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LETTERS TO EDITOR

Artificial intelligence in scientific writing: What are the ethical boundaries? - A Reflection inspired by the myth of Prometheus

La inteligencia artificial en la redacción científica ¿Cuáles son los límites éticos? - Una reflexión inspirada en el mito de Prometeo

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Dear Editor,

We are reaching out to you to expand and deepen the ideas presented in the manuscript titled "Human Intelligence for Authors, Reviewers, and Editors Using Artificial Intelligence" by Palacios ¹, articulating a reflection inspired by the myth of Prometheus. This comparison aims to contribute to the debate on the ethical implications of artificial intelligence (AI) in the composition of scientific texts.

The myth of Prometheus, which tells how this titan defied the gods by granting fire to humanity, symbolizing knowledge, and progress, offers an intriguing parallel to the contemporary situation of AI. Like Prometheus, AI brings significant advancements and raises substantial ethical questions, as discussed in the works of Rozenbergaite ² and Carbajal-Degante et al ³.

Palacios' analysis highlights the potential of tools like ChatGPT to optimize efficiency and accessibility in scientific writing, while also underlining the risks of unethical use ⁴. This duality reflects the Promethean dilemma of balancing the power of innovation with the ethical responsibilities it entails. AI, comparable to Prometheus' fire, has the potential to enlighten and transform, yet its misuse can lead to adverse consequences.

The central issue lies in how to properly manage this "new flame" of AI in scientific writing and other areas. It is crucial to ensure that its application is ethical, responsible, and beneficial to humanity, avoiding falling into arrogance or power abuse, reasons for which Zeus punished Prometheus. This challenge invites us to consider the importance of a balanced and conscious approach in the implementation of AI.

A vital aspect for the ethical use of AI is to establish clear boundaries. For instance, tools like Smodin, which can generate extensive texts based on assigned topics, pose ethical questions



about authorship and the originality of the produced content. Is it ethical for AI to take such active roles in the creation of scientific content without proper acknowledgment? Furthermore, the ability of Scopus, in its beta version, to summarize research and provide graphical representations, as well as the function of Humata AI to synthesize information from multiple articles, raises questions about delegating critical tasks to AI ⁵.

These tools, by assisting in the generation of introductions, discussions, conclusions, and summaries, lead us to reflect on the ethical boundaries of their use. The adoption of AI in tasks such as assisted qualitative analysis, exemplified by Atlas.ti, and statistical analysis, illustrates the diversity of possible applications. It also underlines the need to clearly define the ethical boundaries in their use.

This parallel with the myth of Prometheus reminds us that true progress is measured not only by our innovation capabilities but also by how we address the ethical implications of these innovations. As we advance into the AI era, it is imperative to proceed with careful consideration of the ethical lesson's history offers us, ensuring that our actions reflect a commitment to ethical responsibility and collective well-being.

We appreciate your attention to this reflection and trust that it will enrich the debate on AI in scientific writing and its ethical impact on our society.

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