# Preprints are all you need?

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Preprints—scholarly manuscripts not yet captured by the publication industry—have long promised to facilitate scholarly communications' efficiency, transparency, and availability. Yet, despite preprints' growing popularity, this "intellectual perestroika" (Harnad 1990) has not been uniformly realized: In many disciplines, preprints continue to be treated as less authoritative versions of their "published" counterparts. However, this narrow view of preprints as a communication by-product is flawed because scholars could instead do publish review curate. , and the services that underlie this gap in perceived authoritativeness—editorship, peerreview, and curation—can be provided for preprints but commonly aren't, and are provided by academics but incorrectly credited to the publishing industry. This perceived authoritativeness gap results from scientists' willingness to let industry platforms

As a result, scientists have become trapped in a system that creates artificial authoritativeness while making scientific outputs less accessible to their ultimate funder and purported beneficiary, the general public. I encourage scholars to recognize this state of captivity of their communications infrastructure and to work together toward Harnad's (Harnad 1998) vision of the "final state toward which the learned journal literature is evolving": Preprints are all we need.

*Keywords:* preprints, science communication *Words:* 801

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350 days ago, I submitted a manuscript for evaluation at an academic journal. Around the same time, I submitted the same manuscript to PsyArXiv, a document sharing website popular in the psychological sciences. The results: Radio silence for the journal submission; 334 downloads and 4 citations (with just one self-citation!) for the PsyArXiv version.

But this is a meaningless comparison: The PsyArXiv version hasn't been peer-reviewed and listed on a journal's website: It is not *published*, the goal of most scientific endeavors, with each publication providing a piton on a scientist's climb to career success and fame with the side-effect of informing others of one's work.

Never mind that my colleagues are reading and citing the document on PsyArXiv. For this manuscript to count as a legitimate scientific product I must first endure inexplicable delays to feedback and decisions; clunky websites; arbitrary formatting requirements; conflicts between my scholarly values and the astronomical profits that private publishing companies make from our taxpayer funded work; introduction of errors into my manuscript by the journal's proofreaders; and of course peer review. Without that process of publication, my work will remain a "preprint"—an incomplete and unreliable artifact unworthy of a place in the scientific literature.

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Could things could be better? Like fish unaware of their wet surrounds, academics don't feel the pain because it's all they've ever known. Peer review has nothing to do with commercial journals or publishers—it's the voluntary labor of our colleagues in service of scientific progress. We could, right now, be reviewing each others work on PREreview or Review Commons. Neither does the role of an editor have to be tied to a commercial rent-seeker: The Publish, Review, Curate model of scholarly communication enables a given scholarly work to be included in a plurality of collections, perhaps analogous to journal volumes or blog categories, each curated by different editors on different platforms.

Alternatives to journals operated by "[Big Academic Publishing]" are already making it far faster [cite] and cheaper to get one's work permanently available and findable online, vetted by editors, and reviewed by peers. Against the estimated \$8.97 billion dollars of (mostly) taxpayer money hoovered up by only six commercial publishers on article processing fees alone in 2019 to 2023, and for example Elsevier's \$3,480 median article processing fee for hybrid OA articles along with an average turnaround time of 111 days, alternatives fare well: Peer Community In, an online platform for managing reviews and "recommendations" for scholarly writings (brief editorial reports that summarize the articles and their reviews), reports total costs of €369 per article.

Perhaps the time to replace academic journals is today. If we disentangle peer review and editorial oversight from journals, what remains? The infrastructure to make millions of documents available to millions of readers? Turns out we already have that ... Page numbers, spellchecker-introduced errors, well perhaps we can do those too.

#### **Further reading**

- · guardian paper
- harnad
- key point: citation (for a bunch of papers in folder)

#### **Outline**

#### Hook: The absurd status quo

- The journal-based publishing system is outdated, extractive, and harmful
  - Illustrate with a relatable frustration (waiting months for reviews, paying APCs to read your own work, etc.)
- Frame the central irony: We created this system, we do all the work, yet we're held captive by it
- Preprints could be the primary mode of scholarly communication upon which we build (e.g. publish-review-curate)

#### The Current System Is Broken (But You Already Know This)

- Expensive (subscriptions, APCs, "double-dipping", time spent recovering manuscriptcentral.com passwords)
- Distorts incentives (impact factor, prestige shopping)
- Workflow inefficiencies (slow, clunky workflows, redundant review)
- Misattributes labor and credit (peer review/editing done by academics, credited to publishers who just host it).
- Shifting to data-harvesting platforms ("users are the product").

# The False Dichotomy: "Peer Review OR Preprints"

- Address the elephant: "But preprints aren't peer reviewed!"
- Counter: This is a choice, not an inherent limitation
- Physics example: ArXiv papers get cited, discussed, built upon immediately
- The terminology trap
  - ► Term "preprint" suggests unfinished or inferior product
    - Reinforces journal dominance / authority as "final" product
  - ▶ We want to indicate, review, and cite versions of record (lifecycle) without pretending something has concluded "at publication"

• The real question: Why are we waiting for journals to organize peer review for us?

### Towards community-driven science communications

- Highlight existing examples (PCI, eLife's new model, psychology's growing preprint culture)
- The "publish, review, curate" model already exists—we just need to embrace it
- Preprints as the primary publication.
- Inspired by Harnad's "final state" -> journals unnecessary.

## Challenges & responses

- Quality control -> solved by transparent, post-publication peer review.
- Career credit -> institutions & funders must recognize preprints.
- Prestige inertia -> needs cultural change, but prestige is already hollow.

#### Call to action

- Scholars: stop treating journals as gatekeepers.
- Institutions: reward preprints in hiring/promotion.
- Funders: stop subsidizing publishers, support open infrastructure.
- Reclaim communication as a public good: preprints are all we need.

Harnad, Stevan. 1990. "Scholarly Skywriting and the Prepublication Continuum of Scientific Inquiry." *Psychological Science* 1 (6): 342–44. https://doi.org/10.1111/j.1467-9280.1990.tb00234.x.

——. 1998. "On-Line Journals and Financial Fire Walls." *Nature* 395 (6698): 127–28. https://doi.org/10.1038/25878.