

Review of: "Behavioral optimization in Scientific Publishing"

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Significance

The topic of this paper is important to scholarly publishing. Peer review is threatened by bias and it is important to consider how peer review might be improved. New ideas often come from researchers applying new theories, methods, and interdisciplinary collaborations. Manuscripts are sometimes rejected because reviewers or editors do not understand a new method or topic for a field. Rejections are often made of papers that are conceptually important, but need a lot of stylistic effort from reviewers or editors such as extensive spelling and grammar corrections, reorganization, and further interpretation of the findings.

Argumentation

The author should refrain from making exaggerated statements without support from the literature. The paper will be stronger if the author makes more moderate, realistic, evidence-based assertions. The paper should be credible. No one can revolutionize publishing with one paper. Just aim to improve it. It is ok to make progress without solving all the problems of peer review. Here are some places where the author has claimed too much without support from the literature:

- Peer review has not “largely deteriorated to support a dichotomous editorial decision of accepting or rejecting a manuscript”. Almost no articles are published outright with no changes from the submission manuscript. Usually, authors are able to implement feedback from reviewers according to their own interpretation. Often, authors are able to leave pieces of their manuscript which reviewers object to unchanged if they provide a reasonable justification for their choice. Overall, as noted in the literature cited, peer review improves the quality of manuscripts rather than simply rejecting or accepting them as is. Often, journals offer the option for reviewers to recommend that an article be submitted to a more appropriate journal. Rejections are not always final. Sometimes, manuscripts which are initially rejected can be resubmitted with significant revisions.
- The author does not provide evidence that “Conformity bias is likely to be very strong in science because it is an important judgement”. The decision of a single reviewer to recommend acceptance or rejection for a single manuscript is not very important. Each reviewer is just one piece of the decision and there are few consequences for their decision on any single manuscript. A single editor’s decision on a single manuscript is not very important either. Lots of scholarship gets published with flaws and authors have lots of backup journals to submit to if they aren’t accepted at their first choice.

- It is too big of an assumption to say “Individuals appreciating sound but nonconformist ideas are rare” in the scholarly community. They may be rare in the general population, but it’s the responsibility of scholars to look for original but sound ideas.
- Do not assert that this alternative peer review system is “ideal”. This is too big a claim. “Improved” is more accurate and sufficient to make a contribution to the literature.
- In many fields, it is not true that “with the increasing popularity of preprint archives, the benefit of access to new research in their field before publication is fading away fast for reviewers”. In many fields, there is little or no participation in preprint archives.
- It is not true that “The benefits of peer reviewing do not compare to the time and effort spent in thorough reviewing”. People still do reviews. Many people find them worth the time and effort they spend on them. They enjoy helping researchers improve their publications. They enjoy contributing to the advancement of their field.
- The author asserts that “there are surprising little quality checks on reviewing”. There are a fair amount of quality checks on reviewers. A good journal editor will not let a poor quality review slide. They will not invite a poor reviewer back to review. They will not give an author a biased or inaccurate review from a reviewer. They will edit the review or find an alternative reviewer.
- The author asserts that “Careless reviewing maximizes the cost-benefit ratio”. Actually, scholars benefit from feeling good about donating their time and expertise to the profession.
- The author asserts that “Most readers of research papers are researchers themselves”. Actually, readers of research papers include researchers, practitioners, policy makers, and students. It would be more accurate to say, “Many readers of research papers are researchers themselves”.
- The image the author paints of scholarly peer review for tenure and promotion is not realistic. It is too bleak. The system of peer evaluation for tenure and promotion ensures that faculty evaluators are experts in a scholar’s field from their own institution and other institutions. It is not perfect, but it is not as tragic as the author paints it. These peers have usually read at least some of the work of the scholar they are evaluating. Not all disciplines give any consideration to the H-index or the impact factor. In many disciplines, in many countries, scholarly evaluation continues to be based mainly on qualitative evaluation of research.
- The author asserts that “if researchers were being evaluated by reading their work, impact factors and h-index would have rapidly become irrelevant”. This is false. Impact factor was invented by a librarian for use by libraries to decide which journals to subscribe to. If researchers stopped using/abusing these metrics, libraries and journals would still use them for their intended purposes.
- The author asserts that “Institutional reputation is an important surrogate in editor and reviewer decisions”. He needs to support this assertion with evidence from the literature, especially since reviewers are usually blinded to authors’ institutional affiliations.
- The author asserts that “double blind peer review can at best be a pretense, or a smokescreen”. This is too strong a statement. Double blind review can work very well. It can also be merely a pretense or smokescreen in cases where the author’s identity is guessable, but there is no evidence that these cases are the majority. The author should concentrate on identifying that there are problems in peer review rather than trying to paint peer review as completely

worthless.

