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Psychology & Neuroscience

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New and Best of Backlist

Spring 2023





The Annotated Hodgkin and Huxley

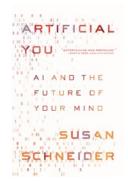
Indira M. Raman 9780691220635 £35.00 Trade Paperback Science / Life Sciences / Neuroscience January 2022 Princeton University Press

The first annotated edition of the scientific papers that created the foundation of modern neuroscience and physiology

The origin of everything known about how neurons and muscles generate electrical signals can be traced back to five revolutionary papers, published in the Journal of Physiology in 1952 by Alan Hodgkin and Andrew Huxley. The principles they revealed remain cornerstones of the discipline, summarized in every introductory neuroscience and physiology course. Since that era, however, scientific practice, technology, and presentation have changed extensively. It is difficult for the modern reader to appreciate Hodgkin and Huxley's rigorous scientific thought, elegant experimental design, ingenious analysis, and beautiful writing.

This book provides the first annotated edition of these papers, offering essential background on everything, from terminology, equations, and electronics, to the greater historical and scientific context surrounding the work. The original journal pages are displayed opposite detailed notes explaining content, process, and background, with copies of the figures replotted according to modern conventions. Indispensable for scientists, teachers, and trainees alike, *The Annotated Hodgkin and Huxley* makes an essential body of knowledge—and an unparalleled approach to research—accessible to a new readers. to a new generation of readers

- Reproduces the original articles paired with extensive annotations on facing pages
- Replots figures with modern conventions of data display Explains the development of the voltage clamp and the discovery of ionic currents and action potential generation, foundational to the study of neuroscience and physiology
- Summarizes the history of electrophysiology leading to Hodgkin and Huxley's work
- Includes appendices on relevant concepts from mathematics, physics, electronics, chemical kinetics, and numerical methods

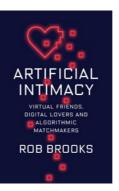


Artificial You

Susan Schneider 9780691216744 £13.99 Trade Paperback Science / Life Sciences / Neuroscience April 2021 Princeton University Press

A guide to AI's thorniest implications that asks: How shall we navigate our brave new world?

We are at a monumental turning point in human history. AI is taking intelligence in new directions. The strongest human competitors in chess, go, and *Jeopardy*! have been beaten by AIs, and AI is getting more sophisticated by the day. Further, AI research is going inside the human brain itself, getting more sophisticated by the day. Further, AI research is going inside the human brain itself, attempting to augment human minds. It may even create greater-than-human-level intelligence, leading to a new generation of artificial minds—Minds 2.0. Susan Schneider, a philosopher, argues that these undertakings must not be attempted without a richer understanding of the nature of the mind. An insufficient grasp of the underlying philosophical issues could undermine the use of AI and brain enhancement technology, bringing about the demise or suffering of conscious beings. Examining the philosophical questions lying beneath the algorithms, Schneider takes on AI's thorniest implications.

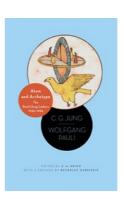


Artificial Intimacy

Rob Brooks 9780231200943 £25.00 Hardcover Psychology / Human Sexuality September 2021 Columbia University Press

What happens when the human brain, which evolved over eons, collides with twenty-first-century technology? Machines can now push psychological buttons, stimulating and sometimes exploiting the technology? Machines can now push psychological buttons, stimulating and sometimes exploit ways people make friends, gossip with neighbors, and grow intimate with lovers. Sex robots pres the humanoid face of this technological revolution—yet although it is easy to gawk at their uncanniness, more familiar technologies based in artificial intelligence and virtual reality are instinuating themselves into human interactions. Digital lovers, virtual friends, and algorithmic matchmakers help us manage our feelings in a world of cognitive overload. Will these machines, fueled by masses of user data and powered by algorithms that learn all the time, transform the quality of human life?

Artificial Intimacy offers an innovative perspective on the possibilities of the present and near future. The evolutionary biologist Rob Brooks explores the latest research on intimacy and desire to consider the interaction of new technologies and fundamental human behaviors. He details how existing artificial intelligences can already learn and exploit human social needs—and are getting better at what they do. Brooks combines an understanding of core human traits from evolutionary biology with analysis of how cultural, economic, and technological contexts shape the ways people express them. Beyond the technology, he asks what the implications of artificial intimacy will be for how we understand ourselves



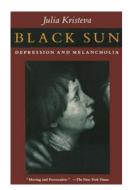
Atom and Archetype

C. G. Jung 9780691161471 £22.00 Trade Paperback Psychology / Movements / Jungian July 2014 Princeton University Press

In 1932, world-renowned physicist Wolfgang Pauli had already done the work that would win him the 1945 Nobel Prize. He was also suffering after a series of troubling personal events. He was drinking heavily, quarrelling frequently, and experiencing powerful, disturbing dreams. Pauli turned to C. G. Jung for help, forging an extraordinary intellectual conjunction not just between a physicist and a psychologist but between physics and psychology. As their acquaintance developed, Jung and Pauli discussed the nature of dreams and their relation to reality, finding surprising common ground between depth psychology and quantum physics and profoundly influencing each other's work.

This portrait of an incredible friendship will fascinate readers interested in psychology, science, creativity, and genius



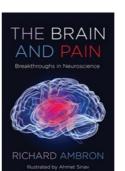


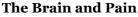
Black Sun

Julia Kristeva 9780231067072 £28.00 Trade Paperback Psychology / Movements / Psychoanalysis April 1992 Columbia University Press

In *Black Sun*, Julia Kristeva addresses the subject of melancholia, examining this phenomenon in the context of art, literature, philosophy, the history of religion and culture, as well as psychoanalysis. She describes the depressive as one who perceives the sense of self as a crucial pursuit and a nearly unattainable goal and explains how the love of a lost identity of attachment lies at the very core of depression's dark heart.

In her discussion she analyzes Holbein's controversial 1522 painting "The Body of the Dead Christ in the Tomb," and has revealing comments on the works of Marguerite Duras, Dostoyevsky and Nerval. *Black Sun* takes the view that depression is a discourse with a language to be learned, rather than strictly a pathology to be treated.



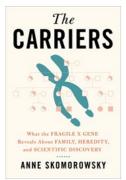


Richard Ambron 9780231204873 £25.00 Trade Paperback Science / Life Sciences / Neuroscience March 2022 Columbia University Press

Pain is an inevitable part of existence, but severe debilitating or chronic pain is a pathological condition that diminishes the quality of life. *The Brain and Pain* explores the present and future of pain management, providing a comprehensive understanding based on the latest discoveries from many branches of neuroscience.

Richard Ambron—the former director of a neuroscience lab that conducted leading research in this field—explains the science of how and why we feel pain. He describes how the nervous system and brain process information that leads to the experience of pain, detailing the cellular and molecular functions that are responsible for the initial perceptions of an injury. He discusses how pharmacological agents such as opiates affect the duration and intensity of pain. Ambron examines new evidence showing that discrete circuits in the brain modulate the experience of pain in response to a placebo, fear, anxiety, belief, or other circumstances, as well as how pain can be relieved by activating these circuits using mindfulness training and other nonpharmacological treatments. The book also evaluates the prospects of procedures such as deep brain stimulation and optogenetics.

Current and thorough, *The Brain and Pain* will be invaluable for a range of people seeking to understand their options for treatment as well as students in neuroscience and medicine.



The Carriers

Anne Skomorowsky 9780231197663 £22.00 Hardcover Medical / Psychiatry May 2022 Columbia University Press

Consciousness and the Unconscious

C. G. Jung 9780691228570 £25.00 Hardcover Psychology / Movements / Jungian February 2022 Princeton University Press

A tiny mutation on the X chromosome can shape a family's history. Passed down from a "carrier" parent to a child, fragile X syndrome is the most common inherited cause of intellectual disability and autism. Beyond that—and a rarity among genetic disorders—some fragile X carriers not only transmit the mutation but also experience related conditions themselves. In such cases, carriers can have tremors, infertility, and psychiatric disorders that complicate raising children with fragile X syndrome —and all too often, they suffer in silence.

The Carriers investigates this common but still little-known genetic condition and its life-altering consequences. Anne Skomorowsky reveals how this disorder afflicts families across generations, telling the stories of the mothers and grandparents of fragile X patients and considering how genes interact with family dynamics. She interweaves the personal narratives and family histories of the people affected by fragile X disorders with clear and accessible explanations of the science behind them. Skomorowsky unpacks the latest research on the fragile X mutation and explores the history of its discovery. She highlights the roles of women as carriers, caregivers, and researchers who have made astonishing scientific breakthroughs over the last three decades.

The Carriers is an essential book for fragile X families, including those just learning they are carriers, and for all readers interested in the complexities of heredity, the ethical dilemmas of genetic medicine, and the relationship between genes and personality.

Psychology / M February 2022 Princeton Univ

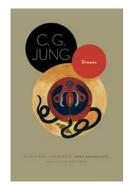
Jung's lectures on consciousness and the unconscious—in English for the first time

Between 1933 and 1941, C. G. Jung delivered a series of public lectures at the Swiss Federal Institute of Technology (ETH) in Zurich. Intended for a general audience, these lectures addressed a broad range of topics, from dream analysis and yoga to the history of psychology. They are at the center of Jung's intellectual activity in this period and provide the basis of his later work. Here for the first time in English is Jung's introduction to his core psychological theories and methods, delivered in the summer of 1934.

