

Academy-owned non-profit scholarly publishing: an approach to achieve an inclusive and sustainable Scholarly Communications

Arianna Becerril García

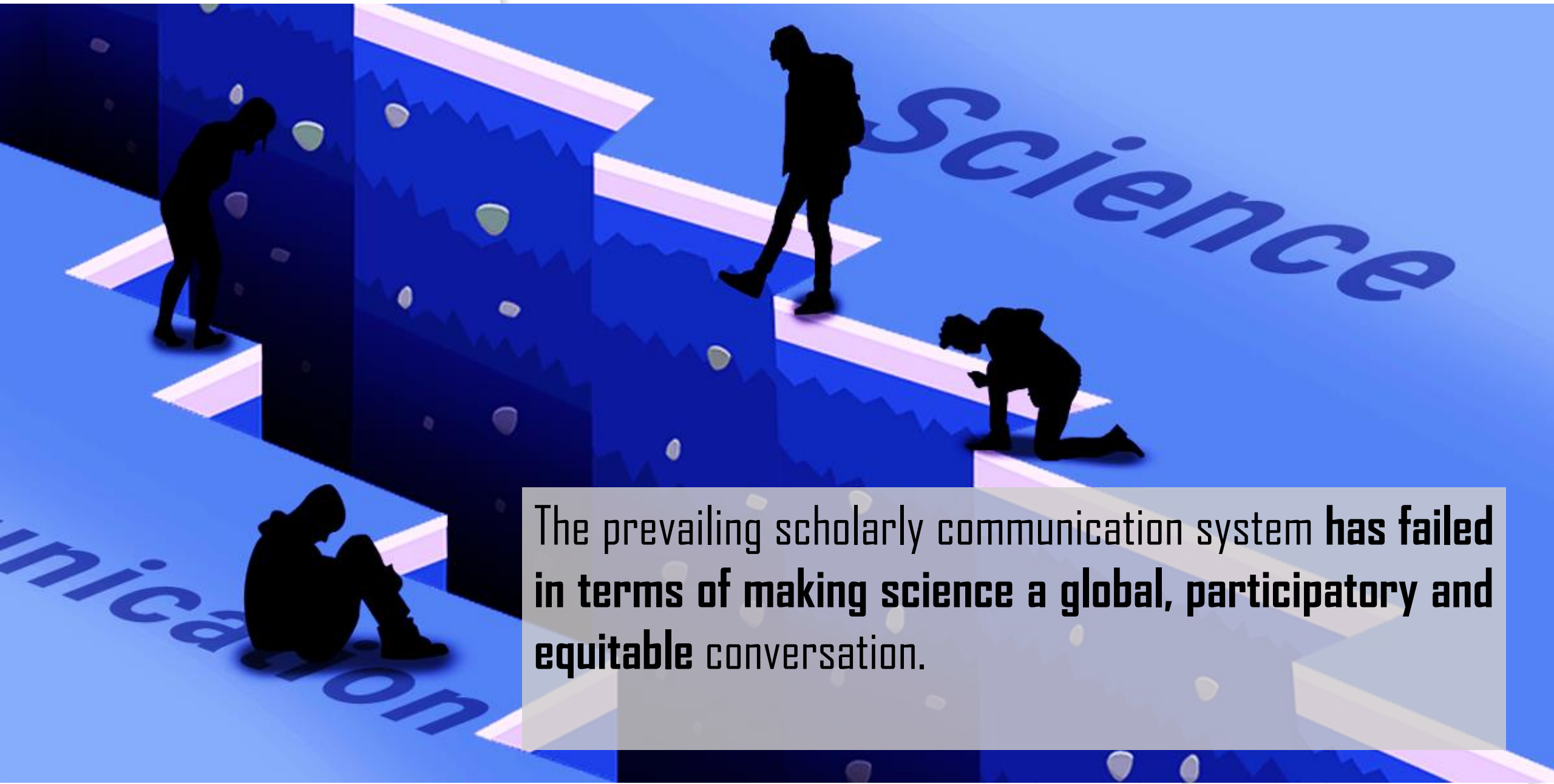
JNSO
2019

Deuxièmes **Journées Nationales
de la Science Ouverte**

18-19 novembre 2019
Paris, France



**OUVRIR
LA SCIENCE !**



The prevailing scholarly communication system **has failed** in terms of making science a global, participatory and **equitable** conversation.

CONTEXT: Exclusive and deficient research assessment

It is critical to understand that the Journal Impact Factor has a number of well-documented deficiencies as a tool for research assessment.

Quantitative metrics cannot replace qualitative evaluation, nor can they make the contributions of local research visible.

The best ranked publications are usually for-profit and the research assessment systems reward publishing in them.

CONTEXT: ineffective transition to the digital age

346 years later ...

Find the differences

Newton, Isaac (1671)
New theory
about light and colors.
Philosophical Transactions,
6(80)

(3075) Numb. 80.
**PHILOSOPHICAL
TRANSACTIONS.**

February 19. 1671.

The CONTENTS.

A Letter of Mr. Isaac Newton, Mathematick Professor in the University of Cambridge; containing his New Theory about Light and Colors: Where Light is declared to be not Similar or Homogeneous, but consisting of diſform rays, ſome of which are more refrangible than others: And Colors are affirm'd to be not Qualifications of Light, deriv'd from Refractions of natural Bodies, (as 'tis generally believ'd;) but Original and Connate properties, which in divers rays are divers: Where ſeveral Observations and Experiments are alledged to prove the ſaid Theory. An Account of ſome Books: I. A Deſcription of the EAST-INDIAN COASTS, MALABAR, COROMANDEL, CEYLON, &c. in Dutch, by Phil. Baldaeus. II. Antonii le Grand INSTITUTIO PHILOSOPHICÆ, ſecundum principia Renſi Des-Cartes; novâ methodo adornata & explicata. III. An Eſſay to the Advancement of MUSICK, by Thomas Salmon M.A. Advertisement about Thæon Smyræus. An Index for the Traills of the Year 1671.

A Letter of Mr. Isaac Newton, Proſſor of the Mathematicks in the University of Cambridge; containing his New Theory about Light and Colors: ſent by the Author to the Publiſher from Cambridge, Febr. 6. 1671; in order to be communicated to the R. Society.

S I R,
TO perform my late promiſe to you, I ſhall without further ceremony acquaint you, that in the beginning of the Year 1666 (at which time I applyed my ſelf to the grinding of Optick glaſſes of other figures than Spherical,) I procured me a Triangular glaſs-Prisme, to try therewith the celebrated *Phænomena of Colours.*
G B B B

HERRERO OLARTE, S. (2017). Regionalismo abierto y nueva integración, ¿qué modelo genera más integración... Cuadernos Geográficos 56(2), 94-110

94

Regionalismo abierto y nueva integración, ¿qué modelo genera más integración comercial en Sudamérica?

SUSANA HERRERO OLARTE¹ ✉

Recibido: 04/10/2016 | Aceptado: 26/04/2017

Resumen

Sudamérica ha experimentado recientemente dos modelos de integración en el proceso de globalización económica. En los noventa, el regionalismo abierto priorizaba el crecimiento del comercio y promovía para ello el libre mercado y la mínima intervención del Estado. En el siglo XXI, la nueva integración proponía un comercio intrarregional capaz de crecer y generar beneficios más allá de los económicos apoyándose para ello en la UNASUR. Ambos modelos conviven en el discurso y podrían llegar a complementarse en la práctica pero, más allá de la teoría ¿cuál ha generado una mayor integración comercial? La aplicación de varios índices muestra cómo el intercambio entre países sudamericanos era mayor en los noventa que en el siglo XXI por la irrupción de China en el mercado, que ha absorbido en los últimos años parte importante del comercio regional, lo que invita a considerar que el regionalismo abierto ha generado más integración comercial que la nueva integración, seducida por las oportunidades desde el exterior.

Palabras clave: Regionalismo abierto; nueva integración; comercio intrarregional; integración comparada; UNASUR.

Abstract

Open Regionalism and New Integration, What Model Generates More Trade Integration In South America?

