

# Delusion and Belief

A cognitive phenomenological defence of doxasticism

**Peter Clutton**

BA Philosophy Macquarie University NSW Australia

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Philosophy Department, Faculty of Arts

Macquarie University

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## Abstract

In this thesis I defend the doxastic conception of delusions: delusions are beliefs. This is the view of many scientific theories of delusions, which is a point in its favour. But a number of philosophers have argued that delusions cannot be beliefs because they fail the necessary conditions of belief. For example, delusional patients often do not act in accordance with their delusions, a criterion usually considered central to belief. In response to these claims, two influential defences of doxasticism have been put forward, one based on the interpretationist theory of beliefs, the other based on the phenomenal dispositional theory. I argue that both defences have problematic anti-realist tendencies. These tendencies are problematic because, *prima facie*, scientific theories of delusions are staunchly realist about delusions and beliefs. As such, whatever the current doxastic defences supposedly defend, it does not look all that much like robust scientific doxasticism about delusions. For this reason, I put forward a defence of doxasticism which is realist in nature and fits with the general scientific views of delusions and beliefs. I call it the cognitive phenomenological defence of doxasticism.

## Statement of Candidate

I certify that the work in this thesis entitled ‘Delusion and Belief: A cognitive phenomenological defence of doxasticism’ has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institutions other than Macquarie University.

I also certify that this thesis is an original piece of research and has been written by me. Any assistance I have received in my research work and the preparation of the thesis has been appropriately acknowledged.

Finally, I certify that all information sources and literature used have been indicated in the thesis.

Peter Clutton (42636876)

A handwritten signature in black ink, appearing to read 'Peter Clutton', written in a cursive style.

## Acknowledgments

I owe thanks to a number of people for their help. Firstly, words would hardly suffice to adequately express my thanks to my supervisor, Colin Klein. Instead of words, then, I take my cue from Adam Smith (1759: II.iii.I.4): 'What gratitude chiefly desires, is not only to make the benefactor feel pleasure in his turn, but to make him conscious that he meets with this reward on account of his past conduct, and to satisfy him that the person upon whom he bestowed good offices was not unworthy of them.' I can only hope that the work that has gone into this thesis might somehow be enough to show that I was not entirely unworthy of all the time, effort, and advice that Colin bestowed on me. Working with Colin has been an enriching experience, and this thesis has benefited from that experience immensely.

I thank the ARC Centre of Excellence in Cognition and its Disorders, where I learnt about delusions. Particular thanks are due to Max Coltheart, Robyn Langdon, and Jonathan McGuire, as well as my fellow students in the interdisciplinary seminar on 'Advanced Topics in Belief Formation and its Disorders.' I also benefited from symposia organised on the topic of delusions, including from discussions with Jacob Hohwy and Philip Gerrans. I thank the audience at the 2015 AAP Conference where I presented this thesis, particularly Glenn Carruthers, Daniel Hutto, Neil Levy, Chris Letheby, and Liz Schier for their insightful questions. I am also thankful for the entire MRes philosophy cohort, particularly Jonny and Michael, for their support. Thanks are also due to Jeanette Kennett and Jennifer Duke-Yonge, because without their help I would not have had the chance to be in this group.

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## Introduction

Imagine if someone told you sincerely that their spouse, with whom they had lived happily for decades, had been replaced by an identical-looking imposter. What would you think? One thing you might think is: could someone really *believe* that? And what if the person in question proceeded about their day ostensibly as if nothing were amiss—going back to live with the supposed imposter, and perhaps having an evening meal with them before bed? You might feel your initial doubt even more strongly in that case: surely this person does not really *believe* what they say, despite their sincere assertions.

Philosophers who have considered the nature of delusions—like the example above, which is known as the Capgras delusion<sup>1</sup>—have raised similar concerns. On the one hand, some prominent scientific theories, from the field of cognitive neuropsychiatry, have explained delusions as being beliefs that have somehow gone wrong.<sup>2</sup> Such theories are referred to as **doxastic** because they view delusions as *beliefs*. Given the success of these doxastic theories, they give us reason to think that delusions are beliefs. On the other hand, there seem to be reasons to deny that delusions are beliefs. For a start, people generally act in accordance with their beliefs and typically make some effort to gather reasonable evidence for them. But neither seems to be true of the example above.<sup>3</sup> Because of this, some philosophers have mounted various **anti-doxastic** objections, which have aimed to show that despite appearances, delusions cannot be beliefs because they do not fit the typical criteria of beliefs.

In response to these objections, two influential **doxastic defences** have been proposed, one based on an interpretationist view of beliefs and one based on a dispositional view of beliefs. The **interpretationist defence** argues that we can interpret those with delusions as

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<sup>1</sup> Max Coltheart, Robyn Langdon, and Ryan McKay, "Delusional Belief," *Annual Review of Psychology* 62, no. 1 (2011).

<sup>2</sup> Martin Davies et al., "Monothematic Delusions: Towards a Two-Factor Account," *Philosophy, Psychiatry & Psychology* 8, no. 2 (2001).

<sup>3</sup> Surely the person could not have very good reasons for supposing that their spouse had been somehow body-swapped.

having beliefs in just the same way that we can interpret other people around us as having beliefs, and thus we should think of delusions in the same way as we do regular beliefs.<sup>4</sup> The **dispositional defence** argues that delusions share enough dispositional similarities with everyday beliefs to also be considered beliefs.<sup>5</sup>

In this work, I evaluate these two defences of the doxastic position and put forward two theses, one negative and one positive. The negative thesis is that the current defences of doxasticism are flawed. The positive thesis is that there is a better defence to be had. Each thesis also has a strong and a weak form, as I will review below. At the least, I believe that the ongoing debate over the doxastic status of delusions would be advanced—marginally but importantly—even if only the weak forms of my theses were accepted. But ultimately, I aim to convince readers of both theses in their strong forms.

My weak negative thesis is that the current defences of doxasticism rest on views of belief that are markedly anti-realist. On the dispositional defence, given by Bayne and Pacherie (2005), Tumulty's comments sum up the point well: 'Dispositionalism has the resources to generate the ascriptive claims Bayne and Pacherie want precisely because it doesn't give [those ascriptions] the same weight [Bayne and Pacherie] do.'<sup>6</sup> Regarding the interpretationist defence, Gerrans' comments similarly hit the mark: interpretationism 'runs very close to a kind of antirealist instrumentalism about psychology in which the coherence of a subject's psychology becomes a matter of interpretive ingenuity or community standards for

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<sup>4</sup> The primary source of this view is Lisa Bortolotti, *Delusions and Other Irrational Beliefs*, International Perspectives in Philosophy and Psychiatry (Oxford: Oxford University Press, 2010).

<sup>5</sup> This defence is given in Tim Bayne and Elisabeth Pacherie, "In Defence of the Doxastic Conception of Delusions," *Mind & Language* 20, no. 2 (2005). The dispositional view of beliefs in question is based on Eric Schwitzgebel, "A Phenomenal, Dispositional Account of Belief," *Nous* 36, no. 2 (2002).

<sup>6</sup> Maura Tumulty, "Delusions and Dispositionalism About Belief," *Mind & Language* 26, no. 5 (2011): 613. I should make it clear that Tumulty does not reject dispositionalism on account of this: the flaw that Tumulty sees lies in the attempt to use dispositionalism to defend any kind of robust doxasticism, because dispositionalism is not well suited to that task. She further argues that in order to secure any kind of robust classification, dispositionalism would need to draw more heavily on folk psychological norms, in which case it would be even less likely to classify delusions as beliefs.

rationalization.<sup>7</sup> In so far as these defences actually defend doxasticism, then, the doxastic claim starts to look somewhat insubstantial.

My strong negative thesis is that this anti-realism is a reason to reject these defences. The anti-realism is a flaw because the current doxastic cognitive neuropsychiatric theories of delusions are strongly *realist* about beliefs. They view belief as a particular, concrete natural phenomenon which they seek to explain by adverting to the mechanisms that give rise to it. And on these theories, delusions are properly classed as instances of this phenomenon. As such, it is hardly a ‘defence of doxasticism’ to argue that on some other, partly anti-realist view of beliefs, we can call delusions ‘beliefs.’ That may be true, but it is not a defence of doxasticism. Scientific theories are generally realist about things they posit; cognitive-scientific theories of mental states are realist about mental states; and cognitive neuropsychiatric theories of delusions are realist about beliefs. If we want to defend doxasticism, we should also be realists about beliefs, at least in the beginning. If this realism starts to look unviable, then we may have to rethink it; until then, we should stick with it. Call this ‘default realism.’ I think we should adhere to default realism when giving defences of doxasticism. Thus, we should reject the current defences of doxasticism.

The weak version of my positive thesis is that the notion of cognitive phenomenology—the distinct phenomenology of thought—has something to contribute to this debate and to the study of delusions generally. I claim that it is to the detriment of the study of delusions that there has been little direct overlap between the philosophical literature on cognitive phenomenology and the literature on delusions. The strangest aspect of this is that the study of delusions in cognitive science has embraced the notion of phenomenology generally, and has even drawn on the work of early continental phenomenologists like

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<sup>7</sup> Phillip Gerrans, *The Measure of Madness: Philosophy of Mind, Cognitive Neuroscience, and Delusional Thought* (Cambridge, MA: MIT Press, 2014), 11. Again, I should make it clear that although Gerrans makes this comment, he would likely not agree with my position overall. Also, Gerrans calls this view of beliefs ‘meaning rationalism’ rather than ‘interpretationism.’

Jaspers.<sup>8</sup> And yet the recent resurgence of attention to cognitive phenomenology in the analytic literature is rarely invoked.<sup>9</sup> I see this as somewhat of a microcosm of the move that Strawson once described as the move from the ‘Astonishing View’—that there is no experience, or qualitative what-its-likeness at all—to the merely ‘Remarkable View’—that the subject of phenomenology is completely exhausted by sensory experience alone.<sup>10</sup> The modern study of delusions has made this move, and makes heavy use of the notion of sensory phenomenology. But it is time to acknowledge that this still leaves out something important—cognitive phenomenology.

My strong positive thesis is that a cognitive phenomenological view of beliefs can serve as the basis for a robust defence of doxasticism about delusions. On the view I put forward, beliefs are (categorically grounded) dispositions to have occurrent ‘judgements-that-P,’ where judgements are a distinct type of cognitive-phenomenological state.<sup>11</sup> Delusions, I will show, also fit this criteria. Doxasticism is thus correct. This view is realist about beliefs, both about the experiential aspects of belief—the cognitive phenomenological judgements—and about the bases of the belief—the categorical grounds of the disposition. This makes the view compatible with current scientific theories.

In the coming chapters, I hope to convince the reader of these theses. After reviewing the various theories of delusions and the debate over doxasticism in chapter 1, in chapter 2 I consider the interpretationist defence in detail, and show that it rests on a number of anti-realist assumptions about beliefs. More strongly, I argue that this anti-realism is a reason to

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<sup>8</sup> Karl Jaspers, *General Psychopathology*, Johns Hopkins paperbacks ed., 2 vols. (Baltimore: Johns Hopkins University Press, 1997). See, for example, the types of delusional experience often referred to by two-factor theorists. Coltheart, Langdon, and McKay, "Delusional Belief."

<sup>9</sup> I have in mind here specifically the literature covered in recent surveys of cognitive phenomenology, including the Philosophy Compass review of cognitive phenomenology by Smithies (2013), and the recent monograph on cognitive phenomenology by Chudnoff (2015). Declan Smithies, "The Nature of Cognitive Phenomenology," *Philosophy Compass* 8, no. 8 (2013); Elijah Chudnoff, *Cognitive Phenomenology* (London: Routledge, 2015). In a wider sense, there has been some interesting work that has drawn on what could reasonably be called cognitive phenomenology, which I will comment on in chapter 4.

<sup>10</sup> Galen Strawson, "Cognitive Phenomenology: Real Life," in *Cognitive Phenomenology*, ed. Tim Bayne and Michelle Montague (Oxford: Oxford University Press, 2011), 289-90.

<sup>11</sup> Based on the view given in Uriah Kriegel, *The Varieties of Consciousness* (Oxford: Oxford University Press, 2015).

reject the interpretationist defence on account of its incompatibility with current scientific theories.

In chapter 3, I evaluate the dispositional defence, and claim that at least when it comes to abnormal states like delusions, dispositionalism does not count these states as beliefs in any concrete, realist way. I further argue that because of this, the dispositional view cannot serve as a defence of doxasticism.

In chapter 4, I consider the notion of cognitive phenomenology, and its potential to address points of interest in the debate over delusions. More strongly, I put forward a view of beliefs as (categorically grounded) dispositions for cognitive-phenomenological ‘judgements-that-P,’ and show how this view can provide the basis for a robust, realist defence of doxasticism.



# Chapter 1 Background

## 1.1 What is a delusion?

### 1.1.1 Definitions

What is a delusion? This might seem obvious. If someone insisted, as in the opening example, that their spouse had been replaced by an imposter, surely this would be an example of a delusion: something about this just seems *wrong*. But while this does indeed seem like an obvious example of delusion, the problem comes in defining just what it is about this case, and cases like it, that makes it a delusion. Intuitively, if delusions are a distinct, recognisable category, some set of necessary and sufficient conditions must delineate them. But just what these conditions might be remains elusive.<sup>1</sup>

Consider the definition of ‘delusion’ in the latest ‘Diagnostic and Statistical Manual,’ ‘DSM-5.’ In the ‘Glossary of Technical Terms,’ a delusion is described as 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.’<sup>2</sup> This captures something intuitive—indeed it is not so different from the dictionary definition of ‘delusion’ as ‘a fixed false opinion or belief with regard to objective things.’<sup>3</sup> Additionally, it seems to describe the example of the person who insists that their spouse has been replaced by an imposter. Surely this person has a ‘false belief’ based on some kind of ‘incorrect inference,’ and there must certainly be ‘evidence to the contrary.’

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<sup>1</sup> For discussions of definitional issues, see Coltheart, Langdon, and McKay, "Delusional Belief."; James Gileen and Anthony S. David, "The Cognitive Neuropsychiatry of Delusions: From Psychopathology to Neuropsychology and Back Again," *Psychological Medicine* 35, no. 01 (2005); Manfred Spitzer, "On Defining Delusions," *Comprehensive Psychiatry* 31, no. 5 (1990).

<sup>2</sup> APA, *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, 5th ed. (Washington, D.C.: American Psychiatric Association, 2013), 819.

<sup>3</sup> "delusion, n.". OED Online. June 2015. Oxford University Press.

<http://www.oed.com/view/Entry/49546?rskey=8OThXg&result=1> (accessed July 28, 2015).

But while this definition seems superficially adequate, it is problematic.<sup>4</sup> The best way to see this, and to gain a better grasp on the nature of delusions, is to consider some examples. The following cases illustrate a range of phenomena that have been labelled ‘delusions’ by professional clinicians. Each represents an example that is of interest to scientific theories attempting to explain such phenomena.

### 1.1.2 Case Reports

MV, an 85-year-old with no history of psychiatric disorder, presented at a psychiatric unit after she had been overheard seemingly talking to nobody.<sup>5</sup> MV claimed that someone was living in her house uninvited, and was now doing the same in the hospital. Clinicians soon discovered that MV was unable to recognise herself in the mirror, claiming instead that the figure in the mirror was the mysterious unwelcome guest. When clinicians surreptitiously placed a mark on MV’s forehead and positioned her in front of a mirror (a ‘mirror-mark test’ that will prompt healthy subjects to reach searchingly towards their forehead), she ignored it. This claim that one’s own reflection is another person is known as the ‘mirror sign,’ or mirrored-self misidentification. MRI and PET scans revealed cortico-subcortical atrophy and hypo-metabolism in the parietal and occipito-temporal areas.

Mrs C’s initial presentation as a psychiatric outpatient took a peculiarly circuitous route, quite literally.<sup>6</sup> On the way to her appointment, she performed a set of complicated detours to carefully avoid her ‘pursuers.’ Mrs C claimed that this was a regular occurrence because members of her family had been disguising themselves and following her around:

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<sup>4</sup> Not to mention that it conflicts with a separate definition offered in the body of the manual, under the section on ‘Schizophrenia Spectrum and other Psychotic Disorders.’ There, delusions are described as ‘fixed beliefs that are not amenable to change in light of conflicting evidence,’ a description that lacks a number of the strict criteria seen in the definition in the ‘Appendix,’ such as the requirement that a delusion be based on ‘incorrect inference.’ APA, *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, 87.

<sup>5</sup> Jan Van den Stock et al., "A Strange Face in the Mirror. Face-Selective Self-Misidentification in a Patient with Right Lateralized Occipito-Temporal Hypo-Metabolism," *Cortex* 48, no. 8 (2012): 1088-89.

<sup>6</sup> K. W. de Pauw, T. K. Szulecka, and T. L. Poltock, "Frégoli Syndrome after Cerebral Infarction," *The Journal of Nervous and Mental Disease* 175, no. 7 (1987).



‘they keep changing their clothes and their hairstyles but I know it’s them.’<sup>7</sup> This belief that familiar people disguise themselves and follow one around is known as the Fregoli delusion. In the years leading up to this presentation, Mrs C had suffered two cerebrovascular incidents; however, her verbal and cognitive skills were normal, aside from this strange belief.

WI was treated after a brain injury from a motorcycle accident.<sup>8</sup> After making good recovery, WI reported feelings of ‘unreality,’ a lack of familiarity with people and places, and claimed he was dead.<sup>9</sup> After being released, his mother took him to South Africa, and he there claimed that the accident had killed him and he was now in hell. This belief that you are dead is known as the Cotard delusion.

A 72-year-old man presented to an emergency department following left-sided weakness after a suspected infarct of the right middle cerebral artery.<sup>10</sup> After the patient improved and was discharged, he began to believe that his wife was having an affair with someone known to the couple, and that this person was the true father of his children. All of this despite the fact that the patient had not seen the alleged lothario for many years.<sup>11</sup> This type of delusional jealousy—the fixed, unwarranted belief that a partner is unfaithful—is known, appropriately, as Othello’s syndrome.

GH presented one month after a stroke, suffering from an impairment of movement and vision on the left half of the body.<sup>12</sup> He was visually and personally neglectful of that side, failing to comb the hair on the left side of his head and bumping into objects on his left. When questioned about the functioning of his left leg, he answered, ‘it was very difficult to

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<sup>7</sup> Ibid., 434.

<sup>8</sup> A. W. Young et al., "Cotard Delusion after Brain Injury," *Psychological Medicine* 22, no. 03 (1992).

<sup>9</sup> Ibid., 800.

<sup>10</sup> Albert H. C. Wong and H. M. Rosemary Meier, "Case Report: Delusional Jealousy Following Right-Sided Cerebral Infarct," *Neurocase* 3, no. 5 (1997).

<sup>11</sup> Ibid., 392.

<sup>12</sup> Hemiplegia and hemianopia. For a full description, see Peter W. Halligan, John C. Marshall, and Derick T. Wade, "Unilateral Somatoparaphrenia after Right Hemisphere Stroke: A Case Description," *Cortex* 31, no. 1 (1995).

begin with ... to live with a foot that isn't yours.'<sup>13</sup> When questioned further, he claimed, 'I came to the conclusion that it was a cow's foot. And in fact I decided that they sewed it on.'<sup>14</sup> This belief that one's own limb belongs to someone else is known as somatoparaphrenia.

The final example comes from a woman with schizophrenia. She believed that when she went out people watched her and gossiped about her, that freckles on her body were marks from God, that God had intervened to assist her with problems because He had a mission for her (which prompted renewed church attendance to discover this mission), and that her thoughts were broadcast to people around her.<sup>15</sup>

### 1.1.3 Definitions, Second Pass: Distinctions, Commonalities, and a Working Definition

Before considering the problematic issue of what unites these examples, it is enlightening to review some of the distinctions that theorists have made among these phenomena. Firstly, the initial few cases involve a single strange belief, or a belief about a single topic, and as such they have been called 'monothematic' delusions.<sup>16</sup> Monothematic delusions are typically 'circumscribed,' in that the person does not integrate this belief into wider explanations of events in their life. In contrast, the final example exhibited 'polythematic' delusions about many topics. Polythematic delusions are typically not circumscribed but 'elaborated' and interconnected throughout a person's belief system.<sup>17</sup>

A distinction has also been made between disorders that arise from an 'organic' basis such as brain injury, and those related to 'functional' psychological mechanisms, although modern evidence suggests that all disorders of thought relate to an underlying brain issue.<sup>18</sup>

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<sup>13</sup> Ibid., 176.

<sup>14</sup> Ibid.

<sup>15</sup> Patient originally interviewed by Robyn Langon, as reported in Davies et al., "Monothematic Delusions: Towards a Two-Factor Account," 135. Max Coltheart, "On the Distinction between Monothematic and Polythematic Delusions," *Mind & Language* 28, no. 1 (2013): 104.

<sup>16</sup> For a detailed review of the monothematic / polythematic distinction, see "On the Distinction between Monothematic and Polythematic Delusions."

<sup>17</sup> As Radden describes it, they are 'interlinked in an all-encompassing scheme.' Jennifer Radden, *On Delusion, Thinking in Action* (New York: Routledge, 2011), 20.

<sup>18</sup> Coltheart, Langdon, and McKay, "Delusional Belief," 276.

Still, the distinction is useful in that some delusions appear to result from acute, currently-understood brain abnormalities, whereas in other cases, this is not so clear.

A distinction has also been made between ‘bizarre’ and ‘mundane’ delusions. The example of somatoparaphrenia appears utterly bizarre, whereas the belief in a lover’s infidelity appears rather mundane.<sup>19</sup> Lastly, the somatoparaphrenia patient who elaborated wildly on his delusion when questioned provides an example of ‘confabulation.’ Many distinguish between confabulation—post-hoc elaboration in response to questioning—and the original content of a delusion.<sup>20</sup>

What unites the examples as instances of delusion? Note that the DSM definition will not do. Firstly, it required that a delusion be ‘false.’ But if someone with obsessive, irrational jealousy turned out to be somehow right about the infidelity, despite possessing no evidence for it, should we really deny that this is a delusion?<sup>21</sup> The DSM definition also required that the belief be about ‘external reality.’ But the patient with schizophrenia had strange beliefs about her *internal* thoughts. Lastly, need a delusions be based on ‘inference’? Many beliefs are formed directly from our observations, without any ‘inference’:<sup>22</sup> the Fregoli patient claimed that she just *knew* who the disguised people were.

The DSM, however, is a clinician’s tool, and we should not expect it to provide a scientifically adequate definition.<sup>23</sup> Besides, most researchers agree upon a number of

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<sup>19</sup> Robyn Langdon and Tim Bayne, "Delusion and Confabulation: Mistakes of Perceiving, Remembering and Believing," *Cognitive Neuropsychiatry* 15, no. 1-3 (2010): 321-22.

<sup>20</sup> Although, as with many of these distinctions, this is contentious. For a thorough discussion, see *ibid.*

<sup>21</sup> Jaspers originally used this example: 'A delusion of jealousy, for instance, may be recognised by its typical characteristics without our needing to know whether the person has genuine ground for his jealousy or not.' Jaspers, *General Psychopathology*, 1:106. See also Coltheart, Langdon, and McKay, "Delusional Belief," 274-75; Spitzer, "On Defining Delusions," 379. As these authors have further pointed out, such a delusion could become self-fulfilling, with the partner seeking an affair to escape the obsessive jealousy.

<sup>22</sup> Coltheart, Langdon, and McKay, "Delusional Belief," 275-76. See also the discussion in Tim Bayne and Elisabeth Pacherie, "Experience, Belief, and the Interpretive Fold," *Philosophy, Psychiatry, & Psychology* 11, no. 1 (2004).

