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The Uncoordinated Potential of Libraries to Achieve Open Access Now

How the Transition to Open Access Could be Accelerated by Libraries Working Together

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Abstract

The last ten years have shown, that Open Access is not only a vision, but has become real. Libraries are in a good position to push Open Access even further, as they currently fully pay the production costs of the traditional subscription model. SCOAP³ demonstrates that coordination among libraries is not unlikely and could lead to more Open Access immediately.

Die letzten zehn Jahren haben gezeigt, dass Open Access nicht nur eine Vision ist, sondern tatsächlich funktioniert. Bibliotheken könnten Open Access ganz zum Durchbruch verhelfen, da sie zurzeit vollständig für die Produktionskosten beim Subskriptionsmodell aufkommen. SCOAP³ zeigt, dass die Koordination zwischen Bibliotheken möglich ist und sofort zu mehr Open Access führen kann.

1 Introduction

Open Access (OA) is a fascinating topic because it is simple and complex at the same time. It is simple because the vision of OA can be put into a few sentences like the Berlin Declaration¹ from 2003. It is complex because even ten years after the Berlin Declaration we have not yet realized the simple idea of OA to the full extent. In 2011 only 17% of 1.66 millions scholarly articles were published di-

rectly with so called open access publishers, where there is no charge to the reader (Laakso and Björk 2012). And despite a few exceptions repositories usually contain only a small fraction of the research output of an institution. According to estimates by Björk et al. (2014) access to only 12% of scholarly articles is provided by the green road of open access, although self-archiving policies of publishers would allow 80% (Laakso 2014).

¹<http://openaccess.mpg.de/286432/Berlin-Declaration> (as of: 06/13/2014).

By analyzing the situation, it is easy to play the blame game between all involved stakeholders. We would achieve OA, if ...

- all authors published in OA journals and OA monographs.
- all authors deposited a copy of their papers in a subject or institutional repository.
- publishers changed from subscription based business model to pure OA.
- all research funders required OA and sanctioned non-compliance.
- all libraries joined together and would stop paying money for subscriptions.

Obviously no stakeholder has taken radical steps towards OA as we do not yet live in an OA world. Currently the OA movement consists of small parallel efforts from various directions and stakeholders, that slowly but steadily lead to more OA. The last ten years have shown that OA is not only a vision but (gold) OA can be implemented as business model by any publisher in any discipline. As of June 2014 the Directory of Open Access Journals² lists 9'822 journals and the Directory of Open Access Books³ contains 2'033 books. A milestone of acceptance was reached when the editor-in-chief of Nature said, that OA to research is inevitable and is going to happen in the long run (Jha 2012). This statement finally ends a decade, where OA often was perceived as low quality, not peer-reviewed and not feasible for traditional high-quality journals. Now there is a chance that the debate about OA has shifted to the essential part of OA. The costs and the transformation. In this phase libraries and especially library consortia which currently heavily support the traditional subscription business model, could play a crucial role.

2 Unchanged publisher profits

A STM industry report (Ware and Mabe 2009:16) shows that revenues in journal publishing are generated primarily (up to 75%) from academic library subscriptions. Further 15% revenues come from

²<http://doaj.org/> (as of: 06/13/2014).

corporate subscriptions. Considering the 30%+ profit margin of publishers one can argue like Morrison (2013), that academic libraries are therefore in an excellent position to change the system as they currently fully pay the production costs of the traditional subscription model.

Although the OA movement made huge efforts in the last ten years, it obviously did no harm to the subscription model. On the contrary, Elsevier, the publisher of more than 2500 closed access journals, could even increase its profit margin from 33% in 2002 (Taylor 2012) to 39% in 2013 (Reed Elsevier 2014:12). Expressed in absolute numbers: In 2013 Elsevier had a revenue of £2126 million (~\$3,56b) and an operating profit of £826 million (~\$1.38b). In the STM market Elsevier is not an exception. Springer, Wiley and Informa also have profit margins over 30% (Taylor 2012).

3 Real costs

In the article "The true cost of science publishing" (Van Noorden 2013) the internal cost per paper of Nature is mentioned to be \$30'000- \$40'000. Opposed to this number, the Egyptian based publisher Hindawi publishes a paper at a cost of \$290 and is still able to generate 50% profit. Even if one considers the lower labor costs of Egypt, the higher rejection rate and a different editorial process of Nature (a lot is done in-house) the difference is tremendous. It seems likely that the real production costs for many publishers are higher than those from Hindawi but much lower than those from Nature.

