

Review of: "Limitations of and Lessons from the Learning of Large Language Models"

Alexandra Gonzalez-Eras¹

¹ Universidad Técnica Particular de Loja

Potential competing interests: No potential competing interests to declare.

Approach to the topic: The article seems to address the issue of limitations of large language models (LLMs) in logical reasoning from an interesting perspective, especially by relating it to the Curry-Howard correspondence and the differences between intuitionistic and classical logic. However, I cannot affirm whether it has fully covered all relevant aspects of the topic.

Viability of the proposed solution: The proposed solution of incorporating additional symbols or using a stack structure in the input sequence to improve the logical reasoning of LLMs seems to be an interesting idea in principle. However, the practical viability of these solutions will depend on their implementation and how they affect the performance and efficiency of the models. It would be necessary to conduct experiments and exhaustive testing to evaluate the effectiveness and impact of these proposals.

Final opinion on the article: Based on the provided excerpt, I believe the article addresses a relevant topic and offers interesting ideas about the limitations of LLMs in logical reasoning. However, it is important for the article to present solid and rigorous evidence to support its claims and proposed solutions. Additionally, it would be beneficial if it addresses possible criticisms or limitations of its own proposals.

Publication: Since the article seems to address a relevant topic and offers original ideas, I believe it could have the potential to be published in an appropriate academic journal, subject to peer review and possible revisions and improvements suggested by reviewers.

Suggestions for improving the article: To enhance the article, it could be helpful to:

- Expand the discussion on empirical evidence of the limitations of LLMs in logical reasoning.
- Present experiments or case studies evaluating the effectiveness of the proposed solutions.
- Consider possible criticisms or limitations of the proposed solutions and how they could be addressed.
- Explore more deeply the theoretical and practical implications of the limitations of LLMs in other areas, such as language acquisition and education.
- Improve the clarity and organization of the article to facilitate reader comprehension.

