Guest Editorial

Advancing an Open Ethos with Open Peer Review

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Open source. Open access. Open data. Open notebooks. Open government. Open educational resources. Open access workflows. To be open is to have a disposition favoring transparent and collaborative efforts.

Open is everywhere. Since the late 90's when developers in Silicon Valley adopted the term 'open source' (suggested by Christine Peterson), the open movement has grown by leaps and bounds. The developers, who met after the web browser company Netscape made its source code open, articulated that 'open' "...illustrated a valuable way to engage with potential software users and developers, and convince them to create and improve source code by participating in an engaged community." It also separated 'open source' "...from the philosophically- and politically-focused label 'free software.'"

An ethos of openness pervades each open movement. Transparency, collaboration, and sharing and remixing knowledge are valued in the open ethos. Similarly, community engagement is a foundation of it, which is mirrored in open access (OA)—a movement in which we library workers are strong community members. In this community, we advocate for access to scholarship free of paywalls and licensing restrictions. We educate and advocate regarding authors' rights, facilitate the creation and publication of open educational resources, and do so much more. We know that our efforts in this regard facilitate and make room for broader and more equitable community engagement with scholarly research outputs.

This open ethos can expand—and has expanded—to peer review. Increasingly, scholarly communities have moved to open up peer review, and their publications have implemented open peer review (OPR) processes. OPR has been the subject of scholarly research and debate. But what does opening the peer review process do? What could it mean for LIS publishing? In my view, OPR allows for and supports transparent scholarly conversations, improves and enhances collaboration and research, and exposes and alleviates problems endemic in blinded peer review processes. Moreover, OPR is in line with and advances practical adoption of our professional values of transparency and collaboration—what is essentially our open ethos.

The definition of OPR is not cut and dry,^{3,4} due to the multitude of scholarly communities with differing approaches to research, dissemination of scholarship, and needs. In fact, early exploration of open review by Kathleen Fitzpatrick and Avi Santo outlines the need for open review to be formed by each community adopting it.⁵ However, for purposes of this editorial, a functional definition is that OPR allows for the disclosure of author and referee identities to one another, and supports the publication of referee reports and author responses on the open web.

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The remainder of this editorial discusses the purpose of peer review, presents an example and provides arguments in favor of OPR, and ends with recommended actions that will help to expand an open ethos in LIS that includes OPR.

Why Do We Peer Review?

One of the fundamental questions surfaced by OPR is, "why do we peer-review? What purpose does it serve?" Broadly, peer review aims to ensure the quality and validity of scientific and academic research, as well as remark on its novelty and impact. Blind and double-blind review reinforce this approach, yet there exist persistent and endemic problems to blind review—long wait times between submission, review, and publication; potential reviewer abuse of authors and lack of reviewer accountability; hidden labor of reviewing and editing; submission quality; and the misnomer of 'blind' processes when many scholars and referees may be able to identify one another by their research topics and approaches.⁶ Blind and double-blind approaches to peer review can serve to validate and codify a myopic view of academic library workers as scientists, who individually achieve great discovery and create knowledge in elite and opaque silos. In this view scientific evidence is the almighty power reigning supreme over the evaluation of scholarly works.

But library workers are not scientists. Librarianship is a profession of humanistic practice. Libraries, library workers, and library users exist in a world replete with social contexts; none of us are free from bias, -isms, and society's political, institutional, and social influences. We attempt to base our collection development practices on evidence and to provide balanced perspectives and information to patrons. Yet, despite our best efforts, these activities will always be influenced by external sociopolitical contexts and our own selection bias. As I tell students, everything is biased. The way I see it, library practice, scholarship, and evaluation thereof should be largely informed by social constructivism.