- The author asserts that “Today, work which is ahead of its time does not get published”. The author needs to provide evidence to back this up. On the contrary, I often see articles get published which have major limitations, but offer a very original topic.
- The author argues that eliminating institutional bias in peer review would make publishing equitable. This is too big a claim. Institutional bias is just a small part of the problem for authors in developing countries. Authors in developing countries do not have the same access to costly scholarly literature that authors in developed countries have. They have different levels of familiarity with English scholarly writing. These factors will not be fixed by correcting institutional bias in editorial review.

Authors already have outlets for exposing biased editors to the scientific community. This is evidenced by several articles you cited in the paper. The author should explain to the reader why the peer review system need to change when authors can already expose editors in *Inside Higher Ed*, *Chronicle of Higher Ed*, or other outlets.

The author should keep his focus on the costs and benefits of various stakeholders for accepting or rejecting papers. He occasionally drifts into analyzing the costs and benefits of choosing to peer review or edit papers. This is not the central concept of the paper. The paper is not trying to recruit peer reviewers or editors. It is trying to make reviews more fair. One place where this happens is in the reviewer section. The author should note that the cost for reviewers of accepting a bad article is professional pride. Reviewers want their discipline to advance. They want the journals they are affiliated with to have good reputations and high citations (Remember that many reviewers are also editorial board members). The author should relate the cost in time of reviewing to the biases reviewers may have in acceptance and rejection recommendations. The author rightly says that reviewers have limited time to invest in reviewing. This means that they don't want to spend hours or days making a conceptually good but poorly written article readable. They are incentivized to accept articles that are both conceptually good and stylistically sound. This can lead to bias against authors for whom English is not their first language.

The author should acknowledge opportunity costs throughout the paper. For instance, the opportunity cost for an editor of rejecting good papers is the opportunity cost of the enhancement to their reputation and the reputation of their journal which is lost when they reject a good paper. Good papers attract high numbers of citations for a journal.

One concern I have about peer review which is missing from this paper is that high profile manuscripts are often routed to high profile reviewers and therefore get better feedback than manuscripts from low reputation authors whose manuscripts are routed to low reputation reviewers.

One benefit of peer review that is missing from this paper is that reviewers can state in their promotion and tenure packages or annual evaluations that they have reviewed papers, demonstrating their service to the field. They can also demonstrate their prestige in the field by stating that they have been invited to review for prestigious journals.

The author argues that “In the current system, low quality science is unlikely to get accepted in journals of high repute, but good quality science from lesser known researchers is equally unlikely to get accepted there”. He needs to explain for the

reader why this is a problem. Does it matter whether a paper is published in a well-known journal or a little known journal? As long as a publication is highly cited or highly downloaded, why does it matter what journal it is associated with?

The author argues for most reviews to be open, but does not account for all the reasons a reviewer might wish to remain anonymous. What if a reviewer might be looking for jobs in the future? They would not want to criticize a potential search committee member. Open peer review can create an additional burden of time if authors want to have extended discussions of aspects of their articles. Reviewers cannot escape these discussions if their identity is available to the author. Having one's name associated with a poor study could be damaging to one's career if a reviewer doesn't notice an article's flaws. There is already a serious peer reviewer shortage. It will be even worse if peer reviewing carries greater risk for the reviewers. How are journals going to afford to reward reviewers for these risks?

The author argues that the objection that "the volume of literature being published is already huge and the reader has no time to read more" is not a very serious objection. He does not provide any evidence that researchers will not mind weeks or months of extra work to identify quality papers every time they seek literature on a topic. Not to mention that many researchers are students and do not yet have the expertise to differentiate reliable papers from unreliable ones. This is, in fact, a desperately serious objection to publishing everything regardless of its quality.

Clarity

The heading "Rationalization in human behaviour" comes out of nowhere. The author needs to introduce this topic into the paper before suddenly introducing a major section of the paper with this concept. Also, only the first paragraph in this section actually focuses on rationalization. The rest of the section is really about general principles of human decision making. Maybe the heading of this section should be "Principles of Human Decision Making".

In English, people "make" decisions. They do not "take" them. This and other grammatical issues interfere with the clarity of the paper.

Defending "politically incorrect" papers is not the best word choice. Politically correct papers can have huge costs for a journal, an editor, and an author. It is the editor and reviewer's job to protect the journal and author from negative consequences of politically incorrect papers. I think what the author means to say here is papers with unpopular perspectives.