Cognition Exploring The Science Of The Mind Daniel

One of the most successful cognitive psychology texts ever published: up-to-date, authoritative, and clearly written.

The textbook engages students in the scientific process through its integrated treatment of research methods and strong coverage of key experiments. The companion Cognition Workbook contains essays, activities, and demonstrations that focus on the real-world applications of cognitive psychology. The ZAPS Online Labs invite students to experience psychological phenomena and classical experiments in a vivid and engaging environment.

Cognitive Science combines the interdisciplinary streams of cognitive science into a unified narrative in an all-encompassing introduction to the field. This text presents cognitive science as a discipline in its own right, and teaches students to apply the techniques and theories of the cognitive scientist's 'toolkit' - the vast range of methods and tools that cognitive scientists use to study the mind. Thematically organized, rather than by separate disciplines, Cognitive Science underscores the problems and solutions of cognitive science, rather than those of the subjects that contribute to it - psychology, neuroscience, linguistics, etc. The generous use of examples, illustrations, and applications demonstrates how theory is applied to unlock the mysteries of the human mind. Drawing upon cutting-edge research, the text has been updated and enhanced to incorporate new studies and key experiments since the first edition. A new chapter on consciousness has also been added.

This volume presents a theoretical framework for understanding consciousness and learning. Drawing on work in cognitive psychology and philosophy, this framework begins with the observation that to be conscious is literally to have a point of view. From this starting point, the book develops a descriptive scheme that allows perceptual, symbolic, and emotional awareness to be discussed in common theoretical terms, compatible with a computational view of the mind. A central theme is our experience of ourselves as agents, consciously controlling activities situated in environments. In contrast to previous theories of consciousness, the experienced cognition framework emphasizes the changes in conscious control as individuals acquire skills. The book is divided into four parts. The first introduces the central themes and places them in the context of information-processing theory and empirical research on cognitive skill. The second develops the theoretical framework, emphasizing the unity of perceptual, symbolic, and emotional awareness and the relation of conscious to nonconscious processes. The third applies the experienced cognition framework to a variety of topics in cognitive psychology, including working memory, problem solving, and reasoning. It also includes discussions of everyday action, skill, and expertise, focusing on changes in conscious control with increasing fluency. The last concludes the book by evaluating the recent debate on the "cognitive unconscious" and implicit cognition from the perspective of experienced

cognition, and considering the prospects for a cognitive psychology focused on persons. This book addresses many of the issues raised in philosophical treatments of consciousness from the point of view of empirical cognitive psychology. For example, the structure of conscious mental states is addressed by considering how to describe them in terms of variables suitable for information-processing theory. Understanding conscious states in this way also provides a basis for developing empirical hypotheses, for example, about the relation of emotion and cognition, about the apparent "mindlessness" of skilled activity, and about the nature and role of goals in guiding activity. Criticisms of the computational view of mind are addressed by showing that the role of first-person perspectives in cognition can be described and investigated in theoretical terms compatible with a broadly-conceived information-processing theory of cognition.
Reflecting recent changes in the way cognition and the brain are studied, this thoroughly updated third edition of the best-selling textbook provides a comprehensive and student-friendly guide to cognitive neuroscience. Jamie Ward provides an easy-to-follow introduction to neural structure and function, as well as all the key methods and procedures of cognitive neuroscience, with a view to helping students understand how they can be used to shed light on the neural basis of cognition. The book presents an up-to-date overview of the latest theories and findings in all the key topics in cognitive neuroscience, including vision, memory, speech and language, hearing, numeracy, executive function, social and emotional behaviour and developmental neuroscience, as well as a new chapter on attention. Throughout, case studies, newspaper reports and everyday examples are used to help students understand the more challenging ideas that underpin the subject. In addition each chapter includes: Summaries of key terms and points Example essay questions Recommended further reading Feature boxes exploring interesting and popular questions and their implications for the subject. Written in an engaging style by a leading researcher in the field, and presented in full-color including numerous illustrative materials, this book will be invaluable as a core text for undergraduate modules in cognitive neuroscience. It can also be used as a key text on courses in cognition, cognitive neuropsychology, biopsychology or brain and behavior. Those embarking on research will find it an invaluable starting point and reference. The Student’s Guide to Cognitive Neuroscience, 3rd Edition is supported by a companion website, featuring helpful resources for both students and instructors.
This book examines cognition with a broad and comprehensive approach. Drawing upon the work of many researchers, McDowell applies current scientific thinking to enhance the understanding of psychotherapy and other contemporary topics, including economics and healthcare. Through the use of practical examples, his analysis is accessible to a wide range of readers. In particular, clinicians, physicians, and mental health professionals will learn more about the thought processes through which they and their patients assess information.
The Cognition Workbook contains engaging essays on research methodology

