

A Quick Word on Open Access Sharing

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Open access sharing contributes nowadays a major part to the publication process in many different scientific disciplines. One could think it is an invention of modern time, however, the idea to make data and literature widely available is quite old: Libraries. In 1836, Anthony Panizzi, the future principal librarian of the British Museum said:

"I want a poor student to have the same means of indulging his learned curiosity, of following his rational pursuits, of consulting the same authorities, of fathoming the most intricate inquiry as the richest man in the kingdom, as far as books go, and I contend that the government is bound to give him the most liberal and unlimited assistance in this respect."^[1]

Sounds pretty much like the idea of open access sharing of modern times, just two key aspects were missing: Low cost reproduction of texts and fast, cheap and reliable transfer of the data. In modern times, this can be achieved by electronic documents and the internet – providing the biggest commonly available library that ever existed on earth. So, what is stopping us from extending this network? Why don't we have one huge library for all scientific disciplines? While following this question, we will discover that open access sharing in general might be currently at a critical point in its development.^[2]

The hurdles open access in science has to face are the impact factor and money; or to be more precise, copyright. For many years, publishers were only intermediaries within the publication process. However, nowadays research-based journals do not pay for papers and pre-prints they receive and which appear in their journals (actually, they expect that authors pay fees for getting published), although they earn money by selling the finished issue. Researchers additionally assign their copyright to the publishers who can afterwards act as if they created the article.^[2] The whole peer review process is also completely gratuitous.

While one could argue that researchers still get a lot out of this publishing culture, we can now close the loop to Mr. Panizzi: Academic literature that was funded by companies or society via taxes becomes exclusive again and is only available by paying significant license fees to the (monopolistic) journals. Their profit margins here are correspondingly large, while at the same time some universities cannot afford the access licenses anymore.^[3,4]

In times of the internet there is, however, an alternative:

Open access websites like arxiv.org, which was one of the first established platforms.^[5] Arxiv went online in 1991 as an initiative of physics professor Paul Ginsparg. More than 20 years^[6] after its launch, it has become one of the biggest open access websites with thousands of submissions per month.^[2] Eventually, the journals had to adapt to the new system and introduced a hybrid system. In this context, 'hybrid' refers to journals that "carry both open-access and traditional-access articles: an extra fee (...) has to be paid in order to make an article in it freely available to all."^[2] This was meant to be a transition to purely open access based publications, however, the publication fee (including the additional open access fee) eventually rose to twice the required payment for a "born-digital full open access journal".^[7] Therefore, the hybrid journals still charged significant fees while the open access trend was meant to reduce the overall costs. Several alternative systems followed, but never really reduced the overall costs, maintaining the huge profit margins of the journals. All the old difficulties between traditional paid access licensing and open access remained in place.^[2]

Currently, established journals show increasing interest in buying open access platforms. Richard Poynder, an independent journalist who observed the open access world for more than a decade sees the development now at a critical point:

"In the end, the key question is whether the research community has the commitment, the stamina, the organizational chops and/or the resources to reclaim scholarly communication. While I would love to end on a positive note, I am personally doubtful that it has. The fact is that, OA [open access, note by JUnQ] advocates aside, there does not appear to be much appetite in the research community for giving up publishing in prestigious journals, and abandoning the notorious Impact Factor. More importantly, university managers and funders do not want to see anything that radical occur. We live in an age of bureaucratic scrutiny, and scrutineers crave simple and standard ways of practicing their dark arts. That is exactly what the IF [impact factor, note by JUnQ] and legacy journals provide. If I am right, OA will surely remain a half-revolution, for now at least."^[8] Of course, not everyone sees the open access development negatively. Many scientists expect the original open access idea to win eventually. Currently, there are a few attempts

to force an open access data base for paid publications. The illegal website Sci-Hub is one example or the tragic story of Aaron Swartz.^[2,9] Open access for everyone cannot and should not be an illegal enterprise and we can only hope to, in the end, find a compromise between traditional publishing and open access sharing that keeps the quality of scientific articles on a high level and is, on the other hand, acceptable for the publishing houses. So that in the end we meet Anthony Panizzi's idea of widely accessible knowledge for everyone.

References

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Extensive Material for Further Reading Provided by the UNESCO:

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