What if academic publishing became truly open?

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Public Publications

| Within Reach | **Transitional** | Visionary |

Academic publishing shifts to a centralised platform with universal access, advanced machine intelligence and blockchain, enhancing research quality, innovation, diversity, collaboration and global research.

UNCERTAINTIES

Collaboration, Systems

MEGATREND (Most significant)

Borderless World
– Fluid Economies

TRENDS

Cross-Sectoral Partnerships
Future of Education
International Collaboration
Mobilising Innovation
Open Data

TECHNOLOGIES

Artificial Intelligence
Data Protection & Privacy

SECTORS IMPACTED

All Sectors

KEYWORDS

Academic Publishing
Journal Impact Factor
Open Access
Plagiarism/Retraction
Research

WHY IT MATTERS TODAY

Despite a fragmented landscape, open access publishing continues to increase. It is estimated that just over

50%

of published articles are open access, and grant-making organisations are **increasingly stipulating that funded research must be published this way**

Despite a fragmented landscape,[995] open access publishing – where academic research is made freely available online for anyone to read and reuse – continues to increase. Globally, it is estimated that just over 50% of published articles are open access,[996, 997] and grant-making organisations (e.g. in Indonesia[998, 999] and Latin America[1000]) are increasingly stipulating that funded research must be published this way.[1001] Open Research Europe, provided by the European Commission, offers authors funded by the European Commission the option to publish their research as open access, with no charge to authors.[1002]

The focus on journal impact factors has led to exponential growth in misconduct and the prioritisation of quantity over quality. Despite a lack of evidence that it is a reliable metric,[1003] the impact factor rewards practices such as self-citation,[1004,1005] and citation data are often unrelated to the quality of papers.[1006] Paper mills and manipulated citations have also caused distortion, rewarding the mass production of fake papers.[1007] In 2024, the Retraction Watch Database had logged over 60,000 retractions, with the earliest dating back to 1927.[1008]
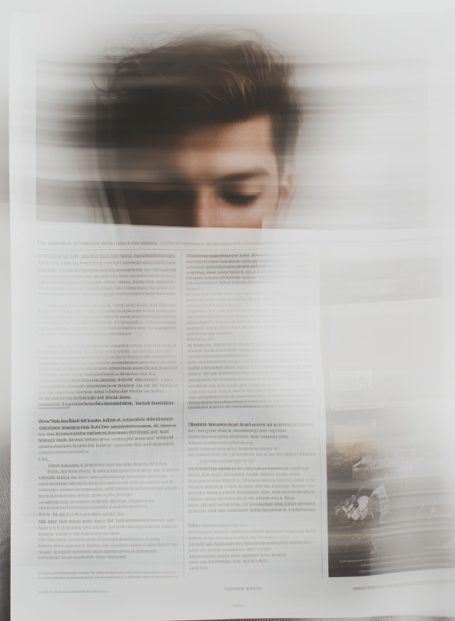
While it was designed for global access to knowledge, open access publishing remains in large part restricted. Globally, the average article processing charge (APC) – a fee authors pay for open access publication – is $1,626,[1009] yet the most significant nationwide grant for young researchers in Brazil (for example) is 30,000 reais (around $5,055)[I] for three years.[1010] At such high costs, many researchers – especially those from underfunded institutions or early in their careers – hesitate to make their work available for free. At the same time, the APC model unintentionally limits who gets published,[1011]especially when research is in a non-English language.[1012,1013] The big five academic publishers (Elsevier, Sage, Springer Nature, Taylor & Francis, and Wiley) earned approximately $1.06 billion in APC fees between 2015 and 2018,[1014] with Springer Nature recently reporting that its adjusted operating profit margin was 28%[1015] publishers have little reason to support free access.

[I] Based on REAIS:USD exchange rate as at 27 January 2025.

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THE OPPORTUNITY

Academic publishing transitions from a diverse journal ecosystem to a centralised platform offering universal access to research. Operating under a non-commercial model with open licences like the Creative Commons, this platform enhances innovation, reduces plagiarism, and elevates research quality. Blockchain features improve transparency, provide decentralised storage, enable peer-to-peer collaborations, and reward research contributions, preventing unauthorised commercial use. Commercial applications, such as training large language models (LLMs), require separate licences to ensure fair compensation under relevant intellectual property frameworks.

Replacing journals, research outputs are dynamically grouped into themes using advanced machine intelligence, inspiring new research. Instant translation makes research accessible and diversified, while community peer reviews after publication enhance quality and relevance, moving away from traditional metrics.[1016] Meta-analysis research thrives with comprehensive datasets, automated tools for synthesis, and real-time updates, enabling deeper insights and researcher engagement where needed.

BENEFITS

Equal access to knowledge; accelerated research and innovation; enhanced global collaboration; improved research quality and diversity; broader global reach.

RISKS

Cultural resistance to change; poor quality despite efforts; unauthorised commercial use.