Open Scholarship and Bibliodiversity

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"Bibliodiversity," as it pertains to open scholarship, refers to the diversity of publishing models, platforms, and formats available for scholarly communication. It emphasizes the importance of a varied and inclusive ecosystem for acquiring academic knowledge and disseminating research. An important part of bibliodiversity is the inclusion and promotion of diverse scholarly voices. In February, I moderated a session at the NISO Plus[1] conference, entitled "Open Scholarship and Bibliodiversity," that included researchers and scholarly communication professionals from diverse backgrounds who represent varied open scholarship initiatives. Each of the panelists were asked to consider these key principles as they prepared their talks:

1. Access to Diverse Perspectives
2. Inclusivity and Equity
3. Reducing Publishing Bias
4. Encouraging Innovations
5. Global Collaboration

Although each presentation contained elements of each principle, I have related in this report each presentation to the principle that it most represented.

1. Access to Diverse Perspectives

Bibliodiversity, which encompasses a diverse range of publishing models and platforms, allows for a broader representation of scholarly voices. Different publishing options, including open access journals, institutional repositories, and alternative publishing platforms, can cater to a variety of perspectives, research topics, and methodologies.

Maureen P Walsh, Scholarly Sharing Strategist and Associate Professor at The Ohio State University,[2] presented, "Investments in Open Scholarship Toward Bibliodiversity: The Role of a

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Large North American Research Library." Her talk focused on transforming the scholarly publishing economy, particularly within a large North American research library, aiming to promote bibliodiversity through investments in open scholarship. Walsh emphasized that the initiative, ongoing since April 2019, represents a strategic approach and is guided by values and principles, such as open access publishing agreements, consortia partnerships, open scholarly infrastructure, authors' rights, open access monographs, engagement with campus partners, and support for diamond open access.

Walsh highlighted 1 significant aspect of the initiative, which involves investments in open scholarship and encompasses various models, platforms, and formats. For instance, the "Read and Publish" or "Pure Publish" model, implemented from July 8, 2020, to February 9, 2024, resulted in the publication of 1,471 articles as open access, with $4,604,805 in article processing charges (APCs) waived. She noted that the investments target scholarly societies, nonprofit organizations, university presses, and commercial publishers, and support their transition toward open access publishing. Examples of supported entities include the Biochemical Society, Cambridge University Press, PLOS, and Springer.

This initiative, as discussed by Walsh, highlights investments made by university libraries in diamond open access, subscribe-to-open models, open monographs, and open infrastructure, demonstrating a commitment to promoting diverse scholarly outputs and supporting campus researchers. It represents a balancing act between fostering bibliodiversity—ensuring a diverse range of scholarly works—and supporting the needs and goals of the academic community.

The support provided through this initiative extends beyond financial investments and aims to have a tangible impact on the direction and scale of open scholarship. Walsh sees that by collaborating with various stakeholders and investing strategically in open access initiatives, the large North American research library can contribute to the advancement of scholarly communication while ensuring equitable access to knowledge resources for researchers and scholars.

2. Inclusivity and Equity

A diverse scholarly ecosystem promotes inclusivity and equity by providing opportunities for researchers from different backgrounds, disciplines, and regions to share

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their work. *Open scholarship aims to break down barriers to information access, and a diverse bibliodiversity contributes to this goal by offering a platform for a wide array of voices.*

Two presentations fall under this category. First, Nataliia Kaliuzhna, Research Associate at TIB – Leibniz Information Centre for Science and Technology,[3] and PhD student at Kyiv National University of Culture and Arts,[4] presented "Identification of Hurdles to Open Access Publishing for Researchers with Weak Institutional Ties—Epistemic Injustice in Scientific Publishing." She provided an overview about the newly launched IDAHO project[5] that aims to identify and describe the obstacles and their underlying mechanisms that researchers with weak institutional ties face in the realm of open access publishing. It underscores the necessity of ensuring that diverse ranges of voices from various backgrounds have an equitable opportunity to engage in research, knowledge creation, and dissemination. The project spans from October 2023 to August 2025 and employs a multipart exploratory mixed-method approach.

Kaliuzhna explained that the initial phase, a comprehensive literature review, has been conducted, revealing a range of obstacles authors encounter when attempting to publish open access. This stage of the study aims to inform the data collection approach for the subsequent empirical phase. These include independent researchers, those without affiliations, transient academics, retired researchers, refugee scientists, nongovernmental organization researchers, and individuals from the Citizen Science domain. As Kaliuzhna points out, the study aims to shed light on the specific obstacles faced by these diverse groups, particularly due to their lack of sufficient institutional support (APC funding).

Currently, the project is progressing to its second phase, which involves qualitative interviews with both researchers and publishers, alongside quantitative surveys targeting researchers. Kaliuzhna says that this phase seeks to deepen the understanding gained from the literature review by directly engaging with stakeholders. Subsequently, in the third phase, a workshop with publishers will be organized to distill findings into actionable recommendations for improving access to open publishing for researchers with weak institutional ties.