In addition to serving as a validation and quality control mechanism, peer review can serve multiple and differing purposes. It can be a developmental process, providing a venue for referees and authors to engage in dialogue and to collaboratively develop ideas and research. A few LIS publications already utilize a developmental approach to review. portal: Libraries and the Academy, a double-blind peer-reviewed journal, has integrated developmental support in its review process. At portal, referees are explicitly asked to indicate when they feel authors could benefit from the appointment of a mentor to assist in shepherding their worthy idea into a quality submission. Similarly, In the Library with the Lead Pipe articulates development in their OPR process, "Our open peer review system is designed to ensure articles are well written and based on sound evidence; it is also designed to support authors in writing the best article they possibly can, whilst retaining their own voice."8 Code4Lib Journal, too, collaboratively approaches its editorial review process, stressing the development of ideas and research.9 These examples provide evidence that portions of the LIS community already embrace developmental and supportive review.

An Example of OPR: F1000Research

Before I begin to further unpack the argument for OPR, it is necessary for readers to understand at least one example of it. I would like to offer F1000Research¹⁰—an open access life sciences mega-journal from Faculty of 1000—as this example. F1000Research is indexed in DOAJ and is a member of COPE, the Committee on Publication Ethics. As you read this description below, it is important to understand that F1000Research is but one implementation of OPR, and OPR can be implemented and adopted in many differing ways.

F1000Research publishes biomedical and life sciences scholarship including case reports, clinical practice articles, commentary, correspondence, data articles, method articles, opinion articles, research articles, reviews, short research articles, study protocols, systematic reviews, thought experiments, and web tools. Authors publishing in F1000Research pay article processing charges. The publication and refereeing process at F1000Research is analogous to 'flipping the classroom' in instruction; submissions are published prior to peer-review. When an article is submitted to F1000Research, it undergoes a brief editorial review for readability, plagiarism, etc. and is then published on the website with a designation of "awaiting peer review." Then the refereeing process begins. Referees at F1000Research review published submissions for research quality and scientific soundness using guidelines specific to submission type. Referees are asked to omit judgements of research novelty or impact from their referee process (much like PLoS One). Submitted referee reports include one of three public recommendations: approved, approved with reservations, or not approved.

Referee reports, with referee names and affiliations, are published alongside the publication, and include their own formatted citations. Additionally, community members, who are not designated referees, may publicly comment on articles and referee reports. Once an article receives two approved recommendations, or two approved with reservations recommendations and one approved recommendation, the publication is indexed in databases such as PubMed and Scopus. Authors are encouraged to respond to referee reports as well as revise and resubmit articles. Both article versions and referee reports remain hosted on the publication platform, and CrossRef's® CrossMark product tracks article versioning. Recommendation citations also provide for peer-review information, such as in the case of the following citation:

Giordan M, Csikasz-Nagy A, Collings AM and Vaggi F. The effects of an editor serving as one of the reviewers during the peer-review process [version 2; referees: 2 approved, 1 approved with reservations]. *F1000Research* 2016, 5:683 (doi: 10.12688/f1000research.8452.2)

F1000Research's transparent review process addresses several problems with blind and double-blind peer review. Time between article submission to publication is minimal, reviewers remain accountable for their comments and potential bias in their reviews are exposed, referees' labor and scholarly contributions are acknowledged, and community participation enables for collaborative development of ideas and continuation of scholarly conversations. It is one model of opening up review to expand an open ethos.

Adopting OPR in LIS

Just as F1000Research's implementation of OPR has diminished problems of blinded review, so, too, could OPR address these problems in LIS. Timeline between submission and publication of articles could be shortened, reviewers' efforts in refereeing would be more visible, reviewers would remain accountable for their abuse and potential bias, and community could openly contribute to the development of ideas. Adopting OPR would improve research and amplify community engagement, a core value in our profession. OPR would help strengthen efforts to create a diverse and socially just culture of publishing and scholarly communication in LIS. Finally, OPR advances and reinforces the goals and objectives outlined in ACRL's Plan for Excellence.

