

Library Resources & Technical Services

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to the Library of Congress Subject Heading
“Illegal Aliens”**

Kelsey George, Erin Grant, Cate Kellett, Karl Pettitt

**Representational Belonging in Collections: A
Comparative Study of Leading Trade Publications
in Architecture**

Emilee Mathews

**LibraryThing and Literary Works Revisited:
Are Social and Library Cataloging Just as
Complementary as they were a Decade Ago?**

Philip Hider and Gemma Steele



Core LEADERSHIP
INFRASTRUCTURE
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Editorial

Mary Beth Weber



The 2021 ALA Annual Conference is the first Annual with Core programs and meetings (note: there were also Core meetings at Midwinter 2021). This year there are many programs at Annual that focus on diversity, equity, and inclusion (DEI). These are important issues, and an integral part of our work.

The library where I am employed formed a DEI Committee in December 2020. Many of the vendors and organizations that serve libraries, such as Ex Libris and OCLC, have initiated DEI initiatives. ALA has an Office for Diversity, Literacy and Outreach Services and offers the Diversity in Publishing Showcase. Additionally, ALA has a Committee on Diversity, and Core has the Diversity and Inclusion Committee, chaired by Amber Billey. Organizations like the Federal Deposit Insurance Corporation (FDIC) and companies like Citi, General Motors, and Slack have DEI initiatives.¹ Many universities and colleges, as well as EDUCAUSE and the Association of Research Libraries, are focusing on DEI.²

DEI initiatives in libraries often focus on services, spaces, and staffing, yet there is also an important role that technical services professionals contribute to these initiatives. I have attended numerous programs in the past year that have addressed diversity, equity, and inclusion that have related to technical services' role in bringing about change. The New York Technical Services Librarians (NYTSL) and ARLIS/NY presented the program "Inclusive Description in New York City" to highlight current projects on inclusive description that are happening in NYC. In 2020, NYTSL hosted Barbara Fister's presentation "The Bigot in the Machine: Bias in Algorithmic Systems." I share a quote from Fister: "As language shifts, we shift our subject headings, trying to 'fix' the language so it is more accurate or less offensive."³ The Cataloging Ethics Steering Committee (CESC), is composed of cataloging communities from the US, Canada and the UK, and has compiled a Code of Ethics for Cataloguers. The Program for Cooperative Cataloging has an Advisory Committee on Diversity, Equity and Inclusion that was charged in February 2021 to make "DEI and metadata ethics an integral part of PCC work."⁴ The film *Change the Subject* raised awareness of how language can be harmful and negatively influence perception, and has led to a greater awareness of inappropriate or discriminatory subject headings and description.

It might seem that technical services work related to DEI is mostly related to resource description. However, it also includes collection development and management, and preservation. It is not enough for us to purchase materials about DEI, but also to purchase materials by individuals who are diverse. Libraries are now conducting diversity audits of their collections. In preservation, the need to preserve materials from the past must be balanced with the need to respond when racist or harmful content has been identified. UCLA's preservation blog discusses how conservators should not be required to process materials that may be harmful to their "mental and spiritual well-being."⁵ Organizations may acknowledge bias in their archival collections and are making efforts to document more inclusive history, such as Carnegie Mellon's "What We Don't Have" exhibit.⁶

There are two papers in this issue that address DEI issues. A summary of this issue's content follows. I hope you enjoy it.

- In their paper “A Path for Moving Forward with Local Changes to the Library of Congress Subject Heading ‘Illegal aliens,’” Kelsey George, Erin Grant, Cate Kellett, and Karl Pettitt discuss events that followed LC’s 2014 decision to reject a proposal to change headings in the Library of Congress Subject Headings (LCSH) that refer to undocumented immigrants as “Illegal aliens.” Those events include the formation of a new SAC Working Group on Alternatives to LCSH “Illegal aliens” in 2019 to survey local institutions implementing changes to the subject heading and to chart a path for librarians to address the subject heading at the organizational-level. The working group presented their report at the 2020 ALA Annual Conference, and this paper builds upon that report and details next steps.
- “Representational Belonging in Collections: A Comparative Study of Leading Trade Publications in

Architecture,” by Emilee Mathews, explores how libraries reflect the communities that they serve. Her research analyzed a subset of periodical literature to measure how women are reflected, specifically women of color, in architecture library collections. The focus is on four major publishing outputs of architecture literature to obtain a sample the ratio of women leaders in featured architectural firms.

