Open Access, a New Kind of Emerging Knowledge Regime?

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Abstract

Open Access as a programmatic name for a new mode of dissemination of scholarly publications has been around since the turn of this millennium. However, a considerable accumulation of calls for a more rapid transition from journal subscription towards "full" Open Access system can be observed in the recent years. By looking at some of the beginning aspirations of the Open Access movement as well as proposed disruption scenarios this contribution aims at discussing some of less visible aspects in current debates and to give a glimpse at embedding this sort of initiatives in a conceptual framework by making use of the notion of an emerging "knowledge regime".

Biographical note

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Introduction

For quite some time now, academic libraries, research and funding organisations and individual actors behind them are noticeably concerned with one topic. The long-cherished quest for a universal accessibility of humanity's (scientific) knowledge seem to have come within reach. The conventional subscription model for publishing scholarly journals is supposed to make a radical shift and to transition into full Open Access system in which everyone is able to read about research results without having to overcome the "pay wall". As most research takes place in higher education and other research institutions that are supported with public funds, it is hard to disagree with an argument of making fruits of this research available to the public as well.

However, the concept and practice of Open Access has a long history of developing various technical, legal and financial implementation models which make speaking of one homogeneous "Open Access movement" rather a matter of a symbolic unity. Neither is the whirl of excitement at the dawn of the expected new Open Access world, as accumulated in many recent initiatives, a novel property in the career of Open Access. Yet the considerable amount of attention to this topic in the science policy arena indicates a new stage in its evolution. Looking back and forth at this rich area of debates thus offers a glimpse at the imaginaries of the future of academic publishing and scholarly communication.

Full Open Access as a long-cherished wish

The transition to full Open Access system, one in which scholarly publications are generally accessible on the internet and not only to institutional subscribers or individual members, seems to be an intrinsic desire in the history of Open Access. From its inception at the turn of this millennium it was a central idea that Open Access would replace other modes of granting access to scholarly literature at some future time. One of the illustrative examples can be found in the Budapest Open Access Initiative (BOAI), which was published in February 2002 and is widely regarded to be the first venue that used the term "Open Access" and articulated a corresponding definition. BOAI proposed not only a vision of an "unprecedented public good" – one to which a new internet technology and an old tradition of sharing fruits of research will converge – but also encouraged experimentation with different implementation strategies "to make the transition from the present methods of dissemination to open access". To mark the tenth anniversary of the original declaration, BOAI reaffirmed its aspiration for a widespread adoption of Open Access and added a spatio-temporal dimension for it to "become the default method for distributing new peer-reviewed research in every field and country" within the next ten years.

Various research and funding organisations have been supporting the idea of full Open Access in the universe of scholarly communication, too. Major associations such as Science Europe, the European University Association (EUA) and the Global Research Council (GRC) have endorsed action plans and issued their own transition principles, urging to replace "the present subscription system with other publication

¹ Budapest Open Access Initiative (BOAI), "Ten years on from the Budapest Open Access Initiative: setting the default to open," September 12, 2012, http://www.budapestopenaccessinitiative.org/boai-10-recommendations/.

² Budapest Open Access Initiative (BOAI), "Read the Budapest Open Access Initiative," February 14, 2002, http://www.budapestopenaccessinitiative.org/read/.

³ BOAI, "Ten years on from the Budapest Open Access Initiative".

models whilst redirecting and reorganising the current resources accordingly".⁴ Along with numerous institutional Open Access policies such demands mainly tackled research publications that result from endeavours supported by public funds. Somewhat unsurprisingly, the parties involved mostly agree on the basic principle behind this rationale – to make publicly funded research results freely accessible to the public. Points of contention rather show up when it comes to the ways to translate this at first appearance simple principle into practice. This includes the full "colour spectrum" of so-called Green, Gold, Diamond, Platinum and other species of Open Access models as well as pilot agreements with academic publishers at an institutional or a national level.⁵

