

Review of: "Provisional Definition of the Living State: Delineation of an Empirical Criterion that Defines a System as Alive"

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Potential competing interests: No potential competing interests to declare.

This study explores the conditions necessary for abiotic matter to undergo a transition into a living system, focusing on the significance of a far-from-equilibrium thermodynamic low entropy state. The presence of the term "only" in the statement is crucial, as it emphasizes that this particular condition is the sole determinant of such a transition. Without "only," the statement would merely reiterate well-established knowledge, rendering it meaningless.

The author contends that there are no clear criteria for identifying the presence of certain factors, presumably related to the transition of abiotic matter into a living system. However, it is suggested that the absence of clear criteria may be attributed to the author's lack of familiarity with relevant literature, which likely contains established methods for identifying said factors.

Fig. 1: Despite the legend provided, the figure fails to illustrate a clear arrow leading to the conclusion that a system is considered alive. The lack of clarity in the figure's representation might hinder readers' comprehension of the study's findings. The author statement about consciousness could benefit from further elaboration and clarification.

Furthermore, it is questioned whether consciousness is a prerequisite for life. While most would agree that consciousness is not a requirement for being alive, the paper seems to imply a direct connection between the two. The author provides examples of bacteria and ants to illustrate this point, but the distinction between life and consciousness needs more thorough examination and discussion.

On basis of 3 references it is difficult to reach any conclusion. The author should cite more latest references.

In conclusion, this study offers valuable insights into the requirements for abiotic matter to transition into a living system. However, the inclusion of "only" in the statement is crucial to its significance. The paper would benefit from a deeper exploration of the distinction between life and consciousness, as well as a review of relevant literature to identify clear criteria for the factors discussed. Additionally, improvements in figure clarity would enhance the overall presentation of the research findings.