- Philip Hider and Gemma Steele discuss how providing access to literary works remains a challenge for catalogers and metadata librarians, despite the introduction of the *Guidelines on Subject Access to Individual Works of Fiction, Drama etc.* and the Library of Congress Genre/Form Terms. In their paper “LibraryThing and Literary Works Revisited: Are Social and Library Cataloging Just as Complementary as they were a Decade Ago?,” they examine how applying social cataloging to fiction and other belles-lettres might help meet this challenge.
- Book reviews courtesy of my colleague Elyssa Gould, *LRTS* book review editor.

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A Path for Moving Forward with Local Changes to the Library of Congress Subject Heading “Illegal Aliens”

Kelsey George, Erin Grant, Cate Kellett, Karl Pettitt

In 2014, the Library of Congress (LC) rejected a proposal to change headings in the Library of Congress Subject Headings (LCSH) that refer to undocumented immigrants as “Illegal aliens.” Two years later, a Subject Analysis Committee (SAC) working group submitted recommendations regarding how and why LC should change the LCSH “Illegal aliens.”¹ That same year, LC decided to cancel the “Illegal aliens” subject heading, which Congress subsequently sought to block.² Congress eventually required LC “to make publicly available its process for changing or adding subject headings . . . [and use] a process to change or add subject headings that are clearly defined, transparent, and allows input from stakeholders including those in the congressional community.”³ In response, LC paused their plan to change “Illegal aliens.” In June 2019, a new SAC Working Group on Alternatives to LCSH “Illegal aliens” was convened to survey local institutions implementing changes to the subject heading and to chart a path for librarians to address the subject heading at the organizational level. At the 2020 ALA Annual Conference, the working group presented their report. This paper builds upon that report and details next steps both for the working group and library professionals who plan to implement changes at their own organizations.

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In June 2019, representatives from the American Library Association (ALA), the former Association for Library Collections and Technical Services (ALCTS), and representatives from the Library of Congress (LC) met before the 2019 ALA Annual Conference in Washington, DC. During the meeting, ALA and ALCTS representatives requested an update on the status of changes proposed to the authorized LCSH (Library of Congress Subject Headings) “Illegal aliens.” LC declined to provide more information or a timeframe for changing this subject heading. The ALCTS board of directors determined their priority would be to help libraries revise their catalogs using alternatives to LCSH while continuing to keep lines of dialogue open with LC. This working group, the ALCTS Subject Analysis Committee’s Working Group on Alternatives to LCSH “Illegal aliens,” was established to that end under the auspices of ALCTS’s Subject Analysis Committee (SAC).

Literature Review

The specific historical circumstances that led to the SAC working group and the report discussed in this paper are covered in the next section. However, a review of the written record during the intervening period between the first SAC working group in 2016 and the current one in 2019 will help to illuminate the discussions in library literature about the terminology used in LCSH, particularly when that terminology does not reflect the personal and institutional values of those who use LCSH.

In a paper written for *Library Journal* by Morales, the issue of the term “Illegal aliens” is viewed through the lens of technology and previous attempts by student activists to change the terminology used in LCSH for marginalized groups. Morales references the movement by Latino students at the University of California (UC) Berkeley in the 1970s who advocated for subject headings that better reflect and represent the Mexican American experience. The UC Berkeley Chicano Studies Library met this request by creating a unique vocabulary that was eventually instituted in the Chicano Database. Morales argues that the issue over the LCSH term “Illegal aliens” reflects this past activism as it turns to technology to help rectify the situation and implement change.⁴