South America has recently experienced two models of integration in the process of economic globalization. In the nineties, opened regionalism prioritized growth in trade through free market and the minimum governmental intervention. In the 21st century, the integration model known as new integration proposed to raise intraregional generating benefits beyond the economic ones. Both models coexist and even they could complement each other but beyond the theory, which has generated a major commercial integration? The application of several indexes shows how the exchange between South American countries was major in the nineties that in the 21st century because of the irruption of China on the market, which it has absorbed in the last years part of regional trade. It invites to think that opened regionalism has generated more commercial integration than new integration, seduced by the opportunities from abroad.

Keywords: Open regionalism; new integration; intraregional trade; compared integration; UNASUR.

1. Centro de Investigaciones Económicas y Empresariales (CIEE). Facultad de Ciencias Económicas y Empresariales (FACEA). Universidad de las Américas, Quito, Ecuador. olartesusana@hotmail.com

Herrero, Susana (2017)
Regionalismo abierto
y nueva integración (...)
Cuadernos Geográficos,
56(2).

Different paradigms to address Open Access

Focused on commercial publishers

Aim to eliminate pay-to-read business model



Open, scholarly-led, non-profit communication system

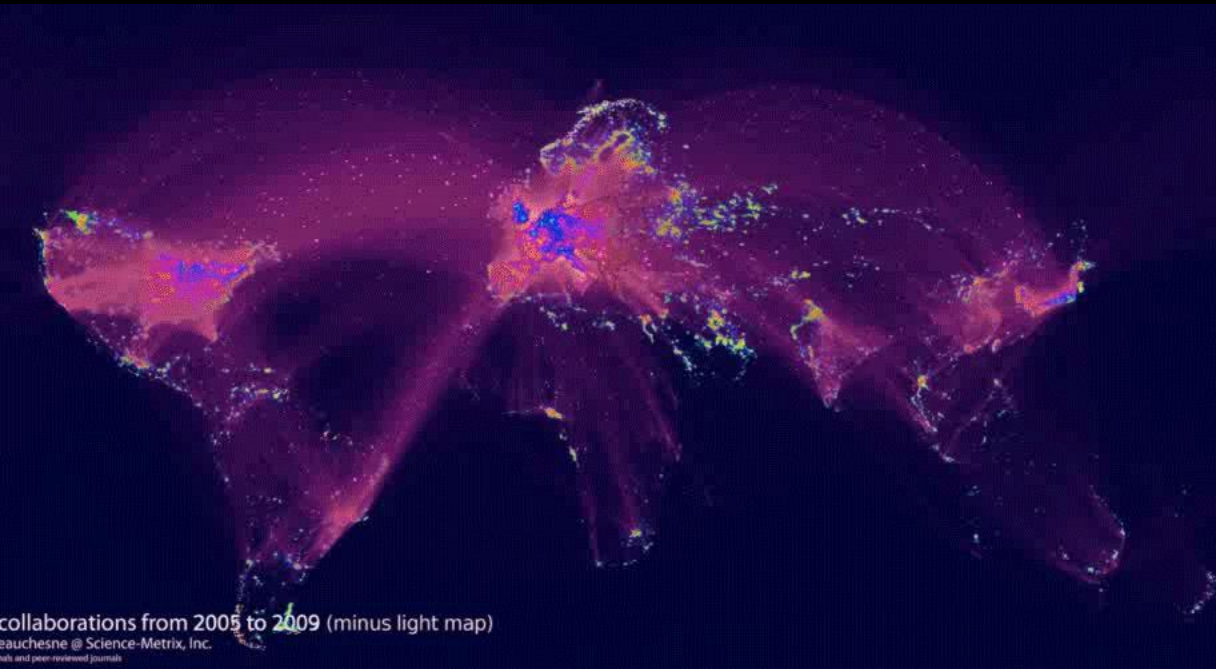
Neither a cost for readers nor for authors



Different resultant subsystems of science communication

- How could they interact without cause other forms of exclusion?
- How could they coexist if the big funding flow is directed unequally?
- If one subsystem is altered to emulate other, new concepts, rules and values will appear with side effects varying from the weakening of the original subsystem's strength to its complete disruption and disappearance.

Analyzing scientific collaborations



Based on Scopus

Map of scientific collaborations from 2005 to 2009
Computed by Olivier H. Beauchesne @Science-Metrix, Inc.



Based on Redalyc

Map of scientific collaborations from 2005 to 2011
Computed by Redalyc, 2019



We must think about:

Property

1

There is no guarantee that what it is open now,
will continue open.
Specially if authors do not hold copyright.

Sustainability

2

Is it OA long-term guaranteed?
Is it non- profit OA sustainable?

Research assessment

3

Is it science fairly assessed?
Are there OA platforms included in assessment
criteria?

Funding

4

Are new forms of exclusion emerging?

What **role will the academy play** to face this challenge?

What will be the role of **libraries**?

What will be the role of **researchers**?

What will be the role of **funders**?

What will be the role of **platforms**?

What will be the role of **publishers**?

“

The cost of communicating scientific research is a tiny fraction of the cost of research, somewhere between 1% and 2%.

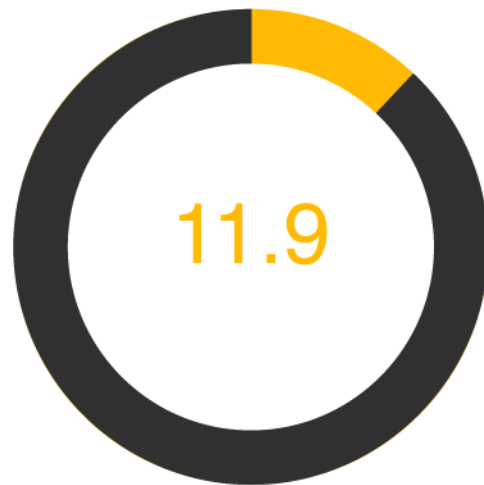
So why should we ask that particular phase of the research cycle to obey financial rules couched in terms of “sustainability” while the **overwhelming part of scientific research has to be constantly subsidized?**

”

