

## Review of: "A Challenge in A(G)I: Cybernetics Revived in the Ouroboros Model as One Algorithm for All Thinking"

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Potential competing interests: No potential competing interests to declare.

This paper "A Challenge in A(G)I: Cybernetics Revived in the Ouroboros Model as One Algorithm for All Thinking" presents an ambitious attempt to address fundamental challenges in artificial intelligence (AI) through the Ouroboros Model, proposing a unified approach to cognition. However, there are several areas where major revisions could strengthen the manuscript:

- 1. The paper ambitiously integrates concepts from cybernetics, AI, and cognitive science but occasionally does so in a manner that may be perplexing for readers unfamiliar with the breadth of disciplines involved. A clearer articulation of the core concepts, particularly the Ouroboros Model's specific mechanisms and its application to AI, would be beneficial.
- 2. While the paper outlines a novel framework, it lacks detailed empirical evidence supporting the efficacy of the Ouroboros Model over existing approaches. Additionally, practical details on implementing this model in AI systems are sparse. Providing concrete examples, simulations, or case studies demonstrating the model's application and benefits could significantly enhance the paper's impact.
- 3. The manuscript critiques current AI methodologies, highlighting their limitations in symbol grounding, hierarchical organization, and common-sense reasoning. A more thorough comparative analysis, detailing how the Ouroboros Model specifically addresses and overcomes these limitations, would offer valuable insights into its advantages.
- 4. The paper received one negative review, which suggests that there may be skepticism or misunderstandings regarding the proposed model or its feasibility. Directly addressing the concerns raised in this review within the manuscript, perhaps in a revised discussion or conclusion section, could fortify the paper's arguments and appeal.
- 5. The paper's scope is broad, covering topics from symbol embedding to the philosophical underpinnings of free will and truth. Narrowing the focus to more specific challenges that the Ouroboros Model aims to solve within AI could make the objectives clearer and the arguments more compelling.

In conclusion, the paper presents a thought-provoking perspective on overcoming current AI challenges through a cybernetic approach. Focusing on the aforementioned areas for major revision will likely make the manuscript more coherent, scientifically rigorous, and accessible to a broader audience.

