



Editorial: Pay to criticise? Rebuttal articles in open-access journals should be published for free

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Open access has not quite lived up to the utopian expectations we once envisaged (Borrego, 2023). Regardless, open access brought a much needed shift in the editorial world, with many positive outcomes, some negative ones, and many other neutral ones (see a thoughtful analysis by Racimo et al., 2022). The viability of the open-access system is dependent on the existence of a minimal set of agreed principles, the most obvious one being that any article published under this model will remain freely available to everyone in perpetuity. There are finer details that are more difficult to standardise, though; one such area is the fee-waiving policies of critical comments on published articles and particularly of rebuttal articles. Such articles are always unpleasant to write, and, for open-access journals, they might also involve costly article processing charges (APCs). Presently, authors willing to unveil critical flaws in published research might not be able to overcome the added burdens of cost, time, and confrontation risks in exchange for small professional recognition.

Open access is not perfect, but it has provided more publishing choices and allowed smaller editorial companies to break into a market largely dominated by a handful of large publishing companies. Some of these smaller publishing companies, such as *Web Ecology*'s publisher Copernicus.org, have brought refreshing ideas and opportunities to scientific publishing. Unfortunately, it has also allowed some opportunistic publishers with low ethical standards to thrive through exploiting the most vulnerable among the scientific community. Terms such as “predatory journals” are now in common use. There are tools such as Think. Check. Submit. (<https://thinkchecksubmit.org/>, last access: 14 August 2023) that facilitate the publication process. The Directory

of Open Access Journals (DOAJ) lists all open-access journals but grants a “DOAJ Seal” only to those that meet certain criteria, including that all articles are provided with a relevant Creative Commons license, that there is long-term digital preservation of assets, that all articles have persistent digital identifiers, etc. (<https://doaj.org/apply/seal/>, last access: 14 August 2023). Reputable open-access journals have established fee-waiving schemes which facilitate the publication of science from less affluent scientists, and many clearly state that “publication decisions are based solely on editorial criteria. Information about applications for fee assistance are not disclosed to journal editors or reviewers” (PLOS, <https://plos.org/publish/fees/>, last access: 14 August 2023). Our own editorial company, Copernicus.org, waives article processing charges (APCs) for up to 10 % of its published articles every year (https://publications.copernicus.org/for_authors/financial_support.html, last access: 14 August 2023). In some cases, such as *Web Ecology*, there are no publication fees for anyone; in the case of *Web Ecology*, the European Ecological Federation sponsors the journal.

Although there is some fundamental agreement on the basics, the majority of open-access publishers indirectly but effectively disincentivise authors from publishing critical pieces. Critical comments on published articles vary in importance; they can simply point to an aspect absent from a published article or offer an alternative interpretation or perspective. In some cases, they can point to fundamental flaws that undermine the published conclusions. The nomenclature of these – comments, replies, rebuttals – is variable, but their importance to scientific progress is unquestionable. However, the incentives for scientists to write such contributions are more equivocal. Comments, replies, and rebuttals

tend to be seen as confrontational. Although they constitute a citable item, they tend not to be deemed as important as other types of publications. Lastly, if the comment or rebuttal is published in an open-access journal, they might require the payment of costly publication fees.

A review of the publication policies of some major open-access publishers (e.g. Elsevier, <https://www.elsevier.com/about/policies/pricing>, last access: 14 August 2023; Wiley, <https://authorservices.wiley.com/open-research/open-access/for-authors/publication-charges.html>, last access: 14 August 2023; Springer Nature <https://support.springer.com/en/support/solutions/articles/6000211135-article-processing-charges-apc->, last access: 14 August 2023) shows no explicit waivers for any type of comments, replies, or rebuttals, and fee waiving is discretionary, except for some scientists based on a specific list of less affluent countries. Some other publishers have lower fees for all types of comments. For instance, “Frontiers” journals charge USD 490 (less than half of the regular APC) to publish General Commentary articles that “provide critical comments on a previous publication at Frontiers” (<https://www.frontiersin.org/about/fee-policy>, last access: 14 August 2023). Overall, we could not find any mention of automatic waivers for contributions that identify fundamental flaws in published research (i.e. rebuttals) or for any other type of critical comment.

