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Open Access – the better access? Academic publishing and its politics

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Abstract. Open Access to scholarly literature seems to dominate current discussions in the academic publishing, research funding and science policy arenas. Several international initiatives have been recently started calling for a large-scale transformation of the majority of scholarly journals from subscription model to Open Access. Such a massive transition would indeed affect not only business models and related cash flows but might be also expected to generate new inequalities in distributing resources among different regions or research fields. Thus, the paper at hand aims to serve as an input statement for the upcoming discussion and to provide some background information on Open Access debates.

Keywords. Open Access, academic publishing, science policy, science and technology studies (STS)

Introduction

At the beginning of this millennium, the Budapest Open Access Initiative (BOAI) proposed a novel vision for scholarly communication and coined the term "Open Access" (BOAI, 2002). At its heart was the idea "to make possible an unprecedented public good", where an old tradition, publishing the fruits of research for the sake of knowledge or inquiry, has converged with a new technology, the internet. Therefore, no barriers other than access to the internet itself should be imposed on any "curious mind" seeking to read or use peer-reviewed journal literature for any lawful purpose (ibid.).

Since then, the Open Access movement has been gaining traction at a rapid pace. The numbers of Open Access journals, articles and repositories were rising together with human and technical infrastructure that support it (Björk, 2013). Meanwhile, the debates on free access to scholarly literature have moved beyond the circles of librarians and its long-standing advocates, and became a dominant topic not only in the publishing industry (Ware & Mabe, 2015), but also in the science policy, thus making the matter increasingly "political". This can be exemplified by the tide of Open Access policies on the side of research funders, which encourage or require grant recipients to make their research publications resulting from funded projects to be publicly available.¹ Even more, several countries in Europe and beyond have adopted national strategies and set up target values for the share of Open Access publications in a given year, such as 60% in 2019 and 100% in 2024 in the Netherlands, 80% in 2020 and 100% in 2025 in Austria, 80% in 2018 and 100% in 2021 in Slovenia or 100% in 2025 in Sweden (cf. Bauer *et al.*, 2015). The discussion was further given a new swing as the Netherlands has set Open Access and Open Science among its priorities during the Presidency of the Council of the European Union in the first semester of 2016. Noteworthy, a new projection for the future of scholarly publishing has been recently drawn and stipulated as "a clear pan-European

¹ See for instance the European Commission's Framework Programme for Research and Innovation "Horizon 2020" (European Commission, 2016)

target": all new publications available through Open Access from 2020 (Amsterdam Call for Action on Open Science, 2016, p. 30).

Although many actors and involved parties agree on the basic principle of Open Access - namely, to make research results arising from publicly funded endeavours available to the public – there are many variations on how to translate this objective into practice. For the purpose of this paper and in order to facilitate further reading, three main models or "roads to" Open Access shall be explained in a nutshell. The first road was dubbed "Green" Open Access and refers to so-called self-archiving where authors of scholarly publications (mostly journal articles) deposit their manuscripts in electronic repositories run by their institutions or disciplinary communities. The best-known example is probably arXiv, an electronic archive started by Paul Ginsparg in the early 1990s to collect research articles from physics and neighbouring disciplines.² Second road, the "Gold" Open Access, stands for scholarly journals which publish all articles freely available to the readers without payment. The journals of the Public Library of Science (PLoS) can be named as an example.³ Finally and sometimes misleadingly used in parallel to the latter model, there are socalled "Hybrid" journals. These are actually traditional subscription-based journals requiring a payment to get access to the content (either by libraries or per each view) and offering to "ransom" individual articles to make them available for free. This model is highly controversial as the content is charged twice via subscription fees and publication fees (so-called "double dipping") (cf. Suber, 2012). Most of the journals published by large commercial publishing houses such as Elsevier or Springer offer this option and thus can be classified as Hybrid journals.

