

Editorial Note: We Need to Recognise that Peer Review is Central to the ‘Social Contract’ of Academic Citizenship

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Abstract: When submitting a manuscript to JASSS, authors should be aware that the quality of the feedback they will receive on their manuscript depends on the voluntary work of the editors and reviewers, and that a fair distribution of this collective effort is essential for the sustainability of peer review. This editorial note aims to make explicit certain reciprocal obligations that characterise the social contract of academic citizenship on which any journal depends. It announces new initiatives to motivate reviewers in times of increasing demand. Although we compete for resources, prestige, and reputation, we should also cooperate to maintain important public goods, such as editorial work and peer review. The combination of editorial responsibility and decentralised, inclusive and constructive peer review is the main *raison d'être* of academic journals. This function is central to credibility and trust in science.

Keywords: Peer Review, Journals, Academic Community, Social Contract, JASSS

● Journals Under Pressure

- 1.1 These are challenging times for academic journals. Perverse incentives and rankings that favour quantity over quality, and the race to disseminate papers quickly in a hyper-competitive academic environment, are putting journals under pressure. More submissions mean more editorial work, more responsibility for higher rejection rates, and typically fewer reviewers available per manuscript.
- 1.2 Vitek Tracz, one of the most visionary and influential scientific publishers, chairman of a company that controlled more than 250 biological and medical journals and a radical voice of the open science movement, argued that journals are dysfunctional gatekeepers of the scholarly publishing system, defending their power over the dissemination of scientific knowledge with the ‘rhetoric’ of editorial quality and peer review (Rabesandratana 2007). Others have argued that there is little empirical evidence of any value added to manuscripts during the editorial process (e.g., Smith 2006; note, however, that there is recent research showing positive effects of the editorial process on manuscript development; cf. Bianchi et al. 2022; Garcia-Costa et al. 2022).
- 1.3 If this is true, then given the availability of preprint archives, we should either abandon the old idea of academic journals filtering publications, or restructure their function as curators of material previously published elsewhere. Recently, new models of scholarly publishing have been explored that transform the role of journals into decentralised, collaborative platforms for scholarly communication, leading to critical debate (see the recent case of e-Life being suspended by Web of Science as its editors no longer make rejection/publication decisions; Brainard 2024).
- 1.4 This debate also touches on the governance and control of journals. For example, in the current debate between advocates of open science and the for-profit journals that dominate the publishing industry, journals and peer

review are often portrayed as instruments of the hegemony of the latter, which would resist the new impetus of decentralised online preprint platforms that call for a new, more transparent governance of the publishing industry (Brembs et al. 2023).

- 1.5 While there is much to be gained from the coexistence of preprints and journals, and the diversity of journal governance systems must always be encouraged, the real point is that the academic context seems to have undergone an implicit change in the old 'social contract' that dominated the pre-Internet era, where editors and peer reviewers were the dominant figures. Authors have now reclaimed their core rights to publish their work online, wherever they want, against any barriers imposed by editors and peer reviewers. Journals are often seen as unfairly delaying authors' publication and adding excessive financial and human costs of editing and reviewing to the publication process.