OPR Improves Research and Amplifies Community Engagement

Community engagement and human-centeredness are core values of libraries and

library workers. This has been repeatedly articulated by practitioners, library leaders, and library organizations. During his New Librarianship project, R. David Lankes determined the mission of librarians is "...to improve society through facilitating knowledge creation in their communities."11 ACRL, too, points to a humanistic approach to academic librarianship, asserting its vision that "academic and research librarians and libraries are essential to a thriving global community of learners and scholars."12

In our profession, many academic library workers serve in tenure-related or other positions requiring a scholarly research agenda, yet have little-to-no training in research methodologies or navigating IRB, and are provided few financial or other job-related resources to support their success in this arena. In light of this deficit, it behooves us to approach peer review as developmental and community-based. Many researchers have argued that OPR improves the quality of research, 13,14 and LIS would be no exception. One may question why I argue for OPR since some LIS publications, including the double-blind peer-reviewed journal portal, already include and value developmental review. While I admire and support portal's model, I contend that a more open process can expand existing collaboration and development to a broader community, allowing for a more robust scholarly conversation to unfold, and thereby improve research. In short, OPR reflects the adage, "it takes a village..."

OPR Strengthens Efforts to Create a Diverse and Socially Just Culture of Publishing and Scholarly Communication

In the Encyclopedia of Science and Communication, John Besley states, "At the heart of social justice concerns are questions about implicit exclusion and social power."¹⁵ No doubt in scholarly publishing implicit exclusion and social power play large roles. Journal rankings, for example, are an assertion of power, especially considering the social power achieved by academics who publish in 'high impact' journals. An article in Nature or Science can make one's career. Editors and editorial boards, too, wield great power in shaping journal priorities, policies, making publishing recommendations, and overseeing submission and review processes. Even unintentionally, editors and editorial boards may perpetuate selection bias, thereby censoring and excluding works. Social power and exclusion are an unfortunate part of the landscape of scholarly publishing, which is evidenced in the lack of diversity in the scholarly publishing landscape, to which LIS is no exception. 16,17

I agree with Thomas Gould, who maintains that blind peer review allows for elitism in the review process. 18 Blinded review continues a cycle of exclusion, retaining the social power of scholarly publishing in the hands of the "...majority voice, which is often white and male"19 as well as those established in their own scholarly agendas and careers. On the other hand, OPR provides the opportunity to replace that elitism with an open and inclusive discourse of ideas within a community. It can provide a platform to make space for a diverse population of readers, authors, and research approaches to be present and included in the scholarly publication process. OPR can flatten hierarchies of research, where largely senior researchers review the work of their junior colleagues.²⁰ If we reflect on how to equalize and democratize the institutionalized practice of peer-review within a community, OPR is one way we can crack open the door and invite disenfranchised voices into a conversation. It is a way to make transparent potential bias, -isms, and inequalities in publishing communities.

OPR Advances and Reinforces ACRL's Plan for Excellence

The ACRL Plan for Excellence outlines four areas in its Five-Year Goals and Objectives — Value of Academic Libraries, Student Learning, Research and Scholarly Environment, and New Roles and Changing Landscapes.²¹ Investigating and implementing OPR in library publications would support each of these goal areas. The Value of Academic Libraries expresses an objective to advance equity and inclusion issues in higher education, which I have already shown OPR can support.

OPR also contributes to Student Learning, where it can be a valuable teaching tool. Using examples of OPR processes in library instruction engages learners as they become familiar and comfortable with two threshold concepts outlined in ACRL's Framework for Information Literacy: scholarship is a conversation, and information creation as a process. In my experience, many students view scholarly publishing and communication processes as mysterious and unapproachable. In instruction, when students are invited to observe, examine, and participate in OPR, these processes become more accessible. In this way OPR provides an invitation for students to participate in scholarly conversations and in the information creation process.

Additionally, OPR explicitly supports ACRL's Research and Scholarly Environment goal to "...accelerate the transition to more open and equitable systems of scholarship." OPR implementation would increase ACRL's advocacy for and modeling of open dissemination and evaluation practices. In short, it would move "...scholarly publishing policies and practices to a more open system."

Finally, OPR addresses ACRL's New Roles and Changing Landscape objective to "expand ACRL's role as a catalyst for transformational change in higher education" by challenging and transforming the academic tradition and culture regarding peer review. By investigating and implementing OPR, library workers will engage with peer review in new ways. In turn, they will demonstrate successes in this arena to colleagues in disciplinary departments. In promotion and tenure processes, committees will need to support an individual's contributions to OPR—as referees and as authors—as legitimate and meaningful contributions to the profession.

