



# Editorial: Schizophrenia and Other Pathologies of Self-Awareness Widening the Focus

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## 1 Self-Awareness: Ownership and Agency

Self-awareness is the kind of awareness of ourselves that underlies our standard, first-personal attributions of conscious mental states, bodily parts and states, and actions. When I think that I'm thirsty, that I'm running too slow, that my left foot hurts or that I am having these thoughts, I normally rely on self-awareness. Self-awareness displays various epistemic, semantic and psychological features that have drawn the attention of philosophers at least since Descartes. The latter, for example believed that self-attributions of conscious states based on self-awareness are absolutely certain (Descartes 1641/1985).

Today, many psychologists and philosophers would probably reject such a strong claim (see for example Schwitzgebel 2011 for a recent, influential critique). Many would argue, however, that my self-attributions of conscious states (and even, indeed, of actions and bodily parts and states) based on self-awareness are immune to a certain type of error involving a misidentification of the owner of the state: I can mistake an itch for a pain, but I cannot mistake my itch for yours. It has been said that these self-attributions are *Immune to Error through Misidentification (IEM)* (Shoemaker 1968).

This asymmetry between the identification of *the nature* and the identification of *the owner* (of the target of self-awareness) suggests that we should distinguish between two dimensions of self-awareness. Not surprisingly, the second dimension involving ownership has been under the spotlight of recent research on self-awareness. It has often been called *the sense of ownership* for conscious states, bodily parts and states, and the *sense of agency* for our self-awareness of actions (Martin 1995; Gallagher 2000; Marcel 2003).

It is widely believed that self-awareness, and more specifically the sense of ownership / the sense of agency, is impaired in patients suffering from schizophrenia. The study of schizophrenic patients has been one of the most important

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sources for the empirical study of self-awareness. However, schizophrenic patients also suffer from deficits that may have nothing to do with self-awareness and it is not clear that they constitute the best probe for self-awareness. Moreover, lesser studied conditions, such as depersonalization, the Cotard syndrome, somatoparaphrenia, or even split-brain, Dissociative Identity Disorder (DID) and other ‘dissociative’ conditions, seem to involve specific impairment of the sense of ownership and agency, but they have been widely neglected in the literature on the topic. Likewise, psychopathology has been used mostly to study the sense of ownership and agency, while other aspects of self-awareness that seem disrupted in other psychiatric conditions (such as alexithymia, autism spectrum disorder (ASD) or obsessive compulsive disorders (OCD)) have attracted much less attention. Bringing together contributions on many of the disorders just mentioned, this special issue co-edited with Francesca Garbarini aims, among other things, at filling this gap.

## 2 Different Kinds of Self-Awareness and their Relationship

We have said that self-awareness is the kind of awareness of ourselves that underlies our standard, first-personal attributions of conscious mental states, bodily parts and states, and actions. This suggests that we can distinguish between:

- the kind of awareness of ourselves that underlies our standard, first-personal attributions of conscious mental states, call it *mental self-awareness*.
- the kind of awareness of ourselves that underlies our standard, first-personal attributions of bodily parts and states, call it *bodily self-awareness*.
- the kind of awareness of ourselves that underlies our standard, first-personal attributions of actions, call it *agentive self-awareness*.

Arguably, all these forms of self-awareness rely on a more basic form of awareness, namely the kind of awareness reflected, merely, in our use of the first-person, something we might call *basic self-awareness*.

Isolating the “ownership dimension” of self-awareness we can likewise distinguish between the sense of *mental ownership*, *bodily ownership*, and *agency (action ownership)*.

These distinctions naturally raise the question of the relationship between mental, bodily and agentive self-awareness and more specifically between the sense of mental ownership, bodily ownership and agency. As emphasised by José-Luis Bermudéz in his contribution, debates about mental and bodily ownership have typically been led in isolation. One might even add that when they have relied on psychopathology, the former have usually focused on schizophrenia (see e.g. Campbell 2004) while the latter have focused on somatoparaphrenia (see e.g. De Vignemont 2013, see Billon 2016 for an exception). José-Luis Bermudéz puts forward a framework for the study of the sense of mental ownership (what he calls  $\Psi$ -ownership) and the sense of bodily ownership (what he calls  $\Phi$ -ownership) and accounts for them in a way that explains their connection by the way they both depend on the sense of agency.

### 3 Self-Awareness and Consciousness

The connection between consciousness and self-awareness has been much disputed in the past fifteen years (see Billon and Kriegel 2015). While universalists such as Gallagher 2004 and Zahavi 2008 claim that all conscious states necessarily involve a form of self-awareness, nihilists such as Schear 2009 and Dainton 2008 claim that they never do, and existentialists such as Howell and Thompson 2016 claim that they sometimes, but only sometimes, do (nihilism is roughly Humean, universalism can be considered as Cartesian).

David Rosenthal's very influential higher-order thought theory of consciousness is committed to universalism, but it is inconsistent with IEM, or rather, with the way this immunity is usually articulated — call that the *classical immunity principle*. David Rosenthal has bitten the bullet and argued, from the study of Dissociative Identity Disorder, that the classical immunity principle is too strong anyway. In her contribution, Michelle Maiese responds that Rosenthal's discussion of DID is unsuccessful, and that the weaker version of the immunity principle advocated by Rosenthal is threatened by some cases of somatoparaphrenia. In the course of her argument she introduces a new distinction between two forms of ownership (perspectival and personal) for mental states.

In their respective articles, Matt Duncan and Pablo Lopez-Sylva argue for a form of existentialism concerning the link between consciousness and self-awareness. Both rely on a common symptom of schizophrenia, thought insertion, which involves reporting thoughts that are not one's own but occur in oneself. Matt Duncan argues that thought insertion shows that, despite Hume's influential contention, we can be aware of ourselves through introspection. Pablo Lopez-Sylva carefully analyses the different ways universalists have tried to accommodate thought insertion, and formulates objections to those.

