

Moving towards open science? Conference report: the 9th Conference on Open Access Scholarly Publishing, Lisbon, September 20–21, 2017

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Abstract

The Conference on Open Access Scholarly Publishing, COASP, is held annually with the aim of reaching professional publishing organizations, independent publishers and university presses, as well as librarians, university administrators and other stakeholders. Here, we outline some themes and highlights from this year's conference.

Keywords

open access; COASP; conference; offsetting deals; open peer review; OA monograph; Nordic list; APC

The 9th Conference on Open Access Scholarly Publishing (COASP) was held in a comfortably warm and sunny Lisbon. There was a record attendance, COASP has established itself as THE trade conference if you want to know what is happening in open access publishing. The number of Swedish librarians attending was notably increased compared to recent years. A result of the Springer Compact deal perhaps? Overall the sessions were very interesting with a good mix of speakers in each session. And the excellent dessert confectionary gave the sugar shock needed to keep up with the tight program. Here we have put together our impressions and reflections in a conference report. Slides and videos are available at <http://coaspvideos.org/>.

Opening Keynote

The opening keynote was held by Jean-Claude Burgelman, head of the science policy and foresight unit at Directorate General for Research and Innovation of the European Commission. His presentation was titled

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“Open access publishing policies in Europe: What the European Commission does and why”. His main points were that it is not about publications only anymore. The goal of the European Union is open science, defined as “a systemic transition of the science system which affects...the whole research cycle and all its stakeholders.” Some of the steps Burgelman mentioned to move towards this goal were:

- **Adding OA requirements to project funding:** the Green OA pilot in FP7 has developed into the Green OA obligation combined with a default requirement for open access to research data (with an opt-out possibility) in H2020 from 2020. The reported result from this is that 61–69% of publications funded through H2020 are open access. According to Burgelman this is not satisfactory and here reinforced monitoring and incentives are needed.
- **Further developing policy** through the [Open Science Policy Platform](#) , commissioning expert groups on FAIR data and the Future of Scientific Communication and holding an ongoing dialogue with member states and stakeholders.
- **Supporting innovative business models.** As an example, the H2020-funded project [OpenUp](#) (OPENing UP new methods, indicators and tools for peer review, dissemination of research results, and impact measurement) was mentioned. It will among other things result in an [Open Information Hub](#), a collaborative web-based Knowledge Base that will host a catalogue of open tools/services, methodologies, best practices from various disciplines or settings, success stories, reports.
- **Setting up a publishing platform.** “This is not a repository, it will provide a fast, cost-efficient and high quality service to publish in the 21st century.” There will be a call for tender in November this year and a contract signature sometime in 2018. We see this step as an indication that the considerations of the publishers’ interest that the EU has shown earlier is beginning to reach an end. It is also part of a trend where funders create their own publishing services.

Infrastructures

A very noticeable trend at this year’s COASP was the broadening of scope from the “final” product, i.e. the publication, towards a view that the whole scientific process should be as open, transparent and interactive as possible as the first keynote by Burgelman made clear. A number of projects that aim to create an open source infrastructure to meet those

needs were presented together with experiments with open peer review, the sudden rise of preprints in the biosciences and elsewhere. As Louise Page from [PLoS](#) pointed out, the technical infrastructures used today in scientific communication are 20+ years old and PLoS is investing in their project to create innovation through modernizing and enabling the infrastructure. Mark Patterson from [eLife](#) (another publishing service established by major funders) presented quite a similar ongoing development at eLife, with much the same goals to modernize and improve the tools needed for a more open scientific communication process.

Some things these projects have in common are:

- They want to cover more of the scientific communication process than the formal publication – from research data availability to altmetrics and post-publication interactions.
- They are open source
- They try to be as modular as possible so that parts may be reused elsewhere
- They emphasize the importance of open standards. Among those mentioned were:
 - [ORCID](#) (researcher ids)
 - [CRedit](#) – vocabulary for roles in research
 - [CASRAI](#) – research output vocabulary
 - [ISNI](#) – organization ID

Heather Staines, [hypothes.is](#), held a poster presentation where she presented Hypothesis as an open standards-based annotation tool that creates sophisticated interaction possibilities in a publication, from peer review to post-publication discussions. Hypothesis annotation is, by the way, used as one of the components in the eLife suite of tools.

