Insights - 33, 2020

Open Access eXchange (OAeX) | Jack Hyland, et al.



Open Access eXchange (OAeX): an economic model and platform for fundraising open scholarship services

Authors' names are listed in alphabetical order.

This article describes the Open Access eXchange (OAeX) project, a pragmatic and comprehensive economic model and fundraising platform for open scholarship initiatives. OAeX connects bidders with funders at scale and right across the open scholarship spectrum through crowdfunding: financial expenditure is regulated by a market of freely competing providers and financial transactions and transparency are assured by a clearing-house entity. Specifically, OAeX seeks to facilitate open access publishing without the barrier of article processing charges (APCs), as well as contribute to solving challenges of transparency and economic sustainability in open scholarship projects in the broader sense.

Keywords

Open access; crowdfunding; open scholarship; scholarly journals; funding models



JACK HYLAND Manager, IReL Maynooth University



ALEXANDER KOUKER
Faculty Librarian,
Humanities & Social
Sciences
Dublin City University



DMITRI ZAITSEV

Associate Professor
and Fellow of
the School of
Mathematics
Trinity College Dublin

Introduction

This article seeks to contribute to addressing the various open scholarship funding challenges from the perspective of economic modelling. It does so by proposing a marketplace mechanism for open scholarship projects that seek funding. For the purpose of conceptual clarity, the emphasis in this paper is placed on the example of open access (OA) journal publishing.

Contextual background

Open access to the scholarly record is not only progressively on the rise but here to stay – for good.¹ Between the years 2000 and 2018, members of the Open Access Scholarly Publishers Association (OASPA) published over 1.3 million articles. Notably, 18.8% of that share was produced in 2018 alone.² This steady rise in output is backed up by policies and practices at national and institutional levels.³ At European level and beyond, Science Europe recently proposed

'a marketplace mechanism for open scholarship projects that seek funding'



Plan S,⁴ emphasizing that '... the transition [to open access] must take place in an efficient and sustainable way, avoiding unnecessary costs. It also requires strong engagement of the research community, in order to adapt the system to a culture of sharing.'⁵

Specifically, Principle 4 of Plan S affirms that 'Where applicable, Open Access publication fees are covered by the Funders or research institutions, not by individual researchers'. Plan S OA champion Johan Rooryck states further that more cost-effective and DORA-compliant academic-led publishers hold equal Plan S status to established commercial publishers.

However, beyond avoiding unwarranted costs towards realizing open access to the formal academic record, other factors are just as important to academic libraries and research funders. LIBER, Europe's leading association of research libraries, argues that the following five principles should apply when negotiating with publishers:

- licensing and open access go hand in hand (resist double dipping)¹⁰
- · no open access, no price increase (ensure return on investment)
- transparency for licensing deals (reject non-disclosure agreements)
- keep access sustainable (secure perpetual access to paid-for resources)
- usage reports should include open access (capture downloads of open access resources).¹¹

'collective goodwill and willingness for genuine change is required ... to achieve mutually agreeable circumstances'

In the realm of OA research funding, the Wellcome Trust applies stringent conditions to successful grant holders, including mandatory compliance with grant audits, regular progress descriptions and end-of-grant reports, in addition to other clearly defined requirements. Essentially, such provisions aim to achieve a sense of transparency in business practice. But beyond recommendations and enforcement, collective goodwill and willingness for genuine change is required on behalf of all stakeholders taking part in the research and scholarly communication life cycle to achieve mutually agreeable circumstances.

13

The state of communal play: OA business models and approaches

Much is written about the ethical and practical challenges around publicly funded and subscription-based (paywalled) publications excluding broad readerships. The same applies to questions around pay-to-publish journals, potentially excluding authors who do not have the ability to pay for article processing charges (APCs) or have access to respective funding, agreements or waivers, as well as increasing prices in an unequitable fashion. The APC model also triggers considerable administrative load for university systems and libraries.

No-fee OA initiatives, on the other hand, which impose neither pay-to-read nor pay-to-publish charges, such as the Open Library of Humanities (OLH), ¹⁶ SciPost, ¹⁷ arXiv, ¹⁸ SCOAP3, ¹⁹ AmeliCA, ²⁰ SciELO, ²¹ the subscribe to open initiative by *Annual Reviews* ²² or learned-society led journals, such as TEANGA, ²³ face an uphill struggle to maintain stable funding. ²⁴ Generally, non-commercial, no-fee OA journals tend to operate on uncertain financial foundations. ²⁵

'The status quo presents a continuing challenge to further opening up access to published research'

The status quo presents a continuing challenge to further opening up access to published research, as well as to creating a sense of equity within the knowledge commons: cost-effective publishers struggle to sustain themselves and prosper for the benefit of the wider scholarly and public good.²⁶ At the same time, academic libraries continue to face tensions between supporting OA while prioritising funding for closed-subscription access through 'big deals'.²⁷ More recently, libraries are entering transformative open access agreements with publishers,²⁸ although doubts remain regarding equity and the ability to control prices within this model.²⁹



Against this backdrop, commercial publishers seek to maintain the initiative by controlling the direction that academic publishing reform may take, within the context and the possibilities of a fast-moving digital ecosystem.³⁰ Both subscription and APC models are heavily debated in the academic community and are hermeneutically contested in praxis and in the literature.³¹ Other challenges relating to entrenched socio-cultural publishing and research-assessment practices, such as the misuse of bibliometrics³² and the prevalence of prestige economies in academia,³³ are well documented³⁴ and will therefore not be further discussed here.