and applications to topics like the legal system and education. Students are offered numerous hands-on activities to try themselves, including demonstrations of articulatory rehearsal loops, common errors in judgment and reasoning, the effect of practice on the cognitive unconscious, and many more. The new edition includes many new essays, activities, and demonstrations that focus on the real-world applications of cognitive psychology, and builds a bridge between the course and students own concerns."

An examination of what makes us human and unique among all creatures—our brains. No reader curious about our “little grey cells” will want to pass up Harvard neuroscientist John E. Dowling’s brief introduction to the brain. In this up-to-date revision of his 1998 book Creating Mind, Dowling conveys the essence and vitality of the field of neuroscience—examining the progress we’ve made in understanding how brains work, and shedding light on discoveries having to do with aging, mental illness, and brain health. The first half of the book provides the nuts-and-bolts necessary for an up-to-date understanding of the brain. Covering the general organization of the brain, early chapters explain how cells communicate with one another to enable us to experience the world. The rest of the book touches on higher-level concepts such as vision, perception, language, memory, emotion, and consciousness. Beautifully illustrated and lucidly written, this introduction elegantly reveals the beauty of the organ that makes us uniquely human.

New research on different areas of cognition, focusing on language, with contributions that treat topics explored in Ray Jackendoff's pioneering research. This volume offers new research in cognitive science by leading scholars, exploring different areas of cognition with an emphasis on language. The contributions—in such fields as linguistic theory, psycholinguistics, evolution, and consciousness—reflect the thriving interdisciplinary scholarship in cognitive science today. Ray Jackendoff's pioneering cross-disciplinary work was instrumental in establishing the field, and Structures in the Mind, with contributions from Jackendoff's colleagues and former students, is a testament to his lasting influence. After an introduction that includes short reflections on Jackendoff's work by such scholars as Paul Bloom, Noam Chomsky, Barbara Partee, and Steven Pinker, the book presents chapters on linguistics, which build on Jackendoff's theories of conceptual semantics and parallel architectures; psycholinguistics, reaching from linguistics to psychology and neuroscience; and other topics as varied as the evolution of linguistic and musical abilities, consciousness, music theory, and the grammar of comics—with this particular chapter taking the form of a comic. The chapters present fresh data, bold claims, and stimulating theoretical discussions, offering a celebration of cognitive science today. Contributors Daniel Büring, Neil Cohn, Peter W. Culicover, Daniel Dennett, Cecily Jill Duffield, W. Tecumseh Fitch, Lila Gleitman, Jane Grimshaw, Yosef Grodzinsky, Katharina Hartmann, Albert Kim, Max Soowon Kim, Barbara Landau, Fred Lerdahl, Willem J. M. Levelt, Joan Maling, Bhuvana Narasimhan, Urpo Nikanne, Catherine O'Connor, Maria Mercedes Piñango, Daniel Silverman, Henk Verkuyl, Heike Wiese, Eva Wittenberg, Edgar B. Zurif, Joost Zwarts

