

### Global Trends in Knowledge Production and the Evolving Peer Review Process

### Steven Witt<sup>(a)</sup>

a) University of Illinois at Urbana-Champaign, https://orcid.org/0000-0001-5931-4774

Contact: Steven Witt, <u>swwitt@illinois.edu</u> Received: 18 October 2022; Accepted: 3 November 2022; First Published: 15 January 2023

### ABSTRACT

This essay seeks to provide further critique and clarity to the peer review process and the ways in which management of peer review is evolving. These changes occur within a context of massive growth in the knowledge production process: global trends, information technologies, and policies that encourage more people globally to take part in the research process. Associated with these global changes are stressors on the peer review process and particularly questions about who gets to be a peer review and who has the right to produce knowledge under these processes. Less a formal review and analysis of peer review across LIS, this essay takes the form of an autoethnograpic narrative that that seeks to draw upon the researcher's personal observations, experience, and reflections to critically examine changes to the peer review system that are taking place.

### **KEYWORDS**

Publication Ethics; Information Society; Library and Information Science; Peer Rewiew Ethics.

<sup>© 2023,</sup> The Author(s). This is an open access article, free of all copyright, that anyone can freely read, download, copy, distribute, print, search, or link to the full texts or use them for any other lawful purpose. This article is made available under a Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. JLIS.it is a journal of the SAGAS Department, University of Florence, Italy, published by EUM, Edizioni Università di Macerata, Italy, and FUP, Firenze University Press, Italy.

### Introduction

As a young scholar beginning to publish independent research in academic journals, I recall being somewhat mystified by the peer review process. Of course, as a librarian, I was aware simultaneously of the importance of peer review and fully invested in knowing intellectually the differences in review processes and their relationship to establishing the authority of knowledge produced through social scientific methods. As a librarian, aiding other scholars to access this literature is critical in enabling people to join the increasingly expanding knowledge production process. In the past 50 years, we've seen the importance of research and knowledge production rise dramatically through the developments Daniel Bell described as the post-industrial society and other sociologists such as Yoneji Masuda and Manuel Castells later observed as an economic system increasingly reliant on innovations derived by new knowledge in our information or network society (Bell 1973; Castells 2000; Masuda 1980). With these changes in the global scope and participation in research and scholarship, the peer review process has also begun to adapt to demands for greater access to the means and privilege to publish.

Once I began working in an academic environment, my research career began, and I was swept up in the desire to produce knowledge to advance LIS and its practices. This prompted me to engage peer review and the publishing process in a new way – not as a librarian but as a researcher. Like dipping one's toes into cold water, the prospects were both chilling and inviting. As I worked to submit my first manuscripts, I recall negotiating the cultural practices that have developed around the process. I wasn't sure whether to format my manuscript to look like the journal – two columns, small font, biography, and contact information prominently on the cover – or in some other format. From here began a further series of questions about the abstract, selection of key words, suggestion of people who might review the paper, proclamations of my lack of conflicting interests, and on and on. This of course, was after the work had taken place to identify a research question, select appropriate methods, and then interpret the results. From here, the review process looked opaque.

This essay thus seeks to provide further critique and clarity to the peer review process and the ways in which management of peer review is evolving in the context of changes in the research landscape. These changes occur within a context of massive growth in the knowledge production process: global trends, new information technologies, and policies that encourage more people globally to take part in the research process. Associated with these global changes are stressors on the peer review process and particularly questions about who gets to be a peer reviewer and who has the right to produce knowledge under these processes. Less a formal review and analysis of peer review across LIS, this essay takes on more of a form of autoethnography. As Adams et al describe autoethnography is a qualitative method that seeks to draw upon the researcher's personal observations, experience, and reflections to critically examine cultural practices (Adams 2015). I'm therefore drawing upon my experience as *a*) a scholar whose work has been evaluated through the peer review process, *b*) the editor of *IFLA Journal*, the International Federation of Library Associations and Institutions' (IFLA) flagship academic journal that enacts a system of anonymous peer review, and *c*) a researcher, whose work attempts to grapple with the materiality of the global as it impacts both libraries and information production.

