Neurology and Religion

This innovative book examines what can be learnt about the role of the brain in religious belief and practice from studying people with neurological disorders, such as stroke, epilepsy and Parkinson’s disease. Using a clinical case study approach, the book analyses the interaction of social influences, religious upbringing and neurological disorders on lived religious experience in a number of different faith traditions. The interdisciplinary contributors to the book ensure a variety of perspectives to help understand how the religious life is affected when different cognitive functions are impaired; how faith modifies the effects of neurological disorders; and how awareness of faith practices may assist in the treatment of these conditions.

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Neurology and Religion

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Preface

We believe that careful observation of the lives of neurology patients can teach us useful things about human religious experience, belief and practice, especially when these observations are critically analysed by theologians and philosophers. But these worlds have rarely met; few health care professionals are interested in neurology patients’ religious lives, and few theologians and philosophers have encountered the spiritual consequences of neurological disorders. This volume is an attempt to draw these disciplines together. We hope this book will be of interest to academics in the brain sciences, philosophy and theology; to ministers of religion; and to the interested layperson.

To those who say clinical observation has been made redundant by sophisticated brain scanning, we respond that imaging experiments are powerful but reductionist, methodologically limited (see Chapter 3) and with their ecological validity hampered by the paraphernalia of the scanning environment. Moreover, we argue that the encounter of the patient with a neurological clinician offers a unique perspective, as we observe how, in their spiritual lives, human beings overcome and respond to neurological deficits.

A straightforward and valuable outcome from this enterprise is increased understanding for patients, clinicians and pastors, on how faith might change with neurological conditions. But we also believe that there is academic value in observing how focal lesions fractionate the human experience of religion, just as our knowledge of the basis of language has thrived on the dissociative effects of brain lesions.

We affirm that religion involves multiple cognitive and affective domains, none of which may be exclusively ‘religious’. Religion is also perhaps best understood not so much as an individual capacity as a social activity (after all, religio means to ‘bind’, and this connects with the idea of faith as social glue); thus it is more like cricket than binocular vision.  

For all these reasons, this book is not entitled the ‘neuroscience of religion’, which, as Warren Brown has argued, is an implausible topic (Jeeves and Brown 2009). Rather, we see the study of neurological patients as an opportunity to analyse the interaction between societal influences, prior conditioning, religious upbringing and metaphysical understanding with the primary effects of neurological lesions. What sort of religion emerges when this or that cognitive function is impaired, compensated for and made sense of?

Though the terms religion and spirituality are slippery, and variably understood, our preference is to favour ‘religion’, as it encompasses individual and communal behaviour, practice and belief as well as subjective experience. The relationship between religion and disease is complex and two-way. In this book we describe several ways in which brain disease may appear to diminish or distort human expressions of religion. But we also describe the positive role of religious practice in therapy and rehabilitation. We recognise that periods of enforced convalescence from illness may lead to a new attention to religious belief (as in the lives of Francis of Assisi and Ignatius of Loyola). Also the experience of suffering through illness can mature faith, through ‘post-traumatic growth’ (Tedeschi and Calhoun 1995), and a religious framework can provide meaning to disease and recovery. Being part of a worshipping congregation may be attractive to those living with illness.

1 An idea borrowed from Warren Brown (MacNamara 2006).
because of the offer of practical and emotional support. Conversely, illness may itself symbolise important internal religious conflicts, as in psychosomatic and dissociative disorders.

William James, in the first chapter of *The Varieties*, entitled ‘Religion and Neurology’, argues against the ‘medical materialism’ that ‘finishes up Saint Paul . . . [as] an epileptic . . .’ (James 1902, 14). It is not our intent to denigrate religion as pathological or to assume that the religious life of those with neurological disorders is inauthentic. We concur with James that the criteria of religious credibility lie outside of medicine, instead relating to ‘immediate luminousness, . . . philosophical reasonableness and moral helpfulness’ (James 1902, 17–18).

We originally envisaged a review of the interaction of a comprehensive range of neurological conditions and the beliefs and practices of the major religions. But we have inevitably ended up with a more modest volume, dominated by Western religious traditions and covering a representative sample of neurological conditions, which reflects the patchiness of the work in this area. Being very aware of its limitations, we offer this volume as the start of the conversation between neurology and religious studies rather than as its conclusion.

The book is in two parts. Part I explores basic issues of philosophy and methodology that need to be kept in mind in opening a conversation between neurology and religion. Following two chapters by the editors that describe the discipline of neurology and the history of treating religion as an object of scientific study, Chapter 3 by Stuart J. Judge discusses the practical and interpretative constraints and pitfalls in applying neuroscientific methods to religion. There are then five chapters on philosophical issues. Warren S. Brown (Chapter 4) addresses the old ‘mind–body’ problem, arguing against dualistic positions in favour of the notion of embodied cognition, in which the mind is understood to be an emergent property of an active and dynamic brain–body. Ian James Kidd (Chapter 5) argues for a phenomenological approach in which first-person accounts of illness experience (rather than clinical or scientific observations) are understood as the basic data set and treated accordingly. Daniel De Haan (Chapter 6) and Sophie Grace Chappell (Chapter 7) both interact with significant issues set out in Maxwell Bennett and Peter Hacker’s influential work *Philosophical Foundations of Neuroscience* but take different positions. Finally, Neil Krishnan Aggarwal (Chapter 8) presents an approach to neuropsychiatry that is not founded on Western post-Enlightenment thought but located within an Islamic framework. This last chapter is in some ways an exemplar; other faith traditions have offered their own ‘alternative’ frameworks to medicine and psychology that have arisen largely in a northern European and American Protestant Christian framework, and this is picked up with a more practical focus in Giles Yeates’ chapter in Part II (Chapter 17).

In this second part, which is likely to be more accessible to clinicians, the focus is on specific neurological disorders and therapy, using clinical observation and findings from empirical studies of patients to elucidate questions about the nature of religion.

Alasdair Coles (Chapter 9) writes on temporal lobe epilepsy and its association with mystical-like experience. Roger Barker and Clare Redfern (Chapter 10) present an empirical study of religion and spirituality in people living with Parkinson’s disease. Working within a cognitive science of religion framework, Gordon Pennycook and colleagues explore in Chapter 11 the role of the prefrontal cortex in relation to strength of religious beliefs, drawing on studies of patients with prefrontal tumours. Ashraf El-Mitwalli (Chapter 12) examines the relationship between a religious practice – fasting – and brain
function. Kelly James Clark and Ingela Visuri (Chapter 13) explore the expression and experience of religion in people with autism spectrum conditions. Julian Hughes (Chapter 14) opens up questions of personhood from the perspective of dementia studies, and Nikolas Block and Bruce Miller (Chapter 15) focus more specifically on frontotemporal dementia.

In a chapter on therapy and rehabilitation, Joanna Collicutt (Chapter 16) presents a model of rehabilitation that incorporates spiritual and religious issues, illustrating it with a detailed case study of memory rehabilitation in a minister of religion. Giles Yeates (Chapter 17) reviews a range of practices located in Eastern religion and philosophy that have been found to show promising effects in the treatment of patients with neurological disorders.

Finally, there are two chapters on death. Aron Buchman (Chapter 18) looks at the status of brain death in relation to Jewish law, while Michael Marsh (Chapter 19) offers a polemical essay on the causes and nature of near-death experiences.

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References