Influential theories have argued that affective processing is fundamentally different from cognitive processing. Others have suggested that theoretical boundaries between affective and cognitive processing are artificial and inherently problematic. Over recent years, different positions on these issues have fueled many empirical studies investigating the mechanisms underlying cognitive and affective processing. Where and on what basis should we draw the line between cognition and emotion? Are there fundamental distinctions to be made between the way emotion influences cognition and cognition influences emotion? How does the reciprocal interaction between emotion and cognition lead to adaptive behavior? This Research Topic explores the nature of the reciprocal interaction between emotion and cognition from a functional perspective.
"Cognition 8e is a Cognitive Science text booked aimed at intermediary to upper-level psychology majors. It covers the basic foundations and history of cognitive science, and also explores how key concepts from cognitive psychology can be seen in the world today. The book includes many illustrations and visual representations of experiments, effects, and concepts"--
The Handbook of Epistemic Cognition brings together leading work from across disciplines, to provide a comprehensive overview of an increasingly important topic: how people acquire, understand, justify, change, and use knowledge in formal and informal contexts. Research into inquiry, understanding, and discovery within academic disciplines has progressed from general models of conceptual change to a focus upon the learning trajectories that lead to expert-like conceptualizations, skills, and performance. Outside of academic domains, issues of who and what to believe, and how to integrate multiple sources of information into coherent and useful knowledge, have arisen as primary challenges of the 21st century. In six sections, scholars write within and across fields to focus and advance the role of epistemic cognition in education. With special attention to how researchers across disciplines can communicate and collaborate more effectively, this book will be an invaluable resource for anyone interested in the future of knowledge and knowing. Dr. Jeffrey A. Greene is an associate professor of Learning Sciences and Psychological Studies in the School of Education at the University of North Carolina at Chapel Hill. Dr. William A. Sandoval is a professor in the division of Urban Schooling at the UCLA Graduate School of Education & Information Studies. Dr. Ivar Bråten is a professor of Educational Psychology at the Faculty of Educational Sciences at the University of Oslo, Norway.
One of the most successful texts ever published on its subject, the new Seventh Edition focuses on the insights and ideas that drive the field and supports student learning. Three exciting features—a new pedagogical program based on the "testing effect," a comprehensive, author-created instructorÕs guide, and ZAPS Cognition Labs—deliver a dynamic, interactive introduction to cognitive psychology today.
Given Ulysses' perhaps unparalleled attention to the operations of the human mind, it is unsurprising that critics have explored the work's psychology. Nonetheless, there has been very little research that draws on recent cognitive science to examine thought and emotion in this novel. Hogan sets out to expand our understanding of Ulysses, as well as our theoretical comprehension of narrative—and even our views of human cognition. He revises the main narratological accounts of the novel, clarifying the complex nature of narration and style. He extends his cognitive study to encompass the anti-colonial and gender concerns that are so obviously important to Joyce's work.

Finally, through a combination of broad overviews and detailed textual analyses, Hogan seeks to make this notoriously difficult book more accessible to non-specialists.

The cognitive science of religion examines the mental processes that govern religious belief and behaviour. It offers a fresh and exciting approach to the scientific study of religion. 'Religion and Cognition' brings together key essays which outline the theory and illustrate this with experimental case material. The central topics in this new critical field of research are all addressed: meta-theoretical arguments for cognitive explanations of religion; theoretical models of cognition employed in the cognitive science of religion; prominent cognitive theories of religion; methods used to gather data and test theories; and experimental findings by cognitive scientists of religion.

The Routledge Companion to Music Cognition addresses fundamental questions about the nature of music from a psychological perspective. Music cognition is presented as the field that investigates the psychological, physiological, and physical processes that allow music to take place, seeking to explain how and why music has such powerful and mysterious effects on us. This volume provides a comprehensive overview of research in music cognition, balancing accessibility with depth and sophistication. A diverse range of global scholars—music theorists, musicologists, pedagogues, neuroscientists, and psychologists—address the implications of music in everyday life while broadening the range of topics in music cognition research, deliberately seeking connections with the kinds of music and musical experiences that are meaningful to the population at large but are often overlooked in the study of music cognition. Such topics include: Music’s impact on physical and emotional health Music cognition in various genres Music cognition in diverse populations, including people with amusia and hearing impairment The relationship of music to learning and accomplishment in academics, sport, and recreation The broader sociological and anthropological uses of music Consisting of over forty essays, the volume is organized by five primary themes. The first section, "Music from the Air to the Brain," provides a neuroscientific and theoretical basis for the book. The next three sections are based on musical actions: "Hearing and Listening to Music," "Making and Using Music," and "Developing Musicality." The closing section, "Musical Meanings," returns to fundamental questions related to music’s meaning and significance, seen from historical and contemporary perspectives. The Routledge Companion to Music Cognition seeks to encourage readers to understand connections between the laboratory and the everyday in their musical lives.

