Asian Journal of Philosophy (2022) 1:38
https://doi.org/10.1007/s44204-022-00041-3

BOOK SYMPOSIUM

Précis of *Delusions and Beliefs: A Philosophical Inquiry*

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Received: 1 July 2022 / Accepted: 12 July 2022 / Published online: 30 July 2022

Abstract

The central hypothesis of this book, *Delusions and Beliefs: A Philosophical Inquiry* (Routledge, 2019), is that delusions are malfunctional beliefs (Chapter 1); they belong to the category of belief (Chapter 2) but, unlike mundane false or irrational beliefs, they fail to perform some functions of belief (Chapter 3). More precisely, delusions directly or indirectly involve some malfunctioning cognitive mechanisms, which is empirically supported by the two-factor account of delusion formation (Chapter 4).

Keywords Delusion · Belief · Teleo-functionalism · Malfunction · Two-factor theory

Think about the following clinical case of a person with the delusion that he has no internal organs.

> Thirty-three-year-old man with chronic schizophrenia. The patient had been ill for 14 years. At the time of the interview, he was preoccupied and distressed by the firm belief that he had no internal organs. Although his doctors had told him that this was a physiological impossibility, and despite some acknowledgment on the part of the patient that he could not quite understand how such a thing was possible, the patient said that he could not rid himself of the belief. The patient also expressed the belief that spirit doctors had come to his room one night to perform a magical operation in order to remove his internal organs. This happened, he believed, because he was being punished by God for some evil or sin that he had committed, although he was uncertain about the nature of that sin. The most distressing aspect of the delusion for this patient was the pervasive worry that, when he died, he would be rejected from heaven because he was no longer a proper human being (Davies et al., 2001, 136).

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His delusion about internal organs raises several philosophical and psychological questions.

First, what kind of mental state is the delusion (The Nature Question)? Perhaps he believes that he has no internal organs. Alternatively, he does not believe that he has no internal organs but rather accepts it, or imagines it. The belief account ("doxasticism about delusions") is the default position in psychiatry (which is reflected in the fact that the term "belief" is actually used in the case description), and has been defended by some philosophers (e.g., Bortolotti, 2009, 2012; Bayne & Pacherie, 2005). Delusions, however, have a number of peculiar features that are not belief-like, such as the remarkable insensitivity to evidence (e.g., he maintains his delusion despite the doctors' testimony that it is physiologically impossible that he has no internal organs) or the incoherence with nonverbal behavior (e.g., he might behave, at least in some contexts, as if he does have internal organs). These peculiar features (I call them "delusional features" in the book) cast some doubt on doxasticism and motivate revised or alternative conceptions of delusions; e.g., delusions are empty speech acts (Berrios, 1991), acceptances (Frankish, 2012; Dub, 2017), perceptual inferences (Hohwy & Rajan, 2012), imaginings (Currie, 2000; Currie & Jureidini, 2001), in-between states (Egan, 2009; Schwitzgebel, 2012), etc.

Second, the person's delusion is not merely false or irrational; it is pathological. Unlike mundane false or irrational beliefs (e.g., the optimistic belief that one's internal organs are perfectly healthy despite some worrisome data in the recent checkup report), his delusion about internal organs is pathological; it (together with other symptoms) warrants clinical diagnoses and treatments. What makes it the case that his delusion about internal organs is pathological (The Pathology Question)? What distinguishes the pathological delusion that one does not have internal organs from the mundane irrational belief that one's internal organs are perfectly healthy? A possible view would be that the former is too irrational; the latter is certainly irrational, but the irrationality of the former is significantly different, either in degree or in kind, from that of the latter. Another possible view would be that the content of the former is too strange or unrealistic. The mundane irrational belief that one's internal organs are perfectly healthy is not strange. In contrast, the delusion that one has no internal organs is certainly strange and unrealistic.

Third, how is the person's delusion about internal organs formed? And how it is maintained despite obvious counterevidence (The Etiology Question)? It is widely believed that delusions (at least many of them) are formed in response to some abnormal experience (e.g., Maher, 1974; Bayne & Pacherie, 2004); e.g., the delusion about internal organs is formed in response to some abnormal somatic feelings. But do abnormal somatic feelings explain everything about the formation of his delusion? It is not clear why the person adopts the delusional explanation of the abnormal somatic feelings that he has no internal organs rather than some mundane explanations, such as the one that the abnormal somatic feelings are due to some illness or fatigue (e.g., Stone & Young, 1997). A related problem is that even if the abnormal somatic feelings explain why the person adopts the delusional explanation, they might not explain why he fails to revise the explanation when he faces counterevidence such as doctors' testimony (e.g., Coltheart et al., 2010). Empirical findings of reasoning biases and abnormalities

(e.g., Garety & Hemsley, 1997; Woodward et al., 2006) cast additional doubt on the idea that abnormal experience explains everything about the formation of delusions.

