artificial intelligence and engineering science), a model is proposed for how experts construct a reading of a text. A prototype system is presented.
that can read in image data and produce realistic and plausible textual interpretations of the writing that appears on the documents. Incorporating knowledge elicited from experts working on the texts, and utilizing image processing techniques developed in engineering science to analyze the stylus tablets, the book includes a corpora of letter forms generated from the Vindolanda text corpus, and a detailed description of the architecture of the system. This research presents the first stages towards developing a cognitive visual system that can propagate realistic interpretations from image data.

The Concept of a Just Peace, or Achieving Peace Through Recognition, Renouncement, and Rule

Pierre Allan and Alexis Keller

in What is a Just Peace?

In this concluding chapter, Allan and Keller posit that Just Peace should be defined as a process resting on four necessary and sufficient conditions: thin recognition whereby the other is accepted as autonomous; thick recognition whereby identities need to be accounted for; renouncement, requiring significant sacrifices from all parties; and rule, the objectification of a Just Peace by a ‘text’ requiring a common language respecting the identities of each, and defining their rights and duties. This approach, based on a language-oriented process amongst directly concerned parties, goes beyond liberal and culturalist perspectives. By moving beyond the idea of a peace founded on norms claiming universal scope, each side of a conflict has a place at the negotiating table to present their own perspective on what justice might entail. This inclusion into the decision-making process helps create the feeling of personal investment in the final negotiated product. In addition, negotiators need to work towards building a novel shared reality as well as a new common language to help foster an enduring harmony between previously clashing peoples.

Electrophysiology of Mind

Michael D. Rugg and Michael G. H. Coles (eds)

Page 6 of 13
This book reviews a productive period of research aimed at connecting brain and mind through the use of scalp-recorded brain potentials to chart the temporal course of information processing in the human brain. The book serves as both as a summary of where we have been and as a pointer of the way ahead. Event-related potential (ERP) methodology has long been used in neuroscience to measure electrical activity in the brain. It has become clear, however, that it can be a powerful tool in studying and illuminating central psychological issues relating to attention, information, processing, dynamics, memory, and language. Linking this technology to newer imaging techniques such as positron emission tomography (PET) and functional magnetic resonance imaging (MRI), it becomes possible to build up a spatial and temporal picture of the brain during the performance of high-level skills. This book provides strong evidence that cognitive psychology can benefit from the use of brain electrical activity.

The Grammar of Words
Geert Booij


This book introduces the reader to the basic methods for the study of the internal structure of words, and to the theoretical issues raised by analyses of word structure concerning the organization of the grammars of natural languages. Data from more than sixty languages are used to illustrate these descriptive and theoretical issues. The book is structured into three main parts. In the first part the basic notions of morphology and morphological analysis are introduced, and attention is given to word formation (derivation and compounding), the basics of inflection, and inflectional systems. The second part, reflecting an important characteristic of this book, is the discussion of the interface between morphology and other modules of the grammar such as phonology, syntax, and semantics. It is shown that the formal structure of complex words is not necessarily isomorphic to their phonological or semantic structure. This book is comprehensive since it also deals, in its third part, with the relation between morphology and mind. Facts concerning the processing of complex words are used as a window on the human mind. Language change in the domain of word structure is also approached from that perspective. In a final summarizing chapter, it is shown how the book has taught a theoretically sophisticated notion ‘word’ and that there are different notions ‘word’ that should be recognized in a proper linguistic analysis. An index and glossary of terms, exercises
(with answers), a language index, and advice for further reading are also provided.

Proliferation of Informal Groups in the Post-Bipolar Era
Jochen Prantl

in The UN Security Council and Informal Groups of States
Published in print: 2006 Published Online: May 2006
Item type: chapter

This chapter examines the question of why informal groups of states proliferated in the post-Cold war era. It argues that the proliferation of groups of friends and contact groups must be analyzed in the context of the mounting pressure on the United Nations' conflict resolution machinery to respond to more complex crises than ever before. Informal groups of states are agents of incremental change, without formally changing the constitutional foundation of the Organization. At the same time, the post-Cold War era has permitted a political context that furthers the trend towards devolution of the substance of crisis management to informal groups of states, whereas the Security Council provides — at least in most cases — the form, that is, the legitimization for state action. The functions of diplomacy and its collective legitimization have become decoupled.

Family Relationships
Catherine A. Salmon and Todd K. Shackelford (eds)
Published in print: 2007 Published Online: September 2007
Item type: book

Kinship ties — the close relationships found within the family — have been a central focus of evolutionary biological analyses of social behavior ever since biologist William Hamilton extended the concept of Darwinian fitness to include an individual's actions benefiting not only his own offspring, but also collateral kin. Evolutionary biologists consider organisms not only reproductive strategists, but also nepotistic strategists. If a person's genes are just as likely to be reproduced in her sister as in her daughter, then we should expect the evolution of sororal investment in the same way as one expects maternal investment. This concept has revolutionized biologists' understanding of social interaction and developmental psychologists' understanding of the family. However, kinship ties have largely been ignored in other areas of psychology,
particularly social psychology. This book illustrates the ways in which an evolutionary perspective can inform our study and understanding of family relationships. It is argued that family psychology is relationship specific: the relationship between mother and daughter is different from that between father and daughter or that between brother and sister or sister and sister. In other words, humans have evolved specialized mechanisms for processing information and motivating behavior that deal with the distinct demands of being a mate, father, mother, sibling, child, or grandparent. Such an evolutionary perspective on family dynamics provides a unique insight into human behavior.

