Reclaiming Knowledge from Monopolies: A Critique of Peer Review, Impact Factors, and the Need for Socialized Research Platforms

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Abstract

Knowledge, as a shared human heritage, should not be trapped in bureaucratic monopolies, economic paywalls, or disciplinary silos. Yet the modern academic system has created artificial barriers: exorbitant publication fees, long delays in peer review, and the suppression of unconventional creativity. This paper argues that current practices of impact-factor–driven publishing reduce knowledge to a commodity rather than a universal good. By analyzing the flaws of peer review and suggesting alternatives such as community-driven platforms, rapid review models, and AI-assisted validation, this work calls for a more democratic, transparent, and holistic approach to the circulation of knowledge.

Keywords: Knowledge, academic publishing, peer review, open access, commercialization, monopolization, specialization, innovation, exclusion, interdisciplinarity, AI-assisted review, global participation.

1. Introduction

Knowledge should be understood as a shared inheritance of humanity rather than as private property [1]. Yet the modern system of academic publishing has transformed it into a tightly controlled commodity [2]. Large publishing houses and leading journals operate as monopolistic entities, charging significant fees for both access to published work and for article processing [3]. These practices create a structure where wealth determines visibility, leaving many researchers, particularly those from resource-constrained environments, excluded from full participation in global scholarship. The result is an uneven intellectual landscape where access to knowledge depends more on financial privilege than on curiosity or commitment.

Equally troubling is the system of peer review, which is often presented as a guarantee of rigor and quality but is in fact riddled with structural problems [4]. The process lacks transparency and is heavily dependent on the subjective judgments of a small number of reviewers [5]. Delays are widespread, with manuscripts frequently remaining in review for months or even years, leaving authors uncertain about their contributions. Rather than fostering open and timely exchange, peer review frequently becomes a bottleneck that restricts creativity and slows the advancement of ideas [6].

2. Historical Unity of Knowledge

Before the rise of the modern disciplinary system, knowledge was often approached in a holistic manner that emphasized interconnectedness rather than division [7]. Thinkers such as Ibn Sina, Al-Farabi, and Isaac Newton did not confine themselves to narrow academic categories. Instead, they moved fluidly across philosophy, medicine, theology, and mathematics, drawing insights from each area to enrich their broader understanding of the world. This intellectual practice reflected a belief that different forms of inquiry were not isolated but deeply related, each shedding light on the others. Knowledge was understood as a unified whole in which progress in one area could illuminate questions in another.

The later fragmentation of knowledge into rigid disciplines created new efficiencies but also weakened the vitality of learning [8]. By separating philosophy from science, or medicine from ethics, the system placed boundaries on intellectual curiosity. Scholars became increasingly specialized, sometimes to the extent that their work became inaccessible to those outside their

field. Although specialization allows for technical depth, it often restricts the possibility of dialogue across domains. The earlier holistic view reminds us that creativity and innovation thrive when ideas flow freely between fields, rather than being confined to narrow academic silos.

3. Hurdles in the Path of Research and Knowledge

3.1 The Problem of Fragmentation

Contemporary universities and academic publishers play a central role in reinforcing rigid silos of knowledge. Departments are structured around narrow disciplines, and journals are often designed to cater to highly specific fields [9]. This structure creates an environment where specialization is rewarded above all else, while broader, interdisciplinary approaches are viewed with suspicion or even dismissed as lacking rigor. Instead of encouraging the crossing of intellectual boundaries, these institutions frequently discourage the exchange of ideas between fields that might otherwise benefit from dialogue.

As a result, a culture has emerged in which originality is constrained by the demand to conform to predetermined categories. Scholars are often expected to ensure that their work "fits" into existing molds, even if their research raises questions that extend beyond traditional disciplinary limits [10]. This emphasis on conformity limits the potential for groundbreaking discoveries, since some of the most innovative ideas arise when insights from different domains intersect. The prioritization of specialization over synthesis reduces opportunities for collaboration and stifles creativity. It also narrows the academic imagination, leaving universities and publishers less capable of supporting the type of knowledge that addresses complex global challenges.

