

PERSPECTIVE AND INSIGHT

Artificial intelligence in publishing: Navigating the balance between assistance and originality

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INTRODUCTION

The rapid integration of artificial intelligence (AI) into scholarly publishing presents opportunities and challenges, raising vital questions about originality and human agency. This perspective explores the essential role of human-authored insights in academic writing, emphasizing that scholarly work must originate from researchers' direct observations and experiences. Although AI tools can effectively address challenges, such as language barriers, structural requirements, and limited writing proficiency, their unsupervised application risks undermining the integrity of academic literature.

THE IMPORTANCE OF ORIGINALITY IN ACADEMIC WRITING

Words and ideas, when not grounded in lived experience, lack depth and meaning. Writing devoid of originality serves no higher purpose. True originality does not imply that an idea is completely unique but rather that it emerges from the writer's unique perspective—a view that no one else has considered in the same way. This is what the world needs more of: fresh, original perspectives that reflect individual insights. Originality, not imitation, is key to true progress.

However, in scholarly literature, originality faces growing threats—not only from paper mills and fabricated work but also from the unchecked and unsupervised use of AI in writing.^[3] As AI technology becomes increasingly capable, it poses a risk to the integrity of academic work

by enabling the production of content without authentic, human-driven insights.^[4] This is why it is necessary to limit AI's involvement in the writing process. A scientific paper must reflect the observations and insights of the researcher, and these words must come from the researcher's own intellectual journey. Only researchers, through their lived experiences, can translate those insights into meaningful writing.

THE ROLE OF AI IN SUPPORTING, NOT REPLACING, HUMAN INSIGHT

Challenges such as structural requirements, lack of writing training, or being a non-native English speaker can create obstacles. In these cases, AI can and should offer assistance. It can help refine language, ensure adherence to academic standards, and aid in clarity. However, when AI's role extends beyond this supportive capacity, it risks compromising the integrity and originality of the paper. Relying too heavily on AI to write for us can open the door to imitation, diminishing the value of authentic insight. Even when editing, it is vital to ensure that the original meaning and message are preserved.

Although AI can be valuable for many aspects of research work, such as speeding up tasks and alleviating mundane burdens, it should never assume the role of the primary author. Research papers that can significantly influence lives and knowledge should not be written by AI alone. Writing a research paper is a serious responsibility, and there must be consequences for misuse. Just as performance-enhancing drugs lead to bans in sports, AI-generated text in research papers, without sufficient

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human oversight, should be treated with equal caution. AI must be used transparently, carefully, and under human supervision. [2]

SUPPORTING AUTHORS WITHOUT COMPROMISING INTEGRITY

The pressure to publish—"publish or perish"—is undeniable, but it should never justify compromising the integrity of scholarly work.^[3] To support authors, controlled editing environments could be established by publishers by offering pre-vetted tools or clear guidelines on using AI for manuscript preparation. Authors should use AI-enhanced editing tools to refine their original drafts or organize their notes into a structured form, but they must remain in control of the process and be responsible for the final outcome.^[2] The collaboration between the author and AI should empower, not overshadow, the human element of the work.

Several use cases for generative AI in scholarly publishing seem sensible and ethical. For example, AI can be a valuable editing tool or a thought partner for researchers, but its role must be carefully managed to avoid undermining the integrity of the research process. Below are some potential ethical applications of AI:

Al as an editing tool

If a paper is written in a stream-of-consciousness style, with little regard for grammar, clarity, or flow, then AI can help polish the text. For non-native English speakers, AI can improve readability without changing their voice or intent. However, authors must still apply their energy and attention to the final version, ensuring that the nuances and intended meaning are intact. Precision in editing is key, particularly when high-stakes outcomes are involved. Human thought, supported by AI to provide the right structure, style, and communication format, can help reduce effort and overcome communication barriers caused by a lack of academic writing training, limited language proficiency, or an absence of natural aptitude for written expression.