Fundamentals of Cognitive Neuroscience: A Beginner's Guide, Second Edition, is a comprehensive, yet accessible, beginner’s guide on cognitive neuroscience. This text takes a distinctive, commonsense approach to help newcomers easily learn the basics of how the brain functions when we learn, act, feel, speak and socialize. This updated edition includes contents and features that are both academically rigorous and engaging, including a step-by-step introduction to the visible brain, colorful brain illustrations, and new chapters on emerging topics in cognition research, including emotion, sleep and disorders of consciousness, and discussions of novel findings that highlight cognitive neuroscience’s practical applications. Written by two leading experts in the field and thoroughly updated, this book remains an indispensable introduction to the study of cognition.

Presents an easy-to-read introduction to mind-brain science based on a simple functional diagram linked to specific brain functions Provides new, up-to-date, colorful brain images directly from research labs Contains "In the News" boxes that describe the newest research and augment foundational content Includes both a student and instructor website with basic terms and definitions, chapter guides, study questions, drawing exercises, downloadable lecture slides, test bank, flashcards, sample syllabi and links to multimedia resources

Why do people attach importance to the wordless language we call music? Music Cognition: The Basics considers the role of our cognitive functions, such as perception, memory, attention, and expectation in perceiving, making, and appreciating music. In this volume, Henkjan Honing explores the active role these functions play in how music makes us feel; exhilarated, soothed, or inspired. Grounded in the latest research in areas of psychology, biology, and cognitive neuroscience, and with clear examples throughout, this book concentrates on underappreciated musical skills such as sense of rhythm, beat induction, and relative pitch, that make people intrinsically musical creatures—supporting the conviction that all humans have a unique, instinctive attraction to music. The scope of the topics discussed ranges from the ability of newborns to perceive a beat, to the unexpected musical expertise of ordinary listeners. It is a must read for anyone studying the psychology of music, auditory perception, or simply interested in why we enjoy music the way we do.

Development of Mathematical Cognition: Neural Substrates and Genetic Influences reviews advances in extant imaging modalities and the application of brain stimulation techniques for improving mathematical learning. It goes on to explore the role genetics and environmental influences have in the development of math abilities and disabilities. Focusing on the neural substrates and genetic factors associated with both the typical and atypical development of mathematical thinking and learning, this second volume in the Mathematical Cognition and Learning series integrates the latest in innovative measures and methodological advances from the top researchers in the field. Provides details about new progress made in the study of neural correlates of numerical and arithmetic cognition Addresses recent work in quantitative and molecular genetics Works to improve instruction in numerical, arithmetical, and algebraic thinking and learning Informs policy to help increase the level of mathematical proficiency among the general public

Computers have become a topic of concern, debate, argument, dogmatism, and inquiry among a variety of people who are interested in the fate and effectiveness of the educational system. This book presents working hypotheses of ways in which computers may fit into and/or transform classroom education. Through the exploration of learning and cognitive theory as it infuses technological developments, this volume promises to illuminate a number of important issues, including experiential learning and nontraditional computer-based instruction.

