

Color Science Concepts And Methods Quantitative Data And Formulae

Generalized Linear Mixed Models: Modern Concepts, Methods and Applications presents an introduction to linear modeling using the generalized linear mixed model (GLMM) as an overarching conceptual framework. For readers new to linear models, the book helps them see the big picture. It shows how linear models fit with the rest of the core statistics curriculum and points out the major issues that statistical modelers must consider. Along with describing common applications of GLMMs, the text introduces the essential theory and main methodology associated with linear models that accommodate random model effects and non-Gaussian data. Unlike traditional linear model textbooks that focus on normally distributed data, this one adopts a generalized mixed model approach throughout: data for linear modeling need not be normally distributed and effects may be fixed or random. With numerous examples using SAS® PROC GLIMMIX, this book is ideal for graduate students in statistics, statistics professionals seeking to update their knowledge, and researchers new to the generalized linear model thought process. It focuses on data-driven processes and provides context for extending traditional linear model thinking to generalized linear mixed modeling. See Professor Stroup discuss the book.

This book examines the implications of new communication technologies in the light of the most recent work in social and cultural theory and argues that new developments in electronic media, such as the Internet and Virtual Reality, justify the designation of a "second media age".

This book covers systematically and in a simple language the mathematical and physical foundations of controlling deterministic and stochastic evolutionary processes in systems with a high degree of complexity. Strong emphasis is placed on concepts, methods and techniques for modelling, assessment and the solution or estimation of control problems in an attempt to understand the large variability of these problems in several branches of physics, chemistry and biology as well as in technology and economics. The main focus of the book is on a clear physical and mathematical understanding of the dynamics and kinetics behind several kinds of control problems and their relation to self-organizing principles in complex systems. The book is a modern introduction and a helpful tool for researchers, engineers as well as post-docs and graduate students interested in an application oriented control theory and related topics.

Security and authentication issues are surging to the forefront of the research realm in global society. As technology continues to evolve, individuals are finding it easier to infiltrate various forums and facilities where they can illegally obtain information and access. By implementing biometric authentications to these forums, users are able to prevent attacks on their privacy and security. Biometrics: Concepts, Methodologies, Tools, and Applications is a multi-volume publication highlighting critical topics related to access control, user identification, and surveillance technologies. Featuring emergent research on the issues and challenges in security and privacy, various forms of user authentication, biometric applications to image processing and computer vision, and security applications within the field, this publication is an ideal reference source for researchers, engineers, technology developers, students, and security specialists.

Strengthening Forensic Science in the United States

Data Science Methods and Tools for Research and Practice

Principles, Methods, and Practices

Concepts, Techniques, and Instrumentation

Social Science Concepts

Field Book for Describing and Sampling Soils

A Framework for K-12 Science Education

A fully revised edition of the classic reference on concepts and their role in social science research Social Science Concepts and Measurement offers an updated look at the theory and methodology of concepts for the social sciences. Emphasizing that most concepts are multilevel and multidimensional, this revised edition continues to bring the qualitative and quantitative closer together, with new chapters devoted to scaling, aggregation, and the methodological links between the semantics of concepts and numeric measures. In addition, it stresses that concepts are used for description and causal inference, and contain normative judgments. Initial chapters focus on conceptualization, followed by chapters on issues of measurement. The textbook examines concepts in the international arena (such as the global performance indicators used by international organizations like the UN and the World Bank), as well as classic paired concepts such as poverty and wealth, democracy and authoritarianism, and war and peace. Additionally, it explores such topics as typologies, hybrid concepts, and how complex concepts constitute complex theories. The volume serves as a guide to the methodology of concepts in the classroom and is accompanied by more than two hundred exercises. Social Science Concepts and Measurement is an indispensable resource for graduate students and scholars.

Discusses the best methods of learning, describing how rereading and rote repetition are counterproductive and how such techniques as self-testing, spaced retrieval, and finding additional layers of information in new material can enhance learning.

To develop theories and research designs requires concepts. Gary Goertz provides advice on the construction and use of social science concepts and their use in case selection and theories. He also cites examples from political science and sociology to illustrate the theoretical and practical issues of concept construction and use.

