



OPINION PIECE

Plan S, Open Access and the potential roles for STS research

By Elena Šimukovič

The year 2020 plays a highly symbolic role in the world of academic publishing. As the beginning of a new decade, it featured prominently in various research programmes such as “Horizon 2020”, the framework programme for research and innovation of the European Commission, as well as in numerous roadmaps and development goals in various institutions across the globe. Yet, in the recent past, it has also become a target year in many strategic plans for shifting the business of academic publishing from the prevailing journal subscription model towards full and immediate Open Access.

The most prominent among them has arguably been “Plan S”. It was launched in September 2018 by a group of national research funding organisations in Europe, including the Research Council of Norway (Forskningsrådet), the Dutch Research Council (NWO) and the Austrian Science Fund (FWF), among others. These funders collectively called themselves “cOAlition S” and announced an ambitious plan to require that scientific publications resulting from their grants be published only in compliant Open Access journals or on compliant Open Access platforms. The grantees of these funding agencies were said to face sanctions for non-compliance through enforcing contractual requirements of grant agreements as of 1st of January 2020 (cOAlition S, 2018).

Much of the controversy about Plan S that followed revolved around one particular issue: the decision to not support the “hybrid” model of publishing in which conventional subscription journals offer an option to ransom individual articles in Open Access for an additional fee (cOAlition S, 2018). This, in its turn, has caused a shockwave among the (potential) grantees. For instance, in an open letter authored mostly by scholars in chemistry and related fields, Plan S was seen as “a serious violation of academic freedom” that would rule out most esteemed academic journals and lead to “a surplus of papers of low quality/originality/newsworthiness” (Kamerlin et al., 2018, p. 2; see also Schneider, 2018). At the same time, other academics engaging in Open Access publishing have responded in support of the Plan S and attempted a rebuttal of “a number of highly problematic and logically fallacious statements” by their fellow researchers, in order “to address the problematic situation academia has maneuvered itself into with regards to scholarly publishing” (FOAA, 2018, p.1). After a public consultation process that lasted from November 2018 to February 2019 and collected more than 600 feedback statements, the timeline of the Plan S has been postponed by one year to 1st of January 2021 (cOAlition S, 2019).

While Plan S might sound as a “radical” plan (Else, 2018) to overhaul an outdated journal subscriptions system that stems from a print-based age, the idea of removing barriers to scholarly publications and transitioning to a new Open Access publishing era has been around for almost twenty years. At the turn of this millennium, the Budapest Open Access Initiative (BOAI)—which coined the term “Open Access” and laid the foundation for Open Access movement—declared as its goal “to make the transition from the present methods of dissemination [of scholarly literature] to open access” attainable (BOAI, 2002). The two implementation strategies that were proposed therein—the self-archiving of article manuscripts in electronic repositories, and a new generation of toll-free online journals—have later become known as the “Green” and “Gold” roads to Open Access. Along with the so-called “serial pricing crisis” in which academic libraries became unable to keep up their acquisition budgets with the rising journal subscription costs, these two models were put forward as complementary strategies to relieve them from financial constraints. Should the Green and Gold roads to Open Access gradually coalesce, as expected by the BOAI, journal subscriptions would ultimately become obsolete in the new academic publishing world (Guédon, 2001 and 2008).

During the early days of Open Access, there were clearly high expectations on increasingly widespread use of the Internet and Web technologies and their potential for building a digital “knowledge commons” (Guédon, 2001). This was coupled with a strong emphasis on the value of scientific knowledge as a global public good and the old tradition of scientists and scholars “to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge” (BOAI, 2002). Therefore, an alternative vision for the worldwide online availability of scientific literature was an intuitive response in light of the challenges and opportunities of the time. Restricting access to academic journals for the benefit of commercial publishing companies—even if most scientific publications resulted from publicly-funded research—was seen as at odds with the principles and opportunities for modern scholarship.

In 2012, to mark the tenth anniversary of the initial declaration, the BOAI reaffirmed its aspiration to remove access barriers to scholarly literature, but felt the need to add a spatial and temporal dimension to its goals: Open Access shall “become the default method for distributing new peer-reviewed research in every field and country” within the next ten years (BOAI, 2012). Motivated



largely by the public funding argument, this idea was taken up in a series of roadmaps and action plans by several major research organisations and their umbrella associations, such as Science Europe (2013), the Global Research Council (2013) and the European University Association (2016), to name just a few. Such efforts were further fuelled by an influential white paper published by the Max Planck Digital Library, claiming that “[t]here is currently already enough money in the system”, thus, “[a] large-scale transformation from subscription to open access publishing is possible without added expense” (Schimmer et al., 2015, p. 7).

At the same time, numerous national transition plans were announced setting the pace and the target years by which a given country was supposed to reach “100% Open Access” of their share of scientific publications. This includes, for example, 80% by 2020 and 100% by 2025 for Austria, 80% by 2017 and 100% by 2022 for Denmark, or 60% in 2019 and 100% in 2024 for the Netherlands (see Bauer et al., 2015). The political momentum for Open Access in Europe loomed up at the latest in spring 2016. Along with the publication of the “Three Os”—“Open Innovation, Open Science, Open to the World”—by the then-Commissioner Moedas (European Commission, 2016), the Council of the European Union put “Open Access” and “Open Science” among its priorities under the Dutch Presidency in the first half-year of 2016. In its conclusions in May 2016, the Council agreed “to further promote the mainstreaming of open access to scientific publications by continuing to support a transition to immediate open access as the default by 2020” (Council of the European Union, 2016, p. 8). From now on, the colourful potpourri of national strategies and transition plans was supposed to be aligned with “a clear pan-European target” and to settle down at 100% in 2020 (The Netherlands EU Presidency, p. 30).

