

Open Peer Review

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Discussion

Papanas, N., & Mikhailidis, D. P. (2024). Alice through the Looking-glass: Can We Improve Peer Review? *The International Journal of Lower Extremity Wounds*, 23(3), 356–359. <https://doi.org/10.1177/15347346221084784>

Research workflow

We discuss about one of the most important aspect related to scholarly research, i.e. the reviewing phase of scholarly publications



Peer review

Peer reviewing is the process by which research objects (such as manuscripts) are **vetted for validity**, **appraised for originality**, and **selected for publication** in academic venues

Contextualising the scenario in journals (but it holds also for other situations), an editor cannot be expert in every single area covered, thus manuscripts submitted for consideration are shown to external expert advisers (i.e. the *peers*) who deliver verdicts on the novelty of the work, criticisms or praise of the piece, and a judgement of whether or not to proceed to publication

Editors are then bound, with some caveats and to some extent, to respect these external judgements in their own decisions

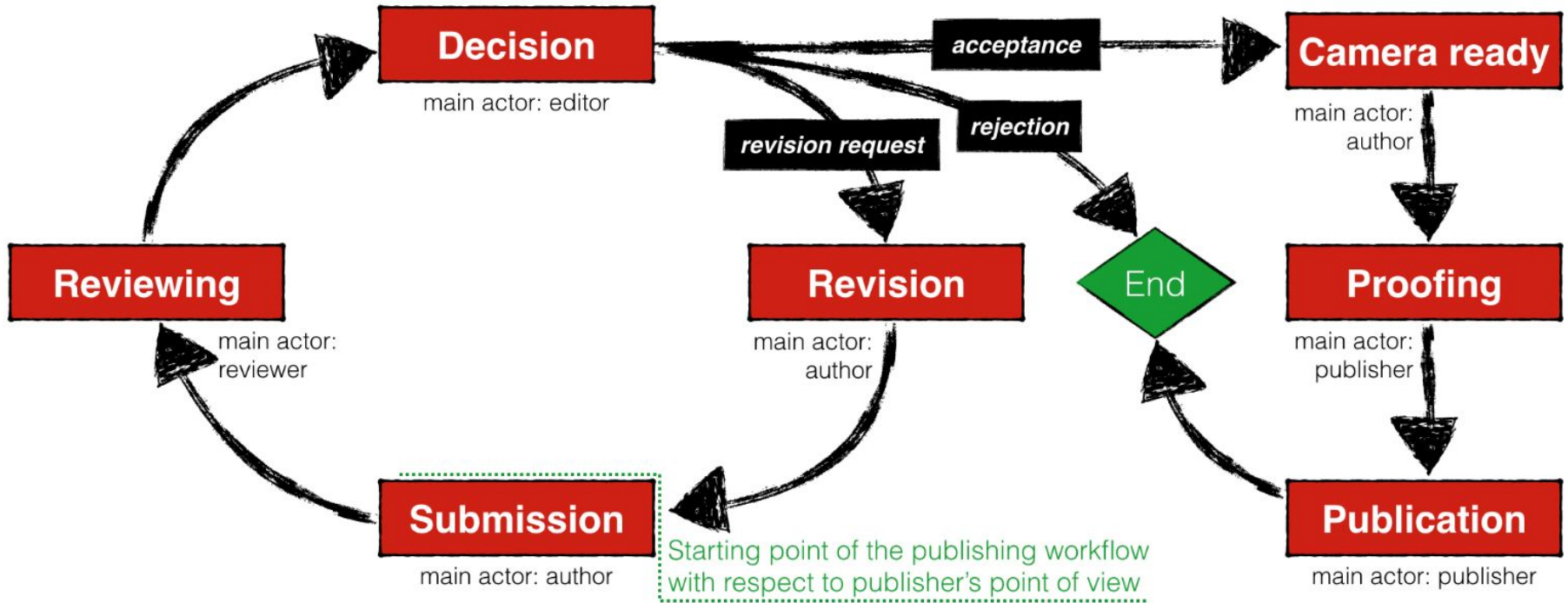
Brief history of peer review

Before 19th century: Early forms of peer evaluation (even if it was not called peer review yet) emerged as part of the social practices of learned societies, and were characterised by **civil and collegial discussions in the form of letters** between authors and the publication editors – editors had the final word on publishing

19th century: Peer evaluations evolved to become more about **judgements of scientific integrity**, and research diversification made it necessary **to seek assistance outside** the immediate group of knowledgeable reviewers from the journals' sponsoring societies

20th century: Peer review was considered as the process of **objective judgement and consensus**, and became formalised in the research workflow – **commercial publishers** use peer review (single-blind or double-blind usually) as a way of legitimizing their journals, and capitalized on the traditional perception of peer review as **voluntary duty**

