THE MEASURE OF MADNESS

Full Title: The Measure of Madness: Philosophy of Mind, Cognitive Neuroscience, and Delusional Thought
Author / Editor: Philip Gerrans
Publisher: MIT Press/A Bradford Book, 2015

BUY ON AMAZON

Review © Metapsychology Vol. 20, No. 23
Reviewer: George Tudorie

In a photo taken in 1856, the painter Richard Dadd is shown with the tools of his trade, as it was customary in early portrait photography. He looks to the left of the camera, his brush still touching the canvas which will become *Contradiction: Oberon and Titania*. If he seems absentmindedly locked on some ever-receding target, this is perhaps due to the prolonged time needed for exposure, or to the washed-out quality of the surviving image. There is also the uncustomary setting of this photo. It is one of a series Henry Hering took of psychiatric patients, in an attempt to characterize the physiognomy of madness. Dadd had been an inmate of Bethlem Hospital, the original Bedlam, since 1844. Before his asylum career, his art had been unexceptional, and he showed an interest in the Orient (this was not unusual in the era, either). But Dadd left the ordinary behind when he returned from an expedition in Egypt convinced he had a special connection with the god Osiris. Back in Britain, he killed his father, in whom he saw the devil. Therefore Bethlem. He continued to paint, but he was a changed man and his art was also transformed. Formerly conformist, it now acquired a stranger, darker nature. Writing about Dadd's masterpiece, *The Fairy Feller's Master-Stroke*, Neil Gaiman explains his fascination thus:
“Before Dadd’s madness (...) his paintings are quite pretty, and perfectly ordinary (...). Nothing special or magical about them. Nothing that would make them last. Nothing true. (...) Dadd spent the rest of his life behind bars, surrounded by the criminally insane, and as criminally insane as any of them, but with a message for us from, as it were, the other side.”

This certainly sounds right, but how would one know, faced with the intensity and evocative beauty of Dadd’s latter art, if one located its authentic message, if one absorbed its truth and not a simulacrum of one’s own making? The question seems inescapable. If this is something one cannot know, then one should not continue to think that one is faced here with a task (or even a duty) of understanding. What is at work in such cases is not the common difficulty of interpreting art, but a more stringent worry about locating meaning in madness. On the one hand, we would not want to underestimate the opacity of a mind like Dadd’s and misconstrue it as a mere veil which can be penetrated (“other side”) by translating and restoring meaning to the apparent noise and rubble. On the other, we would want a convincing defense to the rejoinder that there will not be much left in terms of explaining madness if we gave up the idea of understanding it by recognizing the significance of symptoms.

It has been a foundational difficulty of theories of abnormal psychology to account for the bizarreness of paradigmatic psychosis, and there have been many frustrated attempts to convert the alien quality of delusions and hallucinations into something theoretically and clinically manageable. *The Measure of Madness*, the last book by Philip Gerrans, presents an unambiguous answer to the explanatory dimension of this challenge. Gerrans argues that by now the relevant disciplines – psychiatry, neuroscience, cognitive psychology – have the sketch of a theory which can explain delusion. This theory will deflate the explanatory crisis exemplified above by Dadd’s case. It will not be purely biological, rendering the psychotic mind, as it were, silent, but neither will it depend on notions like belief or rationality which invite interpretive speculation (it will not be a “doxastic” theory). Rather, the explanation will combine multiple levels of description, from the biochemical to the behavioral, with a focus on the cognitive characterization of the processes which lead to delusion, and on the mechanisms which support said processes. That is to say that even if this will not be a doxastic theory – i.e. one which tries to assimilate delusions to exotic beliefs – it will be a functional theory, one which accounts for delusion by asking what the relevant mental processes are typically for.

The first part of the book presents the background against which Gerrans builds his argument, and then assembles systematically the elements of his proposal. The main idea is that generally the source of delusional ideation is a breakdown in an information processing system which works hierarchically. Delusions are a kind of unsupervised thoughts, more precisely what Gerrans calls “default thoughts”. The first four chapters of the book gradually introduce and explain what “default thought” is and why it can be derailed in the form of delusion. Alternative accounts are considered and rejected. The remaining six chapters develop the explanatory machinery by tackling specific problems and extending the discussion of the literature. Among the topics Gerrans deals with, some are predictable, such as the relation between dreams and delusion, and typical delusional syndromes, other perhaps less so, such as the first person experience of delusion.
Those who are familiar with the philosophical inclinations and prose of contemporary Australian authors such as Paul Griffiths and Kim Sterelny will recognize that Gerrans’s book fits in the same niche in terms of style. It is economical, at points deliberately subdued, thoroughly informed by the relevant science, unapologetic about jargon, and thematically opportunistic. The fact that the ideal here is no-nonsense clarity does not stop Gerrans from engaging with topics ranging from neuroscience to asylum psychiatry, and with authors as diverse as Hume (on the limits of empathy) or Louis Sass (on the phenomenology of delusion). For the uninitiated readership, following all these incursions and keeping track of the terminology may be difficult.