Big Data and Social Science: Data Science Methods and Tools for Research and Practice, Second Edition shows how to apply data science to real-world problems, covering all stages of a data-intensive social science or policy project. Prominent leaders in the social sciences, statistics, and computer science as well as the field of data science provide a unique perspective on how to apply modern social science research principles and current analytical and computational tools. The text teaches you how to identify and collect appropriate data, apply data science methods and tools to the data, and recognize and respond to data errors, biases, and limitations. Features Takes an accessible, hands-on approach to handling new types of data in the social sciences Presents the key data science tools in a non-intimidating way to both social and data scientists while keeping the focus on research questions and purposes Illustrates social science and data science principles through real-world problems Links computer science concepts to practical social science research Promotes good scientific practice Provides freely available data and code as well as practical programming exercises through Binder and GitHub New to the Second Edition Increased use of examples from different areas of social sciences New chapter on dealing with Bias and Fairness in Machine Learning models Expanded chapters focusing on Machine Learning and Text Analysis Revamped hands-on Jupyter notebooks to reinforce concepts covered in each chapter This classroom-tested book fills a major gap in graduate- and professional-level data science and social science education. It can be

used to train a new generation of social data scientists to tackle real-world problems and improve the skills and competencies of applied social scientists and public policy practitioners. It empowers you to use the massive and rapidly growing amounts of available data to interpret economic and social activities in a scientific and rigorous manner.

Concepts, Methods and Agronomic Applications

The Art and Science of Embodied Research Design

Powercolor

Color Science Concepts and Methods

Landscape Ecology

Biometrics: Concepts, Methodologies, Tools, and Applications

The Second Media Age

This paperback reprint of a classic book deals with all phases of light, color, and color vision, providing comprehensive data, formulas, concepts, and procedures needed in basic and applied research in color vision, colorimetry, and photometry.

"Animal Behavior: Concepts, Methods, and Applications, takes a conceptual approach that highlights the process of science and the real-world applications of animal behavior research"--

Scores of talented and dedicated people serve the forensic science community, performing vitally important work. However, they are often constrained by lack of adequate resources, sound policies, and national support. It is clear that change and advancements, both systematic and scientific, are needed in a number of forensic science disciplines to ensure the reliability of work, establish enforceable standards, and promote best practices with consistent application. Strengthening Forensic Science in the United States: A Path Forward provides a detailed plan for addressing these needs and suggests the creation of a new government entity, the National Institute of Forensic Science, to establish and enforce standards within the forensic science community. The benefits of improving and regulating the forensic science disciplines are clear: assisting law enforcement officials, enhancing homeland security, and reducing the risk of wrongful conviction and exoneration. Strengthening Forensic Science in the United States gives a full account of what is needed to advance the forensic science disciplines, including upgrading of systems and organizational structures, better training, widespread adoption of uniform and enforceable best practices, and mandatory certification and accreditation programs. While this book provides an essential call-to-action for congress and policy makers, it also serves as a vital tool for law enforcement agencies, criminal prosecutors and attorneys, and forensic science educators.

An Introduction to Statistical Learning provides an accessible overview of the field of statistical learning, an essential toolset for making sense of the vast and complex data sets that have emerged in fields ranging from biology to finance to marketing to astrophysics in the past twenty years. This book presents some of the most important modeling and prediction techniques, along with relevant applications. Topics include linear regression, classification, resampling methods, shrinkage approaches, tree-based methods, support vector machines, clustering, and more. Color graphics and real-world examples are used to illustrate the methods presented. Since the goal of this textbook is to facilitate the use of these statistical learning techniques by practitioners in science, industry, and other fields, each chapter contains a tutorial on implementing the analyses and methods presented in R, an extremely popular open source statistical software platform. Two of the authors co-wrote *The Elements of Statistical Learning* (Hastie, Tibshirani and Friedman, 2nd edition 2009), a popular reference book for statistics and machine learning researchers. *An Introduction to Statistical Learning* covers many of the same topics, but at a level accessible to a much broader audience. This book is targeted at statisticians and non-statisticians alike who wish to use cutting-edge statistical learning techniques to analyze their data. The text assumes only a previous course in linear regression and no knowledge of matrix algebra.