Jean-Claude Guédon

Academy-owned publishing seems not to exist in the mainstream databases

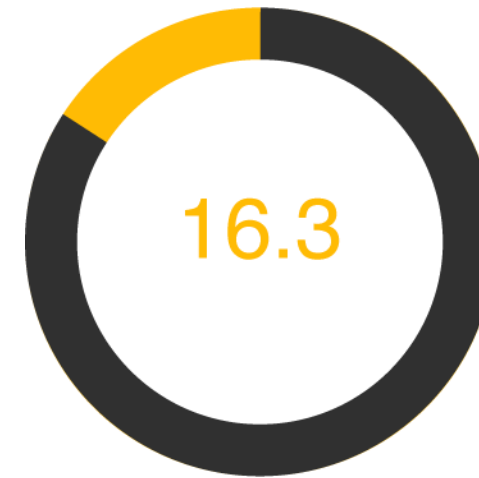
Academy-owned journals in WoS



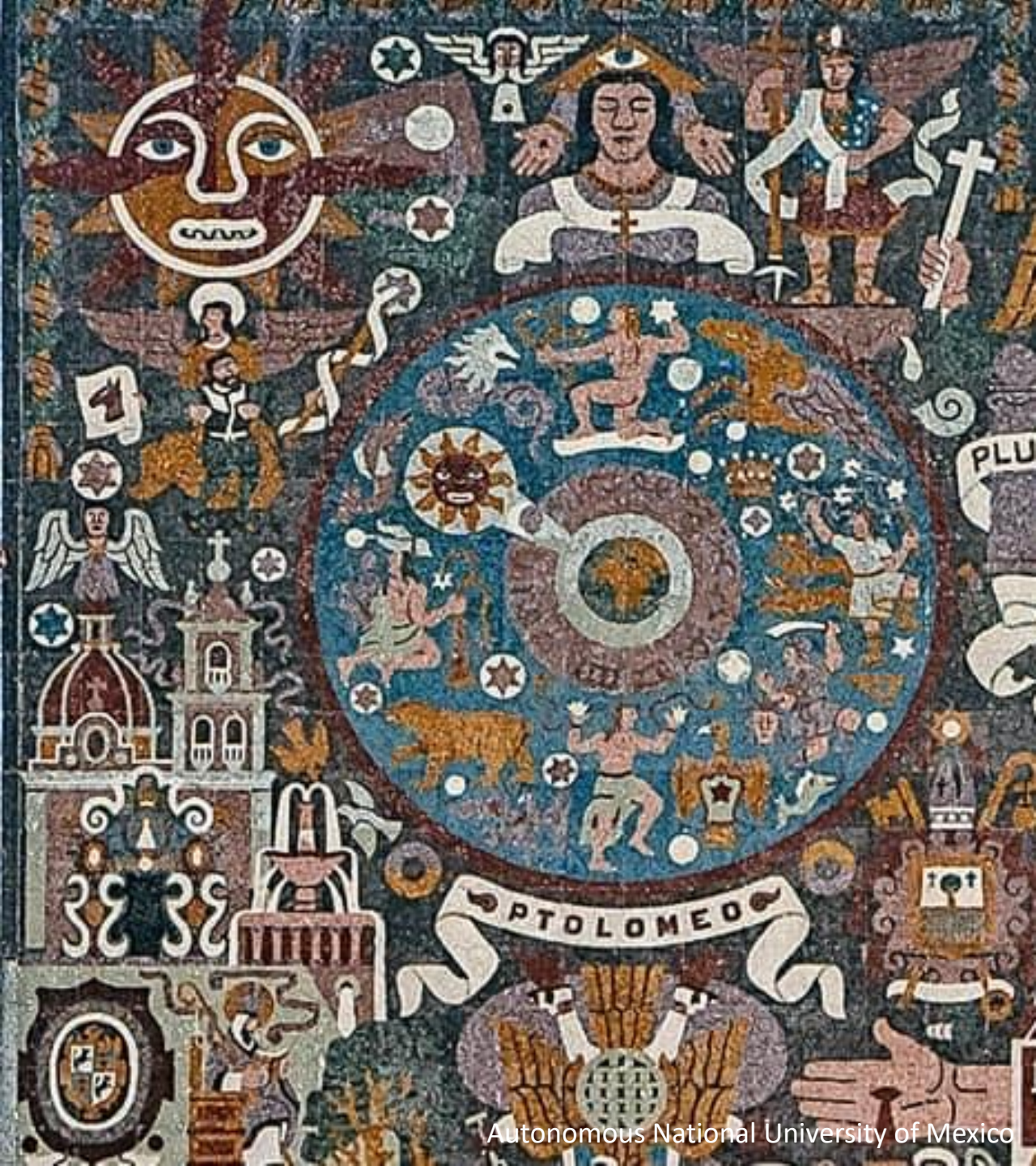
6,3% Science Citation Index;
14,6% Social Sciences Citation Index;
33,8% Arts & Humanities Citation Index.

Repiso, Rafael; Orduña-Malea, Enrique; Aguaded, Ignacio (2019). "Revistas científicas editadas por universidades en *Web of Science*: características y contribución a la marca universidad". *El profesional de la información*, v. 28, n. 4, e280405. <https://doi.org/10.3145/epi.2019.jul.05>

Academy-owned journals in Scopus



CiteScore2019



Latin America has created
and maintains a non-
commercial structure
where **scientific
publishing belongs to
academic institutions and
not to large publishers**

Every institution supports journals that are driven by their own faculty members, and then that content is made available in OA.

Everyone gets benefit from everyone's investment.



A fee has not been included
neither for authors nor for
readers in the regional editorial
tradition.

Open Access Environment in Latin America

Key factors:

Cooperation
Networking
Crowdsourcing
Open source software
In-house software
Free software
International
collaboration



Nonprofit platforms of
visibility, edition, quality
assurance, metrics

Nonprofit institutional journal
portals and repositories
Mainly public institutions

Nonprofit institutional journal
publishing
Mainly public institutions

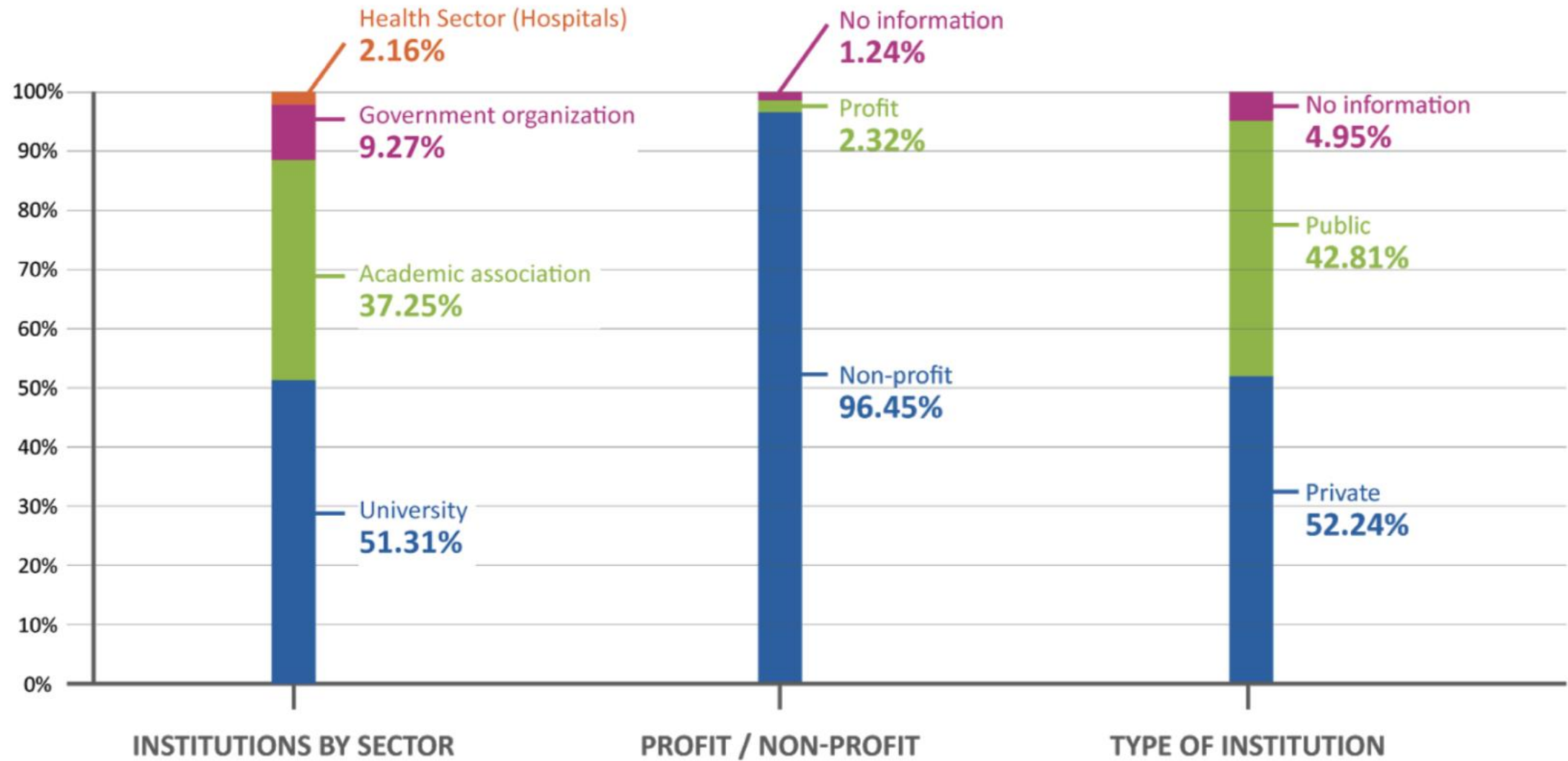
Scholarly-led scientific communication system

