https://doi.org/10.3126/access.v2i01.58993
www.nepjol.info

Perspectives of the Latin American Non-commercial Journal Publishing and South-South Collaboration before Commercial Business Models for Open Access

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Article history: Received: 15 March, 2023; Reviewed: 25 April, 2023; Accepted: 10 May, 2023

Abstract

Currently, the polysemic concept of Open Access is broad enough to encompass different meanings, paths, principles and outcomes. In that spectrum, there are approaches more in favor of values such as equity, inclusion, democratization and participation. On the contrary, some others reproduce schemes of epistemic injustice and structural exclusion. In Latin America, scholarly communication has taken science as a public good. This model is collectively sustained and it provides universal benefit. Conversely, the Open Access business models offered by the commercial sector of scientific journals perpetuate exclusion, since they continue to be based on the paradigm of commodification of science. Both, access and knowledge generation are compromised when knowledge is privatized and commoditized. It is important to reflect on the evolution of the Open Access movement, its effects, the beneficiaries and the excluded. Latin America is proud to showcase an academy-owned publishing paradigm which is worthy to be understood, recognized and strengthened, and that is particularly beneficial for the Global South.

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Keywords : *Open Access, Latin America, APC, Redalyc, Public good.*

The unintended effects of the Open Access movement: the consolidation of commercial publishing and the hardening of epistemic injustice:

The Open Access movement for scientific publications has been possible thanks to the conjunction of two factors: the emergence of the Web and the need for a change in the information industry. Although this movement was formalized with the Budapest (Chan et al., 2002), Berlin (Max Planck Society, 2003) and Bethesda (Brown et al., 2003) declarations, it has been a paradigm of scholarly communications that has coexisted with the publishing industry and has historically evolved in diverse ways across different regions and disciplines.

It is not the purpose of this paper to exhaustively review the historicity of scholarly communications. However, it is important to highlight some facts that have marked the way in which knowledge has been accessed and produced.

In many countries, the ownership and control of scientific publishing by the academic sector have been lost. Then, commercial publishers took not only the control over it but the property of the published science.

They implemented the subscription or pay-per-read business model. In this environment, commercial databases, which produce citation indicators, are often used to determine what is known as "mainstream science" for those countries. When the Web and information and communication technologies emerged, journals under this business model transitioned to the digital era with the same subscription model. A new platform is used for publishing but with the old and obsolete business model, clearly not aligned with the essential nature of the creation of the Web and with the essence of BOAI, which stated that

> *"An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access..." Budapest (Chan et al., 2002)*

As time went by, an inflation was generated in the costs of journal subscriptions, which led to a cost crisis. Thus, many universities, researchers and important actors in the scientific and academic community declared their inability to continue paying for access to scientific publications. Among them, for example, Harvard University (Sample, 2012).

The crisis under this model has led to the fact that the authors themselves cannot

even access their own articles unless they make the corresponding payment to the publisher, and even if that payment is made, they often do not even have permission to share or reuse their own articles.

By 2014, the confirmation that Open Access did not inflict any damage on commercial publishers came. Expectations that OA will address the serial costs crisis faded away (Aspesi, 2014).

Unfortunately, two decades after the Open Access declarations the international context shows:

- Greater control of the knowledge production circuit by commercial publishers. As stated by Chen et. al (2019), a simultaneous redirection of multinational academic publishers' business strategy towards the acquisition and integration of scholarly infrastructure, the tools and services that underpin the scholarly research life cycle, many of which are also geared towards data analytics for the purpose of creating new income streams.. It is precisely because of the power to integrate products across the value chain that this expansion should be critically examined.

- Restrictions continue to grow, now on where, when and how articles are disseminated (Poynder, 2017).

- A harmful research evaluation system, based on a prestige industry that ignores Open Access. A system based on biased and non-transparent metrics offered by proprietary services which lack visibility of non-commercial publications, particularly from countries of the Global South and of Social Sciences and Humanities.

Commercial publishers have not only consolidated the market but their finances are on the rise. In agreement with Posada and Chen (2017), this situation has led, among others, to two consequences: increasing dependence by researchers and institutions, and a resulting increase in global knowledge inequality.