<sup>23</sup> The latest DSM is 'a tool for clinicians,' encompassing much revision 'directed toward the goal of enhancing the clinical usefulness of DSM-5.' APA, *Diagnostic and Statistical Manual of Mental Disorders: Dsm-5*, xli, 5. See Coltheart et al. on the irrelevance of the DSM for scientific research, and see discussions of the 'atheoretical' approach of the DSM in Blashfield et al. and Follette & Houts. Coltheart, Langdon, and McKay, "Delusional Belief."; Roger K Blashfield et al., "The Cycle of Classification: DSM-I through DSM-5," *Annual Review of*

‘cardinal signs’ of delusions.<sup>24</sup> Delusions are incorrigible: patients are typically unable to be dissuaded of their delusion. Relatedly, delusions are held with complete subjective certainty. Finally, delusions are at least in some sense ‘incomprehensible,’ whether it be the outright incomprehensibility of the Cotard delusion or merely the ‘contextual incomprehensibility’ of the Othello patient believing what he does in the absence of any evidence.<sup>25</sup> We can take these as forming a ‘working definition,’ to be filled out by a mature scientific theory of delusions.<sup>26</sup>

## 1.2 Scientific Theories of Delusions

### 1.2.1 Maher

A breakthrough in the modern study of delusions can be seen in the work of Maher.<sup>27</sup> While earlier theories focused either on psychodynamic interpretations—Capgras was explained as an attempt to resolve mixed feelings of love and hate towards another<sup>28</sup>—or the ‘ununderstandable’<sup>29</sup> nature of the schizophrenic’s reasoning process, Maher took a different approach. Maher hypothesised that delusions were not evidence of some gross disorder of thought; rather, patients were making relatively normal attempts to explain abnormal experience. Maher reasoned that there was little evidence of cognitive disorder in delusional patients, but there was increasing evidence that many suffered *sensory* disorders.

In schizophrenia, for example, patients experience unusual levels of salience attached to generally mundane stimuli, and have unusually broad, unfocused attention spans.<sup>30</sup> The

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*Clinical Psychology* 10 (2014); William C Follette and Arthur C Houts, "Models of Scientific Progress and the Role of Theory in Taxonomy Development: A Case Study of the DSM," *Journal of Consulting and Clinical Psychology* 64, no. 6 (1996).

<sup>24</sup> Langdon and Bayne list these ‘cardinal signs’ and use them to form a ‘working definition’ of delusions, and it is this definition I draw on here. Langdon and Bayne, "Delusion and Confabulation: Mistakes of Perceiving, Remembering and Believing," 321-22.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid., 322.

<sup>27</sup> Brendan A. Maher, "Delusional Thinking and Perceptual Disorder," *Journal of Individual Psychology* 30, no. 1 (1974).

<sup>28</sup> For the history of psychodynamic explanations of Capgras and other disorders, see Morgan David Enoch and Hadrian N Ball, *Uncommon Psychiatric Syndromes* (London: Arnold, 2001), 13.

<sup>29</sup> Jaspers, *General Psychopathology*, Vol II, 577.

<sup>30</sup> Maher, "Delusional Thinking and Perceptual Disorder," 100-02.

delusional utterances of such patients, Maher hypothesised, were attempts to explain this experience. Such explanations are not specifically different from the kinds of explanations that anyone under similar conditions would make: the bizarre nature of the explanations is the direct result of the bizarre experience.<sup>31</sup>

### 1.2.2 Cognitive Neuropsychiatry

The search for the underlying causes of this anomalous experience, and its relationship to delusion formation, has been a major focus of the cognitive neuropsychiatric approach. This approach draws on the methodology of cognitive neuropsychology, in which the study of brain-injured patients and their cognitive deficits is undertaken with the aim of improving models of normal cognition.<sup>32</sup> The theory is that if a brain-injured patient is incapable of (or impaired at) cognitive task Y but not X, and better still if a second patient is incapable of task X but not Y, this ‘double dissociation’ provides evidence about the normal workings of these tasks: X and Y must involve distinct cognitive mechanisms, something that should be reflected in models of normal cognition.<sup>33</sup>

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<sup>31</sup> Ibid., 103-04. These insights came to Maher while observing some experimental work in which participants were presented with what looked like their own hand but was in fact an artificial hand. This artificial hand could be made to move in synchrony with the subject's actual movements: they moved a finger, and their ‘finger’ moved as intended. It could also be made to move just out of synchrony, and when this asynchrony became large enough, a peculiar phenomenon was observed. Many participants (healthy adults) produced bizarre explanations as to why their ‘hand’ was not moving as intended. One subject said, ‘it seems my hand was moved by magnetism or electricity;’ another, ‘my hand was controlled by an outside physical force ... I could feel it.’ These utterances, Maher noticed, were akin to those heard from delusional patients. But these subjects were merely normal people attempting to explain abnormal experience. Brendan A Maher, "Psychopathology and Delusions: Reflections on Methods and Models," in *Principles of Experimental Psychopathology: Essays in Honor of Brendan A. Maher*, ed. Mark F. Lenzenweger and Jill M. Hooley (Washington, DC: American Psychological Association, 2003), 20-21.

<sup>32</sup> Andrew W Ellis and Andrew W Young, *Human Cognitive Neuropsychology: A Textbook with Readings* (New York: Psychology Press, 1996), 2; Max Coltheart, "Assumptions and Methods in Cognitive Neuropsychology," in *The Handbook of Cognitive Neuropsychology: What Deficits Reveal About the Human Mind*, ed. Brenda Rapp (Philadelphia: Psychology Press, 2001), 3-5; Alfonso Caramazza, "On Drawing Inferences About the Structure of Normal Cognitive Systems from the Analysis of Patterns of Impaired Performance: The Case for Single-Patient Studies," *Brain and Cognition* 5, no. 1 (1986): 51.

<sup>33</sup> Tim Shallice, *From Neuropsychology to Mental Structure* (Cambridge: Cambridge University Press, 1988), 15; Caramazza, "On Drawing Inferences About the Structure of Normal Cognitive Systems from the Analysis of Patterns of Impaired Performance: The Case for Single-Patient Studies," 63.

In cognitive neuropsychiatry, the cognitive neuropsychological approach is extended to areas of traditional psychiatric concern, like delusions.<sup>34</sup> This methodology initiated a fruitful period in which cognitive neuropsychiatry sought to identify the breakdown giving rise to the kinds of 'anomalous' experience posited by Maher, and model how this experience results in the formation of delusional belief.<sup>35</sup> This approach lends itself most readily to the study of monothematic delusions, which typically involve acute organic impairment and result in a single discrete symptom, and these have so far been the focus of investigation.<sup>36</sup>

In the Capgras delusion, for example, Ellis and Young made use of an existing model of face recognition to hypothesise that Capgras patients suffered from a mirror-image deficit to those with another cognitive impairment: prosopagnosia.<sup>37</sup> In prosopagnosia, patients have difficulty identifying faces. However, when prosopagnosic patients are shown pictures of familiar faces along with names (the 'Guilty Knowledge Test'), they display a greater autonomic response (as measured through their skin conductance response) to correct names than to incorrect. This reveals that some form of recognition is taking place. On the basis of this, a two-route model of face recognition was proposed, one route leading to overt, conscious recognition, the other involving a sense of familiarity generated by the autonomic nervous system. In prosopagnosia, the former is damaged. In Capgras patients, Ellis and Young hypothesised, the latter is impaired: Capgras patients overtly recognise a face but they

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<sup>34</sup> Coltheart, Langdon, and McKay, "Delusional Belief," 282. Peter W. Halligan and Anthony S. David, "Opinion: Cognitive Neuropsychiatry: Towards a Scientific Psychopathology," *Nature Reviews Neuroscience* 2, no. 3 (2001): 210.

<sup>35</sup> Hadyn D. Ellis, "Cognitive Neuropsychiatry and Delusional Misidentification Syndromes: An Exemplary Vindication of the New Discipline," *Cognitive Neuropsychiatry* 3, no. 2 (1998): 88.

<sup>36</sup> This is not to say that no work has been done on investigating polythematic delusions within the cognitive neuropsychiatric framework. For a classic work on the cognitive neuropsychology of schizophrenia, see Christopher Donald Frith, *The Cognitive Neuropsychology of Schizophrenia (Classic Edition)* (East Sussex: Psychology Press, 2015). Two-factor theorists have also claimed that it is an open question how well their theory can extend to explain polythematic delusions. Max Coltheart, "From the Internal Lexicon to Delusional Belief," *Avant: Trends in Interdisciplinary Studies* V, no. 3 (2015).

<sup>37</sup> H D Ellis and A W Young, "Accounting for Delusional Misidentifications," *The British Journal of Psychiatry* 157, no. 2 (1990): 244.

lack a confirming set of information via the second route.<sup>38</sup> When faced with this missing information, patients seek to rationalise their experience by labelling the person an imposter.<sup>39</sup>

The hypothesis that Capgras patients suffer a deficit in the sense of familiarity in response to familiar faces was confirmed in two independent studies. Hirstein and Ramachandran performed a series of tests on Capgras patient DS and a control group.<sup>40</sup> Whereas the control group exhibited a marked difference in skin conductance response to familiar versus unfamiliar faces, this difference was significantly reduced in DS.<sup>41</sup> In a separate study, Ellis et al. obtained similar results when they compared the skin conductance response of five Capgras patients to control groups.<sup>42</sup>

Similar work has been directed at other delusions. Breen et al. presented two cases of mirrored-self misidentification in which a relevant neuropsychological deficit was discovered.<sup>43</sup> The first case, FE, performed poorly on face recognition tasks.<sup>44</sup> TH, on the other hand, performed normally on face recognition but displayed peculiar behaviour in front of a mirror: when an object was held up behind his shoulder and he was asked to reach for it, *he reached towards the mirror*.<sup>45</sup> TH had mirror agnosia—he had lost the knowledge of the use of mirrors and treated them like windows. It was hypothesised that these respective neuropsychological conditions had given rise to the delusional misidentification: FE was attempting to explain the experience of seeing a stranger in the mirror, and TH was attempting

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<sup>38</sup> Ibid.

<sup>39</sup> Ibid.

<sup>40</sup> William Hirstein and Vilayanur S Ramachandran, "Capgras Syndrome: A Novel Probe for Understanding the Neural Representation of the Identity and Familiarity of Persons," *Proceedings of the Royal Society of London. Series B: Biological Sciences* 264, no. 1380 (1997).

<sup>41</sup> Ibid., 439-40.

<sup>42</sup> Hadyn D. Ellis et al., "Reduced Autonomic Responses to Faces in Capgras Delusion," *ibid.*, no. 1384: 1088-89. Similar deficits have also been hypothesised to explain the Fregoli and Cotard delusions. Ramachandran and Blakeslee have speculated that in Fregoli patients, the autonomic system is hyper- rather than hypo-responsive, and that Cotard patients experience a complete flattening of affective response. Vilayanur S Ramachandran, Sandra Blakeslee, and Oliver W Sacks, *Phantoms in the Brain: Probing the Mysteries of the Human Mind* (New York: William Morrow, 1998), 167-71.

<sup>43</sup> Nora Breen et al., "Towards an Understanding of Delusions of Misidentification: Four Case Studies," *Mind & Language* 15, no. 1 (2000).

<sup>44</sup> Ibid., 86.

<sup>45</sup> Ibid., 91.

to explain the experience of looking through a 'window' and seeing himself. Both arrived at the explanation that the person in the mirror was someone else.

### 1.2.3 One-Factor versus Two-Factor

In the examples above, an attempt was made to understand delusions as the direct result of a neuropsychological breakdown. As such, these theories are referred to as 'one-factor' theories: they each hypothesise that a delusion arises directly from a single factor—a neuropsychological breakdown leading to a particular experience.<sup>46</sup> Davies, Coltheart and colleagues, however, have convincingly argued that one-factor accounts are not sufficient to explain delusions, because there are examples of identical neuropsychological deficits that do not result in delusion.<sup>47</sup> For example, Tranel et al. presented patients who exhibited the same face-response deficits as those seen in Capgras patients.<sup>48</sup> But Tranel's patients did not develop a delusion. Similar instances have been found with the breakdowns seen in other delusions.<sup>49</sup>

To explain these facts, the 'two-factor' theory posits a second factor as necessary for the formation of a delusion: a deficit in belief evaluation. Those who form delusions as the result of a neuropsychological impairment must suffer also from a general deficit in belief evaluation; those who do not form delusional beliefs have no such problem. This also helps to explain why delusional patients do not give up their delusions in response to evidence. Since the original paper by Davies et al., much work has been directed towards a full formulation of what this deficit in belief evaluation amounts to in neuropsychological terms. Initial evidence can be seen in the studies of various types of cognitive biases in delusional patients, like the

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<sup>46</sup> Davies et al., "Monothematic Delusions: Towards a Two-Factor Account," 144-47.

<sup>47</sup> Ibid.

<sup>48</sup> Daniel Tranel, Hanna Damasio, and Antonio R. Damasio, "Double Dissociation between Overt and Covert Face Recognition," *Journal of Cognitive Neuroscience* 7, no. 4 (1995).

<sup>49</sup> For further discussion of these examples and their significance, see Coltheart, Langdon, and McKay, "Delusional Belief."



‘jumping to conclusions’ bias.<sup>50</sup> The fact that many delusional patients share a common pattern of brain damage, in the right dorsolateral prefrontal cortex, is further evidence that some general second factor is present in delusional patients.<sup>51</sup>

In addition to offering an explanation for why some people form delusions while others do not, there is a confirmatory line of evidence for the two-factor theory from the use of instrumental hypnosis.<sup>52</sup> Instrumental—as opposed to intrinsic—hypnosis treats hypnosis as a means to study cognitive processing and to create model examples of abnormal cognition.<sup>53</sup> In the case of delusions, hypnosis has been used to model the predictions of the two-factor theory. The two-factor theory predicts that any breakdown that involves both an anomalous experience and a disruption in belief evaluation should result in a delusion.<sup>54</sup> Using hypnosis, this can be tested by inducing the first factor through hypnotic suggestion and the second factor through the hypnotic setting itself (hypnotically induced beliefs, like delusional beliefs, are maintained despite contradictory evidence).<sup>55</sup> This should result in similar behaviour from the hypnotic subject as that displayed by delusional patients.

This result has been demonstrated in the case of mirrored-self misidentification. In a series of studies, hypnotic subjects issued with the suggestion ‘you will see a face in the mirror that you will not be able to identify’—the prosopagnosic first factor—produced

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<sup>50</sup> However, more work is required, and a clear, particular cognitive bias associated with all and only delusions has not been agreed upon. For a review of the evidence on the relation between jumping to conclusions and delusions, see Robert Dudley et al., "Reasoning and Delusions: Do People with Delusions Really Jump to Conclusions?," in *Aberrant Beliefs and Reasoning*, ed. Niall Galbraith (East Sussex: Psychology Press, 2015).

<sup>51</sup> For a review, see Max Coltheart, "The 33rd Sir Frederick Bartlett Lecture: Cognitive Neuropsychiatry and Delusional Belief," *The Quarterly Journal of Experimental Psychology* 60, no. 8 (2007). For a recent case example involving a right dorsolateral prefrontal infarct in the case of mirrored-self misidentification, see Alberto Villarejo et al., "Mirrored-Self Misidentification in a Patient without Dementia: Evidence for Right Hemispheric and Bifrontal Damage," *Neurocase* 17, no. 3 (2011). This is an area of ongoing work, however. For a discussion of the open questions on this matter, and potential avenues of future research, see Coltheart, "From the Internal Lexicon to Delusional Belief."

<sup>52</sup> For a recent review of this work, see Michael H. Connors, "Hypnosis and Belief: A Review of Hypnotic Delusions," *Consciousness and Cognition* 36 (2015).

<sup>53</sup> David A Oakley and Peter W Halligan, "Hypnotic Suggestion: Opportunities for Cognitive Neuroscience," *Nature Reviews Neuroscience* 14, no. 8 (2013): 565.

<sup>54</sup> Lisa Bortolotti, Rochelle Cox, and Amanda Barnier, "Can We Recreate Delusions in the Laboratory?," *Philosophical Psychology* 25, no. 1 (2012): 111.

<sup>55</sup> *Ibid.*

behaviour and verbal responses similar to those of delusional patients.<sup>56</sup> Many subjects claimed to see a stranger in the mirror and were unable to explain why. When challenged with questions similar to those put to delusional patients, such as, ‘how is it possible that you and the person you see look so similar?’ subjects were similarly confused but maintained their belief.<sup>57</sup>

In sum, there is an expanding range of evidence in support of the two-factor theory. It offers a plausible explanation for a number of monothematic delusions; it offers a reasonable hypothesis as to why some people form delusions whereas others do not; and it has been extensively tested in ‘virtual patients’ in the hypnosis laboratory. For these reasons it is currently the dominant model of delusions.

### 1.3 Doxastic versus Anti-Doxastic

#### 1.3.1 Anti-Doxastic Objections

The theories outlined above have one thing in common: they treat delusions as *beliefs*. Such theories are known as ‘doxastic’ theories. Recently, some ‘anti-doxastic’ opponents have argued that delusions cannot be beliefs, because they fail conditions for what it is to be a belief. Most anti-doxastic objections follow a similar form: beliefs typically exhibit feature *x*; delusions lack feature *x*; therefore, delusions are not beliefs.<sup>58</sup>

A number of features are commonly cited as typical of beliefs. Firstly, beliefs integrate and cohere with other beliefs and desires (‘intentional states’) held by an agent. If I believe that harming the environment is bad and that littering harms the environment, then I should believe that littering is bad (because it is entailed by my other beliefs). Secondly,

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<sup>56</sup> Michael H Connors et al., "Mirrored-Self Misidentification in the Hypnosis Laboratory: Recreating the Delusion from Its Component Factors," *Cognitive Neuropsychiatry* 17, no. 2 (2012): 156. More recent work has used the 'real-simulating paradigm' to show that these results are not merely the result of demand characteristics. Michael H Connors et al., "A Laboratory Analogue of Mirrored-Self Misidentification Delusion: The Role of Hypnosis, Suggestion, and Demand Characteristics," *Consciousness and Cognition* 22, no. 4 (2013).

<sup>57</sup> Connors et al., "Mirrored-Self Misidentification in the Hypnosis Laboratory: Recreating the Delusion from Its Component Factors," 160.

<sup>58</sup> Bortolotti summarises the form of these objections well. Bortolotti, *Delusions and Other Irrational Beliefs*, 55-56.

beliefs are typically supported by and responsive to evidence. My belief that littering harms the environment would presumably be based on some form of evidence: perhaps I saw a documentary about the effects of littering on the environment. Thirdly, beliefs are manifested in an agent's behaviour. If I genuinely believe that littering is bad, this will be reflected in a propensity not to litter.

These features are related to different conceptions of rationality.<sup>59</sup> The first feature relates to a conception of rationality termed 'procedural rationality.' Procedural rationality is exhibited when an agent's beliefs form a well-integrated whole, and is violated when this does not occur. The second feature relates to 'epistemic rationality.' Epistemic rationality is exhibited when an agent's beliefs are based on and responsive to evidence. The final feature relates to 'agential rationality.' Agential rationality is exhibited when an agent takes an active stake in their beliefs, by acting on them and defending them with reasons.

### 1.3.2 Rationality Constraints

These conceptions of rationality have been posited as 'rationality constraints' which constrain what kinds of things can be called beliefs. At first blush, these constraints may appear to be merely *normative* rather than *constitutive* of beliefs: certainly, we *should* base our beliefs on evidence, but whether or not we always do seems to be another question. But a number of philosophers have claimed these conceptions of rationality as actual constitutive constraints on what it is to be a belief, often by drawing on the accounts of Dennett and Davidson.<sup>60</sup> These accounts focus on the practice of belief ascription and the interpretation of

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<sup>59</sup> Bortolotti provides a succinct summary of these norms of rationality. Ibid., 14.

<sup>60</sup> As Davies and Coltheart note, although these concerns stem from Davidson and Dennett, 'even someone who thought that the connection between beliefs and rationality was just contingent should allow that we have to address the question.' Martin Davies and Max Coltheart, "Introduction: Pathologies of Belief," *Mind & Language* 15, no. 1 (2000): 2 fn. 2. The fact that I use Dennett and Davidson here to flesh out the idea of constitutive constraints on beliefs should not be taken as claiming that this is the only or the definitive formulation of this issue. Indeed, another formulation of the problem that has been drawn on in the delusions literature is the functional/causal role objection, which formulates these same constitutive constraints as constraints on the functional role of beliefs. I use Dennett and Davidson because their accounts have been central to defining the anti-doxastic objection, and, as seen in the Davies and Coltheart quote, Dennett and Davidson are cited as a central source of these objections even by proponents of doxasticism. For more on the

other agents, and are thus often referred to as ‘interpretationist’ accounts of beliefs. According to these accounts, if we look at the way in which we ascribe beliefs to others in order to interpret them, we will see that the idea of an irrational belief is paradoxical.

Dennett formulates the problem as follows.<sup>61</sup> The practice of belief ascription is a *strategy* or *stance* (the ‘intentional stance’) we adopt to interpret and predict certain types of agent. As a contrast, consider how we would predict the actions of a stone. We need only treat it as a physical object, with properties whose operations we are all familiar with. This is to take the ‘physical stance.’ Consider now a more complex object, like an alarm clock. To understand and predict such an artefact, the physical stance will not get us very far (unless we are engineers). It is far more efficient to take the ‘design stance.’<sup>62</sup> You know that such artefacts have been *designed* with a purpose—the clock will have switches for toggling various functions—and as such you can predict its behaviour by adverting to this design rather than its physical constitution.

Now consider a still more complex object, a human being. Here, neither of the previous stances will be very useful.<sup>63</sup> Instead, you need to take the ‘intentional stance.’ First, assume that the being in question is rational, and figure out what beliefs and desires you think it would have in its position.<sup>64</sup> Then, use these to predict its behaviour. For example, you see someone peer out a window, and collect an umbrella, and you attribute them the belief that it is raining and the desire to stay dry. Such explanations work, and they work by making rational sense of other’s behaviour.

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functional/causal role objection, see Kengo Miyazono and Lisa Bortolotti, "The Causal Role Argument against Doxasticism About Delusions," *Avant: Trends in Interdisciplinary Studies* V, no. 3 (2015).

<sup>61</sup> The classic formulation of this appears in Daniel Dennett, "True Believers," in *The Intentional Stance*, ed. Daniel Dennett (Cambridge, Massachusetts: The MIT Press, 1987), 15-19.

<sup>62</sup> *Ibid.*, 16-17.

<sup>63</sup> Even if we knew enough to make them work, it seems that the ‘intentional stance’ is a far more efficient method.

<sup>64</sup> Dennett, "True Believers," 17.

It is easy to see why this view places ‘rationality constraints’ on beliefs. The assumption that a being is rational and explicable in terms of beliefs and desires that make sense is the very condition on which we utilise the intentional stance. If an agent’s beliefs fail to form a coherent whole, predictive and explanatory success is reduced to zero.<sup>65</sup> There is thus no need to adopt the stance and attribute beliefs at all.

Davidson’s formulation of the relation between rationality and belief ascription is slightly different. Davidson also claims that the existence of rationality is presupposed by explanations in terms of beliefs and other intentional states: ‘such explanations *explain by rationalizing*’ (my emphasis).<sup>66</sup> However, Davidson argues that it is sometimes possible to ascribe beliefs in the face of irrationality, providing we are able to explain away this irrationality as a localised, compartmentalised problem. If an agent has two conflicting beliefs, but they are compartmentalised and not both considered simultaneously, this does not constitute a paradox.<sup>67</sup> It is only when we are faced with globalised incoherence that we are unable to ascribe beliefs. Thus, instances of apparent irrationality are possible, but we can only attribute beliefs to others where there is a general ‘background of rationality.’<sup>68</sup>

Anti-doxastic opponents have argued that delusions violate these rationality constraints and thus cannot be beliefs. Currie and colleagues, Frankish, and Gallagher all point to examples of what the psychiatrist Sass referred to as ‘double-bookkeeping’ as evidence that delusions violate rationality constraints.<sup>69</sup> In a commonly cited example, a

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<sup>65</sup> Ibid., 28.

<sup>66</sup> Donald Davidson, "Paradoxes of Irrationality," in *The Essential Davidson* (Oxford: Oxford University Press, 2006), 138.