Nonprofit, mainly public – funded scientific communication system



3.321 journal installations

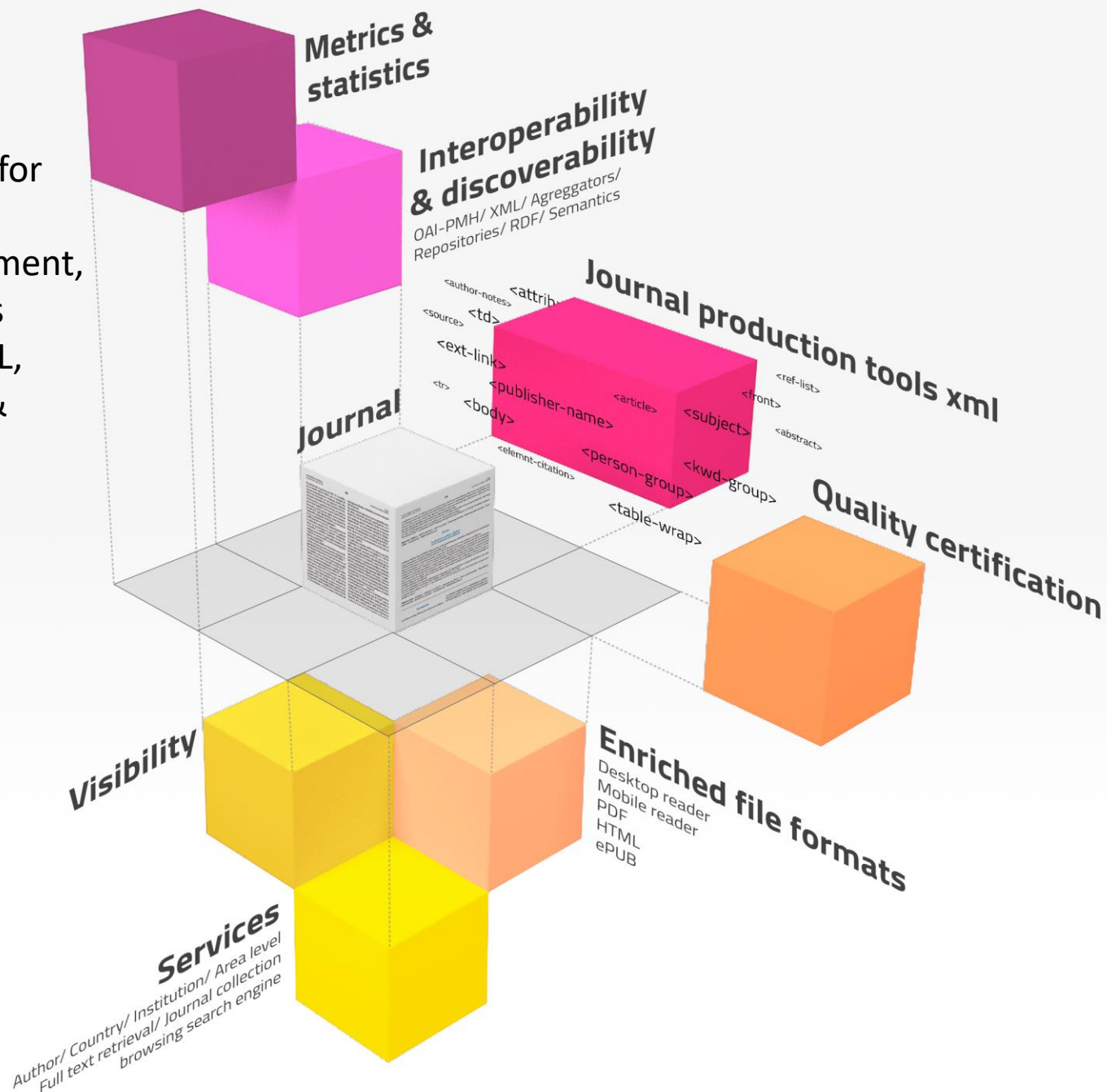
Who sustain the non-profit publishing in Latin America?





An infrastructure that supports academy-owned non-profit scholarly publishing **by providing technology and sharing knowledge** that contributes to the sustainability of non-commercial Open Access

An OA platform for
journal visibility,
quality improvement,
production tools
(XML, PDF, HTML,
ePUB, desktop &
mobile readers)

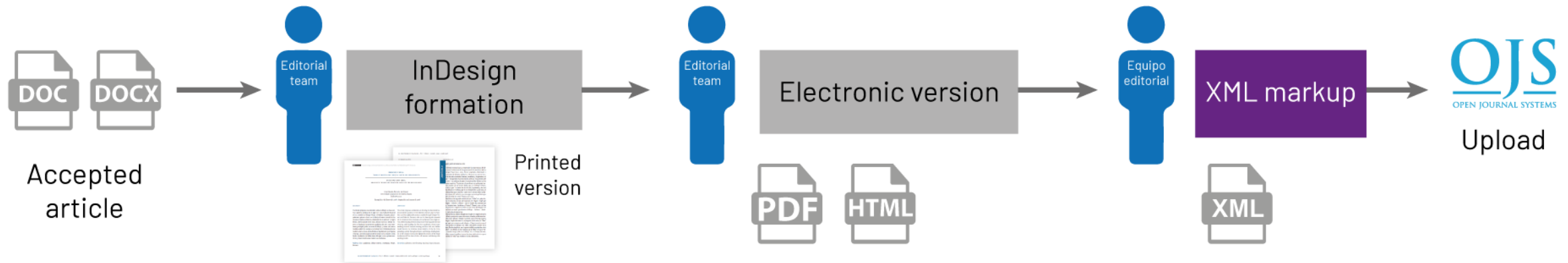




Redalyc  AmeliCA

For a non-profit publishing model to preserve the scholarly and open nature of scientific communication