3.2 Commercialization of Knowledge

The world of academic publishing today is largely dominated by a small number of powerful corporations whose business models rely on extracting profit from both readers and authors [11]. These companies maintain costly subscription systems that limit access to knowledge, while at the same time presenting open access as an alternative. However, even so-called "gold open access" often requires authors to pay substantial fees in order to have their work published [12]. Instead of providing a truly open exchange of ideas, this model simply shifts the burden of payment from institutions and libraries to the individual researcher.

Such practices create an uneven playing field in which only those affiliated with well-funded universities or research centers can afford to disseminate their work widely. Independent scholars, researchers in developing countries, and those without institutional support are frequently marginalized under this system [13]. The consequence is a knowledge economy where financial resources determine visibility, influence, and reach. Rather than democratizing the circulation of ideas, the current publishing structure reinforces inequality and restricts the participation of diverse voices that are vital for the advancement of global scholarship.

3.3 Peer Review as Gatekeeping

The widely repeated claim that peer review is an objective and neutral process conceals its function as a powerful gatekeeping mechanism within academia [14]. In reality, decisions about whether a manuscript is accepted or rejected are often shaped by the biases of reviewers, the limits of disciplinary boundaries, and, in some cases, personal or institutional conflicts [15]. These factors undermine the idea that peer review consistently guarantees fairness or quality.

Because the process usually operates under conditions of anonymity and without meaningful accountability, reviewers are able to exercise significant influence with little oversight. This environment makes it easier for unconventional ideas, interdisciplinary research, or challenges to dominant paradigms to be suppressed [16]. Instead of encouraging bold intellectual exploration,

the system often discourages work that does not conform to established norms. As a result, innovation is pushed to the margins, while research that follows predictable paths is rewarded with publication and recognition.

The culture of rewarding "safe" studies over ambitious or experimental ones creates a cycle that reinforces conformity [17]. Over time, this limits the diversity of perspectives and reduces the ability of academia to respond creatively to new problems or to question entrenched assumptions.

4. A Critical Reflection

The current peer review model is not simply inefficient; it is fundamentally unjust. A process that was originally designed to protect quality has instead become a barrier to creativity and the free flow of ideas. If journals are to retain credibility, the review period should be significantly shortened. No manuscript should remain in limbo for months or even years. A fair standard would be a maximum of 24 to 48 hours for an initial review. Such efficiency is possible if the number of reviewers is increased so that responsibility does not fall on a single individual. This would also reduce the risk of one perspective dominating the outcome.

Most importantly, reviewers should not treat their task as an opportunity to impose their worldview. Their primary responsibility is to assess whether the author's observations and arguments are valid, clearly presented, and applicable. If reviewers struggle to understand a paper, they should be permitted to use AI tools to clarify language or structure. If the work still presents difficulties, the correct response should not be outright rejection. Instead, the paper could be published with reviewer notes attached, allowing the wider scholarly community to participate in evaluating its significance. Knowledge should not be strangled by the limitations of a few gatekeepers.

At present, countless creative works remain unpublished because of unnecessary technical requirements. Journals often reject submissions for issues as trivial as font size, spacing, or formatting, or for not meeting arbitrary stylistic preferences. Furthermore, the obsession with impact factors transforms the publication process into a bureaucratic exercise that prioritizes prestige over originality. Creativity suffocates under these constraints. History teaches that many great ideas were once dismissed before later gaining recognition. Today, countless "un-bloomed flowers" are similarly being discarded before they have the chance to flourish.

5. Measures should be taken

5.1 Alternative Models of Knowledge Dissemination

The example of arXiv illustrates how preprint platforms can transform the way knowledge is disseminated [18]. By allowing researchers to share their work immediately with a global audience, such platforms bypass the delays of traditional publishing. Instead of waiting months or even years for peer review and formal acceptance, ideas can enter the public sphere almost instantly. This community-based approach makes research accessible to anyone, enabling rapid scrutiny, open debate, and collaborative refinement. Rather than filtering ideas through narrow institutional bottlenecks, the wider world itself becomes the sieve: mistakes are quickly exposed, practical applications are identified, and the relevance of findings is collectively discussed. In this way, knowledge grows dynamically, shaped by dialogue rather than restriction.