Color Science: Concepts and Methods, Quantitative Data and Formulae. Second Edition

The Tradition of Giovanni Sartori

Concepts, Methodologies, Tools, and Applications

Data Analytics

Electronic Display Measurement

Concepts and Method in Social Science

The Science of Successful Learning

Careful work with concepts is a cornerstone of good social science methodology. *Concepts and Method in Social Science* demonstrates the crucial role of concepts, providing a timely contribution that draws both on the classic work of Giovanni Sartori and the writing of a younger generation of scholars. In this volume, major writings of Sartori are juxtaposed with other work that exemplifies important approaches to concept analysis. The book is organized into three key sections: Part I : Sartori on Concepts and Methods – including an examination of the necessary logical steps in moving from conceptualization to measurement and the relationships among meanings, terms and observations. Part II: Extending the Sartori Tradition – eminent scholars analyse five key ideas in concept analysis: revolution, culture, democracy, peasants and institutionalization within the context of the Sartori tradition. Part III: In the Academy and Beyond – both an engaging autobiographical essay written by Giovanni Sartori and reflections from former students provide a unique context in which to situate this varied and rigorous discussion of concept analysis and qualitative methods. *Concepts and Method in Social Science* is an accessible text that is well suited to advanced undergraduates and graduate students, providing a distinct and coherent introduction to comparative political analysis.

This book is intended as a resource for students and researchers interested in developmental biology and physiology and specifically addresses the larval stages of fish. Fish larvae (and fish embryos) are not small juveniles or adults. Rather they are transitional organisms that bridge the critical gap between the singlecelled egg and sexually immature juvenile. Fish larvae represent the stage of the life cycle that is used for differentiation, feeding and distribution. The book aims at providing a single-volume treatise that explains how fish larvae develop and differentiate, how they regulate salt, water and acid-base balance, how they transport and exchange gases, acquire and utilise energy, how they sense their environment, and move in their aquatic medium, how they control and defend themselves, and finally how they grow up.

White Logic, White Methods shows the ways that a reigning white ideological methodology has poisoned almost all aspects of social science research. The only way to remedy these prevailing inequalities is for the complete overhaul of current methods, and a movement towards multicultural and pluralist approaches to what we know, think, and question. With an assemblage of leading scholars, this collection explores the possibilities and necessary dethroning of current social research practices.

Our lives are saturated by color. We live in a world of vivid colors, and color marks our psychological and social existence. But for all color's inescapability, we don't know much about it. Now authors David Scott Kastan and Stephen Farthing offer a fresh and imaginative exploration of one of the most intriguing and least understood aspects of everyday experience. Kastan and Farthing, a scholar and a painter, respectively, investigate color from numerous perspectives: literary, historical, cultural, anthropological, philosophical, art historical, political, and scientific. In ten lively and wide-ranging chapters, each devoted to a different color, they examine the various ways colors have shaped and continue to shape our social and moral imaginations. Each individual color becomes the focal point for a consideration of one of the extraordinary ways in which color appears and matters in our lives. Beautifully produced in full color, this book is a remarkably smart, entertaining, and fascinating guide to this elusive topic.

Color Science

Concepts, Tools, and Applications

Cultural Analytics

Master Color Concepts for All Media

A User's Guide

Concepts, Methods and Cases

An Interpretivist Guide

Introductory text for students of genetics is general and the students of agronomy as the book gives numerous agronomic applications.

Time-geography is a mode of thinking that helps in the understanding of change in society, the wider context and ecological consequences of human actions. This book presents its assumptions, concepts and methods, and example applications. The intellectual path of the Swedish geographer Torsten Hägerstrand is a key foundation for this book. His research contributions are shown in the context of the urbanization of Sweden, involvement in the emerging planning sector and empirical studies on Swedish emigration. Migration and innovation diffusion studies paved the way for prioritizing time and space dimensions and recognizing time and space as unity. From these insights time-geography grew. This book includes the ontological grounds and concepts as well as the specific notation system of time-geography – a visual language for interdisciplinary research and communication. Applications are divided into themes: urban and regional planning; transportation and communication; organization of production and work; everyday life, wellbeing and household division of labor; and ecological sustainability – time-geographic studies on resource use. This book looks at the outlook for this developing branch of research and the future application of time-geography to societal and academic contexts. Its interdisciplinary nature will be appealing to postgraduates and researchers who are interested in human geography, urban and regional planning and sociology.

