

# The Indispensable Role of Human Attention and Observation in Editorial and Peer Review

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The future of scholarly publishing lies in a harmonious collaboration between humans and artificial intelligence (AI), where AI is used to augment human capabilities rather than replace them. By maintaining a human-led approach and focusing on the unique qualities of human attention and observation, we can ensure the continued integrity and quality of the peer review process.

Scholarly publishers have long been at the forefront of advancing human knowledge by curating and disseminating research. However, as the volume of research submissions has surged, new challenges have emerged in maintaining the quality and integrity of published work. Editorial tasks and peer review, once manageable through human effort alone, are now strained by the sheer scale of submissions. The central issue is how to manage this increase without compromising the rigorous standards that define scholarly publishing.

The conversation around AI in publishing is often framed as a competition between humans and machines, but this dichotomy is misleading. AI is here to stay, and its role should be seen as augmenting human capabilities rather than replacing them. While AI can efficiently handle repetitive tasks, it lacks the uniquely human qualities of attention and observation—qualities that enable us to see beyond the obvious, think creatively, and draw insights from the unknown. AI operates within the boundaries of existing data, whereas human cognition transcends these limits, allowing for true innovation.

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The essence of learning and understanding in scholarly work is deeply tied to the quality of attention. True learning is not about memorizing facts for later recall, but about understanding the significance of those facts in the broader context of life and research. This kind of learning requires a level of attention that cannot be rushed or optimized by machines; it unfolds over time, allowing for deeper observation and reflection.

Despite AI's potential, there is a significant concern that its use might diminish the quality of human oversight. This is particularly important in academic publishing, where the precision of language and the clarity of ideas are paramount. Multilingual speakers, for instance, may struggle to determine whether AI-generated text accurately conveys their original insights. Even those for whom English is their first language find it challenging to review their work with the necessary attention to detail, which is why external review remains essential. AI's foundation, or its "consciousness," is built on data—information from everything that has ever been written or documented, both digitally and otherwise, that it can access. Its speed, processing power, and real-time access to this vast memory make it highly capable. However, human consciousness holds far more data, much of it unconscious, comprising nonverbal cues, intuitions, and understandings that AI cannot fully replicate. Consciousness is our foundational essence—beyond gender, race, or nationality—reflecting our internal relationship to the whole. This relationship enables us to understand and interpret another human being and their work. A human editor, who can draw on this shared human consciousness and appreciate the nuances and significance of a study, both objectively and subjectively, is indispensable in ensuring the final output preserves the essence and integrity of the original insight.

Instead of the increasing reliance on AI, leading to a reduction in human oversight, the relationship should be human-led and AI-assisted. Reviewer fatigue is a growing concern in scholarly publishing, driven by the increasing

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number of submissions and the limited pool of qualified reviewers. This fatigue can result in rushed reviews, delays in publication, and a reduction in the overall quality of the peer review process. AI tools can help alleviate some of this burden by streamlining certain aspects of the review process, such as initial manuscript screening and reviewer matching. However, the human element remains crucial, particularly in ensuring that the nuances of research are fully understood and accurately communicated. The value of human review lies in its ability to catch subtle nuances and irregularities that might be missed by AI.

AI also can support editorial teams by handling more mechanical tasks, such as checking for plagiarism or ensuring adherence to language and formatting guidelines. However, the final decision-making process must remain in human hands. AI-driven tools can assist with language and technical assessments, but they cannot replace the human editor's understanding of the author's intent or the context of the research.

The key is to free up editors' and reviewers' time from mechanical aspects so they can focus their most precious commodity—their attention—on what truly matters: reading the papers and engaging with the research.

As AI becomes more integrated into the publishing process, there is a growing need for humans to cultivate nonmechanical faculties, such as skepticism and critical thinking. These faculties enable us to question existing knowledge, discriminate between what is essential and what is not, and maintain the integrity of the research process.

The ability to question, observe with an open mind, and draw new insights from seemingly unrelated data is what sets humans apart from machines.

We have no intention of belittling AI—it is a remarkable tool, and I believe it's the precursor to the next stage of human evolution. By taking over the purely mechanical and measurable aspects of intelligence—long a cornerstone of our education and global civilization—AI gives us the opportunity to explore our minds beyond mechanical thought, into the realms of creativity, art, and insight. AI is here to stay, and while it's incredibly capable, we need to place it in the proper context: as a pointer, not the final interpreter of information; as an artificial form of human thought, but not true intelligence.

The role of human attention and observation in editorial and peer review is more important than ever in the age of AI. While AI can handle many tasks efficiently, it cannot replace the human qualities of attention and observation that are essential for maintaining the integrity and quality of scholarly publishing. The future of publishing should be one where AI supports the management of the increasing scale of publishing, creating more time and space for editorial teams and peer reviewers to engage more meaningfully with manuscripts. By emphasizing our unique human qualities and nurturing attention and creativity, we can harness AI advancements to their fullest potential without compromising the standards that define scholarly publishing.