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Signed Peer Reviews as a Means to Improve Scholarly Publishing

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Abstract

Peer review is a necessary process with a long history of complaints, including over-solicitation of a small number of reviewers, delays, inadequate numbers of reviewers, and a lack of incentives to provide strong reviews or avoid reviews with little helpful information for the author. In the era of Web-based distribution of research, through working paper or project reports, anonymous peer reviews are much less likely. The Journal of Ocean and Coastal Economics will use signed peer reviews and an open communication process among authors, reviewers, and editors. This approach, to be developed over time, should lead to stronger communication of research results for the Journal's readers.

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1. INTRODUCTION

It is a time-honored tradition to bemoan the poor quality of peer review and to prophesize the impending “crisis in peer review and science” (Mulligan, 2005). Although the veracity and implications of these dire warnings are often debated (House of Commons Science and Technology Committee, 2011), it is not hard to find both authors and reviewers who remain deeply unhappy with the current state of the peer-review system.

Reviewers are accustomed to a steady flow, some would call it an onslaught, of requests for reviews, with some accepting nearly one article to review each week. We don’t have the data to know whether the heavy workload experienced by our peers is a result of their seniority, personal publishing success, or whether there has been a general increase in the number of manuscripts being sent out for review. A paper published in the journal *Nature* found that, on average, the number of reviews per reviewer did not increase significantly over the first ten years of the twenty-first century (Vines, Rieseberg, & Smith, 2010). Of course, GDP per capita also remained fairly constant over this period, but the average income of the top 1% grew substantially. Still, while the average number of reviews per reviewer may have remained the same over the period, many reviewers complain bitterly that their review load has indeed increased. These “over-solicited” reviewers (Hochberg, Chase, Gotelli, Hastings, & Naeem, 2009) are what Harnad (Harnad, 1996) referred to as “workhorses” from an editor’s stable of reviewers—“go to” reviewers and often friends or acquaintances of editors that seem to get requests for review after review.

This increased workload makes it increasingly difficult to find time to provide thoughtful and concise reviews. As a result, papers may languish at journals while the conscientious reviewer tries to find time for a thorough review. As more journals institute tighter turn-around times (with automated reminders), many reviewers must submit more hastily compiled, and thus less useful reviews. Some reviewers simply fail to return reviews at all leaving many manuscripts reviewed by only one reviewer and an editor (Hauser & Fehr, 2007). No wonder many authors discount the advice provided by reviews and simply resubmit the same, unrevised manuscript to another journal. As one senior scholar told us, “every paper has a home.”

Part of the problem of “reviewer over-solicitation” lies in the fact that

reviewers receive manuscripts that they are frequently not qualified to review. We have received manuscripts far outside our area of expertise merely because the biome was the same as one in a recently published paper. For instance, following a publication in *PLOS One* about the economics of coastal habitats, I received a number of requests to review submissions on coastal ecosystems and geomorphology!

2. POTENTIAL SOLUTIONS

Over the years, several solutions to the peer-review process have been proposed (Harnad, 1996; Hauser & Fehr, 2007; Hochberg et al., 2009). Nearly all cite better editing as an essential element in the peer-review system. Clearly, editors should expand their “stable of reviewers,” but doing so requires new ways of finding knowledgeable and unbiased reviewers. Proposals to use more graduate students (Harnad, 1996) don’t meet the need for “knowledgeable review,” while the practice of many journals to ask authors for suggested reviews may not fulfill the desire for unbiased review.

Solutions for improving the quality and timeliness of reviews seem ever more elusive. The principal downside of the current peer-review system is that there are few incentives for good reviewers and virtually no down side to bad, late, or missing reviews. One suggestion has been to create a system of penalties and rewards for peer review (Hauser & Fehr, 2007). Suggested penalties for reviewers who are chronically late, write poorly considered reviews, or repeatedly reject requests to review would be to impose longer waits when the reviewer submits a manuscript to that journal. Such a punitive approach, however, would simply result in the reviewer merely submitting to other journals. The outcome for the journal could be the loss of a highly sought after reviewer along with his or her articles. At any rate, this would not work for lower tier journals or interdisciplinary journals for which the best (albeit late) reviewers may not plan to submit a paper. As a side effect, sharing information about bad reviewers can only serve to reduce the pool of potential reviewers. Since reviewers are rarely compensated, the goal should be to provide better incentives to reviewers, not penalties.

2.1 Eliminating Anonymity

One possible approach to improving peer review is to eliminate anonymity. Anonymity in the peer-review system is outdated. The on-line posting of pre-publication working papers and presentations means that the reviewer can quickly search key phrases and easily find out who authored a submitted manuscript – even when submitted for blind review. The identity of reviewers has also rarely been secret because many reviewers recommend that the author does a better job of citing the reviewers' own work!

In *The Journal of Ocean and Coastal Economics*, we are working to develop ways to connect editors, reviewers and authors in an open manner. By eliminating anonymity from the peer-review system, we increase the accountability of reviewers – everyone will know who has written a bad review and the editor and reviewers alike are much less likely to let a bad manuscript slip through to publication. Publishing the reviewers' names also gives these reviewers credit for their hard work. From the authors' perspective, the Journal will provide the opportunity to receive free and high quality advice from a known set of reviewers. The Journal will explore ways to use the online, Web-based publishing environment to enhance communication among those who contribute to the publishing process, and we will work to continually improve the peer review process for all involved.

Our experiment in open peer-review is aided by the narrow focus of our journal and a large and active editorial board. It may not be appropriate for all journals. Nevertheless, by getting the incentives right, we hope to embark on a new peer review experience – both for reviewers and authors.

REFERENCES

- Harnad, S. (1996). Implementing Peer Review on the Net: Scientific Quality Control in Scholarly Electronic Journals. In R. Peek & G. Newby (Eds.), *Scholarly Publication: The Electronic Frontier* (pp. 103–108). Cambridge, MA: MIT Press.
- Hauser, M., & Fehr, E. (2007). An Incentive Solution to the Peer Review Problem. *PLoS ONE Biology*, 5(4), e107.
- Hochberg, M. E., Chase, J. M., Gotelli, N. J., Hastings, A., & Naeem, S. (2009). Ecology Letters. *Ecology Letters*, 12, 2–4.
- House of Commons Science and Technology Committee. (2011). *Peer review in Scientific Publications: Eighth Report of 2010-2012 Session*. London.
- Mulligan, A. (2005). Is Peer Review in Crisis? *Oral Oology*, 41(2), 135–41.
- Vines, T., Rieseberg, L., & Smith, H. (2010). No Crisis in Supply of Peer Reviewers. *Nature*, 468, 1041.