With candor and wit, Jung shares with his audience the path he himself took to understanding the nature of consciousness and the unconscious. He describes their respective characteristics using examples from his clinical experience as well as from literature, his travels, and everyday life. For Jung, consciousness is like a small island in the ocean of the unconscious, while the unconscious is part of the primordial condition of humankind. Jung explains various methods for uncovering the contents of the unconscious, in particular talk therapy and dream analysis.

Complete with explanations of Jungian concepts and terminology, *Consciousness and the Unconscious* painstakingly reconstructs and translates these talks from detailed shorthand notes by attendees, making a critical part of Jung's work available to today's readers.





University College London.

Dreams

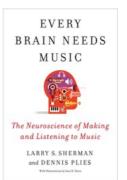
Dream analysis is a distinctive and foundational part of analytical psychology, the school of psychology founded by C. G. Jung and his successors. This volume collects Jung's most insightful contributions to the study of dreams and their meaning. The essays in this volume, written by Jung between 1909 and

1945, reveal Jung's most essential views about dreaming--especially regarding the relationship between language and dream. Through these studies, Jung grew to understand that dreams are themselves a language, a language through which the soul communicates with the body. The essays included are "The Analysis of Dreams," "On the Significance of Number Dreams," "General Aspects of Dream Psychology," "On the Nature of Dreams," "The Practical Use of Dream Analysis," and

New to this edition is a foreword by Sonu Shamdasani, Philemon Professor of Jung History at

"Individual Dream Symbolism in Relation to Alchemy" (complete with illustrations)

C. G. Jung 9780691150482 £13.99 Trade Paperback Psychology / Movements / Psychoanalysis November 2010 Princeton University Press



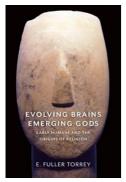
Every Brain Needs Music

Lawrence Sherman 9780231209106 £25.00 Hardcover Science / Life Sciences / Neuroscience May 2023 Columbia University Press

Whenever a person engages with music—when a piano student practices a scale, a jazz saxophonist riffs on a melody, a teenager sobs to a sad song, or a wedding guest gets down on the dance floor—countless neurons are firing. Playing an instrument requires all of the resources of the nervous system, including cognitive, sensory, and motor functions. Composition and improvisation are remarkable demonstrations of the brain's capacity for creativity. Something as seemingly simple as listening to a tune involves mental faculties most of us don't even realize we have.

Larry S. Sherman, a neuroscientist and lifelong musician, and Dennis Plies, a professional musician and teacher, collaborate to show how our brains and music work in harmony. They consider music in all the ways we encounter it—teaching, learning, practicing, listening, composing, improvising, and performing—in terms of neuroscience as well as music pedagogy, showing how the brain functions and even changes in the process. *Every Brain Needs Music* draws on leading behavioral, cellular, and molecular neuroscience research as well as surveys of more than a hundred musical people. It provides new perspectives on learning to play, teaching, how to practice and perform, the ways we react to music, and why the brain benefits from musical experiences.

Written for both musical and nonmusical people, including newcomers to brain science, this book is a lively and easy-to-read exploration of the neuroscience of music and its significance in our lives.

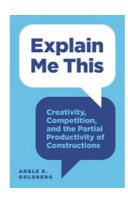


Evolving Brains, Emerging Gods

E. Fuller Torrey 9780231183376 £18.99 Trade Paperback Psychology / Neuropsychology August 2019 Columbia University Press

Religions and mythologies from around the world teach that God or gods created humans. Atheist, humanist, and materialist critics, meanwhile, have attempted to turn theology on its head, claiming that religion is a human invention. In this book, E. Fuller Torrey draws on cutting-edge neuroscience research to propose a startling answer to the ultimate question. *Evolving Brains, Emerging Gods* locates the origin of gods within the human brain, arguing that religious belief is a by-product of evolution.

Based on an idea originally proposed by Charles Darwin, Torrey marshals evidence that the emergence of gods was an incidental consequence of several evolutionary factors. Using data ranging from ancient skulls and artifacts to brain imaging, primatology, and child development studies, this book traces how new cognitive abilities gave rise to new behaviors. For instance, autobiographical memory, the ability to project ourselves backward and forward in time, gave *Homo sapiens* a competitive advantage. However, it also led to comprehension of mortality, spurring belief in an alternative to death. Torrey details the neurobiological sequence that explains why the gods appeared when they did, connecting archaeological findings including clothing, art, farming, and urbanization to cognitive developments. This book does not dismiss belief but rather presents religious belief as an inevitable outcome of brain evolution. Providing clear and accessible explanations of evolutionary neuroscience, *Evolving Brains, Emerging Gods* will shed new light on the mechanics of our deepest mysteries.



Explain Me This

Adele E. Goldberg 9780691174266 £25.00 Trade Paperback Psychology / Cognitive Psychology & Cognition February 2019 Princeton University Press

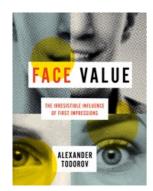
Why our use of language is highly creative yet also constrained

We use words and phrases creatively to express ourselves in ever-changing contexts, readily extending language constructions in new ways. Yet native speakers also implicitly know when a creative and easily interpretable formulation—such as "Explain me this" or "She considered to go"—doesn't sound quite right. In this incisive book, Adele Goldberg explores how these creative but constrained language skills emerge from a combination of general cognitive mechanisms and experience.

Shedding critical light on an enduring linguistic paradox, Goldberg demonstrates how words and abstract constructions are generalized and constrained in the same ways. When learning language, we record partially abstracted tokens of language within the high-dimensional conceptual space that is used when we speak or listen. Our implicit knowledge of language includes dimensions related to form, function, and social context. At the same time, abstract memory traces of linguistic usage-events cluster together on a subset of dimensions, with overlapping aspects strengthened via repetition. In this way, dynamic categories that correspond to words and abstract constructions emerge from partially overlapping memory traces, and as a result, distinct words and constructions compete with one another each time we select them to express our intended messages.

While much of the research on this puzzle has favored semantic or functional explanations over statistical ones, Goldberg's approach stresses that both the functional and statistical aspects of constructions emerge from the same learning mechanisms.





Face Value

Alexander Todorov 9780691167497 £28.00 Hardcover Psychology / Social Psychology June 2017 Princeton University Press

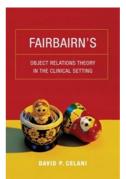
The scientific story of first impressions—and why the snap character judgments we make from faces are irresistible but usually incorrect

We make up our minds about others after seeing their faces for a fraction of a second—and these snap judgments predict all kinds of important decisions. For example, politicians who simply look more competent are more likely to win elections. Yet the character judgments we make from faces are as inaccurate as they are irresistible; in most situations, we would guess more accurately if we ignored faces. So why do we put so much stock in these widely shared impressions? What is their purpose if they are completely unreliable? In this book, Alexander Todorov, one of the world's leading researchers on the subject, answers these questions as he tells the story of the modern science of first impressions.

Drawing on psychology, cognitive science, neuroscience, computer science, and other fields, this accessible and richly illustrated book describes cutting-edge research and puts it in the context of the history of efforts to read personality from faces. Todorov describes how we have evolved the ability to read basic social signals and momentary emotional states from faces, using a network of brain regions dedicated to the processing of faces. Yet contrary to the nineteenth-century pseudoscience of physiognomy and even some of today's psychologists, faces don't provide us a map to the personalities of others. Rather, the impressions we draw from faces reveal a map of our own biases and stereotypes.

A fascinating scientific account of first impressions, *Face Value* explains why we pay so much attention to faces, why they lead us astray, and what our judgments actually tell us.

Erich Neumann



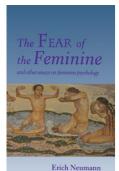
Fairbairn's Object Relations Theory in the Clinical Setting

David Celani 9780231149075 £32.00 Trade Paperback Psychology / Developmental April 2010 Columbia University Press

W. R. D. Fairbairn (1889-1964) challenged the dominance of Freud's drive theory with a psychoanalytic theory based on the internalization of human relationships. Fairbairn assumed that the unconscious develops in childhood and contains dissociated memories of parental neglect, insensitivity, and outright abuse that are impossible the children to tolerate consciously. In Fairbairn's model, these dissociated memories protect developing children from recognizing how bally they are being treated and allow them to remain attached even to physically abusive parents.

Attachment is paramount in Fairbairn's model, as he recognized that children are absolutely and unconditionally dependent on their parents. Kidnapped children who remain attached to their abusive captors despite opportunities to escape illustrate this intense dependency, even into adolescence. At the heart of Fairbairn's model is a structural theory that organizes actual relational events into three self-and-object pairs: one conscious pair (the central ego, which relates exclusively to the ideal object in the external world) and two mostly unconscious pairs (the child's antibidinal ego, which relates exclusively to the rejecting parts of the object, and the child's libidinal ego, which relates exclusively to the exciting parts of the object). The two dissociated self-and-object pairs remain in the unconscious but can emerge and suddenly take over the individual's central ego. When they emerge, the "other" is misperceived as either an exciting or a rejecting object, thus turning these internal structures into a source of transferences and reenactments. Fairbairn's central defense mechanism, splitting, is the fast shift from central ego dominance to either the libidinal ego or the antilibidinal ego - a near perfect model of the borderline personality disorder.