My book, *Delusions and Beliefs: A Philosophical Inquiry* (Miyazono, 2019), proposes an account of delusions that (directly or indirectly) answer the three questions above. The central hypothesis of this book, which I call "the malfunctional belief hypothesis," is that delusions are malfunctional beliefs (Chapter 1). The malfunctional belief hypothesis is based on the following analogy: the category of the heart can be defined in terms of the distinctively heart-like function, i.e., the function of pumping blood. It is not the case, however, that all the members of this category actually perform the function of pumping blood. Diseased or malformed hearts have the function of pumping blood and thus belong to the category of heart, but they do not perform the function. They are malfunctional hearts. A delusion, according to my hypothesis, is analogous to a diseased or malformed heart. The category of belief, just like the category of heart, can be defined in terms of distinctively belief-like functions, which I call "doxastic functions". This is the basic idea of teleo-functionalism, which is the theoretical foundation of this book. It is not the case, however, that all the members of this category actually perform doxastic functions. Delusions, according to my hypothesis, have doxastic functions and thus belong to the category of belief, but they do not perform the functions. They are malfunctional beliefs.

Chapter 2 Nature The malfunctional belief hypothesis is a form of doxasticism; delusions are malfunctional *beliefs*. The person in the case above believes that he has no internal organs. I adopt teleo-functionalism about beliefs (which is the target of the commentaries by Ohlhorst and Atkinson), according to which a mental state is a belief if and only if it has doxastic functions. And I argue that delusions have (or at least they are very likely to have) doxastic functions on the basis of the empirical observation that delusions and non-delusional beliefs are produced by the same set of mechanisms (the "same producer hypothesis") and consumed by the same set of mechanisms (the "same consumer hypothesis"). The crucial assumption here is that the function of a mental state is determined by the function of the cognitive mechanisms that produce the state in response to some inputs and of the cognitive mechanisms that consume the state for producing some outputs (Millikan, 1984).

Chapter 3 The malfunctional belief hypothesis supports the idea that delusions are pathological (partly) because they are *malfunctional* beliefs. Malfunctionality is what distinguishes the pathological delusion that one does not have internal organs from the mundane irrational belief that one's internal organs are perfectly healthy. More precisely, my proposal (which is the target of Bortolotti's commentary) is that delusions are pathological because they involve harmful malfunctions (see also Miyazono, 2015). My proposal is an application of Wakefield's (1992a, b) harmful dysfunction analysis of disorder, according to which a disorder is a condition that involves harmful malfunctions (or "dysfunctions"). A diseased heart is pathological because it involves harmful malfunctions, according to the harmful dysfunction

analysis. Analogously, a delusion is pathological because it involves harmful malfunctions (or, more precisely, it directly or indirectly involves some cognitive mechanisms that fail to perform their functions).

Chapter 4 Etiology The two-factor theory, which I take to be the most plausible (or at least promising) account of delusion formation, is coherent with the malfunctional belief hypothesis. The two-factor theory has been defended by Coltheart and colleagues in a number of publications (e.g., Coltheart, 2007; Coltheart et al., 2010, 2011), but it is still a controversial position. What I offer in this chapter is a new interpretation of how the empirical evidence supports the two-factor theory (which is the target of Sullivan-Bissett's commentary). I argue that pieces of empirical evidence constitute an inference-to-the-best-explanation argument for the two-factor theory. The crucial idea is that, individually, each piece of empirical evidence might be inconclusive and open to alternative interpretations (which is why the two-factor theory has been controversial), but they jointly support the two-factor theory in the form of an inference-to-the-best explanation.

Another project of Chapter 4 (which is one of the targets of Sakakibara's commentary) is to show that the prediction-error theory (e.g., Fletcher & Frith, 2009; Corlett et al., 2010) can be incorporated in the two-factor framework to form a hybrid theory (see also Miyazono & McKay, 2019). The hybrid theory inherits the theoretical and empirical merits of the two-factor theory and the prediction-error theory and provides a unified account of monothematic delusions, which are the main target of the two-factor theory, and (polythematic) delusions in schizophrenia, which are the main target of the prediction-error theory.

Data availability I do not analyze or generate any datasets because my work proceeds within a theoretical and philosophical approach.

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