In recent decades, a new scientific approach to understand, explain, and predict

many features of religion has emerged. The cognitive science of religion (CSR) has amassed research on the forces that shape the tendency for humans to be religious and on what forms belief takes. It suggests that religion, like language or music, naturally emerges in humans with tractable similarities. This new approach has profound implications for how we understand religion, including why it appears so easily, and why people are willing to fight—and die—for it. Yet it is not without its critics, and some fear that scholars are explaining the ineffable mystery of religion away, or showing that religion is natural proves or disproves the existence of God. An Introduction to the Cognitive Science of Religion offers students and general readers an accessible introduction to the approach, providing an overview of key findings and the debates that shape it. The volume includes a glossary of key terms, and each chapter includes suggestions for further thought and further reading as well as chapter summaries highlighting key points. This book is an indispensable resource for introductory courses on religion and a much-needed option for advanced courses.

Cognitive neuroscience is a young field that has been incredibly successful in furthering our understanding of the human brain. Long before the emergence of this field, many of the same questions being posed within this field were asked by philosophers. So how much of this earlier work informs current theories of cognition? In many cases--too little. Yet how can we ignore thousands of years of philosophical thinking on the human mind? There are some questions about the human brain that are surely impossible to answer without considering what it "feels" like to see, what it "feels" like to think. Ways of Seeing is a unique collaboration between an eminent philosopher and a world famous neuroscientist. It focuses on one of the most basic human functions--vision. What does it mean to 'see'? It brings together electrophysiological studies, neuropsychology, psychophysics, cognitive psychology, and philosophy of mind. The first truly interdisciplinary book devoted to the topic of vision, this is a book will make a valuable contribution to the field of cognitive science.

In this book, the editors bring together results from studies on all kinds of animals to show how thinking on many behaviors as truly cognitive processes can help us to understand the biology involved. Taking ideas and observations from the while range of research into animal behavior leads to unexpected and stimulating ideas. A space is created where the work of field ecologists, evolutionary ecologists and experimental psychologists can interact and contribute to a greater understanding of complex animal behavior, and to the development of a new and coherent field of study.

A cognitive psychologist and an industrial design engineer draw on their own experiences of cognition in the context of everyday life and work to explore how people attempt to find practical solutions for complex situations. The book approaches these issues by considering higher-order relations between humans and their ecologies such as satisfying, specifying, and affording. This approach is consistent with recent shifts in the worlds of technology and product design from

the creation of physical objects to the creation of experiences. Featuring a wealth of bespoke illustrations throughout, A Meaning Processing Approach to Cognition bridges the gap between controlled laboratory experiments and real-world experience, by questioning the metaphysical foundations of cognitive science and suggesting alternative directions to provide better insights for design and engineering. An essential read for all students of Ecological Psychology or Cognitive Systems Design, this book takes the reader on a journey beyond the conventional dichotomy of mind and matter to explore what really matters.

While widely studied, the capacity of the human mind remains largely unexplored. As such, researchers are continually seeking ways to understand the brain, its function, and its impact on human behavior. Exploring Implicit Cognition: Learning, Memory, and Social Cognitive Processes explores research surrounding the ways in which an individual's unconscious is able to influence and impact that person's behavior without their awareness. Focusing on topics pertaining to social cognition and the unconscious process, this title is ideal for use by students, researchers, psychologists, and academicians interested in the latest insights into implicit cognition.

CognitionSeventh International Student EditionW.W. Norton & Company

A mechanistic theory of the representation and use of semantic knowledge that uses distributed connectionist networks as a starting point for a psychological theory of semantic cognition.

David Klahr suggests that we now know enough about cognition—and hence about everyday thinking—to advance our understanding of scientific thinking.

This book presents a detailed argument to support the view that religion as a cultural practice cannot be properly explained without knowledge of the evolved cognitive mechanisms by which humans process information. This publication has also been published in paperback, please click here for details.

An important collection of studies providing a fresh and original perspective on the nature of mind, including thoughtful and detailed arguments that explain why the prevailing paradigm - the computational conception of language and mentality - can no longer be sustained. An alternative approach is advanced, inspired by the work of Charles S. Peirce, according to which minds are sign-using (or `semiotic') systems, which in turn generates distinctions between different kinds of minds and overcomes problems that burden more familiar alternatives. Unlike conceptions of minds as machines, this novel approach has obvious evolutionary implications, where differences in semiotic abilities tend to distinguish the species. From this point of view, the scope and limits of computer and AI systems can be more adequately appraised and alternative accounts of consciousness and cognition can be more thoroughly criticised. Readership: Intermediate and advanced students of computer science, AI, cognitive science, and all students of the philosophy of the mind.

