Open peer review: opportunities, challenges and possible influence on a small scientific community

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Introduction

• 1752. – first review process - by the end of the 19th century the review process has become standard

• Pillar of trust (Nicholas et al., 2015) or seal of approval (Ware, 2011)

• Improvement in the quality of journal articles
  • estimate: 90% of authors said that their article had been improved by peer review (Ware, 2011)

• Control of quantity of published journal articles
Peer review process (in short)

• Cooperation of authors and journal editor:
  1. An author cooperates with the journal editor regarding scientific quality of the article, methodology etc.
  2. Editor and author work together on the article layout
  3. Publication of the article (Vrana, 2011)

• Rejection rates at peer-reviewed journals:
  • from over 90% to under 10% (Ware, 2011)
  • average rejection rate about 50% (Ware, 2011)

• The overall average (median) time spent by reviewers per articles is about 5 hours (mean 8,5 hours) (Ware, 2011)
Peer review woes

I can’t begin to imagine how they turned three “accept with very minor revisions” reviews into “your manuscript has been rejected ... on the advice of referees, who have recommended that substantial revisions are necessary”.

In fact, let’s dump the “I can’t imagine how” euphemism and say it how it is: “reviewers recommended substantial revisions” is an outright lie. The reviewers recommended no such thing. The rejection can only be because it’s what the editor wanted to do in spite of the reviewers’ comments not because of them. It left me wondering why I bothered to waste my time offering them an opinion that they were only ever going to ignore.
Peer review woes

Almost every paper I have had published has been rejected at least one place, including the “good” ones. This means that the results of even the good papers have been delayed by months. Or in the case of one paper - a full year and a half of delay. Any time I publish open access, it costs me at minimum around $1,500. I like open access because I think science funded by taxpayers should be free. But it is a significant drain on the resources of my group. Finally, most of the resubmission process is wasted labor. It generally doesn’t produce new science or improve the quality of the science. The effort is just in reformatting and re-inputing information about authors.
Open peer review

• Scholarly review mechanism providing disclosure of author and referee identities to one another at any point during the peer review or publication process (Ford, 2013)

• It could also mean that „the reviewers remain anonymous but their reports are published” (Ware, 2011, 25)

• First(?) appeared or mentioned in the late 1980s:

• First(?) implementation:
  • Atmospheric Chemistry and Physics in 2001
Open peer review characteristics (variants) (Ford, 2013)

• **Signed review refers**: submitted reviews signed by the referee published alongside articles at the time of publication or are signed when an author receives them

• **Disclosed review**: referees and authors know each others’ identities during the peer review process

• **Editor-mediated review**: the editor-mediated portion of any open peer review process may or may not be publicly disclosed

• **Transparent review**: complete openness to a distinct community or the public: public community watches peer review process
Open peer review characteristics (variants) (Ford, 2013)

- **Crowd-sourced review**: a public review process in which any community member may contribute to the article review

- **Pre-publication review**: prior to article publication in a public space such as a pre-print server

- **Synchronous review**: at the same time as publication of the article

- **Post-publication review**: after an article is published
Open peer review pros

• It encourages reviewers to be uncritical

• It gives the author the opportunity to influence the reviewer (Peer review modalities, pros and cons, 2015)

• The transparency of open peer review encourages accountability and civility

• Reviewers are more motivated to do a thorough job (Wiley, n.d.)
Open peer review pros

• Reviewers would be more tactful and constructive

• Reviewers with a vested interest in suppressing the publication of a manuscript could be more easily unmasked by authors

• Generally, it shortens the time between submission and publication (Ford, 2013)

• Strengthen communities of practice (Ford, 2013)

• Open peer review helps achieve social justice in scholarly publishing (Ford, 2013)
Open peer review cons

• Some reviewers might refuse to review for a journal, due to concerns about being identified as the source of a negative review

• Reviewers could be reluctant to criticize the work of more senior researchers – especially if their career depends on them. In smaller research communities and in some regions of the world this could be a significant problem (Wiley, n.d.).

• Reviewer abuse and accountability is diminished in open peer review (Ford, 2013)
Open peer review cons

• The frequent problem: the number of reviewers and their selection

• Small scientific communities with few specialists in some scientific fields – too few reviewers

• Specialists are well known for their expertise in their respective scientific fields

• No editor can know in advance how well these specialists will behave in role of reviewers (Bowman, 2014)
Peer review in social sciences journals in Croatia available on portal „Hrčak” („Hamster”)

• Review of „Guidelines to authors” and „Guidelines to reviewers” in 162 social sciences journals available on portal „Hrčak” („Hamster”) at http://hrcak.srce.hr on September 10th, 2015.

  • 24 journals provide no guidelines to authors at all
  • 32 journals provide guidelines to authors
  • 1 journal explicitly states „We have no peer review!”
  • 50 journals provide guidelines to authors and explicitly state „Yes, we have peer review process” (but they don’t say of what type)
    • 9 out of 50 journals provide guidelines for reviewers
  • 55 journals provide guidelines to authors and explicitly state „Yes, we have anonymous peer review process (with two or evene three reviewers)”
    • 16 out of 55 journals provide guidelines for reviewers

• Zero (0) journals offer open peer review process
Acta medico-historica Adriatica

http://hrcak.srce.hr/pute/pute_autorima_Acta_Medico-Historica_Adriatica.pdf
Open peer review in a small scientific community & conclusion

• Main problem: everyone knows everyone else

• Small number of reviewers in specific scientific fields regarding specific topics = educated guess who is the reviewer

• Unknown number of reviewers willing to sign and publish publicly their review

• Not enough information about open peer review
Open peer review in a small scientific community & conclusion

• Open peer review is in development

• As such, it requires more editorial attention than centuries old blind peer review

• Open peer review is not universal solution?

• Not enough practical experience in many Croatian journals