This leads to the question of what alternative OA publishing models presently exist, or may exist in the future, beyond APC.

Crowdfunding and beyond

3

The practice of crowdfunding³⁵ in non-scholarly digital marketplaces is established and a common occurrence: examples include Kickstarter,³⁶ Indiegogo³⁷ and Crowdcube.³⁸ It also finds creative application in publishing: Unglue.it³⁹ supports free e-book publishing and has been active since 2012.⁴⁰

In scholarly publishing, the Sponsoring Consortium for Open Access Publishing in Particle Physics (SCOAP3) successfully works with publishers to convert high-energy physics journals to OA at no cost for authors, regardless of their affiliation, using a central funding and administration mechanism to cover costs. ⁴¹ Formed in 2017, the Global Sustainability Coalition for Open Science Services (SCOSS) utilizes a crowdfunding model for open science infrastructure: funding applications from non-commercial providers of services are assessed by the SCOSS board before a funding bid is launched. ⁴² The Kotilava project, on the other hand, asks library-funders to regularly contribute a fixed amount for flipping Finnish scholarly journals to OA and sustaining them; critically, the market plays no competitive decision-making role in regulating levels of funding and commitment – libraries are presented a fixed fee for a fixed package of journals to support. ⁴³ Since 2015, LIBRARIA has worked through an OA publishing co-operative model to circumvent market mechanisms, whilst also providing consultancy and advocacy around publishing in the social sciences. ⁴⁴

Open Access eXchange (OAeX)

The main goal of OAeX is to provide current and potential open scholarship initiatives (journals, publishers, services) with a flexible economic model and a platform to seek and receive funding. It builds on and attempts to scale up the existing no-fee OA models mentioned above

(OLH etc.). Its mission is to engage all players in the research and scholarly communication services sphere to not only kick-start but also maintain their diverse projects. Specifically, OAeX offers a tangible route for existing and aspiring OA journal publishers seeking secure and sustainable funding.

OAeX envisions doing this through a one-stop online marketplace. This enables funders (mainly libraries and their institutions) to make evidence-based decisions in accordance with their constituents' needs and broader institutional interests. Financial transactions are facilitated through a clearing-house which oversees marketplace activities. This clearing-house provides the added benefit of bundling all essential components – central payment facilitation, transactional transparency, archiving of project-funding bids – within one entity.

OAeX contains the following features as part of a comprehensive economic model for OA services.

- OAeX provides the infrastructure for an online marketplace to serve funders and bidders.
- The market (in the form of funders) decides which services or projects receive investment based on detailed funding bids, thus allowing an element of competition

'a tangible route for existing and aspiring OA journal publishers seeking secure and sustainable funding'



'OAeX ... can coexist alongside current

funding practices,

- between journals; this approach is in contrast with the limited choice offered by 4 bundled, big deal, journal collections.
 - Multiple funders can converge and share funding for single or multiple bids.
 - OAeX acts as a neutral facilitator of transactions between bidders and funders.
 - All transactions are open and transparent, allowing funders to take credit for their investments, while also 'nudging' non-funding bodies to participate.

The OAeX model from a funder and bidder perspective appeals to:

- taxpayer arguments for open access⁴⁵
- societal-impact arguments46
- open educational practices (OEP)47

fee OA on a subscribe-to-open type model.⁵¹

- positive cultural change⁴⁸

allowing for steady transitions to no-fee arguments against pay-to-publish and pay-to-read models.49 OA' Importantly, OAeX does not depend on a rapid transformation of funding for scholarly publishing.⁵⁰ Instead, it can coexist alongside current funding practices, allowing for steady transitions to no-fee OA as journals and their funders are

Figure 1 below visualizes the place of OAeX within the current ecosystem, whereby OAeX exists in parallel with and complementing existing funding-transaction models and paths to OA.

ready to do so. For example, OAeX can help preprint servers and overlay journals for sciences, while also supporting established society journals in the humanities to flip to no-

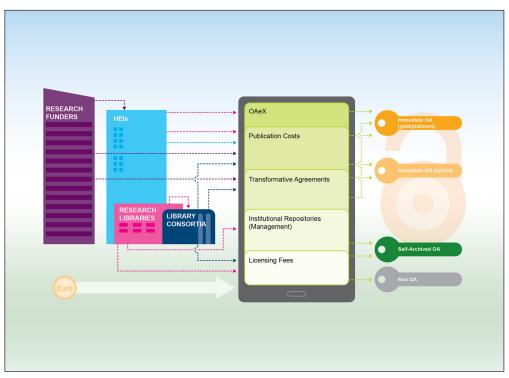


Figure 1. The position of OAeX within the current ecosystem Illustration by Maria de Maré, used under CC BY licence from the National Library of Sweden. Text modified from original.



5 OAeX in action: journal publishing

This section describes an instance of OAeX in practice, taking the example of a university press seeking funding to support the operations of a peer-reviewed journal intending to flip to no-fee OA.

Bidding (for funding) in OAeX

Funding bids are prepared and submitted via an OAeX online workflow template, similar to those already used by the Joint Committee for Nordic research councils in the Humanities and Social Sciences.⁵² Information relevant to a bid would include the journal's:

- editorial board members
- publisher entity (university press, learned society, commercial publisher etc.)
- current funding model and source(s) of funding
- timescale for required funding (one-off capital funding or operational funding for a fixed/repeat period)
- technical standards supported (Crossref membership, digital preservation strategy etc.)
- sustainability plan (future-proofing measures).