Traditional article processing

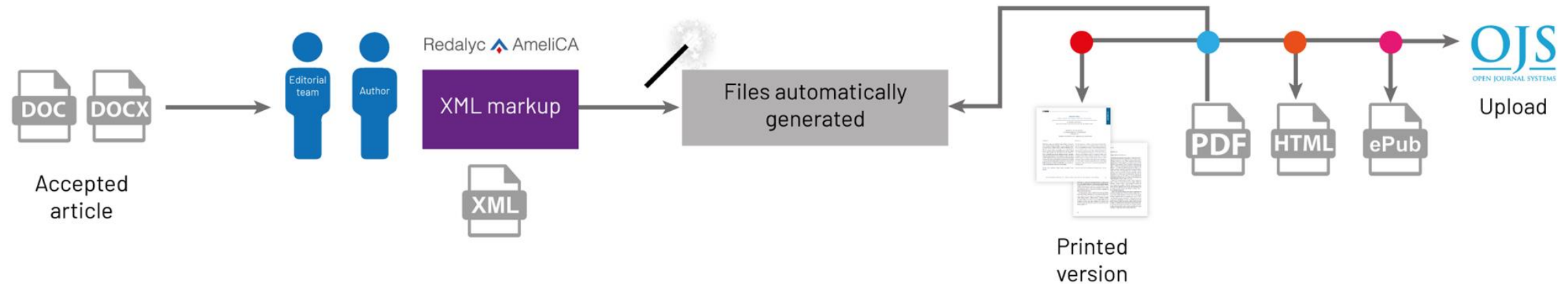


60 - 65 EUR / article

11 - 13 hr / article

Production costs

Article Processing with Redalyc/AmeliCA as infrastructure



6 -7 EUR / article

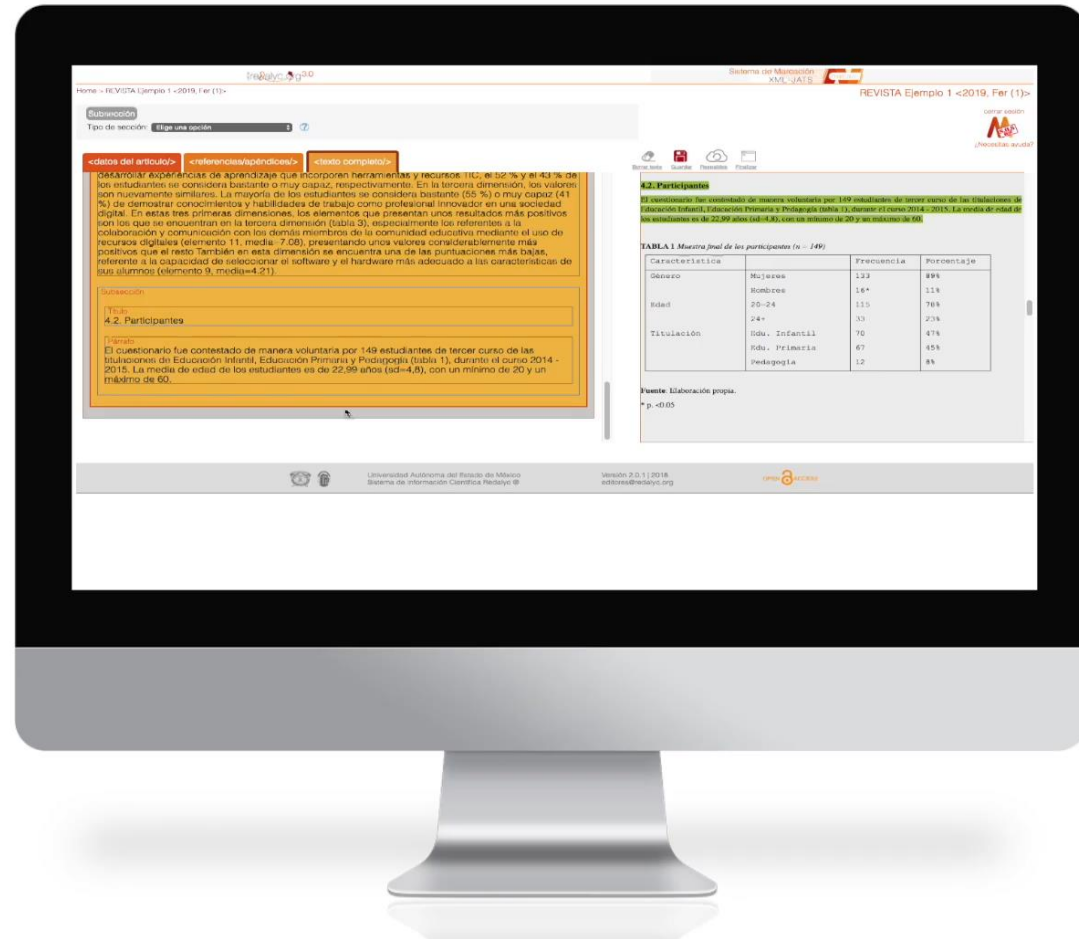
2 - 2.5 hr / article

89% Cost savings

Open Data

Replicability

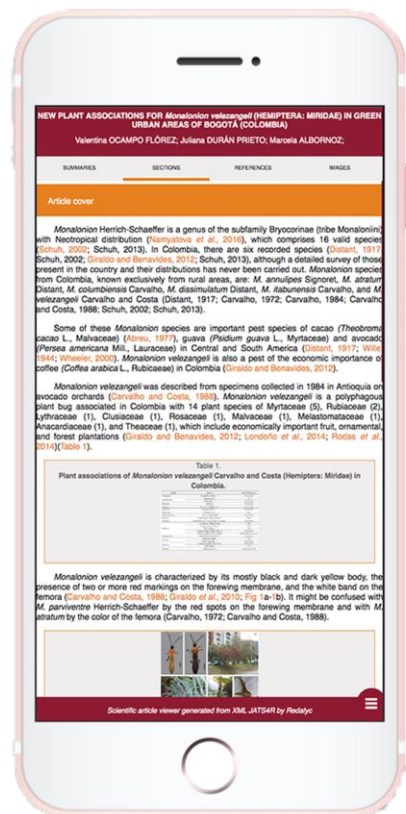
necessary condition in science



Mathematical expressions
tagging with MathML

XML tagging of tables and
data

XML tagging of annexes and
supplementary material



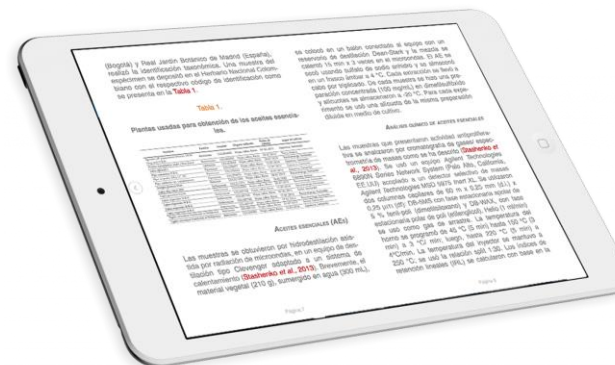
Interactive article reader



HTML



PDF



ePUB

Mobile article reader

XML JATS 4R

Self-classification of information
Improved reading experience
Illustration of items
Intelligent information retrieval

Before: without XML

Redalyc.org Sistema de Información Científica Redalyc
Red de Revistas Científicas de América Latina y el Caribe, España y Portugal

Inicio > Colección de revistas > Revista El Artista English

El Artista

ISSN electrónico: 1794-8614
Anual
Año
Universidad Distrital Francisco José de Caldas
Colombia

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Indicadores de impacto 2005-2015

Artículos

Año	NÚMEROS
2016	(13)
2015	(12)
2014	(11)
2013	(10)
2012	(9)
2011	(8)
2010	(7)
2009	(6)
2008	(5)
2007	(4)
2006	(3)
2005	(2)
2004	(1)

Esp. Número Especial, Sup. Suplemento, Dob. Número Doble

Sistema de Información Científica Redalyc
Red de Revistas Científicas de América Latina y el Caribe, España y Portugal
Versión 2.2 beta | 2015

After: with XML

Redalyc.org

Estudios de Cultura Maya

Revista Activa
ISSN: 0195-2574
Semestral
Estudios Culturales
Universidad Nacional Autónoma de México
México

Revista en DOAJ

Artículos

Normas para autores
Características de la publicación
Página de la revista
Sitio web de la institución editora
Indicadores de la revista
Contacto

Artículos

cultura maya
cerámica mayas
yucatán
arqueología
chiapas

113 artículos en coautoría
0.4 índice de internacionalización

2017, XLIX | 2016 | 2015 | 2014 | 2013 | 2012 | ver todos

Canón: una ciudad portuaria en el río de La Pasión
Horacio Martínez Paiz, Arthur A. Domarest, Chibé Andrieu, Paola Torres, Milane Forné

Resumen: Canón fue una ciudad trascendental para el intercambio comercial a larga distancia durante el Clásico Tardío. Parece que fue el puerto más significativo de las Tierras Bajas Mayas del Sur. Múltiples hallazgos han documentado la importancia y la naturaleza internacional de este asentamiento, que constituyó la cabeza de navegación del río de La Pasión y a la vez, el centro fronterizo donde se los roles seculares del Atlatlan y las ciudades de las Tierras Bajas Mayas de Petén. En más, entre...

Los mayas de los Altos de Chiapas y sus vecinos occidentales: interacción, identidad e intercambio en una frontera cultural
Elizabeth H. Parra, Roberto López Bravo

La tortuga en Tabasco: comida, identidad y representación

In numbers ...

1260
indexed journals

22
countries

622
Publisher institutions

0.6 Million
Full-text articles

10 million
article downloads per month

54.000
Redalyc daily users

1.5 million authors from
10.000 institutions



Unfortunately ...

A black and white photograph of a railway track with a switch, overlaid with an orange semi-transparent band. The text is white and positioned in the upper half of the image.

