

Collaborative transition to open access publishing by scholarly societies

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ABSTRACT For decades, universities, researchers, and libraries have sought a systemwide transition of scholarly publishing to open access (OA), but progress has been slow. There is now a potential for more rapid and impactful change, as new collaborative OA publishing models have taken shape. Cooperative publishing arrangements represent a viable path forward for society publishers to transition to OA as the default standard for disseminating research. The traditional article processing charge OA model has introduced sometimes un-navigable financial roadblocks, but cooperative arrangements premised on collective action principles can help to secure long-term stability and prevent the risk of free riding. Investment in cooperative arrangements does not require that cash-strapped libraries discover a new influx of money as their collection budgets continue to shrink, but rather that they purposefully redirect traditional subscription funds toward publishing support. These cooperative arrangements will require a two-way demonstration of trust: On one hand, libraries working together to provide assurances of sustained financial support, and on the other, societies' willingness to experiment with discarding subscriptions. Organizations such as Society Publishers Coalition and Transitioning Society Publications to Open Access are committed to education about and further development of scalable and cooperative OA publishing models.

Monitoring Editor

Matthew Welch
University of California,
Berkeley

Received: Jun 29, 2020

Revised: Dec 17, 2020

Accepted: Dec 18, 2020

On June 11, 2020, evidence of the new front in the conflict over scientific communication's future came into view. One of the world's most prominent research institutions, the Massachusetts Institute of Technology (MIT), announced that it would be ending negotiations with one of the world's largest publishers of scientific journals, the Dutch commercial publisher Elsevier. According to MIT, Elsevier was unable to present a proposal that aligned with the principles outlined in the MIT Framework for Publisher Contracts, which is premised on the values "that openly sharing research and educational materials is key to the Institute's mission of advancing knowledge and bringing that knowledge to bear on the world's greatest challenges." (MIT, 2020). With the cancellation of their Elsevier deal,

MIT joined an increasingly vocal chorus of universities, researchers, and libraries (such as the University of California, which similarly terminated journal negotiations with Elsevier in 2019) that—recognizing the alignment of open access (OA) with the fundamental values of scholarship—are calling for a systemwide transition of scholarly publishing to OA and are prepared to walk away from publishing agreements that fail to make progress toward it (Barber, 2020; University of California, Office of Scholarly Communication, 2020).

This movement seeking to regain control of scholarly publishing, particularly from commercial—in some cases, oligopolistic (Larivière *et al.*, 2015)—forces, is not new. Libraries, scholars, and activists have been calling for this shift since academic journals were wholly transitioned to online, questioning the validity of the centuries-old subscription model for the digital age, in which scientific research could be more rapidly produced and broadly disseminated. Although formalized with a series of declarations in 2002/2003 (such as the Budapest Open Access Initiative, <https://www.budapestopenaccessinitiative.org/read>, and the Bethesda Statement on Open Access Publishing, <http://dx.doi.org/10.4403/jlis.it-8628>) advocating the systemic transition of scientific research to open dissemination, more than 15 years later OA has only reached approximately 31% of published literature

DOI:10.1091/mbc.E20-03-0178

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Abbreviation used: OA, open access.

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(Piwowar *et al.*, 2019), and progress toward a systemic transformation remains slow. Yet what is new is the potential for more rapid and impactful change, as new collaborative OA publishing models have taken shape.

To date, much of the growth of OA in scholarship has been propelled by the author processing charge (APC) model, in which authors (or their institutions/libraries or research funders) pay a fee to publishers (ranging from several hundred dollars to more than \$6000) on acceptance of a manuscript to cover the costs of publication and replace revenue the publishers would have derived from subscription sales. The APC model, or a variation of it, is likely to remain an efficient and viable path to OA in the biomedical and other well-funded sciences, where funder mandates (such as Plan S) may be applicable. Yet the APC model introduces sometimes un-navigable roadblocks for scholars and institutions: a financial barrier to publishing affordable to few; perverse incentives for publishers to release larger numbers of articles; and a potential new revenue stream from which publishers could double dip alongside historically lucrative library subscriptions. (Double dipping can take place in some hybrid OA models in which subscription journals also publish some articles OA through payments of APCs, without issuing commensurate subscription reductions/discounts. The practice of reducing or discounting subscriptions based on APCs that have been paid is called offsetting.) But scholarship is much broader than the biomedical sciences, and there is an imperative to find effective means for sustaining OA publishing in the less funded sciences, social sciences, and humanities.

