## Cite or be damned: Some Thoughts on Reviewer-Coerced Citation

Rhyd Lewis, Reader in Mathematics, School of Mathematics, Cardiff University UK. www.rhydlewis.eu

This is a reprint of the article "Cite or be Damned: Some Thoughts on Reviewer-Coerced Citation" originally published in <u>Scientists are Humans</u>, November 2020 (<u>https://scientistsarehumans.com/2020/11/24/cite-or-be-damned-some-thoughts-on-reviewer-coerced-citation/</u>).

Some time ago I was asked to edit a special issue of an overseas computer science journal. This involved the usual activities of collecting papers, identifying suitable reviewers, and then overseeing the reviews and revisions of each submission. In one case, a reviewer supplied an author with a long list of publications. They then strongly suggested that the inclusion of these works would influence whether they would recommend the paper's acceptance or not. I was not particularly happy about this and, in my comments to the author, I made it clear that the citations should only be included in their revision if they were of "direct relevance" to their work.

A few weeks later, I submitted my own manuscript to this special issue and arranged for another editor to coordinate the review process. To my surprise, one of the reviews contained the *exact* same list of papers, together with the same word-for-word comments about how they should all be added to the manuscript before acceptance. After spending time looking at these papers, I found that none of them were even remotely related to my work. I therefore politely rejected their request and was forced to spend the next few weeks with all my fingers and toes crossed, hoping that the reviewer did not carry out their threats. (Ultimately, they didn't.)

The phenomenon of "reviewer-coerced citation" is probably familiar to many of us who publish in scientific literature. It occurs when a (usually anonymous) reviewer uses their position to illegitimately increase the number of citations to their own work. In turn, this makes their research more prominent, increases their citation count, and helps to boost their h-index – things that are often considered important by interview and promotion panels.

Extreme cases of reviewer-coerced citation have recently been reported in the media. In February 2020, *Nature* magazine reported how "one of the world's most highly-cited researchers" Kuo-Chen Chou had been barred as a reviewer from several leading computational biology journals. The grounds were "scientific misconduct of the highest order" [1]. In the dozens of reviews Chou had carried out for the journal *Bioinformatics*, he had requested the addition of an average of thirty-five citations per paper. Ninety per cent of those requested papers were his own work. *Bioinformatics* also found instances where his reviews suggested changing the titles of papers to mention an algorithm he had developed, hinting at a rejection otherwise [2].

Peer-reviewing papers can sometimes feel like a thankless task. Papers can take days to read, authors may resent your feedback, and only the publishers get paid. Often, reviewers may feel that a paper does not make full and appropriate reference to the literature and will suggest citations that need to be included. In many cases, these might even be the reviewer's own papers – after all, these are the ones the reviewer is most familiar with. Maybe, then, we can consider a couple of extra citations to a reviewer's work as a kind of *quid quo pro* for taking the time to review the paper in the first place.

I disagree. There are important reasons why reviewer-coerced citation should be considered unethical. Perhaps most seriously, it is an abuse of power on behalf of the reviewer. Authors of manuscripts often feel that they need to acquiesce to reviewers' requests. If a couple of spurious citations will help this process, particularly if it avoids an additional round of reviews, then perhaps so be it. However, in addition to cluttering papers with irrelevant citations, it can result in undue prominence being given to undeserving work, ultimately distorting the canon of scientific knowledge, and slowing scientific progress.

How can reviewer-coerced citation be discouraged? As noted by *Bioinformatics* Associate Editor Jonathan Wren [2], one difficulty faced is the current decentralised nature of the review system and the lack of information-sharing between journals. This makes patterns of abuse hard to identify. In addition, authors may simply be too afraid to voice their concerns to editors, feeling that they tend to side with reviewers. We must also be careful,

because feedback on the completeness and accuracy of a paper's citations is desirable, and it will often be entirely reasonable for reviewers to suggest citations to their own work as part of this.

Wren suggests that a simple way of improving things might be for journals to modify their manuscript-handling systems to include a checkbox for each review that asks, "did this reviewer request a citation to their own research?" This information can then be assessed by editors and, if necessary, compared against previous reviews from the same person. It should also be made very clear to reviewers that, for any suggested citation, rigorous justification should be supplied as to why its addition would improve the paper. Not only will such justifications help authors, but they will also assist editors in ensuring that the citations are relevant and important. Leeway should be given to authors who, with appropriate defence, do not add suggested citations to their papers. If a reviewer chooses to recommend rejection of a paper on these grounds, then the editors should be ready to step in and provide guidance.

Thankfully, reviewer-coerced citation is something that is being taken seriously. In 2019, Elsevier analysts Jeroen Baas and Catriona Fennell conducted a study of more than 55,000 journal reviewers and found that a small minority (approximately one per cent) consistently seemed to have their own work referenced in papers they reviewed [3]. According to *Nature* [4], Bass and Fennel have concluded that this shows "clear evidence of peer-review manipulation". Consequently, Elsevier has since amended its editor guidelines, editor contracts and reviewer guidelines to warn against the practice. It is also reported to be considering the unprecedented step of retracting individual references from published studies.

If anyone has further thoughts on these issues, I would be glad to read their views in this forum.

- [1] https://www.nature.com/articles/d41586-020-00335-7
- [2] https://academic.oup.com/bioinformatics/article/35/18/3217/5304360
- [3] <u>http://go.nature.com/2m8nidy</u>
- [4] https://www.nature.com/articles/d41586-019-02639-9