In this book, David Celani reviews Fairbairn's five foundational papers and outlines their application in the clinical setting. He discusses the four unconscious structures and offers the clinical noncrete suggestions on how to recognize and respond to them effectively in the heat of the clinical interview. Incorporating decades of experience into his analysis, Celani emphasizes the internalization of the therapist as a new "good" object and devotes entire sections to the treatment of histrionic, obsessive, and borderline personality disorders.

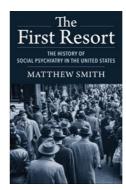


The Fear of the Feminine

9780691034737 £35.00 Trade Paperback Psychology / Movements / Psychoanalysis May 1994 Princeton University Press

These essays by the famous analytical psychologist and student of creativity Erich Neumann belong in the context of the depth psychology of culture and reveal a prescient concern about the one-sidedness of patriarchal Western civilization. Neumann recommended a "cultural therapy" that he thought would redress a "fundamental ignorance" about feminine and masculine psychology, and he looked for societal healing to a "matriarchal consciousness" that forms the bridge between the feminine and the creative

Brought together here for the first time, the essays in the book discuss the psychological stages of woman's development, the moon and matriarchal consciousness, Mozart's *Magic Flute*, the meaning of the earth archetype for modern times, and the fear of the feminine. In Mozart's fantastic world, Neumann saw a true *Auseinandersetzung*--the conflict and coming-to-terms with each other of the matriarchal and the patriarchal worlds. Developing such a synthesis of the feminine and the masculine in the psychic reality of the individual and of the collective was, he argued, one of the fundamental, future-oriented tasks of both the society and the individual.



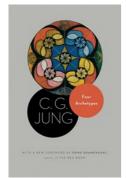
The First Resort

Matthew Smith 9780231203937 £25.00 Trade Paperback Psychology / Social Psychology January 2023 Columbia University Press

Social psychiatry was a mid-twentieth-century approach to mental health that stressed the prevention of mental illness rather than its treatment. Its proponents developed environmental explanations of mental health, arguing that socioeconomic problems such as poverty, inequality, and social isolation were the underlying causes of mental illness. The influence of social psychiatry contributed to the closure of psychiatric hospitals and the emergence of community mental health care during the 1960s. By the 1980s, however, social psychiatry was in decline, having lost ground to biological psychiatry and its emphasis on genetics, neurology, and psychopharmacology.

The First Resort is a history of the rise and fall of social psychiatry that also explores the lessons this largely forgotten movement has to offer today. Matthew Smith examines four ambitious projects that investigated the relationship between socioeconomic factors and mental illness in Chicago, New Haven, New York City, and Nova Scotia. He contends that social psychiatry waned not because of flaws in its preventive approach to mental health but rather because the economic and political crises of the 1970s and the shift to the right during the 1980s foreclosed the social changes required to create a more mentally healthy society. Smith also argues that social psychiatry provides timely insights about how progressive social policies, such as a universal basic income, can help stem rising rates of mental illness in the present day.





Four Archetypes

One of Jung's most influential ideas has been his view, presented here, that primordial images, or

Rebirth, and contrasts the idea of Spirits seen in dreams to those recounted in fairy tales

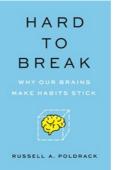
Professor of Jung History at University College London.

archetypes, dwell deep within the unconscious of every human being. The essays in this volume gather

together Jung's most important statements on the archetypes, beginning with the introduction of the concept in "Archetypes and the Collective Unconscious." In separate essays, he elaborates and explores the archetypes of the Mother and the Trickster, considers the psychological meaning of the myths of

This paperback edition of Jung's classic work includes a new foreword by Sonu Shamdasani, Philemon

C. G. Jung 9780691150499 £10.99 Trade Paperback Psychology / Movements / Psychoanalysis November 2010 Princeton University Press



Hard to Break

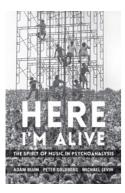
Russell A. Poldrack 9780691241494 £15.99 Trade Paperback Science / Life Sciences / Neuroscience October 2022 Princeton University Press

The neuroscience of why bad habits are so hard to break—and how evidence-based strategies can help us change our behavior more effectively

We all have habits we'd like to break, but for many of us it can be nearly impossible to do so. There is a good reason for this: the brain is a habit-building machine. In *Hard to Break*, leading neuroscientist Russell Poldrack provides an engaging and authoritative account of the science of how habits are built in the brain, why they are so hard to break, and how evidence-based strategies may help us change unwanted behaviors.

Hard to Break offers a clear-eyed tour of what neuroscience tells us about habit change and debunks "easy fixes" that aren't backed by science. It explains how dopamine is essential for building habits and how the battle between habits and intentional goal-directed behaviors reflects a competition between different brain systems. Along the way, we learn how cues trigger habits; why we should make rules, not decisions; how the stimuli of the modern world hijack the brain's habit machinery and lead to drug abuse and other addictions; and how neuroscience may one day enable us to hack our habits. Shifting from the individual to society, the book also discusses the massive habit changes that will be needed to address the biggest challenges of our time.

Moving beyond the hype to offer a deeper understanding of the biology of habits in the brain, *Hard to Break* reveals how we might be able to make the changes we desire—and why we should have greater empathy with ourselves and others who struggle to do so.

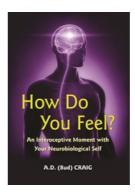


Here I'm Alive

Adam Blum 9780231209458 £28.00 Trade Paperback Psychology / Movements / Psychoanalysis March 2023 Columbia University Press

Here I'm Alive explores the musical foundation of being human from a psychoanalytic perspective.

Writing in collaboration, three psychoanalytic clinicians develop a fresh vision of the essential role of music in psychical life. Through an interdisciplinary exploration, *Here I'm Alive* shows how music is fundamental to becoming human, establishing our embodied sense of membership and participation in a shared world through the fabric of culture. With one authorial voice, these pages resonate with the musical forms of living that make possible any individual style of conduct or shape of desire and without which we are forever lost in the noise.



How Do You Feel?

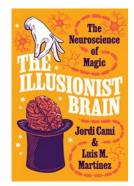
A. D. Craig 9780691204086 £28.00 Trade Paperback Science / Life Sciences / Neuroscience June 2020 Princeton University Press

A book that fundamentally changes how neuroscientists and psychologists categorize sensations and understand the origins and significance of human feelings

How Do You Feel? brings together startling evidence from neuroscience, psychology, and psychiatry to present revolutionary new insights into how our brains enable us to experience the range of sensations and mental states known as feelings. Drawing on his own cutting-edge research, neurobiologist Bud Craig has identified an area deep inside the mammalian brain—the insular cortex—as the place where interoception, or the processing of bodily stimuli, generates feelings. He shows how this crucial pathway for interoceptive awareness gives rise in humans to the feeling of being alive, vivid perceptual feelings, and a subjective image of the sentient self across time. Craig explains how feelings represent activity patterns in our brains that signify emotions, intentions, and thoughts, and how integration of these patterns is driven by the unique energy needs of the hominid brain. He describes the essential role of feelings and the insular cortex in such diverse realms as music, fluid intelligence, and bivalent emotions, and relates these ideas to the philosophy of William James and even to feelings in dogs.

How Do You Feel? is also a compelling insider's account of scientific discovery, one that takes readers behind the scenes as the astonishing answer to this neurological puzzle is pursued and pieced together from seemingly unrelated fields of scientific inquiry. This book will fundamentally alter the way that neuroscientists and psychologists categorize sensations and understand the origins and significance of human feelings.





The Illusionist Brain

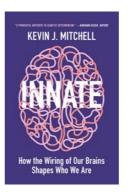
Jordi Camí 9780691208442 £22.00 Hardcover Science / Life Sciences / Neuroscience June 2022 Princeton University Press

How magicians exploit the natural functioning of our brains to astonish and amaze us

How do magicians make us see the impossible? *The Illusionist Brain* takes you on an unforgettable journey through the inner workings of the human mind, revealing how magicians achieve their spectacular and seemingly impossible effects by interfering with your cognitive processes. Along the way, this lively and informative book provides a guided tour of modern neuroscience, using magic as a lens for understanding the unconscious and automatic functioning of our brains.

We construct reality from the information stored in our memories and received through our senses, and our brains are remarkably adept at tricking us into believing that our experience is continuous. In fact, our minds create our perception of reality by elaborating meanings and continuities from incomplete information, and while this strategy carries clear benefits for survival, it comes with blind spots that magicians know how to exploit. Jordi Camí and Luis Martínez explore the many different ways illusionists manipulate our attention—making us look but not see—and take advantage of our individual predispositions and fragile memories.

