

The Transformation Myth

Individual and Collective Memory Consolidation

Ground-Truthing, Programming, Formulating

Case Studies and Strategies

This book addresses two significant research areas in an interdependent fashion. It is first of all a comprehensive but concise text that covers the recently developed and widely applicable methods of qualitative choice analysis, illustrating the general theory through simulation models of automobile demand and use. It is also a detailed study of automobile demand and use, presenting forecasts based on these powerful new techniques. The book develops the general principles that underlie qualitative choice models that are now being applied in numerous fields in addition to transportation, such as housing, labor, energy, communications, and criminology. The general form, derivation, and estimation of qualitative choice models are explained, and the major models - logit, probit, and GEV - are discussed in detail. And continuous/discrete models are introduced. In these, qualitative choice methods and standard regression techniques are combined to analyze situations that neither alone can accurately forecast. Summarizing previous research on auto demand, the book shows how qualitative choice methods can be used by applying them to specific auto-related decisions as the aggregate of individuals' choices. The simulation model that is constructed is a significant improvement over older models, and should prove more useful to agencies and organizations requiring accurate forecasting of auto demand and use for planning and policy development. The book concludes with an actual case study based on a model designed for the investigations of the California Energy Commission. Kenneth Train is Visiting Associate Professor in Economics at the University of California, Berkeley, and Director of Economic Research at Cambridge Systematics, Inc., also in Berkeley. Qualitative Choice Analysis is included in The MIT Press Transportation Studies Series, edited by Marvin L. Manheim.

Firms with superior IT governance have more than 25% higher profits than firms with poor governance given the same strategic objectives. These top performers have custom designed IT governance for their strategies. Just as corporate governance aims to ensure quality decisions about all corporate assets, IT governance links IT decisions with company objectives and monitors performance and accountability. Based on a study of 250 enterprises worldwide, IT Governance shows how to design and implement a system of decision rights that will transform IT from an expense to a profitable investment. How companies can adapt in an era of continuous disruption: a guide to responding to such acute crises as COVID-19. When COVID-19 hit, businesses had to respond almost instantaneously—shifting employees to remote work, repairing broken supply chains, keeping pace with dramatically fluctuating customer demand. They were forced to adapt to a confluence of multiple disruptions inextricably linked to a longer-term, ongoing digital disruption. This book shows that companies that use disruption as an opportunity for innovation emerge from it stronger. Companies that merely attempt to “weather the storm” until things go back to normal (or the next normal), on the other hand, miss an opportunity to thrive. The authors, all experts on business and technology strategy, show that transformation is not a one-and-done event, but a continuous process of adapting to a volatile and uncertain environment. Drawing on five years of research into digital disruption—including a series of interviews with business leaders conducted during the COVID-19 crisis—they offer a framework for understanding disruption and tools for navigating it. They outline the leadership traits, business principles, technological infrastructure, and organizational building blocks essential for adapting to disruption, with examples from real-world organizations. Technology, they remind readers, is not an end in itself, but enables the capabilities essential for surviving an uncertain future: nimbleness, scalability, stability, and optionality.

An argument that individuals and collectives form memories by analogous processes and a case study of collective retrograde amnesia. We form individual memories by a process known as consolidation: the conversion of immediate and fleeting bits of information into a stable and accessible representation of facts and events. These memories provide a version of the past that helps us navigate the present and is critical to individual identity. In this book, Thomas Anastasio, Kristen Ann Ehrenberger, Patrick Watson, and Wenyi Zhang propose that social groups form collective memories by analogous processes. Using facts and insights from neuroscience, psychology, anthropology, and history, they describe a single process of consolidation with analogous—not merely comparable—manifestations on any level, whether brain, family, or society. They propose a three-in-one model of memory consolidation, composed of a buffer, a relator, and a generalizer, all within the consolidating entity, that can explain memory consolidation phenomena on individual and collective levels. When consolidation is disrupted by traumatic injury to a brain structure known as the hippocampus, memories in the process of being consolidated are lost. In individuals, this is known as retrograde amnesia. The authors hypothesize a “social hippocampus” and argue that disruption at the collective level can result in collective retrograde amnesia. They offer the Chinese Cultural Revolution (1966–1976) as an example of trauma to the social hippocampus and present evidence for the loss of recent collective memory in mainland Chinese populations that experienced the Cultural Revolution.

Case Studies in Common Lisp

Learning with Cases

Fundamentals of Machine Learning for Predictive Data Analytics, second edition

Business Dynamics: Systems Thinking and Modeling for a Complex World with CD-ROM

IT Governance

The Conspiracy Against Science

Blueprints for Modern Living

A guide to principles and methods for the management, archiving, sharing, and citing of linguistic research data, especially digital data. "Doing language science" depends on collecting, transcribing, annotating, analyzing, storing, and sharing linguistic research data. This volume offers a guide to linguistic data management, engaging with current trends toward the transformation of linguistics into a more data-driven and reproducible scientific endeavor. It offers both principles and methods, presenting the conceptual foundations of linguistic data management and a series of case studies, each of which demonstrates a concrete application of abstract principles in a current practice. In part 1, contributors bring together knowledge from information science, archiving, and data stewardship relevant to linguistic data management. Topics covered include implementation principles, archiving data, finding and using datasets, and the valuation of time and effort involved in data management. Part 2 presents snapshots of practices across various subfields, with each chapter presenting a unique data management project with generalizable guidance for researchers. The Open Handbook of Linguistic Data Management is an essential addition to the toolkit of every linguist, guiding researchers toward making their data FAIR: Findable, Accessible, Interoperable, and Reusable.