*From television to computers to coffee makers to aircraft cockpits and more, displays play an important role in our everyday life. This book describes practical techniques and instrumentation for the measurement of these displays, as well as common pitfalls that result from errors. Using engaging stories and a diverse cast of characters, Lisa Wade memorably delivers what C. Wright Mills described as both the terrible and the magnificent lessons of sociology. With chapters that build upon one another, *Terrible Magnificent Sociology* represents a new kind of introduction to sociology. Recognizing the many statuses students carry, Wade goes beyond race, class, and gender, considering inequalities of all kinds and their intersections. She also highlights the remarkable diversity of sociology, not only of its methods and approaches but also of the scholars themselves, emphasizing the contributions of women, immigrants, and people of color. The book ends with an inspiring call to action, urging students to use their sociological imaginations to improve the world in which they live.*

Generalized Linear Mixed Models

Concepts and Methods, Quantitative Data and Formulae

Spectrophotometry

Concepts and Applications

Concepts, Methods, and Applications

Racism and Methodology

Practices, Crosscutting Concepts, and Core Ideas

Color Science Concepts and Methods, Quantitative Data and Formulae Wiley-Interscience

This volume is an essential handbook for anyone interested in performing the most accurate spectrophotometric or other optical property of materials measurements. The chapter authors were chosen from the leading experts in their respective fields and provide their wisdom and experience in measurements of reflectance, transmittance, absorptance, emittance, diffuse scattering, color, and fluorescence. The book provides the reader with the theoretical underpinning to the methods, the practical issues encountered in real measurements, and numerous examples of important applications. Written by the leading international experts from industry, government, and academia. Written as a handbook, with in depth discussion of the topics. Focus on making the most accurate and reproducible measurements. Many practical applications and examples.

An authoritative overview of the concepts and applications of biological demography. This book provides a comprehensive introduction to biodemography, an exciting interdisciplinary field that unites the natural science of biology with the social science of human demography. Biodemography is an essential resource for demographers, epidemiologists, gerontologists, and health professionals as well as ecologists, population biologists, entomologists, and conservation biologists. This accessible and innovative book is also ideal for the classroom. James Carey and Deborah Roach cover everything from baseline demographic concepts to biodemographic applications, and present models and equations in discrete rather than continuous form to enhance mathematical accessibility. They use a wealth of real-world examples that draw from data sets on both human and nonhuman species and offer an interdisciplinary approach to demography like no other, with topics ranging from kinship theory and family demography to reliability engineering, tort law, and demographic disasters such as the Titanic and the destruction of Napoleon's Grande Armée. Provides the first synthesis of demography and biology. Covers baseline demographic models and concepts such as Lexis diagrams, mortality, fecundity, and population theory. Features in-depth discussions of biodemographic

applications like harvesting theory and mark-recapture Draws from data sets on species ranging from fruit flies and plants to elephants and humans Uses a uniquely interdisciplinary approach to demography, bringing together a diverse range of concepts, models, and applications Includes informative "biodemographic shorts," appendixes on data visualization and management, and more than 150 illustrations of models and equations

Concepts have always been foundational to the social science enterprise. This book is a guide to working with them. Against the positivist project of concept "reconstruction"—the formulation of a technical, purportedly neutral vocabulary for measuring, comparing, and generalizing—Schaffer adopts an interpretivist approach that he calls "elucidation." Elucidation includes both a reflexive examination of social science technical language and an investigation into the language of daily life. It is intended to produce a clear view of both types of language, the relationship between them, and the practices of life and power that they evoke and sustain. After an initial chapter explaining what elucidation is and how it differs from reconstruction, the book lays out practical elucidative strategies—grounding, locating, and exposing—that help situate concepts in particular language games, times and tongues, and structures of power. It also explores the uses to which elucidation can be put and the moral dilemmas that attend such uses. By illustrating his arguments with lively analyses of such concepts as "person," "family," and "democracy," Schaffer shows rather than tells, making the book both highly readable and an essential guide for social science research.