● The JASSS Vision

- 2.1 As an independent journal since its launch in 1998, now owned by the European Social Simulation Association (ESSA) but with full autonomy, JASSS continues to believe that scientific progress and public trust in science still depend crucially on the traditional function of journals in shaping the academic standards of judgement and research. This requires the organised interaction of the three key figures: authors who adhere to the best scientific standards; editors who are responsible for maintaining these standards and thus protecting the prestige of their journals; and peer reviewers, who provide feedback to improve authors' manuscripts and are key to promoting innovative, rigorous and replicable research.
- 2.2 This triadic interaction inevitably implies asymmetries of interest, especially in contexts that encourage authors to compete for publication and do not provide robust incentives for reviewers to respond to editorial requests and ensure timely and constructive reports to authors. As exemplified by the business model of predatory journals, which have created a collusive equilibrium between editors, reviewers, and authors in order to speed up the publication process at the expense of quality (Seeber 2024), these asymmetries can only lead to beneficial outcomes if there is an appropriate organisational context that ensures responsibility for decision-making, while achieving a balance between interests (i.e., those of editors, reviewers and authors) and different values (e.g., quality, efficiency, fairness).
- 2.3 We at JASSS continue to believe that journals are the most appropriate context for this responsibility to play its beneficial role in the service of the scientific community. Responsibility means responsible people with clear roles. This has always been one of the main *raison d'être* of academic journals: to share the evaluation effort across the community of experts, while being responsible for the quality of publications (Fyfe et al. 2020). By selecting the most innovative and rigorous publications in a given field, journals help to disambiguate signals about quality standards for the benefit of all scientific stakeholders, including learning signals for students and early-career researchers.
- 2.4 However, the context is working against the sustainability of peer review and independent journals. While the financial sustainability of our journal is not in question, thanks to author contributions, the voluntary work of editors and board members, and low in-house editorial costs, it is increasingly difficult to find reviewers to review manuscripts as academics are busy with their own work, grant applications and (increasing) administrative duties. Despite being a specialist journal for a relatively small, presumably cohesive community, JASSS is no exception: whereas in 2014, before I took on editorial responsibility, we were used to inviting an average of 3.9 reviewers per manuscript and receiving an average of 2.4 review reports back, in 2024 I invited an average of 3.5 reviewers per manuscript—to avoid excessive review requests—and received an average of only 2 review reports back, despite a 45% increase in desk rejection rates in 2024 compared to 2014. We now have fewer reviewers per manuscript, although we have reduced the demand on reviewers by reviewing a much smaller proportion of manuscripts. In addition, the average time for reviewers to report has increased from 20 days in 2014 to 31 days in 2024.
- 2.5 These are not dramatic figures, and we believe that these results are largely driven by our editorial decision to focus our reviewers' efforts on manuscripts that are initially sufficiently relevant and rigorous. On the other hand, we would prefer being less selective, minimising editorial desk rejections and giving chances to everyone to benefit from being reviewed by our reviewers. We will continue to discuss internally this decision. However, given that peer review is a common good that requires reviewers to bear individual costs for the benefit of others (i.e., editors and authors) in the presence of weak extrinsic rewards, we believe that the long-term sustainability of our journal requires us to (re)emphasise the implicit 'social contract' that supports the existence of academic journals. Beyond the norms of merit, universalism and disinterested criticism, journals can only

exist if reciprocity (i.e., *spending time reviewing other people's manuscripts as others have/will do for yours*) is respected. Indeed, the sustainability of any academic journal depends on its capacity to encapsulate normative expectations and obligations of academic citizenship and organise them productively to serve its readers.

● Supporting and Rewarding Peer Reviewers

- 3.1 There is a debate about how to increase the value of peer review by providing better incentives for academics to devote time to reviewing compared to other more rewarding activities, including increasing its importance in promotion and proposal evaluation (e.g., Veríssimo & Roberts 2013; Mulligan et al. 2013; Aczel et al. 2021). A journal cannot do much to shape the institutional structure of academic incentives, but these are some initiatives that we plan to implement starting this year to improve the quality of the service we provide to our reviewers.
- 3.2 First, in order to support reviewers, especially early career researchers, we will improve our peer review guidelines, provide information material and promote training initiatives on peer review (e.g., conference tutorials, training schools). This should also help to inform about the best peer review standards also researchers who do not have adequate support in their home institutions.
- 3.3 Second, in order to reward reviewers for their important contribution to the journal, we will conduct regular internal analyses of reviewer engagement, including the perspective of authors, and monitor more systematically reviewer activities by using advanced evaluation tools (e.g., Bianchi et al. 2019). Those with outstanding records will be invited to join the editorial board of the journal (if they are not already members). The top 5 reviewers (according to internal statistics and editorial assessment) will receive a certificate with gift from the journal (e.g., a €100 online voucher and/or journal merchandising). The award winners will be announced on the journal's website and social channels at the beginning of each new year. As the impact of these rewards on reviewers is still controversial (e.g., Yu et al. (2024)), we will maintain anonymity and confidentiality if requested, monitor the effect of these rewards on reviewer behaviour and consider other initiatives if the effect is null or even negative.
- 3.4 While more draconian initiatives have often been considered, such as delaying the processing of manuscripts from authors who have not previously cooperated as reviewers (Hauer & Fehr 2007), we believe that positive incentives are more consistent with the institutional framework of peer review, which is based on voluntary cooperation by all involved, than negative incentives, such as sanctions.

