

Review of: "Brain Patterns Shaping Embodied Activities of Their Bodily Limbs in Perception and Cognition"

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Potential competing interests: No potential competing interests to declare.

Hello, thank you for your article. Many interesting considerations were raised and the notion of "Brainets" shaping embodied activities is a thought-provoking and relevant one considering our increasing understanding and use of neuroscience to explain experience and behaviors. The changes that have already been made have also been useful to the structure and focus of the paper.

It was helpful to have the breakdown and summary of the different positions of enactivism and their central tenets. At times, I found myself wanting these to remain more consolidated throughout the piece, as opposed to the movement back and forth between them within and across the various sections. Some organizational modifications may help the paper read more smoothly and keep the relevant dialogue in the foreground.

The studies were well placed as examples of the relevant phenomena in question. Having scientific examples offered excellent insights, as well as reminding the reader why such an inquiry is significant. The efficacy of the studies would be enhanced if stronger links were made between the findings and the conclusion or criticism being made. Focusing primarily on the strongest findings and clearly drawing the parallels between the data and your argument or conclusion would strengthen the paper overall and perhaps enable you to remove some less effective points, making the article more concise. Some examples, however, such as the pianist, grapes, and drinking wine at the party, do not clearly demonstrate the conclusions being stated, from what I can tell. The idea of trying to ground your arguments into real experiences is commendable, but if the authors wish to use them to dismiss the enactivists' theories and support explicit conclusions (e.g. "...In short, it is not the body that shapes the mind but the brain that shapes the living body".), additional premises and linkages are needed, as the conclusions do not necessarily follow from the examples. It may be prudent to also remove the note about eating disorders and Nazis. The example does not sufficiently illuminate the conclusion nor does it appropriately manage the subjects in a meaningful way. Furthermore, the authors do a good job of using quotes and covering a wide variety of the enactivist positions, though again, ideas often seem to be dismissed without the full support of arguments.

In terms of organizing the paper for maximum efficacy, a suggestion is to devote some time to information about the brain or neurology to prime the reader to shift into thinking about embodiment through the framework of the "brainets"; as the majority of set up seemed to focus on phenomenology and the philosophy of mind and quickly shifts to a neuroscientific perspective. Certain areas of the article do a great job of articulating the enactivist position and the challenges with it. I found that some of the strongest articulations appear late in the article however, such as "Enactivists believe that the

embodied interaction of the organism with external circumstances partially determines consciousness. Therefore, phenomenal character requires both brain processes and extracranial conditions called "interactive worldly commitments" (HUTTO and MYIN, 2013, p. 158)." This may be helpful earlier to replace some of the less serious, speculative, or repeated explanations of enactivism, e.g. the numbered sections that list "Absurd" conclusions.

Overall, this is a beneficial contribution to the literature with great insights, particularly within the consideration of the brain as a uniquely powerful and constitutive organ, as well as in compiling studies highlighting the body-world and body-brain connection. I believe thickening the linkages between examples and conclusions via stronger supporting arguments and removing some of the less effective examples and assertions will raise the potency of the piece significantly.