The deal with DEAL for open access

The recent publish-and-read deals have increased momentum for open-access publishing but may not solve the challenge of open science

Philip Hunter

The move towards open-access publishing in the life sciences has gained momentum after several major deals between publishers and institutions around the world, but it has also raised as many questions over the future of communication in research. Beyond the individual agreements, scientific publishing generally is undergoing a fundamental change under the headline of Open Access (OA) that has major implications for all parties concerned, that is, institutions, libraries, funding bodies and of course researchers. The devil of scientific publishing lies in the details of how funding for publishing is channelled and in particular the precise payment models for articles. After all, costs of the editorial and peer review along with typesetting and distribution still have to be covered, and if they are not paid by readers, then they will fall on the authors, their institutions or the funders of research.

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The debate has been brought to the boil by two seminal agreements between the German DEAL consortium and two of the three largest publishers, Wiley and Springer Nature in 2019, which have been hailed as bellwethers for OA publishing. DEAL was established in 2014 by the Alliance of Science Organisations in Germany led by the country’s Rectors’ Conference (HRK) with the initial goal of introducing national licensing agreements for the entire portfolio of electronic journals from the large academic publishers by 2017. In the event, it took 5 years to reach agreement first with Wiley in March and then Springer Nature in August 2019. Even then, negotiations between DEAL and Elsevier stalled, although contact has been retained. Before the German DEAL, Wiley had already made similar agreements with Austria, Hungary, Dutch universities and Norway.

OA deals and mandates

More widely, the OA publishing and open science movement are being driven by Plan S, an Open Access publishing initiative supported by cOAlition S, an international consortium of research funders. It requires that all scientific publications resulting from research funded by cOAlition S signatory funders be published in compliant Open Access journals or platforms by 2021 (https://www.coalition-s.org/about/). However, the term OA is used quite freely and clarification is needed over what it means both in the context of the DEAL agreements and more generally. Definitions vary but all agree that OA means making all research articles, especially those which were publicly funded, publicly available without access barriers including subscriptions or pay per view.

A point to note is that Wiley and Springer Nature, as well as the other “big three” publisher Elsevier, have for some time had journals that are either full OA or hybrid in that they give authors the choice of publishing OA for payment of an APC (Article Publishing Charge), which ranges from US$1,300 to US$5,200 depending on the journal. The DEAL agreements extend this model to all Wiley and Springer Nature journals, including those that were previously subscription only. Authors pay a fixed fee of €2,750 per article under both those agreements, calculated on the basis that the publisher should earn the same revenue as before during a transitional phase, after which market forces would be allowed to prevail. These fees replacing subscription charges on an equal revenue basis are described as PAR (Publish and Read) agreements. It also embraces the so-called Gold OA model whereby authors pay to have their articles available immediately in OA or hybrid journals and retain copyright under a Creative Commons CC-BY licence.

Amid all the debate that has been provoked by those two DEAL agreements and also others, two points at least have become clear. The first is that OA is here to stay, even if there is some reaction and kick-back against some of the deals. Second, there is reasonable consensus that there cannot be a “one size fits all” model of OA and that the differing needs of many countries, sectors and communities must be accounted for in flexible agreements between institutions, publications and publishers.

Growing momentum

“I believe open access publishing will become the standard, but with several different business models”, commented Nina Karlström, Team Leader for Licensing and OA at UNIT, which manages 39 licence agreements on behalf of Norwegian research libraries. Similarly, Colleen Campbell, head of outreach and engagement in the Open Access 2020 Initiative coordinated by the Max Planck Digital Library on behalf of the global research community, argues that the need for alignment between research funding and research organizations around the
common goal of open access is now widely agreed in principle. “Rather than limiting our success in achieving this goal by narrowly taking only one or the other pathway, such as gold, green and diamond, there is now the recognition that multiple approaches must be embraced”, he said. Under Green OA, authors can choose where to publish their article but ensure a pre-publication version is universally accessible in a freely available institutional or specialist online archive. Under Diamond OA, which is rarer at present, the article is immediately available open access, but the difference is that nobody pays for its publication, so that the process is free to both authors and readers.

