Dead Certainty in the Cotard Delusion

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Abstract.

Some people insist that they are dead. Rather than starting with the usual assumption that delusions are 'false beliefs about external reality' I want to consider how interpreting their claim as a report of a certain kind of anomalous experience assists us in understanding why they are certain, why their claim is immune from evidence to the contrary, and why they do not act in ways we would expect were they to believe their claim to be true of the world.

While this helps us understand cases where people do not act on their delusions, more must be said about the people who do act on their delusions. I shall attempt to describe a process where an intense anomalous experience leads to a context-specific narrowing of attention. The ultimate result of this is that the appearance / reality distinction becomes lost in the context of the anomalous experience. The sense of conviction that would be appropriately associated with a report of experience thus becomes inappropriately associated with a claim about external reality.

While there have been efforts to provide cognitive therapy for delusional subjects such therapy seems to be based on the notion that confronting them with their contradictions will assist in weakening their sense of certainty about the delusional utterance. I consider whether more progress could be made via empathetic validation of the sense of certainty which is appropriate when associated with the person's anomalous experience.

1.1 Introduction.

Some people say they are dead. People who maintain they are dead are considered to have the Cotard delusion. The delusion was named after Jules Cotard a French neurologist who first described the condition in 1880. Since then other cases have been reported, though admittedly the condition is fairly rare. While we may be able to imagine contexts of utterance in which the claim 'I am dead' might not seem so strange, some people are reported to have insisted that they really are dead. One lady even went so far as to have persuaded her family to go out and buy her a coffin.

Delusions are to be found across at least 75 different endocrine, neurological, and psychiatric conditions (Garety and Hemsley, 1994 p.10). The diagnosing clinicians handbook the *Diagnostic and Statistical Manual of Mental Disorders* defines delusion as

> [A] False belief based on incorrect inference about external reality that is firmly sustained despite what almost everyone else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary. The belief is not one ordinarily accepted by other members of the person's culture or subculture... (American Psychiatric Association, (2000) pp. 821-822).

While delusions are typically considered to be beliefs, it is worth drawing your attention to the point that we cannot access another's beliefs directly. Diagnoses of delusion are thus made on the basis of the subjects behavior, and most especially their verbal behavior as when they insist that they are in fact dead, as in the case of the Cotard delusion.

1.2 Un-Understandability and the No Content Objection

Karl Jaspers (1959/1963) was an early psychiatrist / philosopher who drew a distinction between primary and secondary delusions. While he thought that secondary delusions were understandable by recourse to the subjects prior experiences, perceptions, and beliefs, he did not think this to be the case for primary delusions. He maintained that

while primary delusions may be given some sort of neurological explanation, such delusions are not understandable from the intentional level. John Campbell (2001) similarly argues that delusions are not understandable from the intentional level. Along the lines of Quine, Davidson, and Dennett, he considers that we are required to make use of the principle of charity in intentional state attributions. This involves radical translation so as to make the subject out to be rational by their use of the term. He concludes that there is no consistent content that we can attribute to delusional utterances that makes the subject out to be rational, and thus delusions don't seem to be contentful states.

1.3 The Cartesian Model of Delusion

To make the strongest case for Campbell's no-content objection one subject is reported to have said 'I am not and am condemned to going on being nothing forever'. Descartes showed us that so long as one appreciates that doubting is a form of thinking it is impossible to doubt one's existence as a thinking thing. If the delusional subject is attempting to express the belief that they do not exist as a thinking thing then it would seem that they are professing to believe something that they cannot believe because the content of the belief would be self-defeating.

1.4 The Biological Model of Delusion

Perhaps interpreting the content of the Cotard delusion as 'I no longer exist as a thinking thing' is simply one interpretation (and perhaps not the most charitable one) of what the delusional subject is attempting to express. Perhaps the delusional subject is instead attempting to express the belief that they are no longer biologically alive. This seems to have been the main interpretation of the content of the Cotard delusion.

Clinicians attempted to provide evidence against the subject's claim that they were dead by drawing their attention to such facts as the subject being able to walk around, being able to feel their heart beat, and feeling bodily urges such as the need to go to the

bathroom. That the subject did not seem to take such biological signs of life as evidence against their delusional belief was itself taken as evidence for the irrationality of the delusional subject. It seems to have been the result of observations such as these that the APA has been led to conclude that delusions are held 'despite incontrovertible and obvious proof or evidence to the contrary'. It was thus thought to be pointless to attempt to argue a delusional subject out of their delusion.

