**Why is Belief in God not a Delusion?**

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**Abstract**

Religious beliefs and delusions tend to be puzzling to those who do not share them, often violating established biological and physical principles. Indeed, some scholars have suggested that there is no meaningful difference between religious belief and delusion. This suggestion, however, has serious pragmatic limitations, as it effectively pathologises billions of people. We propose that a core research goal should be to develop a comprehensive and nuanced theory of belief formation – and malformation – that encompasses religious beliefs and delusions, yet elucidates the differences between them. Such a theory will recognise the importance of culture in psychiatric diagnosis, without ruling out the possibility of group delusions.

**Keywords**

belief; culture; delusion; religion

The word ‘delusion’ in my title has disquieted some psychiatrists who regard it as a technical term, not to be bandied about.

 — Dawkins (2006, p. 5)

Some people have rather striking beliefs. Consider the following examples:

1. Arnold believes he has two heads, the second of which belongs to his late wife’s gynaecologist.
2. Simone believes that each Sunday she drinks the blood of a long-since-murdered man whose mother was a virgin and whose father was the creator of the universe.[[1]](#footnote-1)

Arnold suffers from a somatic delusion (a singular condition labeled “perceptual delusional bicephaly”; see Ames, 1984). He is hospitalized and prescribed antipsychotic medication. Simone, in contrast, escapes medical attention and lives a happy and fulfilling life. Why should this be? After all, both Arnold and Simone hold beliefs that, on the face of it at least, are bizarrely implausible, violating widely established biological and physical principles.

Some commentators, most prominently Richard Dawkins (2006), have characterized religious belief as delusional. However, this move creates serious problems for diagnosis, as clinicians need an account of delusions that enables them to identify individuals who are in need of help without pathologising billions of people who (rightly or wrongly) believe in God (or gods).

The most prominent system of classification of mental disorders is the Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association. The current edition defines delusion as follows:

A false belief based on incorrect inference about external reality that is firmly held despite what almost everyone else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary. The belief is not ordinarily accepted by other members of the person's culture or subculture (i.e., it is not an article of religious faith). (APA, 2013, p. 819)

Although the DSM definition of delusion is controversial (Coltheart, Langdon, & McKay, 2011), it does have features that are useful for clinicians. In particular, the cultural exemption underscores the importance of carefully considering an individual’s culture when deciding whether they are suffering from a serious psychological problem (Murphy, 2013; Radden, 2011). Nonetheless, despite its pragmatic utility, this cultural exemption has two serious limitations. First, it is too coarse-grained—it excludes *all* beliefs (irrespective of content) that a sufficiently large number of people share; thus eliminating, by definitional fiat, the possibility of group delusions. Second, this cultural exemption is completely atheoretical—no account is provided of *why* a belief being widely shared counts against it being a delusion.

These two limitations can be drawn into sharp focus with an example. Consider Koro—a condition in which individuals believe that their genitalia are retracting into their bodies or are being stolen through sorcery. There are documented cases of Koro spreading rapidly throughout groups, triggering “penis panics” and persecution of “penis thieves” (Mattelaer & Jilek, 2007). It follows from the DSM’s cultural exemption clause that once Koro has become widespread it is no longer a delusion, an assertion that seems difficult to justify (Coltheart, 2015). Nevertheless, this cultural exemption cannot be simply abandoned. To do so would result in many widely shared cultural beliefs, particularly religious beliefs, being pathologised as delusional. A nuanced theory that can accommodate different categories of belief is needed.

An important point of contact between religious beliefs and delusions is that they tend to be very puzzling to outsiders—rational justification can appear very weak or entirely absent. Converging lines of evidence suggest that this parallel can, in part, be understood in terms of dual process theories of reasoning (Evans & Stanovich, 2013), with both categories of beliefs being associated with a tendency to accept ideas that come to mind, whether or not they can be rationally justified. For example, religious believers are more inclined than agnostics and atheists to provide intuitively appealing yet false responses on reasoning tasks (Pennycook, Ross, Koehler, & Fugelsang, 2016). Likewise, there is evidence that people with delusions over-utilize intuitive processing (So, Siu, Wong, Chan, & Garety, 2016).

While the contents of religious beliefs and delusions can appear equally puzzling, they typically differ in terms of social dynamics. Multiple lines of evidence suggest that religion evolved to bind people together in moral communities (Johnson, 2015; Norenzayan, 2013), with cultural evolutionary processes of social transmission playing a crucial role. Culture also plays an important role in shaping the content of delusions (Gold & Gold, 2014). Nevertheless, while religious beliefs tend to be shared within communities and often play positive roles in people’s social lives, delusions are typically idiosyncratic and stigmatizing, fostering a “sense of alienation from the common-sense world the rest of us imagine we inhabit” (Scull, 2015, p. 10). Moreover, whereas religious beliefs tend to emerge from the *normally functioning* human cognitive system (Barrett, 2004), delusions are arguably manifestations of underlying cognitive *dysfunction* (Miyazono, 2015). Even so, just as religious beliefs can provide comfort, solace and meaning to religious believers, delusions may sometimes confer psychological benefits on deluded individuals, in some cases representing a defensive buffer against “the stark reality of annihilating loss” (Butler, 2000, p. 89).

Scientists who study religion from a bio-cultural perspective have tended to shy away from the topic of delusions. Similarly, scholarly work on delusions has rarely engaged with contemporary bio-cultural research on religion. This gap in the literature persists despite clear overlap between the two phenomena, such as religious delusions (i.e. delusions with religious content), which are relatively common in schizophrenia (Cook, 2015) and difficult to distinguish from firmly held religious beliefs (Graham, 2015). We suggest that scientists who take a bio-cultural approach to the study of religion are well positioned to play a leading role in developing a comprehensive and nuanced theory of belief formation and malformation that situates religious belief and delusions in a multidimensional doxastic landscape, and that illuminates the connections and differences between the two. Thus our Hilbert Problem in the study of religion is: *Why is belief in God not a delusion?*

How might this Hilbert Problem be solved? One potentially fruitful starting point is to bring together research paradigms from the delusions literature and the religion literature. For example, recent meta-analyses indicate that delusions are associated with a tendency to “jump to conclusions”, gathering minimal data in probabilistic reasoning paradigms (Dudley, Taylor, Wickham, & Hutton, 2016; McLean, Mattiske, & Balzan, 2016; Ross, McKay, Coltheart, & Langdon, 2015; So et al., 2016). However, little is known about how such biases might interact with social processes to produce beliefs that spread and amplify throughout populations. Can individuals “catch” a propensity to form beliefs on the basis of limited evidence, potentially transforming biased individual-level decisions into social (perhaps religious) traditions? In particular, given prominent claims that humans exhibit a particular tendency to jump to conclusions in the specific domain of *agency detection* (Barrett, 2000; Guthrie, 1993), do tendencies to overattribute ambiguous cues to intentional agency amplify in social settings?

To address such questions we advocate a research programme that integrateswork on the neurocognitive underpinnings of delusions (e.g., data-gathering paradigms from the cognitive neuropsychiatry literature) with models and methods used to understand sociocultural transmission (e.g., information cascade and transmission chain paradigms from the cultural evolution literature). Such research could shed light on why some beliefs that arise in individual minds spread throughout populations and generate stable social traditions, while other beliefs remain the self-contained province of troubled individuals.

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1. The example is adapted from Blaney (2015). [↑](#footnote-ref-1)