<sup>67</sup> Ibid., 148-52.

<sup>68</sup> Ibid., 150.

<sup>69</sup> Gregory Currie, "Imagination, Delusion and Hallucinations," *Mind & Language* 15, no. 1 (2000): 175; Gregory Currie and Ian Ravenscroft, *Recreative Minds: Imagination in Philosophy and Psychology* (Oxford: Oxford University Press, 2002), 177; Keith Frankish, "Delusions: A Two-Level Framework," in *Psychiatry as Cognitive Neuroscience: Philosophical Perspectives*, ed. Matthew Broome and Lisa Bortolotti (Oxford: Oxford University Press, 2009), 270; Shaun Gallagher, "Delusional Realities," *ibid.*, ed. Matthew R. Broome and Lisa Bortolotti, 260. Sass, however, has pointed out that he is not himself making a Davidsonian claim that such instances cannot be beliefs, or even some more general anti-doxastic claim, and that the usual attribution of this view to his earlier (1994) work is misguided. For example, Sass says: ‘I do not deny—at least in any simple or straightforward way—that Schreber’s delusions are “beliefs” or “contentful” mental states.’ Louis Arnorsson

schizophrenic patient might claim that doctors are poisoning her food, but then proceeded to eat anyway.<sup>70</sup> Sass described this as an indication that the delusions in schizophrenia ‘involve a contradiction [...] between two attitudes: one in which he accepts the essential innerness and privacy of his own claims, the other in which he assumes that they have some kind of objectivity.’<sup>71</sup> Relatedly, delusional patients often fail to display the expected emotional corollaries of their beliefs: Capgras patients are often unconcerned for their missing wife.<sup>72</sup> These examples involve a failure of agential rationality—in the failure to act on one’s beliefs—and a failure of procedural rationality—in that the patient appears to both ‘believe’ and not ‘believe’ the delusion.<sup>73</sup>

These are some of the main examples used to attack the doxastic conception.

Regardless of the particular frameworks from within which these objections have been raised, many philosophers and scientists, including proponents of doxastic theories, agree that these arguments are worthy of careful consideration.<sup>74</sup> These arguments thus present a challenge to doxastic conceptions of delusions: doxastic theorists must either admit that delusions are not beliefs, and modify their accounts, or provide some explanation as to how these objections can be dismissed.

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Sass, "Some Reflections on the (Analytic) Philosophical Approach to Delusion," *Philosophy, Psychiatry, & Psychology* 11, no. 1 (2004): 77.

<sup>70</sup> *The Paradoxes of Delusion : Wittgenstein, Schreber, and the Schizophrenic Mind* (Ithaca, N.Y.: Cornell University Press, 1994), 21.

<sup>71</sup> *Ibid.*, 55.

<sup>72</sup> Gallagher uses the Capgras example in defence of his views, drawing on accounts of patients in Coltheart and Davies (2000), and Young (2000). Gallagher, "Delusional Realities," 250. Currie gives a related example involving paranoid patients displaying ambivalence to the objects of the paranoia. Currie, "Imagination, Delusion and Hallucinations," 175.

<sup>73</sup> Bortolotti insightfully points out this dual violation of double-bookkeeping. Bortolotti, *Delusions and Other Irrational Beliefs*, 161-62.

<sup>74</sup> See for examples, the comments in Davies and Coltheart, "Introduction: Pathologies of Belief," 2 fn. 2.

### 1.3.3 Doxastic Defences

#### 1.3.3.1 Interpretationist

One way to rebut these objections in favour of doxastic theories is to meet them directly on the notion of belief ascription. In a comprehensive work that takes this route, Bortolotti argues that we *can* ascribe people irrational beliefs.<sup>75</sup> Her aim is to show that although ascription places constraints on beliefs, the proposed 'rationality constraints' are too strong. She achieves this by providing numerous examples of uncontroversial beliefs which do not meet the constraints and showing that they are similar to delusional examples. Consider the constraint that beliefs be well-integrated. This is violated by the number of scientifically educated people who hold common superstitious beliefs despite accepting that such beliefs contradict their worldview.<sup>76</sup> But we are perfectly capable of ascribing beliefs in this example. Given this, why should we withhold the ascription of beliefs to delusional examples that show a similar failing of rationality? We should not, Bortolotti concludes: the rationality constraints are too strong, and we can in fact ascribe beliefs in cases of irrationality.

#### 1.3.3.2 Dispositional

Another response to anti-doxastic objections has been to propose that delusions can be seen as beliefs on Schwitzgebel's phenomenal-dispositional view of beliefs. On this account, beliefs consist in a set of dispositions related to the typical folk-psychological role of belief: the disposition for certain utterances, for the phenomenological state of thinking the belief to oneself, and so on.<sup>77</sup> Bayne and Pacherie argue that this view generally classifies delusions as beliefs.<sup>78</sup> This is because although most delusions do not completely fit the typical dispositional profile of belief, many of them come close enough, and their rational failings

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<sup>75</sup> Bortolotti, *Delusions and Other Irrational Beliefs*.

<sup>76</sup> *Ibid.*, 85.

<sup>77</sup> Schwitzgebel, "A Phenomenal, Dispositional Account of Belief."

<sup>78</sup> Bayne and Pacherie, "In Defence of the Doxastic Conception of Delusions."

can often be excused. Moreover, belief ascription on this view is context-dependent—we ascribe beliefs based on the factors that interest us from a particular viewpoint—and in many cases we would want to call delusions beliefs.

## 1.4 Thesis

The dispositional and interpretationist responses purport to be defences of doxasticism, but I will argue that they do not succeed in this function. This is because the interpretationist and dispositional conceptions of belief are incommensurable with the view of beliefs and delusions used by scientists. As such, these ‘defences’ cannot in themselves serve to defend the doxastic conception, if ‘doxastic conception’ is taken to mean the robust conception of delusions-as-beliefs that is offered by current cognitive neuropsychiatric theories. For this reason, I offer an alternative defence which does accord with cognitive neuropsychiatric theories, and thus is at least eligible to serve as a straightforward defence of these theories. Before I begin, I close this chapter with an outline of my methodology and a consideration of the assumptions and limitations of this thesis.

### 1.4.1 Methodology

Broadly, my approach is based on methodological naturalism. The phenomena under investigation are part of the natural world, and as such any investigation which hopes to comment on their nature should be continuous with the sciences. In this manner I take my cue from the accounts with which I engage: Bortolotti comments that her enterprise takes philosophical investigation to be a genuine two-way enterprise with the sciences of the mind,<sup>79</sup> and I consider our investigations to be in fundamental agreement on this.

More narrowly, my methodology is a type of philosophical psychopathology, the philosophical investigation of psychopathological cases. One type of philosophical psychopathology is essentially ‘applied philosophy of mind,’ where psychopathological cases

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<sup>79</sup> Bortolotti, *Delusions and Other Irrational Beliefs*, 1-8.



are used as examples to test philosophical theories.<sup>80</sup> Here I again invoke a similarity with the methodology of Bortolotti, and agree with her that while this has its place, it represents a merely ‘one-way approach’: ‘when philosophers invoke the simplified description of case histories in order to conjure a counterexample, the process starts from questions emerging from theoretical philosophy and ends with answers to those original questions.’<sup>81</sup> Instead, by assessing implications of empirical data, attempting to draw conclusions from cases of psychopathology for the workings of normal cognition, and by assessing the success of current scientific interpretations of empirical data, philosophers can contribute to real two-way progress in philosophy and psychopathology.<sup>82</sup> This is the tradition I aim to follow.

Finally, my positive account of beliefs in chapter 4 takes a first-person, phenomenological approach to beliefs. Given the number of philosophers who have identified a distinct, phenomenological component to belief, I would argue that any methodology which ignores this aspect of belief is ignoring one of the most central aspects of our mental lives.<sup>83</sup> I also think that detailed phenomenological analyses have a role to play in scientific explanation generally, because they offer a description of part of what any scientific theory needs to explain.<sup>84</sup> Lastly, the ultimate justification for this approach comes from the ability of the theory I outline to account for a range of delusional phenomena, and the way this approach seems to fit both with scientific descriptions of beliefs and delusions and with

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<sup>80</sup> George Graham and G Lynn Stephens, "An Introduction to Philosophical Psychopathology: Its Nature, Scope, and Emergence," in *Philosophical Psychopathology*, ed. George Graham and G Lynn Stephens (Cambridge MA: MIT Press, 1994), 6.

<sup>81</sup> Bortolotti, *Delusions and Other Irrational Beliefs*, 5.

<sup>82</sup> *Ibid.*, 6.

<sup>83</sup> As Galen Strawson puts it, ‘experience is the most certainly known concretely existing general natural phenomenon, and is indeed the first thing any scientist encounters when they try to do science.’ Galen Strawson, "Mind and Being: The Primacy of Panpsychism," in *Panpsychism: Philosophical Essays*, ed. G. Bruntrup and L. Jaskolla (Oxford: Oxford University Press, Forthcoming), 8. See chapter 4 for a full account of the evidence.

<sup>84</sup> David John Chalmers, *The Character of Consciousness* (Oxford: Oxford University Press, 2010), 47-58. Even those who disagree about the centrality and role of first-person accounts at least agree that it has a role to play. Daniel Dennett, "Who's on First? Heterophenomenology Explained," in *Arguing About the Mind*, ed. Brie Gertler and Lawrence Shapiro (New York: Routledge, 2007). This point was made recently in relation to the delusion of thought insertion: ‘We cannot hope to arrive at appropriate therapeutic intervention or identify underlying neuronal mechanisms for the experience if we cannot say what the experience actually is.’ Rachel Gunn, "On Thought Insertion," *Review of Philosophy and Psychology* (2015): 1.

experimental studies of folk views of belief.<sup>85</sup> For these reasons, I argue that the cognitive phenomenological approach to beliefs has something to offer beyond what can be achieved by other methodologies such as conceptual analysis.

#### 1.4.2 Assumptions / Limitations

It is clearly an implicit assumption of my thesis that doxastic theories are worth defending. This is justified though: currently the two-factor theory is the dominant theory in the literature, and the doxastic view in general is 'the standard position.'<sup>86</sup> As such, it is a reasonable project to ask, 'how and in what way can these theories answer current objections?' This focus also guides my preference for monothematic delusions as examples: as seen above, monothematic delusions have so far proved the most tractable to the cognitive neuropsychiatric approach of the two-factor theory.

In addition, I do not give a full treatment of the alternative proposals regarding delusions. Many who offer anti-doxastic arguments have also offered positive theses regarding what delusions are if not beliefs. But these positive theses are generally motivated precisely by the anti-doxastic objections I seek to reject in this thesis, and thus I leave aside these positive conceptions in favour of dismissing the objections.<sup>87</sup>

Moreover, many other conceptions of delusions differ from the two-factor theory while still being potentially compatible with what I claim in this thesis, and for this reason their omission is excusable. The predictive coding view, which frames delusions in terms of error prediction, is (in some forms) itself a doxastic theory,<sup>88</sup> and thus is potentially

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<sup>85</sup> See chapter 4 for details.

<sup>86</sup> Frankish calls this the standard position, despite his opposition to it. Frankish, "Delusions: A Two-Level Framework," 269. This of course is not to claim that it is obviously or unquestionably correct.

<sup>87</sup> Bortolotti makes the same point. Bortolotti, *Delusions and Other Irrational Beliefs*, 74.

<sup>88</sup> Jakob Hohwy, personal conversation. See also chapter 7 of Jakob Hohwy, *The Predictive Mind* (Oxford: Oxford University Press, 2013). For a classic prediction-error account, see P. R. Corlett et al., "Toward a Neurobiology of Delusions," *Progress in Neurobiology* 92, no. 3 (2010). While prediction-error theorists sometimes reject a strong notion of belief as separate from processes like perceptual inference, it would be wrong to call these theories anti-doxastic, and I think that they are compatible with the points I make.

compatible with my thesis. Some have even argued that the prediction-error view can be seen as a plausible mechanism for the first factor of delusions, rather than as a competing theory to the two-factor account.<sup>89</sup> The view put forward by Gerrans, on the other hand, eschews talk of beliefs and focuses instead on elucidating the lower-level mechanisms which give rise to delusions.<sup>90</sup> However, the view of beliefs that Gerrans rejects is the interpretationist view that I also reject in my second chapter, so on this we agree. Further, Gerrans' view is not necessarily anti-doxastic; he simply views talk of beliefs as unhelpful.<sup>91</sup> As such, I will sidestep Gerrans' account, and try to show that talk of beliefs is indeed helpful in the study of delusions.<sup>92</sup>

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<sup>89</sup> Kengo Miyazono, Lisa Bortolotti, and Matthew R. Broome, "Prediction-Error and Two-Factor Theories of Delusion Formation," in *Aberrant Beliefs and Reasoning*, ed. Neil Galbraith (East Sussex: Psychology Press, 2015).

<sup>90</sup> Gerrans, *The Measure of Madness: Philosophy of Mind, Cognitive Neuroscience, and Delusional Thought*.

<sup>91</sup> Personal conversation. See also, *ibid.*, xx, 20, 40-41.

<sup>92</sup> This list is not exhaustive, but my main point holds: for anti-doxastic accounts I aim to dismiss their motivating objections, and for alternative doxastic accounts I simply favour the dominant two-factor theory.



## Chapter 2 The Interpretationist Defence of Doxasticism

### 2.1 Introduction

As we have seen, there are some pressing challenges to the doxastic view. In this chapter, I evaluate an influential response to these challenges: the interpretationist defence of doxasticism. The interpretationist defence accepts that the way we ascribe beliefs to others tells us important things about the nature of beliefs, but denies that the standard ‘rationality constraints’ really do constrain belief ascription. Rather, there are many instances of ordinary beliefs that violate the constraints in similar ways to delusions, and yet we successfully ascribe beliefs in these instances. Therefore, violations of the rationality constraints do not preclude belief ascription. There is thus no reason to deny the doxastic nature of delusions on account of supposed rationality constraints.

After outlining this defence, I show why it is problematic. The central problem with the interpretationist defence is that it accepts the interpretationist approach and its focus on belief ascription. This places the focus on the epistemic features by which we come to know the beliefs of others. In this way, interpretationism is anti-realist: it adverts only to facts about what we say about other believers, rather than seeking any concrete state inside the person. This is my weak negative thesis: this anti-realism should be noted by those in the doxastic debate.

I further argue that this anti-realism is a reason to disfavour the interpretationist defence. When faced with cases like delusions, a natural thing to wonder is—what is going on internally, inside the person we are trying to interpret? To eschew this question is to forgo the very question that cognitive science aims to address. It is also to forgo the main explanatory resources of cognitive neuropsychiatry, which typically sees itself as investigating the structure of internal mechanisms responsible for cognitive phenomena and the way these mechanisms malfunction in instances of brain abnormalities. This is also the approach of the

dominant two-factor theory of delusions. Thus, if we want to defend these theories, it is to the internal facts that we should look for answers regarding the doxastic status of delusions, not to facts about ascription. Interpretationism does not fit with the realism of cognitive neuropsychiatry. That is the strong negative thesis presented in this chapter.

Finally, I consider the following objection: the interpretationist defence does not aim to fit with the scientific approach to delusions, but rather to examine a ‘folk’ view of beliefs and evaluate how this view classifies delusions. Perhaps this is important regardless of whether this approach fits with scientific theories. In response, I argue that my defence in chapter 4 is still to be preferred, and that the interpretationist defence is actually a poor candidate for a ‘folk’ view of beliefs.

## 2.2 The Interpretationist Defence

The most thorough version of the interpretationist defence is given by Bortolotti.<sup>1</sup> Bortolotti’s main strategy is to propose examples of ordinary beliefs that violate the rationality constraints but where we nevertheless are happy to ascribe beliefs. First I will present the anti-doxastic arguments as Bortolotti formulates them, and then consider the examples she uses in her attempt to knock down these arguments in favour of doxasticism.

### 2.2.1 Rationality Constraints: Formulation of the Anti-Doxastic Objections

Bortolotti first gives precise formulations of the anti-doxastic arguments. These arguments all take the same form: in order for some belief *b* to be ascribed to a subject, *b* must have feature *x*; delusions lack feature *x*; therefore delusions cannot be ascribed to subjects as beliefs. The proposed features are as follows:<sup>2</sup>

- i) *b* needs to be well-integrated with the subject’s beliefs
- ii) *b* needs to be well-supported by the evidence available to the subject
- iii) *b* needs to be responsive to the evidence available to the subject
- iv) *b* needs to be action guiding in the appropriate circumstances
- v) *b* needs to be supported by the subject with (intersubjectively) good reasons

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<sup>1</sup> Bortolotti, *Delusions and Other Irrational Beliefs*.

<sup>2</sup> For accuracy, I follow Bortolotti’s wording directly, from her chapters on procedural, epistemic, and agential rationality respectively. Ibid., 61, 113-14, 59-60.

- vi) *b* needs to be formed on the basis of (intersubjectively) good reasons

Feature *i* constitutes the argument from procedural rationality, which claims that procedural rationality is necessary for belief ascription; *ii* and *iii* constitute the argument from epistemic rationality, which claims that epistemic rationality is necessary for belief ascription; and *iv-vi* constitute the argument from agential rationality, which claims that belief ascription requires agential rationality.

Bortolotti accepts that many delusions fail to meet these conditions. But she argues that that these conditions are not in fact necessary for belief ascription: there are many examples of ordinary beliefs that we successfully ascribe to others which do not meet these constraints.

### 2.2.2 Ordinary Beliefs that Violate the Constraints

As an example, bad integration can be seen in ordinary beliefs about probability. People frequently violate the conjunction rule, which states that the conjunction of two events cannot be more likely than the occurrence of either event singly.<sup>3</sup> When given a description of a woman who participates in various types of left-wing activism, and asked whether it is more likely that she is a) a bank-teller, or b) a bank-teller and a feminist, people favour b.<sup>4</sup> It is easy to see what people are doing here: the description seems representative of their idea of a feminist, so they choose b, despite the impossibility of the conjunction being more likely. When the task is redescribed in terms of frequency—100 people fit this profile, how many of these are a) bank-tellers, b) bank-tellers and feminists—performance improves. This indicates people at least implicitly grasp the conjunction rule. And yet they sometimes also violate it, which is inconsistent.<sup>5</sup>

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<sup>3</sup> Because the conjunction requires that they *both* happen.

<sup>4</sup> Amos Tversky and Daniel Kahneman, "Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment," *Psychological Review* 90, no. 4 (1983).

<sup>5</sup> Bortolotti, *Delusions and Other Irrational Beliefs*, 82-83.

What is more, these inconsistencies are maintained even when they are brought to the subject's attention. In studies of the conjunction rule, participants who are debriefed on the nature of the task do not readily change their answers, tending instead to explain away their inconsistent responses.<sup>6</sup> This is similar to the way that delusional patients fail to abandon their delusions even after cognitive behavioural therapy. And yet, at no point does our ascription of beliefs to participants in these experiments break down. Instead, we successfully ascribe them beliefs while recognising the possibility of inconsistencies.

There are also common examples of epistemic irrationality, like beliefs that are badly supported by evidence. An interesting example involves beliefs about which actions an agent has performed intentionally. A natural distinction exists between actions that are intentional, and those that are merely incidental. But people are overly willing to attribute intentionality to an act that involves a bad consequence, despite evidence that the consequence was not intended. Consider the following two vignettes.<sup>7</sup> In the first, a CEO is presented with a new initiative that will increase profit and also help the environment; he responds that he does not care about the environment—only profit matters. The second vignette is identical, except the proposed initiative will *harm* the environment; his answer is the same—only profit matters. When presented with these vignettes, subjects are more likely to judge the harmful scenario as 'intentional,' only rarely claiming that the CEO 'intentionally' helped the environment. Bortolotti argues that this is an example of a badly supported belief, given that the evidence from the vignettes indicated the environmental consequence was not intended in either case.<sup>8</sup>

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<sup>6</sup> Ibid., 87.

<sup>7</sup> Joshua Knobe, "Intentional Action and Side Effects in Ordinary Language," *Analysis* 63, no. 279 (2003): 191; "Theory of Mind and Moral Cognition: Exploring the Connections," *Trends in Cognitive Sciences* 9, no. 8 (2005).

<sup>8</sup> Bortolotti states that even considering criticisms of Knobe's work and the difficulties deciding what this work really means, 'it is fair to suppose that there is a presumption in favour of ascribing intentionality in circumstances in which the agent's intentions are not fully explicit. This can be easily characterised as a case in which one forms beliefs (about whether an action was performed intentionally) which are not fully supported by the available evidence.' Bortolotti, *Delusions and Other Irrational Beliefs*, 145.



In terms of agential rationality, examples abound of ordinary beliefs that fail to guide action. In a study of student condom use, Aronson found that although many students expressed the belief that condoms should be used to prevent disease, their self-reported behaviour was inconsistent with this.<sup>9</sup> Students tended to discount the risks to themselves, thinking that disease would not strike them. The students thus seemed to have a strong belief, but also seemed not to act on it.<sup>10</sup> And yet we do not struggle to interpret them.

On the basis of numerous examples like these, Bortolotti concludes that the arguments from rationality constraints are unsound. The arguments claim that in order to ascribe a belief, that belief must fulfil some particular criteria. But in each case it can be seen that many everyday beliefs, which we have no problem ascribing to people, do not meet the proposed criteria. Moreover, the way in which these ordinary beliefs fail to meet the rationality constraints is similar to the way delusions fail to meet them. Both ordinary beliefs and delusions sometimes fail to meet the proposed constraints, and thus failure to meet these constraints is no reason to deny the doxastic status of delusions. We can in fact ascribe irrational beliefs, of both the ordinary and delusional variety.

### 2.2.3 Bortolotti's Revised Interpretationist Account of Beliefs and Delusions

Bortolotti thus dismisses the rationality constraints. But one of Bortolotti's main aims is to 'distinguish between the good and bad of interpretationism.'<sup>11</sup> Looking at the practice of belief ascription in order to understand beliefs is good; idealizing our rationality is bad. Bortolotti thus concludes with a positive account of beliefs and delusions to replace the overly restrictive rationality constraints.

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<sup>9</sup> Elliot Aronson, "Dissonance, Hypocrisy, and the Self-Concept," in *Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology*, ed. E. Harmon Jones and J. Mills (Washington (DC): American Psychological Association, 1999).

<sup>10</sup> Bortolotti, *Delusions and Other Irrational Beliefs*, 173.

<sup>11</sup> *Ibid.*, 261.

Firstly, what separates delusions from beliefs? Given the examples above, it cannot be their rational failings like resistance to counterevidence. Rather, these failings exist on a continuum, with delusions at one extreme.<sup>12</sup> Instead, Bortolotti suggests, delusions seem to be preoccupying and distressing in a way that ordinary irrational beliefs are not. Since distress is a common feature of psychiatric pathology, perhaps this feature also marks the pathology of delusions.

What of a positive characterisation of beliefs? Bortolotti distils four features as plausible ‘core features’ of belief ascription.<sup>13</sup>

- i) Beliefs are integrated in a system and have some inferential relations with other intentional states

Requiring that agents be completely consistent in drawing out the relations between beliefs was an idealisation. But, a belief must at least display some relations with other beliefs for it to be ascribed; otherwise it would not help in interpreting people’s behaviour.

- ii) Beliefs are sensitive to evidence or argument

Beliefs should have at least *some* sensitivity to evidence, even if this does not result in instant revision. This may not be the case for all beliefs, such as those that do not relate easily to empirical evidence, and our beliefs may not always be based on the best evidence. But some form of relation between belief and evidence is required for ascription.

- iii) Beliefs can be manifested in behaviour

Bortolotti makes a distinction between ‘action guidance’ and ‘behavioural manifestability.’

Whereas the former requires that specific, logical consequences of a belief are acted out consistently, behavioural manifestability merely requires that a belief be displayed in some form of behaviour, such as verbal reports. This latter, Bortolotti argues, is a more reasonable constraint on ascription.