What doesn't seem to have been noted is that beliefs such as 'I can feel my heart beating' and 'I can still walk around' do not seem to straightforwardly contradict the belief 'I am biologically dead'. To extract a contradiction from these beliefs we need to add further beliefs and make them explicit.

Lets look at the logic of this:

P1) I can feel my heart beating
P2) I can still walk around
P3) I feel bodily urges such as the need to go to the bathroom

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C1) I exhibit biological signs of life
P4) Anything that exhibits biological signs of life cannot be biologically dead

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C2) I am not biologically dead
P5) I am (biologically) dead (*The Delusional Belief)*

C3) I am (biologically) dead and I am not (biologically) dead

I am not sure that these steps have been brought to the delusional subjects attention to see whether they would endorse all of these beliefs and this line of reasoning or not. Rather, their endorsement of Premises 1-3 has been taken to be sufficient evidence of their irrationality in believing a contradiction (C3).

1.5 The One-Factor Model of Delusion

While delusions have historically been considered paradigmatic of irrationality, the psychological theorist Brendan Maher (1999; 2003) counters that delusions are 'not an example of disordered thinking but of normal adaptive thinking applied to explain very abnormal experiences' (2003 p.19). He maintains that an anomalous experience of a certain intensity and duration is both necessary and sufficient for a subject to adopt a delusional belief. The point here would seem to be that while theorists such as Jaspers and Campbell consider the delusional belief itself to be primary and hence not understandable from the intentional level, Maher instead considers the anomalous experience to be primary, and thus the delusional belief can be explained by recourse to the subjects anomalous experience. If all delusions are capable of being explained in this way then it may be the case that there aren't any primary delusions that Jaspers spoke of, or any content-less delusions that Campbell considered.

Maher maintains that 'the origins of anomalous experience may lie in a broad band of neuropsychological anomalies'. He considers 6 kinds of anomaly, while acknowledging there may well be others. He also describes three kinds of anomalous experience that non-delusional people often encounter in their everyday lives, and he maintains that delusions result from such experiences becoming sufficiently intense and prolonged.

1.6 Cognitive Neuro-Psycology and the Explanation of Delusion

While the causes of depression may be hard to pinpoint, it does seem clear that people with clinical depression tend to benefit from psychotropic medications. What people have surmised from this is that in depression something has gone wrong with levels of neurotransmitter in the brain. The medication is thought to assist because it helps to rectify this problem. If depression is left untreated, however, then some people can deteriorate over time. As this happens the persons sympathetic nervous system no longer produces the typical heightened physiological response to various stimuli. Instead, their

levels of arousal become progressively dulled, or muted. People begin by making claims that they don't feel real, or that they feel disembodied, and if they continue to deteriorate they may eventually reach the conclusion that they are dead. Modern advances in psychotropic medications now largely prevent people deteriorating to this level.

In other cases people develop the Cotard delusion in response to cerebral trauma. They may have been involved in an accident that has resulted in damage to parts of their brain, or a blood vessel may have burst resulting in a similar kind of damage. People who develop the Cotard delusion in response to cerebral trauma may suffer from other conditions as well. It has been found that these people also exhibit muted levels of physiological arousal.

1.7 The Affective Response Model of Delusion

Sass (2004) considers that in response to the lack of usual autonomic response these people may well no longer feel connected to their bodies, to other people, or to the world in which they inhabit. Sass claims that the person with the Cotard delusion

> 'has lost the capacity to experience affect due to a global shutting down of affective processing in which "information derived from perceptual or cognitive channels have no bodily consequences"… such a person is conscious, yet his consciousness lacks a quality that has always accompanied his conscious experience, a quality that is, in fact, intimately allied with his experience as a living subjectivity.'

Although we may not be able to empathize with the delusional experience completely, we may be able to grasp something of it by recalling times where we have felt a strange neutrality of mood, or as Sass puts it 'a diminution in the normal tonality of life'; a period of flattened affect or emotional non-responsivity. Sass considers that in these cases we do talk of feeling 'dead' or 'deadened' and thus the delusional subjects utterance would seem to be 'well within the extended penumbra of comprehensible meanings of this

term'. Sass maintains that the delusional subjects experience is just a severe variation on this and that it is this feeling that prompts the delusional utterance.

In light of the findings regarding levels of physiological arousal and the neurophysiological conditions producing that it would seem natural to add these two anomalies to Maher's list. There is still more work to be done with respect to finding the precise nature of the neurophysiological deficits that underlie the production of such an experience. The experience seems to be multiply realized as it can be produced by either localized cerebral injury or a more global problem with neurotransmission.

