

Review of: "A Perspective for Economic and Social Unfoldings of AI"

Sea Bez¹

¹ University of Montpellier

Potential competing interests: No potential competing interests to declare.

This article aims to be a POSITION PAPER on artificial intelligence and indeed it develops several opinions. For me, the main interesting opinions are :

- The call to rename artificial intelligence “artificial inferences” or “global learning.” The current terms used with Ai, machine learning, etc are misleading about what AI does and can do.
- One main misleading idea is that “machines are able to THINK and perform better than human beings in ALL situations and contexts”
- Behind artificial intelligence, there are heterogeneous methods. The discussion should be about “what is the purpose” and “what engineering methods are the most relevant to this purpose” instead of arguing in a more marketing approach that companies or government are using “artificial intelligence”
- Two efficient methods preventing poor performance are method fuzzy logic and global optimization

The main difficulty while reading the paper is that there are too many ideas/opinions. In addition to the one listed above, it discusses several others (just to list some: what to do due to job losses related to AI, make or buy decisions related to AI, etc.). Thus, I still wonder what is the ONE MAIN opinion of this paper.

By focusing on one main opinion, there would be more place to develop the “arguable” part of the position paper. I need the opinion to be much more grounded into concrete examples and previous articles to be convinced.

Additional and more detailed ideas for improvement for the authors :

Remark 1: There have already been calls to rename Ai just to give an example Agrawal et al. (2018) had rename AI “predictive machines”. It would be interesting to state these existing critics and names for AI.

Remark 2: try to be much more specific with examples and more citations of previous research when developing the arguments. Here are two examples of sentences that need examples and quotes from previous research :

- a. “it is not difficult to infer that the techniques composing AI probably will have a very significant economic and social

importance." What are the economic and social impact?"

b. "They were chosen due to their huge application spectrum and a large number of devices and systems already using their methods." How much ? In which industry? Some examples?

Remark 3: Revise the way arguments are developed. For instance "In summary," means you are summing up what was developed before. And after "In summary" you are not summing up the discussion on the terms but introducing a new discussion on "a happy (economic) ending " of AI and even the idea of " AI-based enterprises" that was not developed before

Remark 4: Revising the way of quoting authors « In [8] » requires putting the names. You keep "[8] » only at the end of a sentence not in a sentence.

There are lots of arguments without explanation, background, or quotes from authors. Some examples :

- "the strongest argument relates to operating costs - decision makers, naturally, always search for maximum profit, and such a directive seems, at first sight, sensible - but in truth they are trying to minimize some possibly unknown cost function"
- "A substantial level of investments in AI and its applications is essential for countries wishing to maintain or attain a good industrial rhythm of growth and leadership in this area - this is valid in research and development as a whole, in all knowledge domains"

Remark 5. The idea of calling AI "global learning" is not developed in v2

All the remarks are well-intentioned, I just want to help the authors clarify the opinion in a more arguably way so that readers can understand it better and thus take a position for or against it.