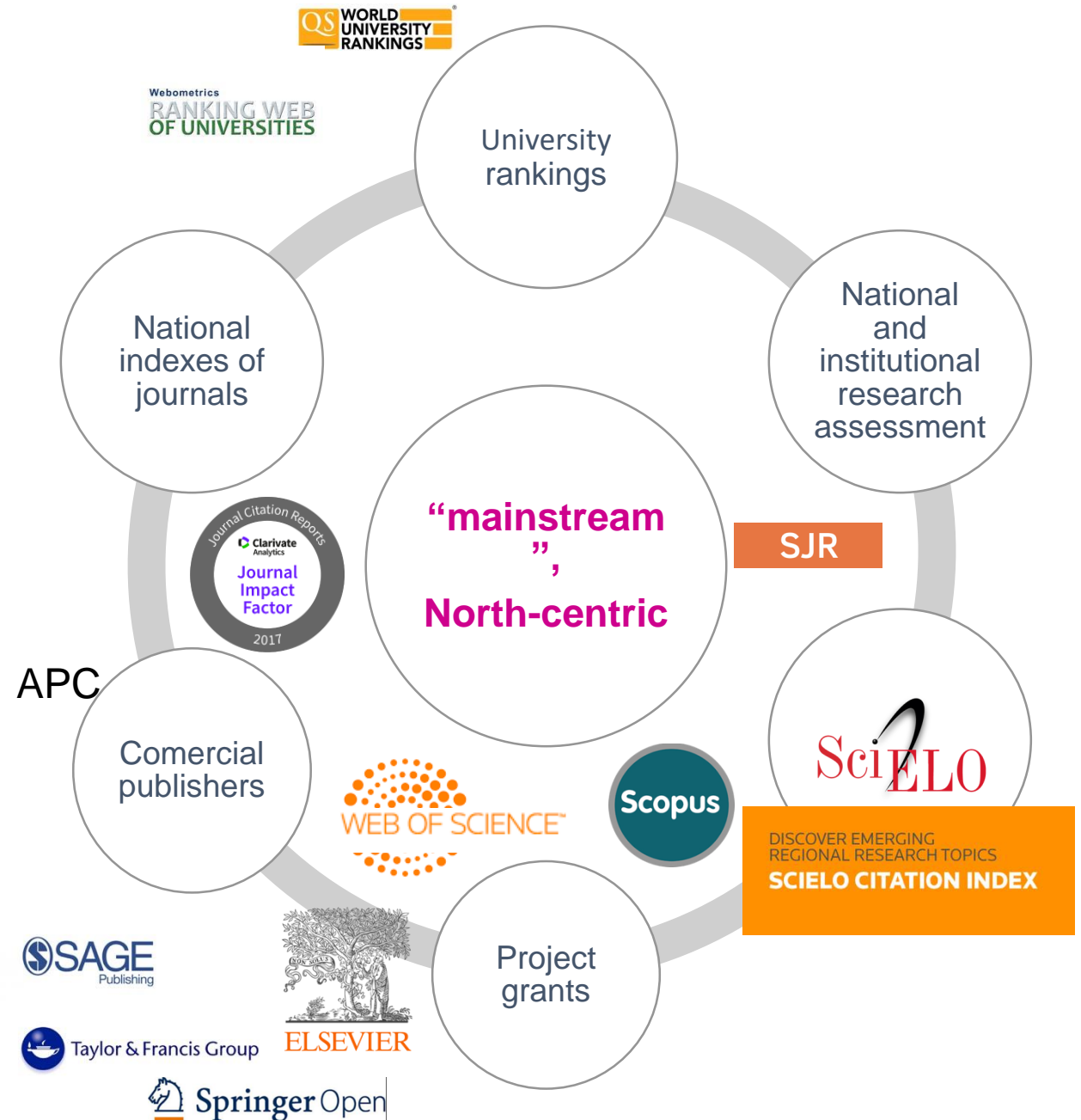
The Latin American OA landscape is being fragmented

Different OA approaches

Approach 1: Dependent on Mainstream-metrics and Commercial Open Access

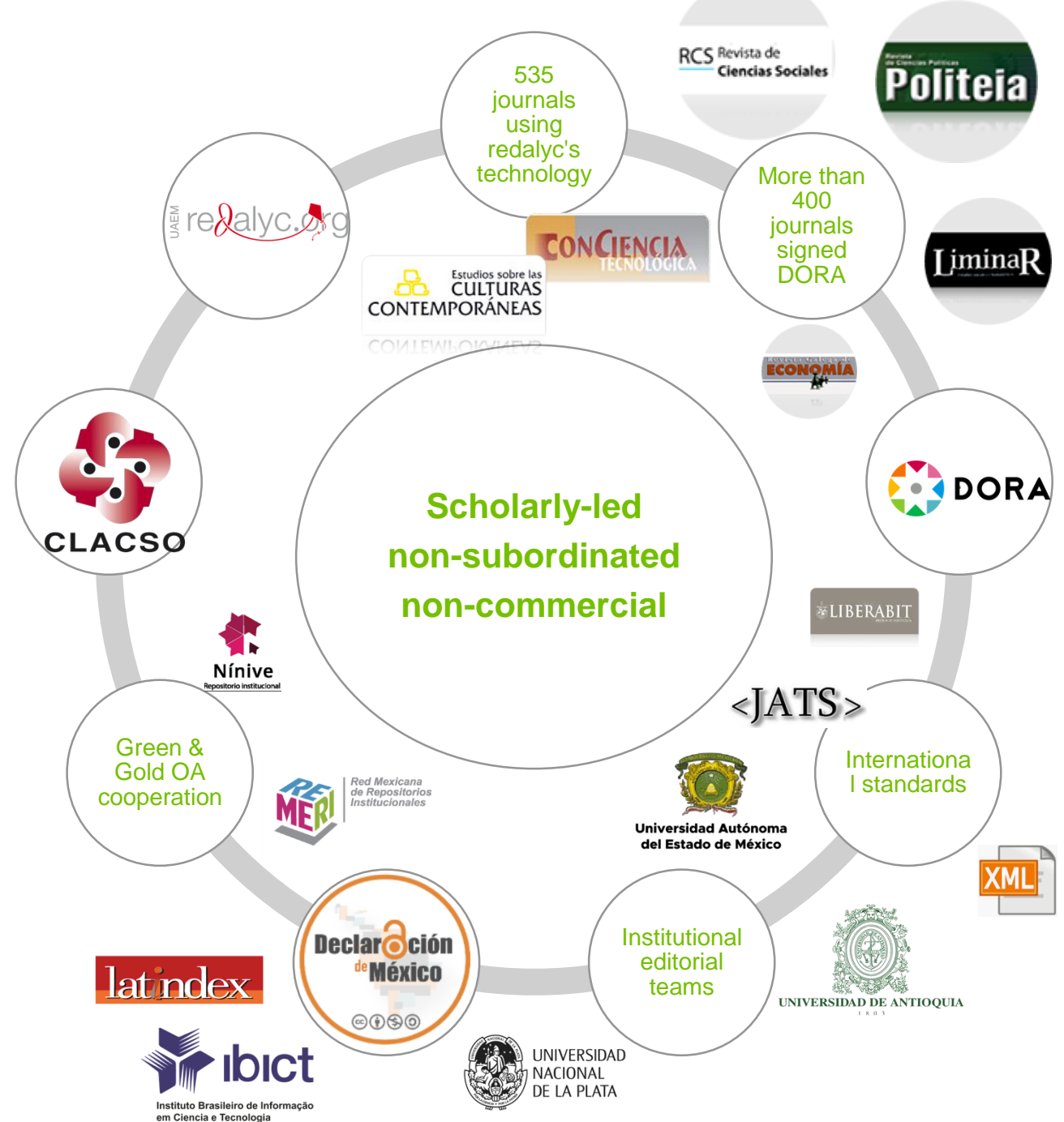
- Research assessment based on IF (JCR) or SJR (Scopus) as the most important metrics.*
- Favours APC bussiness model (inherited from the Global North becoming attractive for Latin American journals)
- Language criteria that disqualify publishing in local languages

*SciELO's agreement with Clarivate Analytics to generate Scielo Citation Index



Approach 2: Scholarly-driven Scientific Communication and Non-commercial OA

- **Scholarly-driven publications and repositories**
This approach seeks to strengthen publishers inside universities by empowering editors with technology and training in favor of the sustainability of OA
- **Non-commercial OA**
-More than 500 journal publisher institutions adopting tools provided by Redalyc to keep the non-commercial nature of their processes and to avoid APCs.
- **Research Assessment**
- Efforts towards finding a better way to assess scientific research (Redalyc metrics, UdeA metrics)
- More than 600 journals signed DORA (Redalyc's additional mandatory requirement)
- **Intellectual Property**
- Publishers allow authors to hold the copyright without restrictions