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Campbell, who is also part of LIBER’s (European Association of Research Libraries) Open Access Working Group, cited the São Paulo Statement on Open Access (https://www.coalition-s.org/sao-pa ulo-statement-on-open-access/) and the Joint Statement of the French Open Science Committee and OA2020 as evidence of consensus for a diverse OA approach. The former emerged in May 2019 from five major worldwide Open Access initiatives, the African Open Science Platform, AmeLICA, cOAilition S, OA2020 and SciELO, which underlines their common mission of making knowledge universally available and accessible, but through a variety of different approaches.

Similar arguments have been made by publishers; for example, Cambridge University Press (CUP), whose Director of Scholarly Communications, Research and Development, Brigitte Shull, believes that broad adoption of OA is inevitable. “It is critical that any transition takes into account the needs of different communities and subjects”, she said.

A disruptive transition

The transition to OA is disruptive whatever model is adopted, because it involves a major change in the flow of money through the system. The two DEAL deals in fact convert the subscription-based model into one where institutions pay for publication with the objective of ensuring that the total amount of money stays the same over the year of transition. They conform with DEAL’s two-part PAR model where all publications by corresponding authors from eligible institutions in Germany become OA by default, although it still gives authors the choice of taking the subscription route in hybrid journals. The Read part means that DEAL-affiliated institutions themselves have perpetual access to the complete e-journal portfolio of the publisher. In the case of Wiley and Springer Nature, there was broad agreement over these principles early on in negotiations with DEAL. But, as so often, the devil was in the detail of the finances to establish fair APCs to cover publication costs. Daniel Ropers, CEO of Springer Nature, commented that negotiations had been challenging and therefore took longer than originally hoped. “This arrangement has taken 3 years to finalise which reflects its scale and complexity, but we highly appreciate the leadership the German research institutions have shown”, he said.

This led to the so-called “cost-neutral” transformative agreement intended to be fair on both institutions and publishers. But it has been criticized by various parties for not catering to the varying needs of different journals, especially the more selective ones. EMBO Press, whose titles are published by Wiley, is ambivalent over the impact of DEAL, according to Bernd Pulverer, Head of Scientific Publications at EMBO (European Molecular Biology Organization), an editorially independent platform for the EMBO scientific publications. “EMBO Press is part of the Wiley agreement and we therefore directly benefit from this arrangement”, he said. “However, there are some caveats to consider: the €2,750 fee per article is well below the actual costs some of the more selective bioscience publishing (https://www.embo.org/news/articles/2019/the-pub lishing-costs-at-embo)”. Pulverer continued, “Also, the devil is in the detail. For example, the agreement between DEAL and Wiley only covers research papers and full reviews, not other article types such as shorter reviews and commentaries”. Moreover, DEAL had initially only been seeking agreements with the big three publishers, Wiley, Springer Nature and Elsevier, which may put smaller independent publishers such as scientific societies at a relative disadvantage.

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However, Horst Hippler, physical chemist and spokesman for the DEAL project, formerly HRK President, was optimistic that the arrangements reflected a fair compromise and would serve as a blueprint for similar contracts with other publishers, including smaller ones. “The agreements will likely contribute to such open-access deals becoming the norm”, he said. “The Wiley contract especially has set a benchmark, more or less defining the price per publish and read article during the transformation process”. The importance of the Wiley agreement was also emphasized by Gerard Meijer from the Department of Molecular Physics at the Fritz Haber Institute of the Max Planck Society and member of the DEAL negotiations team. “The agreement between DEAL and Wiley made it clear that our demands to the publishers were not unrealistic and that at least one of them also understands that in a full OA world there will be a viable business model”, he commented. “And yes, the contract with Wiley is — as far as we are concerned — a blueprint for all the transformative agreements that we would like to conclude with the publishers at this moment”.

Concerns about PAR deals

This sanguine view of the DEAL contracts is not universally shared across the scientific publishing community though, with Curtis Brundy, Associate University Librarian for Scholarly Communications and Collections at Iowa State University in the USA, adopting a more nuanced line. “My main concern, rather than quality, is the incentive to increase quantity”, said Brundy. “With the Wiley agreement, which I am more familiar with, more published articles will equal more revenue. This will lead to more articles coming out of Germany and more money for Wiley”.