Funding bids are self-administered and posted to the online OAeX marketplace. OAeX operates on a rolling basis, with bids being published and closing continually.

Funding in OAeX

Academic libraries are the traditional funders of journal publications, with expertise in evaluating and selecting publications in collaboration with their faculty. In this sense, libraries are the natural funders targeted by OAeX bidders. However, any public or private actor benefiting from the service can be a potential OAeX funder, including but not limited to research funding bodies. With the ability to reach large groups of private funders, companies and enterprises, OAeX is creating the potential for entirely new sources of funding not available to other models focusing on research institutions.

OAeX is designed to make the funding transaction process as straightforward as possible. The marketplace features a cross-searchable database allowing funders (and bidders) to filter bids against descriptive project metadata, such as geographical region, discipline, publisher etc. This enables funders to make evidence-based decisions and allocate funding accordingly. Committed funds are reported in the marketplace in real time. In addition, OAeX ranks funding bids along a financial success scale. This means that funders can choose to favour bids which already attract funding and are likely to meet their target threshold.

A further potential innovation of OAeX is the ability to match bidding projects to funding institutions based on authorship and citation data. Here, OAeX takes inspiration from the no-fee OA journal publisher Sci-Post,⁵³ which collates the affiliations of its authors and posts lists of the institutions benefiting from it, thus distinguishing between those who fund and those who do not. With OAeX, it may be feasible for bidders to include metadata on authors' and citing authors' affiliations so funders can easily identify bids most relevant to their local interests. Such data would act as a powerful counter to arguments against spending limited institutional resources on shared goods.

'creating the potential for entirely new sources of funding'



6 Allocating funding in OAeX

For ease of administration, payments are centralized through the OAeX platform. The rationale for this is that multiple, small amounts from various funders committed to different bidders would place the onus of administration on the funder and the bidder, making the model less attractive. Once a funding bid has successfully reached its required funding threshold, OAeX issues a single invoice to each funder, which can cover pledged funding for multiple bids. If less funding than required is attracted, bidders may either abandon their bid or negotiate with already committed funders to seek support for a revised project.

Successful bidders enter an agreement with OAeX and commit to administering allocated funds in accordance with their bid, whilst also undertaking to provide openly available reports on their progress in achieving their stated funding goals. The bid's OAeX page contains dated place markers for reporting, which will act as incentives for bidders to comply.

'payments are centralized through the OAeX platform'

Archiving funding bids

Every funding bid, successful or not, is archived in a central repository for legacy access. This allows funders to take credit for their funding activities: for crowdfunding to take off, it is not sufficient for funders to contribute; they also need to be seen to do so, to promote their contributions and to motivate others to follow suit. Archived funding bids provide a permanent record for accountability, critical analysis and transparency purposes, as well as an information resource for future bidders and funders.

The OAeX workflow summary is described below.

- 1. The bidder submits a funding bid to the OAeX marketplace.
- 2. Libraries (as well as other funders) review the bid and decide whether or not to fund.
- 3. Successful bids are processed by OAeX (invoicing and allocating funds).
- 4. Successful bidders report to the OAeX marketplace on funding objectives that have been met.
- 5. OAeX archives all bids (successful and unsuccessful).
- 6. At the end of the funding period, the cycle repeats for renewed funding.

Administration

An existing library e-resources consortium, of which there are many globally,⁵⁴ could act as operator of the OAeX platform. Such consortia possess the expertise and administrative resources to manage centralized transactions between publishers and libraries, so could adapt existing practices to facilitate relationships between bidders and funders.

'operating costs could become selfsustaining by levying a transaction charge with each funding pledge'

In its initial stages, the OAeX host consortium would require seed funding for implementation and establishing sound business practices and representative governance. In the long term, OAeX's operating costs could become self-sustaining by levying a transaction charge with each funding pledge.

The OAeX initiative will require significant advocacy efforts to identify and encourage potential bidders, as well as promote the concept (and marketplace) to potential funders. Promotional activities could be supported by OAeX ambassadors in participating institutions, e.g. librarians and academic colleagues facilitating local engagement and encouraging/advising OA projects to prepare for and submit funding bids.



7 Sources of funding through OAeX

Libraries may choose to commit to specific journals on an ongoing basis from their annual budget. They could choose to adopt Lewis's suggestion⁵⁵ to commit 2.5% of their e-resources budget to OA initiatives. Alternatively, they could use any surplus at the end of their financial year to contribute to one-off OAeX project bids.

Another funding option could be a central and recurring grant allocated to academic libraries by government or funding bodies (possibly from CoalitionS members who have committed to 'collectively establish incentives for establishing Open Access journals/platforms or flipping existing journals to Open Access'). Funding bodies could choose to pledge directly via OAeX but might prefer to devolve decision-making to libraries with expertise in evaluating scholarly communications initiatives.

In the years immediately after establishing OAeX – with previously successful bidders returning for new funding cycles and new projects joining in – the amounts of money available in the system will be constrained. While, ideally, libraries would have some capacity to expand commitments (perhaps starting with Lewis's $2.5\%^{57}$ followed by incremental increases), budgetary constraints can also be seen as a virtue within the OAeX

competitive-market context: limits to funding will ensure only highquality projects (as judged by funder libraries) are successful. Libraries may choose to gradually increase their OAeX commitment and reduce spend with legacy economic models as circumstances and their strategic priorities evolve.