A traditional peer review workflow



Traits of Open Peer Review

The term **Open Peer Review** is an umbrella term for a number of overlapping ways that peer review models can be adapted, according to the following traits:

- **open identities**, when authors and reviewers are aware of each other's identity
- **open reports**, when reviews are published alongside the relevant article
- **open participation**, when the community is able to contribute to the review process
- **open interaction**, when discussion between author(s) and reviewers is allowed
- **open pre-review manuscripts**, when manuscripts are made available before review
- **open final-version commenting**, when comments are possible after publication
- **decoupled review**, when it is facilitated by an entity external to the publication venue

What Open Peer Review wants to address

Open identities leads to better reviews – i.e. more accountability and transparency = more responsibility – even if it seems that invited reviewers are currently less inclined to review under such circumstances; in addition, the lack of anonymity might discourage reviewers from making strong criticisms (e.g. to higher-status colleagues)

Open reports and **open final-version commenting** add another layer of quality assurance: the community can scrutinize reviews to examine decision-making processes

Open participation struggles to attract reviewers and cannot replace invited peer review, but fine to supplement it

Open interaction between reviewers and authors could lead to improved reviewing accuracy, but may result in longer reviewing time

Open pre-review manuscripts reduces the time before research is available and may increase the quality of initial submissions

Decoupled review avoids that individual articles go through multiple cycles of review and rejection at different journals

How to change the status quo

We need **policies** – **made by** the scholarly community for the scholarly community

There is “need for richer contextual information” to enable readers “to identify the most relevant or most trustworthy studies” (Waltman & Polka, 2022)

We need **incentives** – to **support** the scholarly community in the transition

“Recognise the diversity of research activities and practices [...] and reward early sharing and open collaboration [...] consider tasks like peer review” (Coalition for Advancing Research Assessment, 2022)

We need **infrastructures** – **managed by** the scholarly community

“Modern technology [...] presents an opportunity to restore peer review to its purer scholarly form, as a discourse in which researchers engage with one another” (Tennant et al., 2019)

Waltman, L., & Polka, J. (2022, July 7). Making sense of preprints by adding context – The Publish Your Reviews initiative [Blog]. LSE Impact Blog. <https://blogs.lse.ac.uk/impactofsocialsciences/2022/07/07/making-sense-of-preprints-by-adding-context-the-publish-your-reviews-initiative/>

Coalition for Advancing Research Assessment. (2022). Agreement on Reforming Research Assessment [Policy]. European Science Foundation. <https://coara.eu/agreement/the-agreement-full-text/>

Tennant, J. P., Crane, H., Crick, et al. (2019). Ten Hot Topics around Scholarly Publishing. Publications, 7(2), 34. <https://doi.org/10.3390/publications7020034>

The way to go

Even if we have seen several discussions in the past years within the scholarly community, a crucial push towards the recognition of all research outputs and practices as first-class citizens (at the same level of books and articles) has started with the endorsement of UNESCO via the publication of its Recommendation on Open Science

Open Peer Review is explicitly mentioned as a **strong desiderata**

UNESCO Recommendation on Open Science

(vi) Promoting innovative approaches for open science at different stages of the scientific process