David Shotton reported on his tireless work to create an open, commercially independent, citation corpus and service, the [Initiative for Open Citations](#) and the [Open Citations Corpus \(OCC\)](#). Both have made big strides forward this year, much thanks to the support of CrossRef. Many major publishers, societies and university presses have released their references there (SpringerNature, Wiley, Taylor & Francis) and through CrossRef's API the information can be collected. Today ca 50% of CrossRef-deposited references are available (~16 mln articles). OCC is also growing and already provides the largest RDF collection of open citation data on the web.

Roman Gurinovich, [sci.AI](#), did a show-and-tell on their product. That is an open artificial intelligence tool that “reads” documents and extracts metadata from the document. The tool is built for biomedical papers. Roman looked towards a future where a human-readable journal paper is published together with a machine-readable version, making sophisticated data-mining through search engines possible.

In our opinion, the creation of these open source platforms and services is an important effort to create options in a market where the big commercial publishers are moving in to acquire or develop services that cover the whole scientific process, supposedly with the ambition to dominate the new market as they have done with publications and by that being able to set prices and keep their profit margins high.

Vanessa Proudman, director of [SPARC Europe](#), presented [SCOSS](#), the Global Sustainability Coalition for Open Science Services. This is an attempt to solve the funding problem that haunts free, “common good” services. They may be crucial services to the development of open science, e.g. Sherpa/Romeo and DOAJ, but have a hard time finding longer-term, stable funding beyond the recent approved project. SCOSS is trying to create a crowd-funding that commits to fund a specific service for a specified time period. Today SCOSS is running a pilot where Sherpa/Romeo and DOAJ are the services that were invited to make an application. They are presently going through a vetting process that is executed by the SCOSS Advisory Group. If the application is deemed successful SCOSS members are expected to pay a specified amount p.a. over three years. The amount is decided by size and type of organization. The pilot started in February 2017 and is ongoing.

Open Peer Review and the Preprints explosion

Experiments with open peer review and the acceptance and use of preprints in new research areas are also part of the changing view of science as an interactive and transparent process. Presentations were given by Jean-Sébastien Caux, from the physics scientific publishing portal [SciPost](#), that use open peer review and open comments from readers, Tony Ross-Hellauer, Göttingen and [OpenAire](#), who gave an overview of open peer review initiatives and researchers attitudes towards open peer review. In a survey 60% of the researchers approved or strongly approved of a statement that said that open peer review should be common scholarly practice. Liz Allen, [F1000](#), discussed issues in today’s closed review systems compared with the experience of open peer review made in F1000. Liz Bal, BMC, presented their experiences

from trying “result-free” peer review, where the quality of the study was what was reviewed, not the results. This is an attempt to reduce the publication bias for positive results even if the statistical significance is low. According to Liz the experiment looks promising. Jessica Polka, [ASAPbio](#), talked about preprints in the biosciences, where a dramatic change has come about in recent years. Journals accept open preprints and create channels for submission from preprint services, funders accept preprints in reporting, and applications and altmetrics services are beginning to cover them. It is a rapidly growing – but still a very small – part in the biosciences: if PubMed indexes ~100,000 papers per month, ~1,500 are uploaded to preprint servers each month. Advantages of open peer review and preprints that were presented could be summed up as follows:

- Speed! A paper is available months/years before the formal publication.
- Authors might prepare their manuscript better when they know it will be published immediately.
- Reviewers might be more careful and constructive when they know their comments will be publicly available.
- The open reviews could be used to give credit to reviewers and give peer-reviewing a larger part of the rewarding structures.
- Open preprints could be scrutinized by any interested peer and their comments improve the publication and the underlying research.
- There are examples from the biosciences where preprint publishing researchers have been approached by journal editors interested in the manuscripts for their journals. We think this is a very interesting turn-around from active submission to journals. Imagine a future where “all” potential articles start in an open preprint archive, those that are deemed interesting enough get picked up by active journal editors, using sophisticated data-mining methods, and formally peer-reviewed and quality-branded, while the rest of the papers stay as preprints open for comments from everyone. The overlay journal in full scale?

Some issues and fears mentioned were:

- The fear, especially in early career researchers, of being scooped
- How to licence preprints
- Consistent and standardised linking and versioning
- Removals

OA monographs and peer review

Most presenters at the conference focused on articles and scientific journals. One of the exceptions was a panel with Anke Beck, CEO of De Gruyter, Aina Svensson, Head of the Electronic Publishing Centre at Uppsala University Library and Laura Speicher, Publishing Manager at UCL Press. This panel covered peer review and OA monograph publishing. All three presenters stressed the importance of peer review from different perspectives.