The Illusionist Brain draws on the latest findings in neuroscience to explain how magic deceives us, surprises us, and amazes us, and demonstrates how illusionists skillfully "hack" our brains to alter how we perceive things and influence what we imagine.

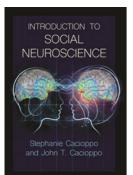


Innate

Kevin J. Mitchell 9780691204154 £15.99 Trade Paperback Science / Life Sciences / Neuroscience March 2020 Princeton University Press

A leading neuroscientist explains why your personal traits are more innate than you think

What makes you the way you are—and what makes each of us different from everyone else? In *Innate*, leading neuroscientist and popular science blogger Kevin Mitchell traces human diversity and individual differences to their deepest level: in the wiring of our brains. Deftly guiding us through important new research, including his own groundbreaking work, he explains how variations in the way our brains develop before birth strongly influence our psychology and behavior throughout our lives, shaping our personality, intelligence, sexuality, and even the way we perceive the world. Compelling and original, *Innate* will change the way you think about why and how we are who we are.



Introduction to Social Neuroscience

Stephanie Cacioppo 9780691167275 £80.00 Hardcover Science / Life Sciences / Neuroscience August 2020

Princeton University Press

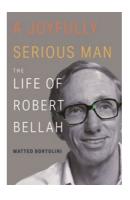
A textbook that lays down the foundational principles for understanding social neuroscience

Humans, like many other animals, are a highly social species. But how do our biological systems implement social behaviors, and how do these processes shape the brain and biology? Spanning multiple disciplines, *Introduction to Social Neuroscience* seeks to engage students and scholars alike in exploring the effects of the brain's perceived connections with others. This wide-ranging textbook provides a quintessential foundation for comprehending the psychological, neural, hormonal, cellular, and genomic mechanisms underlying such varied social processes as loneliness, empathy, theory-of-mind, trust, and cooperation.

Stephanie and John Cacioppo posit that our brain is our main social organ. They show how the same objective relationship can be perceived as friendly or threatening depending on the mental states of the individuals involved in that relationship. They present exercises and evidence-based findings readers can put into practice to better understand the neural roots of the social brain and the cognitive and health implications of a dysfunctional social brain. This textbook's distinctive features include the integration of human and animal studies, clinical cases from medicine, multilevel analyses of topics from genes to societies, and a variety of methodologies.

Unveiling new facets to the study of the social brain's anatomy and function, *Introduction to Social Neuroscience* widens the scientific lens on human interaction in society.

- The first textbook on social neuroscience intended for advanced undergraduates and graduate students
- Chapters address the psychological, neural, hormonal, cellular, and genomic mechanisms underlying the brain's perceived connections with others



A Joyfully Serious Man

Matteo Bortolini 9780691204406 £30.00 Hardcover Biography & Autobiography / Social Scientists & Psychologists October 2021 Princeton University Press

The brilliant but turbulent life of a public intellectual who transformed the social sciences

Robert Bellah (1927–2013) was one of the most influential social scientists of the twentieth century. Trained as a sociologist, he crossed disciplinary boundaries in pursuit of a greater comprehension of religion as both a cultural phenomenon and a way to fathom the depths of the human condition. *A Joyfully Serious Man* is the definitive biography of this towering figure in modern intellectual life, and a revelatory portrait of a man who led an adventurous yet turbulent life.

Drawing on Bellah's personal papers as well as in-depth interviews with those who knew him, Matteo Bortolini tells the story of an extraordinary scholarly career and an eventful and tempestuous life. He describes Bellah's exile from the United States during the hysteria of the McCarthy years, his crushing personal tragedies, and his experiments with sexuality. Bellah understood religion as a mysterious human institution that brings together the scattered pieces of individual and collective experiences. Bortolini shows how Bellah championed intellectual openness and innovation through his relentless opposition to any notion of secularization as a decline of religion and his ideas about the enduring tensions between individualism and community in American society.

Based on nearly two decades of research, *A Joyfully Serious Man* is a revelatory chronicle of a leading public intellectual who was both a transformative thinker and a restless, passionate seeker.





Jung on Ignatius of Loyola's Spiritual Exercises ^{C. G. Jung}

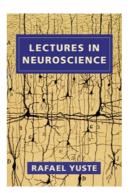
9780691244167 £35.00 Hardcover Psychology / Movements / Jungian January 2023 Princeton University Press

Jung's lectures on the psychology of Jesuit spiritual practice—unabridged in English for the first time

Between 1933 and 1941, C. G. Jung delivered a series of public lectures at the Swiss Federal Institute of Technology (ETH) in Zurich. Intended for a general audience, these lectures addressed a broad range of topics, from yoga and meditation to dream analysis and the psychology of alchemy. Here for the first time are Jung's complete lectures on Ignatius of Loyola's *Spiritual Exercises*, delivered in the winter of 1939–1940.

These illuminating lectures are the culmination of Jung's investigation into traditional forms of meditation and their parallels to his psychotherapeutic method of active imagination. Jung presents Loyola's exercises as the prime example of a Christian practice comparable to yoga and Eastern meditation, and gives a psychological interpretation of the visions depicted in the saint's autobiographical writings. Offering a unique opportunity to encounter the brilliant psychologist as he shares his ideas with the general public, the lectures reflect Jung's increasingly positive engagement with Roman Catholicism, a development that would lead to his fruitful collaborations after the war with eminent Catholic theologians such as Victor White, Bruno de Jésus-Marie, and Hugo Rahner.

Featuring an authoritative introduction by Martin Liebscher along with explanations of Jungian concepts and psychological terminology, this splendid book provides an invaluable window on the evolution of Jung's thought and a vital key to understanding his later work.



Lectures in Neuroscience

Rafael Yuste 9780231186476 £70.00 Trade Paperback Science / Life Sciences / Neuroscience August 2023 Columbia University Press

The human brain is perhaps the most intricate and fascinating object in the known universe. Through a mysterious process, the activity of billions of neurons within a few pounds of matter generates the unfathomable complexity of the mind.

This book is a conversational and accessible introduction to the brain. Beginning from basic elements of neuroscience, the acclaimed scientist Rafael Yuste guides readers through increasingly sophisticated topics. He describes how the brain is organized and how it develops, how neurons operate and form neural circuits, and how these circuits function as neural networks to generate behavior and mental states.

Yuste challenges the traditional view that the brain is an input-output machine that reacts reflexively to sensory stimuli. Instead, he argues, the purpose of the brain is to make a predictive model of the world in order to anticipate the future and choose successful courses of action. He gives readers insight into the workings of sensory and motor systems and the neurobiological basis of our perceptions, thoughts, emotions, memories, and consciousness.

Peppered with anecdotes and illustrated with elegant drawings and diagrams, this succinct book is accessible to readers without previous background in the subject. It is written for anyone seeking to grasp the core principles of neuroscience or looking for a fresh and clear perspective on how the brain works.

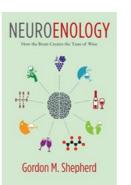
Making a Mindful Nation

Joanna Cook 9780691244488 £22.00 Trade Paperback Psychology / Mental Health August 2023 Princeton University Press

How mindfulness came to be regarded as a psychological support, an ethical practice, and a component of public policy

Mindfulness seems to be everywhere—in popular culture, in therapeutic practice, even in policy discussions. How did mindfulness, an awareness training practice with roots in Buddhism, come to be viewed as a solution to problems that range from depression and anxiety to criminal recidivism? If mindfulness if the answer, asks Joanna Cook, what is the question? In *Making a Mindful Nation*, Cook uses the lens of mindfulness to show how cultivating a relationship with the mind is now central to the ways people envision mental health. Drawing on long-term fieldwork with patients, therapists, members of Parliament, and political advocates in Britain, Cook explores how the logics of preventive mental healthcare are incorporated into people's relationships with themselves, therapeutic interventions, structures of governance, and political campaigns.

Cook observed mindfulness courses for people suffering from recurrent depression and anxiety, postgraduate courses for mindfulness-based therapists, parliamentarians' mindfulness practice, and political advocacy for mindfulness in public policy. She develops her theoretical argument through intimate and in-depth stories about people's lives and their efforts to navigate the world—whether these involve struggles with mental health or contributions to evolving political agendas. Doing so, Cook offers important insights into the social processes by which mental health is lived, the normative values that inform it and the practices of self-cultivation by which it is addressed.



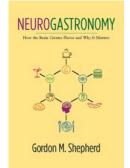
Neuroenology

Gordon Shepherd 9780231177009 £20.00 Hardcover Science / Life Sciences / Neuroscience November 2016 Columbia University Press

In his new book, Gordon M. Shepherd expands on the startling discovery that the brain creates the taste of wine. This approach to understanding wine's sensory experience draws on findings in neuroscience, biomechanics, human physiology, and traditional enology. Shepherd shows, just as he did in *Neurogastronomy: How the Brain Creates Flavor and Why It Matters*, that creating the taste of wine engages more of the brain than does any other human behavior. He clearly illustrates the scientific underpinnings of this process, along the way enhancing our enjoyment of wine.