Gerrans has written before on the topic of delusion, especially circumscribed psychoses like the Cotard and Capgras syndromes. The argument presented here is however quite novel and certainly more ambitious than what he has done previously. The true measure of madness, Gerrans argues, will not be found if one expects to discover it in either of the two domains psychiatric theorizing has historically oscillated between. Two “autonomist” theses are to be rejected: first, that delusion is a phenomenon to be conceived at the personal level, as deviant (inferentially failed) belief; second, that delusion is to be left entirely to neuroscience, as some sort of brain tissue quirk. The relevant level is information processing, a midland which can accommodate both data from neuroscience and reports of symptoms. Once this lens is in place, one can track delusion down to its neural roots or up to its experiential outcome.

While this prologue is typical of cognitive theories, the case presented in The Measure of Madness is of considerable subtlety. In rejecting autonomist theories, for example, Gerrans suggests a lucid qualification of Jaspers’s verdict that serious delusion is opaque, therefore not a candidate for functional explanation. Delusions are not noise. The usual repertoire of normative concepts (belief, rationality) may not be helpful in such cases, but Gerrans insists that the very fact that we are in a position to judge delusions bizarre alludes to words being used in more or less the usual way in patients’ reports. Moreover, one should not dismiss easily the idea that delusions are responses to experience – a parallel to empirical beliefs being typically responses to perception. This positioning gives some footing for considering delusions cognitive in nature, but it reintroduces the usual difficulty of dealing with delusional content. The latter problem, the books seems to argue, will dissolve once the mechanisms which produce delusions are understood.

Gerrans proposes a guiding definition of delusion that is designed to avoid the complications of normative discourse and which should eventually result in a testable model. This is the definition: “Delusions arise when default cognitive processing, unsupervised by decontextualized processing, is monopolized by hypersalient information.” (p. 38). Each of the three components is explained by identifying its typical role in the processing hierarchy. Neural implementation and phenomenology are also used as evidence.

Default cognitive processing is explained as a low level associative process evolved to support planning by simulating and rehearsing scenarios (“mental time travel”) in the absence of external stimulation. This kind of processing is implemented by the so-called “default mode network”. Especially when idling (“screensaver mode” – p.67), this system produces default thoughts which are not circumscribed by the norms of inference,
consistency, and empirical adequacy of paradigmatic conscious thought. The mind wanders. There is however at least some degree of narrative structure and – a problematic notion – subjective adequacy in the default stream. Stories or narrative filaments are connected to the personal history, needs, or experiences of the subject. They “fit with the agent’s psychology” (p. 75). Dreams are the obvious proxy.

The default mode network is a storyteller with a weakness for the audience’s preferences. It is not trustworthy, and as such it needs supervision and scrutiny. In cognitive scientific talk, default processing is held in check by decontextualized processing, which is a superior level of the system, and which tries to align the mind with what happens to be the case (executive control). Autobiographical coherence gives way to objectivity and rationality, and competing narratives are tested empirically and inferentially, since the real world, unlike imaginary scenarios, can have nasty consequences. In neuroscientific talk, there is a division of labor and of power between older regions of the brain and newer (dorsolateral) regions. As exemplified by the familiar case of dreams, the balance of power can and does fluctuate.

At all levels in the processing hierarchy resources are limited, so budgeting needs some prioritizing. Salience systems mark some tasks or bits of information as urgent, other as less so. Most of this happens below the threshold of consciousness (you will not need much deliberation to orient yourself to that startling noise), but salience can be experienced at its upper limit as “cognitively depleting directed attention and concentration” (p. 45).

With this minimal sketch in place, one can begin to see how Gerrans’s model works. In delusion, as in dreams, default processing is more or less left to its own devices. Unlike in dreams, decontextualized supervision fails in the waking state. Moreover, salience is derailed and the result is a “spectacular misallocation of cognitive resources” (p. 40). Since some information, for example perceptual anomalies, is marked as salient, the default system will be oriented to those anomalies and it will flood the mind with narratives that try to tame them by weaving “subjectively adequate” stories.

This account obviously raises a number of questions, and Gerrans answers some of them convincingly. For example, he points out that, as in dreams, at least in some delusions of misidentification there is evidence that the neural regions (probably) supporting decontextualized processing – areas in the dorsolateral prefrontal cortex – are hypoactive (p. 109). That should mitigate to some extent the question of there being proof of a failure of higher information processing or gating. Another prominent question is how salience systems are hijacked and how they impact, at their turn, default processing. This question returns us to the issue of delusional content.

Why should delusions be about what they are? Why, for example, should paranoid delusions involve ominous conspiratorial themes? In Gerrans’s terms, what kind of information becomes (abnormally) salient so that such default thoughts are the output of default processing? The book is, I think, at its best, but also at its most fragile, in trying to solve this problem. Gerrans is aware that he does not have – not yet at least – a general solution.
(Perhaps one is not even in the cards.) The account presented in *Measure* is tributary to Gerrans’s previous work on specific delusional syndromes such as Capgras, where the patient is confused about the identity of a familiar person, Fregoli, where the patient attributes the identity of a familiar person to a stranger, or Cotard, where the patient typically claims she is dead.

