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BOOK SYMPOSIUM: HEARING VOICES AND OTHER MATTERS OF THE MIND: WHAT MENTAL ABNORMALITIES CAN TEACH US ABOUT RELIGIONS BY ROBERT N. MCCAULEY AND GEORGE GRAHAM

COMMENTARIES

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Commentary on *Hearing voices and other matters of mind: What mental abnormalities teach us about religions* by Robert McCauley and George Graham

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As a recent survey of religious artifacts in the British Museum attests (MacGregor, 2018), religions exist in enormous varieties and have been ubiquitous globally and throughout history. This observation has led to the creation of the subdiscipline of psychology focused on religion which, although not as well-established as older subdisciplines such as social, cognitive and developmental psychology, is certainly thriving (Hood et al., 2009). Robert McCauley and George Graham's book, *Hearing voices and other matters of mind: What mental abnormalities teach us about religions*, introduces a novel perspective to this field and delivers a thoughtful and stimulating exploration of the border-lines between psychopathology and religious experience and behavior.

The authors approach this task within a framework which they describe as 'ecumenical naturalism', which stands on three claims. First, they accept the widespread assumption by researchers working on the cognitive science of religion (CSR), that many features of religion are by-products of the mental processes that underpin much of ordinary life. Second, they argue that many religious experiences share features with the experiences of people suffering from psychiatric disorders. Finally, they claim that findings from cognitive science will therefore be informative in understanding features of mental disorders that are also evident in religious experience. Importantly, although they claim that their approach is "free of presumptive ontological commitment or reference to anything supernatural" (p. 214), they say their aim is not to delegitimise or debunk religion, which they see as a natural feature of human life. They contrast this attitude to that taken by some notable previous contributors to what might be called the religion-psychopathology debate (they cite, in particular, Freud's view that religion is a childish illusion).

The core of the book is a series of chapters focusing on four types of mental illness: hearing voices, depression, obsessions and compulsions, and finally autism. In the chapter on hearing voices, they review the research literature showing that auditory-verbal hallucinations (one of the most common experiences reported by patients diagnosed as suffering from schizophrenia) are the consequence of a failure of 'source monitoring', which leads to the misattribution of mental events, especially inner speech, to a source external or alien to the self. They then argue that "there is no categorical difference, at a subpersonal level, between the mental systems or cognitive dispositions involved in believing that God is speaking to you ... and the systems involved in believing that a secular agent is talking" (p. 75); religious belief simply provides a context in which the voice-hearer may interpret these experiences and thereby come to the conclusion that they are being addressed by God.

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This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http:// creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. In the case of depression, McCauley and Graham explore the religious practice of petitionary prayer and, using the letters of Mother Teresa of Calcutta as evidence, argue that the sense of abandonment by God can have painful emotional consequences that align with the experiences of patients suffering from severe mood disorders; in my estimate this is probably the weakest part of the book because it does not really engage with the vast research literature on the role of cognitive processes in depression and leaves the other major type of mood disorder (mania) completely unexamined.

A much more thorough exploration of the relationships between excessive scrupulosity and obsessive-compulsive disorder (OCD) then follows; McCauley and Graham tentatively conclude that religious practice can readily become a way of expressing OCD symptoms, that some religious beliefs (for example, the idea that a thought is the moral equivalent of a deed) can maintain and exacerbate pathological scrupulosity, and that fear of an omniscient and morally interested God can induce in ordinary people analogues of OCD symptoms. They nevertheless conclude that it is unlikely that religions, by themselves, cause OCD.

Finally, in a fascinating chapter, which they describe as following a 'via negativa', they consider the possibility that autistic people may be uniquely unable to develop religious beliefs. This prediction follows from the cognitive science approach to religion, which holds that 'theory of mind' (ToM) skills (the ability to understand the mental states of other people) are required to conceive of God as an interested agent; as autistic people lack ToM skills, they should therefore be inclined to be areligious or atheists. Studies they review provide cautious, although not unequivocal support for this hypothesis.

The book concludes with a final chapter which, amongst other things, briefly identifies some future topics that their ecumenical naturalist approach might address: religious terrorism, the possible benefits of religion for people with mental disorders, and possible ways of using their insights to enhance the effectiveness of clinical interventions.