Maximizing Benefits, Minimizing Risk

Color Science. Concepts and Methods, Quantitative Data and Formulae. 2.ed

Make It Stick

Accurate Measurement of Optical Properties of Materials

Modern Concepts, Methods and Applications

An Introduction to Statistical Learning

This collection of Professor Brandon's recent essays covers all the traditional topics in the philosophy of evolutionary biology. With the improved efficiency of heating, cooling and lighting in buildings crucial to the low carbon targets of all current governments, Building Science: Concepts and Applications provides a timely and much-needed addition to the existing literature on architectural and environmental design education. Taking a logical and didactic approach, the author introduces the reader to the underlying concepts and principles of the thermal, lighting, and acoustic determinants of building design in four integrated sections. The first section explores the thermal building environment and the principles of thermal comfort, translating these principles into conceptual building design solutions. The author examines the heat flow characteristics of the building envelope and explains steady state design methods that form the basis of most building codes. He discusses the sun as a natural heat source and describes the principles of active and passive solar building design solutions. The second section introduces the scientific principles of light, color, and vision, stressing the importance of daylight in building design, presenting the Daylight Factor design concept and methodology, and discussing glare conditions and their avoidance. It also addresses artificial lighting, delving into the prominent role that electricity plays in the production of light by artificial means and comparing the efficacy and characteristics of the various commercially available light sources in terms of the energy to light conversion ratio, life span, available intensity range, color rendition properties, and cost. The third section deals with the various aspects of sound that impact the design of the built environment, discussing the nature of sound as a physical force that sets any medium through which it travels into vibration and laying the foundations for the treatment of sound as an important means of communication as well as a disruptive disturbance. The final section discusses the foundational concepts of ecological design as a basis for addressing sustainability issues in building design solutions. These issues include the embedded energy of construction materials, waste management, preservation of freshwater and management of graywater, adoption of passive solar principles, energy saving measures applicable to mechanical building services, and the end-of-lifecycle deconstruction and recycling of building materials and components. Covers the fundamental building science topics of heat, energy, light and sound Takes a logical and didactic approach, tracing the historical roots of building science Includes summaries of new technologies in solar energy and photovoltaic systems Features a section on the principles of sustainable architecture Website with answers to MC questions testing students' learning

This book is designed to introduce doctoral and graduate students to the process of conducting scientific research in the social sciences, business, education, public health, and related disciplines. It is a one-stop, comprehensive, and compact source for foundational concepts in behavioral research, and can serve as a stand-alone text or as a supplement to research readings in any doctoral seminar or research methods class. This book is currently used as a research text at universities on six continents and will shortly be available in nine different languages.

Science, engineering, and technology permeate nearly every facet of modern life and hold the key to solving many of humanity's most pressing current and future challenges. The United States' position in the global economy is declining, in part because U.S. workers lack fundamental knowledge in these fields. To address the critical issues of U.S. competitiveness and to better prepare the workforce, A Framework for K-12 Science Education proposes a new approach to K-12 science education that will capture students' interest and provide them with the necessary foundational knowledge in the field. A Framework for K-12 Science Education outlines a broad set of expectations for students in science and engineering in grades K-12. These expectations will inform the development of new standards for K-12 science education and, subsequently, revisions to curriculum, instruction, assessment, and professional development for educators. This book identifies three dimensions that convey the core ideas and practices around which science and engineering education in these grades should be built. These three dimensions are: crosscutting concepts that unify the study of science through their common application across science and engineering; scientific and engineering practices; and disciplinary core ideas in the physical sciences, life sciences, and earth and space sciences and for engineering, technology, and the applications of science. The overarching goal is for all high school graduates to have sufficient knowledge of science and engineering to engage in public discussions on science-related issues, be careful consumers of scientific and technical information, and enter the careers of their choice. A Framework for K-12 Science Education is the first step in a process that can inform state-level decisions and achieve a research-grounded basis for improving science instruction

and learning across the country. The book will guide standards developers, teachers, curriculum designers, assessment developers, state and district science administrators, and educators who teach science in informal environments.

with Applications in R

Creating Scientific Concepts

Control Theory in Physics and Other Fields of Science

Thinking Time Geography

A Path Forward

Biodemography

Sharing Clinical Trial Data

The jargon of color theory and the unpredictability of mixing manufactured colors prevent many artists from using color to its advantage in their work. This comprehensive survey of color—its science, psychology, theory, and aesthetics—gives artists the tools and power to do more with color. Artists learn what color is; the color wheel; various types of color contrast (temperature, intensity, and value); how a medium's physical characteristics affect the use and appearance of color; how color has been used by artists throughout history; and how color can be used effectively in a variety of theories, methods of applications, and mediums. This is an invaluable resource for artists who want to expand their knowledge about and invigorate their use of color. • For artists at all levels working in any medium • All artists, regardless of medium or style, need guidance and instruction on the theories and uses of color Examines the following topics: • PHYSIOLOGY: what color is and how it has been explained by scientists • THEORY: the color wheel, and alternative color systems like triangles and spheres • HISTORY: how color has been used by artists throughout history • PHYSICS: various types of color contrast (temperature, intensity, value) • CHEMISTRY: how a medium's physical characteristics affect the use and appearance of color • CONTEMPORARY COLOR PRACTICE: how color can be used effectively in a variety of theories, methods of application, and mediums