- iv) Beliefs can be self ascribed and some beliefs can be defended with reasons

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<sup>12</sup> Ibid., 259-60.

<sup>13</sup> Again, for accuracy I follow Bortolotti’s formulations exactly. Ibid., 262-65.

This feature replaces the flawed notion that all beliefs should be defended with *good* reasons. Instead, ascription only requires that people are intelligible. As such, one should be able to self-ascribe a belief, and some beliefs should be defended with reasons, even if they are not always good reasons.

This completes my reconstruction of the main elements of Bortolotti's project. In the remainder of this chapter, I consider whether this project achieves its aim of defending a doxastic account of delusions from anti-doxastic objections.

### 2.3 Problems with the Interpretationist Defence

Bortolotti's work is well-researched, supported with a wealth of examples, and is currently the most thorough treatment of the debate over the doxastic status of delusions. But although I agree with the rejection of the rationality constraints, I do not think that the interpretationist method of dismissing these constraints is a fruitful one. The main problem<sup>14</sup> is that the interpretationist defence accepts the central premise of interpretationism—that belief ascription is how we should understand beliefs. There are good reasons for not placing

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<sup>14</sup> I should say that I also think there are issues with many of the examples used by Bortolotti, but I focus here on the problem that is most relevant to my overall thesis. For instance, in and of themselves, violations of the conjunction rule are not instances of radical irrationality of the sort that Davidson considered paradoxical and incoherent. What is needed, instead, is an instance where beliefs are contradictory on principles subscribed to by the agent themselves, and where this is brought to their attention but not rectified. Certainly, if a test is worded in ways that prime certain responses, people may give different answers depending on the cues in the example, but this is not incoherent.

For this reason, Bortolotti (2010) cited instances wherein participants failed to change their answers in response to debriefings. But even these examples do not show radical failures of procedural rationality. Tversky and Kahneman (1983, 300) do cite some responses to a post-experiment debriefing which display some oddity: when confronted with their inconsistency, many subjects 'did not attempt to defend their responses.' But this does not show that no adjustment in attitude was made by the participants to account for their inconsistency. If anything, it shows a willingness to back down on their choices, with one participant saying 'I thought you only asked for my opinion.' This grudging response is made more understandable if we consider that these debriefings often took place in class discussions, presumably in front of other students. This example does not illustrate radical procedural irrationality.

In addition, the use of Knobe's intentionality studies is also problematic. Bortolotti characterises these studies as showing the formation of beliefs (about intentionality) in the absence of evidence, but this characterisation is flawed. More likely this example just shows, as Knobe (2005, 358) argues, that moral considerations are an essential part of the core competence of the folk concept of intention. If so, we might be led to wonder about someone who did *not* use moral information in judgements of this kind (see discussion of such normative questions in Phelan and Sarkissian, 2008, 293). (Another plausible interpretation is that although the semantic understanding of intention does not involve moral consideration, the pragmatics of the use of this concept is laden with notions of blameworthiness (Adams and Steadman, 2004).) But this is not a demonstration that we attribute intentionality without evidence, but rather that this *just is* the evidence generally taken as the basis for forming beliefs about intentional action. For reasons of space and relevance I will say no more about the examples, but more could be said.

such importance on belief ascription. In each of the examples examined by Bortolotti, we are left wondering not about our ability to ascribe beliefs, but whether or not such ascriptions would be *correct*. That is, we want to know what is going on inside the people to whom we ascribe beliefs, something which intuitively may fail to match our third-person ascriptions. Moreover, this intuitive desire to understand the internal state of other agents is the guiding principle of cognitive science.

### 2.3.1 Weak Negative Thesis: Interpretationism and Anti-Realism

The interpretationist defence starts with the assumption that belief ascription is central to understanding the nature of beliefs. This is a central premise of the interpretationist view of beliefs. Bortolotti explicitly accepts the interpretationist premise that belief ascription defines what beliefs are, and then sets out to see whether, on this view, delusions are beliefs. Bortolotti justifies this by saying that she aims to do this while addressing ‘no metaphysical issues about beliefs [...] in detail.’<sup>15</sup> That is, investigating belief ascription ‘make[s] sense independent of a complete theory of what beliefs are, over and beyond their role in folk-psychological practices.’<sup>16</sup> This is because such practices place constraints on what could fill the role of beliefs.

But to accept the interpretationist premise is not to avoid metaphysics, nor to gain a neutral perspective on beliefs. Rather it is to accept a particular metaphysics, and a dubious one at that.<sup>17</sup> Consider again the interpretationist view, as outlined in section 1.3.2 in relation to the work of Dennett and Davidson. For an interpretationist, to answer the question ‘what is a belief?’ we must look at the way the word ‘belief’ is deployed by people. When we do so, we see that the term ‘belief’ is used in the context of a set of practices by which we make explicable to ourselves the outward behaviour of others. As such, beliefs must be non-

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<sup>15</sup> *Delusions and Other Irrational Beliefs*, 2.

<sup>16</sup> *Ibid.*

<sup>17</sup> In taking this method, Bortolotti fails to appreciate what Strawson calls the ‘inescapability of metaphysics.’ Galen Strawson, *Mental Reality*, 2nd ed., Representation and Mind Series (Cambridge, Mass.: MIT Press, 2010), 78.

contingently connected with observable behaviour: beliefs *just are* interpretations of behaviour, and thus a belief without an associated behaviour is nonsensical. And because we make sense of others by attributing reasons that are logically coherent, beliefs just are things that are logically coherent.<sup>18</sup> For the interpretationist, there are no further facts to discover about the nature of beliefs once we have elucidated the kinds of things we call beliefs in our practices.<sup>19</sup>

Note how radical this view sounds. It claims that if we want to understand an agent's beliefs, the relevant facts are those regarding the considerations which enter into the process of a third person ascribing beliefs to that agent. If we lack such facts, or the facts seem fuzzy enough, then the agent in question *eo ipso* does not believe anything. But you might reasonably wonder: why would the way in which others ascribe beliefs to me determine the facts about my beliefs? As Gerrans has pointed out, this 'runs very close to a kind of antirealist instrumentalism about psychology in which the coherence of a subject's psychology becomes a matter of interpretive ingenuity or community standards for rationalization.'<sup>20</sup> The reason for this anti-realism is that this view collapses the distinction between epistemology and metaphysics, by claiming—as McGinn once pithily characterised it—that 'the epistemology of mind is constitutive of its nature.'<sup>21</sup> This view eschews what seems intuitive: that beliefs are something concrete and entirely real in the head, regardless of other's abilities to ascribe them to us.

By taking this view, interpretationism thus identifies the existence of beliefs with the existence of our propensity to attribute them to others: in so far as there are beliefs it is only in so far as we attribute them to others. And by examining the doxastic question on the basis of interpretation and belief attribution, Bortolotti thereby extends this kind of anti-realism to the

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<sup>18</sup> Strawson gives this analysis in Chapter 8 of *ibid.*

<sup>19</sup> Dennett, "True Believers," 29.

<sup>20</sup> Gerrans, *The Measure of Madness: Philosophy of Mind, Cognitive Neuroscience, and Delusional Thought*, 11. I think that 'runs very close' is, if anything, too weak here.

<sup>21</sup> Strawson points out this summation by McGinn (1982, 7) in Strawson, *Mental Reality*, 225 fn. 7.

doxastic debate: delusions are beliefs in so far as we are able to attribute them as beliefs to others. Note that this is not take a ‘neutral’ approach to the subject at all, but rather to implicitly accept the very strong metaphysical premise at the centre of the interpretationist account—namely, that the metaphysical is identical with the epistemological. The interpretationist view of beliefs then is most definitely laden with metaphysical assumptions, and to accept that ascription constrains what beliefs are is to accept the metaphysical premise of interpretationist theories and thus ‘slide down the great anti-realist (positivist, radical empiricist, phenomenalist, etc) epistemologico-semantic slide into metaphysical confusion.’<sup>22</sup> Whatever one thinks of this view, it is not neutral; rather, it is substantially anti-realist. At the very least, this implication should be noted by those who appeal to the interpretationist defence of doxasticism. That is my weak negative thesis regarding the interpretationist defence of doxasticism.

### 2.3.2 Strong Negative Thesis: Reasons to Disfavour the Interpretationist Defence

Furthermore, this anti-realism is a reason to disfavour the interpretationist defence of doxasticism. This is because cognitive science, and cognitive neuropsychiatry in particular, is not anti-realist when it comes to delusions and beliefs. Thus, if we are motivated to defend doxasticism in part because of such theories, then we should really want a view of beliefs on which we get a robust classification of delusions as beliefs.

In particular, there are two things that cognitive science takes a realist stance towards: the phenomena to be explained, and the mechanisms postulated to explain the phenomena.<sup>23</sup>

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<sup>22</sup> ‘It’s to turn ontology and metaphysics into a ghostly, automatic by-blow of epistemology—and human epistemology at that.’ *The Secret Connexion: Causation, Realism, and David Hume (Revised Edition)* (Oxford: Oxford University Press, 2014), 115.

<sup>23</sup> For some review, and a very recent attempt to put forward an anti-realist alternative, see Matteo Colombo, Stephan Hartmann, and Robert van Iersel, “Models, Mechanisms, and Coherence,” *The British Journal for the Philosophy of Science* 66, no. 1 (2015). As will become clear, however, my view is that ‘belief’ per se refers to the phenomenon of interest, with the postulated mechanisms being the explanation. As I show, this fits best with how scientists treat the question. Further, as I show in chapter 4, talking only about the mechanisms of belief and not the phenomena is to miss the experiential nature of belief. I take this as a reason to disfavour the very recent attempt to give a teleo-function defence of doxasticism (Miyazono and Bortolotti, 2015), which reduces talk of belief to talk of mechanisms. This defence has received little attention in the literature, but in terms of an argument against that account, this section, the functionalist misgivings I outline in chapter 3, and the positive

Consider that the common mode of explanation in cognitive science is mechanistic explanation, wherein a mental phenomenon is set off and explained by elucidating the mechanisms which give rise to it. According to the classic formulation, ‘mechanisms are entities and activities organized such that they are productive of regular changes from start or set-up to finish or termination conditions.’<sup>24</sup> The assumption made by cognitive scientists is that the mind is a collection of such mechanisms, which together ‘produce the phenomena we call “mental” or “psychological.”’<sup>25</sup> When some such mental phenomenon of interest is identified, an explanation is sought in terms of the entities and processes that together produce the phenomenon.

On this view, beliefs and delusions are mental phenomena in need of explanation. And the kind of explanation being sought is not one that concerns the process by which people attribute beliefs to others, but one that explains what gives rise to particular mental phenomena of interest, in this case beliefs and delusions. As cognitive neuropsychiatrists have stated, the hypothesis that ‘delusions qualify as beliefs, albeit abnormal beliefs’ is ‘foremost’ among the basic assumptions of the entire cognitive neuropsychiatric approach.<sup>26</sup> And far from there being no further fact about whether something is a belief, the cognitive neuropsychiatric approach has a particular mental phenomenon in mind. To use one formulation, cognitive neuropsychiatrists see the phenomenon of belief as involving ‘whatever processes are happening in the brain and in the mind when someone says, or simply thinks, “I believe that x (is true).”’<sup>27</sup> Regardless of the simplistic nature of this formulation, it

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account in chapter 4 are my arguments against it. (I do, however, think that the defence is at least a step in the realist direction, which is good.) See Miyazono and Bortolotti, "The Causal Role Argument against Doxasticism About Delusions."

<sup>24</sup> Peter Machamer, Lindley Darden, and Carl F Craver, "Thinking About Mechanisms," *Philosophy of Science* 67, no. 1 (2000): 3.

<sup>25</sup> William Bechtel, *Mental Mechanisms: Philosophical Perspectives on Cognitive Neuroscience* (New York: Psychology Press, 2008), 2.

<sup>26</sup> Robyn Langdon and Emily Connaughton, "The Neuropsychology of Belief Formation," in *The Neural Basis of Human Belief Systems*, ed. Frank Kruger and Jordan Grafman (New York: Psychology Press, 2013), 19.

<sup>27</sup> Ibid.

clearly shows that what is in question is a particular mental phenomenon, rather than the facts surrounding everyday, third-person ascription of mental states.

The two-factor theory in particular is definitely predicated on a realist view of belief—the phenomenon to be explained—and the belief formation and evaluations mechanisms appealed to in giving this explanation. The two-factor theory posits a belief formation mechanism responsible for forming this distinct mental phenomenon of belief. In delusions, the stimuli prompting belief formation is abnormal—the Capgras patient looks at his wife but receives unexpected stimuli. This leads the belief formation mechanism to produce the strange belief. Additionally, the mechanisms responsible for the evaluation of beliefs are malfunctioning, and thus belief-revision does not occur.<sup>28</sup>

Stepping back, we can see that the scientific approach described above does not fit well with the interpretationist view. Cognitive neuropsychiatry has identified a particular phenomenon—belief—and is attempting to explain the various processes that produce this phenomenon, and the ways in which these processes can break down in cases of delusions. This phenomenon is entirely real, and does not seem to be simply a matter of the way we interpret others. As Searle once said: beliefs ‘were not postulated as part of some special [folk] theory, they are actually experienced as part of our mental life.’<sup>29</sup> This experience is what cognitive neuropsychiatry aims to understand and explain.<sup>30</sup>

Further, this incompatibility with the scientific study of delusions counts against the interpretationist view as a defence of doxasticism. Recall that one of the reasons for thinking that delusions are beliefs in the first place was the success of scientific theories that explain them as such. But the interpretationist defence does not actually defend this. Rather, it defends the ability to interpret those with delusions in the same manner that we interpret

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<sup>28</sup> For a review, see Coltheart, Langdon, and McKay, "Delusional Belief."

<sup>29</sup> John R Searle, *The Rediscovery of the Mind* (Cambridge, Massachusetts: MIT Press, 1992), 60.

<sup>30</sup> I say more about this, and elaborate on the exact experience that cognitive neuropsychiatry aims to explain in my rejection of the dispositional defence in chapter 3. In chapter 4 I show how the cognitive phenomenological view describes the experience of belief in a way that fits well with the scientific approach.



people with everyday beliefs. In so far as it defends the view of delusions-as-beliefs, then, it is a rather weak defence. At least *prima facie*, we should prefer a defence that confirms the scientific view of delusions as beliefs, because such a convergence would be a compelling case for claiming that delusions are beliefs.

### 2.3.3 Objections and Replies

At this point, one might object to my line of reasoning. I argued that the interpretationist defence is anti-realist in nature, that this anti-realism looks out of place with the realism of the scientific study of delusions, and that this gives us a reason to disfavour the interpretationist defence. But firstly, as I mentioned, Bortolotti did not claim to be providing a complete account of the nature of beliefs. Rather, she was attempting to avoid metaphysical questions about the nature of beliefs, while instead simply elucidating the folk view of beliefs and evaluating the way this view would classify delusions.<sup>31</sup> If the folk view can be shown to classify delusions as beliefs, perhaps this at least provides some support for doxasticism. Moreover, even if this folk view does not entirely fit with the scientific study of delusions, this may simply mean that folk psychology will need to be adjusted over time in line with scientific investigation.

This line of reasoning is one in fact that Bortolotti has invoked in response to criticisms of her use of the interpretationist view of beliefs. Murphy, for example, argued that while Bortolotti makes a strong case for delusions as beliefs, she is overly reliant on the folk view of beliefs, which ‘may not serve as a foundation for a developed science of abnormal intentional states.’<sup>32</sup> In response, Bortolotti reiterated that she does not ‘commit to a particular metaphysical view of what beliefs are,’ but is instead using the folk view in order to

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<sup>31</sup> Of course, I claimed that accepting the interpretationist view was not a way to avoid metaphysical questions about beliefs, but I am putting this claim aside here.

<sup>32</sup> Dominic Murphy, "The Folk Epistemology of Delusions," *Neuroethics* 5, no. 1 (2012): 22. Murphy points out the doxastic debate has largely been fought over the folk view of beliefs, rather than on a view that might be scientifically useful in the study of delusions. In this work, I have hoped to shift the debate in this direction, but with a view that still seems to match with folk rulings.

investigate whether anything at least loosely corresponds to this notion of belief that we have.<sup>33</sup> She admits that perhaps other conceptions may eventually prove more conducive to scientific investigation, and perhaps a mature science would even discard the notion of belief, but asks, ‘what shall we say about delusions [...] while the science of abnormal intentional states reaches maturity?’<sup>34</sup> Perhaps the interpretationist view provides the best possibility for talking about beliefs and delusions, despite the fact that it might not ultimately be vindicated by science.

To the above, I have two responses. (I am putting aside my earlier doubts about the interpretationist view being ‘neutral.’) Firstly, I counter that there is a better view of beliefs, one which does offer the potential to fit with the scientific approach, which I will outline in chapter 4. This view, I will argue, allows for what appears to be the paradigmatic mode of explanation in the cognitive sciences: the identification of mental phenomena of interest and the subsequent investigation of the mechanisms which give rise to these phenomena. Belief is one such phenomenon, an experiential aspect of our mental lives, the basis and workings of which should be the object of empirical investigation. If this is true, this is the account we should use to investigate delusions. This allows us to answer Bortolotti’s question about how we should approach the subject of delusions if we reject her view. Ultimately, I do not object to Bortolotti appealing to a ‘folk’ view per se, I simply think that there is a better view available.

Secondly, in so far as one thinks that using the folk view of beliefs to examine delusions is a useful activity, the interpretationist view is not a good candidate for what the ‘folk’ supposedly think. This is true even of Bortolotti’s revised interpretationist account. Notice that even though Bortolotti rejects certain strong claims about the necessity of rationality for interpretation, she still retains a number of rational features as necessary for

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<sup>33</sup> Lisa Bortolotti, "In Defence of Modest Doxasticism About Delusions," *ibid.*: 49.

<sup>34</sup> *Ibid.*, 50.

belief ascription, such as inferential relations and integration. The problem with this is that if you investigate the folk view of beliefs empirically, even this seems too strong.

In an empirical study of belief attribution, Rose et al. used vignettes of a Capgras patient who asserted that his wife was an imposter, to see how people ascribe beliefs in such instances.<sup>35</sup> In the two vignettes, either the patient continued to stay with his wife as most Capgras patients do (procedural irrationality), or was sullen and refused to eat with her (consistent belief/action). In both cases, almost 100% of participants ascribed to the patient the belief that his wife was an imposter—the procedural irrationality made no difference to belief ascription.<sup>36</sup> Participants also had few qualms about ascribing beliefs that were inconsistent. Rather, the crucial feature for ascription was the regular verbal assertion of the belief.

The authors concluded that verbal assertion is one of the most important features for ascription. Further, the popular claim that behavioural circumscription hampers belief ascription does not survive empirical scrutiny:<sup>37</sup>

Instead of [...] offering elaborate theoretical defenses for categorizing [delusions] as beliefs, we propose a disarmingly simple and unsophisticated thesis: in cases like [this], the delusional attitudes are stereotypical beliefs. There is no need to innovate, compromise, or apologize. Furthermore, we embrace a corollary of this thesis, namely, that theorists should revise their views about stereotypical belief. Philosophers of mind and cognitive scientists have strayed very far indeed from the folk psychology of belief.

The findings above do not fit well even with Bortolotti's revised interpretationist account. Bortolotti requires various rational features like 'integration' to be present, but the vignettes presented a case of outright procedural irrationality, providing no wider context

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<sup>35</sup> David Rose, Wesley Buckwalter, and John Turri, "When Words Speak Louder Than Actions: Delusion, Belief, and the Power of Assertion," *Australasian Journal of Philosophy* 92, no. 4 (2014).

<sup>36</sup> By this I really mean that the procedural irrationality had no effect: 'there was no effect of action profile [...] Surprisingly, and against conventional wisdom, behaviour circumscription [procedural irrationality] had no effect on whether the folk viewed the Capgras patient as having the belief that his wife is an imposter.' *ibid.*, 688.

<sup>37</sup> *Ibid.*, 684.

about the delusional person. And yet there was not even the slightest effect on belief ascription. For the folk, it seems that even starkly irrational states like circumscribed delusions are simply obvious, stereotypical beliefs. This study thus gives us reason to doubt that Bortolotti's view really is a 'folk' view of beliefs. The interpretationist defence of doxasticism looks shaky even if it is viewed only on the basis of folk psychology. We should look for another defence.

## 2.4 Conclusion

In sum, there are serious issues with the interpretationist defence of doxasticism. It rests on an anti-realist view of beliefs, something that should be noted by those in the doxastic debate. Moreover, this anti-realism is at odds with the realist approach of the scientific study of delusions. This is a reason to disfavour the view. While it might be claimed that Bortolotti's account seeks only to investigate delusions on the folk psychological view of beliefs, and thus may be somewhat immune to the above criticism, even this is dubious: empirical studies suggest that interpretationism is not the folk view of beliefs. Moreover, as I will argue in chapter 4, there is a better account of beliefs, one which does fit with the scientific study of delusions. But first I will consider another influential defence of doxasticism, this time based on a dispositional view of belief, and decide whether it fares better than the interpretationist defence.

## Chapter 3 The Dispositional Defence of Doxasticism

### 3.1 Introduction

Some proponents of the doxastic conception of delusions have argued that doxasticism can be defended by appealing to a dispositional account of beliefs, specifically Schwitzgebel's 'phenomenal dispositionalism.'<sup>1</sup> On this view, beliefs are characterised by the dispositions typically associated with them, including dispositions for certain behaviours, thoughts, and reasoning patterns. Bayne and Pacherie have drawn on this account to defend doxasticism, arguing that the objections raised in anti-doxastic arguments can be answered on a dispositional view.<sup>2</sup> For example, some of the supposedly necessary conditions for belief can be dismissed by dispositionalism as unreasonable. Further, dispositionalism can appeal to various 'excusing conditions' to explain away some of the rational failings of delusions.<sup>3</sup> In these ways, Bayne and Pacherie argue, anti-doxastic arguments can be rejected and delusions can be viewed as beliefs.

After outlining this defence, I argue that it is problematic. The central problem with the dispositional defence, just as with the interpretationist defence, is a problem with the underlying account of beliefs on which it rests. On dispositionalism, belief ascription—at least in cases like delusions—becomes a matter of context and communicative goals; there are 'no further facts' beyond this about what someone *really* believes.<sup>4</sup> My weak negative thesis is that this anti-realism should be acknowledged in the doxastic debate.

Moreover, on cognitive neuropsychiatric theories of delusions, there *are* further facts, and the term 'belief' is not merely a helpful label. For cognitive neuropsychiatry, use of the

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<sup>1</sup> Schwitzgebel, "A Phenomenal, Dispositional Account of Belief."

<sup>2</sup> Bayne and Pacherie, "In Defence of the Doxastic Conception of Delusions."

<sup>3</sup> Excusing conditions are discussed in detail in Schwitzgebel, "A Phenomenal, Dispositional Account of Belief," 253.

<sup>4</sup> On this point, I draw heavily from Tumulty, "Delusions and Dispositionalism About Belief." See Schwitzgebel's view on 'no further facts' in Schwitzgebel, "A Phenomenal, Dispositional Account of Belief," 262.

term ‘belief’ signifies a substantive empirical claim about actual internal similarities between cases of beliefs and delusions. As such, even if dispositionalism viewed delusions as beliefs, nothing of substance would follow from this in terms of doxastic cognitive neuropsychiatric accounts. This is a reason to disfavour the dispositional defence. We should prefer a view that defends doxasticism more robustly than dispositionalism. That is my strong negative thesis.

Finally, I consider a potential objection: the dispositional defence does not aim to fit with the scientific approach to delusions, but rather to elucidate a ‘folk’ view of beliefs and evaluate how this view classifies delusions. This may be important regardless of whether this approach fits with scientific theories. In response, I argue that my defence in chapter 4 is still to be preferred, and that the dispositional view is actually a poor candidate for a ‘folk’ view of beliefs.

