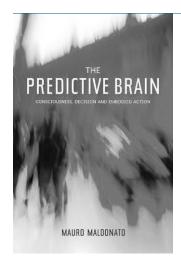


## **Book reviews**

Edited by Allan Beveridge, Femi Oyebode and Rosalind Ramsay



## The Predictive Brain: Consciousness, Decision and Embodied Action

By Mauro Maldonato Sussex Academic Press. 2014. £17.95 (pb). 112 pp. ISBN: 9781845196394

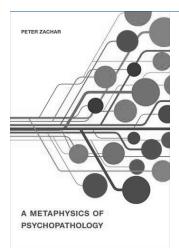
This is a concise but detailed book which covers a lot of ground. Mauro Maldonato is an academic psychiatrist and neuroscientist with a strong track record in motor control and decision-making. This book links abstract symbolic thought and decision-making to evolutionary origins in motor control. The text is generally accessible to inquisitive readers in addition to the target audience of neuroscientists, psychiatrists and philosophers of mind. A rich account of the history of consciousness, decision-making and motor action is presented that, importantly, goes beyond the English-language literature. The remit stretches from evolutionary perspectives to influential modern views of consciousness and even to the experience-dependent application of medical knowledge. The reader is not patronised, but drawn into the detail and complexity of theoretical and evidence-based understanding of the subject of the volitional and rational mind. The chapters serve as self-contained essays that share a common theme. This style, reviewing the topic broadly, provides a fresh contrast to recent monographs of consciousness, where the aim is often to convince the reader of the central merits of a single theory.

The study of consciousness is now at the forefront of cognitive neuroscience. Major advances in understanding the neurobiological origins of the human mind are anticipated over the next few decades, which will bring with them practical applications and interventions that will necessarily affect mental health and psychiatry. Present progress with technical and methodological aspects of consciousness science is accompanied by the development and refinement of theoretical models among which the notion of predictive coding and the Bayesian brain is beginning to dominate. The central premise of the predictive brain, first formulated by von Helmhotz, is that to make sense of the wealth of dynamic sensory information the brain must try to predict the source of sensory inputs. Friston and others present these concepts as driven by functional efficiency, a need to minimise 'free energy'. Sensation is inference, wherein predictive codes represent hypotheses that are tested against incoming data, generating prediction errors. In this context actions become embodied means for active inference, enhancing the precision and accuracy of future predictions. Embodiment also applies to the concept of interoceptive predictive coding, relating to internal bodily control and viscerosensory information. This notion is emerging as a potent model for the neural mechanisms

that underlie self-representation and emotion states and, by extension, disorders of selfhood and affect that have pervasive relevance to psychiatry. Professor Maldonado's book provides a valuable framework to consider such elaborations of the predictive brain and represents a scholarly resource from an erudite perspective.

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## A Metaphysics of Psychopathology

By Peter Zachar MIT Press. 2014. £27.95 (hb). 288 pp. ISBN 9780262027045

Book titles are often misleading. I once looked up books on Chinese cooking, having just acquired a wok, and found *From Woking to Portsmouth*. Sections of this book could equally well be accommodated by the title *A Psychopathology of Metaphysics*, as they concern how the mindset and personal foibles of certain philosophers coloured their philosophical views.

This preamble is occasioned by my disappointment with the actual contents of the book given its highfalutin title. The book is essentially a neo-Szaszian argument for why psychiatric diagnosis is a contentious issue. All the old chestnuts are brought out – the 'death of hysteria', drapetomania (escaping slaves in the Southern States labelled as having mental disorder) – but the author illustrates his thesis by nibbling away at the edges. 'Can grief really be a disorder?' and 'Is narcissistic personality disorder real?' are actual chapter headings. To be sure, there are numerous dubious nosological entities in DSM-5, as there have been in any diagnostic scheme from Galen onwards. The author is tackling small fry here, and to grace his deliberations with the title 'a metaphysics of psychopathology' seems overblown.

It is not even clear quite what the author's specific thesis is, other than to praise the contributions of general philosophers and philosophers of science to the problem of psychiatric diagnosis. At least Szasz made his message clear: psychiatric diagnostic entities were artefacts of a self-serving doctor–patient relationship, epitomised by Charcot's hysterics, who derived social status as performing artists of illness behaviour while pandering to Charcot's own prejudices. The Szaszian legacy that all psychiatric diagnosis is to a greater or lesser extent iatrogenic pervades this book, but is never explicitly addressed.

There are several things to say about a book like this, and I shall not pull any punches.

First, psychiatrists are fed up with the continual sniping at their professional position. Originally it was sociologists who