Neuroenology is the first book on wine tasting by a neuroscientist. It begins with the movements of wine through the mouth and then consults recent research to explain the function of retronasal smell and its extraordinary power in creating wine taste. Shepherd comprehensively explains how the specific sensory pathways in the cerebral cortex create the memory of wine and how language is used to identify and imprint wine characteristics. Intended for a broad audience of readers—from amateur wine drinkers to sommeliers, from casual foodies to seasoned chefs—*Neuroenology* shows how the emotion of pleasure is the final judge of the wine experience. It includes practical tips for a scientifically informed wine tasting and closes with a delightful account of Shepherd's experience tasting classic Bordeaux vintages with French winemaker Jean-Claude Berrouet of the Chateau Petrus and Dominus Estate.





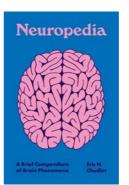
Neurogastronomy

Gordon Shepherd 9780231159111 £14.99 Trade Paperback Science / Life Sciences / Neuroscience July 2013 Columbia University Press

Leading neuroscientist Gordon M. Shepherd embarks on a paradigm-shifting trip through the "human brain flavor system," laying the foundations for a new scientific field: neurogastronomy. Challenging the belief that the sense of smell diminished during human evolution, Shepherd argues that this sense, which constitutes the main component of flavor, is far more powerful and essential than previously believed.

Shepherd begins *Neurogastronomy* with the mechanics of smell, particularly the way it stimulates the nose from the back of the mouth. As we eat, the brain conceptualizes smells as spatial patterns, and from these and the other senses it constructs the perception of flavor. Shepherd then considers the impact of the flavor system on contemporary social, behavioral, and medical issues. He analyzes flavor's engagement with the brain regions that control emotion, food preferences, and cravings, and he even devotes a section to food's role in drug addiction and, building on Marcel Proust's iconic tale of the madeleine, its ability to evoke deep memories.

Shepherd connects his research to trends in nutrition, dieting, and obesity, especially the challenges that many face in eating healthily. He concludes with human perceptions of smell and flavor and their relationship to the neural basis of consciousness. Everyone from casual diners and ardent foodies to wine critics, chefs, scholars, and researchers will delight in Shepherd's fascinating, scientific-gastronomic adventures.



Neuropedia

Eric H. Chudler 9780691213576 £9.99 Hardcover Science / Life Sciences / Neuroscience November 2022 Princeton University Press

A fun and fact-filled A–Z treasury for anyone with a head on their shoulders

Neuropedia journeys into the mysteries and marvels of the three pounds of tissue between your ears the brain. Eric Chudler takes you on a breathtaking tour of the nervous system with dozens of entries that explore the structure and function of the brain and cover topics such as the spinal cord and nerve cells, the methods of neuroscientific research, and the visionary scientists who have dedicated their lives to understanding what makes each of us who we are.

The brain has fascinated and puzzled researchers, physicians, and philosophers for thousands of years and captivated us with each new discovery. This compendium of neuroscientific wonders is brimming with facts and insights, helping us to make sense of our current understanding of the nervous system while identifying the frontiers in our knowledge that remain unexplored. Chudler guides readers through a variety of rare and common neurological disorders such as alien hand disorder, Capgras syndrome, Alzheimer's disease, Parkinson's disease, and stroke, and discusses the latest brain-imaging methods used to diagnose them. He discusses neurochemicals, neurotoxins, and lifesaving drugs, and offers bold perspectives on human consciousness that enable us to better appreciate our place in nature.

With marvelous illustrations by Kelly Chudler, *Neuropedia* is an informative and entertaining trip into the inner world of the brain.



The Neuroscience of Emotion

Ralph Adolphs 9780691174082 £42.00 Hardcover Science / Life Sciences / Neuroscience June 2018

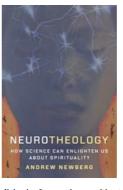
Princeton University Press

A new framework for the neuroscientific study of emotions in humans and animals

The Neuroscience of Emotion presents a new framework for the neuroscientific study of emotion across species. Written by Ralph Adolphs and David J. Anderson, two leading authorities on the study of emotion, this accessible and original book recasts the discipline and demonstrates that in order to understand emotion, we need to examine its biological roots in humans and animals. Only through a comparative approach that encompasses work at the molecular, cellular, systems, and cognitive levels will we be able to comprehend what emotions do, how they evolved, how the brain shapes their development, and even how we might engineer them into robots in the future.

Showing that emotions are ubiquitous across species and implemented in specific brain circuits, Adolphs and Anderson offer a broad foundation for thinking about emotions as evolved, functionally defined biological states. The authors discuss the techniques and findings from modern neuroscientific investigations of emotion and conclude with a survey of theories and future research directions.

Featuring color illustrations throughout, *The Neuroscience of Emotion* synthesizes the latest in neuroscientific work to provide deeper insights into how emotions function in all of us.



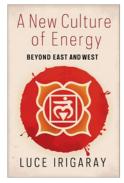
Neurotheology

Andrew Newberg 9780231179058 £20.00 Trade Paperback Religion / Psychology Of Religion February 2021 Columbia University Press

Religion is often cast in opposition to science. Yet both are deeply rooted in the inner workings of the human brain. With the advent of the modern cognitive neurosciences, the scientific study of religious and spiritual phenomena has become far more sophisticated and wide-ranging. What might brain scans of people in prayer, in meditation, or under the influence of psychoactive substances teach us about religious and spiritual beliefs? Are religion and spirituality reducible to neurological processes, or might there be aspects that, at least for now, transcend scientific claims?

In this book, Andrew Newberg explores the latest findings of neurotheology, the multidisciplinary field linking neuroscience with religious and spiritual phenomena. He investigates some of the most controversial—and potentially transformative—implications of a neurotheological approach for the truth claims of religion and our understanding of minds and brains. Newberg leads readers on a tour through key intersections of neuroscience and theology, including the potential evolutionary basis of religion; the psychology of religion, including mental health and brain pathology; the neuroscience of myths, rituals, and mystical experiences; how studies of altered states of consciousness shed new light on the mind-brain relationship; and what neurotheology can tell us about free will. When brain science and religious experience are considered together in an integrated approach, Newberg shows, we might come closer to a fuller understanding of the deepest questions.

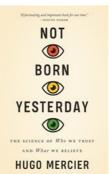




in harmony with all living beings

A New Culture of Energy

Luce Irigaray 9780231177139 £20.00 Trade Paperback Psychology / Movements / Psychoanalysis October 2021 Columbia University Press



Not Born Yesterday

Hugo Mercier 9780691208923 £16.99 Trade Paperback Psychology / Social Psychology March 2022 Princeton University Press

Why people are not as gullible as we think

Not Born Yesterday explains how we decide who we can trust and what we should believe—and argues that we're pretty good at making these decisions. In this lively and provocative book, Hugo Mercier demonstrates how virtually all attempts at mass persuasion—whether by religious leaders, politicians, or advertisers—fail miserably. Drawing on recent findings from political science and other fields ranging from history to anthropology, Mercier shows that the narrative of widespread gullibility, in which a credulous public is easily misled by demagogues and charlatans, is simply wrong.

Why is mass persuasion so difficult? Mercier uses the latest findings from experimental psychology to show how each of us is endowed with sophisticated cognitive mechanisms of open vigilance. Computing a variety of cues, these mechanisms enable us to be on guard against harmful beliefs, while being open enough to change our minds when presented with the right evidence. Even failures—when we accept false confessions, spread wild rumors, or fall for quack medicine—are better explained as bugs in otherwise well-functioning cognitive mechanisms than as symptoms of general guilibility.

Not Born Yesterday shows how we filter the flow of information that surrounds us, argues that we do it well, and explains how we can do it better still.



On Task

In A New Culture of Energy, Luce Irigaray reflects on three critical concerns of our time: the cultivation of energy in its many forms, the integration of Asian and Western traditions, and the

psychoanalyst, Irigaray draws deeply on her personal experience in addressing these questions. In her view, although psychoanalysis can succeed in releasing mental energy, it fails to support physical and spiritual well-being. In pursuit of an alternative, she took up the bodily practices of yoga and

pranayama breathing, which she considers in light of her analysis of sexuate belonging and difference. Reflecting on these practices, Irigaray contrasts yoga's approach to the natural world with how the Western tradition privileges mastery over nature. These varied sources provoke her to question how a tradition imagines transcendence and the divine. In the book's final section, she reinterprets the figure of Mary through breath, self-affection, and touch, recalibrating her physicality within a natural world. A reflection on the liberation of human energy, this book urges us to cultivate an evolutionary culture

reenvisioning of religious figures for the contemporary world. A philosopher as well as a

David Badre 9780691234700 £16.99 Trade Paperback Science / Cognitive Science February 2022 Princeton University Press

A look at the extraordinary ways the brain turns thoughts into actions—and how this shapes our everyday lives

Why is it hard to text and drive at the same time? How do you resist eating that extra piece of cake? Why does staring at a tax form feel mentally exhausting? Why can your child expertly fix the computer and yet still forget to put on a coat? From making a cup of coffee to buying a house to changing the world around them, humans are uniquely able to execute necessary actions. How do we do it? Or in other words, how do our brains get things done? In *On Task*, cognitive neuroscientist David Badre presents the first authoritative introduction to the neuroscience of cognitive control—the remarkable ways that our brains devise sophisticated actions to achieve our goals. We barely notice this routine part of our lives. Yet, cognitive control, also known as executive function, is an astonishing phenomenon that has a profound impact on our well-being.

