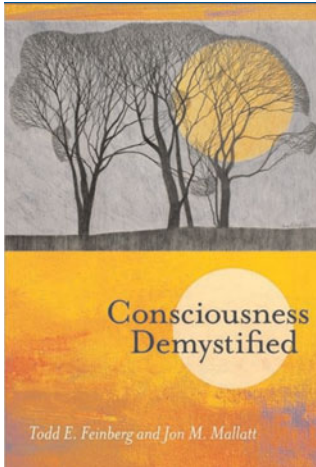


## Book reviews

Edited by Allan Beveridge and Femi Oyeboode

**Consciousness Demystified**

By Todd E. Feinberg and Jon M. Mallatt. MIT Press. 2018. £20.00 (hb). 208 pp. ISBN 9780262038812

The words ‘consciousness’ and ‘mystery’ are often associated in both philosophical and scientific literature. The nature of consciousness and the ‘explanatory gap’ between the brain as a biological organ and the mind as subjective experience have been identified as the Gordian knots of the ‘mind–body problem’, recently reframed as the ‘mind–brain problem’. Feinberg and Mallatt’s previous book (*The Ancient Origins of Consciousness*, MIT Press 2016) focused on the nature and evolution of consciousness. In their more recent book, these authors build on their previous work to explain how natural brain processes can lead to subjective, first-person, experiencing aspects of consciousness (‘qualia’ in philosophical jargon).

‘Nihil quod non scriptum est’: Descartes’ substance dualism reverberates in the authors’ reference to the seemingly unbridgeable gap between the material neurons of the brain (‘res extensa’ in Descartes’ terminology) and immaterial experience (‘res cogitans’). Descartes’ solution to the mind–body problem was a rather shaky bridge: according to the French philosopher, the interaction between the brain and the mind somehow occurred at the level of the pineal gland. Feinberg and Mallatt’s solution is more appealing to modern neuroscientists as they explicitly aim to demystify consciousness by naturalising it, i.e. by placing its most perplexing philosophical features among the natural properties of life and explaining the evolutionary origins of subjective experience.

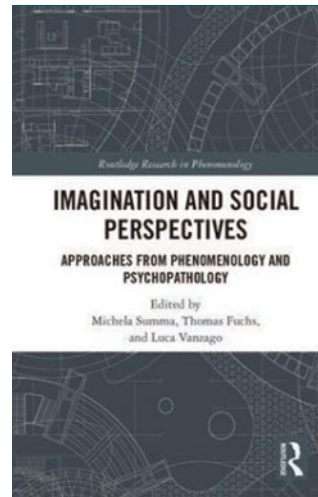
Feinberg and Mallatt’s neurobiological naturalism is an outgrowth and elaboration of the theory of biological naturalism first proposed by American philosopher of mind John Searle. According to Searle’s biological naturalism, consciousness is a mental event that belongs to our biological natural history like digestion, mitosis and all other biological processes. According to Feinberg and Mallatt’s neurobiological naturalism, consciousness is fully natural but requires explanations that are uniquely different from explanations applied to the rest of biology. Specifically, neurobiological naturalism rests on three interrelated principles: (1) the unique features of consciousness are fully grounded in the unique features of life; (2) consciousness as a living process depends on additional neurobiological features that are unique to complex neural systems; and (3) the subjective–objective barrier can be naturally explained by the special features of complex brains.

Compared to *The Ancient Origins of Consciousness*, *Consciousness Demystified* is more condensed, less technical and accessible to a wider range of readers interested in understanding consciousness. This agile book, with its armamentarium of useful tools (Glossary, Notes, References, Index), undoubtedly contributes to the enduring appeal of the neuroscientific study of consciousness.

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**Imagination and Social Perspectives: Approaches from Phenomenology and Psychopathology**

Edited by Michela Summa, Thomas Fuchs and Luca Vanzago. Routledge. 2017. 358 pp. £125.00 (hb). ISBN 9781138221000

This book examines the role of imagination in creating a sense of self, in extending how reality and fiction are experienced and in determining the nature of ‘the Other’, as well as in the fostering of mutual understanding in human culture. For the psychiatrist its most compelling section is that which deals with the impairment of imagination in schizophrenia and autism.

What is imagination? It turns out that this is not as simple a question as it sounds. In many respects it is easier to say what it is not than to say what it actually is. In this account, imagining is not merely ‘supposing’ and it is distinct from mental imagery as well as from perception. It is best regarded as an intentional activity that is ‘a representational state of mind, [...] a form of sensible knowledge, [...] the inner visualising of mental images, [...] a modification of perception, [...] a psychic faculty or as a source of knowledge’. This definition itself points to the complexity of the subject matter.