These ideas and in some way this critical telling of the process have developed over a number of years working with authors, conversing with the journal's editorial committee, presenting on

"How to Get Published" in workshops and conferences around the world, and more recently hosting a series of in-person and online workshops designed to help guide scholars through the peer review process. It is also an expansion of previous pieces on the same theme that I've published over the past several years (Witt 2019; Witt 2020). As described below, *IFLA Journal*, and many other journals in the social sciences are active participants in changing the peer review system and attempting to address problems that have become apparent in the system as the importance and need to publish peer reviewed research has grown the world over.

### The Demand for Peer Review and the Global Knowledge Economy

When we discuss peer review for academic journals, the primary standard is a process by which the reviewer(s) don't know whose paper they are reading and the author(s) don't know who is reading their paper. This is currently referred to as anonymous peer review and formerly blind-review. The peer review process continues to be important and relevant even amidst new models for publishing and disseminating knowledge that don't require such intense mediation and enable scholars to directly publish work through blog platforms and even institutional repositories. Like other fields within the social sciences, peer review is a critical element considered by LIS scholars when they choose to publish. A recent study on factors influencing a scholar's choice of LIS journals found "quality peer review to be the most influential component for authors in deciding where to publish" (Lee, Yang, and Oh 2020, 329). There is a tangible prestige to publishing in a peer review journal. In many ways, this prestige and the power embedded in the peer review process is driven by the same global economic forces of our informationally driven knowledge society. In a global knowledge economy, information production is a key driver of innovation and an important symbol of being connected with the networks of the global information society (Castells 2000).

The economics of research constitutes a complex power structure that impacts scholarship and plays a determining role in the production of knowledge on a global scale. From the perspective of one of the world's largest research funders, the US Government, there are clear shifts in funding for what is termed Global R&D. As the Congressional Research Service asserts, research is a critical and driving force for "advanced economies in areas such as economic growth and job creation, industrial competitiveness, national security, energy, agriculture, transportation, public health and well-being, environmental protection, and expanding the frontiers of human knowledge understanding" (Congressional Research Service 2022, 1). In other words, research activities inform, influence, and enable nearly all aspects of contemporary society. The primacy of research as an economic driver and source of social development is further demonstrated in the continued global growth of investment from \$675 billion in 2000 to \$2.4 trillion in 2022. Within the global context of academic research and thus peer review, it is notable that the share of R&D is shrinking from a system in which the US expended 69% of research investment in 1960 to one in which other countries now invest 69% (Congressional Research Service 2022). This represents a complete shift that results in an ever-greater diversity of scholars seeking to publish the results of academic research. This growth occurred within a system managing peer review that was originally built within a context that presumed most research was emanating from countries like the US that were investing the most in research. It was a system that had changed very little since the 1960's.

While more nations are investing in research, the incentives to researchers preference a hierarchy of publishing and encourages scholars to submit to journals published by large transnational publishers or representative of elite institutions. This hierarchy includes the types of journals in the LIS field that Lee and his colleagues discuss when analyzing author preferences for peer reviewed journals. A factor driving these elite journals is the research and development policies of many nations seeking to advance their overall competitiveness within the knowledge economy (Sivertsen 2017). For example, in South Africa and countries that modeled policies after the UK's Research Excellence Framework to evaluate national and institutional research outputs, scholars were incentivized and rewarded for publishing in journals included in citation indexing products owned by large companies such as Clarivate (Web of Science) and Elsevier (Scopus). These trends reinforce existing paradigms for publishing and knowledge production and provide incentives for scholars to publish in English and on topics deemed appropriate for international impact by editorial boards that both manage peer review systems and strive to remain in the exclusive realm of journal impact listings.