## 3.2 The Dispositional Defence

### 3.2.1 Phenomenal Dispositionalism

According to Schwitzgebel’s phenomenal dispositionalism, beliefs are ‘dispositional stereotype[s].’<sup>5</sup> A *stereotype* in this instance is a cluster of features that we typically associate something. A stereotype of a dog might include the properties of having four legs and barking. Of course, this stereotype is not true of every dog—some dogs do not bark. Nevertheless, this stereotype is true of most instances most of the time.

A *disposition* is the propensity for something to undergo a particular change in the event of a particular condition coming about. According to Schwitzgebel, this can best be characterised by a conditional statement: ‘If condition C holds, then object O will (or is likely to) enter (or remain in) state S. O’s entering S we may call the *manifestation* of the disposition, C we may call the *condition of manifestation* of the disposition, and the event of C’s obtaining we may call the *trigger*.’<sup>6</sup> If a conditional statement like this holds true for

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<sup>5</sup> "A Phenomenal, Dispositional Account of Belief," 250.

<sup>6</sup> Ibid.

some values of C, O and S, then object O may be said to have the disposition expressed by the conditional statement.

Putting these together, we can describe what Schwitzgebel means by saying that beliefs are dispositional stereotypes. Consider a modified version of the ‘favorite belief of philosophers’:<sup>7</sup> the belief that there is a bottle of Laphroaig in the cupboard. There are a range of dispositions that we would typically associate with such a belief. There are behavioural dispositions, like the dispositions to say ‘there’s a bottle of Laphroaig in the cupboard’ when a (good) friend asks for something peaty to drink. There are also various phenomenological dispositions, like being apt to think to oneself ‘there’s a bottle of Laphroaig in the cupboard’ when wondering what to drink. Finally, there are cognitive dispositions, such as the propensity to use the belief to draw conclusions like ‘there is no need to buy anything to drink because I already have some Laphroaig at home.’

It seems there could be an unlimited set of dispositions for any belief—think of all of the dispositions associated with the above belief. This is where the notion of a ‘stereotypical’ profile is useful: the dispositional stereotype of a belief consists in ‘the cluster of dispositions that we are *apt* to associate with the belief,’ and thus can be finitely specified.<sup>8</sup> When a person has every disposition in such a stereotype, they may be said to believe the proposition under consideration, and when they possess none of the stereotypical dispositions, they would be said not to believe it.

There may, however, be instances where a disposition is not manifested but where we still say that a person possesses the disposition. This is because there can be ‘excusing conditions’ that can excuse the fact that a disposition was not manifested in a particular instance.<sup>9</sup> For example, if a person is in some way physically incapacitated, they will not manifest the behavioural dispositions of a stereotype. If this incapacity was remedied,

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<sup>7</sup> The favourite belief being the belief that there is beer in the fridge. Ibid., 251.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid., 253.

however, the behavioural disposition would manifest. In such instances we can be confident that the disposition is still had, despite the temporary failure. Dispositions thus come with an implicit *ceteris paribus* clause: dispositions manifest when manifestations conditions are present, *all else being equal*.<sup>10</sup> In a case where an excusing condition can be found for any failures, and where other of the stereotypical dispositions of a belief do manifest, we would still describe a person as believing the proposition.

What about cases where no excusing condition can be found, but where only *some* of the stereotypical dispositions are exhibited? That is, if a stereotypical disposition involves a cluster of dispositions, how do we judge cases where only some dispositions in the cluster are present—what, if anything, does the person believe in such a case? On the dispositional account, there is no ultimate answer to this question. We can merely describe which of the stereotypical dispositions are manifested and which are not. From there it will be a matter of perspective whether or not the resulting mismatch with the stereotype is enough for us to withhold belief ascription. As Schwitzgebel states, ‘there is no internal chalkboard on which the belief might be written in the language of thought, no warehouse in which it might be stored despite its inconsistent “manifestations.” Once all the relevant dispositions have been made clear, the case is closed. There are no further facts to report.’<sup>11</sup>

Consider an example that illustrates the way dispositionalism handles such tricky cases. A child is cramming for a history test, and memorises that ‘the Pilgrims landed at Plymouth Rock in 1620.’ But in her frantic reading she has become confused and is under the vague impression that ‘Pilgrim’ means ‘Native American.’<sup>12</sup> If we ask whether she believes that ‘the Pilgrims landed at Plymouth Rock in 1620,’ our answer depends on our perspective. From the perspective of a teacher interested only in the child’s answers to a quiz on historical dates, it might be useful to say that she does believe this: when the question arises, the student

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<sup>10</sup> Ibid., 253-54.

<sup>11</sup> Ibid., 262.

<sup>12</sup> Ibid., 257.



will answer correctly. But in other circumstances, describing the child as believing this would be deceitful, because others would be led to expect certain responses (about religious refugees) that they would not get. In such cases we would refrain from ascribing the belief. Alternatively, we could simply describe the child's dispositions, noting where they match and depart from the stereotype.

Notice that this example is mainly a question of content:<sup>13</sup> what seems in question is whether the child believes that it was Pilgrims, Native Americans, or some other vague entity that landed. She clearly believes *something*. There are other instances where our question extends even to the attitude: does the person believe P, not believe P, or perhaps even just desire P? Imagine a mother who loudly proclaims that her teenage son does not smoke marijuana, but who is prone to sniff his clothes and check his eyes when he comes home at night.<sup>14</sup> Does the mother a) believe that her son smokes marijuana, b) believe that her son does not smoke marijuana, or even c) *desire* that her son does not make marijuana, while somehow partly deceiving herself? Once again, there is no ultimate answer to this question. The way we describe the case will depend on our interests and communicative circumstances.

### 3.2.2 Dispositional Doxasticism

Some proponents of the doxastic conception of delusions have argued that we can defend against anti-doxastic objections by accepting the dispositional view of beliefs. The most influential such defence is given by Bayne and Pacherie, who argue as follows.<sup>15</sup>

Firstly, for some of the anti-doxastic arguments, the dispositional account can simply reject the supposedly necessary conditions of belief as not necessary at all. When described in dispositional terms, a mental state could fail to meet the proposed necessary condition but still be a belief because enough of the stereotypical properties are present. For example, imagine

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<sup>13</sup> Schwitzgebel does not claim this in his description of the case, but I think the example best serves as an example about content. Below I use the example of the self-deceiving mother as an example about attitude type.

<sup>14</sup> Schwitzgebel, "A Phenomenal, Dispositional Account of Belief," 260-61.

<sup>15</sup> Bayne and Pacherie, "In Defence of the Doxastic Conception of Delusions."

an anti-doxastic proponent who pointed to the way that a Capgras patient fails to feel sad or distressed about the missing partner as evidence that the delusion is not a belief. A dispositionalist could dismiss this objection, because on dispositionalism, merely lacking *some* of the stereotypical dispositions does not necessarily count against a state being a belief. In this case, if all that are missing are emotional dispositions, we would typically still be happy to call this a belief.

Secondly, some of the failures of delusions to exhibit typical features of beliefs can be explained by appealing to ‘excusing conditions.’ Consider a Capgras patient who claims that their wife is missing but does not search for her. On the anti-doxastic objection, this failure of action calls into question the doxastic status of the delusion. But action requires a range of motivational and affective states in combination with belief, and it is well known that delusional patients suffer from general disruptions to their motivational and emotional states.<sup>16</sup> In addition, Capgras patients are often concerned that they will not be believed and will be hospitalised for acting on their belief, and this fear prevents the expected action. Bayne and Pacherie argue that these facts constitute excusing conditions for the rational failings seen in some delusions.<sup>17</sup>

Thirdly, the dispositional account can invoke the context sensitivity of beliefs to account for certain rational failures of delusions. One instance where this may be helpful is the seemingly inconsistent attitudes held by Capgras patients toward their loved one. A curious feature of Capgras patients is that they seem to believe that their loved one is an imposter only when in visual contact with them, but not over the phone (because it is their face processing system that is impaired). On the dispositional view this can be accounted for by simply saying that the Capgras patient does not straightforwardly believe that the loved

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<sup>16</sup> Ibid., 185.

<sup>17</sup> Ibid.

one is an imposter, but rather believes this when in visual contact with the spouse but does not believe it when out of visual contact.<sup>18</sup>

In sum, the dispositional defence of doxasticism invokes the various explanatory resources of dispositionalism to dismiss anti-doxastic objections. The dispositionalist can deny some of the proposed necessary features of beliefs by appealing to the way we rely on a cluster of dispositions when ascribing beliefs. The dispositionalist can also explain some of rational shortcomings of delusions by appealing to excusing conditions. Finally, the dispositionalist can explain some of the inconsistencies in delusions by appealing to the context-sensitivity of belief ascription. In this way, doxasticism can be maintained in the face of the anti-doxastic objections.

### 3.3 Problems with the Dispositional Defence

Bayne and Pacherie's work offers a range of important insights into the nature of delusions, and has been widely influential in the doxastic debate. But while I agree that doxasticism is worth defending, and have some sympathies with the dispositional account, I think their defence is problematic. The problem is that dispositionalism, at least in tricky cases like delusions, provides answers that are less than robust. Such cases may be ruled as 'beliefs,' but this classification is merely a function of communicative utility, nothing more.<sup>19</sup> At the very least, those in the doxastic debate should recognise this. That is my weak negative thesis. More strongly, though, I argue that this anti-realist aspect of dispositionalism is out of place with the scientific approach to delusions, and that this is a reason to disfavour the view.

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<sup>18</sup> Ibid.

<sup>19</sup> Tumulty makes this general point about the lack of weight that Schwitzgebel's form of dispositionalism gives to ascription in the case of delusions. For Tumulty, this is part of a wider critique of Bayne and Pacherie's defence of doxasticism, a critique that makes a number of insightful points. But here I focus on the point about the lack of a robust ruling regarding delusions for a number of reasons. Firstly, I think that in the doxastic debate in general, this point remains under-appreciated: I think it no coincidence that both of the most prominent defences of doxasticism show this same anti-realist tendency, despite the fact that defenders of doxasticism typically point to cognitive neuropsychiatric theories of delusions as being important evidence. Secondly, as I will argue in the next section, this anti-realism is one of the most obvious *prima facie* cases for disfavouring the view. Maura Tumulty, "Delusions and Dispositionalism About Belief," *ibid.* 26, no. 5 (2011): 613.

### 3.3.1 Weak Negative Thesis: Dispositionalism and Anti-Realism

Suppose that the dispositional account could be shown to generally count delusions as beliefs, by specifying excusing conditions and utilizing the various other resources available to a dispositional account. What would follow? I argue that on Schwitzgebel's dispositional account, all that would really follow is that it would be considered useful in some communicative situations to use the term 'belief' to describe delusions. The reason is that when it comes to most cases of delusions, dispositionalism will only be able to secure a doxastic classification by invoking a very strong sort of context-sensitivity on which this classification looks rather insubstantial. I think this is a rather radical, anti-realist answer. At the very least, this should be noted by those in the doxastic debate.

The point is summed up well by Tumulty, who points out in her insightful critique of Bayne and Pacherie that the latter 'underplay the fact that on Schwitzgebel's account, once a dispositional profile has been exhaustively specified, there is no further factual question as to whether or not a subject really (for example) believes that *p*.'<sup>20</sup> Recall what dispositionalism had to say about the mother who claimed to believe her son did not smoke marijuana but whose actions failed to line up with this belief. In cases like this, where a person's dispositional profile does not wholly line up with the stereotypical profile of belief, the dispositionalist answer is that there is no ultimate answer: in cases where describing the mother as believing that her son smokes marijuana would be useful, then we can do so; in instances where this would be misleading, we should not; in other contexts we might say she simply 'desires' that her son not smoke marijuana. If there is any doubt, we should just describe the disposition, because there are no further facts about the matter. So in so far as dispositionalism would call this a belief, it is not in any robust way, but rather as a matter of conversational interests.

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<sup>20</sup> Ibid., 600.

Notice that this kind of anti-realism also applies to instances of delusion. Consider the case of the Capgras patient who does not act on his belief by (say) calling the police. Bayne and Pacherie offer potential explanations for this, such as that the patient fears hospitalisation. But notice that if this is true, and there are excusing conditions, it looks like we can pretty easily call the state a belief: the dispositional profile closely matches a typical belief, it is just that something is temporarily masking the disposition. But as Tumulty argues, many delusions seem to involve more serious failures to match the dispositional profile of a belief.<sup>21</sup> Consider the kinds of serious motivational deficits that Bayne and Pacherie also reference. Here it seems like actually it is not the case that the disposition is merely being masked, but rather that the underlying disposition is completely missing: the patient is so impaired that there is no disposition to act on their delusion at all.<sup>22</sup> Cases like this are like the case of the self-deceiving mother: for dispositionalism, there actually is no ultimate answer regarding whether or not this is a belief, but rather we need to rely on conversational interests to decide whether to call it a belief. This is not a very robust answer. If we claim that dispositionalism has defended doxasticism, we should make sure we are clear that at least in cases like this, all this means is that we have a kind of ‘pragmatic permission’ to call delusions beliefs.<sup>23</sup> If delusions are beliefs on this account, it seems like it is only in a rather ephemeral sense.

By adopting the dispositional account of beliefs, then, Bayne and Pacherie extend the anti-realism of this account of beliefs into the doxastic debate. Whether or not delusions are beliefs under this defence will often simply be a matter of whether or not it is pragmatically useful to call them such. This is similar to the way the interpretationist defence provides anti-realist answers to the doxastic debate. Of course, it should be noted that it would be unfair to

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<sup>21</sup> Ibid., 602-10. Tumulty argues that the distinction in question here is one that Bayne and Pacherie have failed to clearly make, that is, the distinction between ‘excuses’ for the failure to manifest dispositions which are actually present, and ‘explanations’ for instances where the disposition is missing entirely. When enough of the dispositions are missing, as they seem to be in some delusions, this is where dispositionalism resorts to the kind of context-sensitivity regarding belief ascription that I am concerned about.

<sup>22</sup> Ibid., 607-09.

<sup>23</sup> Ibid., 614.

attribute to dispositionalism the kind of outright anti-realism embodied in the interpretationist approach. The two cases are different, and so far as it goes, dispositionalism is more plausible. Dispositionalism is not anti-realist about certain concrete things going on inside the head of someone who has a belief: the phenomenal aspect of thinking a belief to oneself is an entirely real process on this account. And dispositionalism does not entirely collapse the epistemic/metaphysical distinction. But there is a distinct element of anti-realism in the decision as to whether or not these real processes—thinking a belief to oneself, acting in certain ways—are actually beliefs. At the very least, this should be noted by those in the doxastic debate. This is my weak negative thesis regarding the dispositional defence.

### 3.3.2 Strong Negative Thesis: Reasons to Disfavour the Doxastic Defence

Tumulty draws the following conclusion from these points about belief ascription and the dispositional defence: ‘Dispositionalism has the resources to generate the ascriptive claims Bayne and Pacherie want precisely because it doesn’t give them the same weight they do.’<sup>24</sup> That is, Bayne and Pacherie invoked the dispositional theory of beliefs seemingly to provide a robust defence of doxasticism, but dispositionalism cannot do this: ‘Bayne and Pacherie wanted more than pragmatic permission to talk about delusions as beliefs.’<sup>25</sup> This might be too strong—I think that Bayne and Pacherie do recognise many of the anti-realist elements of dispositionalism, and endorse them. They certainly mention these aspects of dispositionalism in their article.<sup>26</sup> And in another work, Bayne stated that if we were to wonder ‘what exactly might turn on the debate between those who recognize delusions as a

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<sup>24</sup> Ibid., 613.

<sup>25</sup> Ibid., 614.

<sup>26</sup> See, for example, comments regarding the context sensitivity of belief ascription: ‘When a deviation from the stereotype cannot be excused or explained ... whether or not the attributor ascribes the belief will depend on the context of the belief ascription and what her interests are.’ Tim Bayne and Elisabeth Pacherie, “In Defence of the Doxastic Conception of Delusions,” *ibid.* 20, no. 2 (2005): 181.

species of belief and those who do not,' the answer on an account like that under consideration 'is likely to be "not much."'27

Having said that, it certainly seems like Bayne and Pacherie need more than dispositionalism can give them. I think Tumulty's point is ultimately correct, so I will rephrase it to make a more general point:<sup>28</sup> anyone who wants to give a robust defence of doxasticism really *should* want more than 'pragmatic permission to talk about beliefs as delusions.' My argument for this is the same as that given in my strong negative thesis against the interpretationist defence. The fact is that merely ruling that ascribing a belief is useful does not seem to fit with our best science of delusions.

That is, cognitive neuropsychiatric theories most definitely want more than 'pragmatic permission to talk about delusions as beliefs.' As we have seen, the hypothesis that 'delusions qualify as beliefs, albeit abnormal beliefs' is 'foremost' among the basic assumptions of the entire cognitive neuropsychiatric approach.<sup>29</sup> Being so fundamental, this classification does not look like the kind of thing that rides purely on communicative interests. Rather, the classification is a substantive empirical hypothesis about the relation between delusion and belief, one that goes beyond mere communicative utility.

Specifically, the cognitive neuropsychiatric approach does not sit well with Schwitzgebel's type of 'no further fact' dispositionalism, and the claim that there is no 'internal chalkboard' of beliefs. As Langdon and Connaughton state, the cognitive neuropsychiatric approach is implicitly committed to the claim that 'beliefs possess representational content' and that 'believers hold the representational content of their beliefs

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<sup>27</sup> Tim Bayne, "Delusions as Doxastic States: Contexts, Compartments, and Commitments," *Philosophy, Psychiatry, & Psychology* 17, no. 4 (2010): 335.

<sup>28</sup> I would hope that Tumulty would agree with this as a general point, although I give my own argument for it. The point is essentially the same: it is a reasonable interpretation that what doxastic defenders (like Bayne and Pacherie) are up to is giving a robust defence of doxasticism in a way that is strong enough to reject other conceptions of delusions, and that this requires more than dispositionalism can give.

<sup>29</sup> Langdon and Connaughton, "The Neuropsychology of Belief Formation," 19.

to be correct.<sup>30</sup> This sounds like the belief classification is based on robust claims about the internal state of an agent, rather than on communicative circumstances. Further, it is these ‘postulated components of normal belief processing’ that are hypothesised to have broken down in delusions, specifically ‘(1) a deliberative process of “doxastic inhibition” to reason about a belief as if it might not be true; (2) an intuitive “feeling of rightness” about the truth of a belief; and (3) an intuitive “feeling of wrongness” (or warning) about out-of-the-ordinary belief content.’<sup>31</sup>

My criticism here, then, is the same as that against the interpretationist defence. Indeed, it is the same as that which motivates my alternative defence of doxasticism in the next chapter. The crux of the criticism is that if a proposed defence of doxasticism concerns itself primarily with the linguistic circumstances in which ascribers can use the term ‘belief,’ rather than with matters of fact regarding internal mental states, then it cannot function as a substantive defence of scientific doxastic theories of delusions. Both the interpretationist and the dispositional defences fall afoul of this criticism. This is my strong negative thesis.

### 3.3.3 Objections and Replies

It could be objected that this dismissal is too hasty. Perhaps the dispositional view does not need to fit with the scientific view. Rather, if dispositionalism is an elaboration of the folk view of beliefs, it is useful to know how this view classifies delusions, regardless of whether the folk view is scientifically adequate. Indeed, Schwitzgebel bases his view on the folk view of beliefs: the stereotypical dispositional profile of belief just is the stereotypical profile that the folk typically associate with belief.<sup>32</sup> Schwitzgebel thus offers a similar

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<sup>30</sup> They also state that the approach is committed to the claim that because believers hold their beliefs to be true, they will act on them. But this is far from the claimed conceptual link between behaviour and belief made by Schwitzgebel and other functionalists, as discussed below. It is rather an empirical point about what one would expect of someone who held a particular representation to be true, and is fully compatible with my account in chapter 4. Ibid.

<sup>31</sup> Ibid., 20.

<sup>32</sup> Eric Schwitzgebel, "A Dispositional Approach to the Attitudes: Thinking Outside of the Belief Box," in *New Essays on Belief: Structure, Constitution and Content*, ed. Nikolaj Nottelmann (New York: Palgrave Macmillan,



defence to Bortolotti on points like this: although the view may not match scientific accounts, and science may even abandon beliefs, ‘formal science, right now, does no better’ than the folk view elucidated in dispositionalism.<sup>33</sup>

In response to this objection, I have two replies. Firstly, in chapter 4 I will outline a view of beliefs which I argue *does* defend the doxastic conception of beliefs in the kind of robust manner that fits with the scientific view of delusions. If this is true, then I think that this is the best view for evaluating the doxastic status of delusions.

Secondly, the dispositional view is not a good candidate for a folk theory of beliefs. Schwitzgebel maintains that phenomenal-dispositionalism is a functionalist view of belief, that is, the important stereotypical features of belief are those that reflect the typical functional profile of a belief. And for Schwitzgebel, the crucial functions are the forward-facing ones: ‘Beliefs can arise in any old weird way, but—if they are to be beliefs—they cannot have just any old effects. They must have, broadly speaking, belief-like effects; the person in that state must be disposed to act and react, to behave, to feel, and to cognize in the way characteristic of a normal believer-that-P.’<sup>34</sup>

To support this, Schwitzgebel invokes a comparison with David Lewis’s ‘mad pain,’ an imagined form of pain which produces in the sufferer ‘no tendency whatever to [...] groan or writhe, but does cause him to cross his legs and snap his fingers.’<sup>35</sup> A corresponding case of ‘mad belief,’ Schwitzgebel ‘hope[s] [we] will agree, is inconceivable.’<sup>36</sup> Thus, although there may be instances where the dispositional account classifies delusions as belief, when these functional aspects are missing, the dispositional account will deny that the state in

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2013), 75. The folk aspect is also clear in the original account. "A Phenomenal, Dispositional Account of Belief."

<sup>33</sup> "A Dispositional Approach to the Attitudes: Thinking Outside of the Belief Box," 94.

<sup>34</sup> "Mad Belief?," *Neuroethics* 5, no. 1 (2012): 14.

<sup>35</sup> David Lewis, "Mad Pain and Martian Pain," in *Readings in the Philosophy of Psychology, Volume One*, ed. Ned Block (Cambridge, MA: Harvard University Press, 1980), 216.

<sup>36</sup> Schwitzgebel, "Mad Belief?," 14.

question is a belief. In particular, Schwitzgebel argues, if the only behavioural manifestation of a delusion is mere verbal assertion, then this state is not a belief.<sup>37</sup> In this way, even more than Bortolotti, Schwitzgebel insists that the basic insights of Davidson and other interpretationists should not be thrown out: ‘when a person deviates too much from the causal-functional patterns [...] characteristic of belief [...] we have to either abandon belief talk or allow for some indeterminacy in it.’<sup>38</sup>

But if this account is supposed to delineate beliefs by their stereotypical folk properties, then as we have seen, empirical evidence suggests that it falls short of this goal. As Rose et al. showed, verbal assertion was the very thing subjects relied on most when judging something to be a belief, and behavioural inconsistency was ignored.<sup>39</sup> Indeed, recall the wording that Rose et al. used, and note how it stands in stark opposition to the dispositional view: ‘delusional attitudes are *stereotypical* beliefs’ (my emphasis).<sup>40</sup>

Further, I think there are good independent reasons for doubting Schwitzgebel’s insistence that the forward-facing functions of beliefs are necessary, and I do not share the intuition that ‘mad belief’ is inconceivable. If someone was apt have the thought ‘I believe x,’<sup>41</sup> regardless of what (if any) behaviour and emotions followed from this, why should this not be considered belief? Given that Schwitzgebel simply offers a thought experiment and invites us to share his intuition, I will offer an alternative thought experiment, borrowed from Galen Strawson, and invite readers to share the contrary intuition.

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<sup>37</sup> Ibid., 15-16. Schwitzgebel compares the case of mere assertion seen in delusions to cases of implicit bias, and argues that such cases are not, properly speaking, beliefs. At the most, there may be context in which the ascription is useful in some way.

<sup>38</sup> Ibid., 17.

