

Journal flipping or a public open access infrastructure? What kind of open access future do we want?



*Open access debates are increasingly focused on “how” rather than “why”. **Tony Ross-Hellauer** and **Benedikt Fecher** present two possible scenarios for an open access future, consider the relative merits and viability of each, and invite your input to the discussion.*

Open access (OA) is advocated by science funders, policymakers and researchers alike. It will most likely be the default way of publishing in the not-so-distant future. Nonetheless, the dominant approach to achieve OA at the moment – journal flipping – could have adverse long-term effects for science. To try to stir debate, we here present two dichotomic scenarios for open access in 20 years’ time. Our approach is collaborative and open – we recognise that our position is not uncontroversial and welcome engagement from those who would advocate otherwise. What is missing in the scenarios presented below? Which scenario would be better? Which is most realistic?

You can leave your thoughts in our public [Google Doc](#). The two scenarios and the comments we receive are part of a discussion session at FORCE11 in Berlin this week.

Prelude

The movement for open access (OA) seems to have entered a new phase, where debates centre more on “how” than “why”. The arguments about the social, economic, and academic benefits of OA seem to have largely been won, at least at the policy level of governments, policymakers, institutions, and funders. As mandates and policies proliferate, the build-up of political pressure presents OA as an inevitability, although it is worth remembering that researchers, despite seeming to agree that OA is a good idea, have proven much less likely to adopt it for their own publications, where [the prestige of appearing in brand-name journals remains the main motivation](#).

OA’s success at the political level, yet only incremental progress at the level of practices, brings an urgent moment of choice. Policymakers want OA quickly – the European Commission’s competitiveness council famously called for [full, immediate OA to all scientific publications by 2020](#). Although that target is almost certainly unrealistic, as a statement of intent it is powerful. Such sudden urgency sets the scene for pragmatic solutions. And the most pragmatic of solutions currently on the table is that proposed by the [OA2020 initiative](#), which “aims to accelerate the transition to open access by transforming the existing corpus of scientific journals from their current subscription system to open access”. This “big flip” of the current journal ecology would have the advantages of not requiring researchers to change their practices too much and building upon tried and tested infrastructure – the journal-based publishing system.

In two previous posts, we made the argument in favour of a public open access infrastructure and against the “big flip” of subscription journals ([here](#) and [here](#)). Here, we’d like to explore in more detail the possible consequences for scholarly communication if either of these two scenarios came to pass. We present these scenarios for discussion, in the hope that sketching these possible futures will help achieve consensus on the best way forward.

Two scenarios for open access

There are, of course, many possible scenarios for how OA publishing will look in 20 years' time. We decided to present two tentative ending points of a dichotomy. Scenario 1 follows the adopted strategy of many European countries – offsetting agreements and journal flipping. Scenario 2 follows a strategy that is discussed less often – investments in a public OA infrastructure.

Scenario 1: The Big Flip

OA2020, announced in 2016, seeks to mobilise scholarly organisations (universities, research institutions, funders, libraries, and publishers) to convert resources currently spent on journal subscriptions into funds to support OA. The big flip certainly has its advantages. It is probably the most promising approach for OA in the short run. It means that in the medium-term a substantial proportion of paywalled articles would be available under OA licenses.

The initiative's playbook is being adopted by the [DEAL](#) consortium in Germany in negotiations between a large group of scientific institutions and a few major scientific publishers. Although similar negotiations undertaken by consortia in the UK, Austria, Finland, and the Netherlands ended with each agreeing to far less than they wanted, [DEAL's strong negotiating style could yield better outcomes](#). It is hence watched intently by science funders and science policymakers worldwide.

If DEAL has success in pushing the big academic publishers towards flipping, and other countries follow suit such that the OA2020 vision is realised, what sort of OA would we inherit?

While journal flipping would mark a shift in the traditional business model for academic publishing and ultimately lead to many more articles being available under open licenses in the short run, there would be severe adverse effects in the long run.

1. Large-scale offsetting agreements exclude researchers from institutions and countries that cannot afford to buy in; this will be to the detriment and competitive disadvantage of researchers from poorer institutions. **Journal flipping will likely widen the gap between the rich and the poor in the global academic landscape.**
2. Given that many peer-reviewed articles [remain uncited and do not even have a disciplinary impact](#), researchers would contribute more by publishing alternative scientific products, such as open data and code. Yet, the journal-flipping would cement the role of the article and make it difficult for new, more digital-savvy products to emerge. **Journal flipping would cement an analogue academic value creation.**
3. Moreover, journal flipping reproduces the dependence on a small number of commercial publishers that will likely continue to wield oligopolistic market power. **Without necessity, journal flipping reproduces the inefficiencies from the analogue to the digital world.**
4. Finally, the hurried push to flip journals within costs widely believed to be bloated could mean that **average levels of article processing charges will become inflated**, reflecting current publisher profit-margins rather than the true cost of academic publishing.

The clear advantage of OA is its short-term effect. There is hardly a solution that would make more journals and articles OA in a short time. Plus, this approach will likely cost academia less than having libraries and research institutions negotiating individual licensing agreements with publishers (which is the situation now).