In summary, it can be said that Open Access initiatives have attracted increasing attention from academic communities and policymakers, while moving from the grassroots level to a mainstream topic on the science policy agenda. But the launch of the Plan S in September 2018 arguably mobilised the strongest responses both in favour and against it. Plan S was able to catapult Open Access into the centre of numerous debates over recent months and to lay bare the many issues in the current state of academic publishing. Most importantly, as the illustrative example of researchers resisting to publish their work in Open Access journals has shown, the publishing activity serves as a strong ordering force in academic life-worlds that goes beyond merely communicating research results from their work. It is intimately related not only with knowledge sharing among peer groups, but also with researchers’ identity as members of scientific communities and the role that publication records play in research assessment rituals used for academic career progression.

In the long chain of events, however, Plan S can be contextualised as yet another iteration of the many attempts to bring about a revolution in the ways how scholarly work is communicated and evaluated. Moreover, as the early examples of Open Access advocacy show, the idea of a transition from the conventional “paywalled” subscription system towards a comprehensive toll-free availability of scholarly literature is not a novelty in itself. But the rapid accumulation of large-scale international and political initiatives in recent years calls for a careful examination of and attention to the underlying assumptions and repertoires of justification employed therein.

At this point, I would like to turn to the potential roles yet to be played by scholars and practitioners in Science and Technology Studies (STS) and related fields, for at least two reasons. Firstly, the battles in and about Open Access give rise to a number of new research questions about the current practices in and desired qualities for the future of scholarly communication and evaluation. For example, how is Open Access imagined, justified or contested by different actors and in which terms? What assumptions are built into the idea of “high quality” academic publishing that grant commercial entities an exclusive gatekeeping role as opposed to journals that are run voluntarily by academics themselves? While Plan S can be seen as primarily targeting big commercial publishers to change their business models, what implications may such initiatives have to other actors in the ecosystem of scholarly communication? Who is given voice, silenced or remains agnostic and under which circumstances? Why, if Open Access mandates were included in funding policies for a number of years already (cf. Kita et al., 2016), has the announcement of Plan S only now sparked such an emotional response? What particular problem-solution definitions and master narratives are mobilised and by whom? And, conversely, what is not being problematised? As a research community with a long tradition of studying the politics of knowledge production and dissemination, STS seems to be well-suited to tackle exactly such issues. At the same time, STS scholars have showed only limited interest in the study of Open Access controversies as a research topic in its own right. Some notable exceptions include examination of the origins of Open Access in relation to scientific ethos (Strasser & Edwards, 2015), the problems associated with the transition to electronic publishing (Elvebakk, 2010), commodification in academic knowledge distribution (Nentwich, 2001) or particular issues related to the future of the academic book (Hagner, 2015). Lately, aspects of “openness” in scholarly communication and science policymaking have gained more prominence and were at the centre of several ongoing or recently completed doctoral dissertations (see e.g. Lawson, 2018; Moore, 2019; Knöchelmann, 2020) as well as special journal issues (O’Neil & Collins, 2018).¹

¹ Questions on transformations and tensions in academic publishing and Open Science will also be discussed in several accepted panels at the upcoming conference of EASST+4S in Prague in August 2020.



Secondly, as a community of scholars that has established several well-known academic journals to communicate its own research results, STS researchers might also face tough questions on how to position themselves and own publishing choices vis-à-vis Open Access. The not too distant field of scientometrics has already witnessed a high-profile case with the collective resignation of the editorial board of the *Journal of Informetrics* (JOI) and the launch of the *Quantitative Science Studies* (QSS) in early 2019. As the editors of this newly “flipped” journal write in its first issue:

The flip from JOI to QSS is neither the first nor the last of its kind. There is a tremendous Zeitgeist towards openness as the scientific community reasserts its role in the responsible governance of the scientific record. We welcome discussion with other editorial boards and professional societies as they grapple with these transformations. (Waltman et al. 2020:3)

Whether choosing to rearrange the relationship with their (former) publishers or not, those with the “skin in the game” themselves—i.e. the readers, authors, peer reviewers and particularly the editors of STS journals—might have to confront similar issues and (self-)critical inquiries at some future point in time. As a researcher-practitioner myself, I believe that these questions will require both, a thorough understanding of the complexities and intricacies of various (Open Access) publishing models as well as a broader discussion on (self-)governance in science and lessons learned from earlier science-society debates. Combining knowledges and experiences from these realms, thus, presents a strong case for interdisciplinarity.² Finally, making use of STS’ own toolbox and asking “How could it be otherwise?” also in regards to academic publishing might bring forward a plethora of choices and possible alternatives, as the example of the open-access *Nordic Journal of Science and Technology Studies* (NJSTS) can show.

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2 I would like to thank Antti Silvast for making this point, as well as for further helpful comments and discussions.



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