Al as a thought partner

Generative AI can serve as a valuable brainstorming partner when researchers need someone to bounce ideas off of. A kind of AI-assisted and AI-amplified dialogue with oneself. However, AI's response must be treated with caution because it may not always be accurate or complete. Just as with any conversation, it is up to researchers to apply their judgment and ensure that the questions posed are thoughtful and that the answers received are analyzed critically. AI can enhance human thinking, but its originality and depth depend on the researcher's own insights and quality of thinking.

Ultimately, AI-generated outcomes are valuable only when researchers contribute thoughtfully, precisely, and with a clear purpose in mind. Human-led, AI-assisted, human-analyzed, and human-finalized—this is the ideal equation.

THE RISK OF REPLACING HUMAN JUDGMENT

The real threat to scholarly publishing will not come from AI-generated content—it cannot be avoided, for better or worse—but from AI replacing human judgment throughout the editorial process. [5] Scholarly papers must pass through human consciousness and scrutiny to ensure intellectual rigor, ethical integrity, and contextual understanding. We need skilled editorial professionals who can leverage AI tools to manage workload and prevent burnout but still provide the human insight and judgment that AI cannot replicate.^[5] If AI replaces editorial judgment and peer review, it will mark the end of scholarly publishing as we know it. Scholarly publishing relies on both rigorous methodology and trusted human judgment. Replacing human discernment entirely could undermine confidence in published work.

We must recognize areas where AI cannot or should not contribute. The scholarly publishing industry plays a unique role in society, as it promotes knowledge dissemination while confronting the challenges posed by technological disruption. Scholarly publishing thrives on nuance, critical thinking, and meaningful engagement with research. Automating these processes without consideration risks eroding the integrity and richness of our work.

OPPORTUNITIES FOR AI INTEGRATION IN SCHOLARLY PUBLISHING

Several areas present opportunities for beneficial AI integration, such as manuscript preparation, technical assessment, and reviewer selection. [6] However, experienced editors must retain authority in interpreting context and intent to ensure quality and integrity. The peer-review process is a key example: AI can assist in structuring and polishing content, but the reviewer's original insights and judgment must remain central.[6]

The scholarly publishing industry faces unprecedented pressure, with many major publishers reporting an annual increase in manuscript submissions.^[7] This surge has created a significant strain on editorial teams and peer reviewers, leading some publishers to explore AI solutions. However, AI integration must be approached with thoughtfulness to avoid compromising quality.

BUILDING A THOUGHTFUL IMPLEMENT-ATION FRAMEWORK

A successful implementation framework should begin with a comprehensive workflow analysis, which identifies tasks that consume significant time but require minimal creativity. [8] The philosopher J. Krishnamurti defines creativity as an authentic flow of thought and action in harmony with the present moment, which arises when the mind is free from the constraints of the past or routine thought patterns. [6]

Publishers should establish clear metrics for success, including time saved in editorial processes, accuracy rates in technical checks, and effects on publication quality. The rollout of AI tools should be gradual, starting with low-risk, high-volume tasks, and should maintain robust human oversight.

As AI becomes increasingly integrated into our workflows, it transforms not only how we work but also how we think and connect with ourselves. The relentless pull of technology can diminish our ability to engage in deeper, reflective thought—the kind of thinking necessary for true scholarly insight. Life's most authentic expressions emerge when we are present and mindful, but technology often distracts us from this presence. In scholarly publishing, the consequences of this disconnection are profound, affecting both individual contributions and collective progress.

THE NEED FOR A BALANCED APPROACH

AI has immense potential to enhance efficiency and reduce mundane burdens. It can streamline workflows, assist with data processing, and aid in pre-publication checks. [9] However, the core functions of editorial decision-making, peer review, and scholarly evaluation must remain firmly in human hands. [9] When AI replaces human faculties, we risk commodifying research and losing the essence of scholarly inquiry. AI can enhance various aspects of scholarly publishing by improving grammar, clarity, and readability in the pre-editing phase, especially for non-native English speakers. In technical assessments, AI can quickly detect formatting errors and speed up the editorial process. However, human judgment is necessary to address the nuances and contexts that AI may overlook.

AI tools also excel in editorial checks, such as identifying plagiarism and image manipulation. [6] However, the final interpretation of context and ethical considerations must rest on human expertise. In reviewer selection, AI can suggest a diverse range of qualified reviewers to reduce bias, but editors must maintain control to ensure transparency and fairness. [6] Although AI can highlight

areas requiring further attention, it cannot replace the nuanced judgment of human reviewers.