One remarkable case drawing our attention to this issue was a recent publication in *Ecosphere*, an open-access journal published by Wiley on behalf of the Ecological Society of America (ESA), reporting an alleged predation event by a spider on a bat (Dunbar et al., 2022). This would have been the first case of a member of the *Steatoda* genus of spiders preying on bats, globally, and would have also had potential implications for public health. In fact, the article attracted some media attention shortly after publication. However, other scientists were surprised by the claims and, after careful review, some considered the article to be a gross misinterpretation of animal behaviour based on a single observation. Some of these scientists – Serena E. Dool and Gabriele Uhl – invested substantial time in writing a rebuttal to Dunbar et al. (2022), pointing out several more plausible alternative explanations. Their rebuttal article was peer-reviewed in *Ecosphere*, where it was accepted for publication (Daniel Montesinos has seen copies of the submitted rebuttal and of its acceptance letter). However, the authors of this reply were requested to pay an APC of USD 2100/GBP 1300/EUR 1700 for a rebuttal article that largely disproved the original publication. The authors of the reply, who had altruistically devoted significant time to writing their rebuttal, refused to pay. They felt that they were doing the journal – and science – a service and that it was unreasonable to charge them for it.

Dool and Uhl went through months of delays and ambiguous responses in which Wiley and ESA claimed to be studying the case – Daniel Montesinos has seen copies of more than 20 emails between the rebuttal authors and *Ecosphere*'s

editors, ESA, and Wiley over the course of 7 months. Finally, the authors' APC waiver request was declined (according to an email by Wiley to the authors seen by Daniel Montesinos), informing them that their rebuttal article would not be published in *Ecosphere* unless APCs were paid. Consequently, the original, flawed, article remained broadly available to everyone without comment, while a meaningful rebuttal article was left unpublished. Subsequently, the authors of the rebuttal withdrew their submission and approached *Web Ecology* to publish their reply. *Web Ecology* does not usually publish replies or comments to publications from other journals. However, given the extraordinary circumstances of this case, we decided that it would be in the interest of science to make an exception. Two external reviewers agreed with the observations made in the rebuttal article, and the rebuttal was published in *Web Ecology* shortly after (Dool and Uhl, 2022).

Clearly, charging authors for brief, well-founded criticism of published articles creates a highly problematic disincentive to fruitful scientific discussion. This uncontroversial stance should enjoy universal support, but it currently does not. This might be excused as a simple oversight. Historically, this had never been an issue because most journals did not charge any publication fees. However, today more than 40% of all Web of Science publications are open access (Basson et al., 2022). It is time to consider the damaging effects of charging authors for critical comments in open-access journals. It is beyond the scope of this editorial to gather and analyse such data, but we encourage others to do so. It would be expectable that open-access journals have effectively published fewer critical comments than their counterparts that are behind a paywall. If that were the case, it would pose a serious credibility risk to the entire open-access model.

When a clear error is detected, it is for the best interest of all to find a reasonable and ethical solution in the shortest possible time. For platinum/diamond open-access journals, this is not an issue. *Web Ecology* has charged no APCs since its creation in 2000, which shows the viability of making science truly available to the whole scientific community at a moderate cost while maintaining the highest scientific and publishing standards. We are not alone. The Directory of Open Access Journals shows 463 open-access journals that hold the DOAJ Seal and do not charge publication fees (<https://www.doaj.org/>, last access: 14 August 2023). DAFNEE is the Database of Academia Friendly jourNals in Ecology and Evolution and lists 398 not-for-profit journals (<https://dafnee.isem-evolution.fr/>, last access: 14 August 2023). For those who cannot, or wish not to, participate in platinum/diamond open-access models, many ethical and procedural considerations need to be clearer and to be implemented more sensibly. Dool and Uhl spent 7 months trying to achieve a solution, unsuccessfully. On a larger scale, the above-mentioned case points to a clear need for reputable open-access scientific journals to establish an unavoidable ethical commitment to waive all APCs for rebuttal articles

and possibly also for all critical comments. This should be clearly stated and publicised in the instructions for authors of each open-access journal. Failure to do so will result in a strong disincentive to critical discussion that is at the core to scientific progress. More immediately, it will also result in a clear loss of credibility for the open-access journals, editors, and publishing companies that, for all practical purposes, are putting a hefty price on criticising their own publications.

Data availability. No data sets were used in this article.

Competing interests. The author is a member of the editorial board of *Web Ecology*. The peer-review process was guided by an independent editor, and the author also has no other competing interests to declare.

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