<sup>39</sup> Rose, Buckwalter, and Turri, "When Words Speak Louder Than Actions: Delusion, Belief, and the Power of Assertion."

<sup>40</sup> Ibid., 684.

<sup>41</sup> I am using this as a simplistic placeholder, to be examined properly in chapter 4. Recall the wording from Langdon and Connaughton, "The Neuropsychology of Belief Formation," 19.

Consider Strawson's imagined 'weather watchers.'<sup>42</sup> The weather watchers are intelligent beings that are completely immobile, fixed to the ground while they watch the weather pass above them. As completely immobile beings, they do not even have the disposition to act in any way, nor do they ever form intentions to act. But they do have thoughts and sensations, as well as beliefs and desires. For example, imagine that one observes a seed fall to the ground and thus 'forms the belief that a tree may grow there before long.'<sup>43</sup> On the functionalist view, this scenario is impossible; but intuitively it seems perfectly conceivable. To think it impossible is to fall again into the trap of collapsing the distinction between the epistemological and metaphysical. The point is made best by Strawson, and thus in closing I quote him at length:<sup>44</sup>

Why should it be thought to be incoherent to suppose that there could be *Pure Observers*, entirely dispassionate, desireless observers of the world who are constitutionally incapable of any sort of action or observable behavior and who are not disposed to act or behave observably in any way? Why should the existence of such beings be thought logically impossible? [...] The only reason I can think of for claiming that the Pure Observers are impossible is a [...] commitment to the old evidentialist confusion of epistemology and metaphysics, according to which we are obliged to suppose that possession of beliefs [...] is inseparable from possession of dispositions to action or behaviour simply because only such action or behavior could provide (publicly available) evidential grounds for *attributing* beliefs to others. This view, orthodox for much of the twentieth century, has no plausibility.

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<sup>42</sup> For a full explication of this thought experiment and its implications for beliefs, desires, and other mental states, see Chapter 9 of Strawson, *Mental Reality*. In the original formulation of the phenomenal-dispositional view, Schwitzgebel (2002, 258) mentions the weather watchers, and argues that because his account is not completely reductionist about identifying beliefs with functional roles, and because of the importance placed on phenomenal dispositions, it is able to deal with such examples. But firstly, this contradicts more recent statements about delusions, as in the 'mad belief' example. Secondly, although Schwitzgebel is not completely reductionist about functional roles, I am not sure he realises how radical Strawson's example is: the weather watchers are not just incapable of action but positively do not have any action-related dispositions whatsoever. Moreover, if one did insist that the dispositionalist view could be unshackled a little further from some of the functionalist presuppositions, and that this might guard against some of my objections, I would perhaps agree. After all, the account I support in chapter 4 involves dispositions and phenomenal states, just like Schwitzgebel's. However, my account makes the functional connections of belief a contingent matter, and I do not think that this is something that any kind of functionalist account could abide.

<sup>43</sup> Ibid., 255.

<sup>44</sup> Ibid., 265.

### 3.4 Conclusion

In sum, there are serious issues with the dispositional defence of doxasticism. When it comes to delusions, the dispositional account views belief ascription as an insubstantial matter, something that should be noted in the doxastic debate. Moreover, this anti-realism is at odds with the cognitive neuropsychiatric notion of beliefs and delusions. For cognitive neuropsychiatry, calling delusions ‘beliefs’ denotes a substantive empirical claim about delusions. This mismatch is a reason to disfavour the dispositional defence. While it might be objected that the dispositional view is a folk view of beliefs, and immune to some of the charges above, this objection is dubious. Firstly, as I will argue next, there is an account of beliefs which does fit the robust realism of scientific views, and which classifies delusions as beliefs. We should prefer that account as a defence of doxasticism. Secondly, the strict functionalist commitments of dispositionalism make it a poor candidate for a folk view of beliefs.

## Chapter 4 The Cognitive Phenomenological Defence of Doxasticism

### 4.1 Introduction

My aim in the previous chapters has been to draw out what I see as a common and problematic theme in the existing defences of doxasticism: the tendency to produce accounts of belief that focus almost entirely on belief *ascription*.<sup>1</sup> Per my strong negative thesis, that tendency undermines those accounts as doxastic defences: if all an account of beliefs gives us is a defence of the communicative utility of labelling, say, a Capgras patient with the term ‘belief,’ then this account cannot function as a defence of doxastic theories of delusion. Such accounts of ascription may reveal interesting things about our belief-talk, and may indeed show the communicative value of using the term ‘belief’ about delusional patients. But none of that serves to defend the use of the term as deployed by doxastic cognitive neuropsychiatric theories. In the previous chapters, I supported this claim by citing the approach of cognitive neuropsychiatry and showing the substantive realism embedded in this approach.

In this chapter I outline a view of beliefs which does accord with the cognitive neuropsychiatric approach. In the next section, I first introduce the notion of cognitive phenomenology—the unique phenomenology of thought. This notion forms the basis of the account of beliefs offered in section 4.3. There, I argue that beliefs are dispositions to have immediate, phenomenal ‘judgements that P’ when one is triggered to entertain some proposition P.<sup>2</sup> I then put this account to work as a defence of doxasticism, and show how it can answer the original anti-doxastic objections in a more robust way than the accounts so far considered. This is my strong positive thesis. Finally, I consider some remaining open questions, and the potential for the cognitive phenomenological account to open up interesting

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<sup>1</sup> And third-person ascription at that.

<sup>2</sup> This view is based on that given by Kriegel, *The Varieties of Consciousness*.

avenues of empirical and conceptual research into delusions, both within and even outside the doxastic debate. This is my weak positive thesis.

## 4.2 Cognitive Phenomenology: An Introduction

It is common for philosophers to talk about the ‘raw feels’ of consciousness, like ‘what it is like’ to see red or listen to Mozart’s flute concerto.<sup>3</sup> Such examples are evocative: we all have visceral sensory experiences. But many philosophers have argued that there are other types of experiences, cognitive experiences, which are not captured in these examples.

A common way to show this is through the use of *contrast arguments*. Consider, for example, Jack and Jacques, who speak only English and French respectively, as they listen to the same radio broadcast in French.<sup>4</sup> It seems that their sensory phenomenology at such time is identical—they both listen to the same broadcast. But there is a difference. Jack experiences the broadcast as a stream of meaningless sounds, whereas Jacques experiences that same stream of sounds as meaningful—he has what Moore referred to as ‘some act of consciousness—*over and above* the hearing of the words which may be called the understanding of their meaning.’<sup>5</sup> Strawson calls this ‘understanding-experience,’ and suggests that given the similarity of the sensory phenomenology in both cases, the difference must be explained by another kind of experience—cognitive phenomenology.<sup>6</sup> Horgan and Tiensen prompt a similar intuition without the need to imagine someone else’s experience: contrast your first and subsequent readings of the sentence, ‘dogs dogs dog dog dogs.’<sup>7</sup> No

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<sup>3</sup> G Major of course—the D is really an oboe concerto, although the flute transcription is superior. For some famous descriptions of ‘what it is like,’ see Thomas Nagel, “What Is It Like to Be a Bat?,” *The Philosophical Review* 83, no. 4 (1974); Chalmers, *The Character of Consciousness*.

<sup>4</sup> Strawson, *Mental Reality*, 5-13.

<sup>5</sup> See the essay on ‘Propositions’ in G. E. Moore, *Some Main Problems of Philosophy*, Muirhead Library of Philosophy (London: Allen & Unwin, 1953), 57.

<sup>6</sup> Strawson, *Mental Reality*, 5-13.

<sup>7</sup> Terence Horgan and John Tiensen, “The Intentionality of Phenomenology and the Phenomenology of Intentionality,” in *Philosophy of Mind: Classical and Contemporary Readings*, ed. David J. Chalmers (New York: Oxford University Press, 2002), 523.

doubt the first reading involved only confusion, but once the sentence ‘clicks,’ you grasp the sentence in a meaningful way.<sup>8</sup>

Another type of argument sidesteps any direct appeal to a particular phenomenology, claiming instead that the existence of cognitive phenomenology provides the best explanation for epistemological facts about our mental states. These arguments note that we have the ability to know our cognitive states in a way that is non-inferential, quite unlike how we know other’s mental states. We know that we are thinking about *X* rather than *Y* in a way that others cannot without adverting to our behaviour.<sup>9</sup> We also know that we *desire* rather than *believe* there to be scotch in the cupboard without waiting to see if we go to the shop or the cupboard when we want a drink.<sup>10</sup> It thus seems like we have some form of observation-like, knowledge-by-acquaintance of our conscious occurrent states.<sup>11</sup> What explains this ability? The best explanation, some have argued, is that there is an irreducible, unique phenomenology of thought, which individuates both mental content and attitude type.<sup>12</sup>

You might not be convinced. Perhaps Jack and Jacques actually have subtly different aural experiences—maybe Jacques’ auditory stream is segmented into discrete words—and that explains all of the phenomenal differences between the cases.<sup>13</sup> And even if you concede

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<sup>8</sup> Compare it to ‘cats dogs chase catch mice,’ while remembering that ‘dog’ can be a verb in English. Ibid. A more extreme example that prompts the same intuition is Pitt’s ‘Buffalo buffalo buffalo buffalo buffalo buffalo.’ Pitt makes a similar point by appealing to garden-path sentences and centre-embedded sentences like ‘the boy the man the girl saw chased fled.’ David Pitt, “The Phenomenology of Cognition or What Is It Like to Think That P?,” *Philosophy and Phenomenological Research* 69, no. 1 (2004): 27-28.

<sup>9</sup> Behaviour like verbal assent to questions about what we were thinking, whether we acted in ways expected of those thinking certain thoughts about *X* rather than *Y*, and so on. In addition, we might appeal to things like whether a person was in sensory contact with *X* or *Y* at the time. In all cases, we are still making best guesses only. “The Phenomenology of Cognition or What Is It Like to Think That P?,”

<sup>10</sup> The attitude-specific phenomenology version of the argument is made by Alvin I. Goldman, “The Psychology of Folk Psychology,” *Behavioral and Brain Sciences* 16, no. 01 (1993).

<sup>11</sup> Pitt, “The Phenomenology of Cognition or What Is It Like to Think That P?,” 9.

<sup>12</sup> In later work, Pitt has argued even more strongly for the same thesis, claiming that given that other conscious states, *qua* conscious states, are individuated by their phenomenology (e.g. visual versus auditory), the burden of proof lies on anyone who denies this in the case of cognitive states. “Introspection, Phenomenality, and the Availability of Intentional Content,” in *Cognitive Phenomenology*, ed. Tim Bayne and Michelle Montague (Oxford: Oxford University Press, 2011).

<sup>13</sup> For examples, see Jesse J. Prinz, “The Sensory Basis of Cognitive Phenomenology,” *ibid.*; Michael Tye and Briggs Wright, “Is There a Phenomenology of Thought?,” *ibid.*; Joseph Levine, “On the Phenomenology of Thought,” *ibid.*

that we do have some direct knowledge of our mental states, perhaps you could argue that some type of reliabilist mechanism, say, might be able to explain this without the need to invoke a distinct type of phenomenology.<sup>14</sup> In fact, even some who endorse cognitive phenomenology, like Kriegel and Chudnoff, have accepted the weight of some of these challenges, and proposed alternative arguments aimed to avoid them.<sup>15</sup>

Having acknowledged these worries, my aim is to ask whether a cognitive phenomenological account of beliefs is able to make a contribution to the debate over delusions. For this reason, I am simply going to adopt a thesis about cognitive phenomenology, before moving on to give a cognitive phenomenological account of beliefs. If that account offers some insight into delusions, and fits with empirical evidence and current scientific theories, I take it that this in itself is further support for the existence of cognitive phenomenology.

The thesis I adopt is that the above examples point out an *irreducible* type of phenomenology. To borrow Chudnoff's formulation, 'some cognitive states put one in phenomenal states for which no wholly sensory states suffice.'<sup>16</sup> That is, cognitive states, such as understanding a sentence, or believing that P, are such that they make a phenomenal difference that is not reducible to the phenomenal differences made by sensory states.

### 4.3 A Cognitive Phenomenological Account of Beliefs

Cognitive phenomenology opens up a new way of identifying and delineating cognitive mental attitudes. One attitude that has been given such treatment, quite successfully, is intuition, an important attitude to describe and delineate if you are a philosopher. Bealer thus

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<sup>14</sup> I do not think this is the case, and I think that Pitt's argument can withstand such critiques, but for examples of these criticisms see Levine (2011) and Tye and Wright (2011). "On the Phenomenology of Thought," 106-07; Michael Tye and Briggs Wright, "Is There a Phenomenology of Thought?," *ibid.*, 340.

<sup>15</sup> Kriegel critiques the existing accounts and offers a new zombie argument, the Zoe argument, in Kriegel, *The Varieties of Consciousness*, 40-41, 53-65. Similarly, Chudnoff critiques existing accounts, including even Kriegel's Zoe argument, and offers his solution to these issues, the 'glossed phenomenal contrast argument,' in chapter 2 of Chudnoff, *Cognitive Phenomenology*, 44-61.

<sup>16</sup> *Cognitive Phenomenology*, 15.



argues that ‘when you have the intuition that A, it seems to you that A,’ where seems is understood ‘as a term for a genuine kind of conscious episode.’<sup>17</sup> In his own description of this conscious episode, Chudnoff argues that intuition presents an abstract state of affairs as being a certain way in the same manner that perception presents a concrete state of affairs as being a certain way.<sup>18</sup> These treatments see the attitude of intuition as phenomenally individuated from other attitudes.

In this section I present a similar treatment of belief. I begin by considering five philosophers who have discussed the distinctive experiential aspects of belief, before turning to a formal, cognitive phenomenological analysis of belief which captures these views. I include these examples not only as an expository tool, but also as an important corrective to the focus on the rational, functional, decision-theoretic aspects of belief that have been emphasised in the doxastic debate.

#### 1. Searle<sup>19</sup>

First, we do not *postulate* beliefs and desires to account for anything. We simply experience conscious beliefs and desires. Think about real-life examples. It is a hot day and you are driving a pickup truck in the desert outside of Phoenix. No air conditioning. You can’t remember when you were so thirsty, and you want a cold beer so bad you could scream. Now where is the “postulation” of a desire? [...] [these states] are no more postulated than conscious pains. Second, beliefs and desires sometimes cause actions, but there is no essential connection. Most beliefs and desires never issue in actions. For example, I believe that the sun is 94 million miles away, and I would like to be a billionaire. Which of my actions do this belief and this desire explain? That if I want to buy a ticket to the sun I will be sure to get a 94-million-mile ticket? That the next time somebody gives me a billion, I won’t refuse? [...] Beliefs and desires [...] were not postulated as part of some special theory, they are actually experienced as part of our mental life.

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<sup>17</sup> George Bealer, "Intuition and the Autonomy of Philosophy," in *Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry*, ed. Michael DePaul and William Ramsey (Maryland: Rowman & Littlefield, 1998), 207. For another interesting account, see O. Koksvik, "Intuition" (Ph.D., Australian National University, 2011).

<sup>18</sup> Elijah Chudnoff, *Intuition* (Oxford: Oxford University Press, 2013), 1. See also "What Intuitions Are Like," *Philosophy and Phenomenological Research* 82, no. 3 (2011).

<sup>19</sup> Searle, *The Rediscovery of the Mind*, 59-60.

2. Cohen<sup>20</sup>

Belief that p is a disposition, when one is attending to issues raised, or items referred to, by the proposition that p, normally to feel it true that p and false that not-p, whether or not one is willing to act, speak, or reason accordingly [...] The standard way to discover whether you yourself believe that p is by introspecting whether you are normally disposed to feel that p when you consider the issue [...] By acquiring new beliefs you widen the range of feelings that you are disposed to have.

3. Horgan and Tiensen<sup>21</sup>

Each specific occurrent intentional state with phenomenal intentional content is constitutively determined by its own distinctive phenomenal character—viz., the what-it's-like of undergoing that particular attitude-type vis-à-vis that particular phenomenal intentional content [...] Suppose, for example, that you are now undergoing a psychological state with the distinctive phenomenal what-it's-like of believing that there is a picture hanging crooked on a wall directly behind you; undergoing this phenomenology constitutively determines that you are instantiating that belief-state.

4. Russell<sup>22</sup>

“What is happening in me when I have the belief which I express by the sentence S?” [...] All that can be said definitely is that I am in a state such as, if certain further things happen, will give me a feeling which might be expressed by the words “quite so” [...] belief consists in an idea or image combined with a yes-feeling.

5. Flanagan<sup>23</sup>

In our phenomenology, beliefs [...] are experienced differently from desires, and desires differently from expectations [...] The qualitative feel of propositional-attitude states is underestimated.

Some points to note. The examples suggests a separation of the epistemic, third-person-observable features by which we *attribute* beliefs to others from an account of what beliefs *are*. This reflects a commitment to the separation of epistemology and metaphysics, something I claimed alternative accounts failed to do. In line with this, the examples suggest that the relationship between belief and behaviour is not constitutive but rather a contingent empirical fact. Of course, if we really do believe something, then as long as a range of

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<sup>20</sup> Laurence Jonathan Cohen, *An Essay on Belief and Acceptance* (Oxford: Oxford University Press, 1992), 4-5.

<sup>21</sup> Horgan and Tienson, "The Intentionality of Phenomenology and the Phenomenology of Intentionality," 526.

<sup>22</sup> I have left out of this quote Russell's distinction between static beliefs and beliefs involved in action, and it would be wrong to claim that he would agree with my points in any straightforward sense. But at least in so far as occurrent states, this quote speaks for itself. Bertrand Russell, *Human Knowledge: Its Scope and Limits*, Routledge Classics (London: Routledge, 2009), 134.

<sup>23</sup> Owen J. Flanagan, *Consciousness Reconsidered* (Cambridge, MA: MIT Press, 1992), 67-68.

background conditions are true, then we probably will act on it. But this is not definitive of belief in the way it is in those accounts which focus on third-person belief ascription.

As to what beliefs *are*, two things are worth noting. First, the examples suggest that beliefs are partly constituted by what it is like to experience them: there is some unique experience of belief, some feeling of assent in the presentation of an idea, which constitutes our believing it. Second, as Cohen noted, there is something dispositional about beliefs: it is not enough to talk about their conscious features. Even when I am asleep, it is still true to say of me that ‘Peter believes that writing a thesis is hard work.’

In line with these points, I here outline a cognitive phenomenological view of beliefs, a view based directly on that given by Kriegel.<sup>24</sup> On this view, beliefs are dispositions to have certain intentional, occurrent mental states whose phenomenal character is that of ‘judging that P.’ More specifically, on this view, S believes that P iff S is disposed to immediately judge that P when P-entertaining-triggers obtain.<sup>25</sup>

This needs unpacking. To begin, first consider the notion of entertaining a proposition.<sup>26</sup> Entertaining a proposition is an experience of considering or apprehending some proposition, while lacking any feeling of assent one way or another on its truth. For example, when one reads a complex proposition in philosophy, at first one is engaged with merely holding the proposition before one’s mind and trying to grasp it, to figure out its meaning and potential implications.<sup>27</sup> Such entertaining is ‘doxastically neutral’ in that involves no felt sense of affirmation in the truth of the proposition.<sup>28</sup>

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<sup>24</sup> Kriegel, *The Varieties of Consciousness*. I emphasise the way the disposition should be categorically grounded, and avoid some complications, but otherwise, as should be clear from my citations, I think that Kriegel’s account is largely correct.

<sup>25</sup> Ibid., 123. I here avoid Kriegel’s (pp. 119-124) attempted reduction of ‘judging’ to entertaining plus affirming, and thus what would otherwise be direct quotes from Kriegel are slightly adjusted.

<sup>26</sup> Ibid., 97-119.

<sup>27</sup> Ibid., 101.

<sup>28</sup> Ibid., 112.

Upon entertaining a proposition, we may *judge* that it is true. In doing so, we have a sense of ‘coming down’ one way or the other on the truth of the proposition.<sup>29</sup> As a first approximation, we can think of this judging as involving the range of feelings described in the earlier quotes. When we judge some proposition to be so, we feel what Cohen called ‘credal feelings,’ a sense of mental affirming, as we entertain the proposition.<sup>30</sup> We can further grasp this feeling by contrasting it with its absence when one is merely entertaining a proposition. More specifically, this feeling typically has the felt sense of being in some way involuntary, in that one feels *pushed* into this affirming of the proposition. One also feels pushed in a certain way, in that there is a felt sense of being rationally compelled towards the mental affirming, and a felt sense of that affirming being ‘reason-responsive.’<sup>31</sup> Moreover, the felt sense of mental affirming comes in a certain degree or force, of which it is natural to say that a person believes a proposition with a certain amount of conviction.<sup>32</sup> On this account, then, to judge is to have an occurrent, cognitive-phenomenological experience delineated by these characteristics.<sup>33</sup>

The notion of ‘P-entertaining triggers’ captures the fact that we may be disposed to judge that P, and thus to believe that P, even though we may not ever entertain P unless prompted to do so. Consider the result if we remove this clause, and say that S believes that P iff S is disposed to judge that P.<sup>34</sup> This makes belief too narrow, for it requires that to believe a proposition we must in some way be disposed to consider the proposition and have the

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<sup>29</sup> Ibid., 66. Horgan and Timmons use this phrase also. Terrance Horgan and Mark Timmons, "Moorean Moral Phenomenology," in *Themes from GE Moore: New Essays in Epistemology and Ethics*, ed. Susana Nuccetelli and Gary Seay (Oxford: Oxford University Press, 2007), 214.

<sup>30</sup> Cohen, *An Essay on Belief and Acceptance*, 11. Kriegel, *The Varieties of Consciousness*, 65.

<sup>31</sup> *The Varieties of Consciousness*, 67.

<sup>32</sup> On the individuation of degrees of belief by the phenomenal sense of conviction in occurrent judgements, see Declan Smithies, "The Mental Lives of Zombies," *Philosophical Perspectives* 26, no. 1 (2012).

<sup>33</sup> Kriegel builds an extensive Ramsey sentence from these features, but here I am sticking to a core set of features. See Kriegel, *The Varieties of Consciousness*, 65.

<sup>34</sup> I here again avoid Kriegel’s attempted reduction of judging. Kriegel claims that judging can be thought of as entertaining-plus-something, perhaps a sense of affirming, and that this characterisation might best bring out the similarity felt between merely entertaining a proposition and making a judgement on it (pp. 119-124). I think that this is quite possibly correct, although I avoid the complexity here.

judgement in question. Surely though, we can have beliefs about which we are not inclined to even think about outside of certain circumstances. Rather, when we have a belief we are in some way ‘set’ or ‘ready’ to affirm a proposition *if* this proposition comes before our mind, even though we are not necessarily disposed to entertain the proposition otherwise. For this, Kriegel suggests the notion of ‘P-entertaining triggers,’ the conditions under which we would consider a proposition—being asked about P, reading about it, and so on.<sup>35</sup>

Moving on, the ‘immediately’ condition exists to avoid casting the belief net too wide. Without this condition we would need to say that any proposition that we would judge to be true upon entertaining it is thereby a belief. But there must be billions of highly specific such propositions, like the proposition that ‘83 is the lowest prime that begins with 8.’ If this proposition were suggested to me, I would judge it to be true, given enough time to consider it. But even though I would eventually come to judge it true, it does not seem right to say that I *already* believed it.

To account for such cases, Kriegel suggests that we need to capture the difference between *having* a belief already, and *forming* a belief after entertaining some new proposition and coming to assent to it. When one is disposed merely to judge some proposition true after entertaining it for a while, but not to do so in an *immediate*, unmediated fashion, then this is not an existing belief. When we believe a proposition, we are set to have a felt sense of affirmation in some kind of immediate, non-inferential way, upon entertaining it. In sum, S believes that P iff S is disposed to immediately judge that P when P-entertaining-triggers obtain.<sup>36</sup>

Finally, we must consider what the dispositional element of the above characterisation involves. On my account, to be disposed to have occurrent judgements is for one’s neural system to be set such as to trigger the relevant occurrent state in response to the triggering

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<sup>35</sup> Kriegel, *The Varieties of Consciousness*, 123.