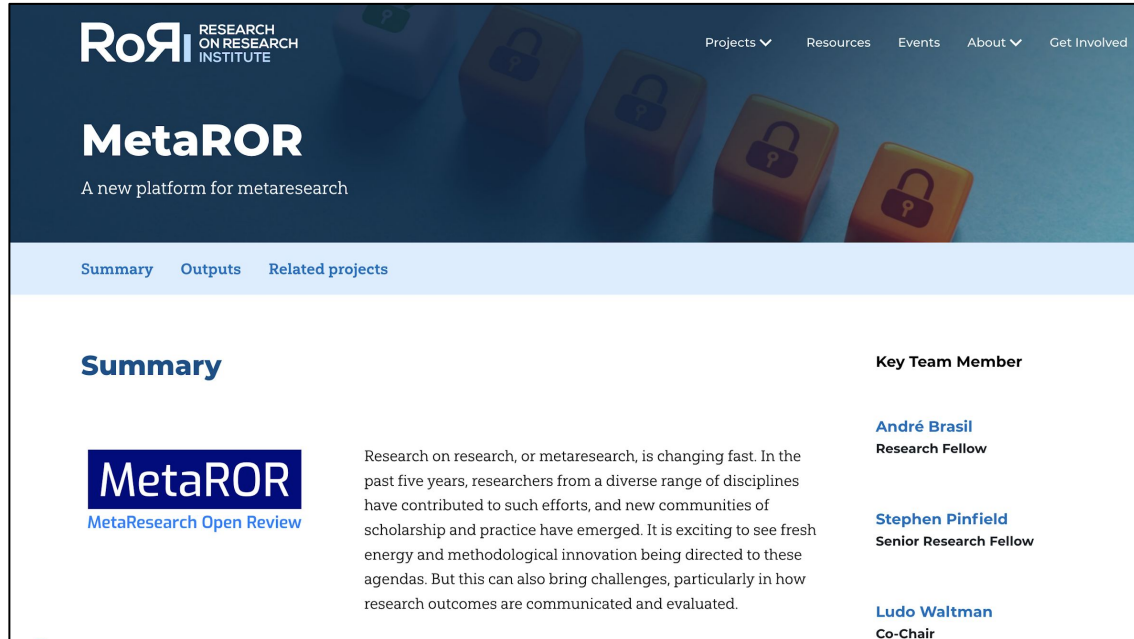
21. Open science requires relevant changes in scientific culture, methodologies, institutions and infrastructures, and its principles and practices extend to the entire research cycle, from formulation of hypothesis, development and testing of methodologies, data collection, analysis, management and storage, peer-review and other evaluation and verification methods, to analysis, reflection and interpretation, sharing and confrontation of ideas and results, communication, distribution and uptake, and use and re-use. Open science is continually evolving and new practices will emerge in the future. To promote innovative approaches for openness at different stages of the scientific process, Member States are encouraged to consider the following:
 - a. Promoting open science from the outset of the research process and extending the principles of openness in all stages of the scientific process to improve quality and reproducibility, including the encouragement of community-driven collaboration and other innovative models, for example preprints, clearly distinguished from final peer-reviewed publications, and respecting the diversity of scientific practices, in order to accelerate dissemination and encourage rapid growth in scientific knowledge.
 - b. Promoting, as appropriate, open peer review evaluation practices including possible disclosure of the identity of the reviewers, publicly available reviews and the possibility for a broader community to provide comments and participate in the assessment process.

An example of decoupling: MetaROR

It is [a platform](#) that operates according to a publish-review-curate model

1. Publish a research work on a preprint server
2. MetaROR assigns reviewers who will submit a report
3. MetaROR publishes an editorial assessment

Partnership with journals for using MetaROR assessment as a seal of quality for the research – so as to publish it directly in interested journals without further review



The screenshot shows the MetaROR website homepage. At the top left is the logo for RoRI (Research on Research Institute). To the right are navigation links for Projects, Resources, Events, About, and Get Involved. The main heading is 'MetaROR' with the tagline 'A new platform for metaresearch'. Below this is a navigation bar with 'Summary', 'Outputs', and 'Related projects'. The 'Summary' section features a 'MetaROR' logo with the tagline 'MetaResearch Open Review' and a paragraph of text: 'Research on research, or metaresearch, is changing fast. In the past five years, researchers from a diverse range of disciplines have contributed to such efforts, and new communities of scholarship and practice have emerged. It is exciting to see fresh energy and methodological innovation being directed to these agendas. But this can also bring challenges, particularly in how research outcomes are communicated and evaluated.' To the right of the text is a 'Key Team Member' section listing three individuals: André Brasil (Research Fellow), Stephen Pinfield (Senior Research Fellow), and Ludo Waltman (Co-Chair).

What about incentives

One of the most effective ways to foster the publication of review reports to support them via incentives – e.g. reviewers can get credit for their work

Coalition for Advancing Research Assessment (CoARA) has the goal of recognising diverse outputs, practices and activities in the assessment of research, and published an Agreement to be signed by organisations

Currently, it counts 520 signatories (and includes also the University of Bologna)

Peer review is something that should be clearly recognised according to the Agreement

The Commitments

1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research

Purpose: This commitment will broaden recognition of the diverse practices, activities and careers in research, considering the specific nature of research disciplines and other research endeavours.

Scope: Changes in assessment practices should enable recognition of the broad diversity of:

- valuable contributions that researchers make to science and for the benefit of society, including diverse outputs beyond journal publications and irrespective of the language in which they are communicated;
- practices that contribute to robustness, openness, transparency, and the inclusiveness of research and the research process including: peer review, teamwork and collaboration;
- activities including teaching, leadership, supervision, training and mentoring.

Mandatory text to read for the next lecture

Borisova, E., Abu Ahmad, R., Garcia-Castro, L., Usbeck, R., & Rehm, G. (2024).
Surveying the FAIRness of Annotation Tools: Difficult to find, difficult to reuse.
Proceedings of The 18th Linguistic Annotation Workshop (LAW-XVIII), 29–45.
<https://aclanthology.org/2024.law-1.4/>

End

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