« Liège, a cradle of academic Open Access voluntarism

Bernard Rentier* May 2023

SciELO was the first continent-wide organisation I heard of when I became interested in Open Access (OA) and it appeared to me as a real proof of concept.

First awakening

My experience as a researcher and teacher gave me a strong desire for efficient bibliography management and for a wide access to scientific literature. I had tasted a bit of that during my stay at the US NIH, from 1976 to 1981, where I benefited from the outstanding institutional library and the nearby National Library of Medicine. Such a total access was allowed by the financial means of these institutions. Back in Belgium, the limitation of access was all the more cruel...

Some twenty years later, in 1997, my election to the Université de Liège (ULiège) vice-rectorate put me in charge of research and bibliographic resources. Simone Jérome, the director of the Sciences Faculty Library, introduced me to the advances by OA pioneers such as Stevan Harnad, Jean-Claude Guédon, Alma Swan or Peter Suber. I felt the need to engage my University in the OA movement, starting with the signing of the Berlin Declaration.

ORBi

As rector in 2005, I undertook a proactive OA policy concerning our researcher's publications. Paul Thirion, the director of the library network, and his team developed an institutional repository that we called ORBi (Open Repository of Bibliography, https://orbi.uliege.be/?&locale=en). The originality of the project, for the time, lay in the obligation of deposit imposed on authors. At the beginning, compliance was low, as researchers considered this deposit as an administrative hassle. This difficulty was initially resolved by the decision of the university's Board of Directors to consider only their publications accessible in full text in ORBi for any evaluation of researchers. In a second phase and quite quickly, the researchers understood the multiple advantages that the process brought them, and compliance was rapidly increased, reaching more than 80% within two years, a ratio never

reached in universities that simply leave the deposit optional. Many features helped meeting our needs (https://orbi.uliege.be/page/background?&locale=en) and were (and still are) much appreciated by the users.

Today, ORBi has produced offspring in the universities of Luxembourg (ORBiLux) and Mons (ORBiMons).

EOS and PASTEUR4OA

The ULiège quickly gained a reputation for this mandate and, as rector, I was invited to many places, including several South American universities, to « describe the method and its successful results. This was also the time when, in 2009, at the instigation of Alma Swan, we created EOS (Enabling Open Scholarship, https://digital-scholarship.org/digitalkoans/2009/09/23/enabling-open-scholarship-launched/), an association promoting open access to scientific publications, which I had the honour of chairing until its termination in 2016, rapidly endorsed by ERCIM (the European Research Consortium for Informatics and Mathematics, https://ercim-news.ercim.eu/en79/in-brief/ercim-endorses-qenabling-open-scholarshipq). It included pioneers mentioned above, S. Harnad, P. Suber and A. Swan, together with Tom Cochrane, William Dar, Martin Hall, Keith Jeffery, Sijbolt Noorda, Stuart Shieber, Ian Simpson, John Willinsky and myself. This association enabled us to promote the principles of OA, and then progressively those of Open Science, throughout the world.

EOS is the originator of the PASTEUR4OA project, Open Access Policy Alignment Strategies for European Union Research (funded by the Seventh European Framework Programme for Research and Development, FP7, http://www.pasteur4oa.eu/home).

Impact in Belgium

In 2018, the French-speaking part of Belgium adopted a decree aiming at the establishment of a policy of OA directly inspired by the institutional policy of the ULiège already in place for 10 years at that time. The decree is applicable to all French-speaking universities and public research centers in Belgium and it covers all publications concerning research carried out in whole or in part with public funds (https://gallilex.cfwb.be/document/pdf/45142_000.pdf)

Drawbacks and difficulties

It would be a great oversimplification to suggest that implementing OA was easy. First of all, we

had to overcome fierce resistance from publishers, both large and small (https://bigthink.com/surprising-science/open-access-academic-publishers/). As university leaders, we have experienced pressure in the form of threats of lawsuits as well as seduction attempts, but the tremendous development of the OA and of the associated concepts of Open Science as well as the objective benefits of universal access to scientific information have gained a strong support with many researchers.

The resistance came first from the researchers, of course, but in an indirect way: disagreement of their hierarchy, of their evaluators whoever they were and of a large part of the scientific establishment. It was then that the need arose for a thorough review of the criteria for evaluating research, researchers, and their careers.

Matrix, not metrics

In 2016, I had the privilege of co-chairing the «Working Group on Rewards under Open Science» set up by the European Commissioner for Research Carlos Moedas. We were tasked with exploring this issue and we published in 2017 a report under the auspices of the European Commission entitled "Evaluation of Research Careers fully acknowledging Open Science Practices - Rewards, incentives and/or recognition for researchers practicing Open Science" (https://op.europa.eu/en/publication-detail/-/publication/47a3a330-c9cb-11e7-8e69-01aa75ed71a1/language-en).

In summary, we made the following proposals:

- 1. A more comprehensive recognition and reward system incorporating Open Science (OS) must become part of the recruitment criteria, career progression and grant assessment procedures for researchers at all carriers levels.
- 2. There should be a review of the European Research Area policies, roadmaps and national action plans through the lens of OS and policies must be updated to ensure compatibility with OS.
- 3. Researcher participation in OS should be encouraged through support and funding mechanisms.
- 4. The assessment of researchers during recruitment, career progression and grant evaluation should be structured to encompass the full range of their achievements including OS, using the instrument OS-Career Assessment Matrix (OS-CAM) that takes into consideration the full range of achievements to reflect diverse career paths. There should also be a validation process on the content and feasibility of the OS-CAM in researcher assessment as well as taking into account the wide spectrum of disciplines, research funding and research performing organisations.

This document has been included in the European Union's Open Science Toolkit and it has been adopted by the DORA organization on a worldwide scale (https://sfdora.org/resource/european-

The Open Data challenge

The next step without which a truly open science cannot be envisaged, is full and open access to the original data on which scholarly articles are built. Here, the reluctance comes essentially from the researchers themselves or their supervisors, who consider their data as their property and as the best guarantee of their professional progress. Reproducibility imperatives are however at stake. Having launched the European Strategy for Data in February 2020, the EU proposed a global approach to foster data sharing across sectors and to make « more data available for R&I (https://ni4oseurope.eu/wp-content/uploads/2021/06/NI4OS_RI_ORDM__web__EN_single_pages.pdf)

Along these lines, the EU adopted the Digital Services Act ("DSA") on October 4, 2022, imposing new rules on intermediary service providers (cloud services, file sharing services, search engines, social networks and online marketplaces) that will be fully applicable on February 17, 2024. Designed with the large technology sector in mind, and particularly the GAFAM, it applies also to institutional repositories in higher education, resulting in administrative burden and cost. Science Europe (https://www.scienceeurope.org/our-resources/dsa-nfp-exemption/) and many other organisations such as the EUA, CESAER, COAR, LIBER, the Coimbra Group, LERU, etc, request that data users for scientific research purposes, digital repositories and not-for-profit libraries be excluded from the DSA scope and obligations.

Hope

When looking upon the long journey since the first initiatives towards free access, two major principles emerge. First, nothing would have been possible without building adhesion to an ideal of sharing and solidarity. Second, always keep in mind that these advances are fragile in front of the power of profit, backed up by the resistance of some academics who try to preserve the old system or who firmly believe that the quality of science can only be guaranteed within the framework of a costly edition business (https://academie-editions.be/accueil/369-open-science-the-challenge-of-transparency.html).

As long as an influential part of the establishment does not curb their enthusiasm, and as long as they are offered adequate training, the hope for universal open science lies mainly with the new generations. »

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