Anke Beck described De Gruyter's experiences working with open access monographs. She emphasized that De Gruyter has the same routines for OA books that they have for traditionally published books. From 2005 to 2017, they have published around 1000 OA books, often in partnership with scientific societies and university presses. De Gruyter has recently started experimenting with open peer review, but they have found that both authors and reviewers have often been reluctant to engage in this open process. Beck thought that open peer review could be a benefit for both publishers and authors, but that the academic community may not be ready for this new routine when it comes to books.

Laura Speicher described the peer review solutions at UCL press. She stressed that peer review for books is different compared to journals in the sense that it involves more editorial development and discussion. It often makes a significant contribution towards the shaping of the overall book, rather than simply evaluating quality. Writing books is a bigger process where the contribution from the reviewer is more akin to a dialogue with the author. Laura was not sure that open peer review would solve the current problems with peer review and noted that authors of books may be more hesitant to put a text out in the open before it is published.

Aina Svensson gave a presentation of [Kriterium](#). It is an initiative that was born from the need to improve the status of academic books in Sweden. Kriterium works as a consortium that currently consists of the universities in Gothenburg, Lund and Uppsala. Academic publishers and university presses can apply to have books peer reviewed by senior researchers from the participating universities. The reviewed books get a quality seal from Kriterium and the text is published as open access under a Creative Commons license.

Reward systems

One thing that was mentioned in several presentations, was how to square openness with the increasing competition for funding. The fear of losing a competitive advantage if research is opened up at an earlier stage must be dealt with by funders and universities, and so far there have been a few changes (e.g. the acceptance of preprints in applications by some funders) but in general it is still the old value markers that seem to apply.

Danny Kingsley, Cambridge University, held a keynote in this session, where she examined the existing system, suggested possible improvements and presented ongoing development. What counts, and is rewarded, in academia today is the publishing of novel results in high impact journals or books with prestigious publishers, depending on research area. Scientists are rewarded for publishing in the right journals and for getting grants, not for being right. Kingsley's suggested solution is open research: dissemination is distributed across the whole research cycle and rewarded accordingly. She mentioned different recent initiatives pointing towards a change in that direction:

- National initiatives
 - [UK Research Integrity Enquiry](#)
 - [Reproducibility and Replicability in Science, NAS](#)
 - EU Open Science Policy Platform (see Burgelman's presentation)
- Funders
 - Wellcome Trust – [Wellcome Open Research](#) where it is possible to publish data sets, case reports, protocols, null and negative results. Accepts preprints in applications and reporting. Wellcome Trust also recognizes that software, cell lines, antibodies etc. should be discoverable and have persistent identifiers so they can be cited and tracked.
 - Gates foundation is setting up an open access platform
 - NIH encourages researchers to publish – and to cite in reporting – preprints and preregistered protocols etc.
 - Medical Research Council UK accepts citing of preprints in grant applications
 - UK – [The concordat of open research data](#)
- Community
 - [FAIR data principles](#)

- The [San Francisco Declaration on Research Assessment \(DORA\)](#) – joined by journals, funders and some universities

A few universities reward openness (University of Liège, Indiana University–Purdue University of Indianapolis) but in general academic leadership must come forward and take measures to promote openness.

Jonas Gurell, Swedish Research Council, presented a common Nordic project with a more traditional journal-centric perspective, a common list of vetted journals, selected by national subject-based groups of researchers. The Danish, Finnish and Norwegian lists are already used for evaluation and funding allocation while the Swedish list is a work in progress. An advantage with these local lists is that nationally important journals, mainly in the humanities and social sciences, become part of evaluation systems that earlier relied on international indexes, i.e. Web of Science and/or Scopus. Objectives of the common project are:

- Reduce workload by maintaining the database together
- Improve the data quality and create compatibility between the existing national lists
- Improve analysis on national level and make comparative Nordic studies possible
- Establish a tool to track the development of open access publishing – to support this a collaboration with DOAJ is put in place.

The common list should be available early 2018.