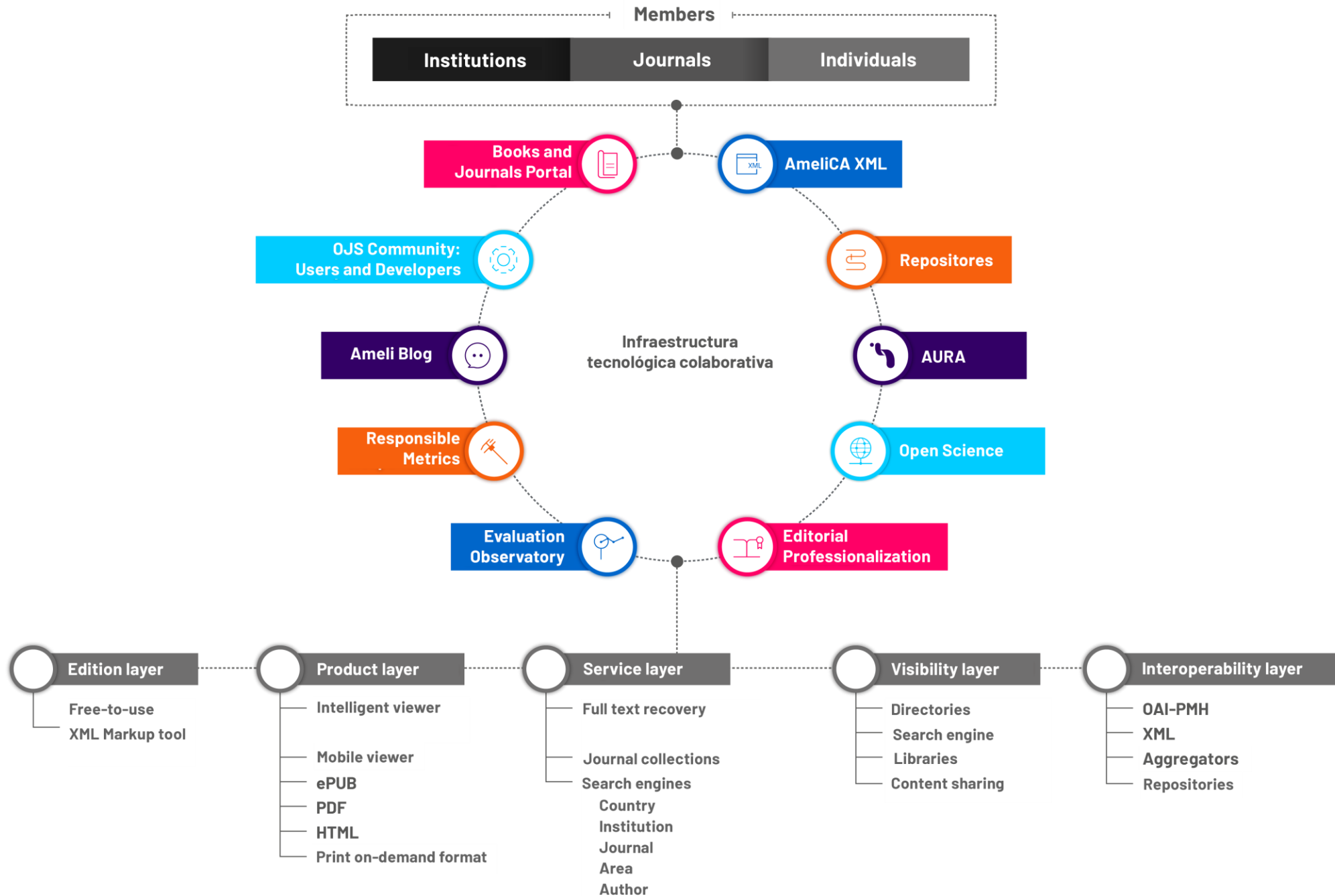
So, we had to act in response...

A decision made to take advantage of the regional ecosystem, technology, knowledge and experience of multiple organizations so that the **scholarly communication remains in control of the academy and that avoids losing subsidies** by choosing a shift to address Open Access with commercial mechanisms such as the APC.

AmeliCA is a **multi-institutional community-driven** initiative supported by UNESCO and led by Redalyc and CLACSO, that arises in response to the international, regional, national and institutional contexts of Open Access, which seeks a **cooperative, sustainable, protected and non-comercial solution for Open Knowledge.**







Journals participating in this model have the following:



Peer-review and editorial quality



Open Access policy free of publishing or processing costs (APC)

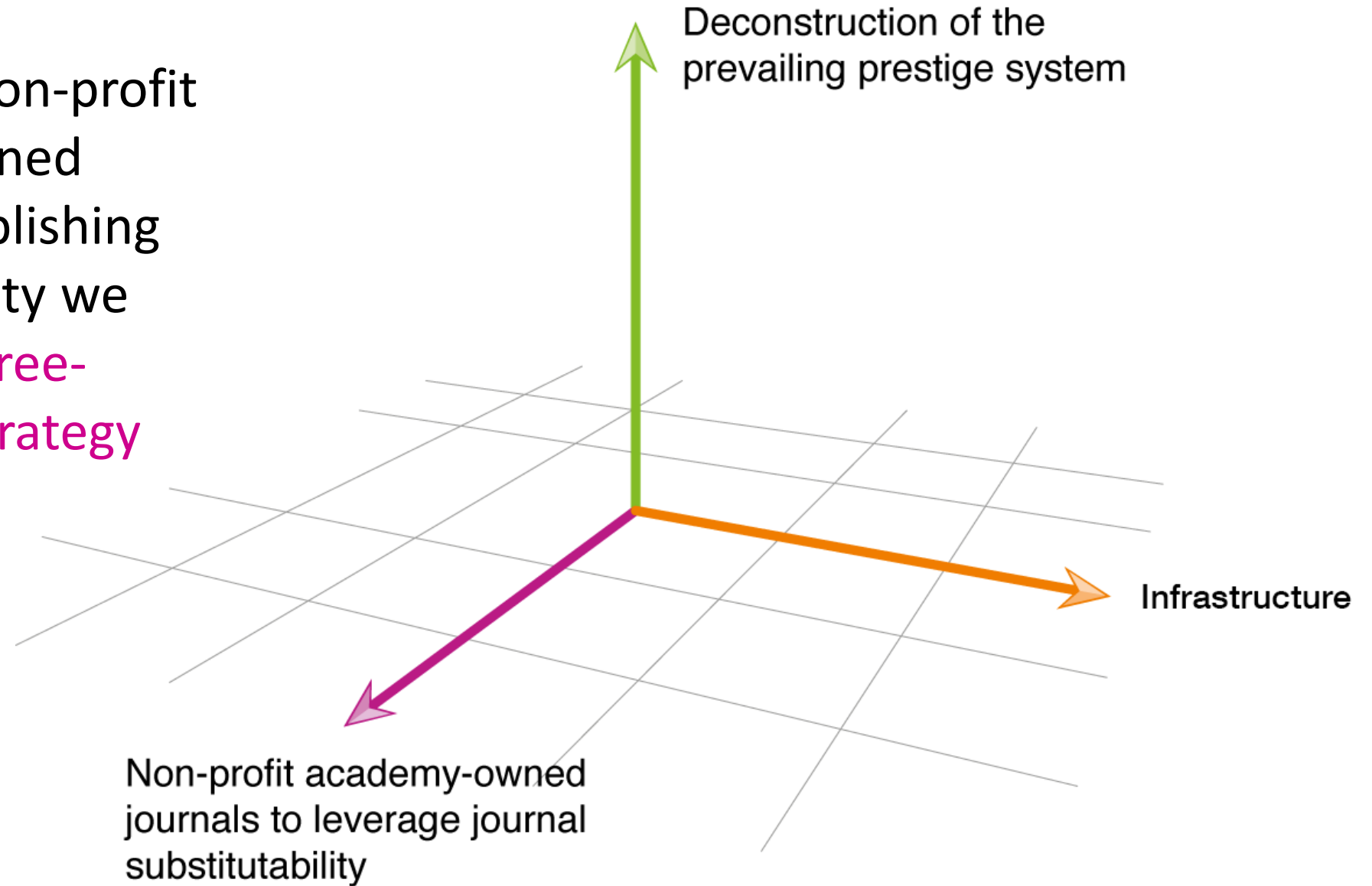


Digital publishing technology
(XML JATS)