A number of alternative models to support OA publishing have begun to materialize—ones in which scholarly publishers are entering into cooperative arrangements with academic libraries (Wise and Estelle, 2019). Although currently limited by discipline and content type, models such as SCOAP3 (<http://scoop3.org>), the Open Library of the Humanities (www.openlibhums.org), and Knowledge Unlatched (www.knowledgeunlatched.org) are already providing important empirical examples of effective cooperation. Also of particular appeal is Subscribe to Open (S2O), which has already demonstrated success (Annual Reviews, 2020) and is being piloted by a rapidly growing number of societies (American Society Cell Biology, 2020; International Water Association, 2020). S2O allows publishers to transition from gated access to OA one year at a time by offering a journal's current subscribers continued access at a regular subscription discount (Crow *et al.* 2020). If current subscribers participate, content covered by that year's subscription is made OA. If participation is insufficient—for example, if some subscribers delay renewing in the expectation that they can gain access without participating—then the content remains paywalled. Because the publisher does not guarantee that the content will be OA unless all subscribers participate in the offer, institutions that value access must either subscribe conventionally (at full price) or participate in S2O (at a discount) to ensure continued access. The offer is repeated yearly, with the opening of each year's content contingent on sufficient participation.

Building models such as S2O on the basis of collective action principles—best described in Mancur Olson's seminal work, *The Logic of Collective Action* (Olson, 1965)—can help to secure long-term stability. Olsen describes how groups can support the provision of public goods through coordinated action, as the nonexcludability and nonrivalry of benefits means that one person's contribution automatically benefits other potential contributors (Olson, 1965). While recognizing the risk of free riding (i.e., benefiting from the good without contributing to its provision), Olson contends that collective action can succeed with adequate coordinating mechanisms. Applying

collective action theory and practice to the design of cooperative OA models between libraries and publishers can help to lower organizing costs, increase the resources available to fund open content, and reduce risk through limiting free ridership (Crow, 2015).

Investment in cooperative arrangements does not require that cash-strapped libraries discover a new influx of money as their collection budgets continue to shrink, but rather that they purposefully redirect traditional subscription funds toward publishing support. Recent work (Naim, 2019) found that in entering into cooperative OA arrangements, libraries were more closely aligned with non-profit publishers (scientific societies, in particular), where the two parties shared closer value alignment.

This finding should be positive and reassuring news for society publishers. Although many have inked agreements with commercial publishing partners to sustain revenue, they continue to uphold their respective missions, which remain well aligned with the values of the academy, and present appealing investment opportunities for universities, research institutions, and libraries. Scholarly societies, in particular, feel vulnerable in the current climate of commercial dominance of scholarly publishing, compounded by increasing demands from the funder community and scholars alike to explore sustainable OA strategies. The subscription model has enabled many society publishers to generate surpluses, which have become central to the support of society activities such as member education, research grants, and public engagement. Yet libraries have indicated willingness to engage in expenditure-neutral models with society publishers, effectively indicating that their publishing surpluses are not under scrutiny, provided there is some financial transparency, and that surpluses fund activities that advance the discipline (Brundy *et al.*, 2019; Naim, 2019).

As society journal subscriptions have largely been bundled for libraries through aggregating intermediaries, libraries and societies have a rather nascent understanding of each other's needs. As such, these cooperative arrangements, at least for some time, may require a two-way demonstration of trust: on one hand, libraries working together to provide assurances of sustained financial support, and on the other, societies' willingness to experiment with discarding subscriptions. To forge bilateral trust, education about and further development of scalable and cooperative OA publishing models is needed.

That is precisely what organizations such as Society Publishers' Coalition (SocPC) are trying to achieve. With over 85 member societies, SocPC is working to ensure an orderly and sustainable transition for nonprofit learned societies to open scholarship. Through education about and development of new transitional publishing models, SocPC is working to support scale and efficiency in cooperative approaches and help societies gain leverage in negotiating with libraries and consortia—thereby securing the focus and prioritization that are typically reserved for commercial publishers. Members of SocPC, such as the Biochemical Society, have already launched several OA pilots and have successfully initiated dialog across the sector regarding the essential and precarious place of learned societies (Brainard, 2019; Legge, 2020). Wise and Estelle (2019) provide a thorough overview of the OA models available to scholarly societies.

Another such group building trust between societies and libraries is Transitioning Society Publications to Open Access (TSPOA), co-chaired by the three authors. TSPOA largely focuses on bringing together stakeholders to catalyze and support society transitions. Members come from a range of library, academic, consortia, and publisher backgrounds and are united in their interest in seeing societies transition sustainably to an open world. TSPOA's work

takes the form of direct consultations, advocacy, and education. For example, in the fall of 2019, TSPOA partnered with SocPC to present a three-part webinar series examining issues facing learned societies as they seek to move their publications to OA as well as the emerging open business models that can be used (Transitioning Society Publications to Open Access, 2019). Consultations have taken place with a number of self-publishing societies, from smaller societies that may have only one publication to larger societies with large portfolios of publications. But consistent in TSPOA's approach is the desire to harness the good will that exists in the library community for mission-focused society publishers while simultaneously recognizing the growing urgency of expanding OA.

