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The SciELO library is now a national initiative, reasserting Brazil's commitment to open-access academic journals

FABRÍCIO MARQUES — illustrations JULIA JABUR

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The management and funding model of the electronic library SciELO Brasil, which is a groundbreaker in open access to academic journals created in the late 1990s, is being transformed with the goal of increasing the prestige and spread of scientific output in the country. Comprising 324 Brazilian journals across a range of knowledge areas and freely offering more than 500,000 scientific papers on the internet, the collection has been funded since August by a consortium of research support agencies, including the Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES), the Brazilian National Council for Scientific and Technological Development (CNPq) of the federal government, and FAPESP.

The principal change is that FAPESP, which promoted the library's creation with a pilot program of 10 journals in 1997 and was almost solely responsible for its funding for over 26 years, has opted to take a small step back in the makeup of the consortium and will now cover slightly less than half (47%) of the costs, alongside the federal government through CAPES (48%) and CNPq (5%). The implications of this rearrangement go beyond the enhanced sponsorship of the collection curated by SciELO, which stands for the Scientific Electronic Library Online and sees the library transformed into a national-level initiative, with a role in Brazil's policies on open access and open science, a concept also encompassing the opening up and sharing of research data, principles, transparent practices, and solid collaboration.

A management committee has been set up with representatives of the three agencies and the library, which, in one year, will formulate new strategies and objectives. Suggestions for increasing the size of the collection and international visibility of the periodicals are on the ta-

ble. "One idea is to create quality metrics to help the journals augment the impact and spread of the articles they publish, setting awards for the best-classified titles in their knowledge areas to improve even further, and goals to raise the bar for the others," says FAPESP scientific director and geneticist Marcio de Castro Silva Filho.

The debate is still in the preliminary phase, but the proposal is to offer prestigious journals for Brazilian researchers from across different disciplines to disseminate their scientific work. "We want to strengthen the SciELO library so it has more journals and more impact," says CAPES president, physician Denise Pires de Carvalho. The collection continues to offer a digital platform for periodicals and ensures that they meet a list of quality criteria in line with international requirements related to the formatting of documents, the frequency of publication, the use of English as the language for articles, increasing the number of overseas authors, peer review, and the establishment of editorial boards.

"The aim is to promote professionalism, internationalization, and sustainability in the journals," explains Abel Packer, who created the collection in 1997 with biochemist Rogério Meneghini and is still its director. He notes, "The management transition is taking place with a minimum of impact on the library's operation". Instead of being managed by a researcher leading a project funded by FAPESP, as has been the norm since its inception, the library will now be governed by a management committee. The Federal University of São Paulo's Support Foundation (FAP-UNIFESP) will continue to lead project execution. Another change under discussion is to transform the library structure to give its journals the same kind of support as a publishing house would and engage more partners to contribute to its maintenance, such as ministries, research foundations, organizations, and companies.

According to Packer, this consortium of agencies has been possible thanks to FAPESP mobilizing to provide national scope to the initiative and the federal government being open to the idea. He explains, “Last year, CAPES began to adopt a policy for open access and open science and to formulate a wider strategy to deal with Brazilian scientific production appropriate to SciELO”.

An arm of the Ministry of Education, CAPES, is a federal government foundation responsible for funding scholarships and evaluating graduate programs in Brazil; the agency has long influenced the course of academic publications. Approximately two decades ago, CAPES adopted a scientific journal classification system known as *Qualis-periodicos*, which was used to assess output quality among students and teaching staff on Brazilian master’s and PhD pathways and define the number of scholarships for the programs. There have been recent changes in the evaluation model for use of this ranking (*see sidebar*), but retrospective analysis has shown that the CAPES classification discouraged graduate students and teaching staff from submitting manuscripts to most of the journals indexed on

SciELO because few of them were well regarded on the Qualis scale. “It’s important that more Brazilian journals become the first option for our researchers when publishing their work,” says CNPq president, physicist Ricardo Galvão.

In fact, only a small proportion of the journals in the collection have an impact comparable to that of internationally renowned titles in their areas. The impact of a journal is measured on the bibliometric indicators calculated by international platforms, which are based on the number of citations that its articles receive in other publications. One problem is that some Brazilian vehicles mostly divulge regional-level papers, which, while relevant, are rarely cited in noteworthy international journals on platforms, and there are authors who produce only incremental results, not attracting the interest of other researchers.