<sup>36</sup> Ibid.

conditions. It is for one's neural system to be 'set' in such a way that when P is considered, suggested to one, etc., one is apt to feel a sense of 'rightness'—an immediate, non-inferential 'judgement that P.' This neural state is the 'truth-maker' of the disposition, the categorical grounds in virtue of which a belief ascription can be true.<sup>37</sup> This is in contrast to the view offered by Schwitzgebel, in which an ascription of a dispositional belief was considered to be true just in so far as some counterfactual statement held.<sup>38</sup> This cognitive phenomenological view is thus completely realist about the existence of beliefs, and realist about the experiential aspect of beliefs.<sup>39</sup> As we will see, this provides an advantage over other views when defending doxasticism.

#### 4.4 The Cognitive Phenomenological Defence of Doxasticism

For the cognitive phenomenological view to work as a defence of doxasticism, it has to count delusions as beliefs. For it to work as a better defence than the accounts so far considered, it also needs to answer the anti-doxastic objections regarding rationality, and answer them in a way that is compatible with robust scientific doxasticism, something the other defences failed to do. In what follows, I consider how the cognitive phenomenological view would approach the example of the Capgras delusion, and argue that it meets these criteria. I use an imaginary patient—'Mrs X'—as an amalgam of a number of Capgras patients, so as to provide a stark example of a highly circumscribed, irrational delusion. If cognitive phenomenology counts this as a belief, and does so in a robust way, then it is reasonable to suppose that it generally does so for most delusions.<sup>40</sup>

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<sup>37</sup> This view of the categorical grounds of dispositional belief states is given in the 'Appendix' of Strawson, *Mental Reality*.

<sup>38</sup> Schwitzgebel, "A Phenomenal, Dispositional Account of Belief," 250. Although, it should be said that Schwitzgebel does not entirely commit to a position on this.

<sup>39</sup> I take the summary on page 319 of Strawson (2010) to contain a useful list of some of the ways my view differs from the interpretationist and dispositional views I have considered in this thesis. Strawson, *Mental Reality*, 319.

<sup>40</sup> Of course, on my view, whether something is a belief is an empirical matter of fact, so this is still something to be decided on a case-by-case basis. On which, more later.

Mrs X is a Capgras patient who asserts, repeatedly and sincerely, to clinicians and her family, that her husband has been replaced by an imposter.<sup>41</sup> (These assertions are not random—if you never asked about her husband you might never know she had Capgras; but when asked, she will insist he is an imposter.) Despite this, she continues to interact with the supposed imposter, sometimes acting as if they were courting in the beginning of a new relationship.<sup>42</sup> She is sometimes confused that this other person is not her real husband, but is not terribly distressed, and does not call the police or search for her husband.<sup>43</sup> What would my account say about Mrs X?

First, note that one nice move that the cognitive phenomenological view makes possible is to take Mrs X's assertion, completely by itself, as strong evidence that she believes what she says. This is because the cognitive phenomenologist has a story about the means by which a person has acquaintance-knowledge of their beliefs—the phenomenology of the belief itself: the asserter is reporting on their experience, and we have good reason to accept such reports (we can take them at face value in the same way we would take a person's report of 'seeing red' at face value). Indeed, the cognitive phenomenological view seems to be the best explanation for the way we handle such assertions. As Flanagan states: 'when a person says, "I believe that snow is white," there is almost never any doubt that she is in a state of belief rather than a state of desire. How should we explain this? The best answer is that there really is a certain way it feels to be believing something and that way of feeling is different from the way it feels to be desiring something.'<sup>44</sup>

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<sup>41</sup> This feature I take from the fact that all delusional patients make such assertions, otherwise they would never come to our attention. Coltheart often makes this point. Coltheart, Langdon, and McKay, "Delusional Belief," 275.

<sup>42</sup> I take this from the description of a Capgras patient and his wife, so-called 'Fred' and 'Wilma,' described in F. Lucchelli and H. Spinnler, "The Case of Lost Wilma: A Clinical Report of Capgras Delusion," *Neurological Sciences* 28, no. 4 (2007): 189. (On a personal note, I should say that I dislike the use of names like this in the study of psychopathological patients, and I think initials or nondescript names should be used instead.)

<sup>43</sup> I take this aspect from a patient's report recounted in Andrew Sims, *Symptoms in the Mind: An Introduction to Descriptive Psychopathology* (Bailliere Tindall, 1988), 97. There, the woman describes the imposter as having a bit of a 'cheek' for pretending, and is confused as to his identity, but does not sound all that distressed.

<sup>44</sup> Flanagan, *Consciousness Reconsidered*, 67-68.

This move is not open to the interpretationist or the dispositionalist. Interpretationism, even Bortolotti's restricted interpretationism, requires a range of features for belief ascription—an interpretationist would need to examine someone like Mrs X in search of these features (the project Bortolotti undertakes in her work). The dispositionalist would say that mere verbal assertion is not enough to be a belief, although perhaps we could somehow envisage a communicative situation in which we might want to *call* it a belief.

And yet, this move from assertion to belief seems natural and legitimate. As the Rose et al study showed, the folk use assertion as a key indicator of belief, and assertion is also key for clinicians and scientists.<sup>45</sup> I argued that it was strange that the interpretationist and dispositionalist were out of step on this point. It is an advantage that the cognitive phenomenologist allows this move, and it is doubly advantageous that the cognitive phenomenologist can give a theoretical *reason* why we should take assertion as *prima facie* evidence. Per my account, the folk, clinicians, and scientists were not just fetishizing a particular aspect of belief—they were right to count 'mere' assertion as evidence of belief.

There is a further reason to think Mrs X's delusion is a belief on the cognitive phenomenological account. Recall that it seems to be possible to produce delusions in the hypnosis laboratory. When you give people certain suggestions, you can produce in them what looks for all intents and purposes like a delusion, and such subjects are often referred to as 'virtual patients.' When asked to reflect on this experience afterwards, subjects use language which seems to match the cognitive phenomenological view of beliefs, describing their reported belief as something they 'know' to be true at the time.<sup>46</sup>

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<sup>45</sup> Remember the Rose et al study that revealed the importance of assertion to folk attribution of belief. Rose, Buckwalter, and Turri, "When Words Speak Louder Than Actions: Delusion, Belief, and the Power of Assertion." Assertion is also important to clinicians and to cognitive neuropsychiatrists, as we have seen. Coltheart, Langdon, and McKay, "Delusional Belief."

<sup>46</sup> Michael H. Connors et al., "Mirror Agnosia and the Mirrored-Self Misidentification Delusion: A Hypnotic Analogue," *Cognitive Neuropsychiatry* 17, no. 3 (2012): 210.



So, on the one hand, hypnotic delusions seem to be related to real delusional examples, and on the other hand, subject's descriptions of this experience sound very much like beliefs on the cognitive phenomenological view. The cognitive phenomenological view explains this by saying that this is because the hypnotic example and Mrs X's delusion are both beliefs. Interpretationism and dispositionalism, seemingly, would at least need to look more closely at the phenomena before deciding that they are beliefs, given their irrational features like the way they are formed without evidence. But the simplest explanation is that these phenomena all look similar because they are one thing: belief.<sup>47</sup>

On the cognitive phenomenological view, then, it looks like Mrs X's delusion is a belief: she seems to be having the experience of judging that her husband has been replaced by an imposter, and given her ongoing assertions to that effect whenever she is queried about the topic, it seems like she is stably disposed to have such judgements. That is good. But what about the anti-doxastic objections? Mrs X's delusion displays failures of procedural, epistemic, and agential rationality—I constructed her that way—failings typically thought to disqualify something as a belief.

The cognitive phenomenological view allows us to meet these objections head on and reject them outright. If a person has the disposition to have an occurrent judgement—as it seems Mrs X does—then on the cognitive phenomenological view, the person believes the content of that judgement. And if a person seems to have such a belief, but fails to draw inferences from their belief, use counter-evidence to question the belief, or offer evidence in support of the belief, then this just shows that belief can occur in the absence of these features. Such occurrences may not be the norm, but the cognitive phenomenological view allows for them. As Cohen stated, 'belief that p is a disposition [...] normally to feel it true

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<sup>47</sup> This also helps explain why scientists call these hypnotic examples beliefs. As just one example: 'All the participants who experienced the delusion maintained their belief throughout these challenges.' Michael H Connors et al., "Mirrored-Self Misidentification in the Hypnosis Laboratory: Recreating the Delusion from Its Component Factors," *ibid.*, no. 2: 155.

that p [...] *whether or not one is willing to act, speak, or reason accordingly*' (my emphasis).<sup>48</sup>

The cognitive phenomenological view can thus take the traditional rationality constraints merely as normative standards on beliefs, rather than as anything constitutive. This is superficially similar to the way that the interpretationist and dispositional defences argued that traditional rationality constraints are too strong and over-idealized, but it goes further in saying that these rational features are truly contingent to belief.

It should be noted, though, that I do not want to go so far as to claim that the connection between belief and behaviour is so completely loose that there is absolutely no truth in certain conceptual claims one could make. For example, I think Strawson is right when he claims that if we build in enough counterfactual qualifications, certain of the functionalist's conceptual truths may really be correct. Strawson gives the following example:<sup>49</sup>

If, at a given time, being *B* [1] had desired *D*, [2] believed there was something it could then do about satisfying *D*, [3] believed in particular that  $\phi$ -ing was the best or only way of trying to satisfy *D*, [4] believed itself able to  $\phi$ , [5] had no equally strong or stronger countervailing desire *D'* that it believed it could do something about, [6] was in fact capable of action, [7] was, more particularly, able to  $\phi$ , or was at least capable of trying to  $\phi$ , then, *ceteris paribus*, [8] *B* would  $\phi$ , or attempt to  $\phi$ .

Statements similar to these, perhaps with further additions, are likely correct, but this is very far from traditional functionalist claims. The counterfactuals here are so broad that the statement really does not add up to a necessary, conceptual link between belief and behaviour. The link is not definitional, but rather it is the case that given what beliefs are, in their essence, they are such that given certain conditions, they would typically result in certain behaviour.

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<sup>48</sup> Cohen, *An Essay on Belief and Acceptance*, 4.

<sup>49</sup> Strawson, *Mental Reality*, 275.

Jettisoning the conceptual connection between behaviour and belief, and taking a realist view of the experiential nature of belief, fits well with robust scientific doxasticism about delusions. Notice that in describing Mrs X as believing that her husband has been replaced by an imposter, and in answering the anti-doxastic objections, the cognitive phenomenological view has not switched to defending merely the pragmatic utility of saying that Mrs X has a belief. Rather, this view focuses on substantive, empirical, internal facts about Mrs X, namely her continuing propensity to have concrete, experiential episodes of a certain character when thinking about her husband. On this view, Mrs X's delusions is *unequivocally* a belief.

The above account thus counts delusions as beliefs, can answer the anti-doxastic objections, and does all of this in a way that fits with robust scientific doxasticism about delusions. It also has some fortuitous convergences with the general scientific study of states like delusions. Recall that the common mode of explanation in cognitive science is mechanistic explanation, wherein a mental phenomenon is set off and explained by elucidating the mechanisms which give rise to it. An important part of this process, per Bechtel, is the proper identification of the phenomenon to be explained, a process termed 'phenomenal decomposition.'<sup>50</sup> Bechtel gives the example of Tulving's classification of different memory systems, including episode and semantic memory. Episodic memory was defined by Tulving as involving a particular kind of conscious experience, a certain 'experiential "flavor" of remembering' in which one can 're-experience' one's past experiences specifically *as* one's own past experiences, something Tulving called 'autonoetic awareness.'<sup>51</sup> This ability to travel into one's past is unique to this form of memory, and

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<sup>50</sup> Bechtel, *Mental Mechanisms: Philosophical Perspectives on Cognitive Neuroscience*, 50. Bechtel points to other, behavioural methods of decomposition of memory, which Tulving also made reference to, but the point applies equally well to Tulving's phenomenal approach.

<sup>51</sup> Endel Tulving, "Episodic Memory: From Mind to Brain," *Annual Review of Psychology* 53, no. 1 (2002): 4-5.

unmistakable: 'the awareness and its feeling-tone are intimately familiar to every normal human being,' and totally unlike any other kind type of mental experience.<sup>52</sup>

Bechtel criticizes the way theorists like Tulving proliferated these so-called 'memory systems,' but claims that this kind of delineating activity does have a use. That is, while such delineating activity does not actually *explain* anything, it is at least useful in that it carefully partitions the various phenomena in need of explanation. This is important because it is crucial to properly delineate the phenomena one is aiming to describe: 'failing to differentiate phenomena that are really different from each other can result in proposed explanations that fail to adequately account for the full character of the phenomena [...] hence [...] phenomenal decompositions [...] play an important role as a prolegomena to explanation.'<sup>53</sup>

The cognitive phenomenal description of beliefs can play this role in the science of beliefs. Firstly, if there really is a shared, uniquely identifying phenomenology associated with a particular mental state, this marks that state out as a single phenomenon which is to be explained. And unlike the interpretationist and dispositional views, the cognitive phenomenological view does not try to include things in the description of belief that seem not to belong: claiming that belief is a phenomenon characterised by actions, emotions, and phenomenal states is to lump a range of (related but distinct) phenomena into one thing.

By sticking to phenomenal description, the cognitive phenomenological view rightly leaves the investigation of the mechanisms which give rise to belief in the hands of scientists. I think that this approach is the proper conception of the role of philosophy in relation to cognitive science. That is, rather than offer things like conceptual analyses, philosophers can help to phenomenally delineate mental phenomena.

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<sup>52</sup> "What Is Episodic Memory?," *Current Directions in Psychological Science* 2, no. 3 (1993): 68.

<sup>53</sup> Bechtel, *Mental Mechanisms: Philosophical Perspectives on Cognitive Neuroscience*, 61.

A similar approach has been advocated in the hallucinations literature. There, it is sometimes argued that hallucinations (or at least a subclass of them) are phenomenally indistinguishable from perceptual experiences, and thus are fundamentally the same kind of mental state.<sup>54</sup> Of course, hallucinations are not normal perceptual experiences, they are *degenerate* perceptual experiences, but the nature and origin of that degeneracy will need to be spelled out in third-person terms by cognitive science—the unique role that philosophy has to play in the process is on the side of phenomenological description and individuation.<sup>55</sup>

Similarly, my view attempts to describe the phenomenology of beliefs and delusions; it is up to cognitive science to elucidate the relevant degeneracy in delusions, and answer other questions about such states. Cognitive science should tell us how it is possible for beliefs to manifest themselves in behaviour, to respond to evidence, to affect other beliefs and so on, and what the neural substrates of such activity are.

Science is beginning to answer these questions. Interestingly, cognitive neuropsychology has already advanced work on the neural basis of the ‘feelings of rightness’ involved in believing something.<sup>56</sup> This looks like a happy convergence with the cognitive phenomenological feel of beliefs outlined above. Additionally, cognitive neuropsychiatry has provided some answers as to what is going wrong with the belief mechanism in delusions. The two-factor theory has begun to identify some faulty inputs to the belief system in various delusions (like the face-perception breakdown in Capgras patients), and biases in certain people’s belief formation mechanisms that can lead to delusions (like jumping to conclusions).<sup>57</sup> And each of these factors has been linked to particular neural substrates. On

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<sup>54</sup> For some review and opposition, see Keith Allen, "Hallucination and Imagination," *Australasian Journal of Philosophy* 93, no. 2 (2015).

<sup>55</sup> Fabian Dorsch, "The Unity of Hallucinations," *Phenomenology and the Cognitive Sciences* 9, no. 2 (2010): 175.

<sup>56</sup> Langdon and Connaughton, "The Neuropsychology of Belief Formation," 20.

<sup>57</sup> Dudley et al., "Reasoning and Delusions: Do People with Delusions Really Jump to Conclusions?."

the cognitive phenomenological view I have put forward, these questions are rightly empirical questions, questions about the phenomenon described by the cognitive phenomenologist.

#### 4.5 Promising Lines of Investigation

The account I have provided leaves some open questions, and also offers up some potentially fruitful questions in the study of delusions. First, this account leaves an open question about whether *every* instance of what is counted as a delusion is actually a belief: perhaps some things look like delusions but are somehow phenomenally different.<sup>58</sup> And where delusions are beliefs on this account, do they differ phenomenally in any way from normal beliefs, such as in their felt intensity?

The notion of cognitive phenomenology allows these ideas to be brought into focus as important objects of investigation. There are a number of ways in which this investigation might proceed. For example, as we have seen, it has been hypothesised that the use of instrumental hypnosis can be used to create ‘virtual patients,’ and to prompt in them the kinds of experiences shared by delusional patients. The delusions prompted in this setting share all of the strange circumscription in behaviour and cognition as real delusions. If this is true, we might learn much by further exploring the experience that such patients have, through more extensive use of techniques such as the post-hypnotic ‘Experiential Analysis Technique,’ in which subjects are questioned about their hypnotic experiences after the fact.<sup>59</sup> We can thus explore what kinds of experiences hypnotic subjects have in terms of levels of conviction and other phenomenal variables.

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<sup>58</sup> Although, as I have said, the evidence seems to point towards belief. But it is important that the classification is an empirical one, and thus it may turn out to be wrong in some instances. In what follows, I consider some of the methods that might be used in investigating this question further.

<sup>59</sup> See this put to use in Connors et al., "Mirror Agnosia and the Mirrored-Self Misidentification Delusion: A Hypnotic Analogue."

There is also room for further use of introspective techniques. Such techniques are beginning to gain wider use in cognitive science and psychopathology.<sup>60</sup> For instance, the ‘Descriptive Experience Sampling’ espoused by Hurlburt offers an attempt to sharpen the use of introspection while avoiding well-known pitfalls.<sup>61</sup> This method has also been applied to experiences related to inner thought.<sup>62</sup> This is surely a technique that can be extended to understanding the nature of belief experience in relation to delusions.

Further, cognitive phenomenology allows us to investigate the relation between belief and other psychopathological states like confabulation. One initial thought might be that confabulations are phenomenally similar but do not ‘stick’ in the dispositional way beliefs do. Perhaps these are better thought of merely as fleeting occurrent judgements—phenomenally similar to beliefs but with no underlying dispositional stability.

A focus on these aspects of cognitive phenomenology in delusional patients thus offers the potential for insight even outside of the doxastic debate. Already there has been fruitful work on the phenomenology of agency—a hot topic in cognitive phenomenology—as it relates to delusions like ‘thought insertion,’ in which patients believe that thoughts are being inserted into their head.<sup>63</sup> I think that engaging with the explicitly cognitive phenomenological literature on these topics would be an advantage to the study of delusions,

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<sup>60</sup> Aaron L. Mishara and Paolo Fusar-Poli, "The Phenomenology and Neurobiology of Delusion Formation During Psychosis Onset: Jaspers, Truman Symptoms, and Aberrant Salience," *Schizophrenia Bulletin* 39, no. 2 (2013); Aaron L.; Parnas Mishara, Josef; Naudin, Jean, "Forging the Links between Phenomenology, Cognitive Neuroscience, and Psychopathology: The Emergence of a New Discipline," *Current Opinion in Psychiatry* 11, no. 5 (1998).

<sup>61</sup> Russell T. Hurlburt and Eric Schwitzgebel, *Describing Inner Experience? Proponent Meets Skeptic*, Life and Mind (Cambridge, Mass.: MIT Press, 2007).

<sup>62</sup> Russell T. Hurlburt, Christopher L. Heavey, and Jason M. Kelsey, "Toward a Phenomenology of Inner Speaking," *Consciousness and Cognition* 22, no. 4 (2013).

<sup>63</sup> Interestingly enough, some of the most fascinating work in this area, I would argue, has been done by philosophers who have worked on topics such as phenomenal intentionality like George Graham. G. Lynn Stephens and George Graham, *When Self-Consciousness Breaks: Alien Voices and Inserted Thoughts*, ed. Owen Flanagan and George Graham, *Philosophical Psychopathology: Disorders in Mind* (Cambridge, MA: MIT Press, 2000); "Self-Consciousness, Mental Agency, and the Clinical Psychopathology of Thought Insertion," *Philosophy, Psychiatry, & Psychology* 1, no. 1 (1994). Despite this fruitful work, the crossover between the resurgence of cognitive phenomenology in the analytic literature and the literature on delusions is still impoverished. If anything, this work shows the kind of contributions that could be made with further attention to the cognitive phenomenological literature.

and allow it to expand a trend that has obviously already taken off: from the phenomenological study of delusional experience to the cognitive phenomenological study of delusional experience.

Interestingly, the phenomenological study of delusions has often been seen in opposition to the work on delusions-as-beliefs; but I think this is a mistake. For example, Jaspers, the great phenomenological psychiatrist, saw the delusional experience as ‘radically alien to the healthy person,’ and others have similarly emphasised the delusional reality-shift and contrasted this with the experience of normal believers.<sup>64</sup> But I think that the cognitive phenomenological view can complement these views. I have focused on the narrow, judgement-experience of delusional patients, but this is obviously integrated into a wider experience of the world as delusional patients see it. And if what I have said is true, it is a useful and non-trivial fact that delusional patients have beliefs in the same sense that normal believers do, at least in terms of this narrow judgement experience. Not only is that worth knowing, but it may prove useful in scientific investigation. Moreover, further investigation could tell us more about the relation between these judgements and the wider delusional experience.

Finally, cognitive phenomenology opens up a range of conceptual questions that could be illuminating. For example, what is the relation between the *felt* sense of being reasons-responsive and being *actually* reasons-responsive? This is an important question not only for a general understanding of the nature of practical reason, but for the way it impacts the ethical

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<sup>64</sup> Jaspers, *General Psychopathology*, 196 Vol. I. Sass (1994, 3), similarly claimed that ‘many schizophrenic patients seem to experience their delusions ... as having a special quality or feel that sets these apart from the “real” beliefs and perceptions, or from reality as experienced by the “normal” person,’ and has been widely taken as coming to anti-doxastic conclusions on this basis (although he contests this classification (Sass, 2004)). More recently, Gallagher (2009) has claimed that this experiential reality shift in delusional patients is key to understanding delusions. Sass, *The Paradoxes of Delusion : Wittgenstein, Schreber, and the Schizophrenic Mind*; “Some Reflections on the (Analytic) Philosophical Approach to Delusion.”; Gallagher, “Delusional Realities.”



and legal judgements that we might want to make about delusions. If all beliefs feel rationally compelled, what do we say about delusions on matters of ethical and legal import?

In sum, even aside from the doxastic debate, the approach outlined in this thesis has the potential to promote empirical and conceptual work on beliefs and delusions on a variety of fronts.

## 4.6 Conclusion

In this chapter, I presented a cognitive phenomenological account of beliefs and used it to defend doxasticism. I argued that this account can serve as a direct defence of doxasticism in a way other accounts could not: the cognitive phenomenological view sees delusions as beliefs, and is able to answer the various anti-doxastic objections while maintaining robust realism about beliefs and delusions. On the doxastic status of delusions, the evidence strongly suggests that delusions are beliefs. On the anti-doxastic objections, the cognitive phenomenological view rejects the premises on which these objections are offered.

Moreover, the cognitive phenomenological approach opens up a number of potentially fruitful avenues of research. The notion of cognitive phenomenology allows us to think about the felt cognitive experience of delusions, and the various forms this may take. It also prompts a number of conceptual questions regarding the relation between the felt features of beliefs and the underlying processes which give rise to them.



## Conclusion

In this work, I defended two theses. Firstly, I argued for the negative thesis that the existing defences of doxasticism are flawed. They are based on views of belief that are anti-realist in nature (my weak thesis). This undermines their status as doxastic defences, given that the doxastic cognitive neuropsychiatric theories which they ostensibly seek to defend are realist about beliefs (my strong thesis). Secondly, I argued that there is a potential defence of doxasticism that is realist in nature, and thus provides a direct defence of cognitive neuropsychiatric theories—the cognitive phenomenological defence.