'helping to incubate and sustain ... initiatives as long as it is needed'

OAeX bidders and funders would naturally continue to review the benefits of OAeX and question whether the cost of a middleman is justified. It may be the case that a successful bidder with a small number of funders would indeed be better off managing transactions directly with the funders. This would be in keeping with the aim of OAeX of helping to incubate and sustain such initiatives as long as it is needed and would incentivize OAeX itself to keep its transaction charges low.

Potential Challenges

The OAeX model presents several challenges:

The free rider problem: libraries reluctant to pay for what they can 'get for free'

Besides the prestige and visibility of being publicly acknowledged as an OA supporter, OAeX bidders can offer additional benefits to funders, such as allowing direct participation in governance decisions, à la SCOAP3's Governing Council, which is comprised of paying

members.⁵⁸ Another motivation is the risk that in the absence of sufficient crowdfunding, a journal could flip back to a more expensive model of either subscriptions or APCs. Existing crowdfunding open scholarship models, as listed above, have demonstrated the willingness of libraries to move beyond supporting local needs and to contribute to a public good.⁵⁹ OAeX has the potential to scale this up by making it as easy as possible for bidders and funders to use its services.

'Any publisher ... is welcome to engage with OAeX without any commitment or risk'

Publishers concerned about losing revenue from migration to OAeX

Any publisher – for-profit commercial, non-commercial – is welcome to engage with OAeX without any commitment or risk (provided money raised via OAeX is used only for services without reader or author restrictions, i.e. paywalls or APCs). For example, a subscription-based society journal could test the water by bidding for funding in OAeX, but would only flip to no-fee OA after a successful outcome, with the option to convert back to the old model in the event of funders dropping out in future years. As with the example of *Annual Reviews*' subscribe-to-open pilot, new funders outside their existing subscription base could be invited to join, potentially leading to higher revenue. PLOS is currently considering

8 moving away from APCs to such a 'journal supporter-based model', which could be facilitated via OAeX.⁶⁰

Horizontal scalability to mitigate the risk of a central point of failure

If OAeX is successful and scales up, it is prudent to acknowledge the risk of a central point of failure of its business entity akin to the collapse of the journal subscription agent Swets in 2015.⁶¹ However, this risk can be spread by multiple federated or independent and coexisting OAeX organizations: successful services typically spawn imitators, so multiple OAeXs could compete with each other to ensure continued quality of service and value for the community.

Bidders are concerned about waiting too long for funding

Bidders do not need to seek exclusive funding via OAeX. OAeX can be utilized to supplement other income streams. In this sense, OAeX helps to accelerate transactions when needed or desired. Consider the example of a no-fee OA publisher established with seed funding from a single source: OAeX can assist with long-term viability when initial funding runs out, without forcing the publisher to move to the less advantageous subscription or APC models.

Local funders supporting only local bids

It is possible that bids in OAeX will primarily attract funding from affiliated libraries with knowledge of local projects and their personnel. While this is not necessarily a negative scenario, it may harbour the risk of real or perceived favouritism, or 'populist' pressure to publish what a funding institution would favour. However, the built-in transparency and openness of OAeX can mitigate against this. Indeed, the ability to view and compare many bids within a single platform could prove helpful in transcending local bias.

Future buy-out by a for-profit

The OA community may be concerned about the risk of OAeX being spun out by the host consortium and sold as a means to generate profit, losing its starting motivation (see critique of Bepress being sold to RELX⁶² or concerns about KU's for-profit status⁶³). OAeX could address this in two very different ways either by emulating the organizational structures of the OLH, which is a registered charity with a defined mission and so cannot be acquired by a for-profit,⁶⁴ or by OAeX being agnostic on the for-profit/non-profit issue. As described above, if the model is successful, there may be multiple competing OAeX services, which would mitigate against profiteering or monopolizing by a controlling for-profit. OAeX would not own any intellectual property so dissatisfied bidders or funders could choose to walk away.

Creating OAeX

The authors are in discussion with various individuals and organizations to progress and realize the idea of OAeX and would welcome contact with other interested parties.

Conclusion

Realizing sustainable OA under competitive market conditions represents an ongoing challenge to all participants in scholarly communications: researchers, institutions, funders, publishers, society. Existing transaction models have not achieved sustainable universal access to the scholarly record under conditions that embrace true transparency and equity.

In contrast, the OAeX economic model, as outlined above, represents an amelioration of existing good practice, whilst also offering a measured proposal for collective action.

'the OAeX economic model ... represents an amelioration of existing good practice, whilst also offering a measured proposal for collective action'



9 Acknowledgements

The authors would like to thank the following individuals for their feedback and constructive critique in developing this concept: Graham Stone, Peter Suber, Martin Paul Eve, Sofie Wennström, Brandt Dainow, Eamon Costello, Camilla Hertil Lindelöw, Mark C. Wilson, Falk Reckling, Marc Robinson-Rechavi, Jim Rogers, Pat Brereton, Ronan Cox, Björn Brembs, Gareth O'Neill and Jonathan Tennant

Abbreviations and Acronyms

A list of the abbreviations and acronyms used in this and other *Insights* articles can be accessed here – click on the URL below and then select the 'full list of industry A&As' link: https://www.uksg.org/publications#aa.

Competing interests

The authors have declared no competing interests.