In addition, a new outlook of exclusion has emerged: a shift from pay-to-read to pay-to-publish models, embodied in the concept of APC (Article Processing Charges). In which, once again, researchers with fewer resources are excluded. In addition, countries, academic institutions and the research community have no control beyond commercial agreements.

Unfortunately, the past mistakes that led to an inflationary subscription price crisis have been repeated. That is, the same context that resulted in the Open Access movement to begin, but in this case with the transfer of costs to authors.

The APC is a commercial concept that will perpetuate the treatment of scientific

knowledge as a commercial product. APC are regulated by private interests that are not necessarily those of the academic community and that also represent a system that excludes researchers from developing countries.

For several years now, there have been warnings about the prices of commercial publishers for open publication. Elsevier with APCs amounting to €1,637, PLoS of €2,212, Wiley with an average of €2,112, as well as BioMed with €1,771, Springer of €1,024 and Wiley of more than 2,100 per article (Socha, 2017).

In 2021, publisher Springer Nature announced that its articles will be free to read as soon as they are published, as part of a long-awaited move to offer open access in the Nature family of journals. To this end, the publisher "will charge €9,500 [...] to make a paper open access (OA) in Nature and 32 other journals that currently keep most of their articles behind paywalls and are financed by subscriptions" (Else, 2020).

This represents a clear step towards an inflationary APC price crisis. As mentioned above, a repetition of the history of the crisis in scientific publishing (previously due to subscription costs) now resulting from the uncontrolled rise in the cost of publishing.

Furthermore, paying to publish does not guarantee that the author retains the copyright to his or her work, nor does it guarantee that his or her work will be published under a Creative Commons license. As argued by Poynder, by underestimating the degree to which copyright would be a barrier to the goals of Open Access "OA advocates have enabled legacy publishers to appropriate the movement for their own benefit, rather than for the benefit of the research community, and to pervert both the practice and the concept of open access." (Poynder, 2017).

The so-called "transformative agreements" are helping to structure the new market for the output and communication of science. Consortia strategies have focused their strategies on such agreements, resulting in the strengthening of the business model based on charging authors. Thus, in a general overview, it is possible to observe a consolidation of an approach based on the commodification of knowledge.

The Latin American approach of non-commercial Open Access publishing and South-South collaboration:

While in the Global North, a call for academics to take back control of research journals is being made (Curry, 2017). In Latin America, a science communication approach prevails in the hands of the academy.

Latin America has historically maintained scientific publications without reading or publishing fees. This sector is supported by universities and is an exemplary case of the Diamond Open Access model. Similarly, the preponderant role of the academic sector as

owner and publisher of scientific journals stands out (Becerril-García, 2021).

In terms of declarations regarding Open Access in Latin America, there have been stated with different emphasis: to safeguard access to information ("Declaración de Salvador sobre acceso abierto," 2006), to safeguard the protection of academic and scientific output in Open Access ("Declaración de México En Favor Del Ecosistema Latinoamericano de Acceso Abierto No Commercial," 2017), to promote the development of public policies for the implementation of Open Science ("Declaración de Panamá sobre Ciencia Abierta," 2018), and more recently the declaration for a new academic and scientific evaluation for a science with social relevance in Latin America and the Caribbean (FOLEC-CLACSO, 2022).

Several platforms have been created in the region as key components of the consolidation of the Open Access ecosystem. The Latindex[4] journal directory, the diamond Open Access journal platform Redalyc[5], Scielo[6], CLACSO[7], AmeliCA[8], La Referencia[9], as well as hundreds of institutional journal portals, thematic, disciplinary and institutional repositories, national journal and repository networks are part of the infrastructure.

In this system, there is an organically-regulated distribution of tasks. The services offered by such platforms complement and supplement non-commercial scholarly communications. In contrast, in commercial business models of scientific publishing, such services imply additional costs to the academic sector. Above all, the main competitive benefit of a model for Open Access such as the Latin American one, is that the benefit is universal. It is a collectively sustained Open Access for the common good.

Particularly, Redalyc, founded in 2003, is aimed to contribute to the sustainability of Open Access journal publishing, by providing diamond OA publications with training and technology. In this sense, it offers an infrastructure of services for evaluation of journal quality, XML JATS markup, editorial workflow to generate articles in different formats such as ePUB, HTML and PDF, full-text articles hosting and information retrieval search engines. It also provides micro-sites for institutions, authors, countries, journals and disciplines, interoperability and discovery services, metrics of use, co-authorship and productivity, as well as integration with Linked Open Data.