However defined in its practical terms, "Open Access" embodied a pivotal element in many science policy related debates in the past few years and served as a powerful heading to bring different actors together and to mobilise resources. Open Access has been declared a strategic goal in several, mostly European countries such as Austria, the Netherlands or Sweden that now aim at 100% of unrestricted access to their research results by specified date. Moreover, the issues of "openness" in scholarly communication have received amplified attention since Open Access together with "Open Science", a fellow concept that incorporates not only free access to the final publications, but also to underlying data or methods used, were put on the official agenda of the Dutch Presidency of the Council of the European Union in the first half-year of 2016. In this context, "Amsterdam Call for Action on Open Science" was released in April 2016, following the launch of "OA2020" campaign "for the large-scale transition to open access" by the Max Planck Society in March 2016. Both initiatives joined together in formulating "a clear pan-European target: from 2020 all new publications are available through open access from the date of publication". The following section will thus take a closer look at proposed transition paths to full Open Access and possible implications thereof.

Time for disruption? Designing an Open Access transition

The foundation for the launch of the OA2020 campaign was laid in a "white paper" by the Max Planck Digital Library (MPDL) in April 2015. Its core message, namely that there is "already enough money in the system" and a large-scale transformation from subscription to Open Access publishing would be "possible without added expense" ¹⁰, was at the heart of many subsequent debates. For instance, in a joint statement in October 2015 EU Commissioner Moedas and Dutch Secretary of State Dekker called upon academic publishers "to adapt their business models to new realities". ¹¹ In the 21st century, they

⁴ Science Europe. "Principles for the Transition to Open Access to Research Publications," April 2013, 3.

⁵ See for instance the efforts made in the Netherlands since 2014, in: VSNU. "Greater impact with open access!" January 2017, http://vsnu.nl/more-impact-with-open-access/index.html.

⁶ See for instance Bruno Bauer, Guido Blechl, Christoph Bock, Patrick Danowski, Andreas Ferus, Anton Graschopf, Thomas König et al. "Recommendations for the Transition to Open Access in Austria," November 30, 2015.

⁷ "News," *OA2020*, accessed February 7, 2017. https://oa2020.org/news/.

⁸ "Amsterdam Call for Action on Open Science," The Netherlands EU Presidency 2016, April 7, 2016, 30.

⁹ "About," OA2020, accessed February 7, 2017. https://oa2020.org/about/.

¹⁰ Ralf Schimmer, Kai K. Geschuhn, and Andreas Vogler. "Disrupting the subscription journals' business model for the necessary large-scale transformation to open access," April 28, 2015, 7.

¹¹ European Commission. "Commissioner Moedas and Secretary of State Dekker call on scientific publishers to adapt their business models to new realities." News release. October 12, 2015.

continue, academic publishing has to move to Open Access and only fair and fully transparent business models will be accepted.¹² In a very similar vein, the League of European Research Universities (LERU) urged publishers "to enter a brave new [Open Access] world".¹³

Interestingly enough, the line of reasoning in the OA2020 initiative repeatedly reads as facing an inevitable development: "One doesn't need a crystal ball to predict that the subscription system will come to a natural end, sooner or later. An unmanaged end would probably be more unpredictably disruptive, and could create damage to the meaningful core activities of the current publishing infrastructure." Hest parts of the new and the old worlds are thus supposed to be combined, with the "disruptive element" for an orderly transformation "directed at the financial streams and the business models only". For this to be accomplished in practice, the authors of the paper promote a strategy of shifting the payment streams from subscribing to academic journals (as it has been the case so far) towards publishing all scientific articles in fee-based Open Access journals, whereas conventional subscription journals are expected to eventually "flip" to full Open Access. This scenario means that academic libraries across the globe are requested to repurpose their acquisition budgets and to cover author-side publishing fees (Article Processing Charges, APCs) for members of their research institutions instead. 16

Despite the wide uptake of the initiative 17, there have been less enthusiastic reactions to the proposed transition path that have stressed the drawbacks of an exclusive APC-focused Open Access model and unintended consequences that such a move could have. One of the notable examples includes a joint statement by the Confederation of Open Access Repositories (COAR) and United Nations Educational, Scientific and Cultural Organization (UNESCO). 18 With their main concern being the particular kind of Open Access that is promoted in this campaign they voice misgivings with respect to researchers located at institutions with tight budgets or in less affluent countries: "Authors will be unable to publish once limited funds have been exhausted. Such a system will need to support researchers who cannot pay APCs - to avoid further skewing a scholarly publishing system that is already biased against the research undertaken in certain disciplines and countries". 19 Secondly, they assume that a flip to an APC system would lead to further concentration in the international publishing industry that is already dominated by the biggest publishers: "A mere shift towards the pay-to-publish model will institutionalize the influence of these companies, and discourage new entrants and models other than APC models". Thirdly, new Open Access models are required to build in mechanisms that ensure cost reductions: "Simply shifting payments to support APCs may lead to higher systemic costs, curb innovation, and inhibit the scholarly community's ability to take advantage of new models and tools". 20

¹² Ibid.

