

Decolonising the social sciences and humanities through peer review

Ross-Hellauer, T.¹ and Derrick, G.E.²

¹ *tross@know-center.at*

Open and Reproducible Research Group, TU Graz, Austria

² *g.derrick@lancaster.ac.uk*

Centre for Higher Education Research & Evaluation, Lancaster University, United Kingdom

Introduction

Peer review faces recurrent accusations that it facilitates bias (Haffar, Bazerbachi, & Murad, 2019; Lee, Sugimoto, Zhang, & Cronin, 2013; Mahoney, 1977); causes unnecessary delay to scholarly communication (Björk & Solomon, 2013; Pautasso & Schäfer, 2010); and is generally unreliable (Ceci & Peters, 1982; Cicchetti, 1991; van Rooyen, Black, & Godlee, 1999). Yet it remains a central pillar of academic self-governance in all scholarly communities. In addition, peer review's centrality in the academic reward system also means that its outcomes directly feed into the development of metrics, and inter-personal impressions of quality, esteem, impact and value. Recently there have been calls to alter the nature of peer review to one that is universal, transparent, decentralised and open. Despite peer review's centrality to how the academy and broader society value and assess research quality, its history in the regulation of scholarly SSH research is unclear, and its relevance to SSH endeavours tacitly assumed rather than rigorously explored. The majority of history surrounding peer review focuses on its adoption in STEM journals and its emergence during the 17th century at the Royal Society in London (Moxham & Fyfe, 2018). In this context, peer review's purpose was to guarantee the validity of facts and to ensure that analytical techniques and approaches were applied appropriately (Shapin & Schaffer, 1985). However, for the SSH, peer review's role as a guarantor of facts and validity is, arguably, less relevant.

This paper explores the suitability of current peer review, and demands on peer review, for SSH disciplines. It conceptualises peer review as an act of boundary-work found necessary to demarcate scientific knowledge, which required the formalisation of a reviewer function, acting as an expert. However, it also conceptualises the STEM-SSH divide, not as a categorical distinction, but as a fluid spectrum that runs parallel to a scale of the object of study expressed by Flyvbjerg's (2001) distinction between objects to humanistic foci of study. This spectrum allows for the existence of peripheral overlaps between fields of study and therefore a mechanism by which regulatory advice through peer reviewers required as part of the peer review system acts instil forms of expertise that are not central to the missions and values of SSH research. In fact, we argue that this sharing different forms of expertise within this spectrum, due to the growth of knowledge production (Yan, 2016), interdisciplinary research (van Noorden, 2015) and the unsustainable nature of peer review (Ross-Hellauer et al, 2017), constitutes a form of gradual colonisation of SSH by STEM values and notions of quality. Left unchecked, the black box nature of peer review catalyses the colonisation of SSH, resulting in a systematic devaluation that forces SSH researchers to submit to, and adopt rather than consciously and openly assess notions of excellence offered by reviewers as part of the scholarly peer review process. In this way, the existing peer review system is feeding a *Teufelskreis/vicious cycle* that alters how SSH can self-govern and regulate notions of quality and value independent of STEM via the peer review process.

As an alternative, this article explores the conceptualisation of peer review for SSH research as a formative process rather than as a summative achievement designed to act as an audit tool. As a quality-control mechanism, peer review in its current form may be suitable for STEM, but we question its relevance to SSH and explore how it acts as a regulatory tool to promote what qualifies as excellence in SSH research. Specifically, we argue that since SSH tends towards interpretations rather than discoveries, its reliance on a peer review system that favours an operationalisation of audit, rather than knowledge construction, is misguided. This, in turn, questions how the recent replication drive for SSH research, promotion of metrics to assess research quality, moves towards interdisciplinary and greater SSH research impact, are relevant and beneficial to the future of SSH research that assumes an inherent value, rather than a value in comparison with its STEM cousins. As a result, this paper questions a STEM-size-fits-all approach to scholarly peer review, and provides options of how peer review practice can be operationalised to value and promote the inherent nature and value, and therefore share a future for a fourth wave (Tarman, 2017) of SSH research.

Acknowledgements

We acknowledge the support of the EU COST Action, ENRESSH (European Network for Research Evaluation in the Social Sciences and Humanities) through their Short Term Scientific Missions.

References

- Björk, B.-C., & Solomon, D. (2013). The publishing delay in scholarly peer-reviewed journals. *Journal of Informetrics*, 7(4), 914–923. <https://doi.org/10.1016/j.joi.2013.09.001>
- Ceci, S. J., & Peters, D. P. (1982). Peer Review: A Study of Reliability. *Change: The Magazine of Higher Learning*, 14(6), 44–48. <https://doi.org/10.1080/00091383.1982.10569910>
- Cicchetti, D. V. (1991). The reliability of peer review for manuscript and grant submissions: A cross-disciplinary investigation. *Behavioral and Brain Sciences*, 14(1), 119–135. <https://doi.org/10.1017/S0140525X00065675>
- Flyvbjerg, B. (2001) Making social science matter: Why social inquiry fails and how it can succeed again. *Cambridge University Press*.
- Haffar, S., Bazerbachi, F., & Murad, M. H. (2019). Peer Review Bias: A Critical Review. *Mayo Clinic Proceedings*, 0(0). <https://doi.org/10.1016/j.mayocp.2018.09.004>
- Lee, C. J., Sugimoto, C. R., Zhang, G., & Cronin, B. (2013). Bias in peer review. *Journal of the American Society for Information Science and Technology*, 64(1), 2–17. <https://doi.org/10.1002/asi.22784>
- Mahoney, M. J. (1977). Publication prejudices: An experimental study of confirmatory bias in the peer review system. *Cognitive Therapy and Research*, 1(2), 161–175. <https://doi.org/10.1007/BF01173636>
- Moxham, N., & Fyfe, A. (2018). The ROYAL society and the prehistory of peer review, 1665–1965. *The Historical Journal*, 61(4), 863–889.
- Pautasso, M., & Schäfer, H. (2010). Peer review delay and selectivity in ecology journals. *Scientometrics*, 84(2), 307–315. <https://doi.org/10.1007/s11192-009-0105-z>
- Ross-Hellauer, T., Deppe, A., & Schmidt, B. (2017). Survey on open peer review: Attitudes and experience amongst editors, authors and reviewers. *PloS one*, 12(12), e0189311.
- Tarman, B. (2017) Editorial, The Future of Social Sciences. *Research in Social Sciences and Technology*, 2(2).
- Van Noorden, R. (2015). Interdisciplinary research by the numbers. *Nature*, 525(7569), 306–307.

van Rooyen, S., Black, N., & Godlee, F. (1999). Development of the Review Quality Instrument (RQI) for Assessing Peer Reviews of Manuscripts. *Journal of Clinical Epidemiology*, *52*(7), 625–629. [https://doi.org/10.1016/S0895-4356\(99\)00047-5](https://doi.org/10.1016/S0895-4356(99)00047-5)

Yan, E. (2016). Disciplinary knowledge production and diffusion in science. *Journal of the Association for Information Science and Technology*, *67*(9), 2223-2245.