Do McCauley and Graham make a compelling case that our understanding of mental abnormalities can be informative when attempting to understand religion? I think they do. Indeed, I am convinced that the authors have made an important contribution which, because it is written with exceptional clarity, should be of considerable interest both to clinical researchers and also anyone who is curious about the nature of religion. Nonetheless, in what follows I will try and identify some issues which, I think, require clarification, or which would benefit from further consideration.

Clarifying the three continua

A guiding framework for the authors' investigations, stated at the outset, links three concepts: the continuum between normal cognition and religious cognition (continuum #3 as identified by the authors), between normal cognition and cognition associated with mental disorders (continuum #2) and the continuum between religious cognition and the cognition associated with mental disorders (the hitherto neglected continuum #1 that is the focus of the book). This idea is represented pictorially on page 3, in the form of a triangle with normal cognition, religion, and psychopathology at the vertices, which invites the notion that there may be some kind of hidden structure—individual differences in cognition that influence functioning at all three poles.

However, the three continua differ in important respects. An important driver of the CSR project (continuum #3) is the observation that religious belief is, as already noted, near universal. Indeed, it has been argued that an apparent decline in religious allegiance in the developed world has not been accompanied by a decline in the influence of the supernatural realm in the lives of ordinary people (Ertit, 2018) and that religious belief remains the norm globally (Micklethwait & Wooldridge, 2009) so that the high levels of atheism and agnosticism that we see in Europe should be considered a historical aberration, which is probably now in reverse (Kaufmann et al., 2012). It is for this reason that CSR researchers think that religious thoughts and experiences are by-products of the normal cognitive processes that we use to navigate our way around the social world (that we attribute a mind to events—God—just as we attribute minds to our fellow human beings; that we wrongly

detect agency behind natural phenomena because we have evolved to become sensitive agency detectors in order to maintain vigilance against predators).

The claims made about continuum #2, which are well summarized by McCauley and Graham on page 36 of their book, are different. First, over recent decades it has been recognized that psychiatric symptoms have a much greater prevalence than would be expected from psychiatric admission records and that the symptoms experienced by psychiatric patients do not differ in kind from those experienced by non-patients. Furthermore, it is now clear that at least some people who have these experiences are untroubled by them. In passing, it is worth stating that the latter is more likely to be the case for some symptoms, notably hallucinations (Romme & Escher, 1993) than others in which fear is an intrinsic feature, for example paranoid delusions (Nolan et al., 2018).

This continuum account of psychopathology has been the subject of considerable debate, especially with respect to psychotic symptoms (van Os et al., 2009) and has led to the development of a family of new statistical techniques, known as 'taxometrics', which allow researchers to test whether traits exist on continua or correspond to 'taxons' (groups of individuals who differ qualitatively in their experience from other people). In the case of most psychiatric disorders, these new techniques have overwhelmingly supported the continuum account (Haslam et al., 2020). However, it is still true that psychopathological experiences, especially of the severe kind, are the exception rather than the norm—most people do not hear voices, develop paranoid beliefs about their neighbors, or suffer from marked autistic traits. In contrast to researchers taking the cognitive-sciences approach to religion, therefore, psychopathologists usually explain psychiatric symptoms, not in terms of *normal* cognitive processes, but in terms of *abnormal* cognitive deficits or biases.

Matters are even more complex in the case of continuum #1, which is the focus of McCauley and Graham's book; and using the term 'continuum' in this context is, I think, misleading. It is worth noting, before continuing, that recent cross-sectional (Abdel-Khalek et al., 2019) and longitudinal studies (Garssen et al., 2021) have reported that, when global measures of mental health are considered, religiosity and religious observance are *positively* associated with mental health. There may be many reasons for this; for example, the effect of observance can be understood in terms of the human need to belong (Baumeister & Leary, 1995), and social identity (the sense of being a member of a social group) is known to play a role in promoting resilience to adversity (Haslam et al., 2009). Whatever the reason, this positive association forms the background against which the specific points of contact between religion and mental ill-health highlighted by McCauley and Graham must be considered and must undermine any hypothesis of a simple relationship between mental ill-health and religion.