Given the variety of available options it is not surprising that the disputes surrounding Open Access often revolve around limitations of each of the models as well as associated costs. As a committee chaired by Dame Janet Finch recommended UK government to expand its support for the often more costly Gold Open Access and Hybrid journals to the detriment of self-archiving (Finch Group, 2012), it has sparked contentious debates and a critique calling it "a Trojan horse" serving interests of the publishing industry instead of the research (Harnad, 2012). However, the issues at stake go far beyond available funds or individual preferences. For instance, as science policy-makers show commitment to the Gold (or rather Hybrid) Open Access (e.g. Ministry of Education, Culture and Science, 2014), a shift from "pay-to-read" to "pay-to-say" principle might be expected as generating new forms of inequalities (Bonaccorso et al., 2014; Czerniewicz & Goodier, 2014) and making publishing options subject to available resources (Hofmann, 2014).

Thus, looking at the Open Access debates from the perspective of Science and Technology Studies (STS) gives rise to a number of questions. For instance, what particular understandings of science, (scientific) knowledge and society are built into the definitions of Open Access? What values, visions and ideals are promulgated in the name thereof? Who is given a voice and who is silenced? And what consequences such a massive transition towards an "Open Access world" would have for knowledge production in different locations, career stages and research fields?

Discussion and open questions

As the purpose of this paper is to serve as an input for the upcoming session, following questions are formulated deliberately to provoke the discussion and are to be read as partly speculative. However, I hope to draw the attention to several less-discussed aspects or "sites of discursive silence" (Clarke, 2005) in the Open Access debates and to play with an idea of alternative scenarios. Dealing with uncertainties is at the core of this learning exercise as well as it is at the present stage of developments in the proposed large-scale transformation of the academic publishing system.

²See <u>http://arxiv.org/help/general</u> [last checked on 26/04/16]

³See <u>https://www.plos.org/history</u> [last checked on 26/04/16]

The problem of problem definition

As the number of involved parties and the scope of issues related to Open Access have widened, it became increasingly difficult even to describe what Open Access is all about. This circumstance is succinctly summarized in the analysis of Bernstein Research:

"Stepping back to take in the big picture, we would be hard pressed, having spent six years networking extensively in the academic publishing and OA [Open Access] communities, even to articulate what problem is OA trying to accomplish. Ask a librarian, and you will be told that OA is meant to address the serial cost crisis (the rising cost of journal subscriptions and the impact this has on their capacity to fulfil the other missions of academic libraries). Ask a researcher, and you will be told that OA will allow more researchers to read their articles, leading to more citations and – ultimately – to better dissemination of knowledge. Ask an economist, and you will be told that OA will allow small and medium sized companies which do not have access to the latest research to do so, furthering the growth of the economy and job creation. Ask some activists, and you will be told that OA is meant to deflate the margins of capitalist exploitation of public spending. Ask an activist from emerging countries: you will be told that OA is meant to allow researchers and doctors in poor countries to have access to leading research. This lack of clarity on which problem OA is trying to solve, in turn, means that it is difficult to achieve any of these goals." (Aspesi & Luong, 2014, p. 10)

So far, there have been several attempts "to flip" academic subscription journals to Open Access either for one or a combination of abovementioned reasons. Just think of SCOAP³ project that aims at converting key journals in the field of High-Energy Physics to Gold Open Access⁴ or the arguments behind the invention of the Hybrid model itself (Björk, 2012). The "OA2020" initiative recently launched by the Max Planck Society⁵ seems to make another attempt.

Although the Green and Gold Open Access roads should be seen as complementary – at least according to the BOAI – current science-policy discussions with Open Access on the agenda often gravitate around an either-or strategy. In fact, to push the argument further, different goals can be pursued by giving preference to one or another model. For instance, if one would strive for the most cost-efficient option, the Green Open Access might be the most likely answer as author manuscripts can be deposited to (already existing) institutional or subject repositories at nearly zero cost. If one, in turn, wishes to foster alternative publishing venues in first place, Gold Open Access and novel cooperation models such as the Open Library of Humanities⁶ might help to level the playing field. However, massive investments in Hybrid model(s) rather seem to perpetuate the status quo in power relations and the price spiral in the academic publishing system. A casual observer might thus wonder, what goal should be achieved at the end of the day. Is Open Access an end in itself? And if so, does the end justify all means?