Drawing on cutting-edge research, vivid clinical case studies, and examples from daily life, Badre sheds light on the evolution and inner workings of cognitive control. He examines issues from multitasking and willpower to habitual errors and bad decision making, as well as what happens as our brains develop in childhood and change as we age—and what happens when cognitive control breaks down. Ultimately, Badre shows that cognitive control affects just about everything we do.

A revelatory look at how billions of neurons collectively translate abstract ideas into concrete plans, On Task offers an eye-opening investigation into the brain's critical role in human behavior.

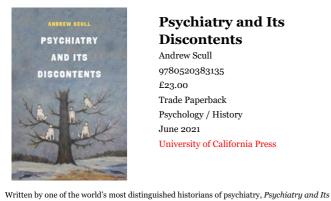




Powers of Horror

Julia Kristeva 9780231053471 £28.00 Trade Paperback Psychology / Movements / Psychoanalysis June 1984 Columbia University Press





Psychiatry and Its Discontents

Andrew Scull 9780520383135 £23.00 Trade Paperback Psychology / History June 2021 University of California Press

Discontents provides a wide-ranging and critical perspective on the profession that dominates the treatment of mental illness. Andrew Scull traces the rise of the field, the midcentury hegemony of

psychoanalytic methods, and the paradigm's decline with the ascendance of biological and pharmaceutical approaches to mental illness. The book's historical sweep is broad, ranging from the age of the asylum to the rise of psychopharmacology and the dubious triumphs of "community care."

The essays in *Psychiatry and Its Discontents* provide a vivid and compelling portrait of the recurring crises of legitimacy experienced by "mad-doctors," as psychiatrists were once called, and illustrates the impact of psychiatry's ideas and interventions on the lives of those afflicted with mental illness.

Psychology of Yoga and Meditation

C. G. Jung 9780691217857 £22.00 Trade Paperback Psychology / Movements / Jungian February 2023 Princeton University Press

Jung's illuminating lectures on the psychology of Eastern spirituality

Between 1933 and 1941, C. G. Jung delivered a series of public lectures at the Swiss Federal Institute of Technology (ETH) in Zurich. Intended for a general audience, these lectures addressed a broad range of topics, from dream analysis to the psychology of alchemy. Here for the first time are Jung's illuminating lectures on the psychology of yoga and meditation, delivered between 1938 and 1940

In these lectures, Jung discusses the psychological technique of active imagination, seeking to find parallels with the meditative practices of different yogic and Buddhist traditions. He draws on three texts to introduce his audience to Eastern meditation: Patañjali's Yoga Sûtra, the Amitâyur-dhyânasûtra from Chinese Pure Land Buddhism, and the Shrî-chakra-sambhâra Tantra, a scripture related to tantric yoga. The lectures offer a unique opportunity to encounter Jung as he shares his ideas with the general public, providing a rare window on the application of his comparative method while also shedding light on his personal history and psychological development.

Featuring an incisive introduction by Martin Liebscher as well as explanations of Jungian concepts and evolution of Jung's thought and a vital key to understanding his later work.



The Quotable Jung

C. G. Jung 9780691181196 £16.99 Trade Paperback Psychology / Movements / Jungian July 2018 Princeton University Press

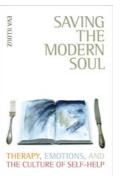
The definitive one-volume collection of Jung quotations

C. G. Jung (1875–1961) was a preeminent thinker of the modern era. In seeking to establish an interdisciplinary science of analytical psychology, he studied psychiatry, religion, mysticism, literature, physics, biology, education, and criminology. He introduced the concepts of extraversion and introversion, and terms such as complex, archetype, individuation, and the collective unconscious. He stressed the primacy of finding meaning in our lives.

The Quotable Jung is the single most comprehensive collection of Jung quotations ever assembled. It is the essential introduction for anyone new to Jung and the Jungian tradition. It will also inspire those familiar with Jung to view him in an entirely new way. The Quotable Jung presents hundreds of the most representative selections from the vast array of Jung's books, essays, correspondence, lectures, seminars, and interviews, as well as the celebrated *Red Book*, in which Jung describes his own fearsome confrontation with the unconscious. Organized thematically, this collection covers such topics as the psyche, the symbolic life, dreams, the analytic process, good and evil, creativity, alchemical transformation, death and rebirth, the problem of the opposites, and more. The quotations are arranged so that the reader can follow the thread of Jung's thought on these topics while gaining an invaluable perspective on his writings as a whole.

Succinct and accessible, The Quotable Jung also features a preface by Judith Harris and a detailed chronology of Jung's life and work.

- The single most comprehensive collection of Jung quotations ever assembled
- Features hundreds of quotes Covers such topics as the psyche, dreams, good and evil, death and rebirth, and more
- Includes a detailed chronology of Jung's life and work Serves as the ideal introduction to Jung and the Jungian tradition



Saving the Modern Soul

Eva Illouz 9780520253735 £30.00 Trade Paperback Psychology March 2008 University of California Press

The language of psychology is all-pervasive in American culture—from *The Sopranos* to *Oprah*, from the abundance of self-help books to the private consulting room, and from the support group to the magazine advice column. Saving the Modern Soul examines the profound impact of therapeutic discourse on our lives and on our contemporary notions of identity. Eva Illouz plumbs today's particular cultural moment to understand how and why psychology has secured its place at the core of modern identity. She examines a wide range of sources to show how self-help culture has transformed contemporary emotional life and how therapy complicates individuals' lives even as it claims to dissect their emotional experiences and heal trauma.



How our collective intelligence has helped us to evolve and prosper

interactions launched our species on an extraordinary evolutionary trajectory

our species' immense success and the origins of human uniquenes

interconnect and learn from one another over generations

Humans are a puzzling species. On the one hand, we struggle to survive on our own in the wild, often

failing to overcome even basic challenges, like obtaining food, building shelters, or avoiding predators. On the other hand, human groups have produced ingenious technologies, sophisticated languages, and complex institutions that have permitted us to successfully expand into a vast range of diverse environments. What has enabled us to dominate the globe, more than any other species, while

remaining virtually helpless as lone individuals? This book shows that the secret of our success lies not

in our innate intelligence, but in our collective brains-on the ability of human groups to socially

Drawing insights from lost European explorers, clever chimpanzees, mobile hunter-gatherers, neuroscientific findings, ancient bones, and the human genome, Joseph Henrich demonstrates how our collective brains have propelled our species' genetic evolution and shaped our biology. Our early capacities for learning from others produced many cultural innovations, such as fire, cooking, water containers, plant knowledge, and projectile weapons, which in turn drove the expansion of our brains

and altered our physiology, anatomy, and psychology in crucial ways. Later on, some collective brains generated and recombined powerful concepts, such as the lever, wheel, screw, and writing, while also creating the institutions that continue to alter our motivations and perceptions. Henrich shows how our genetics and biology are inextricably interwoven with cultural evolution, and how culture-gene

Tracking clues from our ancient past to the present, *The Secret of Our Success* explores how the evolution of both our cultural and social natures produce a collective intelligence that explains both



The Secret of Our Success

Joseph Henrich 9780691178431 £16.99 Trade Paperback Science / Cognitive Science October 2017 Princeton University Press The Self-Assembling Brain Official Construction Official Construction Development of the Second Seco

The Self-Assembling Brain

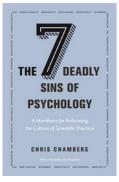
Peter Robin Hiesinger 9780691241692 £20.00 Trade Paperback Science / Life Sciences / Neuroscience December 2022 Princeton University Press

What neurobiology and artificial intelligence tell us about how the brain builds itself

How does a neural network become a brain? While neurobiologists investigate how nature accomplishes this feat, computer scientists interested in artificial intelligence strive to achieve this through technology. *The Self-Assembling Brain* tells the stories of both fields, exploring the historical and modern approaches taken by the scientists pursuing answers to the quandary: What information is necessary to make an intelligent neural network?

As Peter Robin Hiesinger argues, "the information problem" underlies both fields, motivating the questions driving forward the frontiers of research. How does genetic information unfold during the years-long process of human brain development—and is there a quicker path to creating human-level artificial intelligence? Is the biological brain just messy hardware, which scientists can improve upon by running learning algorithms on computers? Can AI bypass the evolutionary programming of "grown" networks? Through a series of fictional discussions between researchers across disciplines, complemented by in-depth seminars, Hiesinger explores these tightly linked questions, highlighting the challenges facing scientists, their different disciplinary perspectives and approaches, as well as the common ground shared by those interested in the development of biological brains and AI systems. In the end, Hiesinger contends that the information content of biological and artificial neural networks must unfold in an algorithmic process requiring time and energy. There is no genome and no blueprint that depicts the final product. The self-assembling brain knows no shortcuts.

Written for readers interested in advances in neuroscience and artificial intelligence, *The Self-Assembling Brain* looks at how neural networks grow smarter.