By addressing these barriers and proposing practical measures to overcome or mitigate them, the study endeavors to promote inclusivity and equity in scientific publishing, ensuring that valuable contributions from researchers across various backgrounds are not marginalized due to institutional affiliations, or lack thereof.

Michael Chimalizeni, Metadata Specialist and Consultant located in Zimbabwe, presented "Bibliodiversity—Local Action to Stay on the Cutting Edge." Chimalizeni emphasized the critical importance of assistive technology, citing a 2017 study in the Lancet[6] that showed 90% of visually impaired individuals reside in developing countries and face significant barriers to education and employment opportunities. There is a need for local libraries to balance technological advancements with ensuring accessibility to content, especially for marginalized communities. To address this disparity, Chimalizeni outlined a series of proactive measures to promote and advocate for assistive technology within local library services.

One significant initiative is the organization of webinars aimed at library directors to raise awareness about the importance of accessibility and assistive technology in library services. The webinars highlight specific case studies demonstrating the transformative impact of implementing assistive technology in libraries, such as how the adoption of screen reader software improved accessibility for visually impaired patrons in a particular library. Also explored were strategies to enhance accessibility within limited budgets, such as advocating for increased funding allocations for assistive technology, seeking grants specifically earmarked for accessibility initiatives, or exploring partnerships with local organizations or businesses willing to sponsor accessibility upgrades in libraries.

Chimalizeni discussed the establishment of a community of practice group on WhatsApp, a space for library professionals to collaborate, share insights, and brainstorm innovative approaches to enhancing accessibility in library services. Members of this group can exchange best practices on creating accessible digital resources and discuss implementing inclusive design principles in library programming.

Partnering with publishers to improve the accessibility of their content, libraries and the publishing industry can also create a more open and inclusive information ecosystem. Publishers are encouraged to undergo training facilitated by the Accessible Books Consortium (ABC).[7] This training equips publishers with the knowledge and skills to produce content that meets accessibility standards, such as providing alternative text for images, ensuring compatibility with screen readers, and implementing navigational aids for individuals with motor impairments.

3. Reducing Publishing Bias

Traditional publishing models may have biases that favor certain topics, methodologies, or regions. Bibliodiversity, especially within open access initiatives, can help counteract these biases by creating space for underrepresented voices. This is crucial for fostering a more comprehensive understanding of various subjects and addressing gaps in knowledge.

Katherine Witzig, a Library Administrative Assistant at Oklahoma City University presented, "Respectful Partnership for More Inclusive Practices." As a member of the Choctaw Nation of Oklahoma[8] and the 2SLGBTQ+ and disability

communities, Witzig brings a unique perspective to her work. With a diverse educational background, including Bachelor of Arts degrees in English and Spanish, and currently pursuing a Master's in Library and Information Science degree at the University of Illinois Urbana-Champaign, Witzig's professional journey is characterized by a dedication to fostering respectful partnerships and counteracting bias in research.

As Chair of the Committee for Tribal Libraries, Archives, and Museums within the Oklahoma Library Association,[9] Witzig discussed initiatives aimed at supporting tribal librarians and improving access to resources for Indigenous populations. One such initiative is the establishment of web-accessible resource lists tailored to the unique needs of tribal libraries, archives, and museums, ensuring these institutions have access to the tools and support required to serve their communities. Fostering collaboration and knowledge sharing among tribal librarians empowers them to address the specific challenges they face, and advocate for the preservation and promotion of Indigenous knowledge and cultural heritage.

As Co-chair of the Program for Cooperative Cataloging's Task Group for Metadata Related to Indigenous Peoples of North America,[10] Witzig advocates for reparative and inclusive metadata practices throughout the library and information science community. Recommendations are in development to update Library of Congress classifications and subject headings so that they accurately reflect Indigenous perspectives and identities. Relatedly, Witzig served as an advisory board member for the "Creating Subject Headings for Indigenous Topics: A Culturally Respectful Guide,"[11] which informs library professionals on best practices for incorporating Indigenous perspectives into cataloging. These metadata standards and practices reduce bias by challenging colonial legacies that are embedded in cataloging systems, and they promote greater visibility and recognition of Indigenous peoples and cultures in library collections.

In her research and presentations, Witzig continues to advocate for respectful and culturally sensitive approaches to information management. Presentations at events like the Eastern Oklahoma Library System and University of Illinois Urbana-Champaign Student Showcases underscore her commitment to fostering cultural connections and incorporating Indigeneity into library and information science practices, creating a more inclusive and representative environment that honors the diverse perspectives and experiences of Indigenous communities and other marginalized groups.

4. Encouraging Innovations

A diverse scholarly publishing landscape encourages innovation in communication and dissemination of research. New and alternative publishing models can emerge, providing researchers with creative ways to share their findings. This innovation contributes to a dynamic scholarly environment that adapts to the evolving needs of the research community.