Big Deals 2.0?

According to some scholars and, indeed, investment analysts, Open Access policies adopted by governments and research funding organisations which require to provide unrestricted access to research publications from funded projects appear to be "publisher-friendly" (Hofmann, 2014, p. 14) or "deferential to the interests of subscription publishers" (Aspesi & Luong, 2014, p. 2). These statements are in line with the arguments of a long-standing Open Access advocate, Stevan Harnad, who calls for cost-efficient self-archiving in institutional repositories (Green Open Access) instead of sustaining bloated subscription revenues (Harnad,

⁴ SCOAP³, the Sponsoring Consortium for Open Access Publishing in Particle Physics, started its operation in January 2014 and is hosted at CERN. For more information please see <u>https://scoap3.org/faqs/</u> [last checked on 01/05/16]

⁵ For more information please see <u>http://oa2020.org/</u> [last checked on 01/05/16]

⁶ See <u>https://www.openlibhums.org/site/about/</u> [last checked on 01/05/16]

2015). However, novel types of "Big Deals"⁷ with large commercial publishers are gaining a foothold and, paradoxically, may even reinforce market concentration processes in the scientific publishing industry (cf. Larivière *et al.*, 2015).

- As country-wide agreements with publishers such as Springer and Elsevier are negotiated and get established in the Netherlands, United Kingdom or Austria⁸, funding is channelled to big players with a strong market position. How does it affect the framework conditions for small or grassroots publishing venues operated by research institutions or learned societies themselves? Will there be enough money for all? Who will pay for what?
- According to its latest report, the Austrian Science Fund (FWF) has spent 2.4 million EUR or approx. 77,4% of costs in the "Peer Reviewed Publications" programme in 2015 to fund Open Access articles in Hybrid journals (Rieck *et al*, 2016). At the same time, these publications could have been made available via institutional or subject repositories at nearly zero additional cost and fully compliant with the FWF's Open Access policy⁹. Indeed, some research funders do not reimburse so-called Article Processing Charges (APCs) for ransoming publications in Hybrid journals in principle (e.g. German Research Foundation; DFG, 2014, p. 3) or draw the attention of potential grant recipients to the problematic aspects of this model (WWTF, 2014). What drives research funders to pursue particular funding politics and to arrange their programmes in either or other way? Is there a silver bullet to balance public funding and public good?
- What drives academics despite the well-known problem of "double dipping" and in times of "academic precarity" in research organizations to spend an average monthly salary to "ransom" individual papers in subscription journals? What expectations are attached to it and what disadvantages are feared if choosing alternative options?

To sum up, it can be stated that different actors have been pursuing different strategies so far, and thus reinforcing particular versions of Open Access. The problem of access to scholarly publications might be not that complex as tackling the climate change, however, the attention currently given to this topic ("Our future depends on it", KNAW, 2016, p. 4) calls on making use of the momentum and carefully reconsidering the issues in the academic publishing system. This contribution is only a drop in the ocean and still I hope to trigger some thoughts and am looking forward to an interesting debate.

Disclaimer

Elena Šimukovič graduated from Berlin School of Library and Information Science at Humboldt-Universität zu Berlin and is currently enrolled as a doctoral student at the Department of Science and Technology Studies, University of Vienna. In her doctoral thesis titled "Of hopes, villains and Trojan horses – Open Access academic publishing and its battlefields" she aims at investigating the effects of the proposed transition from subscription model to full Open Access journals. Writing of this paper benefited from discussions with many people, with my special thanks to Andreas Ferus. No specific funding was received to carry out research or conflicts of interests are to be declared.



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⁷Big Deal refers to a practice of bundling access to individual journals into large collections. This makes an average price of each journal lower, however journals included in a bundle may differ substantially in their value for subscribing institutions.

⁸ See for instance "Open access agreement for Austrian authors" with Springer: <u>http://www.springer.com/gb/open-access/springer-open-choice/springer-compact/agreements-austrian-authors</u> [last checked on 26/04/16]

⁹ See <u>http://www.fwf.ac.at/en/research-funding/open-access-policy/</u> [last checked on 26/04/16]

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