How well does one need to understand a subject to write, rewrite and correct research papers?

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Abstract

My presentation looks at the convergence of human and machine approaches to improving research papers. When correcting the English of a scientific article, the revisor is faced with both language-based issues and those relating to their own understanding of the subject of the paper. These aspects may be combined, as problems of understanding terminology can mask language problems. In a previous presentation [1] I covered the possible use of text simplifications tools to quickly gain access to definitions in such circumstances. Here, I ask how far it is necessary to master a subject while correcting it, based on the type of questioning I apply in my own correction-revision work. I compare my approach to correction with results from AI tools for language correction and improvement, which may or may not include subject-specific text analysis.

I also examine the usefulness of simplification tools, aimed at widening audiences, in the context of research papers. Correction is not the same as simplification as it aims to maintain the entirety of the information from the original. However, some degree of simplification during correction can make a paper easier for search tools to retrieve for potential readers or for automatic summary or analysis of content. Should we, therefore, consider how to write for the AI audience before the human one?

Imitating a style based on papers in a particular field is one manner of improving a paper for a particular audience or target journal. Indeed, authors have done this themselves to a degree based on their bibliography and leading different styles to develop in the writing of different fields. Emulation of these styles during correction by human revisors or machines may be exacerbating such trends.

The communication purposes of research papers can include the presentation of new data, innovations, concepts or opinions and are therefore structured and argued in different ways. An article's objective may be to describe a technique or device in such a way that the reader should be able to repeat or recreate it. Even though the non-expert revisor is unlikely to ever do this or to interact with the content as a target reader would, they would be capable of understanding the aim of such protocols and, therefore, of helping to prepare the paper for its intended purpose.

It may not be necessary for a revisor to know the detailed meaning of terminology in a subject as long as the meaning in the context of the paper is clear. A human reader from outside the subject area, because they are not an expert, can make adaptions while working to understand concepts themselves that then open the information to a larger number of potential readers.

Keywords

correction-revision, text simplification, scientific writing, scientific articles, difficulty levels

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https://motsmachines.github.io/2022/fr/

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