The Self in Neuroscience and Psychiatry

Like our perceived world, our self is a construction of our mind. But self appears to be a particular perception, with particular properties. Unlike perceptions of the external world it cannot readily be shared, and unlike perceptions of the external world it generally has a quality of continuity and changelessness over time that can be remarkably robust to changes in our perceptions of the external world. Yet the perception of self can change, and such phenomena are recognised both as a consequence of focal brain injury, and are the level at which some conceptions of schizophrenia are framed. This book is a wonderfully wide-ranging, and demanding, tour de force. It synthesises accounts of self from a variety of perspectives: psychological, philosophical, historical, linguistic, social, psychiatric, computing and basic neuroscience. The editors are to be commended for ensuring that such authors from such diverse backgrounds have managed to convey their insights in generally accessible language. The “problem” of self is clearly closely related to the “problem” of consciousness, at its highest, most fascinating level. Inevitably, there is no overall reconciliation of these perspectives yet, but it’s a fascinating overview of work under way in these areas. Some surprisingly clear and consistent themes do emerge (such as the necessity, if not sufficiency, of right frontotemporal structures for access to self-awareness and episodic memory) and the promise of significant progress is palpable.

The clinical relevance is to situations where that “continuous” quality of the self is lost, and the perception of self fundamentally changes. Perhaps inevitably, given that the editors and many authors are psychiatrists, the clinical emphasis is on schizophrenia, although the neurology of focal acquired brain injury is used to inform models of self-awareness. There are certainly many insights into consciousness and self to be gained from the “natural experiments” of both schizophrenia and focal brain injury. Both give rise to observations that suggest that (self-)consciousness may be a multiple, “multi-track”, rather than unitary phenomenon: the phenomenon of thought insertion, a thought that the thinker does not “own”, suggests a dissociability of thought and “ownership”. Zeki’s model of “multiple microconsciousnesses” in the context of visual awareness is compatible. The fact that we generally have a unitary perception of our self may ultimately relate to a general tendency for temporally coincident coherence of perceptions across modalities: I plan to type an “a” on the computer keyboard, make a movement of my left little finger, hear a click and see an “a” appear on the screen all in a coherent way.

This is a fascinating and highly recommended read.

Rob Forsyth, Newcastle.

Handbook of Botulinum Toxin Treatment

The journey of botulinum toxin from an experimental treatment for strabismus to its current ever-expanding list of indications and prominent public profile has been an astounding one. It is therefore of great importance for practising neurologists to have a guide to the uses of botulinum toxin, and in particular a text which can separate out some conceptions of schizophrenia are framed. This book is a wonderfully wide-ranging, and demanding, tour de force. It synthesises accounts of self from a variety of perspectives: psychological, philosophical, historical, linguistic, social, psychiatric, computing and basic neuroscience. The editors are to be commended for ensuring that such authors from such diverse backgrounds have managed to convey their insights in generally accessible language. The “problem” of self is clearly closely related to the “problem” of consciousness, at its highest, most fascinating level. Inevitably, there is no overall reconciliation of these perspectives yet, but it’s a fascinating overview of work under way in these areas. Some surprisingly clear and consistent themes do emerge (such as the necessity, if not sufficiency, of right frontotemporal structures for access to self-awareness and episodic memory) and the promise of significant progress is palpable.

The clinical relevance is to situations where that “continuous” quality of the self is lost, and the perception of self fundamentally changes. Perhaps inevitably, given that the editors and many authors are psychiatrists, the clinical emphasis is on schizophrenia, although the neurology of focal acquired brain injury is used to inform models of self-awareness. There are certainly many insights into consciousness and self to be gained from the “natural experiments” of both schizophrenia and focal brain injury. Both give rise to observations that suggest that (self-)consciousness may be a multiple, “multi-track”, rather than unitary phenomenon: the phenomenon of thought insertion, a thought that the thinker does not “own”, suggests a dissociability of thought and “ownership”. Zeki’s model of “multiple microconsciousnesses” in the context of visual awareness is compatible. The fact that we generally have a unitary perception of our self may ultimately relate to a general tendency for temporally coincident coherence of perceptions across modalities: I plan to type an “a” on the computer keyboard, make a movement of my left little finger, hear a click and see an “a” appear on the screen all in a coherent way.