More generally, Brundy highlighted lingering scepticism and concern in the USA over APC-based models, but he also pointed to growing traction among libraries for the
Green OA approach being promoted for example by the MIT framework. This was introduced in October 2019 to help guide libraries in their negotiations with publishers based on core principles around open access articulated in recommendations from the Task Force on Open Access to MIT’s Research (http://news.mit.edu/2019/mit-announces-framework-guide-negotiations-publishers-1023). “We are seeing growing library interest in article-level OA agreements, such as read and publish or publish and read”, Brundy observed. He cited the agreement between Sage Publishing and the University of North Carolina at Chapel Hill (UNC) struck in October 2019 as a significant step in this direction. This is an OA pilot program granting UNC-Chapel Hill access to SAGE Journals with funding to cover APCs for university researchers to make their SAGE articles fully open access.

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Brundy does have one personal concern that is shared by many others, which is the ability to preserve a diversity of publishers when the article becomes the focus of fees paid. This leads to a wider concern that dismantling the subscription model will bring new problems, notably predatory publishing and replacement of a paywall with a publication wall. In fact, predatory publishing has already been stimulated by Gold OA, according to Richard Poynder, who has been observing and reporting on the evolution of OA for 15 years. He also highlighted the concern over erecting publication walls that has not been widely appreciated until now. “Since pay-to-publish replaces paywalls with publication walls it is highly discriminatory for those who do not have access to the necessary funds to pay an APC, notably, but by no means exclusively, researchers based in the Global South”, Poynder explained.

Implications on the global scale

On a global scale, this is a major reason why the OA transition has so far struggled to extend beyond the USA and European countries. The overall publishing funds exist, but they would have to be distributed not only from libraries to authors as addressed by PAR deals, but also from read-focussed institutions to research-intensive institutions. This key problem actually extends even within countries where the top research institutions suddenly find themselves saddled with the majority of the overall publishing costs, which were previously distributed more evenly across all academic institutions. The implication is that a publication wall could in fact be worse than a paywall, which can be more readily surmounted with the help of appropriate subsidies, or concessions from publishers.

This does not mean the clock should be turned back towards paywalls but that these concerns must be addressed. To some extent this is the goal of Plan S, which is currently being represented by Johan Rooryck, Professor of Linguistics at Leiden University in the Netherlands. His predecessor Robert Kiley had argued that life sciences publishing has been slow to adapt to the Internet and remained locked into research evaluation systems that place more value on where someone has published rather than the underlying work. It is notable that open-access platforms are being set up by some of the Plan S members, including a number of European national research councils as well as the European Commission and the European Research Council. Plan S is not confined to Europe either, with the World Health Organization also being a member. However, if the trend of PAR agreements between publishers and individual countries and universities continues, it might challenge Plan S’ intentions.

Looking beyond OA

Clearly, there is pressure to change not just how publication is funded but also how the underlying work is disseminated. Some publishers at least partly agree. Wiley in particular is already looking beyond the OA transformation, according to Judy Verses, Executive Vice President, Wiley Research. “We are thinking more broadly than open access”, she said. “Our overall business strategy is focused on Open Research with products and services that enable both the researcher and the overall ecosystem. By delivering on initiatives that place the researcher at the heart of our business, we believe it will help to facilitate more collaboration, ease of sharing outputs of their work, not just the final peer reviewed research article, and enable researchers to be recognized and rewarded for those outputs.”

Wiley may be right to be looking beyond OA, because the fundamental question of funding for scientific publication has yet to be settled. “The open access movement was intended to solve two problems – the affordability problem and the accessibility problem”, Poynder commented. “If we see a pushback against open access, or some kind of splinternet, then we will not be able to solve the accessibility problem. I believe the real issue is and always has been affordability. […] If we solved the affordability problem, then would we not have solved the accessibility problem in the process? By contrast, the history of open access might seem to suggest that even if we solved the accessibility problem, we would still be left with an intractable affordability problem.”

Solving the affordability problem is therefore fundamental but will be difficult. Poynder suggests it might only be achievable by moving beyond the concept of the scientific paper. “We should complement the research paper with other outputs, not necessarily supersede it”, commented Pulverer, who echoes Kiley’s point that focus should switch from the traditional journal to the research paper itself. “Frankly, we should share more through Open Science platforms and only publish a subset of research findings in traditional journal format.”

Naturally, the publishers will fight to retain their relevance and revenues in this new world of more granular recording and communication, for which they are already preparing by investing in the analytics that will identify and correlate knowledge. Those with the best algorithms may then be the winners.