

Review of: "'Let's Argue Both Sides': Argument Generation Can Force Small Models to Utilize Previously Inaccessible Reasoning Capabilities"

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Potential competing interests: No potential competing interests to declare.

The article is interesting and well-developed. I suggest the following:

1. Redaction. In Section 2, paragraph 2, it says: "We hypothesize that many day-to-day arguments are evaluated by humans in an intuitive (fast, system 1) manner, without deep thought or "epistemic vigilance"^[18], unless they are from **trusted sources** and appear to contradict our own beliefs".

My first question would be: why do arguments need to be evaluated considering deep thought when they are from trusted sources? It seems that it is the opposite that we need to evaluate them when we believe that the sources are not trusted (untrusted sources).

Second question: The paragraph says that humans use deep thought just in cases in relation to day-to-day arguments when sources are trusted and when they appear to contradict our beliefs, so, when we have these two situations. Why is it not enough to consider only one option as sufficient for using deep thought or "epistemic beliefs"? I consider that with only one of the situations mentioned, we as humans used deep thought, so, it would be better an "or" instead of an "and".

2. In section 4 of the article, "Argument Generation" part, it is said that "we (...) ask the model the answer with the **strongest** argument as the final output" and it is said that the LLM will be a proxy for an argument ranking function. I suggest for this part, to add perhaps in a footnote a little more information about how this ranking function works, for example, which criteria could be set (some of them, not necessarily all), as this can help a reader from another area to understand how the system selects one argument as the stronger. Another way is to mention the logical system behind the processing of formulae (i.e., a defeasible logic, or another).

3. About the first image of the article: the robot. I am not sure if this image is from the authors or from the journal designer. In any case, images contain information too. I would strongly recommend erasing that image, or if you want one, designing another more related to the topic. I got the wrong idea of the article the first time that I opened it because of that image. I thought that it was not serious because that image did not give me an idea of the article's content. Besides, this kind of image is related to divulgation articles instead of research articles.

4. The idea of the article is original, but I recommend to the authors for future works to explore the theory of argumentation not from the computational point of view, but the contemporary theory of argumentation focused on

practices of argumentation. More concretely, I will suggest reading Hubert Marraud's work about Argumentation Dialectics (Leal & Marraud, 2022, How Philosophers Argue) because it could be helpful to understand this part of counterargue and the structures linked to this activity.