### 4 The Functions of Self-Awareness

While the function of consciousness might seem hard to pin down and has raised many debates in philosophy of mind and neuroscience in the last thirty years, the function of self-awareness seems more straightforward. It is plausible, for example, that self-awareness plays some role in our control of (and thus in our responsibility for) certain actions. Such an idea has been carefully articulated by Fischer and Ravizza 1999. This view, Nathan Stout argues in his contribution, is however in tension with the empirical study of emotional self-awareness in ASD. According to him, patients suffering from ASD are clearly responsible for some actions and not for other, but certain specific aspects of their emotional self-awareness are impaired. This, he continues, is evidence that Fischer and Ravizza 1999 fail to provide necessary conditions — and maybe, even sufficient conditions — for responsible agency.

The connection between self-awareness and action control is also explored by Judit Szalai, who reviews current models of Obsessive Compulsive Disorders and argues for a hybrid theory involving both motor *and metacognitive* deficits. This is interesting in itself; it might also help assessing a common objection against some influential accounts of thought insertion, to the effect that they miss the difference between inserted thoughts and merely intrusive or obsessive thoughts (see Billon 2011).

## 5 The Mechanisms of Self-Awareness

According to the very popular and fruitful “Bayesian approach to the mind”, our cognition essentially rests on probabilistic inferences, and perception consists in issuing and correcting sensory predictions based on incoming sensory signals. According to leading proponents of this approach, as Valerie Gray Hardcastle reminds us in her contribution, “the “I” [is] a construct our brains create to explain and predict our actions in the world”, and the deficits of self-awareness centrally involved in schizophrenia can be explained by the claim that “patients with schizophrenia relate sensory inputs to prior expectations sub-optimally”. However, Valerie Hardcastle argues, (i) Bayesian models cannot explain such “negative symptoms” of schizophrenia such as memory and affectivity deficits, (ii) yet memory and affectivity are essential to our sense of the self. Together, these two conclusions challenge the idea that Bayesian approaches can *fully* account for self-awareness and its impairments.

Philip Gerrans goes some way toward meeting this challenge in his contribution. Focusing on depersonalization rather than schizophrenia, he puts forward an account of the feeling of “mineness,” which arguably grounds both our sense of ownership and agency. His model appeals to Bayesian inferences, but it construes the feeling of mineness as emerging from a multilevel interaction between cognitive and *affective and emotional* (Philip Gerrans distinguishes the two) processing. In contrast to Valerie Hardcastle’s, his model explains the connection between the kind of affective flattening from which patients with schizophrenia can suffer and deficits of self-awareness.

## References

- Billon, Alexandre. 2011. Does consciousness entail subjectivity? The puzzle of thought insertion. *Philosophical Psychology* 1–24.
- Billon, Alexandre. 2016. “What is it like to lack mineness? Depersonalization as a probe on the scope, function and nature of mineness.” To be published in *The sense of mineness* edited by M. Garcia-Carpintero and M. Guillot. Oxford: Oxford University Press.
- Billon, Alexandre, and Uriah Kriegel. 2015. “Jaspers’ dilemma: The psychopathological challenge to subjectivity theories of consciousness.” In *Disturbed consciousness: New essays on psychopathology and theories of consciousness*, edited by Rocco Gennaro, 29–54. MIT Press.
- Campbell, John. 2004. The ownership of thoughts. *Philosophy, Psychology, Psychiatry* 9 (1): 35–39.
- Dainton, B. (2008). *The Phenomenal Self*. New York: Oxford University Press.
- De Vignemont, Frédérique. 2013. The mark of bodily ownership. *Analysis* 73 (4): 643–651.
- Descartes, R. 1641/1985. *Meditations on First Philosophy*, in *The philosophical writings of Descartes*, edited by J. Cottingham and D. Murdoch. Cambridge University Press.
- Fischer, John Martin, and Mark Ravizza. 1999. *Responsibility and control: A theory of moral responsibility*. Cambridge: Cambridge University Press.
- Gallagher, Shaun. 2000. Self reference and schizophrenia. In *Exploring the self: Philosophical and psychopathological perspectives on self-experience*, ed. Dan Zahavi, 203–239. Amsterdam: John Benjamins.
- Gallagher, Shaun. 2004. Neurocognitive models of schizophrenia: a neurophenomenological critique. *Psychopathology* 37: 8–19.
- Howell, R. & Thompson, B (2016) ‘Phenomenally mine: In Search of the Subjective Character of Consciousness’ forthcoming in *Review of Philosophy and Psychology*.

- Marcel, Anthony J., 2003, The sense of agency: Awareness and ownership of action. In *Agency and Self-Awareness: Issues in Philosophy and Psychology*, edited by Johannes Roessler and Naomi Eilan, 48–93. Oxford: Oxford Clarendon Press.
- Martin, M.G.F., 1995, Bodily awareness: A sense of ownership. In *The Body and the self*, edited by Jose-Luis Bermúdez, Anthony Marcel and Naomi Eilan, 267–289. MIT Press.
- Schear, J.K. 2009. Experience and self-consciousness. *Philosophical Studies* 144 (1): 95–105.
- Schwitzgebel, E. 2011. *Perplexities of consciousness*. Cambridge: MIT Press.
- Shoemaker, Sydney. 1968. Self-reference and self-awareness. *Journal of Philosophy* 65: 555–567.
- Zahavi, D. (2008). *Subjectivity and selfhood: Investigating the first-person perspective*. MIT Press.

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