The question of innateness, or nativism, is one of the most heated problems in philosophy, reaching as far back as Plato but generating fierce debates in contemporary philosophy and cognitive science. Which aspects of the human mind are innate and which are the products of experience? Do we have any innate concepts or knowledge or are all the contents of the mind acquired by means of learning? Innateness and Cognition is a much-needed overview of this important problem. Through addressing the following topics M.J. Cain argues for a nativist perspective which, nevertheless, finds an important role for culture and social learning in cognitive development: the nature of innateness the coherence and explanatory value of the concept of innateness the acquisition of concepts and the role of learning in conceptual development domain specific knowledge, including the 'massive modularity' thesis and the theory of core knowledge domains cognitive development relating the theory of mind and

mathematics the relationship between biological and cultural evolution and their respective roles in cognitive development language and innateness, particularly Chomsky's linguistic nativism and challenges to this morality, moral judgment, and innateness. Innateness and Cognition is an excellent resource for those researching and studying philosophy of psychology and philosophy of mind, as well as those interested in foundational issues in cognitive science, psychology, linguistics, and anthropology.

The question, "What is Cognitive Science?" is often asked but seldom answered to anyone's satisfaction. Until now, most of the answers have come from the new breed of philosophers of mind. This book, however, is written by a distinguished psychologist and computer scientist who is well-known for his work on the conceptual foundations of cognitive science, and especially for his research on mental imagery, representation, and perception. In Computation and Cognition, Pylyshyn argues that computation must not be viewed as just a convenient metaphor for mental activity, but as a literal empirical hypothesis. Such a view must face a number of serious challenges. For example, it must address the question of "strong equivalents" of processes, and must empirically distinguish between phenomena which reveal what knowledge the organism has, phenomena which reveal properties of the biologically determined "functional architecture" of the mind. The principles and ideas Pylyshyn develops are applied to a number of contentious areas of cognitive science, including theories of vision and mental imagery. In illuminating such timely theoretical problems, he draws on insights from psychology, theoretical computer science, artificial intelligence, and psychology of mind. A Bradford Book

Unlike any other book, Avian Cognition thoroughly examines avian intelligence, behavior, and individuality. Preferences, choices, motivation, and habits of species, flocks, and individual birds are discussed and compared. This book investigates who birds are and why they do what they do. Daily, seasonal, and play activities, creativity, reasoning a

This Handbook reviews a wealth of research in cognitive and educational psychology that investigates how to enhance learning and instruction to aid students struggling to learn and to advise teachers on how best to support student learning. The Handbook includes features that inform readers about how to improve instruction and student achievement based on scientific evidence across different domains, including science, mathematics, reading and writing. Each chapter supplies a description of the learning goal, a balanced presentation of the current evidence about the efficacy of various approaches to obtaining that learning goal, and a discussion of important future directions for research in this area. It is the ideal resource for researchers continuing their study of this field or for those only now beginning to explore how to improve student achievement.

An argument that there are perceptual mechanisms that retrieve information in cognitively and conceptually unmediated ways and that this sheds light on various philosophical issues. In Cognition and Perception, Athanassios Raftopoulos discusses the cognitive penetrability of perception and claims that there is a part of visual processes (which he calls “perception”) that results in representational states with nonconceptual content; that is, a part that retrieves information from visual scenes in conceptually unmediated, “bottom-up,” theory-neutral ways. Raftopoulos applies this insight to problems in philosophy of science, philosophy of mind, and epistemology, and examines how we access

the external world through our perception as well as what we can know of that world. To show that there is a theory-neutral part of existence, Raftopoulos turns to cognitive science and argues that there is substantial scientific evidence. He then claims that perception induces representational states with nonconceptual content and examines the nature of the nonconceptual content. The nonconceptual information retrieved, he argues, does not allow the identification or recognition of an object but only its individuation as a discrete persistent object with certain spatiotemporal properties and other features. Object individuation, however, suffices to determine the referents of perceptual demonstratives. Raftopoulos defends his account in the context of current discussions on the issue of the theory-ladenness of perception (namely the Fodor-Churchland debate), and then discusses the repercussions of his thesis for problems in the philosophy of science. Finally, Raftopoulos claims that there is a minimal form of realism that is defensible. This minimal realism holds that objects, their spatiotemporal properties, and such features as shape, orientation, and motion are real, mind-independent properties in the world.