References

 Marc Schiltz, "Science without Publication Paywalls: COAlition S for the Realisation of Full and Immediate Open Access," PLOS Biology 16. no. 9 (4 September 2018): e3000031. DOI:

https://doi.org/10.1371/journal.pbio.3000031; Joachim Schöpfel, et al., "Ready for the Future? A Survey on Open Access with Scientists from the French National Research Center (CNRS)," Interlending & Document Supply 44, no. 4 (21 November 2016): 141–49, DOI:

https://doi.org/10.1108/ILDS-06-2016-0023; Stuart Lawson, "Open Access Policy in the UK: From Neoliberalism to the Commons," PhD Thesis, Birkbeck, University of London, 2019, DOI:

https://doi.org/10.17613/ktz2-w249; Paul Ayris et al., "LIBER Open Science Roadmap," Zenodo, 2 July 2018, DOI:

https://doi.org/10.5281/zenodo.1303002; ACRL, "Scholarly Communication Toolkit: Public Access & Funder Mandates," ACRL - Association of College and Research Libraries, 14 October 2019,

https://acrl.libguides.com/c.php?g=539108&p=3694721 (all accessed 14 January 2020).

- Claire Redhead, "Rate of Growth for CC BY Articles in Fully-OA Journals Continues for OASPA Members," OASPA, 3 July 2019, https://oaspa.org/growth-continues-for-oaspa-member-oa-content/ (accessed 16 January 2020).
- 3. "Open Access Policies," eifl,

https://www.eifl.net/programme/open-access-programme/open-access-policies (accessed 16 January 2020).

- "What Is COALition S?", Science Europe, Plan S, 2019, https://www.coalition-s.org/about/, (accessed 16 January 2020).
- 5. "Open Access," Science Europe, 2019,

https://www.scienceeurope.org/our-priorities/open-access/, (accessed 16 January 2020).

- "Principles and Implementation," Science Europe, Plan S, 2019, https://www.coalition-s.org/principles-and-implementation/, (accessed 16 January 2020).
- "COAlition S Appoints Johan Rooryck as Open Access Champion," Science Europe, Plan S, 28 August 2019, https://www.coalition-s.org/oa-champion-announced/ (accessed 16 January 2020).
- 8. DORA (San Francisco Declaration on Research Assessment),

https://sfdora.org/;lohan Rooryck, "ACTION: Open Letter - Help Liberate Our Science - Please Help! (#119)," GitLab / Publishing Reform/discussion, 10 June 2019,

https://gitlab.com/publishing-reform/discussion/issues/119; Stephen Buranyi, "Is the Staggeringly Profitable Business of Scientific Publishing Bad for Science?," The Guardian, 27 June 2017, sec. Science,

https://www.theguardian.com/science/2017/jun/27/profitable-business-scientific-publishing-bad-for-science; Kirsi Pauliina Kallio, "Subtle Radical Moves in Scientific Publishing," Fennia - International Journal of Geography 195, no. 1 (20 June 2017): 1–4, DOI: https://doi.org/10.11143/fennia.63678 (all accessed 14 January 2020).

- "LIBER (Ligue Des Bibliothèques Européennes de Recherche Association of European Research Libraries), https://libereurope.eu/ (accessed 14 January 2014).
- David Prosser, "The Costs of Double Dipping," Research Libraries UK (blog), 6 February 2015, https://www.rluk.ac.uk/the-costs-of-double-dipping/ (accessed 16 January 2020).
- 11. "Open Access: Five Principles for Negotiations with Publishers," LIBER Association of European Research Libraries (blog), 7 September 2017, https://libereurope.eu/blog/2017/09/07/open-access-five-principles-for-negotiations-with-publishers/ (accessed 16 January 2020).
- 12. "About us," Wellcome,

https://wellcome.ac.uk/about-us; "Grant conditions," Wellcome,

https://wellcome.ac.uk/funding/guidance/grant-conditions; "Open access policy," Wellcome,

https://wellcome.ac.uk/funding/guidance/open-access-policy (all accessed 16 January 2020).

 "Scholarly Communication Toolkit: Public Access & Funder Mandates," ACRL - Association of College and Research Libraries, 10 October 2019, https://acrl.libguides.com/scholcomm/toolkit/home (accessed 16 January 2020); European Commission, OSPP-REC: Open Science Policy Platform Recommendations, 2018,

https://ec.europa.eu/research/openscience/pdf/integrated_advice_opspp_recommendations.pdf (accessed 22 January 2020); Emma Cryer (contributor), "Incorporating Open Access into Libraries," Serials Review 37, no. 2 (1 June 2011): 103–7, DOI:

https://doi.org/10.1080/00987913.2011.10765359 (accessed 16 January 2020); Diane Harley, "Scholarly Communication: Cultural Contexts, Evolving Models," Science 342, no. 6154 (4 October 2013): 80–82, DOI:

https://doi.org/10.1126/science.1243622 (accessed 16 January 2020); Gareth J. Johnson, "Cultural, ideological and practical barriers to open access adoption within the UK Academy: an ethnographically framed examination," *Insights* 31, (June 2018), DOI:

https://doi.org/10.1629/uksg.400 (accessed 16 January 2020); Alysia D. Roehrig, Devin Soper, Bradley E. Cox, and Gloria P. Colvin, "Changing the Default to Support Open Access to Education Research," *Educational Researcher* 47, no. 7 (1 October 2018): 465–73, DOI: https://doi.org/10.3102/0013189X18782974 (accessed 16 January 2020).