¹³ Cf. League of European Research Universities. "The academic world urges publishers to enter a brave new world." News release. January 27, 2016.

¹⁴ "FAQ," *OA2020*, accessed February 7, 2017. https://oa2020.org/faq/.

¹⁵ Ibid.

¹⁶ Schimmer, Geschuhn, and Vogler, "Disrupting the subscription journals' business model".

¹⁷ As of February 7, 2017, 73 scholarly organisations have officially signed the Expression of Interest.

¹⁸ COAR, and UNESCO. "Joint COAR-UNESCO Statement on Open Access," May 2016.

¹⁹ Ibid, 1.

²⁰ Ibid.

Following UNESCO's World Science Report, both organisations further emphasize the critical role that scientific knowledge plays in socio-economic welfare and the global economy. No region or nation can remain simple "user" of knowledge but also must become a "creator" of new knowledge. ²¹ Thus, they warn that a "large-scale continental shift towards a pay to publish model in Europe may have significant unintended consequences for both Europe and elsewhere by impeding global participation in the system" and ask governments and the research community to look for a variety of approaches for a healthier and more innovative ecosystem. ²²

Thinking in terms of emerging knowledge regimes

Since multiple efforts to accelerate progress towards Open Access as a default mode of academic publishing have built up momentum and even manifested themselves in (inter-)national policy goals, it might be helpful to consider recent initiatives from a broader conceptual perspective. Particularly, looking through the lens of Science and Technology Studies (STS) and related research domains can offer a hint at potentially neglected or otherwise invisible aspects in current debates. The notion of emerging knowledge regimes will thus serve as an illustrative example.²³

Building on "technopolitical regimes" developed by Gabrielle Hecht in her work on the role of nuclear technologies in shaping the national identity in France, the "regime" metaphor offers three basic ideas to be considered. First, its political parlance and the capacity "to refer at once to the people who govern, to their ideologies, and to the various means through which they exert power", including "their guiding myths and ideologies, the artifacts they produce, and the technopolitics they pursue". ²⁴ Second, to point at prescription of certain policies and practices as well as broader visions of sociopolitical order. And finally, to emphasize the contested nature of power in which different regimes always have "to contend with varying forms of dissent or resistance, both from outside and from within the institutions they governed". ²⁵

In the context of large-scale Open Access transition initiatives as described in the previous section, the concept of "knowledge regime" then aims both to evoke similarity with political regimes and to convey the difference that knowledge makes. It is important to bring to the fore at this point again, that various models to "opening" access to this knowledge are available, while so-called Green and Gold Open Access can be regarded to form a basis. Although both models were proposed initially as complementary strategies, ²⁶ current Open Access discussions often gravitate around an either-or dichotomy or even put the two in opposition. For instance, the OA2020 initiative committed itself from the onset to reject the

²¹ Ibid.

²² Ibid, 2.

²³ For bringing other theoretical concepts into play see also Elena Šimukovič, "Of hopes, villains and Trojan horses – Open Access academic publishing and its battlefields." Doctoral research proposal, April 30, 2016.

²⁴ Gabrielle Hecht, "Technology, Politics, and National Identity in France," in *Technologies of power: Essays in honor of Thomas Parke Hughes and Agatha Chipley Hughes,* ed. Michael T. Allen and Gabrielle Hecht, (Cambridge, Mass.: MIT Press, 2001), 258.

²⁵ Ihid

²⁶ BOAI, "Read the Budapest Open Access Initiative," 2002; the labels "Green" and "Gold" were proposed for somewhat later, though.

