Consciousness is ‘the last great mystery for science’. How can a physical brain create our experience of the world? What creates our identity? Do we really have free will? Could consciousness itself be an illusion? Exciting new developments in brain science are continuing these debates, and the field has now expanded to include biologists, neuroscientists, psychologists, and philosophers. Consciousness: A Very Short Introduction clarifies the potentially confusing arguments, and the major theories, whilst also outlining the amazing pace of neuroscience discoveries. Covering areas such as construction of self in the brain, mechanisms of attention, neural correlates of consciousness, and physiology of altered states of consciousness, it highlights the latest findings.

Dreaming: A Very Short Introduction provides an increasingly complete picture of how dreaming is created by the brain. It explores how the new science of dreaming is affecting psychoanalysis theories and how it is helping our understanding of the causes of mental illness. Dreams are investigated to illustrate and explain some of the fascinating discoveries of modern sleep science, while challenging some of the traditionally accepted theories about dream meaning. How dreaming maintains and develops the mind, why we go crazy in our dreams in order to avoid doing so when we are awake, and why sleep is not just good for health, but essential for life is revealed.

Emotion: A Very Short Introduction

Dylan Evans
Was love invented by European poets in the Middle Ages or is it part of human nature? Will winning the lottery really make you happy? Is it possible to build robots that have feelings?

*Emotion: A Very Short Introduction* explores the latest thinking about the emotions, drawing upon a wide range of scientific research, from anthropology and psychology to neuroscience and artificial intelligence. Anthropologists have begun to question their previous views on the cultural relativity of emotional experience; cognitive psychologists have abandoned their exclusive focus on reasoning, perception, and memory, and are rediscovering the importance of affective processes; and neuroscientists and researchers in artificial intelligence have also joined the debate.

**Intelligence: A Very Short Introduction**

*Ian J. Deary*

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eISBN: 9780191776854  
DOI: 10.1093/actrade/9780192893215.001.0001

Intelligence: A Very Short Introduction describes how and why people differ in their thinking power by dealing with issues such as what intelligence is, whether there are several different types of intelligence, and whether one person can be described as more ‘intelligent’ than another. The fact that the broad powers of human intelligence show differences has been recognized since antiquity. Our language is full of words that signify the possession or lack of an efficient brain. People value their powers of thinking. Are differences in intelligence caused by genes or the environment? Does intelligence decline or increase as we grow older? What is the biological basis of thinking?

**Learning: A Very Short Introduction**

*Mark Haselgrove*

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Learning: A Very Short Introduction describes learning from the perspective of associative theories of classical and instrumental conditioning, and considers why these are the dominant, and best described analyses of learning in contemporary psychology. Tracing the origins of these theories, it discusses the techniques used to study learning in both animals and humans, and considers the importance of learning for animal behaviour and survival.

**Memory: A Very Short Introduction**

*Jonathan K. Foster*

Print Publication Year: 2008 Published Online: Sep 2013  
Publisher: Oxford University Press
Memory: A Very Short Introduction weaves together case-studies, anecdotes, literature and philosophy, and the latest research in neuroscience and psychology to address these and many other important questions about the science of memory — how it works, and why we can't live without it. Memories are an integral part of being human, and they underpin our sense of who we are. Many people report being able to remember events from childhood as if they happened yesterday, but not what they did last week. Why does memory seem to work well sometimes and not others? Can memory be improved or manipulated by psychological techniques or even ‘brain implants’? How does memory grow and change as we age? And what of so-called ‘recovered’ memories?

Perception: A Very Short Introduction
Brian Rogers

Perception is concerned with how we use the information reaching our senses to guide and control our behaviour and create our particular, subjective experiences of the world. Perception: A Very Short Introduction discusses the philosophical question of what it means to perceive, and describes how we are able to perceive the particular characteristics of objects and scenes such as their lightness, colour, form, depth, and motion. The study of illusions can be useful in telling us something about the nature and limitations of our perceptual processes. This VSI explores perception from an evolutionary perspective, explaining how evolutionary pressures have shaped the perceptual systems of humans and other animals.

Sleep: A Very Short Introduction
Steven W. Lockley and Russell G. Foster

Sleep: A Very Short Introduction addresses the biological and psychological aspects of sleep. What is sleep? Why do we need it? How much is enough? What is the impact of modern society on sleep? We spend about a third of our lives asleep. References to sleep abound in literature and art, sleep has been recognized as fundamental to the human condition. Over the past century, our knowledge of sleep has developed hugely. The impact of poor sleep on our quality of life is gaining recognition and the prevalence of sleep disorders in the population is increasing as we live ever stressful lives.
Synaesthesia is often described as a rare neurological condition where one sense appears to merge or cross with another. It is a multi-variant condition that can present itself in many different ways: some synaesthetes taste words, while others see colours when they hear sounds. Synaesthesia: A Very Short Introduction describes this extraordinary condition, explaining what synaesthesia is, how it manifests itself, what causes it, how it feels, how it links to creativity and the arts, and what it can tell us about every human’s perceptions of reality. Delving into the neuroscience behind synaesthesia, it also relates contemporary attempts at understanding both the genetic causes of synaesthesia, and how synesthetic sensations occur in the brain.

Thinking and Reasoning: A Very Short Introduction
Jonathan St B. T. Evans

Thinking and Reasoning: A Very Short Introduction explores cognitive psychological approaches to understanding the nature of thinking and reasoning, problem solving, and decision making. It shows how humans’ unique problem-solving capabilities are hugely dependent on having the imagination to ask the right questions, and the ability to see things from a completely new perspective. Beginning by considering the approaches of the behaviourists and the gestalt psychologists, it moves on to modern explorations of thinking, including hypothetical thinking, conditionals, deduction, rationality, and intuition. Covering the role of past learning, IQ, and cognitive biases, this VSI also discusses the idea that there may be two different ways of thinking, arising from our evolutionary history.