A practical guide to neural data analysis techniques that presents sample datasets and hands-on methods for analyzing the data. As neural data becomes increasingly complex, neuroscientists now require skills in computer programming, statistics, and data analysis. This book teaches practical neural data analysis techniques by presenting example datasets and developing techniques and tools for analyzing them. Each chapter begins with a specific example of neural data, which motivates mathematical and statistical analysis methods that are then applied to the data. This practical, hands-on approach is unique among data analysis textbooks and guides, and equips the reader with the tools necessary for real-world neural data analysis. The book begins with an introduction to MATLAB, the most common programming platform in neuroscience, which is used in the book. (Readers familiar with MATLAB can skip this chapter and might decide to focus on data type or method type.) The book goes on to cover neural field data and spike train data, spectral analysis, generalized linear models, coherence, and cross-frequency coupling. Each chapter offers a stand-alone case study that can be used separately as part of a targeted investigation. The book includes some mathematical discussion but does not focus on mathematical or statistical theory, emphasizing the practical instead. References are included for readers who want to explore the theoretical more deeply. The data and accompanying MATLAB code are freely available on the authors' website. The book can be used for upper-level undergraduates or graduate courses or as a professional reference.

How do we make the most of the greatest global shift in the world of work for a century and radically redesign the way we work—forever? Professor Lynda Gratton is the global thought-leader on the future of work. Drawing on thirty years of research into the technological, demographic, cultural, and societal trends that are shaping work and building on what we learned through our experiences of the pandemic, Gratton presents her innovative four-step framework for redesigning work that will help you: Understand your people and what drives performance Reimagine creative new ways to work Model and test these approaches within your organization Act and create to ensure your redesign has lasting benefits Gratton presents real-world case studies that show companies grappling with work challenges. These include the global bank HSBC, which built a multidisciplinary team to understand the employee experience; the Japanese technology company Fujitsu, which reimagined three kinds of “perfect” offices; and the Australian telecommunications company Telstra, which established new roles to coordinate work across the organization. Whether you’re working in a small team or running a multinational, Redesigning Work is the definitive book on how to transform your organization and make hybrid working work for you.

The second edition of a comprehensive introduction to machine learning approaches used in predictive data analytics, covering both theory and practice. Machine learning is often used to build predictive models by extracting patterns from large datasets. These models are used in predictive data analytics applications including price prediction, risk assessment, predicting customer behavior, and document classification. This introductory textbook offers a detailed and focused treatment of the most important machine learning approaches used in predictive data analytics, covering both theoretical concepts and practical applications. Technical and mathematical material is augmented with explanatory worked examples, and case studies illustrate the application of these models in the broader business context. This second edition covers recent developments in machine learning, especially in a new chapter on deep learning, and two new chapters that go beyond predictive analytics to cover unsupervised learning and reinforcement learning.

Managing Change--a Case Study of the Implementation of the TEAM Program at the MIT Sloan School of Management

The Constitution of Algorithms

Redesigning Work

How to Transform Your Organization and Make Hybrid Work for Everyone

Technology, Design, Practice

Ivory Bridges

A First Course

Scholars from across law and internet and media studies examine the human rights implications of today's platform society. Today such companies as Apple, Facebook, Google, Microsoft, and Twitter play an increasingly important role in how users form and express opinions, encounter information, debate, disagree, mobilize, and maintain their privacy. What are the human rights implications of an online domain managed by privately owned platforms? According to the Guiding Principles on Business and Human Rights, adopted by the UN Human Right Council in 2011, businesses have a responsibility to respect human rights and to carry out human rights due diligence. But this goal is dependent on the willingness of states to encode such norms into business regulations and of companies to comply. In this volume, contributors from across law and internet and media studies examine the state of human rights in today's platform society. The contributors consider the “datafication” of society, including the economic model of data extraction and the conceptualization of privacy. They examine online advertising, content moderation, corporate storytelling around human rights, and other platform practices. Finally, they discuss the relationship between human rights law and private actors, addressing such issues as private companies' human rights responsibilities and content regulation. Contributors Anja Bechmann, Fernando Bermejo, Agnès Callamard, Mikkel Flyverbom, Rikke Frank Jørgensen, Molly K. Land, Tarlach McGonagle, Jens-Erik Mai, Joris van Hoboken, Glen Whelan, Jillian C. York, Shoshana Zuboff, Ethan Zuckerman Open access edition published with generous support from Knowledge Unlatched and the Danish Council for Independent Research.