This complexity becomes more obvious when we consider the specific points of contact that McCauley and Graham discuss. After their excellent summary of the research on hallucinations, the authors propose the plausible hypothesis that religion provides a framework in which these experiences can be interpreted by the experiencer (actually, often a benign framework, as hearing the voice of God can often be a positive, indeed actively sought-after, experience). In the chapter on mood, by contrast, the focus is on the idea that religious belief, leading to a sense of being abandoned by God, can be a cause of depression. Religion, we are then told, can provide a vehicle for the expression of OCD symptoms and even exacerbate them, although probably not cause OCD on its own. Finally, autism, as discussed earlier, is likely associated with the absence of religious belief.

Notice here that the causal models linking religion and psychopathology run in different directions in each of these cases. These observations, of course, do not undermine any of McCauley and Graham's specific and fascinating analyses, but they do suggest that the suggestion of a simple continuum between mental illness and religion is wrong.

The missing element of belief

Standard accounts of the psychology of religion identify many different components—belief in the divine and an afterlife, spirituality, mystical and otherwise anomalous experiences, but also ritual practices, participation in religious communities, and religious identity (Hood et al., 2009). These are likely related to each other and to mental health in complex ways. Most of these elements are addressed in various sections of McCauley and Graham's book but two, in particular, tend to be neglected.

First, and surprisingly, the belief component gets little attention, so it bears closer examination here, not least because it highlights the difficulty of distinguishing between healthy religious life and psychiatric disorder. When clinicians form the judgment that their patients have abnormal beliefs that are caused by mental illness, the beliefs are usually described as 'delusions'. Standard psychiatric descriptions, such as that found in the American Psychiatric Association's Diagnostic and Statistical Manual (American Psychiatric Association, 2013), note that delusions are "...fixed beliefs that are not amenable to change in light of conflicting evidence," and that "their content may include a variety of themes (e.g., persecutory, referential, somatic, religious, grandiose)." Numerous studies in many countries have reported that the persecutory (paranoid) variety is particularly common, but it is certainly not unusual for delusions to have religious content (Brewerton, 1994) (I once had a patient who, when ill, was certain that she was the Virgin Mary, and another who believed that he had a Jesus-like role and was being punished by God for the crimes of the world). A British study estimated that about a quarter of patients experiencing their first episode of psychosis have beliefs of this kind (Siddle et al., 2002). The content may intertwine with other delusional themes; for example, the beliefs may also be paranoid (as when the patient believes that he or she is being persecuted by the Devil) or grandiose (as when a patient thinks that he or she is Jesus). Typically, patients with religious delusions will have a background of religiosity that pre-dates the onset of mental illness (Drinnan & Lavender, 2006).

Of course, it is sometimes very difficult to decide whether religious beliefs are pathological or not. Some studies have reported, for example, that deluded patients are similar to religious people in terms of their strong need for a meaning to their lives (Roberts, 1991) and that members of new age religious movements score similarly to psychiatric patients on psychometric measures of delusionality (Peters et al., 1999). A much-discussed case in which this problem had important practical implications concerned the Mormon fundamentalist brothers Dan and Ron Lafferty who, in 1983, murdered their sister-in-law and her infant daughter, apparently after being ordered to carry out the killings by Jesus Christ. Mental health issues were extensively debated in the case of Ron (the brothers were tried separately after Ron attempted to commit suicide soon after their capture) who was deemed mentally incapable of facing a jury and spent years undergoing psychiatric treatment before he was eventually tried and sentenced to death (in 2019, he died of natural causes while awaiting execution). Mental health experts who testified at the trial were evenly divided on whether he was psychotic or in the grip of extreme religious belief. Of course, this problem is made more difficult without an understanding of the context in which beliefs arise. In his extraordinary book Under the banner of heaven, the investigative journalist Jon Krakauer (2003) convincingly argued that the actions of the brothers were intelligible, but only after understanding the history of the Mormon church and, in particular, the rift between the mainstream Church of Jesus Christ of Latter-Day Saints and fundamentalists who continue to believe in plural marriage (the Lafferty's sister-in-law was blamed for their brother's opposition to this practice).

The mental health research community is divided in our understanding of delusions. Some researchers, mainly psychologists, argue that, like other psychiatric symptoms, delusions exist on a continuum with normal beliefs and attitudes so that clinical paranoia is an extreme variant of the forms of suspiciousness and mistrust that are often observed in the community; taxometric research supports this view (Elahi et al., 2017). On the other hand, following the early work of Karl Jaspers (1913/1963), researchers who take a phenomenological approach claim that delusions

are the consequence of subtle alterations in perception and the sense of 'being in the world' which make them qualitatively different from ordinary beliefs and attitudes (Sass & Byrom, 2015).

