Mapping the global landscape of journals

Mikael Laakso & Janne Pölönen

Contents

- 1. The problem
- 2. What are the consequences
- 3. Towards a solution
- 4. Multilingualism
- 5. References

A major inspiration and strong reading recommendation for anyone interested in this topic

RESEARCH ARTICLE

Recalibrating the scope of scholarly publishing: A modest step in a vast decolonization process

Saurabh Khanna¹, Jon Ball¹, Juan Pablo Alperin², and John Willinsky^{1,2} ¹Craduate School of Education, Starford University, Starford, CA, USA ² Publishing School of Statuse Favore University, Bernford, EC, Canuda

Keywords: decolonial process, Global South, journal publishing, OA diamond journals, open access, scholarly communication

ABSTRACT

By analyzing 25,671 journals targely absert from common journal counts, as well as Web of Science and Scours, bits study demonstrates that schular/communication is more of a global endeavor than is commonly credited. These journals, employing the open-source publishing alternom Open (accurate) system (SQ), busy published 5.3 million items; they are in 1.16 counties, with 79,9% in the Global South and 84.2% following the Optimized in more than one language (48.3%), with research published in 60 languages (feld by fragils, Indonesian, Spaniah, and Portugues). The journals are distributed across the social sciences (65.5%), STEM (40.3%), and the humanities (13.8%). For all there geographic, linguistic, and disciplian diversity 1.2% are indexed in the Web of Science and 5.7% in Scours. On the other hand, 1.2% are indexed in the Web of Science and 5.7% in Scours. On the other land, 1.2% are indexed in the Web of Science and 5.7% in Scours. On the other land, 1.2% are indexed in its increasingly a global research enterprise. Instrumention is tarking in the longe that its increasingly a global research enterprise.

1. INTRODUCTION

In 2018, Philip G. Althach and Hana de WII, hoo kealing scholars of higher extension at Bioton College, published¹¹ Too Much A cademic Research is Being Published¹¹ in University World News. In making their case, Althach and de WII point out that although ¹¹ no one knows how many scientific pumals there are accessed estimates point to a normal 30,000° (Vilash): & do Vila. 2019). Finding the number excessive, they declaw¹² a coils in a cademic publishing¹¹ in them that publish low or manying al august years.¹¹ There recommend steps the taken to reduce the annount of research published¹¹. The analysis in this article not only challenges such publishers that publish or sensorial august or the Global Station Yeasench. Challenges such proval estimates the calls for a recognition of the Global Station Yeasench challenges such

Copyright: © 2022 Saurabh Kharna, Jon Bull, Jann Pablo Alperin, and John Willinsky, Published under a Creative Commons Attribution 4.0 International (CC BY 4.0) license.

OSS

an open access 🔓 journal

Check for updates

Citation: Khanna, S., Ball, J., Alpenin, J. P., & Willinsky, J. (2022). Recalibrating the scope of scholarly publishing: A modest step in a vast decolonization process. Guantitritive

https://doi.org/10.1162/gss a 00228

KR: https://doi.org/10.1162/qss_a_00228

Accelved: 23 August 2022 Accepted: 6 November 202

Corresponding Author John Willinsky

Handling Editor

ublen/10.1162

¹ Just how dated this moder may be is suggested by the Library of Cangens study of 1950, which koust a global taid of 350, 00 pointsk, which locat a library bail of the library bails and the library of Males Biological Biologi

Khanna, S., Ball, J., Alperin, J. P., & Willinsky, J. (2022). Recalibrating the scope of scholarly publishing: A modest step in a vast decolonization process. Quantitative Science Studies, 3 (4): 912–930. <u>https://doi.org/10.1162/qss_a_00228</u>

The problem

There are now more scholarly journals than ever before, publishing an increasing total number of articles every year (Bornmann, Haunschild & Mutz 2021).

Change in this space is constant, yet comprehensive knowledge about what and why changes are happening still lacks a lot of scope and depth, mostly due to the limitations in available data.