- 14. Christopher May, "Academic publishing and open access: Costs, benefits and options for publishing research," Politics, 25 June 2019, DOI: https://doi.org/10.1177/0263395719858571 (accessed 16 January 2020); Jubb Consulting, United Kingdom, Directorate-General for Research and Innovation (European Commission), Jean-Claude Guédon, et al., Future of scholarly publishing and scholarly communication: Report of the Expert Group to the European Commission, (Luxembourg: Publications Office of the European Union), 1 January 2019, 30–37, https://digitalcommons.unl.edu/scholcom/97 (accessed 16 January 2020).
- 15. Leonid Schneider, "Researchers reject APC-based OA publishing as promoted by Plan S," For Better Science (blog), 11 June 2019, https://forbetterscience.com/2019/06/11/researchers-reject-apc-based-oa-publishing-as-promoted-by-plan-s/ (accessed 16 January 2020); University of California Libraries, Pay It Forward: Investigating a Sustainable Model of Open Access Article Processing Charges for Large North American Research Institutions, July 2016,

https://www.library.ucdavis.edu/wp-content/uploads/2018/11/ICIS-UC-Pay-It-Forward-Final-Report.rev .7.18.16.pdf (accessed 16 January 2020); Marcel Knöchelmann, "Knowledge Unlatched, failed transparency, and the commercialisation of open access book publishing," LSE Impact Blog (blog), 3 October 2018,

https://blogs.lse.ac.uk/impactofsocialsciences/2018/10/03/knowledge-unlatched-failed-transparency-and-the-commercialisation-of-open-access-book-publishing/ (accessed 16 January 2020); Shaun Khoo, "The gold rush: Why open access will boost publisher profits," LSE Impact Blog (blog), 4 June 2019,

https://blogs.lse.ac.uk/impactofsocialsciences/2019/06/04/the-gold-rush-why-open-access-will-boost-publisher-profits/ (accessed 16 January 2020); Björn Brembs, "Why Open Access Big Deals Are Worse than Subscriptions," Bjoern.Brembs.Blog (blog), 13 April 2018,

http://bjoern.brembs.net/2018/04/why-open-access-big-deals-are-worse-than-subscriptions/ (accessed 16 January 2020); Toby Green, "Is open access affordable? Why current models do not work and why we need internet-era transformation of scholarly communications," *Learned Publishing* 32, no. 1 (1 January 2019): 13–25, DOI:

https://doi.org/10.1002/leap.1219 (accessed 16 January 2020).

16. "About," Open Library of Humanities,

https://www.openlibhums.org/site/about/ (accessed 17 January 2020).

17. SciPost,

https://scipost.org/ (accessed 16 January 2020).

18. arXiv

https://arxiv.org/ (accessed 16 January 2020).

19. SCOAP³,

https://scoap3.org/ (accessed 16 January 2020).

20. AmeliCA.

http://amelica.org/index.php/en/home/ (accessed 16 January 2020).

21. SciELO.

https://scielo.org/en/ (accessed 16 January 2020).

22. "Subscribe to Open", Annual Reviews, 2019,

https://www.annualreviews.org/page/subscriptions/subscribe-to-open (accessed 17 January 2020).

 TEANGA - The Journal of the Irish Association for Applied Linguistics, https://journal.iraal.ie/index.php/teanga (accessed 17 January 2020).

24. Martin Paul Eve, "Transparency Agendas Are Being Used to Legislate against Consortial Open-Access Models Even Though It Has Good Cost Outcomes," Martin Paul Eve (blog), 3 June 2018,

https://eve.gd/2018/06/03/transparency-agendas-are-used-to-legislate-against-consortial-open-access-models/ (accessed 17 January 2020).

- 25. María Francisca Abad, "Financial aspects of open access journals," Contributions to science 5, no. 1, (2009), 107–114; Janneke Adema, and Graham Stone, "Changing Publishing Ecologies: A Landscape Study of New University Presses and Academic-Led Publishing," Jisc Repository, 30 June 2017, http://repository.jisc.ac.uk/6666/ (accessed 23 January 2020).
- 26. Martyn Rittman, "Sustainability in Publishing: An Open Access Publisher's View," in *ELPUB 2018*, ed. Leslie Chan and Pierre Mounier (Toronto, Canada, 2018), DOI:

https://doi.org/10.4000/proceedings.elpub.2018.9 (accessed 17 January 2020).

- 27. Jonathan Nabe, "After the Big Deals Are Done," *Against the Grain* 29, no. 1 (1 February 2017), DOI: https://doi.org/10.7771/2380-176X.7707 (accessed 17 January 2020).
- Max-Planck-Gesellschaft, "Register Transformative Agreements ESAC," https://esac-initiative.org/about/transformative-agreements/share/
 (accessed 23 January 2020).
- Fiona M. Scott Morton, "The Problems of Price Controls," Cato Institute, 20 June 2001, https://www.cato.org/publications/commentary/problems-price-controls
 (accessed 17 January 2020); Richard Poynder, "Open Access: Whom Would You Back?" Open and Shut? (blog), 10 March 2009,

https://poynder.blogspot.com/2009/03/open-access-who-would-you-back.html (accessed 22 January 2020).

30. Jim Giles, "PR's 'pit bull' takes on open access," News, *Nature*, 445, 347, 24 January 2007, DOI: https://doi.org/10.1038/445347a (accessed 17 January 2020); Ludovico Bullini Orlandi, Francesca Ricciardi, Cecilia Rossignoli, and Marco De Marco, "Scholarly Work in the Internet Age: Co-Evolving Technologies, Institutions and Workflows," *Journal of Innovation & Knowledge* 4, no. 1 (January 2019): 55–61. DOI:

https://doi.org/10.1016/j.jik.2017.11.001 (accessed 17 January 2020); John Willinsky, "Scholarly Associations and the Economic Viability of Open Access Publishing (Published April 8, 2005)," Demonstration Journal of the Health Sciences Theme 1, no. 2 (2018),

https://demo.publicknowledgeproject.org/ojs3/demo/index.php/health-sciences/article/view/693 (accessed 17 January 2020); George Chen, Alejandro Posada, and Leslie Chan, "Vertical Integration in Academic Publishing," in Connecting the Knowledge Commons — From Projects to Sustainable Infrastructure, ed. Leslie Chan and Pierre Mounier (OpenEdition Press, 2019), DOI:

https://doi.org/10.4000/books.oep.9068 (accessed 17 January 2020).



