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Marc-André Simard, Leigh-Ann Butler, Juan Pablo Alperin, Stefanie Haustein

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The moderation of this preprint received the endorsement of:
Vincent Larivière (ORCID: https://orcid.org/0000-0002-2733-0689)

We need to rethink the way we identify diamond open access journals in quantitative science studies

Marc-André Simard*, Leigh-Ann Butler**, Juan Pablo Alperin***, and Stefanie Haustein****

*marc-andre.simard.1@umontreal.ca, https://orcid.org/0000-0003-3795-0053, École de bibliothéconomie et des sciences de l'information, Université de Montréal, Montréal, QC, Canada

**https://orcid.org/0000-0002-3385-4729, University of Ottawa Library, University of Ottawa, Ottawa, ON, Canada

***https://orcid.org/0000-0002-9344-7439, School of Publishing, Simon Fraser University, Burnaby, BC, Canada

****https://orcid.org/0000-0003-0157-1430, School of Information Studies, University of Ottawa, Ottawa, ON, Canada

Abstract

With the announcement of several new diamond open access (OA) related initiatives, such as the Action Plan for Diamond Open Access, the DIAMAS and CRAFT-OA projects, and the recent creation of the Global Summit on Diamond Open Access, it is clear that diamond OA is now at the forefront of the OA movement. Diamond OA is a publishing model that is free for both authors and readers, with the publishing costs generally assumed by grants, governments, subsidies, or a community. However, while working on our recent Quantitative Science Studies publication and dataset, we noticed that temporarily waiving APCs was a commonly used strategy by the Big 5 for-profit publishers for some of their journals. This letter discusses the need for more cautiousness when doing research about diamond OA and APCs, as well as the need for more transparency in the costs for publishing.

Keywords: Open access publishing, Open access, Article processing charges, Diamond open access

With the announcement of several new diamond open access (OA) related initiatives, such as the Action Plan for Diamond Open Access, the DIAMAS and CRAFT-OA projects, and the recent creation of the Global Summit on Diamond Open Access, it is clear that diamond OA is now at the forefront of the OA movement. Diamond OA is a publishing model that is free for both authors and readers, with the publishing costs generally assumed by grants, governments, subsidies, or a community. Much of the excitement about the diamond OA model stems from a belief that it can put an end to the inequities inherent in an author-pays model based on article processing charges (APCs). Yet, despite this optimism, up until recently there was little data about the uptake, costs, labor force, and impact of diamond OA (Bosman et al., 2021).

It is no surprise, therefore, that a growing body of research is seeking to understand this model (Becerril et al., 2021; Bosman et al., 2021; Khanna et al., 2022; Simard et al., 2022; Simard et al., 2023). In the absence of an index of diamond OA journals, most studies (including some of our own) have operationalized the identification of diamond OA journals as a subset of gold OA journals that do not charge an APC (at any given moment of analysis). While this is a practical approach, we fear that it could undermine the value of the research in understanding what we believe is more commonly understood by diamond OA.

When we think of a diamond OA journal, we generally imagine a small, local, community-based and non-profit scholarly journal that relies on public funds and receives volunteer support from

the academic community. For instance, at the recent 2nd Diamond Open Access Summit in Toluca, México (2023), experts have defined the seven facets of diamond OA as 1) equity, 2) knowledge as a public good, 3) community-driven, 4) diversity, 5) transitioning to diamond, 6) research assessment and recognition, and 7) multi-level co-operation (Saenen et al., 2024). As such, there is a need for a more accurate way to operationalize diamond OA in quantitative science studies that accurately reflects these values.

However, while working on our recent QSS publication (Butler et al., 2023) and dataset (Butler et al., 2022), we noticed that *temporarily* waiving APCs was a commonly used strategy by the Big 5 for-profit publishers for some of their journals. For instance, we noticed that more than half of Elsevier's gold OA articles over the 2015-2018 period were published in a journal that did not charge an APC, something that peer reviewer John Willinsky qualified as "uncharacteristic of the company", questioning their status as diamond (Willinsky, 2023). We had initially labelled these articles as diamond, the operationalization that we seek to criticize, but decided to classify them as "no APC" instead. More generally, in our 2015-2018 dataset of APC list prices for the Big 5 academic publishers, we identified 155 journals (43,623 articles) with no APCs over the entire 4-year period. While we have not done a full analysis of these journals, we have come across statements such as: "this journal is a peer reviewed, subsidized open access journal where the Taiwan Association of Obstetrics and Gynecology pays for the publishing costs incurred by the journal"[1]. This suggests an APC-like arrangement, where the society likely pays the publisher, rather than the authors. Another example is *Zoological Letters*[2] (2056-306X), whose APC was covered by the *Zoological Society of Japan* at the time (between 2015 and 2018)*, while* they now (in 2024) charge authors $US 2,190 per article. This poses the question: should journals such as *Zoological Letters* be classified as diamond OA during the temporary waiver period, but as gold with APC in 2024? If the answer is no, what information other than the absence of APCs can be used to identify diamond OA journals that correspond to our values as a community?