The results from the PEER project (Publishing and the Ecology of European Research) provides some more specific average numbers (Wallace 2012):

- Peer Review per manuscript: \$250
- Remaining production costs per article: \$170-\$400
- Annual publisher platform maintenance costs: \$170'000-\$400'000

An Article Processing Charge (APC) of about \$1'000-\$2'000 should therefore cover the produc-

³<http://www.doabooks.org/> (as of: 06/13/2014).

tion cost while providing reasonable profit for the publisher. A recent report (Björk and Solomon 2014) shows that the average APC of pure OA journals is between \$1'418 (born OA like BMC, PLOS) and \$2'097 (OA from a originally subscription based publisher like Wiley OA), while the hybrid options from subscription publishers are with \$2'727 significant higher.

4 Missing library coordination

In 2012 when the "Cost of Knowledge" initiative⁴ was created, Gowers (2012) stated the unlikeliness of libraries to coordinate their actions:

"Even if one library refuses to subscribe to Elsevier journals, plenty of others will feel that they can't refuse, and Elsevier won't mind too much. But if all libraries were prepared to club together and negotiate jointly, doing a kind of reverse bundling – accept this deal or none of us will subscribe to any of your journals – then Elsevier's profits (which are huge, by the way) would be genuinely threatened. However, it seems unlikely that any such massive coordination between libraries will ever take place."

It is hard to understand that a pressing issue like OA cannot be addressed globally by the library community as in the end all institutions are affected. Robert Darton, library director at Harvard said (Sample 2012):

"We simply cannot go on paying the increase in subscription price. In the long run, the answer will be open-access journal publishing, but we need concerted effort to reach that goal."

5 SCOAP³

An example where libraries and research organizations have been able to reach that goal is SCOAP³. The Sponsoring Consortium for Open Access Pub-

lishing in Particle Physics eventually launched in 2014 after several years of preparation. The idea is simple: All libraries that until now had subscribed to certain journals in high energy physics transfer the amount of their subscriptions to SCOAP³ instead to the publisher directly. This international consortium will then sponsor the APC to any new paper submission to those journals, so that the new content becomes OA. However the change from subscription-based system to an APC-based system is not trivial to implement. One also have to include the local perspective where some research institutions could end up being losers or winners, depending on their publishing and subscribing ratio. Nevertheless from a holistic point of view research institutions are definitely winners as with the same amount of money a few journals⁵ are fully or partially OA from 2014 on.

A bird in the hand is worth two in the bush

Some green OA advocates have criticized SCOAP³ for being unnecessary and unsustainable. Harnad (2012) argues that 90% of the relevant papers were already available OA via arxiv.org and therefore there was no necessity to go for this deal with the publishers. While this might be true, it overlooks that although almost complete OA was achieved via green road in the discipline of high energy physics, libraries have not cancelled subscriptions. Harnad (2012) also argues that SCOAP³ is overpriced and therefore unsustainable. The agreed APCs⁶ show a huge variability between EUR 500 and £1'400. Of course one could argue that APCs over \$1'000 are still too high and should therefore not be accepted, because this would allow publishers to keep alive their high profits in the OA world. Again this might be true, but as long as libraries keep their overpriced subscriptions the money is lost anyway and therefore it is more pragmatically to first transform the journals to OA and care later about a pricing that comes closer to the real costs. Compared to the (adhesion) contracts libraries usually sign with traditional publishers, the specifi-

⁴http://en.wikipedia.org/wiki/The_Cost_of_Knowledge (as of: 06/13/2014).

⁵<http://scoap3.org/scoap3journals> (as of: 06/13/2014).

⁶<http://scoap3.org/scoap3journals/journals-apc> (as of: 06/13/2014).

cation of SCOAP³ (CERN 2012) is a tremendous progress towards an OA world.

SCOAP³ demonstrates that a coordination between libraries is not totally impossible, although SCOAP³ had positive prerequisites that may not exist in other disciplines. With the CERN there already was a highly international player, which could take over the initial coordination. Also the field of high energy physics consists of a rather small number of research institutions that are already used to collaborate.

6 IOP and RSC

Other approaches taking into account that academic institutions are producers and consumers at the same time come from IOP Publishing and the Royal Society of Chemistry (RSC).

6.1 Institute of Physics (IOP)

In a pilot between IOP, the Austrian Science Fund (FWF), the Austrian Academic Consortium and the Austrian Central Library for Physics at the University of Vienna, hybrid APCs that are paid by Austrian researchers result in an equal discount on the national subscription price⁷. A similar deal was closed in UK⁸.