Practices and policies that reinforce what can be considered a hegemonic system of scholarly knowledge production are being countered by the open access movement and the advent of article repositories that attempt to create what Collyer calls "transnational circuits of knowledge" (Collyer 2018). In some ways, these new circuits attempt to circumvent the dominance of English language and the Western publishing industry to provide alternative and regionally localized publishing and discovery systems that allow scholars to contribute their research in ways that reflect both quality and the scholar's epistemological and methodological goals. At a national level, many countries are now supporting institutional and national level repositories aimed at promoting local knowledge production and research dissemination. These efforts broaden access to published knowledge while creating new knowledge networks that can be seen as positive alternatives to Western hegemonic publishing models yet are also potentially negative trends that could further fragment and marginalize domains of knowledge within an already hierarchal and complex mixture of publishing and access. The overall investment in research and ways in which scholars and institutions are measured in regard to their international contributions, however, suggests that the new circuits of knowledge have yet to replace the established venues for publication. The power of systems of ranking universities through the use of publishing and citation metrics limits the ability of alternative systems to become a viable competitor (Peters 2019). Further, this helps to drive the growing competitiveness for the ability to publish academic work. These policy changes in reaction to global trends in economic development also help to explain the increase in research and need for the peer review system to change to accommodate these shifts.

### Peer Review and Access to Knowledge Creation

The previous section asserted not just the importance of the peer review process but also the complex and intersecting pressures that ensure academic publishing behaves in these globalized patterns that manifest locally in policies that ensure scholars seek publication in internationally recognized peer review journals. At the same time, however, the process of peer review remains

largely unchanged and the ways in which to navigate it often go undiscussed and undisclosed aside from the mentoring process or trial and error.

In recent years, the management of the peer review process and peer review itself has become more of a contested and problematic practice. In conversations and advocacy about other aspects of the knowledge production process, peer review and how to make it work in a more equitable manner rarely gain the volume of attention as other issues within LIS. For example, my colleagues often rightly discuss and advocate for open access and access to knowledge to equalize systemic failures of the global economy and seek to "switch-on" (to borrow a phrase from Manuel Castells) access for the global south and others who live on the wrong side of the paywalls we construct. Invariably, access in these debates is limited to enabling more people to use the knowledge produced by academic institutions and scholars largely aligned with questions and imperatives derived from a North American or European context. In this context, open access rarely reflects creating greater access to the means to produce and disseminate knowledge.

Through my own work as an editor, *IFLA Journal* strives to make publishing original research more accessible to librarians and researchers from around the world. Being a truly inclusive journal, however, faces historical, systemic, and economic barriers that make this goal difficult to achieve. It is well documented that scholars who are not native speakers of English (an increasing percentage of those doing research as noted above) or from regions that are less represented on editorial boards struggle to get their work accepted in international peer reviewed journals. The work of sociologist Fran Collyer provides striking evidence of bias toward the global North in both citation patterns and acceptance rates of scholars, which impacts the way in which knowledge is transferred around the world (Collyer 2018). The problem of un-equal access to publishing opportunities and the often one-way flow of knowledge and techniques should be of great concern to the library profession as a whole since this issue impacts both the collections we build and the manner by which professional practices are shared and adopted transnationally.

Over the past decade, the Committee on Publication Ethics (COPE), which supports and aims to improve processes such as peer review and journal management, studied the extent to which journal editors across the humanities and social sciences are aware of the issue of inclusivity in academic publishing. In a 2018 survey of over 650 editors, 64% reported problems of language (i.e. English) and writing quality as barriers to inclusivity. In addition, 55% of editors struggled to recognize and deal with bias in the peer review process. Among editors of Library and Information Science journals, the issue of inclusivity was equally salient among respondents to the COPE Study (Committee on Publication Ethics 2019). In a follow-up study in 2021, COPE found evidence of change within the management of the peer review process that seeks to address concerns of bias and inclusivity. In the ensuing three years, there was a 9% increase among journals providing in-house training to promote diversity in peer review. The survey also found that 69% of journals and publishers are trying to diversify their peer review pools with an increase in emphasis on factors such as gender parity (Committee on Publication Ethics, 2021). Thus, many editors are keenly aware of this issue and are working to avoid the continued replication of barriers to an equal transnational exchange of techniques, ideas, and professional knowledge within the field of library and information science.