The question of whether belief in God is a delusion has been described as a 'Hilbert problem' in the scientific study of religion (that is, a problem that must be solved in order for there to be fundamental progress in the field) (Ross & McKay, 2017). One impediment to resolving it has been the assumptions made by researchers taking different sides in the continuum debate. Psychologists, on the one hand, have tended to think of beliefs as simply lists in the head (an idea that, interestingly, seems analogous to the way that beliefs were treated in early Christian creeds). The phenomenologists, on the other hand, have recognized the complexity and, frankly, weirdness of delusional beliefs but, because they have compared them to mundane beliefs, have underestimated the complexity and weirdness of beliefs that are widely accepted as normal, especially those involved in politics and religion. Underpinning these two attitudes has been the absence of a coherent understanding of beliefs in general, which is remarkable given the central role that beliefs play in a wide range of psychological theories (Bentall, 2018). It seems likely that our understanding of both normal and abnormal cognition would benefit considerably from an ecumenical naturalist project that considers delusions, religious beliefs, and political beliefs within a single framework.

Religion and the social world

The second feature of religion that McCauley and Graham give little attention to is religious identity. As already noted, human beings have a powerful need to belong (Baumeister & Leary, 1995), which is manifested in both the need for attachment relationships (Bowlby, 1969) and also in bonds developed with social groups (Tajfel, 1979). At the cognitive level, attachment and identity can be thought of as schemas that represent our expectations of relationships with others and both are known to influence mental health, so that insecure attachment is associated with a high risk of psychopathology, especially depression (Bifulco et al., 2002) and paranoia (Bentall & Sitko, 2020), whereas a strong sense of identity confers resilience to both of these conditions (Elahi et al., 2018; Haslam et al., 2009). Interestingly, both attachment and identity are thought to also influence religious belief and participation (Granqvist & Kirkpatrick, 2004; Ysseldyk et al., 2010).

The account of Mother Teresa's difficulties discussed in McCauley and Graham's chapter on depression can be readily interpreted in terms of attachment theory, given her traumatic childhood, her yearning for a sense of attachment to God, and her feeling that she had been abandoned by Him. Identity is known to play an important role in inter-group conflict, and therefore is one framework through which social scientists have sought to understand religious extremism and terrorism (Herriot, 2009).

These observations lead me to make a general point about the limitations of an exclusively cognitive approach when trying to understand any aspect of human behavior. Human beings, of course, live in a world populated by other human beings, who are themselves affected by the cultural and historical context in which they live. Whether or not we develop psychopathology of any kind is known to be influenced by our social environment and, especially, adverse experiences in early childhood (Felitti et al., 1998; Varese et al., 2012). There is a particularly strong association between childhood sexual abuse and hearing voices, for example (Bentall et al., 2014). Both benign and malign aspects of the social environment must presumably influence the cognitive pathways that determine adult experiences in ways which we are only just beginning to understand. It is not a criticism of the cognitive approach to understanding religion that these influences are not addressed, but this surely is a limitation that must be addressed in future research.

Conclusion

Hearing voices and other matters of mind: What mental abnormalities teach us about religions in an important addition to a growing literature that attempts to understand religion from a

psychological perspective. In this commentary I have tried to identify its strengths, but also some limitations that I think can be addressed in future studies. Overall, I would strongly commend this book to anyone who is interested in the relationship between psychopathology and religious life.

Disclosure statement

No potential conflict of interest was reported by the author.

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Beliefs, evolution, and psychiatric symptoms

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Overall, I found this book very interesting and some parts are fascinating. It certainly takes on a difficult set of topics, and in doing so, the authors have ignored some theories and empirical findings that I think are relevant. As my own scientific interests include the evolutionary basis of psychiatric symptoms and the influence of religious beliefs on mental illness and mental health, these are the topics on which I have focused in my commentary.

Psychiatric symptoms and evolved defense systems

The authors think there is continuity between the cognitive experience of people with mental disorders (or psychiatric disorders) and the general population, and they firmly believe even though psychiatric disorders reflect brain function, they do not necessarily reflect brain malfunctions; therefore, "each mental disorder is not best explained or understood just in terms of brain science"