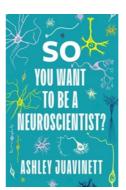


The Seven Deadly Sins of Psychology

Chris Chambers 9780691192277 £16.99 Trade Paperback Psychology / Research & Methodology July 2019 Princeton University Press

Why psychology is in peril as a scientific discipline—and how to save it

Psychological science has made extraordinary discoveries about the human mind, but can we trust everything its practitioners are telling us? In recent years, it has become increasingly apparent that a lot of research in psychology is based on weak evidence, questionable practices, and sometimes even fraud. *The Seven Deadly Sins of Psychology* diagnoses the ills besetting the discipline today and proposes sensible, practical solutions to ensure that it remains a legitimate and reliable science in the years ahead. In this unflinchingly candid manifesto, Chris Chambers shows how practitioners are vulnerable to powerful biases that undercut the scientific method, how they routinely torture data until it produces outcomes that can be published in prestigious journals, and how studies are much less reliable than advertised. Left unchecked, these and other problems threaten the very future of psychology as a science—but help is here.



So You Want to Be a Neuroscientist?

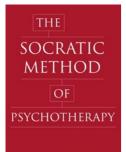
Ashley Juavinett 9780231190893 £14.99 Trade Paperback Science / Life Sciences / Neuroscience December 2020 Columbia University Press

The pursuit to understand the human brain in all its intricacy is a fascinatingly complex challenge and neuroscience is one of the fastest-growing scientific fields worldwide. There is a wide range of career options open to those who wish to pursue a career in neuroscience, yet there are few resources that provide students with inside advice on how to go about it.

So You Want to Be a Neuroscientist? is a contemporary and engaging guide for aspiring neuroscientists of diverse backgrounds and interests. Fresh with the experience of having recently launched her own career, Ashley Juavinett provides a candid look at the field, offering practical guidance that explores everything from programming to personal stories.

Juavinett begins with a look at the field and its history, exploring our evolving understanding of how the brain works. She then tackles the nitty-gritty: how to apply to a PhD program, the daily life of a graduate student, the art of finding mentors and collaborators, and what to expect when working in a lab. Finally, she introduces readers to diverse young scientists whose career paths illustrate what you can do with a neuroscience degree. For anyone intrigued by the brain or seeking advice on how to further their ambitions of studying it, *So You Want to Be a Neuroscientist?* is a practical and timely overview of how to learn and thrive in this exciting field.

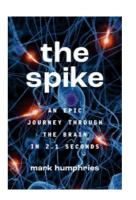




The Socratic Method of **Psychotherapy**

James Overholser 9780231183291 £30.00 Trade Paperback Psychology / Psychotherapy October 2018 Columbia University Press

As the field of psychotherapy focuses more on treatment manuals and the regimented nature of clinical research, the practice risks losing the subtle nuances that guide the interactive fluidity of therapy research, the practice risks iosing the subtle nuances that guide the interactive fundity of therapy sessions. Can clinicians combat this loss by incorporating ideals from ancient philosophy into contemporary psychotherapy? In *The Socratic Method of Psychotherapy*, James Overholser approaches cognitive therapy through the interactive dialogues of Socrates, aiming to reduce the gap between theory and practice. Clinicians and students will appreciate the flexibility and creativity that underlie effective psychotherapy sessions when guided by the Socratic method as an innovative approach to self-exploration.



The Spike

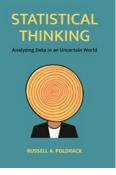
Mark Humphries 9780691241487 £15.99 Trade Paperback Science / Life Sciences / Neuroscience January 2023 Princeton University Press

The story of a neural impulse and what it reveals about how our brains work

We see the last cookie in the box and think, can I take that? We reach a hand out. In the 2.1 seconds that this impulse travels through our brain, billions of neurons communicate with one another, sending blips of voltage through our sensory and motor regions. Neuroscientists call these blips "spikes." Spikes enable us to do everything: talk, eat, run, see, plan, and decide. In *The Spike*, Mark Humphries takes readers on the epic journey of a spike through a single, brief reaction. In vivid language, Humphries tells the story of what happens in our brain, what we know about spikes, and what we still have left to understand about them.

Drawing on decades of research in neuroscience, Humphries explores how spikes are born, how they are transmitted, and how they lead us to action. He dives into previously unanswered mysteries: Why are most neurons silent? What causes neurons to fire spikes spontaneously, without input from other neurons or the outside world? Why do most spikes fail to reach any destination? Humphries presents a new vision of the brain, one where fundamental computations are carried out by spontaneous spikes that predict what will happen in the world, helping us to perceive, decide, and react quickly enough for our survival.

Traversing neuroscience's expansive terrain, The Spike follows a single electrical response to illuminate how our extraordinary brains work.



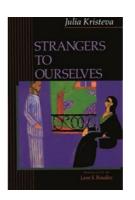
Statistical Thinking

Russell A. Poldrack 9780691218441 £35.00 Trade Paperback Psychology / Statistics June 2023 Princeton University Press

An essential introduction to statistics for students of psychology and the social sciences

Statistical thinking is increasingly essential to understanding our complex world and making informed decisions based on uncertain data. This incisive undergraduate textbook introduces students to the main ideas of statistics in a way that focuses on deep comprehension rather than rote application or mathematical immersion. The presentation of statistical concepts is thoroughly modern, sharing cutting-edge ideas from the fields of machine learning and data science that help students effectively use statistical methods to ask questions about data. *Statistical Thinking* provides the tools to describe complex patterns that emerge from data and make accurate predictions and decisions based on data.

- Introduces statistics from a uniquely modern standpoint, helping students to use the
- basic ideas of statistics to analyze real data Presents a model of statistics that ties together a broad range of statistical techniques that
- can be used to answer many different kinds of questions Explains how to use statistics to generate reproducible findings and avoid common mistakes in statistical practice Includes a wealth of examples using real-world data
- Accompanied by computer code in R and in Python-freely available online-that enables students to see how each example is generated and code their own analyses



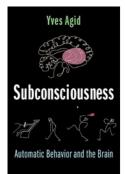
Strangers to Ourselves

Julia Kristeva 9780231071574 £28.00 Trade Paperback Psychology / Movements / Psychoanalysis June 1991 Columbia University Press

This book is concerned with the notion of the "stranger" -the foreigner, outsider, or alien in a country and society not their own- as well as the notion of strangeness within the self -a person's deep sense of being, as distinct from outside appearance and their conscious idea of self.

Kristeva begins with the personal and moves outward by examining world literature and philosophy. She discusses the foreigner in Greek tragedy, in the Bible, and in the literature of the Middle Ages, Renaissance, Enlightenment, and the twentieth century. She discusses the legal status of foreigners throughout history, gaining perspective on our own civilization. Her insights into the problems of nationality, particularly in France are more timely and relevant in an increasingly integrated and fractious world.





Subconsciousness

Yves Agid 9780231201278 £18.99 Trade Paperback Science / Life Sciences / Neuroscience July 2021 Columbia University Press

We are conscious of only a small fraction of our lives. Because the brain constantly receives an enormous quantity of information, we need to be able to do things without thinking about them—to act in "autopilot" mode. Automatic behaviors—the vast majority of our activities—occur without our conscious awareness, or subconsciously. Yet the physiological basis of subconsciousness remains poorly understood, despite its vast importance for physical and mental health.

The neurodegenerative disease expert Yves Agid offers a groundbreaking and accessible account of subconsciousness and its significance. He pinpoints the basal ganglia—the ancient "basement of the brain"—as the main physiological hub of the subconscious. Agid examines its roles in the control and production of automatic behavior, including motor, intellectual, and emotional processes. He highlights the consequences for various brain pathologies, showing how malfunctions of the subconscious have clinical repercussions including not only abnormal involuntary movements, as seen in Parkinson's disease, but also psychiatric disorders such as obsessive-compulsive disorders and depression. Based on this understanding, Agid considers how seeing the basal ganglia as a therapeutic target can aid development of potential new treatments for neurological and psychiatric disorders.

Shedding new light on the physiological bases of our behavior and mental states, this book provides an innovative exploration of the complexities of the mind, with implications ranging from clinical applications to philosophy's thorniest problems.



Synchronicity

C. G. Jung 9780691150505 £8.99 Trade Paperback Psychology / Movements / Psychoanalysis November 2010 Princeton University Press

Jung was intrigued from early in his career with coincidences, especially those surprising juxtapositions that scientific rationality could not adequately explain. He discussed these ideas with Albert Einstein before World War I, but first used the term "synchronicity" in a 1930 lecture, in reference to the unusual psychological insights generated from consulting the *I Ching*. A long correspondence and friendship with the Nobel Prize-winning physicist Wolfgang Pauli stimulated a final, mature statement of Jung's thinking on synchronicity, originally published in 1952 and reproduced here. Together with a wealth of historical and contemporary material, this essay describes an astrological experiment Jung conducted to test his theory. *Synchronicity* reveals the full extent of Jung's theorem.

This paperback edition of Jung's classic work includes a new foreword by Sonu Shamdasani, Philemon Professor of Jung History at University College London.