In chapter 2, I argued for the negative thesis against the interpretationist defence. For my weak thesis, I showed that the interpretationist view of beliefs is remarkably anti-realist about beliefs, something I claimed should be noted by those in the doxastic debate. I further demonstrated the realism of the cognitive-scientific approach, and showed that this realism is embodied in cognitive neuropsychiatric theories of delusions. I argued that if this is the approach of these theories, then any defence which seeks to vindicate their use of terms like ‘belief’ should also be realist in nature. That was my strong negative thesis.

In chapter 3, I argued for the negative thesis against the dispositional defence. For my weak thesis, I showed that even some dispositionalists recognize that the kind of belief ascription dispositionalism offers in the case of delusions is rather insubstantial, and argued that this should be noted in the doxastic debate. Moreover, by citing the views of cognitive neuropsychiatrists, I showed that this aspect of dispositionalism is problematic: doxastic cognitive neuropsychiatric theories have a realist view of beliefs, and it is not defended well by dispositionalism. This was my strong negative thesis.

In chapter 4, I put forward the cognitive phenomenological defence. I showed that the cognitive phenomenological view is realist about beliefs in a way that is compatible with cognitive neuropsychiatric theories. It also views delusions as beliefs, can answer the anti-

doxastic objections, and can do so in a way that is compatible with robust scientific realism about beliefs and delusions. That was my strong positive thesis. I also argued that the cognitive phenomenological view offers some interesting avenues for research, research that I hope to pursue in the future. This was my weak positive thesis.

In conclusion, I think the doxastic conception of delusions deserves to be defended. But if we want to do this, we should keep in sight what it is that we are trying to defend. The doxastic theories that we want to defend view beliefs and delusions as real, concrete phenomena, and any ‘defence’ of this conception should respect this. I have offered a view that I think has the potential to provide such a defence. In future work, I hope to develop this view further.

## Bibliography

- Adams, Fred, and Annie Steadman. "Intentional Action and Moral Considerations: Still Pragmatic." *Analysis* 64, no. 283 (2004): 268-76.
- Allen, Keith. "Hallucination and Imagination." *Australasian Journal of Philosophy* 93, no. 2 (2015): 287-302.
- APA. *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*. 5th ed. Washington, D.C.: American Psychiatric Association, 2013.
- Aronson, Elliot. "Dissonance, Hypocrisy, and the Self-Concept." In *Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology*, edited by E. Harmon Jones and J. Mills, 103-26. Washington (DC): American Psychological Association, 1999.
- Bayne, Tim. "Delusions as Doxastic States: Contexts, Compartments, and Commitments." *Philosophy, Psychiatry, & Psychology* 17, no. 4 (2010): 329-36.
- Bayne, Tim, and Elisabeth Pacherie. "Experience, Belief, and the Interpretive Fold." *Philosophy, Psychiatry, & Psychology* 11, no. 1 (2004): 81-86.
- . "In Defence of the Doxastic Conception of Delusions." *Mind & Language* 20, no. 2 (2005): 163-88.
- Bealer, George. "Intuition and the Autonomy of Philosophy." In *Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry*, edited by Michael DePaul and William Ramsey, 201-40. Maryland: Rowman & Littlefield, 1998.
- Bechtel, William. *Mental Mechanisms: Philosophical Perspectives on Cognitive Neuroscience*. New York: Psychology Press, 2008.
- Blashfield, Roger K, Jared W Keeley, Elizabeth H Flanagan, and Shannon R Miles. "The Cycle of Classification: DSM-I through DSM-5." *Annual Review of Clinical Psychology* 10 (2014): 25-51.
- Bortolotti, Lisa. *Delusions and Other Irrational Beliefs*. International Perspectives in Philosophy and Psychiatry. Oxford: Oxford University Press, 2010.
- . "In Defence of Modest Doxasticism About Delusions." *Neuroethics* 5, no. 1 (2012): 39-53.
- Bortolotti, Lisa, Rochelle Cox, and Amanda Barnier. "Can We Recreate Delusions in the Laboratory?." *Philosophical Psychology* 25, no. 1 (2012): 109-31.
- Breen, Nora, Diana Caine, Max Coltheart, Julie Hendy, and Corrine Roberts. "Towards an Understanding of Delusions of Misidentification: Four Case Studies." *Mind & Language* 15, no. 1 (2000): 74-110.
- Caramazza, Alfonso. "On Drawing Inferences About the Structure of Normal Cognitive Systems from the Analysis of Patterns of Impaired Performance: The Case for Single-Patient Studies." *Brain and Cognition* 5, no. 1 (1986): 41-66.
- Chalmers, David John. *The Character of Consciousness*. Oxford: Oxford University Press, 2010.
- Chudnoff, Elijah. *Cognitive Phenomenology*. London: Routledge, 2015.
- . *Intuition*. Oxford: Oxford University Press, 2013.
- . "What Intuitions Are Like." *Philosophy and Phenomenological Research* 82, no. 3 (2011): 625-54.
- Cohen, Laurence Jonathan. *An Essay on Belief and Acceptance*. Oxford: Oxford University Press, 1992.
- Colombo, Matteo, Stephan Hartmann, and Robert van Iersel. "Models, Mechanisms, and Coherence." *The British Journal for the Philosophy of Science* 66, no. 1 (2015): 181-212.
- Coltheart, Max. "The 33rd Sir Frederick Bartlett Lecture: Cognitive Neuropsychiatry and Delusional Belief." *The Quarterly Journal of Experimental Psychology* 60, no. 8 (2007): 1041-62.

- . "Assumptions and Methods in Cognitive Neuropsychology." In *The Handbook of Cognitive Neuropsychology: What Deficits Reveal About the Human Mind*, edited by Brenda Rapp, 3-22. Philadelphia: Psychology Press, 2001.
- . "From the Internal Lexicon to Delusional Belief." *Avant: Trends in Interdisciplinary Studies* V, no. 3 (2015): 19-29.
- . "On the Distinction between Monothematic and Polythematic Delusions." *Mind & Language* 28, no. 1 (2013): 103-12.
- Coltheart, Max, Robyn Langdon, and Ryan McKay. "Delusional Belief." *Annual Review of Psychology* 62, no. 1 (2011): 271-98.
- Connors, Michael H, Amanda J Barnier, Max Coltheart, Rochelle E Cox, and Robyn Langdon. "Mirrored-Self Misidentification in the Hypnosis Laboratory: Recreating the Delusion from Its Component Factors." *Cognitive Neuropsychiatry* 17, no. 2 (2012): 151-76.
- Connors, Michael H, Amanda J Barnier, Robyn Langdon, Rochelle E Cox, Vince Polito, and Max Coltheart. "A Laboratory Analogue of Mirrored-Self Misidentification Delusion: The Role of Hypnosis, Suggestion, and Demand Characteristics." *Consciousness and Cognition* 22, no. 4 (2013): 1510-22.
- Connors, Michael H. "Hypnosis and Belief: A Review of Hypnotic Delusions." *Consciousness and Cognition* 36 (2015): 27-43.
- Connors, Michael H. , Rochelle E. Cox, Amanda J. Barnier, Robyn Langdon, and Max Coltheart. "Mirror Agnosia and the Mirrored-Self Misidentification Delusion: A Hypnotic Analogue." *Cognitive Neuropsychiatry* 17, no. 3 (2012): 197-226.
- Corlett, P. R., J. R. Taylor, X. J. Wang, P. C. Fletcher, and J. H. Krystal. "Toward a Neurobiology of Delusions." *Progress in Neurobiology* 92, no. 3 (2010): 345-69.
- Currie, Gregory. "Imagination, Delusion and Hallucinations." *Mind & Language* 15, no. 1 (2000): 168-83.
- Currie, Gregory, and Ian Ravenscroft. *Recreative Minds: Imagination in Philosophy and Psychology*. Oxford: Oxford University Press, 2002.
- Davidson, Donald. "Paradoxes of Irrationality." In *The Essential Davidson*, 138-52. Oxford: Oxford University Press, 2006.
- Davies, Martin, and Max Coltheart. "Introduction: Pathologies of Belief." *Mind & Language* 15, no. 1 (2000): 1-46.
- Davies, Martin, Max Coltheart, Robyn Langdon, and Nora Breen. "Monothematic Delusions: Towards a Two-Factor Account." *Philosophy, Psychiatry & Psychology* 8, no. 2 (2001): 133-58.
- de Pauw, K. W., T. K. Szulecka, and T. L. Poltock. "Frégoli Syndrome after Cerebral Infarction." *The Journal of Nervous and Mental Disease* 175, no. 7 (1987): 433-38.
- Dennett, Daniel. "True Believers." In *The Intentional Stance*, edited by Daniel Dennett, 13-35. Cambridge, Massachusetts: The MIT Press, 1987.
- . "Who's on First? Heterophenomenology Explained." In *Arguing About the Mind*, edited by Brie Gertler and Lawrence Shapiro, 81-93. New York: Routledge, 2007.
- Dorsch, Fabian. "The Unity of Hallucinations." *Phenomenology and the Cognitive Sciences* 9, no. 2 (2010): 171-91.
- Dudley, Robert, Kate Cavanagh, Kate Daley, and Stephen Smith. "Reasoning and Delusions: Do People with Delusions Really Jump to Conclusions?." In *Aberrant Beliefs and Reasoning*, edited by Niall Galbraith, 7-33. East Sussex: Psychology Press, 2015.
- Ellis, Andrew W, and Andrew W Young. *Human Cognitive Neuropsychology: A Textbook with Readings*. New York: Psychology Press, 1996.
- Ellis, H D, and A W Young. "Accounting for Delusional Misidentifications." *The British Journal of Psychiatry* 157, no. 2 (1990): 239-48.
- Ellis, Hadyn D. "Cognitive Neuropsychiatry and Delusional Misidentification Syndromes: An Exemplary Vindication of the New Discipline." *Cognitive Neuropsychiatry* 3, no. 2 (1998): 81-89.

- Ellis, Hadyn D., Andrew W. Young, Angela H. Quayle, and Karel W. De Pauw. "Reduced Autonomic Responses to Faces in Capgras Delusion." *Proceedings of the Royal Society of London. Series B: Biological Sciences* 264, no. 1384 (1997): 1085-92.
- Enoch, Morgan David, and Hadrian N Ball. *Uncommon Psychiatric Syndromes*. London: Arnold, 2001.
- Flanagan, Owen J. *Consciousness Reconsidered*. Cambridge, MA: MIT Press, 1992.
- Follette, William C, and Arthur C Houts. "Models of Scientific Progress and the Role of Theory in Taxonomy Development: A Case Study of the DSM." *Journal of Consulting and Clinical Psychology* 64, no. 6 (1996): 1120-32.
- Frankish, Keith. "Delusions: A Two-Level Framework." In *Psychiatry as Cognitive Neuroscience: Philosophical Perspectives*, edited by Matthew Broome and Lisa Bortolotti, 269-84. Oxford: Oxford University Press, 2009.
- Frith, Christopher Donald. *The Cognitive Neuropsychology of Schizophrenia (Classic Edition)*. East Sussex: Psychology Press, 2015.
- Gallagher, Shaun. "Delusional Realities." In *Psychiatry as Cognitive Neuroscience: Philosophical Perspectives*, edited by Matthew R. Broome and Lisa Bortolotti, 245-66. Oxford: Oxford University Press, 2009.
- Gerrans, Phillip. *The Measure of Madness: Philosophy of Mind, Cognitive Neuroscience, and Delusional Thought*. Cambridge, MA: MIT Press, 2014.
- Gileen, James, and Anthony S. David. "The Cognitive Neuropsychiatry of Delusions: From Psychopathology to Neuropsychology and Back Again." *Psychological Medicine* 35, no. 01 (2005): 5-12.
- Goldman, Alvin I. "The Psychology of Folk Psychology." *Behavioral and Brain Sciences* 16, no. 01 (1993): 15-28.
- Graham, George, and G Lynn Stephens. "An Introduction to Philosophical Psychopathology: Its Nature, Scope, and Emergence." In *Philosophical Psychopathology*, edited by George Graham and G Lynn Stephens, 1-23. Cambridge MA: MIT Press, 1994.
- Gunn, Rachel. "On Thought Insertion." *Review of Philosophy and Psychology* (2015): 1-17.
- Halligan, Peter W., and Anthony S. David. "Opinion: Cognitive Neuropsychiatry: Towards a Scientific Psychopathology." *Nature Reviews Neuroscience* 2, no. 3 (2001): 209-15.
- Halligan, Peter W., John C. Marshall, and Derick T. Wade. "Unilateral Somatoparaphrenia after Right Hemisphere Stroke: A Case Description." *Cortex* 31, no. 1 (1995): 173-82.
- Hirstein, William, and Vilayanur S Ramachandran. "Capgras Syndrome: A Novel Probe for Understanding the Neural Representation of the Identity and Familiarity of Persons." *Proceedings of the Royal Society of London. Series B: Biological Sciences* 264, no. 1380 (1997): 437-44.
- Hohwy, Jakob. *The Predictive Mind*. Oxford: Oxford University Press, 2013.
- Horgan, Terence, and John Tienson. "The Intentionality of Phenomenology and the Phenomenology of Intentionality." In *Philosophy of Mind: Classical and Contemporary Readings*, edited by David J. Chalmers, 520-33. New York: Oxford University Press, 2002.
- Horgan, Terrance, and Mark Timmons. "Moorean Moral Phenomenology." In *Themes from GE Moore: New Essays in Epistemology and Ethics*, edited by Susana Nuccetelli and Gary Seay, 203-26. Oxford: Oxford University Press, 2007.
- Hurlburt, Russell T., Christopher L. Heavey, and Jason M. Kelsey. "Toward a Phenomenology of Inner Speaking." *Consciousness and Cognition* 22, no. 4 (2013): 1477-94.
- Hurlburt, Russell T., and Eric Schwitzgebel. *Describing Inner Experience? Proponent Meets Skeptic*. Life and Mind. Cambridge, Mass.: MIT Press, 2007.
- Jaspers, Karl. *General Psychopathology*. Johns Hopkins paperbacks ed. 2 vols Baltimore: Johns Hopkins University Press, 1997.
- Knobe, Joshua. "Intentional Action and Side Effects in Ordinary Language." *Analysis* 63, no. 279 (2003): 190-94.

- . "Theory of Mind and Moral Cognition: Exploring the Connections." *Trends in Cognitive Sciences* 9, no. 8 (2005): 357-59.
- Koksvik, O. "Intuition." Ph.D., Australian National University, 2011.
- Kriegel, Uriah. *The Varieties of Consciousness*. Oxford: Oxford University Press, 2015.
- Langdon, Robyn, and Tim Bayne. "Delusion and Confabulation: Mistakes of Perceiving, Remembering and Believing." *Cognitive Neuropsychiatry* 15, no. 1-3 (2010): 319-45.
- Langdon, Robyn, and Emily Connaughton. "The Neuropsychology of Belief Formation." In *The Neural Basis of Human Belief Systems*, edited by Frank Kruger and Jordan Grafman, 19-42. New York: Psychology Press, 2013.
- Levine, Joseph. "On the Phenomenology of Thought." In *Cognitive Phenomenology*, edited by Tim Bayne and Michelle Montague, 103-20. Oxford: Oxford University Press, 2011.
- Lewis, David. "Mad Pain and Martian Pain." In *Readings in the Philosophy of Psychology, Volume One*, edited by Ned Block, 216-22. Cambridge, MA: Harvard University Press, 1980.
- Lucchelli, F., and H. Spinnler. "The Case of Lost Wilma: A Clinical Report of Capgras Delusion." *Neurological Sciences* 28, no. 4 (2007): 188-95.
- Machamer, Peter, Lindley Darden, and Carl F Craver. "Thinking About Mechanisms." *Philosophy of Science* 67, no. 1 (2000): 1-25.
- Maher, Brendan A. "Psychopathology and Delusions: Reflections on Methods and Models." In *Principles of Experimental Psychopathology: Essays in Honor of Brendan A. Maher*, edited by Mark F. Lenzenweger and Jill M. Hooley. Washington, DC: American Psychological Association, 2003.
- Maher, Brendan A. "Delusional Thinking and Perceptual Disorder." *Journal of Individual Psychology* 30, no. 1 (1974): 98-113.
- Mishara, Aaron L., and Paolo Fusar-Poli. "The Phenomenology and Neurobiology of Delusion Formation During Psychosis Onset: Jaspers, Truman Symptoms, and Aberrant Salience." *Schizophrenia Bulletin* 39, no. 2 (2013): 278-86.
- Mishara, Aaron L.; Parnas, Josef; Naudin, Jean. "Forging the Links between Phenomenology, Cognitive Neuroscience, and Psychopathology: The Emergence of a New Discipline." *Current Opinion in Psychiatry* 11, no. 5 (1998): 567-73.
- Miyazono, Kengo, and Lisa Bortolotti. "The Causal Role Argument against Doxasticism About Delusions." *Avant: Trends in Interdisciplinary Studies* V, no. 3 (2015): 30-50.
- Miyazono, Kengo, Lisa Bortolotti, and Matthew R. Broome. "Prediction-Error and Two-Factor Theories of Delusion Formation." In *Aberrant Beliefs and Reasoning*, edited by Neil Galbraith, 34-54. East Sussex: Psychology Press, 2015.
- Moore, G. E. *Some Main Problems of Philosophy*. Muirhead Library of Philosophy. London: Allen & Unwin, 1953.
- Murphy, Dominic. "The Folk Epistemology of Delusions." *Neuroethics* 5, no. 1 (2012): 19-22.
- Nagel, Thomas. "What Is It Like to Be a Bat?". *The Philosophical Review* 83, no. 4 (1974): 435-50.
- Oakley, David A, and Peter W Halligan. "Hypnotic Suggestion: Opportunities for Cognitive Neuroscience." *Nature Reviews Neuroscience* 14, no. 8 (2013): 565-76.
- Phelan, Mark T, and Hagop Sarkissian. "The Folk Strike Back; or, Why You Didn't Do It Intentionally, Though It Was Bad and You Knew It." *Philosophical Studies* 138, no. 2 (2008): 291-98.
- Pitt, David. "Introspection, Phenomenality, and the Availability of Intentional Content." In *Cognitive Phenomenology*, edited by Tim Bayne and Michelle Montague, 141-73. Oxford: Oxford University Press, 2011.
- . "The Phenomenology of Cognition or What Is It Like to Think That P?". *Philosophy and Phenomenological Research* 69, no. 1 (2004): 1-36.



- Prinz, Jesse J. "The Sensory Basis of Cognitive Phenomenology." In *Cognitive Phenomenology*, edited by Tim Bayne and Michelle Montague, 174-96. Oxford: Oxford University Press, 2011.
- Radden, Jennifer. *On Delusion*. Thinking in Action. New York: Routledge, 2011.
- Ramachandran, Vilayanur S, Sandra Blakeslee, and Oliver W Sacks. *Phantoms in the Brain: Probing the Mysteries of the Human Mind*. New York: William Morrow, 1998.
- Rose, David, Wesley Buckwalter, and John Turri. "When Words Speak Louder Than Actions: Delusion, Belief, and the Power of Assertion." *Australasian Journal of Philosophy* 92, no. 4 (2014): 683-700.
- Russell, Bertrand. *Human Knowledge : Its Scope and Limits*. Routledge Classics. London: Routledge, 2009.
- Sass, Louis Arnorsson. *The Paradoxes of Delusion : Wittgenstein, Schreber, and the Schizophrenic Mind*. Ithaca, N.Y.: Cornell University Press, 1994.
- . "Some Reflections on the (Analytic) Philosophical Approach to Delusion." *Philosophy, Psychiatry, & Psychology* 11, no. 1 (2004): 71-80.
- Schwitzgebel, Eric. "A Dispositional Approach to the Attitudes: Thinking Outside of the Belief Box." In *New Essays on Belief : Structure, Constitution and Content*, edited by Nikolaj Nottelmann, 75-99. New York: Palgrave Macmillan, 2013.
- . "Mad Belief?". *Neuroethics* 5, no. 1 (2012): 13-17.
- . "A Phenomenal, Dispositional Account of Belief." *Nous* 36, no. 2 (2002): 249-75.
- Searle, John R. *The Rediscovery of the Mind*. Cambridge, Massachusetts: MIT Press, 1992.
- Shallice, Tim. *From Neuropsychology to Mental Structure*. Cambridge: Cambridge University Press, 1988.
- Sims, Andrew. *Symptoms in the Mind: An Introduction to Descriptive Psychopathology*. Bailliere Tindall, 1988.
- Smithies, Declan. "The Mental Lives of Zombies." *Philosophical Perspectives* 26, no. 1 (2012): 343-72.
- . "The Nature of Cognitive Phenomenology." *Philosophy Compass* 8, no. 8 (2013): 744-54.
- Spitzer, Manfred. "On Defining Delusions." *Comprehensive Psychiatry* 31, no. 5 (1990): 377-97.
- Stephens, G. Lynn, and George Graham. "Self-Consciousness, Mental Agency, and the Clinical Psychopathology of Thought Insertion." *Philosophy, Psychiatry, & Psychology* 1, no. 1 (1994): 1-10.
- . *When Self-Consciousness Breaks: Alien Voices and Inserted Thoughts*. Philosophical Psychopathology: Disorders in Mind. edited by Owen Flanagan and George Graham Cambridge, MA: MIT Press, 2000.
- Strawson, Galen. "Cognitive Phenomenology: Real Life." In *Cognitive Phenomenology*, edited by Tim Bayne and Michelle Montague. Oxford: Oxford University Press, 2011.
- . *Mental Reality*. Representation and Mind Series. 2nd ed. Cambridge, Mass.: MIT Press, 2010.
- . "Mind and Being: The Primacy of Panpsychism." In *Panpsychism: Philosophical Essays*, edited by G. Bruntrup and L. Jaskolla. Oxford: Oxford University Press, Forthcoming.
- . *The Secret Connexion: Causation, Realism, and David Hume (Revised Edition)*. Oxford: Oxford University Press, 2014.
- Tranel, Daniel, Hanna Damasio, and Antonio R. Damasio. "Double Dissociation between Overt and Covert Face Recognition." *Journal of Cognitive Neuroscience* 7, no. 4 (1995): 425-32.
- Tulving, Endel. "Episodic Memory: From Mind to Brain." *Annual Review of Psychology* 53, no. 1 (2002): 1-25.
- . "What Is Episodic Memory?". *Current Directions in Psychological Science* 2, no. 3 (1993): 67-70.

- Tumulty, Maura. "Delusions and Dispositionalism About Belief." *Mind & Language* 26, no. 5 (2011): 596-628.
- Tversky, Amos, and Daniel Kahneman. "Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment." *Psychological Review* 90, no. 4 (1983): 293-315.
- Tye, Michael, and Briggs Wright. "Is There a Phenomenology of Thought?". In *Cognitive Phenomenology*, edited by Tim Bayne and Michelle Montague, 326-44. Oxford: Oxford University Press, 2011.
- Van den Stock, Jan, Beatrice de Gelder, François-Laurent De Winter, Koen Van Laere, and Mathieu Vandenbulcke. "A Strange Face in the Mirror. Face-Selective Self-Misidentification in a Patient with Right Lateralized Occipito-Temporal Hypo-Metabolism." *Cortex* 48, no. 8 (2012): 1088-90.
- Villarejo, Alberto, Verónica Puertas Martín, Teresa Moreno-Ramos, Ana Camacho-Salas, Jesús Porta-Etessam, and Félix Bermejo-Pareja. "Mirrored-Self Misidentification in a Patient without Dementia: Evidence for Right Hemispheric and Bifrontal Damage." *Neurocase* 17, no. 3 (2011): 276-84.
- Wong, Albert H. C., and H. M. Rosemary Meier. "Case Report: Delusional Jealousy Following Right-Sided Cerebral Infarct." *Neurocase* 3, no. 5 (1997): 391-94.
- Young, A. W., I. H. Robertson, D. J. Hallowell, K. W. De Pauw, and B. Pentland. "Cotard Delusion after Brain Injury." *Psychological Medicine* 22, no. 03 (1992): 799-804.