1.8 The Two-Factor Model of Delusion

In their paper '*Monothematic Delusions: Towards a Two-Factor Account'* Davies et al., (2001) consider that while an anomalous experience may be necessary for delusion, it cannot be sufficient. They maintain that some people have comparable anomalous experiences, yet they do not exhibit comparable delusions. While they agree that such an anomalous experience is in need of explanation they do not consider the experience to be sufficient to determine that the person must arrive at a delusional explanation for it.

Davies et al., consider that the account thus far would seem to go some of the way towards explaining why it is that the delusional hypothesis occurs to the subject. They also maintain, however, that the above account is not enough to explain why it is that the delusional subject accepts the delusional hypothesis as a belief 'despite everything they previously knew to be true' and despite other people attempting to persuade them out of their delusion.

One route to belief is the route from perception to belief. While this input clause is not typically considered to be a rationality constraint we can consider whether we would call someone irrational who failed to form beliefs in this way. Suppose I am in a room walking around and I fall over a chair. You ask 'what happened? Didn't you see the chair?' I reply 'Oh, I saw it alright, I just didn't believe it was there'. In this case I might

be described as being irrational for failing to believe what I had perceived. Whether we consider this to be a failure of rationality or not it does seem that something abnormal is going on here.

It would also seem that it is not a normal, rational, or typical response to always believe what we perceive, however. Sometimes what we perceive diverges too radically from what we previously knew to be true. It diverges too much from our prior beliefs and perceptions. When we experience visual illusion it may well be a typical initial response to judge the lines to be of different length when viewing the Muller Lyer illusion. Once we come to understand something of how the illusion is produced, however, then we no longer believe what we perceive. We judge the lines to be of equal length despite the way that they appear to us to be.

Davies et al., maintain that the delusional error is to accept an erroneous perceptual experience to be veridical despite rational grounds to doubt. In considering the anomalous experience to be a perceptual experience Davies et al., are led into the problem of the unwanted prediction. They acknowledge that a problem with their account is that it would predict that a person with the Cotard delusion should be routinely fooled by the Muller-Lyer illusion as they come to believe what they perceive. The subject with the Cotard delusion should be unable to inhibit this response despite coming to learn about how the illusion is produced, and despite perceptual information to the contrary such as seeing the arrow heads removed and then reinserted, or after measuring the lines.

One way around this problem for Davies et al's account of the nature of the second factor would be to consider that the relevant anomalous experience is not a perceptual experience. Indeed, from what we know about the various kinds of anomalous experiences that seem to feature in the production of various kinds of delusion it seems that the experiences have more to do with the persons affective response system or levels of physiological arousal rather than with a strictly perceptual deficit.

1.9 Anomalous Experience -> False Beliefs About Reality

Maher, Davies et al., and the APA definition of delusion are similar with respect to what they construe the delusional subject as doing in making their delusional utterance. They concur that in making the claim 'I am dead' the subject draws a false conclusion from their experience to what is the case in the world. They thus similarly consider delusional subjects to be expressing a belief about external reality – or the world beyond the subjects experience. If this is the case then what are we to make of the subjects claim that they are dead? It might be natural to think that the subject goes from the experience of emotional death that Sass talked about to drawing a false conclusion about their biological death. Whether the claim that the subject is biologically dead is true or false is mind independent in the sense that the subject can have false beliefs about the way things really are outside of their minds. Delusions are thus considered to be false beliefs about external reality.

On this analysis of what the delusional subject is attempting to express in making their utterance there may be a problem with respect to consistency within the subjects belief network if they were to endorse the beliefs and the line of reasoning given by the biological model. Normal subjects are also not perfectly rational, however. Sometimes we discover that we do have contradictory beliefs in our belief network. While holding contradictory beliefs may not be so very abnormal we do expect people to be able to see that they are in fact endorsing a contradiction once the logic has been pointed out to them. While I am not so sure that the contradiction has been pointed out explicitly to the delusional subject it would seem problematic to attempt to make sense of them retaining their delusional belief as certain after endorsing the other beliefs, the line of reasoning, and seeing the contradiction that results from it.