Scenario 2: A Public Open Access Infrastructure

An alternative future would be one in which a concerted and coordinated attempt is made to implement an open, public infrastructure. There are many pieces of such an infrastructure already in place, although at the moment they are scattered.

For instance the [FairOA](#) initiative calls for models where publication is not dependent on payments from authors or institutions and costs are “low, transparent, and in proportion to the work carried out”. How this might be achieved sustainably is shown by the [Open Library of Humanities](#), an academic-led, gold OA publisher that circumvents APCs by collecting membership fees directly from (currently over 200) research libraries. [OLH has been actively involved in “flipping” subscription journals over to its model.](#)

At the same time, the “green” OA infrastructure of institutional repositories and preprint servers has been growing in interesting ways. Will preprint servers like [arXiv](#), [bioRxiv](#) and the host of newly-created servers hosted by the [Open Science Framework](#) integrate review and editing technologies to enable them to become functional publishing platforms? Could infrastructures like [OpenAIRE](#) and visions like [COAR Next Generation Repositories](#) provide a way forward for public infrastructures of repositories and overlay journals to create a user-centric, public publishing ecosystem?

Meanwhile, science funders like the European Commission, Bill & Melinda Gates Foundation and Wellcome Trust have already announced the establishment of their own OA megajournals. Although currently based on proprietary technologies, it is possible that in future these funds would be diverted to support public infrastructures. Overarching all of these developments, the EC’s European Open Science Cloud, currently being piloted ([EOSCpilot.eu](#)) can be expected to become a central resource for new scholarly communication tools and methodologies which better support data generation and data processing.

Most recently, the open-source Collaborative Knowledge Foundation has begun working with publishers like eLife and Hindawi to develop open-source publishing tools, including the [PubSweet framework](#), an open-source platform for scholarly journals. According to [Hindawi’s Paul Peters](#), the involvement of commercial actors in such an open enterprise requires four basic principles of openness: Open Source, Open Data, Open Integrations, and Open Contracts.

We believe the way ahead here lies in linking up all such efforts in order to coordinate them into an interoperable public infrastructure, sustainably funded directly by public institutions like research libraries or funders, that is able to offer a researcher-centric, low-cost, innovative platform for the dissemination of research. A possible model for coordination of such activities is [SCOSS](#), the Global Sustainability Coalition for Open Science Services, a community-led effort to help maintain, and ultimately secure, vital infrastructure. David Lewis’ recent [proposal](#) that research libraries set aside 2.5% of their total budget to support the common infrastructure needed to create the open scholarly commons, if it were to be realised, would ensure money was in place on a sustainable basis to fund these activities.

A future in which coordinated public OA infrastructures play a much stronger role would bring the following advantages:

1. **First and foremost, investing in a public infrastructure for open access could mean overcoming the dependence on a few commercial publishers.** Instead of subsidising the big players in the business (e.g. Reed-Elsevier, Springer, Wiley-Blackwell, Taylor & Francis, and SAGE) with licensing deals – and thereby perpetuating the same, oligopolistic publishing system – a bold step towards public infrastructures could mean that new players and services emerge.
2. With overlay models built upon a network of public repositories, the classic publishing model with an editorial board and a peer-review system would remain intact. Though this model itself can be criticised – in light of the replication crisis, for example – it would not confront risk-averse authors with a completely new system. **It could be a starting point to push the necessary change required in academic publishing in small doses (e.g. with regards to a data and code policy).**
3. **A public infrastructure could widen the scope of activities of research libraries, redefining their role in an increasingly digital world.** Instead of managing subscriptions for journals, they could provide the technical infrastructure for publishing and offer related services.
4. **A truly public OA infrastructure would be open to researchers from everywhere.** Whereas big deals (as in scenario 1) mainly benefit researchers affiliated with (relatively well-resourced) institutions that are included in the negotiations, public infrastructures would be better able to offer services regardless of ability to pay, thus not excluding researchers from the Global South.

The disadvantages of such a system would likely include the difficulty in creating a broad, inclusive governance structure which ensures the system is responsive to user needs, that many public infrastructures are often accused of too heavily privileging functionality over usability, and that a centralised system could stifle innovation.

The right way forward?

These two scenarios, although we present them as a dichotomy, are not mutually exclusive. The OA future that we eventually inherit will probably include a mix of flipped journals and public infrastructures. But the decisions we make now will determine the degree to which either is favoured. We hope to have shown that the chance to create a coordinated public OA infrastructure is at hand. But above all, we'd like to know what you think!

This article gives the views of the authors, and not the position of the LSE Impact Blog, nor of the London School of Economics. Please review our [comments policy](#) if you have any concerns on posting a comment below.

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About the authors

Tony Ross-Hellauer is a senior postdoctoral researcher in open science at [Know-Center](#). His main research interests are open science models and infrastructures, science policy, alternative models for peer review, and philosophy of technology. Find him on Twitter at [@TonyR_H](#).

Benedikt Fecher is the programme coordinator for the “Knowledge Dimension” programme at the Alexander von Humboldt Institute for Internet and Society (HIIG Berlin) and leads the “Open Science” research project at the HIIG Berlin.