Recent advances in AI-assisted review expand this vision even further [19]. Artificial intelligence can help evaluate clarity, verify data consistency, and highlight potential errors without replacing human judgment. Combined with open preprint systems, AI offers the possibility of a transparent and efficient validation process. This would reduce the burden on individual reviewers while ensuring that the integrity of research is not compromised.

Such models suggest the emergence of a more democratic academic culture, one where rigid hierarchy and the obsession with impact factors gradually lose their hold. Instead of prestige dictating value, research could be judged by its creativity, applicability, and contribution to shared human knowledge [20]. Open, socialized platforms would not only accelerate the exchange of ideas but also broaden participation, ensuring that innovation is no longer restricted to privileged institutions. In this future, scholarship becomes what it was always meant to be: a collective endeavor in service of humanity.

5.2 Knowledge as a Shared Heritage

Knowledge should be understood as a living ocean, constantly in motion, rather than a stagnant pond locked behind barriers. For knowledge to retain its vitality, it must flow freely across boundaries, open to correction, refinement, and growth. When ideas circulate widely, they are exposed to diverse perspectives that test their strength, uncover their weaknesses, and reveal their hidden potential. This constant process of exchange ensures that human understanding evolves rather than stagnates.

Yet the present system of monopolistic publishing silos, lengthy review delays, and exorbitant processing charges stands in direct contradiction to the very spirit of inquiry. Instead of encouraging curiosity and experimentation, it restricts access and imposes artificial limitations on who may participate in the pursuit of truth. Creativity suffers when ideas are locked away or delayed, and originality weakens when only the well-funded can afford to share their insights.

To preserve intellectual vitality, research must be socialized and democratized. Open platforms offer an alternative vision in which knowledge can circulate without unnecessary barriers. On such platforms, ideas are critiqued not by a handful of anonymous reviewers but by global communities of scholars and practitioners. This wider participation creates a more transparent and inclusive form of evaluation, one that recognizes creativity and applicability as much as formal rigor.

In such an environment, knowledge becomes collaborative and dynamic, constantly reshaped by dialogue and open engagement. Rather than being filtered through gatekeepers, it grows organically, tested and refined through collective wisdom. Only by embracing openness can humanity ensure that the ocean of knowledge continues to expand, nourishing discovery and serving the shared future of all.

6 | Conclusion:

The fragmentation, commercialization, and monopolization of knowledge have created serious obstacles for the advancement of scholarship. What was once envisioned as a collective pursuit of truth has been reshaped into a system dominated by profit and exclusivity. Creativity is stifled when researchers must struggle against barriers of access, paywalls, and restrictive publishing models. Entire communities of scholars, particularly those in underfunded institutions or resource-limited regions, are excluded from meaningful participation. The advancement of ideas slows when the circulation of knowledge is treated as a commodity rather than a shared inheritance of humanity.

Peer review, though useful in principle as a mechanism for maintaining standards, has in practice become a tool of suppression rather than support. Delays stretch for months or even years, while biases and disciplinary boundaries frequently prevent unconventional or interdisciplinary work from receiving fair consideration. Instead of acting as a safeguard for quality, the process often silences originality and rewards conformity. Innovation, which depends on intellectual risk-taking, suffers under such conditions.

The future of scholarship requires bold transformation. Platforms must emerge that are free of charge, rapid in review, and genuinely open to participation from the global community. These platforms should not only enable immediate dissemination but also integrate both community feedback and AI-assisted review. Such an approach would provide transparency, reduce inefficiencies, and ensure that evaluation is shaped by collective intelligence rather than a handful of gatekeepers.

Only by dismantling the existing monopolistic and exclusionary structures can knowledge be restored to its rightful role. Scholarship must once again be understood as the universal heritage of humanity, a living body of ideas that grows stronger through openness, dialogue, and shared responsibility. In this vision, knowledge becomes not a privilege of the few, but a resource for all.

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