These examples highlight that relying on a $0 APC as a sole proxy for diamond OA masks a range of practices which do not address the inequities of the APC model in the same way. In other words, this approach, while practical, lumps together the use of (temporary) APC waivers as a marketing strategy, as well as different arrangements that leave price controls in the hands of for-profit publishers and not, as many who advocate for diamond OA hope, in the hands of the scholarly community. Therefore, we propose classifying no-APC journals into at least two categories: 1) non-profit journals that do not charge APCs because their costs of publishing are covered by another source of revenue such as a learned society[3], and 2), for-profit journals that temporarily do not charge APCs for various reasons (e.g., promotion, the COVID-19 pandemic, agreements with learned societies, etc.). In other words, most if not all of these seemingly equitable diamond OA journals might still charge fees that significantly exceed production costs and therefore primarily sustain a profitable business model rather than promoting equity and diversity in academic publishing.

[1] https://www.sciencedirect.com/journal/taiwanese-journal-of-obstetrics-and-gynecology/publish/open-access-options

[2] https://zoologicalletters.biomedcentral.com/

[3] This would comply with the Diamond OA Summit facets.

The purpose of this letter is two-fold. Firstly, we would like to call for more cautiousness when doing research about diamond OA and APCs. Over the past 25 years, we have witnessed various for-profit actors managing to maintain if not strengthen their dominance over the publishing market through the creation of APC models, which instead of have simply shifted barriers from readers to authors (Ellers et al., 2017; Fontúrbel & Vizentin-Bugoni, 2021; Klebel & Ross-Hellauer, 2023; Mekonnen et al., 2021; Peterson et al., 2013; Santidrián Tomillo et al., 2022). We cannot afford to repeat a similar mistake with diamond OA and let a handful of for-profit publishers take advantage of a model that we consider to be the most *equitable* model of OA. A deeper reflection into what constitutes diamond OA (e.g., for-profit vs non-profit) and how to operationalize it in quantitative analyses would eliminate ambiguity that can be used against its core values and facets (e.g., inclusive, community-based, equitable, diverse, etc.). Instantiating clarity of the definition of diamond OA in widely used databases and tools such as OpenAlex, Unpaywall, and the DOAJ could be helpful.

Secondly, we want to call attention to the need for more transparency in the costs for publishing, by both funders and publishers, whether for-profit or non-profit, as already proposed by the Fair Open Access Alliance (FOAA) framework (Wallace, 2020). Creating the dataset (Butler et al., 2022) used in our most recent study was an incredibly time-intensive effort of manually searching for annual APC list prices for thousands of journals, using previously curated datasets and the Internet Archive's Wayback Machine. This effort allowed us to make a rough estimate of APC spending, only to have a representative from one of the big-5 publishers critique our work by saying it uses "very outdated data" and "poor methodology" (Ansede, 2023). Of course, they know very well the revenue they generate from APCs, but the critique was not accompanied with evidence. It would be easy to determine who is right if the counter-factual data were available. On the other hand, the Public Library of Science (PLOS), is transparent about how their "publication fees are used to support journal activities and operational costs" after participating in Plan S' Price & Service Transparency Framework pilot in 2020 (PLOS, 2023). Similarly, QSS also provides a breakdown of publishing costs financed through the author-pays model[4]. Unfortunately, such transparency practices are far from being the norm.

If we want to encourage diamond OA as an equitable and sustainable OA publishing model for the academic community, we need to be mindful of how we discuss and study it. Making a distinction between true diamond journals and those that temporarily wave APCs will be especially important to avoid co-opting the model to yet again use OA as a means to generate profits.

Conflicts of interest:
The authors of this letter declare no conflict of interest.

Authors contributions:
Conceptualization: MAS, SH
Project administration: MAS

[4]https://direct.mit.edu/journals/pages/open-access#qss

Writing – original draft: MAS
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