There seems to be a near consensus about Capgras, to take this example, that at least one of the causes is perceptual. Gerrans describes this as a failure of “binding”. At some point in the processing of information about a seen face, multiple components are normally integrated. Among them, the visual features, perhaps stored elements, like the name, but also autonomic reactions that color seeing a familiar person with an emotional valence. In Capgras patients, it is suspected that the latter is lost. They recognize the face, but they do not experience the expected emotion. This dissociation somehow cascades into the delusion that the familiar person has been replaced by an impostor. It is relatively easy to see how that may fit in Gerrans’s model: the salient information is the missing emotional response; this captures default processing and a narrative is produced to make sense of the experience; if this narrative is not filtered out by decontextualized processing, the person becomes delusional.

As Gerrans himself observes, locating candidates for salience does not by itself explain the content of delusions or their resistance to argument and evidence (e.g. “It seems clear that perceptual or recognitional systems alone cannot be responsible for the content of the thought.” – p. 149). For example, delusions such as Capgras are rather “circumscribed and monothematic” (p. 154). This is to say that the patients do not seem to have serious difficulties in “decontextualizing” in general. Why they should be unable to evaluate and reject a relatively small set of ideas remains, speculation aside, mysterious. Even more so is the elaboration of the delusional narrative – in Capgras from a mere apathetic reaction to suspecting sinister happenings.

Gerrans follows the literature here and considers possible “second factors”. Something other than a mere perceptual deficiency makes the patient maintain her bizarre convictions. To keep to the example of Capgras, one way to describe such a second factor is to refer to a putative tendency of the patient to prefer paranoid explanations. The tendency may be local, e.g. mood-dependent, or generalized (“attributional style”). Gerrans prefers to trace a second factor to the evolved role of the default system – i.e. to the fact that it is not designed to produce and test hypotheses (belief fixation), but to imagine scenarios. This, I think, does not evaporate the obvious difficulty of delusional stories being both strange and, like beliefs, sometimes acted upon. Gerrans does stress the second difficulty and tries to answer it by discussing how imagination can be “incorporated” into the practical reasoning of a subject.

The author is also aware that it is not trivial to project from one kind of delusion to the next. The discussion of how the default processing model might explain passivity of thought in schizophrenia (Chapter 8) is instructive in this respect. Some patients diagnosed with schizophrenia say that they experience thoughts which are not their own – they are not the authors of those thoughts and have little control over them. One much discussed idea in the field, often associated with suggestions made by Christopher Frith in the late 1980s and early 1990s,
is to treat passivity of thought on a parallel with passivity of action. In the case of action, the theory has it that patients “monitor” poorly the behaviors they initiate, and therefore they have the tendency to attribute them to other agents. As a result, they may develop delusions of alien control. It is the “monitoring” — planning and overseeing action to avoid error — which makes one’s actions one’s own, and if that is lost, there will be free-floating intentions which will be experienced as external.

Whatever one may think of this theory, it works poorly for thought, since, unlike action, thoughts are not goal-directed, planned, and revised to match intended outcome. Gerrans notes these problems (p. 197), but, as others have done before, concentrates his treatment on the idea that some delusions of passivity may not be strictly of thought, but of inner speech or subvocalizations — i.e. of actions. This avoids the issue rather than solve it. The issue however might be a false one to begin with, inherited from the framework established by Frith, in which it is as if thoughts need to be labeled one’s own or else they will be attributed externally.

The final section of the book focuses on the phenomenology of delusion. Gerrans uses a canonical case, that of Paul Schreber, whose autobiography has been somewhat of a fixation ever since Freud speculated on it more than a century ago. Gerrans reads Schreber via the writings of Louis Sass, which is an interesting touch, since the two authors are very different in style and inclinations. Sass’s phenomenological analysis of Schreber suggests the need of a framework of understanding delusion which is detached from the familiar conceptual domain of belief and interpretation. In Madness and Modernism, for example, Sass has us see Schreber descending on a twisted spiral from Foucault’s Discipline and Punish. Gerrans is less interested in Schreber as, in some sense, quintessentially modern, as in the description of his “lifeworld”. In this Prussian’s obsessive preoccupation with his own experience Gerrans sees an echo of what the default processing model suggests: a cancerous spread of unanchored autobiographical narrative.

The ambiguous, articulate, and benign Schreber, though a tragic character, may set an overoptimistic tone to the book’s conclusion — and to this review. Gerrans has written a book which provides a glimpse of the state of the art, at least when it comes to what cognitive theories can throw at psychoses. It is also, to my knowledge, an original addition to this particular theoretical family. But the puzzle I started with, that which is better exemplified by Dadd than by Schreber, remains intact. Gerrans has given us even more reasons to suspect that the mad, while poorly equipped, are striving, like all of us, to make sense of their world and of themselves. The Measure of Madness, however, for all its merits, does not ultimately have a working theory of content for delusions. Given its presupposition that it can take seriously the experience of patients — its significance — without inviting in the normative notions involved in interpretation (essentially, that of belief), perhaps it could not have one.

© 2016 George Tudorie
George Tudorie is a teaching assistant, College of Communication and PR, Bucharest.
MEDIA TYPES

Audio Books
Movies