Distributed Cognition and Reality puts theory into practice, as the first book to show how to apply the Perceptual Cycle Model in aviation decision making. Based on case studies, critical incident interviews and live observations in cockpits, the authors develop a new way to understand how pilots and crews make decisions. This book will be useful for practitioners involved in accident and incident investigations and decision-making training, researchers and students within the disciplines of Aviation, Human Factors, Ergonomics, Engineering, Computer Science, and Psychology. Dr Katherine L Plant is a New Frontiers Fellow in Human Factors Engineering at the University of Southampton in the UK. In 2014 she was awarded the Honourable Company of Air Pilots Prize for Aviation Safety Research. Professor Neville A Stanton holds the Chair in Human Factors Engineering at the University of Southampton in the UK. In 2007 The Royal Aeronautical Society awarded him the Hodgson Medal for his work on flight-deck safety.

This book brings together researchers with cognitive-scientific and literary backgrounds to present innovative research in all three variations on the possible interactions between literary studies and cognitive science. The tripartite structure of the volume reflects a more ambitious conception of what cognitive approaches to literature are and could be than is usually encountered, and thus aims both to map out and to advance the field. The first section corresponds to what most people think of as "cognitive poetics" or "cognitive literary studies": the study of literature by literary scholars drawing on cognitive-scientific methods, findings, and/or debates to yield insights into literature. The second section demonstrates that literary scholars needn't only make use of cognitive science to study literature, but can also, in a reciprocally interdisciplinary manner, use a cognitively informed perspective on literature to offer benefits back to the cognitive sciences. Finally, the third section, "literature in cognitive science",

showcases some of the ways in which literature can be a stimulating object of study and a fertile testing ground for theories and models, not only to literary scholars but also to cognitive scientists, who here engage with some key questions in cognitive literary studies with the benefit of their in-depth scientific knowledge and training.

Edwin Hutchins combines his background as an anthropologist and an open ocean racing sailor and navigator in this account of how anthropological methods can be combined with cognitive theory to produce a new reading of cognitive science. His theoretical insights are grounded in an extended analysis of ship navigation—its computational basis, its historical roots, its social organization, and the details of its implementation in actual practice aboard large ships. The result is an unusual interdisciplinary approach to cognition in culturally constituted activities outside the laboratory—"in the wild." Hutchins examines a set of phenomena that have fallen in the cracks between the established disciplines of psychology and anthropology, bringing to light a new set of relationships between culture and cognition. The standard view is that culture affects the cognition of individuals. Hutchins argues instead that cultural activity systems have cognitive properties of their own that are different from the cognitive properties of the individuals who participate in them. Each action for bringing a large naval vessel into port, for example, is informed by culture: the navigation team can be seen as a cognitive and computational system. Introducing Navy life and work on the bridge, Hutchins makes a clear distinction between the cognitive properties of an individual and the cognitive properties of a system. In striking contrast to the usual laboratory tasks of research in cognitive science, he applies the principal metaphor of cognitive science—cognition as computation (adopting David Marr's paradigm)—to the navigation task. After comparing modern Western navigation with the method practiced in Micronesia, Hutchins explores the computational and cognitive properties of systems that are larger than an individual. He then turns to an analysis of learning or change in the organization of cognitive systems at several scales. Hutchins's conclusion illustrates the costs of ignoring the cultural nature of cognition, pointing to the ways in which contemporary cognitive science can be transformed by new meanings and interpretations. A Bradford Book