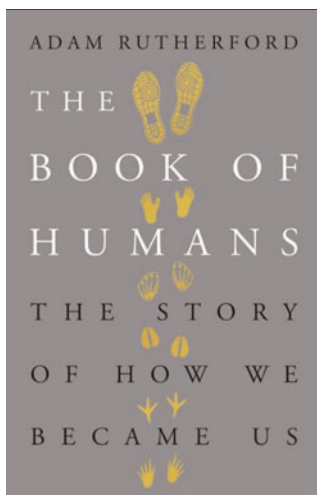
The capacity to situate oneself in someone else’s shoes, to look at the world through their eyes, is a fundamental aspect of human cognitive capacity, and much in the practice of psychiatry relies on this skill. And imagination is critical for this ability in which there is ‘some kind of de-centring from one’s own perspective’. In addition, the editors remind us that imagination has a role in distinguishing between reality and alternative worlds, and hence enhancing cognitive flexibility and increasing freedom as decisions can be made in the context of multiple imagined options.

The most relevant chapters for psychiatrists in this fascinating book are those by Michela Summa, Thomas Fuchs and Till Grohmann. Summa argues that even though it is true that there is a distinction and a discontinuity between reality and fiction, reality shapes fiction and the experience of fiction too acts to reconfigure our sense of reality. This chapter does not deal directly with the discontinuities between 'psychotic' reality and everyday reality, but it is clear that much of what is explored is relevant to an understanding of how patients traverse the differing worlds and may also help to illustrate the interpenetration of psychotic reality and everyday experiences. Fuchs focuses on what he terms the 'as-if' function; this is the human cognitive function that allows us 'to suspend the force and validity of the immediate experience and to enter a parallel world of imagination, daydreaming, hypothetical thought, fiction, pretence, role play or theatre'. Fuchs' case is that impairment of this cognitive function underlies the concrete attitude, delusions and what he terms 'transitivism' (the threat of loss-of-self that is posed by the presence of others) in schizophrenia. I am not persuaded by his arguments but nonetheless his is a novel approach. Finally, Grohmann disputes the role of the disturbance of Theory of Mind in schizophrenia and autism and argues for an account based on the phenomenology of intersubjectivity. There's no doubting the fact that the case being put forward is not persuasive but it illustrates that, even in a condition such as autism where certain empirical facts are settled and established, alternative accounts are still possible.

This is a densely written book that has a lot to offer, but it is not for a general audience. Matters that have a central place in psychiatric thought are treated with seriousness and rigour alongside approaches that will surprise many psychiatrists whilst at the same making the subject seem fresh and vital.

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### The Book of Humans: The Story of How We Became Us

By Adam Rutherford. Weidenfeld & Nicolson. 2018. 272 pp. £18.99 (hb). ISBN 9780297609407

Adam Rutherford is a geneticist who may be better known as a science broadcaster on Radio 4 and for his previous books about genetics for a lay audience. In this book, Rutherford focuses on *Homo sapiens* as animals, whose genetic endowment gives rise to strong similarities with other animals, but also significant differences. In the first half of the book, Rutherford describes many

examples of animal behaviour that some might consider uniquely human, such as tool use, cultural transmission of behaviour and the full range of non-reproductive sexual activity.

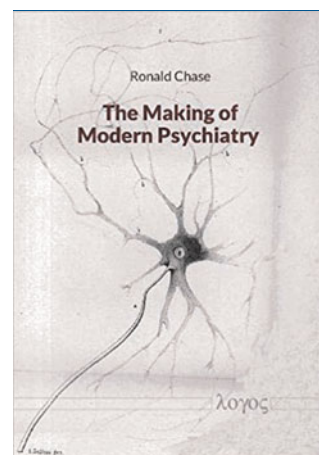
It is in the second half that Rutherford examines the human capabilities that enable the modern mind, and which do seem to be unique to humans in terms of degree and complexity; namely symbol formation, linguistic capacity and what psychiatrists would call 'mentalising skills' i.e. the capacity to make inferences about other people's minds and intentions and to see them as real. He cites research that indicates that the capacity for the modern mind seems to have evolved long before it was put into use; that there was a kind of delay before we were able to use these skills to become sapient.

This is an easy book to read and Rutherford has a warm and passionate voice as a science writer. He reminds us that genes only encode proteins and that there are no genes for complex behaviours; rather, it is the cultural evolution by which we teach others what we know that enables humans to create themselves as humans and develop across time. He insists that cultural and biological evolution cannot be separated and emphasises the interdependence of all organisms, concluding that we can be proud of our animal heritage and marvelling at the complexity of life on earth.

A book for the lay reader must always risk dealing with big domains of knowledge superficially, and the book is less successful in its reflections on the modern mind than on the wonders of animal behaviour. But it is an enjoyable read; not least for some very funny lines like 'we [humans] spend a titanic amount of time trying to touch each other's genitals', which makes the genetics department of University College London sound like an interesting place to work.

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### The Making of Modern Psychiatry

By Ronald Chase. Logos Verlag Berlin. 2018. 232 pp. £31.00 (pb). ISBN 9783832547189

German psychiatrist Emil Kraepelin (1856–1926) suffered several tragedies, including the death of three of his children in early childhood. He was an avid traveller of Europe and Africa. He became teetotal, convinced that alcohol weakened the will and caused intellectual stupefaction and moral insanity. To record objectively the clinical features of all his patients, he created his famous card index since clinical notes slipped from his grasp when patients moved between hospitals. In his later years Kraepelin acknowledged that the distinction between 'dementia