There is a large number of journals that are currently invisible to most bibliometric research (see e.g. Khanna, Ball, Alperin et al 2022).

Even if data sources would be more complete the key obstacle for their extended use in research purposes following open science approaches is their commercial and proprietary nature.





What are the consequences

What might come as a surprise to many is that we do not have comprehensive answers to the following questions:

- How many scholarly journals are there?
- How many articles do they publish?
- In what languages do they publish?
- How are they divided into publishers?
- How many are associated with a scholarly society?
- How are they divided across research areas?
- How are they divided geographically?
- How many are publishing Open Access?



What are the consequences (cont.)

If we would have a solid common data foundation it would enable research into the changing landscape of journal and studying e.g. the following phenomena:

- Creation of new journals
- Publisher changes for journals
- Merging journals
- Journal renaming/re-scoping
- Momentum of journals towards internationalization
- Changing publication models
- Discontinued journals
- Disappeared journals



Towards a solution

There is a lot of public data available about journals available in different datasets and through different services

The ISSN International Center provides free access to standardised metadata for all journals

The/One approach to start building a foundation based on open data:

- 1. Collect as wide and broad list of journals globally based on ISSN numbers
- 2. Deduplicate
- 3. Query the ISSN center for standardised metadata for all journals

Towards a solution (cont.)



Towards a solution (cont.)

Our preliminary dataset is aggregated from five local and global information sources including a total of 152,644 unique journals matched with bibliographic metadata records from the International ISSN Centre

Source	1 source	2 sources	3 sources	4 sources	5 sources	Journals
JUFO	3296	2783	14127	3483	720	24409
Scopus	8693	8690	17820	4615	720	40538
PKP	13278	9124	20068	2176	720	45366
Bielefeld	16678	24728	24606	4797	720	71529
Crossref	28276	31979	37529	4933	720	103437
Total	70221	38652	38050	5001	720	152644

Multilingualism



Multilingualism (cont.)

Distribution of languages by region

■ English ■ Multiple languages ■ Other languages



Conclusions

Recently started ongoing research, but...

- Early evidence paints a much more globally diverse and multilingual landscape than selective commercial databases can provide.
- There is a lot of potential for increasing the visibility, discoverability, and inclusion of more scholarly journals into bibliometric research.
- Some way of crowdsourcing metadata for these journals would be needed.
- Methods for managing data additions, changes, and forks could probably lean towards systems and practices familiar from open source software development.



References

Bornmann, L., Haunschild, R. & Mutz, R. (2021). Growth rates of modern science: a latent piecewise growth curve approach to model publication numbers from established and new literature databases. Humanit Soc Sci Commun 8, 224. https://doi.org/10.1057/s41599-021-00903-w

Bruns, A., Cakir, Y., Kaya, S., & Beidaghi, S. (2022). ISSN-Matching of Gold OA Journals (ISSN-GOLD-OA) 5.0. Bielefeld University. <u>https://doi.org/10.4119/unibi/2961544</u>

Crossref (2023). Crossref title list. http://ftp.crossref.org/titlelist/titleFile.csv

Scopus (2023). Scopus source title list. https://www.elsevier.com/__data/assets/excel_doc/0015/91122/extlistMarch2023.xlsx

Khanna, S., Ball, J., Alperin, J. P., & Willinsky, J. (2022). Recalibrating the scope of scholarly publishing: A modest step in a vast decolonization process. Quantitative Science Studies, 3 (4): 912–930. https://doi.org/10.1162/qss_a_00228

Khanna, S., Raoni, J., Smecher, A., Alperin, J., Ball, J., Willinsky, J. (2022). Details of publications using software by the Public Knowledge Project. Harvard Dataverse. Version 3 https://doi.org/10.7910/DVN/OCZNVY

TSV (2023). Listing of publication outlets included in the publication indicator http://www.tsv.fi/julkaisufoorumi/kokonaisluettelo.php