Implicit Learning and Tacit Knowledge

Arthur S. Reber

The book is an extended essay on implicit learning, a topic that emerged in recent years as an important but previously overlooked process. Implicit learning is learning that takes place independent of both the process and products of learning. It occurs without the intention to learn and largely without awareness of the nature of what has been learned. The process is “bottom-up”; information is acquired automatically when individuals focus attention on complex displays; and the knowledge base is “tacit” and largely opaque to introspection. Examples abound in everyday life, notably natural language learning and the acquisition of the mores of social behavior. A core assumption is that this implicit acquisitional mechanism is a fundamental “root” process that is based on evolutionarily old neurological structures and lies at the heart of the adaptive behavioral repertoire of every complex organism. Firstly, the book outlines the essential features of implicit learning that have emerged from controlled studies carried out over the past several decades. It also presents alternative perspectives that have been proposed and accommodates these views to the proposed theoretical model. It then structures the literature within the framework of Darwinian evolutionary biology that lies at the core of the theory. Finally, it shows how the evolutionary stance makes a series of predictions about how functions based on implicit mechanisms should differ from those mediated by consciousness.
We give a brief introduction to modelling in mathematical neuroscience, to stochastic processes, and stochastic differential equations as well as an overview of the book.

Temporal lags in the response of populations to climatic variation associated with the NAO are widespread in both terrestrial and marine environments. The existence of both immediate and lagged responses to climate presents conceptual and analytical challenges to the study of the ecological consequences of large-scale climatic variability, as well as to the ability to forecast population responses to future climatic change. This chapter discusses the influence of atmospheric processes, life history, and trophic interactions on time lags. It argues that the existence of time lags in a multitude of systems can be exploited to one obvious advantage: prediction. Hence, an empirically-derived basis for improving conceptual and analytical understanding of lagged responses to climate should prove valuable in the pursuit of scientifically robust predictions of population and community response to future climate changes.

This book provides an introduction to the cognitive science of religion, a new discipline of study that explains the origins and persistence of religious ideas and behavior on the basis of evolved mental structures.
and functions of the human brain. Belief in gods and the social formation of religion have their genesis in biology — in powerful, often hidden, processes of cognition that all humans share. Arguing that we cannot understand what we think until we first understand how we think, the book describes ways in which evolution by natural selection molded the modern human mind, resulting in mental modularity, innate intelligences, and species-typical modes of thought. The book details many of the adapted features of the brain — agent detection, theory of mind, social cognition, and others — focusing on how mental endowments inherited from our ancestral past lead people to naturally entertain religious ideas, such as the god concepts that are ubiquitous the world over. In addition to introducing the major themes, theories, and thinkers in the cognitive science of religion, the book also advances the current discussion by moving beyond explanations for individual religious beliefs and behaviors to the operation of culture and religious systems. Drawing on dual-process models of cognition developed in social psychology, the book argues that the same cognitive constraints that shape human thought also work as a selective force on the content and durability of religions.

Economic Inequality and Political Representation
Larry M. Bartels

in The Unsustainable American State
Published in print: 2009 Published Online: July 2012
Published online and print ISBN: 9780195392135 eISBN: 9780199852543
DOI: 10.1093/acprof:oso/9780195392135.003.0007
Item type: chapter

This chapter reveals how increasing economic inequality among Americans engenders political inequality as well. Though every citizen should equally count in the area of politics and government in a democratic state, this chapter argues that affluent constituents are given more importance by public officials. Taken into account representation by US senators in the late 1980s and early 1990s, senators during this period were more responsive to the views of the elite while those with lower incomes were not considered in the policy making process. Though various reasons are presented on the reason for this disparity, the chapter reflects on the idea that affluent constituent's propensity to contribute to political campaigns are greater than less affluent ones.
This chapter first presents a conventional and non-conventional characterization of a thermoelastic process, giving four mixed initial-boundary value problems (displacement-temperature and stress-heat flux) in the both theories. These problems contain as special cases the so-called natural problems: a natural displacement-temperature problem in the L-S or G-L theory, a natural stress-heat flux problem in the L-S theory, a natural stress-temperature problem in the G-L theory. This is followed by a discussion, made rigorous through several theorems, of the relations among descriptions of a thermoelastic process in terms of various pairs of thermomechanical variables.

Democracy in the Making

Kathleen M. Blee

Democracy in the Making looks at how activist groups form. By closely observing the dynamics of 60 emerging activist efforts on the left and right over a three year period in Pittsburgh, it assesses the possibilities and limits of grassroots activism as a democratizing force in modern U.S. society. The book presents two broad findings. First, very early times matter. What an activist group initially does, even what it talks about, has long-lasting consequences. Early actions set up assumptions about how activist groups should operate that are difficult to dismantle or even perceive. Second, activist groups make decisions within a changing sense of what is possible. Over time, their sense of possibilities tends to narrow and options for action become more restricted. When action is too constrained, groups either collapse or dramatically reshape their sense of possibilities. By taking a close look at how ordinary people come together to change society, this book pinpoints both the potentials and the boundaries of democratization in grassroots activism. It shows how activism can broaden people’s sense of political engagement but also how activist groups can become mired in dysfunctional and undemocratic patterns that their members may dislike but don’t know how to change.