6.2 Royal Society of Chemistry (RSC)

The "Gold for Gold" program of RSC⁹ is the first approach from a traditional publisher to start the transition by providing vouchers to libraries subscribing to the whole journal program of RSC (the gold package). The vouchers in the same amount of the subscription costs can be used to publish hybrid OA. According to RSC around 600 institutions are qualified to get "Gold for Gold" vouchers. In 2013 878 vouchers were used by 187 institutions (Geisenheyner 2014).

In Germany where RSC titles are currently licensed on a national level, the distribution of vouchers to publish hybrid-OA is also handled nationally (Espley and Dabb 2014).

⁷<http://ioppublishing.org/newsDetails/Austria-open-access> (as of: 06/13/2014).

⁸http://www.iop.org/news/14/may/page_63308.html (as of: 06/13/2014).

The numbers from Switzerland show that institutions are still struggling to distribute the vouchers to their authors and therefore many vouchers from 2013 were not redeemed.

	Available	Used
2013	110	59
2014 (May)	113	16

Table 1: RSC vouchers in Switzerland

But even if all vouchers were redeemed completely, only a third of all Swiss publications (2013: ~325) would have been made OA by the 110 vouchers provided in 2013. This leads to the assumption that Swiss institutions are extremely research intensive or the applied APC of £1'600 is set to generate more revenue than with the subscription model.

So far the impact of the RSC gold for gold program is still limited. In 2013 the highest percentage of OA articles in a RSC journal was only 7% (Chemical Science). It is interesting to see how this percentage will evolve in 2014 as probably more vouchers will be redeemed due to a better promotion of libraries and RSC.

7 Library consortia and OA

Further effort towards OA could be coordinated by library consortia which have been bundling the interests of several libraries since many years (Carbone 2007). Consortia usually have a central staff body financed by their library members. So the structure is already there and could be expanded towards OA in various ways.

7.1 Self-Archiving clauses

Library consortia can include self-archiving clauses in their agreements (Schmidt and Shearer 2012) to support green OA. This is especially important as some publishers started to change their self-archiving policies to restrict or delay certain ways of self-archiving, like only allowing the self-archiving on the personal website, but not in the institutional repository. The inclusion of compre-

⁹<http://www.rsc.org/publishing/librarians/goldforgold.asp> (as of: 06/13/2014).

hensive self-archiving rights in the subscription agreements could prevent publishers restricting their global self-archiving policies.

7.2 Offsetting hybrid OA

Consortia can also negotiate and manage the offsetting of hybrid APCs generated by researchers from the member institutions with subscriptions. As long as publishers hesitate to transform established journals to a pure OA model and libraries feel urged to continue subscribing, libraries should at least try to make the subscription worthwhile by ensuring that affiliated authors can publish hybrid OA for the same amount of the subscription fee. As IOP and RSC show, hybrid OA can be integrated into subscription agreements.

7.3 Informing and transparency

If publishers refuse to accept certain non-negotiable terms (like refusing to regard hybrid OA and subscriptions as related) libraries should make more efforts to react with one voice. Consortia could take over the tedious task to inform all libraries and get feedback about the desired action from each member library. They can also support libraries to inform the university management and the researchers to get the approval to cancel subscriptions. The negative consequences of such a step are often overestimated as experiences show (Toni 2012; Nabe and Fowler 2012). Researchers

usually have no idea about the financial aspects of the subscription business, as libraries tend to keep these numbers private. However, there is reason to assume that if more information is made transparent, researchers and the university management are more likely to agree to do something about the absurd situation. At Cambridge Gowers (2014) recently did a short survey among research colleagues about to learn about how they feel cancelling Elsevier journals and found that "most people would not suffer too much inconvenience if they had to do without Elsevier's products and services, and a large majority were willing to risk doing without them if that would strengthen the bargaining position of those who negotiate with Elsevier".

8 From subscription to OA funding

According to the Study of Open Access Publishing, a large scale survey among over 35'000 researchers, the lack of funding is one of the main barriers for gold OA (Dallmeier-Tiessen et al. 2011). With more and more APC-based OA journals on the market (also from traditional publishers), libraries should consider to move their limited acquisition budget away from subscriptions to institutional or consortial OA funding. Otherwise they might miss the real opportunity to support willing researchers to publish gold OA and libraries become unwillingly the last defender of the existing subscription model.

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