Recommendations for Scholarly Publishing in LIS and ACRL at-large

Above I have provided my perspective on the purpose of peer review in LIS and offered reasoned arguments supporting the increased investigation and adoption of OPR in LIS. While I see great potential in OPR, I understand that it may not solely and immediately replace current scholarly review and publishing practices in our field or in other disciplines. Because our community needs to continue conversations about OPR, I have not offered models of OPR to implement, but rather call on the community to engage with these nascent conversations. We have much more to discuss and learn. To that end, I offer the following recommendations for library workers, libraries, readers, editors, reviewers, editorial board members, publications, ACRL, and other library organizations interested in exploring OPR.

1. Seek Out and Engage in Existing OPR Opportunities

Authors, reviewers, and readers should seek opportunities to engage in OPR by submitting their work to publications utilizing OPR, and/or volunteer their services as an open reviewer. Those serving as open reviewers should include reviews on their CVs and in their academic portfolios. Readers should use public commenting mechanisms at journals that offer it. (This journal offers that capability from any article's abstract page.) Moreover, librarians providing instruction may consider utilizing OPR publications and processes as article examples in instruction, or even develop instructional activities engaging with OPR. Bridging OPR with concepts from the Framework for Information Literacy, scholarship as a conversation and information creation as a process, can be a way for library workers to engage students with these concepts.

- Observe, Investigate, Discuss, and Experiment with OPR
- Editors and editorial board members should read the growing body of literature on the topic, brainstorm potential pitfalls and benefits, and discuss experimental implementations for their communities. They should review their current editorial policies, procedures, review guidelines and discuss how they might be opened up. This work has already begun at ACRL's re-envisioned monographic research series, Publications in Librarianship, whose editorial board is currently developing an OPR process.
- Advocate for and Support an Open Ethos of Scholarly Publishing
- Despite the headway that ACRL, libraries, and library workers have made in advocating for openness via OA and other initiatives, this work is not complete. Library workers should continue advocating for all things open, and expand that advocacy to include conversations about OPR. Authors may begin research with an aim to openly share their data at the conclusion of a project, and journals should encourage deposit of open data into repositories. ACRL should continue to move all ACRL publications to OA. ACRL can continue to invite public commentary on policy documents, white papers, and other association-related business in an easy, accessible, and open way.
- Continue Efforts to Increase Diversity, Inclusion, and Social Justice in Scholarly Publishing OPR can strengthen social justice, diversity, and inclusion in scholarly publishing. We should engage in this work even before implementing OPR. Journal editors and editorial boards should begin to collect demographic information from their constituencies-readers, authors, reviewers, and editorial board members. For instance, a report is forthcoming from ACRL's Publications Coordinating Committee, which has completed a demographic survey of ACRL publications' Editorial Boards.²³ Publication stakeholders should review and revise editorial and other policies, using a diversity lens. Implicit bias training should be mandatory for editors, editorial boards, and reviewers. Those who research, write, and publish, can find and submit to publication venues that have made efforts toward diversity and inclusion in their editorial policies. These practices should also be embraced and institutionalized at publications that do move to implement OPR.

Conclusion

Since the term 'open source' was coined and adopted, the open initiatives have tied community engagement to 'open.' Adopting a full expression of an open ethos in LIS will mean that we do more than advocate for and publish OA scholarship. It means more than promoting and facilitating open data at our institutions, and more than funding and publishing open educational resources. A full expression of an open ethos will include OPR implementation and acceptance by the community at large.

OPR offers vast potential for LIS. Implementing OPR would demonstrate our commitment to human-centered library practice, collaboration, and community engagement. It would allow us to make progress toward ameliorating elitism, implicit exclusion, and social power in LIS publishing and scholarship. It would afford us the opportunity to include a greater diversity of authors, editors, reviewers, readers, and research approaches in LIS publications. It amplifies collaborative and communityengaged efforts in our scholarly conversations. Finally, it positions academic libraries and library workers as innovators of scholarly publishing. Although conversations about OPR in LIS publishing are nascent, academic libraries, library workers, and ACRL's well established dedication to openness show that we are ready to take this step. I am excited to see where a full expression of an open ethos in LIS takes us.

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