31. George Machovec, "Strategies for Transformational Publish and Read Agreements in North America," Journal of Library Administration 59, no. 5 (4 July 2019): 548–55, DOI:

https://doi.org/10.1080/01930826.2019.1616969 (accessed 17 January 2020); Mercedes Baquero-Arribas, Luis Dorado, and Isabel Bernal, "Open Access Routes Dichotomy and Opportunities: Consolidation, Analysis and Trends at the Spanish National Research Council," *Publications* 7, no. 3 (September 2019): 49. DOI:

https://doi.org/10.3390/publications7030049 (accessed 17 January 2020); Jeffrey Brainard, "New deals could help scientific societies survive open access," Science 365, no. 6459 (20 September 2019): 1229–1229, DOI:

https://doi.org/10.1126/science.365.6459.1229 (accessed 17 January 2020); Brigitte Kromp, and Frank Koren-Wilhelmer, "Finanzierung von Open Access-Übergangsmodellen: Leitlinie für Verlagsverträge für die Open Access-Transformation," Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare 72, no. 1 (17 May 2019): 66–73, DOI:

https://doi.org/10.31263/voebm.v72i1.2277 (accessed 17 January 2020); Martin Paul Eve, "All That Glisters: Investigating Collective Funding Mechanisms for Gold Open Access in Humanities Disciplines," *Journal of Librarianship and Scholarly Communication* 2, no. 3 (2014). DOI: https://doi.org/10.7710/2162-3309.1131 (accessed 17 January 2020).

32. Bregt Saenen and Lidia Borrell-Damián, "EUA Briefing. Reflections on University Research Assessment. Key Concepts, Issues and Actors," European University Association, April 2019,

https://www.ouvrirlascience.fr/wp-content/uploads/2019/05/EUA_Reflections-on-University-Research-Assessment_2.pdf (accessed 17 January 2020).

 Aileen Fyfe et al., "Untangling Academic Publishing: A history of the relationship between commercial interests, academic prestige and the circulation of research," (Zenodo, 25 May 2017), DOI: https://doi.org/10.5281/zenodo.546100 (accessed 17 January 2020).

34 Hamid R. Jamali, et al., "How scholars implement trust in their reading, citing and publishing activities: Geographical differences," *Library & Information Science Research* 36, no. 3 (1 October 2014): 192–202, DOI:

https://doi.org/10.1016/j.lisr.2014.08.002 (accessed 17 January 2020); Gary Barron, "Universities in the Making: Rankings, Performance Metrics and Control in Academia," ERA, June 2019, DOI:

https://doi.org/10.7939/r3-w9vx-vw08 (accessed 17 January 2020); Jo Ann Oravec, "The manipulation of scholarly rating and measurement systems: constructing excellence in an era of academic stardom," *Teaching in Higher Education* 22, no. 4 (19 May 2017): 423–36, DOI:

https://doi.org/10.1080/13562517.2017.1301909 (accessed 17 January 2020); Eti Herman, "Scholarly reputation," FEMS Microbiology Letters 365, no. 18 (1 September 2018), DOI:

https://doi.org/10.1093/femsle/fny200 (accessed 17 January 2020); Icy Lee, "Publish or perish: The myth and reality of academic publishing," Language Teaching 47, no. 2 (April 2014): 250–61, DOI:

https://doi.org/10.1017/S0261444811000504 (accessed 17 January 2020).

35. Paul Belleflamme, Thomas Lambert, and Armin Schwienbacher, "Crowdfunding: Tapping the right crowd," *Journal of Business Venturing* 29, no. 5 (1 September 2014): 585–609, DOI:

https://doi.org/10.1016/j.jbusvent.2013.07.003 (accessed 17 January 2020).

36. Kickstarter,

https://www.kickstarter.com/ (accessed 17 January 2020).

37. Indiegogo,

https://www.indiegogo.com/ (accessed 17 January 2020).

38. "Funding the wonderful," Crowdcube, 19 March 2019, https://www.crowdcube.com/ (accessed 17 January 2020).

39. Unglue.it,

https://unglue.it (accessed 17 January 2020).

40. Paula J. Hane, "New Crowdfunding Initiative to 'Unglue' Ebooks Launches in Alpha," Information Today, Inc., 30 January 2012, http://newsbreaks.infotoday.com/NewsBreaks/New-Crowdfunding-Initiative-to-Unglue-Ebooks-Launches-in-Alpha-80293.asp (accessed 17 January 2020); Corilee Christou, "Unglue.It Builds a Supply Chain for Free Ebooks," Information Today, Inc., 19 April 2016, http://newsbreaks.infotoday.com/NewsBreaks/Unglueit-Builds-a-Supply-Chain-for-Free-Ebooks-110480.asp (accessed 17 January 2020).

41. "What Is SCOAP3," SCOAP3,

https://scoap3.org/what-is-scoap3/ (accessed 17 January 2020).