There Is Life After the Nobel Prize Eric R. Kandel

There Is Life After the Nobel Prize

Eric Kandel 9780231200141 £14.99 Hardcover Science / Life Sciences / Neuroscience December 2021 Columbia University Press

One day in 1996, the neuroscientist Eric R. Kandel took a call from his program officer at the National Institute of Mental Health, who informed him that he had been awarded a key grant. Also, the officer said, he and his colleagues thought Kandel would win the Nobel Prize. "I hope not soon," Kandel's wife, Denise, said when she heard this. Sociologists had found that Nobel Prize winners often did not contribute much more to science, she explained.

In this book, Kandel recounts his remarkable career since receiving the Nobel in 2000—or his experience of proving to his wife that he was not yet "completely dead intellectually." He takes readers through his lab's scientific advances, including research into how long-term memory is stored in the brain, the nature of age-related memory loss, and the neuroscience of drug addiction and schizophrenia. Kandel relates how the Nobel Prize gave him the opportunity to reach a far larger audience, which in turn allowed him to discover and pursue new directions. He describes his efforts to promote public understanding of science and to put brain science and art into conversation with each other. Kandel also discusses his return to Austria, which he had fled as a child, and observes Austria's coming to terms with the Nazi period. Showcasing Kandel's accomplishments, erudition, and wit, *There Is Life After the Nobel Prize* is a candid account of the working life of an acclaimed scientist.



The Undiscovered Self

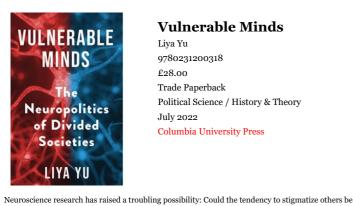
C. G. Jung 9780691150512 £8.99 Trade Paperback November 2010 Princeton University Press

These two essays, written late in Jung's life, reflect his responses to the shattering experience of World War II and the dawn of mass society. Among his most influential works, "The Undiscovered Self" is a plea for his generation--and those to come--to continue the individual work of self-discovery and not abandon needed psychological reflection for the easy ephemera of mass culture. Only individual awareness of both the conscious and unconscious aspects of the human psyche, Jung tells us, will allow the great work of human culture to continue and thrive.

Jung's reflections on self-knowledge and the exploration of the unconscious carry over into the second essay, "Symbols and the Interpretation of Dreams," completed shortly before his death in 1961. Describing dreams as communications from the unconscious, Jung explains how the symbols that occur in dreams compensate for repressed emotions and intuitions. This essay brings together Jung's fully evolved thoughts on the analysis of dreams and the healing of the rift between consciousness and the unconscious, ideas that are central to his system of psychology.

This paperback edition of Jung's classic work includes a new foreword by Sonu Shamdasani, Philemon Professor of Jung History at University College London.





prospects for political rapprochement

Vulnerable Minds

innate? Some evidence suggests that the brain is prone to in-group and out-group classifications, with consequences from ordinary blind spots to full-scale dehumanization. Many are inclined to reject the argument that racism and discrimination could have a cognitive basis. Yet if we are all vulnerable to thinking in exclusionary ways—if everyone, from the most ardent social-justice advocates to bigots and xenophobes, has mental patterns and structures in common—could this shared flaw open new

Liya Yu develops a novel political framework that builds on neuroscientific discoveries to rethink the

Laya Yu develops a novel political framework that builds on neuroscientific discoveries to rethink the social contract. She argues that our political selves should be understood in terms of our shared social capacities, especially our everyday exclusionary tendencies. Yu contends that cognitive dehumanization is the most crucial disruptor of cooperation and solidarity, and liberal values-based discourse is inadequate against it. She advances a new neuropolitical language of persuasion that refrains from moralizing or shaming and instead appeals to shared neurobiological vulnerabilities. Offering practical strategies to address those we disagree with most strongly, *Vulnerable Minds* provides timely guidance on meeting the challenge of including and humanizing others.

Liva Yu 9780231200318 £28.00 Trade Paperback Political Science / History & Theory July 2022 Columbia University Press

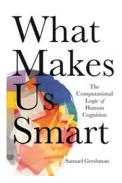


The Way Out

Peter T. Coleman 9780231197403 £22.00 Hardcover Psychology / Social Psychology June 2021 Columbia University Press

The partisan divide in the United States has widened to a chasm. Legislators vote along party lines and rarely cross the aisle. Political polarization is personal, too-and it is making us miserable. Survey show that Americans have become more fearful and hateful of supporters of the opposing political party and imagine that they hold much more extreme views than they actually do. We have cordoned ourselves off: we prefer to date and marry those with similar opinions and are less willing to spend time with people on the other side. How can we loosen the grip of this toxic polarization and start working on our most pressing problems?

The Way Out offers an escape from this morass. The social psychologist Peter T. Coleman explores how conflict resolution and complexity science provide guidance for dealing with seemingly intractable political differences. Deploying the concept of attractors in dynamical systems, he explains why we are stuck in this rut as well as the unexpected ways that deeply rooted oppositions can and do change. Coleman meticulously details principles and practices for navigating and healing the difficult divides in our homes, workplaces, and communities, blending compelling personal accounts from his years of working on entrenched conflicts with lessons from leading-edge research. *The Way Out* is a vital and timely guide to breaking free from the cycle of mutual contempt in order to better our lives. relationships, and country.



What Makes Us Smart

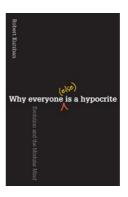
Samuel Gershman 9780691205717 £30.00 Trade Paperback Psychology / Cognitive Psychology & Cognition October 2021 Princeton University Press

How a computational framework can account for the successes and failures of human cognition

At the heart of human intelligence rests a fundamental puzzle: How are we incredibly smart and stupid at the same time? No existing machine can match the power and flexibility of human perception language, and reasoning. Yet, we routinely commit errors that reveal the failures of our thought processes. What Makes US Smart makes sense of this paradox by arguing that our cognitive errors are not haphazard. Rather, they are the inevitable consequences of a brain optimized for efficient inference and decision making within the constraints of time, energy, and memory—in other words, data and resource limitations. Framing human intelligence in terms of these constraints, Samuel Gershman shows how a deeper computational logic underpins the "stupid" errors of human cognition

Embarking on a journey across psychology, neuroscience, computer science, linguistics, and economics, Gershman presents unifying principles that govern human intelligence. First, inductive bias: any system that makes inferences based on limited data must constrain its hypotheses in some way before observing data. Second, approximation bias: any system that makes inferences and decisions with limited resources must make approximations. Applying these principles to a range of computational errors made by humans, Gershman demonstrates that intelligent systems designed to meet these constraints yield characteristically human errors

Examining how humans make intelligent and maladaptive decisions, What Makes Us Smart delves into the successes and failures of cognition.



Why Everyone (Else) Is a Hypocrite

Robert Kurzban 9780691154398 £17.99 Trade Paperback Psychology May 2012 Princeton University Press

The evolutionary psychology behind human inconsistency

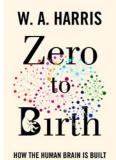
We're all hypocrites. Why? Hypocrisy is the natural state of the human mind.

Robert Kurzban shows us that the key to understanding our behavioral inconsistencies lies in understanding the mind's design. The human mind consists of many specialized units designed by the process of evolution by natural selection. While these modules sometimes work together seamless they don't always, resulting in impossibly contradictory beliefs, vacillations between patience and impulsiveness, violations of our supposed moral principles, and overinflated views of ourselves.

This modular, evolutionary psychological view of the mind undermines deeply held intuitions about ourselves, as well as a range of scientific theories that require a "self" with consistent beliefs and preferences. Modularity suggests that there is no "I." Instead, each of us is a contentious "we"--a collection of discrete but interacting systems whose constant conflicts shape our interactions with one another and our experience of the world.

In clear language, full of wit and rich in examples, Kurzban explains the roots and implications of our inconsistent minds, and why it is perfectly natural to believe that everyone else is a hypocrite.





Zero to Birth

William A. Harris 9780691211312 £22.00 Hardcover Science / Life Sciences / Neuroscience May 2022 Princeton University Press

A revelatory tale of how the human brain develops, from conception to birth and beyond

By the time a baby is born, its brain is equipped with billions of intricately crafted neurons wired together through trillions of interconnections to form a compact and breathtakingly efficient supercomputer. *Zero to Birth* takes you on an extraordinary journey to the very edge of creation, from the moment of an egg's fertilization through each step of a human brain's development in the womb— and even a little beyond.

As pioneering experimental neurobiologist W. A. Harris guides you through the process of how the brain is built, he takes up the biggest questions that scientists have asked about the developing brain, describing many of the thrilling discoveries that were foundational to our current understanding. He weaves in a remarkable evolutionary story that begins billions of years ago in the Proterozoic con, when multicellular animals first emerged from single-cell organisms, and reveals how the growth of a fetal brain over nine months reflects the brain's evolution through the ages. Our brains have much in common with those of other animals, and Harris offers an illuminating look at how comparative animal studies have been crucial to understanding what makes a human brain human.

An unforgettable chronicle of one of nature's greatest achievements, *Zero to Birth* describes how the brain's incredible feat of orchestrated growth ensures that every brain is unique, and how breakthroughs at the frontiers of science are helping us to decode many traits that only reveal themselves later in life.