● Conclusions

- 4.1 The 'social contract' behind academic citizenship is relatively simple: although academics compete for resources, prestige and reputation, they should also cooperate to maintain important public goods such as editorial work and peer review. All forms of social organisation require the establishment of norms that avoid exploitation and promote cooperation. These are often based on simple rules of (direct and indirect) reciprocity that typically underpin the existence of any social institution, especially those based on voluntary cooperation. This is also the case for peer review.
- 4.2 In these times of change and public debate about journals, platforms and academic governance, let us all remember these few norms for the benefit of academic institutions and their maintenance. With this editorial note, our journal commits itself to promoting and defending these norms. We believe that they are more important than journal governance, types of peer review models, and publishing models, which are often at the centre of the debate¹.

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Notes

¹For a possible outlet to comment on this editorial, share ideas and contribute to the debate, please consider submitting your comment to *The Review of Artificial Societies and Social Simulation* at this link: <https://rofasss.org/>. RofASSS rapidly publishes comments on all aspects of social simulation in a citable format without fees or a paywall.

References

- Aczel, B., Szaszi, B. & Holcombe, A. (2021). A billion-dollar donation: Estimating the cost of researchers' time spent on peer review. *Research Integrity and Peer Review*, 6(14), 14
- Bianchi, F., Garcia-Costa, D., Grimaldo, F. & Squazzoni, F. (2022). Measuring the effect of reviewers on manuscript change: A study on a sample of submissions to Royal Society journals (2006-2017). *Journal of Informetrics*, 16(3), 101316
- Bianchi, F., Grimaldo, F. & Squazzoni, F. (2019). The F3-index. Valuing reviewers for scholarly journals. *Journal of Informetrics*, 13(1), 78–86
- Brainard, J. (2024). Web of Science index puts eLife 'on hold' because of its radical publishing model. Available at: <https://www.science.org/content/article/web-science-index-puts-elife-hold-because-its-radical-publishing-model>
- Brembs, B., Humenan, P., Schönbrodt, F., Nilsonne, G., Susi, T., Siems, R., Perakakis, P., Trachana, V., Ma, L. & Rodriguez-Cuadrado, S. (2023). Replacing academic journals. *Royal Society Open Science*, 10(27), 230206
- Fyfe, A., Squazzoni, F., Torny, D. & Dondio, P. (2020). Managing the growth of peer review at the Royal Society journals, 1865-1965. *Science, Technology & Human Values*, 45(3), 405–429
- Garcia-Costa, D., Forte, A., Lopez-Inesta, E., Squazzoni, F. & Grimaldo, F. (2022). Does peer review improve the statistical content of manuscripts? A study on 27,467 submissions to four journals. *Royal Society Open Science*, 9(9), 210681
- Hauer, M. & Fehr, E. (2007). An incentive solution to the peer review problem. *PLoS Biology*, 5(4), e107
- Mulligan, A., Hall, L. & Raphael, E. (2013). Peer review in a changing world: An international study measuring the attitudes of researchers. *Journal of the American Society for Information Science and Technology*, 64(1), 132–161
- Rabesandratana, T. (2007). The seer of science publishing. *Science*, 342(6154), 405–429
- Seeber, M. (2024). Changes in scientific publishing and possible impact on authors' choice of journals. *Chem-Texts*, 10(5), 5
- Smith, R. (2006). Peer review: A flawed process at the heart of science and journals. *Journal of the Royal Society of Medicine*, 99(4), 78–182
- Veríssimo, D. & Roberts, D. L. (2013). The academic welfare state: Making peer-review count. *Trends in Ecology & Evolution*, 28(11), 623–624
- Yu, H., Liang, Y. & Xie, Y. (2024). Can peer review accolade awards motivate reviewers? A large-scale quasi-natural experiment. *Humanities and Social Science Communications*, 11, 1557