

Review of: "Towards Modeling Artificial Consciousness"

Maurice Yolles¹

¹ Liverpool John Moores University

Potential competing interests: No potential competing interests to declare.

The abstract of this paper is insufficient to provide much indication concerning the content and trajectory of the paper. The abstract has 21 words while most journals allow up to somewhere between 150-200 words. There are 16 key words that only partially connect with the abstract. A potential reader of this paper would likely not proceed beyond the abstract.

The introduction lacks a definition of artificial consciousness, as is the case with artificial personality. Definition is distinct from properties, which are briefly attempted from the literature. Now the paper introduces a new concept of "consciousness information processes" where no previous connection has been made between consciousness and information processing. Nor has a connection been made between the knowledge referred to, the nature of purpose, and consciousness. And what are "attended process". There are other definitional issues in this introduction.

The introduction neglects to indicate the purpose of the paper, not how this purpose will be pursued, i.e., its structure and trajectory.

Next, modelling is considered, but the reader does not know what is to be modelled. In this section reference is made to "possesses a non-physical, subjective awareness", but the reader is not informed what this is, or how it relates to consciousness. Using only one citation without argumentative support to conclude that "consciousness is an emergent phenomenon that appears due to specific structures and links of the brain" is inadequate.

The paper then says that "A possible mechanism for modeling consciousness is a system of neural networks in which there is a nonlinear connection between neurons that are involved in different processes – that is, between segments of different networks", but there is no rationale to enable the authors to arrive at this position. This means that the equations that follow have no significance, and I will not comment on them.

The discussion appears to be arbitrary, for instance introducing "language component systems" for the first time without citation, and the conclusion of only 32 words is inadequate, and neither refers to the purpose of the paper or how this has been achieved.

This paper should be rejected.