42. Martin Borchert, and Vanessa Proudman, "Someone has to pay: The global sustainability coalition for open science services (SCOSS)," in *Proceedings* of the IATUL Conferences, 2018,

https://docs.lib.purdue.edu/iatul/2018/collaboration/2 (accessed 17 January 2020); "SCOSS", SCOSS, https://scoss.org/ (accessed 17 January 2020).

43. "Kotilava – Finnish Academic Journals towards Immediate Open Access," Kotilava,

http://www.kotilava.fi/ (accessed 17 January 2020); Journal.Fi,

https://journal.fi/ (accessed 17 January 2020); Jyrki Ilva, "Looking for commitment: Finnish open access journals, infrastructure and funding," Insights 31, (27 June 2018), DOI:

https://doi.org/10.1629/uksg.414 (accessed 17 January 2020).

 LIBRARIA: A Cooperative Approach to Scholarly Publishing in the Social Sciences", 2019, http://libraria.cc/open-access-for-anthropology-a-model-for-universal-oa (accessed 17 January 2020).

 Peter Suber, "The taxpayer argument for open access," SPARC Open Access Newsletter 2003, https://dash.harvard.edu/handle/1/4725013 (accessed 17 January 2020).

46. Palie Smart et al., "Open Science and Open Innovation in a socio-political context: knowledge production for societal impact in an age of post-truth populism," R&D Management 49, no. 3 (2019): 279–97, DOI: https://doi.org/10.1111/radm.12377 (accessed 17 January 2020).

47. Suzan Koseoglu and Aras Bozkurt, "An exploratory literature review on open educational practices," *Distance Education* 39, no. 4 (2 October 2018): 441–61. DOI:

https://doi.org/10.1080/01587919.2018.1520042 (accessed 17 January 2020).



- 48. Peter Kraker et al., "The Vienna Principles: A Vision for Scholarly Communication in the 21st Century," Open Access Network Austria (OANA), 2016, https://viennaprinciples.org/v1/ (accessed 17 January 2020).
- 49. Toby Green, "Is open access affordable? Why current models do not work and why we need internet-era transformation of scholarly communications," Learned Publishing 32, no. 1 (1 January 2019): 13–25, DOI: https://doi.org/10.1002/leap.1219 (accessed 17 January 2020).
- 50. Green, "Is open access affordable?".
- 51. Annual Reviews, "Subscribe to Open".
- 52. "NOS-HS: The joint committee for Nordic research councils in the humanities and social sciences", NOS-HS, https://www.aka.fi/en/nos-hs (accessed 17 January 2020).
- 53. "SciPost",

https://scipost.org/ (accessed 17 January 2020).

- ICOLC. "Participating Consortia," ICOLC, https://icolc.net/consortia (accessed 22 January 2020).
- David W. Lewis, "The 2.5% Commitment," ScholarWorks, 2017, DOI: https://doi.org/10.7912/c2jd29 (accessed 17 January 2020).
- 56. "Principles and Implementation," Science Europe.
- 57. Lewis, "The 2.5% Commitment".
- 58. "FAQs SCOAP3," SCOAP3 Sponsoring Consortium for Open Access Publishing in Particle Physics, 3, https://scoap3.org/faqs/ (accessed 17 January 2020).
- 59. Martin Paul Eve on Twitter: "The final grant report for the Open Library of Humanities has now been filed. As of the last few months we've been funded entirely by our LPS model, not grants. Our continued existence is due to our library members. We've shown it can work. We now need others to adopt this model." Twitter, 30 October 2019, https://twitter.com/martin_eve/status/1189497007448252417 (accessed 17 January 2020).
- Sarah Rouhi, "'Flipping' to (more) open when you're already open", The Official PLOS Blog (blog), 25 October 2019, https://blogs.plos.org/plos/2019/10/flipping-to-more-open-when-youre-already-open/ (accessed 17 January 2020).
- 61. Kaitlin Mulhere, "Journals and Money at Risk," Inside Higher Ed, 1 February 2015, https://www.insidehighered.com/news/2015/01/02/swets-bankruptcy-will-cost-libraries-time-money (accessed 17 January 2020).
- 62. Roger C. Schonfeld, "Reflections on 'Elsevier Acquires Bepress'," *Ithaka S+R* (blog), 7 August 2017, https://sr.ithaka.org/blog/reflections-on-elsevier-acquires-bepress/ (accessed 17 January 2020).
- 63. Marcel Knöchelmann, "Knowledge Unlatched".
- 64. OLH, "Frequently Asked Questions".



Article copyright: © 2020 Jack Hyland, Alexander Kouker and Dmitri Zaitsev. This is an open access article distributed under the terms of the Creative Commons Attribution Licence, which permits unrestricted use and distribution provided the original author and source are credited.



Corresponding author:

Jack Hyland

Manager

IReL e-resources consortium

Maynooth University, IE

E-mail: jack.hyland@mu.ie

ORCID ID: https://orcid.org/0000-0002-1702-7870

Co-authors:

Alexander Kouker

ORCID ID: https://orcid.org/0000-0002-6150-4603

Dmitri Zaitsev

ORCID ID: https://orcid.org/0000-0002-6947-4226

To cite this article:

Hyland J, Kouker A and Zaitsev D, "Open Access eXchange (OAeX): an economic model and platform for fundraising open scholarship services," *Insights*, 2020, 33: 8, 1–13; DOI: https://doi.org/10.1629/uksg.500

Submitted on 3 December 2019

Accepted on 22 January 2020

Published on 26 February 2020

Published by UKSG in association with Ubiquity Press.