Redalyc has benefited hundreds of journals published by hundreds of institutions

4 *https://www.latindex.org/*
5 *https://www.redalyc.org/*
6 *https://scielo.org/*
7 *https://www.clacso.org/*
8 *http://amelica.org/*
9 *https://www.lareferencia.info/*

in the region, strengthening their internal editorial teams and absorbing the costs of developing and maintaining this technology, so that publishers do not have to outsource XML JATS markup, for example, so not to adopt commercial models such as APC. Although Redalyc emerged as a Latin American platform, in 2018 it decided to focus its efforts on strengthening Diamond Open Access by indexing journals from anywhere in the world, as long as they meet quality and editorial criteria. Currently, Redalyc holds a collection of 1,575 journals from 749 institutions from 31 countries and it hosts about 800 thousand full-text scientific articles on its platform.

Regarding AmeliCA, this initiative supported by UNESCO and led by Redalyc and CLACSO aims to articulate the dialogue with different actors in order to strengthen the recognition and sustainability of Diamond OA publishing and non-commercial Open Science. AmeliCA emerged in a concerning context where non-commercial approaches are under-valued and "transformative agreements" are taken as the means to achieve Open Access.

In this sense, a call for action to join forces for the strengthening of non-commercial Open Access models needs to be made and for which South-South collaboration is essential.

A good example of such efforts is the development of the updated version of the UNESCO Global Open Access Portal (*GOAP 2.0*, n.d.). It is a collaborative effort between UNESCO, Redalyc, the Indian Statistical Institute and AmeliCA, whose goal is to visualize and assess progress of Open Access across the world. It was developed under the guidance of a multi-stakeholder advisory committee.

Another instance that showcases the potential of South-South collaboration to advance non-Commercial Open Access is the cooperation of Angola (Oscar Ribas University) and Mexico (Autonomous University of the State of Mexico, Redalyc and AmeliCA) with a project supported by UNESCO and the Ministry of Higher Education, Science, Technology and Innovation of Angola. This work, entitled "Open Access and Open Data for Angola", included the draft of a National Recommendation for Non-commercial Open Access and Open Data, the development of a National Repository for Angola and capacity building for universities.

Discussion:

Many individual voices including Hillyer, Albornoz, Posada, Okune, Chan (2020); Albornoz, Okune, Chan (2020); Roh, Inefuku, Drabinski (2020); Raju, Claassen, Madini, Suliaman (2020); Aguado López, Vargas Arbeláez (2016) and groups such as AmeliCA (2019) or SPARC (Shockey, 2020) have risen up towards the need for structural inclusion,

epistemic justice and decolonization through Open Access. However, the efforts of multiple organizations in the world have focused on "transforming" scientific publishing from closed access (by subscription) to open access through commercial strategies (APC) that value the commercial exchange of knowledge.

Fortunately, BOAI20 (BOAI20 Steering Group, 2022) recognizes systemic problems, such as harms caused by proprietary infrastructure, commercial control of research access, commercial control of research assessment indicators, journal-based research metrics, journal rankings, journal business models that exclude authors on economic grounds (just as subscription journals exclude readers on economic grounds), embargoes on repository OA, publisher exclusive rights, among others.

The same way, the UNESCO Recommendation on Open Science (UNESCO, 2021) acknowledges that open science should promote inclusion and exchange of scholarly knowledge from traditionally underrepresented or excluded groups (such as women, minorities, indigenous scholars, scholars from less-advantaged countries and low-resource languages) and contribute to reducing inequalities in access to scientific development, infrastructures and capabilities among different countries and regions.

The approach of science as a global public good is able to endow scholarly communications with a more sustainable, inclusive and participatory future where everyone's word is treated with the same weight when considering someone is providing knowledge. The tradition that prevails in Latin America is perhaps one of the closest to the *science as a public good* paradigm. With a complex framework of collective sustainability, led and owned by the academic and public sectors.

It is possible that, by identifying and by recognizing current distortions collectively, the first steps in the construction of new solutions could be achieved. Nowadays, Open Access, in its asymmetries and paradoxes, offers the unique opportunity to build a model that finally considers science as a global public good.

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