CAPES also deals with academic publications in another of its programs: the *Portal de Periódicos* (Periodicals Portal), which allows researchers from public institutions and universities to access content from thousands of international journals. To pay subscriptions or remunerate publishing houses that franchise their publications, the agency invested R\$546 million last year alone and has recently sought to close new types of deals with

Changes in sight

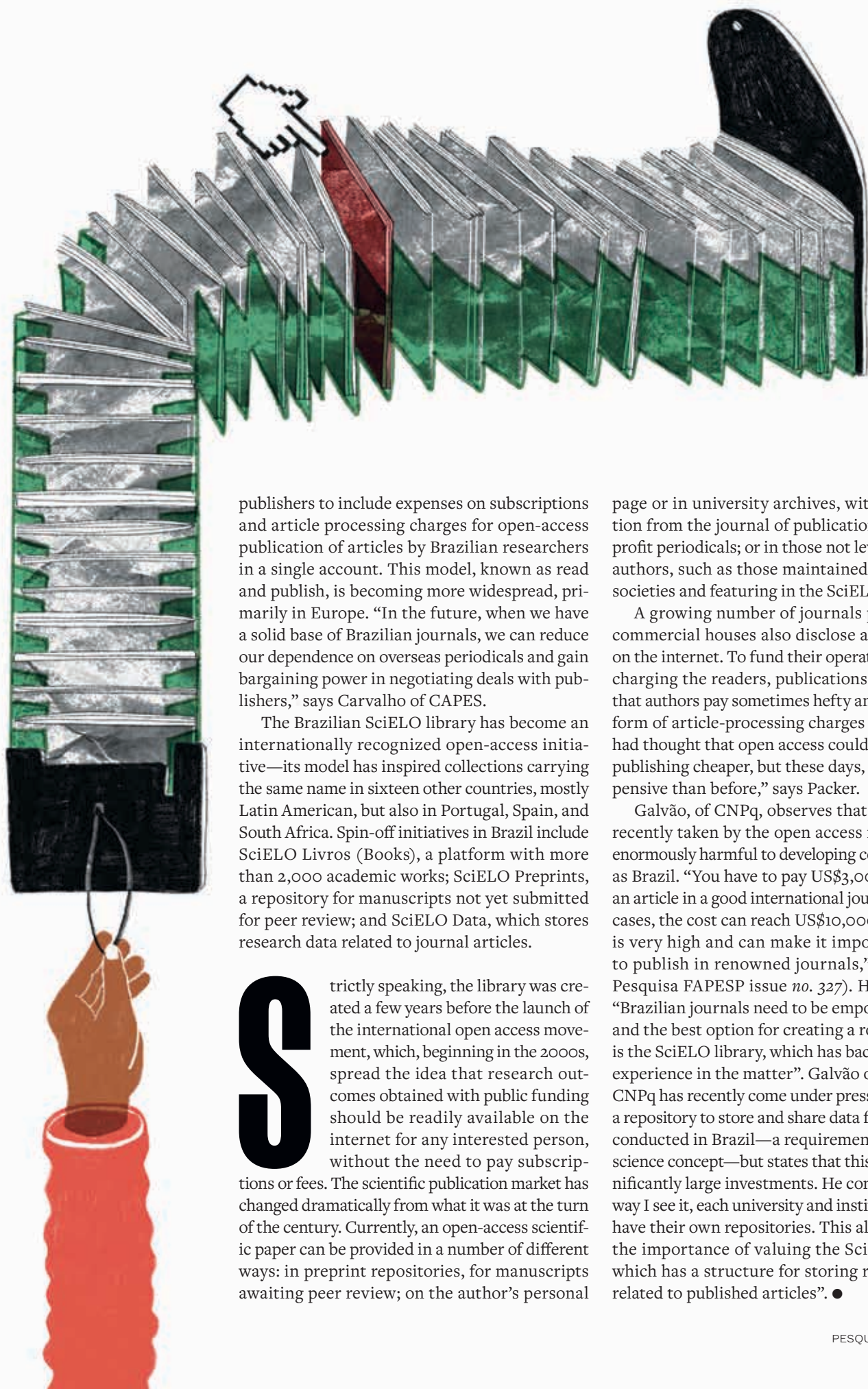
A system that ranks scientific journals will be replaced by classification with a direct focus on articles