Peer review, the cornerstone of scholarly publishing, demands the utmost integrity and discernment. Although AI can assist in identifying potential reviewers, organizing comments, or drafting preliminary reports, the ultimate judgment must reside with humans. [6] Thoughtful engagement, contextual understanding, and creative critique remain irreplaceable qualities of human reviewers. Tools that transcribe voice notes or summarize reviewer feedback can enhance efficiency while preserving the depth and rigor of human oversight.[10] Furthermore, AI tools that assist peer reviewers in getting started and completing reviews on time, with greater engagement and immersionpotentially inducing a flow state—should be explored. These tools could make the process more creative, enjoyable, and fulfilling, helping to address or reduce the problem of reviewer fatigue.

Ultimately, transparency in AI usage is essential for building trust and ensuring ethical practices. Clear guidelines and best practices must be established to manage expectations and promote accountability throughout the publishing process, ensuring that AI complements human expertise rather than replacing it.

A FINAL REFLECTION ON INNOVATION

A philosopher once said that evil is that which is unnecessary, and it seems that we are intent on innovating without evaluating necessity. While many calls for innovation are driven by commercial or vested interests, as a community, we must ask ourselves whether innovation without purpose is truly needed. Any innovation that does not enhance the quality of life or contribute to the fulfillment of human beings—while remaining in harmony with the environment—is ultimately unnecessary and could lead to negative consequences in the long run.^[10]

Wherever possible, we should use AI to make our work better but not at the expense of our own unique thinking, insights, and work. Looking forward, organizations must invest in developing human capabilities and fulfillment alongside AI implementation. This includes enhancing editorial expertise, strategic and critical thinking skills, creativity and ethical inquiry, and technical literacy while maintaining transparent communication about AI usage. Success in scholarly publishing will arise from a thoughtful and synergistic collaboration between human expertise and AI capabilities. By harnessing the strengths of both, scholarly publishing can evolve to meet the increasing demands for innovation and quality, while preserving the

core principles of rigorous research and intellectual discourse. This partnership has the potential to create more impactful, accessible, and accurate scholarship, driving the field forward in meaningful and transformative ways.

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REFERENCES

- Ekundayo T, Khan Z, Nuzhat S. Evaluating the influence of artificial intelligence on scholarly research: A study focused on academics. *Hum Behav Emerg Technol.* 2024;2024:8713718.
- Olson PJ. Artificial intelligence in scholarly publishing: Responding to opportunities and risks. Sci Ed. 2024;47:107–109.
- Gulumbe BH. Obvious artificial intelligence-generated anomalies in published journal articles: A call for enhanced editorial diligence. *Learn Publ.* 2024;37:e1626.
- 4. Scientists brace for a "flood of junk" papers written with AI help: One researcher estimated more than 1% of all scientific papers published in 2023 involved the use of AI. The Hindu. Accessed December 4, 2024. https://www.thehindu.com/sci-tech/science/scientists-brace-for-a-flood-of-junk-papers-written-with-ai-help/article68515779.ece
- Ghildiyal A. The indispensable role of human attention and observation in editorial and peer review. Sci Ed. 2024;47.
- Mehmani B, Ghildiyal A. Rethinking reviewer fatigue. EON. 2024;17(10).
- STM Association. STM Tech Trends 2024. STM Association; 2024.
- Upshall M. Using AI to solve business problems in scholarly publishing. *Insights: UKSG J.* 2019;32:13.
- Chauhan C, Patel CJ. Striking a balance: Humans and machines in the future of peer review and publishing. The Scholarly Kitchen. Accessed December 4, 2024. https://scholarlykitchen.sspnet.org/2023/09/28/ guest-post-striking-a-balance-humans-and-machines-in-the-future-ofpeer-review-and-publishing/
- Ghildiyal A. From fatigue to fulfillment. Research Information. Accessed December 4, 2024. https://www.researchinformation.info/analysis-opinion/fatigue-fulfillment/