This might be motivation enough for concluding that delusions are intractable from the intentional level and so one would be better off abandoning intentional explanation in favor of a neurophysiological account of the various kinds of brain damage that might

result in delusion. In another more recent paper Davies et al., (2005) modify their two-factor account of delusions so that the first factor is no longer the anomalous experience that was talked about by Maher. Instead, they maintain that the first factor is neurophysiological deficit and that further research is needed to determine whether anomalous experience features early, late, or not at all in the production of delusion. As such, they too seem to have abandoned the attempt to offer an intentional explanation of delusion. Instead they maintain that delusion should be explained by the presence of neurophysiological anomaly despite the point that the precise nature of the neurophysiological anomaly seems to vary across different subjects with the same delusion. Before we are tempted to give up on intentional explanation altogether, however, it might be worth considering another interpretation of what the delusional subject might be attempting to do in making the claim 'I am dead'.

What seems to be in common to the accounts considered thus far is the notion that the delusional subject is taking their lack of autonomic response to be informing them of the further fact that they have died. What I want to consider, however, is that this may not be the case for the majority of subjects who maintain that they are dead. Instead of considering the subject to be attempting to make a false claim about reality on the basis of their experiences perhaps they are simply trying to report or express their experience as it seems to them to be. The loss of autonomic response is discrepant with the response that should have occurred. While it is true that normally we are not aware of having a heightened affective response to various stimuli, it might be the case that the absence of the typical response produces consciously experienced 'alarm bells' that signal to the subject that something is wrong. If they are attempting to report on this anomalous experience then this would make sense of why it is that they are so very certain about what they are saying. If they are reporting on their experience then they are indeed entitled to be certain that their experience is in fact the way it seems to them to be.

1.10 Anomalous Experience -> Reports of Experience

One of the problems with construing the subject as making a false claim about reality was the point that they did not seem to consider it to be relevant to what they were saying that they were still able to walk around. Perhaps they did not find it relevant because they did not draw the implicit steps. It would seem that an alternative explanation for this, however, is that it might be because facts such as their being able to walk around are indeed irrelevant to their utterance. If they are reporting on their experience then those facts would be irrelevant as facts about the external world are irrelevant with respect to providing supporting or disconfirming evidence for the subjects anomalous experiences.

Campbell writes that delusional beliefs seem to have been elevated to the status of Wittgenstinean framework propositions by which he seemed to mean that they are immune to supporting or falsifying evidence. It could be taken that our belief in an external world is something that is a framework proposition in the sense that whether the belief is true or false is something that we are unable to verify. Some delusional beliefs seem to have taken on this quality as well where they seem to be beyond the reach of supporting or disconfirming evidence. Once again, this would not be surprising if we consider delusional subjects to be reporting on their experiences.

If this is the case then it would seem that the delusional subject is simply playing a language game in which the external world has fallen out as irrelevant. If they are expressing their experiences then they cannot be wrong, which may be why the delusion is held with such conviction. Their utterances would also not be in conflict with what they previously held to be true.

The most obvious objection to this line would be that the delusional subject does not preface their utterances with ‘it seem to me as though’ or ‘it is like…’. Why doesn’t the delusional subject simply say ‘I have the experience of emotional death’ or ‘I feel dead’ or something a little more like that? Part of a response might be that these expressions do not convey the sense of conviction that the delusional subject feels. Indeed the subject

with depression might start out making claims like this, but if their depression continues untreated they may progress to claiming they are dead. It is also a point that we don't typically say 'it seems to me as though I am in pain' because the first half of that just seems redundant. We typically do not take such pains to distinguish between a claim about our experience and a claim about the external world. To make it clearer that the subject is attempting to report on their experience rather than a state of the world would also require them to be able to distinguish between their experience and the external world. It may be the case that the anomalous experience has captured the persons attention to the point that when it occurs the subject may become solely focused on appearances or on reporting their experience.

1.11 The Problem of Inaction

It is often thought to be a fairly significant problem for models of delusions that consider delusions to be false beliefs about external reality that in most cases delusional subjects do not act in ways in which we would expect them to act were they to literally believe what they are saying. In the Capgras delusion, for instance the delusional subject comes to maintain that someone who is close to them has been replaced by an impostor. We might expect that the delusional subject would attempt to talk to the alleged impostor to see whether they have access to the memories of the original. We might expect them to show some concern as to where the original has got to or concern as to what might have happened to them. Subjects with the Capgras delusion do not attempt to locate the original. They do not contact the relevant authorities to inform them of the disappearance of the original. While we could attempt to attribute all sorts of other beliefs and desires to the delusional subject in order to make these behaviors rational given their delusion and their other beliefs and desires this is not a line that anybody seems to have pursued. Rather, these facts about delusional subjects most often not acting in ways we would expect has been taken to be evidence for their irrationality. It has also led some theorists to consider that delusions may not be appropriately classified as beliefs.