Offsetting & APCs

As part of turning the traditional article publishing in journals to open access the emergence of offsetting deals has gained prominence in the recent years. To simplify a bit, an offsetting deal includes OA publishing (both in fully OA and hybrid journals) and access to the content behind subscription walls in a big deal, typically negotiated by national library consortia – as a natural extension of their earlier big deal negotiations. Those in favour of these big deals see them as a temporary phase that will lead to the flipping of the journals to full OA. This is seen as a way to ease the transition for the traditional publisher and give the authors a simple possibility to make their papers OA in their preferred journals. Critics of the offsetting strategy point out that they perpetuate an old-fashioned scientific communication model by increasing and conserving

the revenue streams going to the traditional big publishers. Critics doubt that the publishers will switch to full open access as long as they can keep their profit margins at today's levels. By doing this, resources will be made scarcer for new initiatives, like many of those presented in earlier sessions, and the broader changes in scientific communication will be harder to achieve. Two presentations in this session made a case for each of the views. Paul Peters, [Hindawi](#), made the case from an OA publishers' perspective and Colleen Campbell, Max Planck Digital Library and the [OA2020](#) initiative, presented the arguments for the advantages of the offsetting strategy.

Paul's main arguments against offsetting were:

- Already without offsetting deals a major portion of open access funds goes towards hybrid publishing. Example: in UK in 2016 73% of available open access funds supported hybrid publishing.
- APCs in hybrid journals are higher, as shown in a [IISC study of APCs in 2016](#). Median APC for fully open access is £1261 and for hybrid – £2000.
- Offsetting deals provide very little transparency regarding the actual publishing cost.
- Offsetting deals further entrench the power of the large publishers.

Paul's suggested solutions were:

- Consortia level support for fully open access journals/publishers
- Greater transparency of the actual costs in the national deals to make comparison possible between hybrid and fully open access costs
- Institutional funds available to authors that support publishing in journals where no centralized deals exist

Colleen saw the offsetting deals as a main part of the transition to open access and pointed out the following:

- The deals should be seen as transitional and not as a new standard routine to be repeated. Next step would be to unbundle the research output cost and pay for actual number of papers published and at the same time phase out the reading costs.
- A shift of the expenditures from subscription towards open access publishing should not raise the total costs. This can be achieved

by combining the subscription and open access publishing costs into one deal.

- Practical advantages:
 - Rationalization of workflows lessen the administrative cost.
 - Centralized agreements make everything easier for the researcher.
 - Funding liberated from big deals can support new initiatives.
 - Cost transparency will increase competition, which will spur innovation.

What emerged from this session was how the development of offsetting deals will have a huge impact on what the role of libraries and library consortia will be in the development of scientific communication. How should resources be balanced between supporting big deals and emerging services? An independent APC fund as a percentage of the cost of each big deal? A membership deal with a fully open access publisher for each offsetting deal? No offsetting deals that increase the total cost? There is a large number of questions that we have to find answers to in the near future.

Wellcome Trust

The last speaker at the conference was Robert Kiley from the funder Wellcome Trust. Kiley described how Wellcome Trust is working to increase open output from projects that they fund and he shared his thoughts on how academic publishing would develop.

His presentation focused on the new publishing platform [Wellcome Open Research](#) that was launched in November 2016 with a technical solution from F1000. The driving factors for Wellcome Trust to establish their own publication channel was to make the publication process faster. So far, the average time from first submission of a manuscript until the reference is exported to PubMed is 50 days. The increased speed compared to publishing in traditional journals has received positive feedback from the authors. Kiley said that other advantages with the new platform were increased transparency thanks to open peer review and a focus on reproducibility due to the underlying data being made openly available. While most contributions to the new platform have been traditional articles, documentation of other outputs like data and code is also possible.

Kiley argued that the competition in the APC-market is not working very well because researchers have a need to publish with established journals regardless of cost. The cost of processing an article on Wellcome Open Research is so far £793, whereas the average level of APCs sponsored by Wellcome Trust is £2044. Researchers with funding from Wellcome Trust are free to publish where they want, and even if Wellcome Open Research now is the fourth most popular choice when publishing, Kiley foresaw that hybrid journals would continue to be popular with researchers. Kiley saw the increasing cost for APCs as problematic and presented several alternatives for how Wellcome Trust could handle that.

Looking ahead, Kiley saw subscription-based journals as a dead end because of the problems associated with keeping content behind paywalls – SciHub now covers over 80% of the articles published in subscription-based journals. Instead, he saw a future where open was the standard and where articles would first be uploaded as preprints on platforms using open peer review as the default method of perusing the standard of a paper.

Regarding how to identify top articles that stand out, Kiley, in line with other speakers at the conference, was critical to the current situation where journal names are being used as a proxy for the quality of published papers. Instead, he presented a possible alternative where editorial reviewers singled out already published articles because of their specific qualities, perhaps in the framework of overlay journals.

Kiley concluded by predicting that data, rather than publications, will be the new strong currency in the academic world.