

Review of: "The Case for Conscious Experience Being in Individual Neurons"

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The authors present the idea that the site of conscious experience is in individual neurones whose dendritic trees integrate incoming signals. It is held that for conscious experience such an integration is required. Since consciousness is subjective and linked to the 'Self', it is argued that all individual neuronal experiences are linked together in a way analogue to a solid whose individual molecular oscillations can be conceived as one phonon. A role of a neurone is also to be a receptor for experiences. To combine these feelings from many neurones, in order to feel as a single subject, another similar link is assumed.

Unfortunately I cannot recommend the publication of the article if no better support is provided for the main proposals.

In particular:

The attribution of 'meaning' (i.e. phenomenal content of consciousness) is no valid operation of natural science. The writing is far from clear in this respect. The impression must be avoided that 'meaning' behaves like a physiological entity. Signal integration in dendritic trees is certainly an important process of neuronal function. However, the conclusion is unsatisfactory that the site underlying consciousness must be within neurones for the only reason of that integration feature. Mainly this point needs much further support.

A large part of the article is devoted to features of consciousness that do not immediately fit to the main idea (there is only *one* Self; it is unsatisfactory just to *define* that a biological structure can be a receptor for 'experiences'). Only in order to defend the main idea, several mechanisms are proposed that are vague and far-fetched.

Finally,

- the contents of the 'dialogues' should be greatly condensed and transformed into a discussion; a format similar to 'a famous scientist is interviewed by a journalist' is inadequate for a scientific communication.
- the 'epilogue' should be omitted.
- readers may be offended by various mentions of mental limitations of 'people'.
- Other scientists but not the authors themselves can declare that their idea elicits a kind of Copernican shock.
- The text should be tightened up, more care should be given to references to views of others.
- Unusual, irrelevant or otherwise inadequate terms (catch22, yinzz, appetite, logistic, no-brainer, Biden, PA, ..your own life) should be eliminated.