This is a fascinating and highly recommended read.

Rob Forsyth, Newcastle.

Neurosurgery Oral Board Review

The introduction of this book states that it was compiled from notes scribbled down while studying for the Neurosurgery Oral Board examination. The manual is designed to act as a supplement to the knowledge gained during training. The book addresses these objectives in a systematic, structured fashion. As a result, this manual is full of information, with very few wasted words. It is the nature of such small revision aids that numerous lists of key points are detailed. This, therefore, makes the book difficult to assimilate in other than short doses.

Overall, I think that the book is a useful read for all Neurosurgical trainees, in the mid to latter stages of their training. It provides a comprehensive, focused summary of nearly all conditions that a Neurosurgical trainee is likely to encounter. For example, the one page dedicated to thoracic disc disease precisely describes a variety of operative approaches with clarity as an aide memoire.

In summary, the book is comprehensive and concise. It is well illustrated and is likely to be found helpful in the run-up to specialist examination.

Peter C Whitfield, Plymouth.
Saturday - Ian McEwan

“There were three thousand six hundred and fifty three days like that in his stretch. From the first clang of the rail to the last clang of the rail. The three extra days were for leap years”

So wrote Alexander Solzhenitsyn about a day in the life of Ivan Denisovich, a day that was exactly like the rest of his days in the harsh Gulag to which he had been sentenced to 3653 days, an outcast for disagreeing with government thinking. Ian McEwan’s latest book on the other hand, follows one Saturday in the life of Henry Perowne, a Saturday unlike any other day, a day played out against mass protests against the government.

Henry is a very successful London neurosurgeon who lives in an expensive house close to his hospital of work in Bloomsbury – presumably the National Hospital for Neurology and Neurosurgery at Queen Square. He enjoys the trappings of success, his tastes are expensive, his family both beautiful and gifted.

As the Saturday that temporally frames this novel begins, Henry is suffering from insomnia and watches from his bedroom a flaming plane streak across the sky en route to Heathrow. It ends as he shuts this same bedroom window on a waking London some 24 odd hours later. During this Saturday the lives of Henry and those closest to him oscillate from normal routine to unique experiences, against the backdrop of the anti-Iraqi protests of the 15th February 2003. We learn of his skills as a surgeon and clinician and of the various talents of his family as they all converge for a memorable reunion and evening meal. We see Henry in the comfortable surroundings of his work, home and family whilst also having to confront the unpredictable street life of London and the minds of those with neurodegenerative disorders. An accidental encounter with Baxter, a patient with Huntington’s disease, serves to destabilise the world of Henry, the microcosm of individual lives played out on the background of the macrocosm of mass protest. So it is that this book sets out its themes of relationships and reactions – what should be the response to injustice? When does inequality become injustice? What is our responsibility to the less privileged, abused people in our society? What is our role in life and within the family? And how does our work impinge on our families and those around us?

In this book we learn a lot about Henry and his family and Baxter. We learn a lot about neurosurgical procedures and neurology – indeed it is everywhere, such that even the aged mother of Henry has multi-infarct dementia. We learn a lot about families but fundamentally what we really learn is that we will all have to face questions of identity – what constitutes “us” and how we are constructed and deconstructed by life and disease. It is a book that leaves us feeling self conscious and that challenges our value system, both as individuals in our private worlds and as a member of a democratic society. There are of course many different ways of seeking a sense of worth and peace in life, and this book tackles many of them with a secular emphasis…whether you agree with this is a matter of opinion, but Ian McEwan’s book will challenge you to reevaluate the life you lead… Roger Barker, Cambridge.