A vision to overcome the current assessment of science based on the Impact Factor aligned to the Declaration on Research Assessment (DORA)

To give the non-profit
academy-owned
scholarly-publishing
an opportunity we
envision a **three-
dimension strategy**



The potential of Redalyc/AmeliCA model

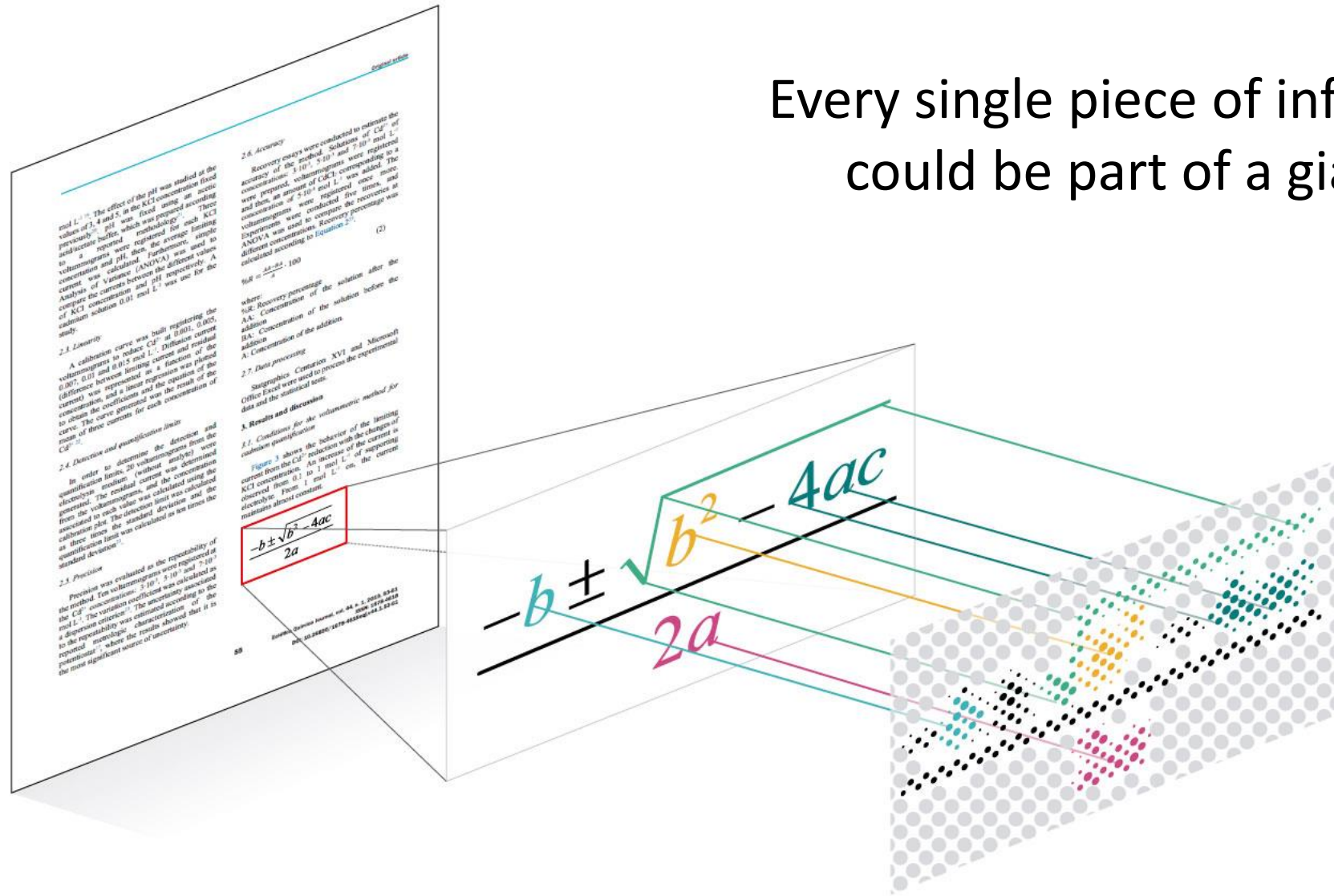


Technology and Artificial Intelligence for a participatory and inclusive science ecosystem.

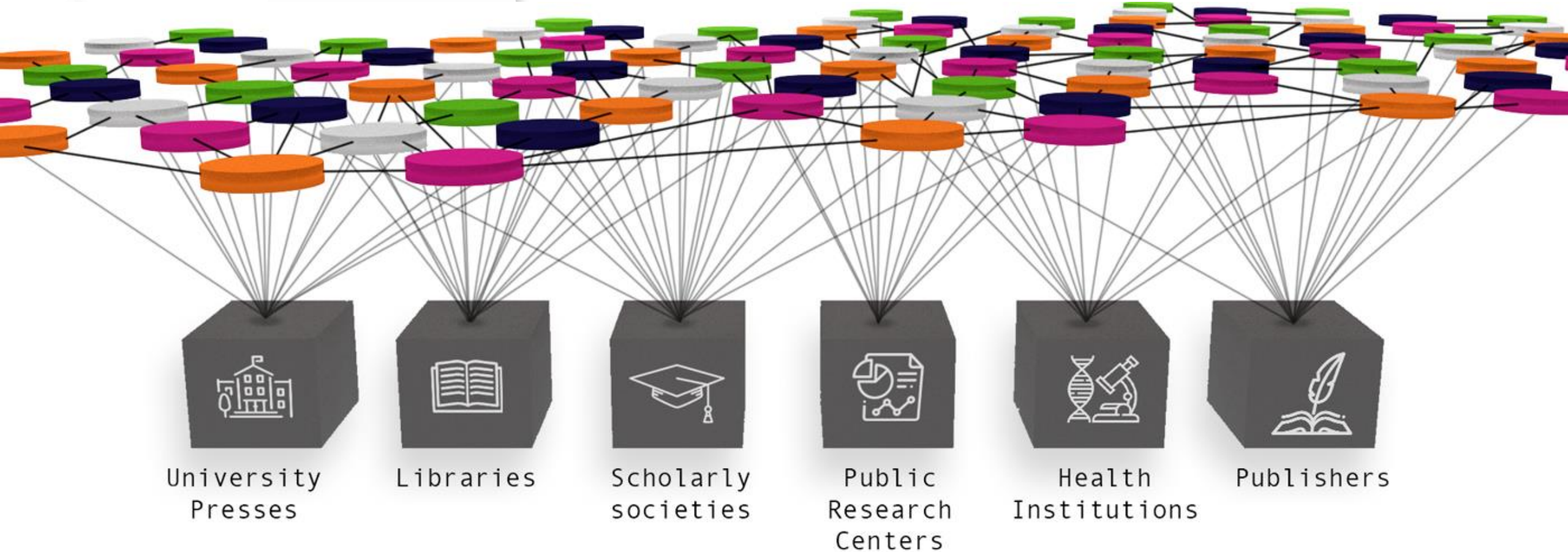
Organic visibility, discoverability and impact of science



Every single piece of information
could be part of a giant graph



An upper layer of linked knowledge could be built



Aligned to the Web Foundation call on policymaker to reverse and leverage the power of technology to fight inequality:

Accelerate progress towards universal access

Level the playing field

It is possible to achieve a **cooperative values-based infrastructure** that benefits scholarly communications worldwide.

Academy has the power to take back control (or keep it) of the whole knowledge generation life-cycle.

Publishing in control of **academia can create a counterweight to the exclusionary system** that prevails today.

Thank you!

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<http://orcid.org/0000-0003-0278-8295>

@ariannabec



For a non-profit academy-owned scholarly publishing to preserve
and sustain the open nature of science communication