Green model, which is delivering access to scholarly publications by means of depositing author manuscripts in online repositories. The authors give following reasons for this standpoint: "Although green approaches have been around for the past 20 years, they have not led to any progress regarding the subscription system. On the contrary, subscription spending has steadily increased during this period. There is no indication of any delegitimization of the prevailing distribution- and financing conditions by means of the green route to open access. The green approach has not proven to be an effective tool to overcome the publishers' market power, to bring down prices and to establish open access on the grand scale". ²⁷ Thus, the career of and the relation between the Green and Gold siblings seems to have experienced its own evolution in terms of number of respective supporters and expectations on their potential impacts.

To push the argument even further, it can be said that different targets may 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 likely answer as publication manuscripts can be deposited to (often already existing) institutional or subject repositories at nearly zero cost. If one, in turn, wishes to foster alternative publishing venues in first place, community-driven Gold Open Access and novel funding models such as the Open Library of Humanities²⁸ might help to level the playing field. However, massive investments in bulk prepayments to ransom individual articles in so-called "hybrid" subscription journals might risk to perpetuate the status quo in power relations and the price spiral in the academic publishing system. Furthermore, should the argument taken seriously to make publicly funded research available to the public – would the regular citizens pay as much attention as their fellows scientists to the title of the journal in which an article appeared? Or would they, for instance, rather make use of local newspapers that discuss the relevance of specific results and link to respective repositories from which a full-text copy can be downloaded?

Although it is a highly speculative undertaking with no definitive answers – given the evolving state of affairs as well as complexity of the issues at stake – engaging with underlying assumptions in such transition scenarios might shed light on some of potential drawbacks in this new kind of knowledge regime. Moreover, to regard certain phenomena as "emergent", that is to put emphasis "not on the unfolding of something already in being but on the outspringing of something that has hitherto not been in being" ²⁹ suggests that emergencies can be also perceived as threatening because they come along with an inherent portion of uncertainties and insecurities. Thus, a disruption of scholarly publishing towards full Open Access will inevitably cause a pinch of discomfort as it entails a "side effect" to destabilize current workings of the science system and to redraw at least some boundaries.

Concluding remarks

It becomes visible from many initiatives and related debates that Open Access is "here to stay". Whilst taking into account the pros and cons of different roads towards desirable future, different actors might

²⁷ "FAQ," *OA2020*, accessed February 7, 2017. https://oa2020.org/faq/.

²⁸ "About," Open Library of Humanities, accessed February 7, 2017. https://www.openlibhums.org/site/about/.

²⁹ Morgan, 1927: 112, cited in Geoffrey M. Hodgson, "The Concept of Emergence in Social Sciences: Its History and Importance." *Emergence* 2, no. 4 (2000): 66.

go in different directions according to their preferences or available resources. Bearing this kind of multiplicity in mind, or in some cases even diverging developments, it seems to be more appropriate to speak of different branches of rather than *the* Open Access movement.

As several parties noted in their comments and position statements, relying on one particular academic publishing model – whatever it would be – can't be expected to suit researchers in all fields and life course situations as a one-size-fits-all approach. Mainstreaming advocacy campaigns would thus need to acknowledge plurality of options and allow for "deviant" directions departing from one-way roadmaps. Questioning the dominance of Gold (or rather hybrid) Open Access models and heavy focus on scientific journals published by major commercial publishers should be open to scrutiny as much as other alternatives allowing for variety of "legitimate" research profiles and publishing practices. Although current large-scale initiatives are surrounded by a considerable amount of noise and hype, their present orientation might lead to a fundamental fallacy of pushing for an immediate yet pricey "accessibility" of scientific articles but do little to alter established copyright transfer practices or issues in re-usability of research results.³⁰

Instead, the proposed (r)evolution in scholarly publishing could benefit from an effort to avoid merely relocating the "entrance fee" to the scholarly publishing world from a "pay-to-read" towards "pay-to-say" threshold. Being responsive to the intricate relationships and difficult entanglements between science, technology, society and policy realms might be not a straightforward task but seems to be all the more promising approach to foster the long-cherished quest not only for a universal access to but also to participation in producing and sharing knowledge across the globe.

³⁰ Some readers might recall discussions on "gratis" versus "libre" Open Access at this point. See for instance Stevan Harnad, "Gratis Open Access Vs. Libre Open Access," December 19, 2011.

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