An introduction to a broad range of topics in deep learning, covering mathematical and conceptual background, deep learning techniques used in industry, and research perspectives. "Written by three experts in the field, Deep Learning is the only comprehensive book on the subject." —Elon Musk, cochair of OpenAI; cofounder and CEO of Tesla and SpaceX Deep learning is a form of machine learning that enables computers to learn from experience and understand the world in terms of a hierarchy of concepts. Because the computer gathers knowledge from experience, there is no need for a human computer operator to formally specify all the knowledge that the computer needs. The hierarchy of concepts allows the computer to learn complicated concepts by building them out of simpler ones; a graph of these hierarchies would be many layers deep. This book introduces a broad range of topics in deep learning, including mathematical and conceptual background, covering relevant concepts in linear algebra, probability theory and information theory, numerical computation, and machine learning. It describes deep learning techniques used by practitioners in industry, including deep feedforward networks, regularization, optimization algorithms, convolutional networks, sequence modeling, and practical methodology; and it surveys such applications as natural language processing, speech recognition, computer vision, recommender systems, bioinformatics, and videogames. Finally, the book offers research perspectives, covering such theoretical topics as linear factor models, autoencoders, representation learning, structured probabilistic models, Monte Carlo methods, Markov chain partition function, approximate inference, and deep generative models. Deep Learning can be used by undergraduate or graduate students planning careers in either industry or research, and by software engineers who want to begin using deep learning in their products or platforms. A website offers supplementary material for both readers and instructors.

A book at the intersection of data science and media studies, presenting concepts and methods for computational analysis of cultural data. How can we see a billion images? What analytical methods can we bring to bear on the astonishing scale of digital culture? With billions of photographs shared on social media every day, the hundreds of millions of songs created by twenty million musicians on Soundcloud, the content of four billion Pinterest boards? In Cultural Analytics, Lev Manovich presents concepts and methods for the computational analysis of cultural data. Drawing on more than a decade of research and projects from his own lab, Manovich offers a gentle, nontechnical introduction to the core ideas of data analytics and discusses the ways that our society uses data and analyzes it. Large data sets arriving at ever increasing speeds require a new set of efficient data analysis techniques. Data analytics are now an essential component for every organization and technologies such as health care, financial trading, Internet of Things, Smart Cities, or Cyber Physical Systems. However, these diverse application domains give rise to new research challenges. In this context, Cultural Analytics provides a broad picture on the concepts, techniques, applications, and open research directions in this area. In addition, it serves as a single source of reference for acquiring the knowledge on emerging Big Data Analytics technologies.

Color Science: Concepts and Methods, Quantitative Data and Formulas

White Logic, White Methods

Animal Behavior

A Guide for the Realist Painter

Concepts, Techniques, and Applications

with Registration Card

Concepts, Methods and Applications

Data sharing can accelerate new discoveries by avoiding duplicative trials, stimulating new ideas for research, and enabling the maximal scientific knowledge and benefits to be gained from the efforts of clinical trial participants and investigators. At the same time, sharing clinical trial data presents risks, burdens, and challenges. These include the need to protect the privacy and honor the consent of clinical trial participants; safeguard the legitimate economic interests of sponsors; and guard against invalid secondary analyses, which could undermine trust in clinical trials or otherwise harm public health. Sharing Clinical Trial Data presents activities and strategies for the responsible sharing of clinical trial data. With the goal of increasing scientific knowledge to lead to better therapies for patients, this book identifies guiding principles and makes recommendations to maximize the benefits and minimize risks. This report offers guidance on the types of clinical trial data available at different points in the process, the points in the process at which each type of data should be shared, methods for sharing data, what groups should have access to data, and future knowledge and infrastructure needs. Responsible sharing of clinical trial data will allow other investigators to replicate published findings and carry out additional analyses, strengthen the evidence base for regulatory and clinical decisions, and increase the scientific knowledge gained from investments by the funders of clinical trials. The recommendations of Sharing

Clinical Trial Data will be useful both now and well into the future as improved sharing of data leads to a stronger evidence base for treatment. This book will be of interest to stakeholders across the spectrum of research--from funders, to researchers, to journals, to physicians, and ultimately, to patients.