The CAPES *Qualis-periodicos* system for classifying scientific journals will no longer be used to appraise the output of graduate students and teaching staff in Brazil during the quadrennium 2025–2028, according to the institution’s assessment director Antonio Gomes de Souza Filho. He explains, “This is a concept shift; evaluation now focuses on the quality and classification of the article, and not just the bibliometric performance of the scientific journal in which it was published”. The proposal, which was approved in early October by the CAPES TechnicalScientific Higher Education Board, involves three new article classification procedures that may be combined depending on what the heads of each knowledge area define.

First, the bibliometric indicators of the journal in which the article is published, such as its citations, are taken into account. “Certain principles of Qualis continue, but we will no longer have that list of journals,” says the director. The second procedure involves combining article citation rates with their alternative indicators, or “altmetrics,” such as mentions on websites and social networks, and the number of downloads, in addition to qualitative criteria of the journal in which they are published, for example, valuing open-access journals of good quality or national relevance, per those indexed in the SciELO collection. There is no focus on metrics in the third procedure but rather on the qualitative evaluation of each

article, observing, for example, its scientific contribution and theoretical impact.

“With this widening of procedures, the new methodology makes for a more accurate appraisal of different articles published in the same journal. Instead of attributing them with the same classification on the basis of the impact of the journal, the specific contributions that each one promotes can be identified. We see this as an important development,” says Souza Filho. The methodology will be applied to the evaluation set to be completed in 2029. CAPES is expected to publish guidelines, with details of each procedure, in March 2025. SARAH SCHMIDT



publishers to include expenses on subscriptions and article processing charges for open-access publication of articles by Brazilian researchers in a single account. This model, known as read and publish, is becoming more widespread, primarily in Europe. “In the future, when we have a solid base of Brazilian journals, we can reduce our dependence on overseas periodicals and gain bargaining power in negotiating deals with publishers,” says Carvalho of CAPES.

The Brazilian SciELO library has become an internationally recognized open-access initiative—its model has inspired collections carrying the same name in sixteen other countries, mostly Latin American, but also in Portugal, Spain, and South Africa. Spin-off initiatives in Brazil include SciELO Livros (Books), a platform with more than 2,000 academic works; SciELO Preprints, a repository for manuscripts not yet submitted for peer review; and SciELO Data, which stores research data related to journal articles.

Strictly speaking, the library was created a few years before the launch of the international open access movement, which, beginning in the 2000s, spread the idea that research outcomes obtained with public funding should be readily available on the internet for any interested person, without the need to pay subscriptions or fees. The scientific publication market has changed dramatically from what it was at the turn of the century. Currently, an open-access scientific paper can be provided in a number of different ways: in preprint repositories, for manuscripts awaiting peer review; on the author’s personal

page or in university archives, with authorization from the journal of publication; in not-for-profit periodicals; or in those not levying fees on authors, such as those maintained by scientific societies and featuring in the SciELO collection.

A growing number of journals published by commercial houses also disclose articles freely on the internet. To fund their operations without charging the readers, publications now require that authors pay sometimes hefty amounts in the form of article-processing charges (APCs). “We had thought that open access could make article publishing cheaper, but these days, it is more expensive than before,” says Packer.

Galvão, of CNPq, observes that the pathway recently taken by the open access movement is enormously harmful to developing countries such as Brazil. “You have to pay US\$3,000 to publish an article in a good international journal; in some cases, the cost can reach US\$10,000. The outlay is very high and can make it impossible for us to publish in renowned journals,” he says (*see Pesquisa FAPESP issue no. 327*). He continues, “Brazilian journals need to be empowered more, and the best option for creating a robust system is the SciELO library, which has background and experience in the matter”. Galvão observes that CNPq has recently come under pressure to create a repository to store and share data from research conducted in Brazil—a requirement of the open science concept—but states that this requires significantly large investments. He concludes, “The way I see it, each university and institution should have their own repositories. This also highlights the importance of valuing the SciELO library, which has a structure for storing research data related to published articles”. ●