

Review of: "Behavioral optimization in Scientific Publishing"

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A very detailed, well-argued analysis of the current situation in scientific publishing from the point of view of human behaviour and cost-benefit optimization, supported by a literature review. That analysis served as the basis for creating a proposal for a different system of the entire scientific publishing process. As the author correctly stated, the position of reviewers is the weakest segment of the currently most widespread forms of peer review (single-blind or double-blind). That is why the point of view presented by the author is completely justified: *"Since good quality reviews are most crucial to scientific publishing, the cost-benefit optimization of the reviewer should be the first consideration in designing an alternative publishing system. For which it is necessary to give sufficient incentive for reviewing as well as allow reviewers to build reputation for good quality reviews."*

In this sense, the author suggests: *"This can be achieved by making the review reports public with optional anonymity. However, currently journals that do so only publish review reports of accepted papers. Rejection recommendations can still be accompanied with hurried conclusions and irresponsible comments and reviewers can get away with it without affecting their reputation. Anonymity should be optional for the reviewers but if reviewers are ready to publish the review report disclosing their names, the published reviews should be considered as a valid form of publication that can be credited to the reviewer. Reviewers should be able to enrich their CVs and given some importance by their evaluators at any level. Anonymous reviews cannot be included in evaluation for obvious reasons. The choice of being or not being anonymous would then lie with the reviewer. There could be specific conditions under which the reviewer may not like to disclose his/her name. But commonly disclosing it would be beneficial for the reviewer. Inclusion of reviews in evaluation would provide a substantial incentive for reviewing but at the same time publication of review reports would impose a reputation cost for bad quality reviews. Since all reviews are made public, bad quality reviews will threaten the reputation of a journal as well. Thereby bad quality reviewers are unlikely to get further review requests from the journal. This carrot and stick approach can fundamentally alter the cost-benefits of reviewers motivating them towards greater efforts, greater quality and timely inputs."*

However, I see two questionable things in this system.

The first is that the "mandatory" publication of reviews (or even conditional, but not dependent on the will of the reviewers) will further reduce the number of accepted invitations to review papers. The possibility of the review being publicly available will discourage many reviewers, who will want to avoid the slightest chance of their reputation being discredited and will judge that the benefit may be far less than the cost. The author points to this, but I think it needs to be much more seriously considered when discussing the proposed model. Nevertheless, it can be assumed that this model will make

most reviews to be of high quality, useful for both the author and the readers - It is to be expected that such a system would make the reviews much more competent and objective.

On the other hand, leaving the possibility for the review to be public, but not to know the identity of the reviewer, greatly makes the idea pointless. Reviewers will then (still) be able to rate a paper unjustifiably bad or unjustifiably good, or even act unethically by reviewing a paper, even though they are in some conflict of interest, without consequences for their reputation.

Therefore, this type of system still has shortcomings from the point of view of the intention to be correct "A behavior-based alternative system". Some of the disadvantages of the usual (current) way of reviewing would still be present: difficult to find reviewers willing to review manuscripts; and the ability (still) to submit incompetent and dishonest reviews.

In my opinion, another, perhaps utopian model would be much more "honest" and free from most unethical practices in scientific publishing. It contains many elements of the system proposed in this article, but it would be based on the free publication of all papers, without peer reviews, but with the possibility that anyone, with full disclosure of identity, can comment (review) the published manuscript. The value of the presented results would be confirmed or refuted by those comments, as well as by citations by other authors. However, what makes such a system utopian is that in such a model we don't need publishers and then no money is made in scientific publishing. Academic communities could develop harmonized publishing platforms, which could be searched together, and authors/or readers should pay minimal fees to ensure the stable functioning of the system. In that case, the citations would not contain the name of the journal, but (eg.) the doi would be sufficient to identify the paper.

That is not the only thing that makes such a system utopian: first of all, the perception of published work had to be changed from the roots. The possibility of publishing fabricated and/or false results increases drastically. Readers must have a completely different approach to what they read - what is published should not be taken for granted, it does not mean that everything published is correct and accurate. Closely related to this is the issue of paper quality assessment, and the evaluation and categorization of authors. A system would have to be devised that would rate papers and authors, something that would replace the existing impact factors.

A special problem can be the presentation of the work itself, from the experiences of many publishers, including my personal experience, the technical preparation, the language in which the manuscripts are written, the clarity of the results presentation is often below any acceptable standard. Therefore, there would still have to be some preliminary check, which would provide a minimum new requirement for the paper to be readable and understandable.

It can be concluded that the article "Behavioral optimization in Scientific Publishing" excellently analyses the current state of publishing the results of scientific research, and that the proposed model has elements that can significantly overcome many of the shortcomings of most current systems. First of all, it significantly reduces the possibility of unethical actions by all actors in the publishing process. Based on behavioural optimization, it would make the whole process more objective and fairer, but there are still weak points, which could be, at least partially, removed.

It would certainly be a significant step in preventing the trend of scientific publishing becoming more and more a business and a way to make good money, rather than a service for the scientific community to present new achievements. On the other hand, even for authors themselves, it become more important how much and where they publish than what they publish. The struggle for the highest Impact factor becomes more important than the essence of scientific publishing. The phrase Publish or Perish has never been more true than it is today.