The competition for publishing, however, remains steep with only about 30% of papers getting accepted in *IFLA Journal*, which I edit, a metric that is shared among many academic journals

in LIS. As members of a scholarly community, we consent to a rigorous anonymous peer review process to ensure new ideas are promoted and the methods that drive research and discovery are sound. Submissions from Africa and the Asia Pacific region, however, are rejected at higher rates while those from North America and Europe are rejected less often. This is a problem for us all. Although scholars from Africa and the Asia Pacific region submit more manuscripts for review and are thus well represented in the journal, there is a clear need to work towards review processes, organizational structures, and professional development programs that can help make research and publishing more accessible to all of our colleagues in the field. Over the past several years, *IFLA Journal* has implemented policies and activities aimed to make publishing more inclusive.

As noted previously, language is one of the primary barriers to inclusivity in academic publishing. The Esperanto movement in the early 20th century attests to the fact that language is a long-standing barrier to sharing scientific knowledge ("Esperanto for Scientific Papers and Abstracts" 1938). Academic writing requires language that is clear, precise, and appropriate to the professional terminology on a specific field. This is a difficult challenge for any researcher to meet when working within their first language not to mention their second or third language. To the extent possible, IFLA Journal's editorial policies attempt to decouple language from the review. We ask reviewers to focus on the content of work and attempt to overcome challenges presented by manuscripts that have been translated or written by non-native speakers of the journal's publishing language. Rather than simply rejecting papers that are difficult to comprehend because of language, the editor will often return a manuscript for language editing when a paper seems to be within the scope for the journal and might be deemed appropriate for publication. Through this process, IFLA Journal addresses language barriers within the final editorial process by providing editorial assistance to work with authors to improve language and readability for papers without changing the results in cases when reviewers recommend publication. Similar editorial stances have also been adopted recently by others LIS journals such as *Library Trends*. Further steps in the editorial process require either financial resources or skilled volunteers to work with authors on improving the language within their manuscripts. This can slow down the publication process as author and editorial assistant trade revisions. Although imperfect, this process lowers to some degree the significant barrier presented by language.

To increase representation in the reviewer pool, *IFLA Journal* has taken several actions. First, the reviewer selection process strives to ensure that both the need for expertise in the primary research topic and regional representation is reflected. This works to create a peer review process that considers both meaning and importance of context within the research and factors traditionally considered such as methods and results. Through this process, the journal aims to change the dynamic regarding what topics and questions constitute important contributions to the literature. Additionally, the journal changed the composition of the editorial committee. Following the practice of many international journals to have regional editors, the journal added members to its editorial committee to both increase submissions from and provide mentorship to potential authors in regions that are less represented. Working with the IFLA Professional Committee the journal added editorial committee members designated to represent the Asia and Pacific Region and the African Region in 2019. An editor for Latin America was added in 2020. These three new members create further diversity within an editorial committee.

Finally, the editorial committee also aims to provide professional development to scholars and practitioners in the field by offering a series of workshops on research methods and practices. In August of 2019, the *IFLA Journal* editorial committee partnered with Sage and the IFLA Social Science Libraries Section to host a two-day workshop on qualitative research methods for library and information science practitioners. This workshop attracted 20 participants from Africa, Asia, Europe, the Middle East, and North America. The workshop provided participants with access to journal editors and reviewers to learn more about the publishing process and ways to better position their work for publication. Additionally, the workshop introduced students to methods and tools to equip them to design, conduct, and critique qualitative and mixed methods research. Participants explored the strengths and weaknesses of a variety of data collection methods and evaluated strategies for using and combining them. In this manner, we aim to demystify the peer review process and open the black box so that scholars become better aware of the process and how it is managed.

### In Conclusion: Why Do Articles Get Rejected?

As I've discussed throughout this essay, there is a clear rationale for the peer review process and great demand to publish in such journals despite the flaws that we've acknowledged. Additionally, there are trends toward ameliorating systemic challenges to the process that results in barriers to publishing.

As an editor, I host presentations on "how to get published" at each IFLA Congress. These presentations provide an interesting way to reflect upon the scholarly publishing process and the questions and concerns of my colleagues – many of the same questions that beguiled me as I first approached the process. The presentation of this session is roughly the same each year. My co-presenters from the editorial committee and I speak about the whole process from preparing a manuscript, to selecting a journal, to the review process and then what finally happens when a paper is published. The audience for this presentation is very often largely comprised of participants from the congresses' region. Yet, regardless of the audience – North America, South Africa, Greece, Malaysia, Ireland, the questions and concerns raised are fairly universal. And of course, the overriding question is generally *why do papers get rejected*?