Dr Nokuthula Mchunu, Deputy Director at the African Open Science Platform,[12] presented "Towards a Continental Open Science Vision: Making African Research Discoverable." Her talk focused on making African research more discoverable. The African Open Science Platform encompasses various components aimed at advancing open science across the continent, including open science resources, outreach and engagement activities, education and capacity development initiatives, and data-intensive science outcomes.

One of the key challenges addressed by the platform is the limited visibility of African scholarly output, which is attributed to language barriers, underrepresentation in international research networks, and restricted access to research funding. To tackle these challenges, the platform emphasizes the importance of convening and coordinating the interests, ideas, people, institutions, and resources for open science both within and for Africa.

To enhance the discoverability of African research, the platform is actively encouraging the adoption of persistent identifiers (PIDs) and fostering the best possible discoverability and indexing in open scholarly databases. This effort is exemplified by platforms like africarxiv.org,[13] which serves as a preprint repository specifically for African research, promoting visibility and accessibility of scholarly outputs from the continent.

The African Open Science Platform-Nodes serve as crucial hubs for fostering collaboration and advancing open science initiatives across the continent. These nodes are strategically located in various regions of Africa, encompassing countries such as South Africa, Nigeria, Kenya, Ghana, and others. Each node operates under the umbrella of the African Open Science Platform, working to encourage the adoption of PIDs and promote the discoverability of African research in open scholarly databases. Additionally, these nodes play a vital role in facilitating engagement with local communities, universities, research institutions, and policymakers to address challenges related to language barriers, limited digital visibility, and access to research funding. Through their concerted efforts, the African Open Science Platform-Nodes contribute to building a more robust and inclusive research ecosystem across the African continent.

Moreover, the African Open Science Platform is investing in essential infrastructure, such as cloud computing and data management tools, to support data-intensive research projects. Additionally, initiatives like the Data Science & AI Institute demonstrate the platform's commitment to providing cutting-edge support for researchers across Africa.

Expanding on these efforts, the platform is engaged in global challenge projects and aims to address the unique

needs and opportunities present in African research landscapes. By tackling challenges related to visibility, language, and access to resources, the African Open Science Platform strives to foster a more inclusive and impactful research environment on the continent, ultimately contributing to the advancement of science and innovation worldwide.

5. Global Collaboration

Bibliodiversity, combined with open access principles, facilitates global collaboration. Researchers from different parts of the world can access each other's work more easily, leading to increased collaboration and the exchange of ideas. This international collaboration enriches the scholarly discourse and helps build a more interconnected global research community.

Mohamad Mostafa, Regional Engagement Specialist, Middle East and Asia, at DataCite,[14] presented "Advancing Equity and Accessibility through DataCite's Global Access Program." DataCite, is a global community committed to making research outputs openly available and connected so their reuse can advance knowledge across and between disciplines, from samples and images to data and preprints. DataCite enables the creation and management of PIDs, they integrate services to improve research workflows, and they facilitate the discovery and reuse of research outputs and resources.

DataCite launched the Global Access Program (GAP)[15] in February 2023. The program seeks to improve equity and access to PIDs infrastructure in underrepresented regions such as Africa, Asia, the Middle East, and Latin America through a comprehensive approach encompassing outreach, technical infrastructure development, and funding opportunities.

Mostafa discussed how GAP has made significant strides in increasing awareness through various outreach activities, such as regional webinars delivered in multiple languages, and how the launch of the DataCite Ambassador Program[16] has established collaborations with local communities, and provided case studies[17] demonstrating the practical applications of DataCite. Ambassadors from diverse regions such as Ecuador, Indonesia, India, Brazil, Ethiopia, and Saudi Arabia play a crucial role in promoting DataCite's mission within their communities.

Additionally, GAP has focused on analyzing and enhancing technical infrastructure in target regions, including Africa, Asia, the Middle East, and Latin America. Mostafa noted that by examining the repository landscape and identifying opportunities for improvement, the program aims to support the development of robust infrastructure that facilitates the discoverability and accessibility of research outputs. Furthermore, DataCite's Global Access Fund (GAF)[18] provides funding opportunities for organizations in the regions to support outreach activities, infrastructure development, and demonstrator projects. Mostafa was happy to announce that the first round of the GAF had been successful, with more than 185 applications received and 12 awardees announced[19] in the first cohort.

GAP is increasing global PID adoption, which Mostafa attributes to the program's commitment to fostering an equitable and inclusive research ecosystem, where researchers and communities worldwide have the necessary tools and resources to share their work effectively. As the GAP continues to make strides toward its goals, its call for support[20] remains open, inviting organizations and individuals to contribute to the advancement of global research accessibility and equity.

Promoting bibliodiversity is seen as a way to increase access to knowledge, reduce barriers to information, and foster a more collaborative and open scholarly community. The NISO Plus session on Open Scholarship and Bibliodiversity, provided an outlet for recognition and promotion of these 6 important initiatives. Although I've categorized each under a single heading, all of the panelists internalized and then reflected all 5 key principles in their presentations, illustrating that a diverse publishing landscape facilitates the inclusion of a wide range of perspectives and voices. Together, these voices contribute to a robust, equitable, and collaborative scholarly ecosystem.

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