Gregory Currie (2000) takes the later line and he attempts to maintain that delusions are not really beliefs rather they are 'imaginings misidentified as beliefs by the delusional subject'. I am not sure whether this line will help solve the problem of inaction, however, as Tim Bayne has queried 'what is the difference between believing something to be the case and believing that one believes something to be the case?' This does seem a little odd and perhaps Curries line is not really enough to solve the problem of inaction. I think that viewing delusions as reports of anomalous experience is able to solve the problem of inaction quite naturally. There wouldn't seem to be any obvious behavioral consequences for believing that one has a lack of physiological response other than the expression of the delusion itself.

1.12 The Problem of Action

For any model that is able to solve the problem of inaction, there is a related problem that arises. Namely, how to account for the cases where subjects actually do act on their delusions. In an often cited case of this one man became convinced that his step-father was a robot and he decapitated him in order to look for the batteries and microfilm in his head. This seems a very strange thing to do if one is merely attempting to express ones anomalous experience.

The problems of action and inaction taken together seem to create problems for attempts to explain delusions. One could maintain that delusions cannot be false beliefs about external reality because some subjects do not behave in ways we would expect. One could maintain that delusions cannot be reports of experience because some subjects do act on their delusions. One thing that might be of assistance at this point is to consider that different models might be better placed to account for different types of cases. It would seem that making a delusional utterance yet not behaving as though one literally believed the world was that way would be best explained by subjects attempting to report on their experiences. Where subjects do act on their delusions, however, then I think that a modified version of Davies et al's two factor account where we have an affective

anomalous experience rather than a perceptual anomalous experience would best explain that phenomenon.

I would also like to suggest that subjects start out by expressing their anomalous experiences. If their experiences become sufficiently intense then their attention comes to be captured by the anomalous experience when it occurs. At those times the subject becomes so focused in on their experiences that they lose the appearance / reality distinction and the external world falls out as irrelevant. There is also some evidence that delusional subjects are less able to attend to external stimuli than non-delusional client populations (I think I found one and would be grateful for others) in a manner that is similar to the performance of normal subjects when they are under stress which is known to be something that interferes with attention. What this line on the progression from inaction to action may also be able to buy us is the notion that the sense of certainty or conviction that is appropriate with respect to reports of their experiences may come to be inappropriately associated with reports about external reality as attention becomes too focused and the appearance / reality distinction is lost.

1.13 Implications for Therapy

Traditionally it was thought that delusions were not amenable to reason and thus it was pointless to attempt to argue delusional subjects out of their delusion. Fairly recently, however, there has been a move towards offering cognitive therapy as treatment for them. Cognitive therapy attempts to make confront the delusional subject with counter-evidence in order to weaken their sense of conviction or certainty that the delusion is true by making the contradictions explicit. In looking at cases of delusions and case reports of interviews with delusional subjects as therapists attempt to persuade them that their delusions are false I can't help but wonder whether this strategy results in an unhelpful dialectic. One of the main problems they have found with attempting this kind of treatment is that it is hard to build a good rapport between the therapist and the delusional subject and that there are high drop out rates as the delusional subject simply stops going to therapy.

If we grant that most delusional subjects are attempting to report on certain kinds of experiences then we may be able to explain why it is that the delusional subject will not back down on delusional utterances. When people attempt to offer evidence to the contrary they miss the point that the evidence is not relevant to what the subject is saying. Even if they have lost the appearance / reality distinction to the point where they have come to act on their utterance it may be unhelpful to challenge the subjects sense of conviction directly. Attempting to draw out the logic of their utterances may result in them coming to endorse greater and greater contradictions in their effort to retain their sense of certainty in the face of their experience. If we can instead attempt to think our way into the kinds of experiences that the delusional subject may have then we may be able to arrive at an understanding of why they insist on their delusional utterance despite everyone attempting to argue them out of their delusion. Rather than by engaging in radical translation to attempt to understand the logic of how they can believe what they are saying we can engage in radical empathy to understand why they might be led to say the things they do.

