



Causation, Constitution and Context

Comment on “Seeing mental states: An experimental strategy for measuring the observability of other minds” by Cristina Becchio et al.

Zahavi, Dan

Published in:
Physics of Life Reviews

DOI:
[10.1016/j.plrev.2017.11.013](https://doi.org/10.1016/j.plrev.2017.11.013)

Publication date:
2018

Document version
Peer reviewed version

Document license:
[CC BY-NC-ND](https://creativecommons.org/licenses/by-nc-nd/4.0/)

Citation for published version (APA):
Zahavi, D. (2018). Causation, Constitution and Context: Comment on “Seeing mental states: An experimental strategy for measuring the observability of other minds” by Cristina Becchio et al. *Physics of Life Reviews*, 24, 94-95. <https://doi.org/10.1016/j.plrev.2017.11.013>

Causation, constitution and context: Comment on “Seeing mental states: An experimental strategy for measuring the observability of other minds” by Cristina Becchio et al.

Dan Zahavi

Center for Subjectivity Research, University of Copenhagen, Denmark

In their new article [1], Becchio and her colleagues argue that recent claims concerning the possibility of directly perceiving other people’s mental states will remain speculative as long as one has failed to demonstrate the availability of mentalistic information in observable behavior [p.4]. The ambitious goal of the authors is then to outline an experimental setup that will permit one to determine whether and to what extent a mental state is observable. Drawing on Becchio’s previous work on how regularities in the kinematic patterns specify the mental states of the agent, the authors suggest that a similar approach can be adopted to probe the observability of any mental state instantiated in behavioral patterns [p.19].

I find the article rich and challenging. Let me here raise a few concerns that can hopefully encourage the authors to clarify and develop their proposal even further.

The authors assert that the operational approach they are developing will be able to advance the debate considerably when compared to the untestable claims and considerations that so far have been dominating the discussion. I am not questioning the value of the operational approach, but I also think it has some clear limitations. There are simply many aspects of and controversies in the theoretical debate that it can neither address nor settle. Consider, for instance, how the authors towards the end of their article, propose a new definition of direct, where a perception of a mental state can be said to be direct “insofar as the features of the observed behavior predict the mental state an observer will perceive” [p. 22]. Such a definition leaves it open, however, precisely why the mental state is observable. Is it because observable behavior is reliably caused by mental states such that an observer over time will automatically be able to discern the mental states by observing the behavior, or is it because the mental states are (partially) constituted by the observable behavior? The two alternatives have very different theoretical ramifications. Given some of the formulations used in the article, it seems as if the authors favor the former option. They write, for instance, that one study shows that when a participant grasps a bottle with the intention of pouring, then the middle and ring fingers will be more extended than otherwise. And as they then put it, plenty of studies “have documented the influence of intention on human grasping parameters” [p. 9]. The use of the term ‘influence’ suggests that the link between the two are causal rather than constitutive. But the authors do not address the question explicitly, and it is not obvious whether the outlined operational approach can settle the issue and determine which of the two alternatives we should opt for.

The new definition of direct perception also raises a further related question. Does such a definition allow for the possibility that our capacity to perceive mental states might be influenced by background knowledge? The reason this question is important is that it ties directly to a recent development in the theory-of-mind debate. In the last few years, an increasing number of theory-theorists have expressed a willingness to concede that mental states are visible, i.e., that we can literally see the mental states of others in their behavior. But they also insist that this concession in no way challenges the overarching framework of the theory-theory. Why not? Because it on their account is the presence of theoretical knowledge that makes the mental states observable. We can see someone’s intentions or

emotions when we observe their movements and facial expression, if and only if, our observations are informed by the relevant theory of mind [2]. The interesting question is now the following: Does Becchio and colleagues' operational approach exclude this type of account? It is not clear that it does.

At one point in the text, Becchio et al remarks that the presence of specificational information is not sufficient to establish its efficiency, since the information despite being present might still be undetectable to observers. And as they then continue, if the information despite being available is not useful to the observer, the mental state of the other will remain invisible, and the observer will then have to conduct some kind of abductive leap if he or she is to figure out what the other thinks, desires or believes [pp. 19-20]. Here, further distinctions might be appropriate. When discussing the visibility of the mental, it is important to be clear about what level one is targeting. Is it, for instance, the *that* or the *what* [3]. Whereas we often might be uncertain about the specific beliefs and intentions of the other, this uncertainty rarely affects our ability to experience that the other has a mind in the first place. When playing poker, I might be unable to detect the specific intentions of my opponent, his behavior might not provide me with any specificational information about *what* he is thinking, but that hardly means that everything about the other's mental life is therefore invisible. The very fact *that* the other is conscious might still be something I can pick up perceptually. Is the method developed by Becchio et al also able to capture this more basic grasp of the mindedness of the other?

In Becchio's previous work, a relevant question was whether an observer by simply looking at the kinematics of another's movement could determine the other's intention and predict the future course of her actions. Was the agent picking up, say, the apple in order to eat it or hand it to somebody else, etc. [4] In order to test the amount of information available in the kinematics, it was important to occlude the context, such that the observer would only have access to the kinematics. As a test design, this makes good sense, but one has to ask whether such an occlusion is also required if one is interested in the more general question of whether mental states are observable or not. It seems to me that the answer must be negative. After all, it could be that perceptual information about the other's intentions is not merely available in the movements of the other, but also in the surrounding pragmatic context. If, on a football field, I see you running towards a football, my understanding of your intentions is facilitated by the fact that I can also see the football and the football field, and the actions that they afford. Moreover, outside psychology labs we very rarely encounter expressions in isolation. The fact that we experience what comes before and after a certain expressive movement or act facilitates and aids our understanding of the expression in question and might help us determine whether the blush means shame, anger or is the result of a physical exertion. Drawing on the context when trying to determine the target's mental state broadens the scope to include more than simply bodily information, but we are still talking about perceptually available information. In short, I am not convinced that one can conclude that "when information to discriminate a mental state is not available in the pattern of behavior [...] the mental state will be invisible to human observers". [p.19]

REFERENCES

[1] Becchio C, Koul A, Ansuini C, Bertone C, Cavallo A. Seeing mental states: An experimental strategy for measuring the observability of other minds. *Phys Life Rev.*, 2017 <https://doi.org/10.1016/j.plrev.2017.10.002> [this issue]

[2] Lavelle JS. Theory-Theory and the Direct Perception of Mental States. *Review of Philosophy and Psychology* 2012; 3(2): 213–30.

[3] Zahavi D. *Self and other: Exploring subjectivity, empathy, and shame*. OUP 2014.

[4] Becchio C, Manera V, Sartori L, Cavallo A, Castiello U. Grasping intentions: from thought experiments to empirical evidence. *Frontiers in Human Neuroscience*. 2012; 6:117.