From New York Times best-selling author of the Dinotopia series, James Gurney, comes a carefully crafted and researched study on color and light in paintings. This art instruction book will accompany the acclaimed Imaginative Realism: How to Paint What Doesn't Exist. James Gurney, New York Times best-selling author and artist of the Dinotopia series, follows Imaginative Realism with his second art-instruction book, Color and Light: A Guide for the Realist Painter. A researched study on two of art's most fundamental themes, Color and Light bridges the gap between abstract theory and practical knowledge. Beginning with a survey of underappreciated masters who perfected the use of color and light, the book examines how light reveals form, the properties of color and pigments, and the wide variety of atmospheric effects. Gurney cuts through the confusing and contradictory dogma about color, testing it in the light of science and observation. A glossary, pigment index, and bibliography complete what will ultimately become an indispensable tool for any artist. This book is the second in a series based on his blog, gurneyjourney.com. His first in the series, Imaginative Realism, was widely acclaimed in the fantastical art world, and was ranked the #1 Bestseller on the Amazon list for art instruction. "James Gurney's new book, Color and Light, cleverly bridges the gap between artistic observation and scientific explanation. Not only does he eloquently describe all the effects of color and light an artist might encounter, but he thrills us with his striking paintings in the process." --Armand Cabrera, Artist

The Art and Science of Embodied Research Design: Concepts, Methods, and Cases offers some of the nascent perspectives that situate embodiment as a necessary element in human research. This edited volume brings together philosophical foundations of embodiment research with application of embodied methods from several disciplines. The book is divided into two sections. Part I, Concepts in Embodied Research Design, suggests ways that embodied epistemology may bring deeper understanding to current research theory, and describes the ways in which embodiment is an integral part of the research process. In Part II, Methods and Cases, chapters propose novel ways to operationalize embodied data in the research process. The section is divided into four subsections: Somatic Systems of Analysis, Movement Systems of Analysis, Embodied Interviews and Observations, and Creative and Mixed Methods. Each chapter proposes a method case; an example of a previously used research method that exemplifies the way in which embodiment is used in a study. As such, it can be used as scaffold for designing embodied methods that suits the researcher's needs. It is suited for many fields of study such as psychology, sociology, behavioral science, anthropology, education, and arts-based research. It will be useful for graduate coursework in somatic studies or as a supplemental text for courses in traditional research design.

An account that analyzes the dynamic reasoning processes implicated in a fundamental problem of creativity in science: how does genuine novelty emerge from existing representations? How do novel scientific concepts arise? In Creating Scientific Concepts, Nancy Nersessian seeks to answer this central but virtually unasked question in the problem of conceptual change. She argues that the popular image of novel concepts and profound insight bursting forth in a blinding flash of inspiration is mistaken. Instead, novel concepts are shown to arise out of the interplay of three factors: an attempt to solve specific problems; the use of conceptual, analytical, and material resources provided by the cognitive-social-cultural context of the problem; and dynamic processes of reasoning that extend ordinary cognition. Focusing on the third factor, Nersessian draws on cognitive science research and historical accounts of scientific practices to show how scientific and ordinary cognition lie on a continuum, and how problem-solving practices in one illuminate practices in the other. Her investigations of scientific practices show conceptual change as deriving from the use of analogies, imagistic representations, and thought experiments, integrated with experimental investigations and mathematical analyses. She presents a view of constructed models as hybrid objects, serving as intermediaries between targets and analogical sources in bootstrapping processes. Extending these results, she argues that these complex cognitive operations and structures are not mere aids to discovery, but that together they constitute a powerful form of reasoning—model-based reasoning—that generates novelty. This new approach to mental modeling and analogy, together with Nersessian's cognitive-historical approach, make Creating Scientific Concepts equally valuable to cognitive science and philosophy of science.

Color and Light

Building Science

Concepts and Methods in Evolutionary Biology

Terrible Magnificent Sociology

Social Science Concepts and Measurement

Social Science Research

An Introduction to Concepts and Methods