Perhaps it is as Walkup notes:

> The distinction between a description of the experience (sometimes called a phenomenological description) and the description of the factual state of affairs is scientifically and clinically important. Scientifically, a subject who consistently failed to describe the perception of certain illusions would be suspected of some visual or neurological abnormality. Clinically, the therapist who challenges a patient's description of his or her experience may sound absurd, just as would a vision researcher who insisted to an experimental subject that the two lines in the Muller-Lyer illusion actually *look* the same length (Walkup, 1995 p. 326).

What might be happening here is an unfortunate state of affairs for the delusional subject who might be hard pressed to find an appropriate alternative expression of their experience. Rather than focusing on the logic of their utterance I wonder whether we

might have more luck with attempting to empathize with the subjects anomalous experience. Not with the view to arguing subjects out of their delusions, but with a view to attempting to understand what they might be trying to say. And with the ultimate view of assisting them in finding more appropriate ways of expressing themselves. Rather than attempting to argue them out of their delusion by presenting evidence that is not even relevant to what they are saying one might have more luck with trying to express some empathy for the anomalous experience that they are having.

What I would like to suggest is that regardless of whether the subject actually has made the move from expression of experience to false belief about reality one may be better off establishing rapport by validating the sense of conviction or certainty which is appropriately associated with the subjects anomalous experience. Perhaps the trouble with subjects who have come to false beliefs about external realty on the basis of experience is that they have lost sight of the distinction between appearances and reality in the context of their anomalous experience. Davies et al., talk about this as a failure to inhibit believing what they perceive, and it sounds to me a lot like the notion that delusional subjects have lost their ability to reality test in the sense that external reality is irrelevant to the reality of ones experiences, and ones experiential reality is certain. One way to lose the appearance / reality distinction is to focus so intently on appearances that the external world is disregarded. Perhaps what has happened here is that the delusional subject has become lost in appearances where their experiences are sufficiently anomalous.

1.14 Concluding Remarks

It may be that there are two different things that we can construe the delusional subject as doing in making their utterance. We could consider that they are making a false claim about the world, or we could consider that they are attempting to express their anomalous experience. The DSM considers that delusions are ‘false beliefs about external reality’ but this seems to beg the question in saying that delusional subjects should be construed as intending to do this. Diagnosis of delusion are made on the basis of the subjects

utterances, and so their claims could lead to them being classified as delusional yet they may intend their utterance to be an expression of their experience. It may be that only when the subject is making a false claim about the world that they are appropriately classified as delusional. We could consider that subjects who are expressing their experience are not in fact delusional because delusions proper involve making a false claim about the world. But the other way we could go is to say that these subjects clearly are delusional and this shows the inadequacy of the DSM definition of delusion. Either way it is interesting that more people do not act on their delusion than people who do so if the explanandum is taken to be the delusional utterance then it would seem to me that a large class of the phenomena is better explained by the report of experience model, and the class of phenomena requiring explanation by a false belief model has been significantly reduced.

References

American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition, Text-Revision)* pp. 821-822.

Bayne, T., & Pacherie, E. (????). In Defense of a Doxastic Conception of Delusions.

Campbell, J. (2001). Rationality, Meaning, and the Analysis of Delusion. *Philosophy, Psychiatry, & Psychology, 8*(2/3) 89-100

Currie, G. (2000). Imagination, Delusion and Hallucinations. *Mind and Language, 15*(1) 168-183.

Davies, M; Coltheart, M; Langdon, R & Breen, N (2001). Monothematic Delusions: Towards a Two-Factor Account *Philosophy, Psychiatry, & Psychology, 8* 133-158.

Davies, M; Davies; A; Coltheart, M (2005) Anosognosia and the Two-Factor Theory of Delusions, *Mind and Language, 20* 209-236.

Garety, P A. & Hemsley, D R. (1994). *Delusions: Investigations into the Psychology of Delusional Reasoning.* Oxford: Oxford University Press p.10.

Jaspers, K (1959/1963). *General Psychopathology.* (Seventh German Edition, J. Hoenig & M. Hamilton Trans.) Manchester: Manchester University Press.

Maher, Brendan (1999). Anomalous Experience in Everyday Life: Its Significance for Psychopathology *Monist 82* 547-570

Maher, Brendan A. (2003). Schizophrenia, Aberrant Utterance and Delusion of Control: The Disconnection of Speech and Thought, and the Connection of Experience and Belief. *Mind and Language 18* 1-22.

Sass, L.A. (2004). Some Reflections on the (Analytic) Philosophical Approach to Delusion. *Philosophy, Psychiatry, & Psychology 11*(1) 71-80.

Walkup, (1995). A Clinically Based Rule of Thumb for Classifying Delusions.