This urgency has only grown during the current public health crisis surrounding COVID-19. In the time of this pandemic, academic publishers have recognized OA as the optimal mechanism for achieving rapid progress toward solutions on many fronts, including vaccines, therapeutics, and disease epidemiology. Prompted by the Wellcome Trust, dozens of publishers and content providers (commercial and noncommercial alike) have agreed to make COVID-19-related research either immediately OA, or at least freely available for the duration of the outbreak (Wellcome Trust, 2020). These gestures of access, funded primarily by research library subscriptions, acknowledge not only that the paywalled system is suboptimal, but also that open access to scientific articles and datasets is critical to solving global problems and saving lives. Cooperative publishing arrangements represent a viable path forward for society publishers to transition to OA as the default standard for disseminating research. This not only will equip the scientific community to better respond to future challenges, but also will further accelerate the advancement of research and scholarship as a whole.

REFERENCES

- American Society of Cell Biology (2020, August 25). New subscription model may make cell biology journal open access. Available at: <https://www.ascb.org/science-news/new-subscription-model-may-make-cell-biology-journal-open-access/> (accessed 15 December 2020).
- Annual Reviews (2020, May 12). Annual review of political science uses Subscribe to Open to publish 2020 volume open access. Available at: <https://www.annualreviews.org/pb-assets/assets/documents/press-release/ARPS-S2O-announcement-1588955466100.pdf> (accessed 28 June 2020).
- Barber G (2020, June 16). Universities step up the fight for open-access research. *Wired*. Available at: <https://www.wired.com/story/universities-step-up-the-fight-for-open-access-research/> (accessed 28 June 2020).
- Brainard J (2019, September 16). New deals could help scientific societies survive open access. *Science Magazine*. Available at: <https://www.sciencemag.org/news/2019/09/new-deals-could-help-scientific-societies-survive-open-access> (accessed 28 June 2020).
- Brundy C, Naim K, Legge M, Delman S, Spiller K (2019). [Webinar]. Funding pathways for learned society open access publishing. *Transitioning Society Publications to Open Access*. Available at: <https://tspoa.org/resources/webinars/> (accessed 28 June 2020).
- Crow R, Gallagher R, Naim K (2020). Subscribe to Open: A practical approach for converting subscription journals to open access. *Learned Publishing*, 33: 181-185. Available at: <https://onlinelibrary.wiley.com/doi/full/10.1002/leap.1262> (accessed 28 June 2020).
- International Water Association (2020, October 7). IWA Publishing launches pilot to flip its entire journal portfolio to open access using the Subscribe-to-Open model Available at: <https://knowledgeunlatched.org/2020/10/iwap-launches-s2o-pilot/> (accessed 15 December 2020).
- Larivière V, Haustein S, Mongeon P (2015). The oligopoly of academic publishers in the digital era. *PLoS ONE* 10: e0127502. Available at: <https://doi.org/10.1371/journal.pone.0127502> (accessed 28 June 2020).
- Legge M (2020). Towards sustainable open access: A society publisher's principles and pilots for transition. *Learned Publishing*, 33: 76-82. Available at: <https://doi.org/10.1002/leap.1279> (accessed 28 June 2020).
- MIT (2020). MIT framework for publisher contracts. Available at: <https://libraries.mit.edu/scholarly/publishing/framework/> (accessed 28 June 2020).
- Naim K (2019). Let's not see open access as a threat: convergence and divergence among research librarians and academic publishers on public access to the scholarly literature. Available at: <https://searchworks.stanford.edu/view/13331552> (accessed 28 June 2020).
- Olson M (2009). *The logic of collective action: Public goods and the theory of groups* [1965], Second printing with a new preface and appendix (Vol. 124). Cambridge, MA: Harvard University Press.
- Piwovar H, Priem J, Orr R (2019). The future of OA: A large-scale analysis projecting open access publication and readership. *bioRxiv*. Available at: <https://doi.org/10.1101/795310> (accessed 28 June 2020).
- Transitioning Society Publications to Open Access (2019, August 13). Bridging learned society publishing and open access: An international collaboration and webinar series. Available at: <https://tspoa.org/2019/07/30/254/> (accessed 28 June 2020).
- University of California, Office of Scholarly Communication (2020). UC and Elsevier. Available at: <https://osc.universityofcalifornia.edu/uc-publisher-relationships/uc-and-elsevier/> (accessed 28 June 2020).
- Wellcome Trust (2020, March 16). Publishers make coronavirus (COVID-19) content freely available and reusable. Available at: <https://wellcome.ac.uk/press-release/publishers-make-coronavirus-covid-19-content-freely-available-and-reusable> (accessed 28 June 2020).
- Wise A, Estelle L (2019). Society publishers accelerating open access and Plan S (SPA OPS): Final project report. Available at: https://wellcome.figshare.com/articles/Society_Publishers_Accelerating_Open_Access_and_Plan_S_-_Final_Project_Report/9805007 (accessed 28 June 2020).