

Interactive comment on “Open Access: Strengths, Weaknesses, Opportunities, and Threats. An Editorial” by Geoffrey Bodenhausen

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Open access is important, because it makes final peer-reviewed articles available to everybody from the day of publication. Open access has been shown to be associated with increases in citations, media attention, potential collaborators, job opportunities and funding opportunities (McKiernan et al., 2016).

Sadly, author pay charges (APC) associated with open access have led to a proliferation of predatory open access journals, which publish against payment without proper peer review and make authors suspicious about the quality of new open access journals.

At Magnetic Resonance, we are fortunate to have Copernicus Publications in Göttingen

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(Germany) as the publisher. Copernicus Publications is a not-for-profit publisher who takes quality and ethical behaviour seriously. Articles are vetted before being put online and the final published version is carefully typeset to a high standard.

Furthermore, Magnetic Resonance practices a two-stage review system that has been successfully employed by many open access journals operated by Copernicus Publications over two decades. It fosters quality by transparency, making reviews as well as comments from the public available publicly on the forum called Magnetic Resonance Discussions. Students read these comments and the authors' responses with great interest!

Magnetic Resonance provides a platform for publications across a wide range of magnetic resonance subfields, including NMR and EPR spectroscopy, MRI and optical magnetic resonance phenomena, spanning physics, biology and biomedical applications. It aims to bring together researchers from a range of fields that have developed cultural differences over the years, such as the importance placed on the impact factor. At Magnetic Resonance, we feel that the value of an individual article is better measured by its citation numbers and downloads (both measured by Copernicus Publications) than by the impact factor of the journal. Nonetheless, we are certain that a quality journal, as Magnetic Resonance strives to be, will not have to hide once the impact factor becomes available after the first two years.

Geoffrey's editorial opinion piece correctly highlights the undue market power that established journals wield due to their name recognition and copyright privileges to past articles. For over 15 years, even a comprehensive initiative such as the PLOS endeavour has been unable to break the oligopoly of the established publishers. Recently, however, open access has been gathering momentum, with Plan S and DEAL being only two of the initiatives. For example, the Howard Hughes Medical Institute will expect its staff scientists to publish in journals moving to open access for all content (Brainard, 2020). Country-wide transformative agreements such as DEAL (Kupferschmidt, 2019) present a pathway to convert established journals into open access

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publications which, without copyright privileges for past articles, will lose their grip on library budgets. Copernicus Publications has been competitive in this space for a long time, by championing agreements that transfer the cost of publication to library budgets rather than authors.

This reviewer does not share the author's despairing comments on different scientific cultures. Not all biology is butterfly collecting (as indeed acknowledged by the author) but also not all butterfly collecting is pointless – think of Charles Darwin's barnacle collection that bore the seed of the theory of evolution! Also, physics researchers may have embraced preprint servers like arXiv first, but the biological research community is coming on board, including the publication of referee reports (Guterman, 2020), similar to the Magnetic Resonance Discussions platform. Magnetic Resonance is thus well positioned for the future. Indeed, while its review process has been unfamiliar to most of us, it can be trusted to ultimately cater for a decent impact factor. How important will the impact factor be? Who knows, but on behalf of those who like to rank journals by their impact factor, I propose not to publish this editorial in Magnetic Resonance. The success of the journal should be measured by scientific research articles rather than opinion pieces.

Besides, the editorial will make more meaningful future reading in the context of other comments made on the discussion forum than as a standalone article.

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