As this essay suggests, the answer to this question is as complex and problematic as the system created to review papers. And there are always far too many reasons to recount in a single session – flawed methods, unfulfilled objectives, poorly articulated research questions. A rejection is often a confluence of problems that together make a manuscript difficult to move forward – even if that movement is towards a major revision. A rejection can also reflect a system that needs further reform.

This reform should take place with changes in the way editorial boards and review process are managed as discussed above. Reviewers, like authors, need to be trained on how to communicate and assess a work. Reviewer pools need to be expanded to include a broader diversity of the profession and be more reflective of the authors whose work is being published and the readers that rely upon the literature to inform practices and better understand the field of LIS.

Also, to make knowledge creation within the field more accessible, there needs to be broader teaching of research practices and methods. Further, there may need to be some movement in

the field to develop methods of its own that are more suitable to a practitioner focused field of research. We've seen the development of participatory research methods such as action research in the field of Education and there is a similar need for methods specifically for library science. Increasing the capacity for research across the field will benefit the peer review process in multiple ways – reviewers will be better placed to provide quality reviews and authors will be ready to engage the process from a position of knowledge and comfort that is not always present. Slowly, changes are taking place as seen in the recent surveys conducted by COPE. Hopefully, change will continue and in a manner that creates space for further dialogue within the field about what constitutes access to knowledge.



### References

Adams, Tony E. 2015. *Autoethnography*. Understanding Qualitative Research. New York, NY: Oxford University Press.

Bell, Daniel. 1973. *The Coming of Post-Industrial Society; a Venture in Social Forecasting*. New York: Basic Books.

Castells, Manuel. 2000. *The Rise of the Network Society*. 2<sup>nd</sup> ed. Information Age; v. 1. Oxford ; Blackwell Publishers.

Collyer, Fran M. 2018. "Global Patterns in the Publishing of Academic Knowledge: Global North, Global South." *Current Sociology* 66 (1): 56-73. <u>https://doi.org/10.1177/0011392116680020</u>.

Committee on Publication Ethics. 2019. "Exploring Publication Ethics in the Arts, Humanities, and Social Sciences: A COPE Study 2019." <u>https://doi.org/10.24318/cope.2019.4.1</u>.

Congressional Research Service. 2022. "Global Research and Development Expenditures: Fact Sheet." CRS Report R44283. Washington, D.C., United States: Congressional Research Service. <u>https://sgp.fas.org/crs/misc/R44283.pdf</u>.

"Esperanto for Scientific Papers and Abstracts." 1938. *Nature* 141 (3579): 1007-1007. <u>https://doi.org/10.1038/1411007b0</u>.

Lee, Jongwook, Kiduk Yang, and Dong-Geun Oh. 2020. "Factors Influencing the Choice of a Publication Venue in Library and Information Science." *Learned Publishing* 33 (3): 323-32. <u>https://doi.org/10.1002/leap.1300</u>.

Masuda, Yoneji. 1980. *The Information Society: As Post-Industrial Society*. Tokyo: Institute for the Information Society.

Peters, Michael A. 2019. "Global University Rankings: Metrics, Performance, Governance." *Educational Philosophy and Theory* 51 (1): 5-13. <u>https://doi.org/10.1080/00131857.2017.1381472</u>.

Sivertsen, Gunnar. 2017. "Unique, but Still Best Practice? The Research Excellence Framework (REF) from an International Perspective." *Palgrave Communications* 3 (1): 1-6. <u>https://doi.org/10.1057/palcomms.2017.78</u>.

Witt, Steven. 2020. "Creating Global Studies Knowledge amidst Biased and Entrenched Systems of Academic Publishing." *Global-e: A Global Studies Journal* 13 (55). <u>https://globalejournal.org/global-e/august-2020/creating-global-studies-knowledge-amidst-biased-and-entrenched-systems</u>.

Witt, Steven. 2019. "Can Journals Overcome Bias and Make the Peer Review Process More Inclusive?" *IFLA Journal* 45 (4). <u>https://doi.org/10.1177/0340035219894100</u>.