A 2017 interview conducted by Gross with Sanford (“Sandy”) Berman provided some interesting insight from Berman, long a proponent of localized vocabulary creation. Berman suggested that there were better alternatives to “Illegal aliens” when the term was first adopted, and that as early as 1981, the Hennepin County Library, where Berman worked, began using “Undocumented workers” instead, based upon the Chicano Thesaurus for Indexing Chicano Materials. Berman further stated that the greatest failure in 2016 was not that LC did not change the heading in LCSH, but that given the work that the SAC working group did regarding suggestions for replacing “Illegal aliens,” that more libraries did not then make these changes in their local systems. He believed, that among other reasons, this lack of action can be attributed to “a sickening abandonment of professional judgement and independence . . . and a frankly numbing deference to distant authorities (like LC) and mindlessly imposed standardization (e.g., LCSH) that simply don’t deserve such knee-jerk acceptance and embrace.”⁵ The interview also includes an interesting, unpublished paper that Berman wrote for *American Libraries* on the “Illegal aliens” issue.⁶

Lo’s 2019 paper in *Legal Reference Services Quarterly* discussed the issues of classification and indexing systems and using the terms “Aliens” and its variant “Illegal aliens” as examples of the limitations of these systems. She grounded her argument in the legal research process, noting that legal research necessarily mirrors aspects of legal work, namely

the concept of *stare decisis*. This concept places special emphasis on following precedent when it exists. Therefore legal research is primarily about finding similar concepts to those being discussed in the current research question. This process of finding similar concepts in previous cases or research is aided by indexing systems such as LCSH. The problem, to which Lo alludes, is that indexing systems such as LCSH try to fit everything into orderly categories that do not always accurately represent the complex realities of legal research. For example, intersectionality can create a dilemma when applying LCSH. Which concept is given precedent and how is the relationship between the two concepts reflected in LCSH? Another issue is that LCSH, and other indexing systems, reify the biases of those who created and apply the system. The subject heading “Illegal aliens” provides a perfect case study in how these issues exist in LCSH. Lo reviewed the historical context surrounding the issue of changing the LCSH “Illegal aliens.” Her analysis of the final appropriations bill that was passed into law seems to instruct LC to weigh changes to subject headings in favor of current legal terminology, including the sources that are frequently referenced for that terminology, such as Title 8 of the US Code, *Black’s Law Dictionary*, and the *Legislative Indexing Vocabulary* used by the Congressional Research Service. Lo concluded by pointing out that this exemplifies LCSH’s inherent shortcomings and the biases that exist in it because of its reliance on literary warrant from legal texts, the difficulty of changing headings, and the need to adhere to political considerations.⁷

There have also been numerous resources that document the historical events surrounding the initial proposal to change “Illegal aliens” in LCSH and the resultant events that led to this effort stalling and no changes being made. The documentary film titled “Change the Subject” tells the story of how Dartmouth College students worked to change the LCSH heading “Illegal aliens” in cooperation with the library staff.⁸ Fox has also published a timeline of events surrounding the “Illegal aliens” controversy in *Cataloging and Classification Quarterly*.⁹ Ford wrote a similar piece in *American Libraries*.¹⁰ Finally, Cox’s paper in the *University of Iowa Library News* also relates the background to the Congressional interference in LCSH.¹¹ Though these resources relate an historical account of the issues surrounding the heading “Illegal aliens” in LCSH, a brief overview is helpful before moving on to the survey and results.

Background

In 2014, Dartmouth College students Óscar Rubén Cornejo Cásares and Melissa Padilla, and other members of Dartmouth College’s student organization, the Coalition for Immigration Reform, Equality and DREAMERS

Table 1. Original Proposed Changes. Table 1 contains a column of the five original Library of Congress Subject headings that have the term “illegal aliens” and a second column of the 2016 proposed changes to the main entries of these subject headings.

Current Library of Congress Subject Heading	Proposed Replacement Subject Heading
Illegal aliens	Undocumented immigrants
Illegal aliens in literature	Undocumented immigrants in literature
Illegal alien children	Undocumented immigrant children
Children of illegal aliens	Children of undocumented immigrants
Women illegal aliens	Undocumented women immigrants

(CoFIREd), called for a change to the subject heading in the library catalog. Specifically, the students advocated for Dartmouth College Libraries to drop the term “Illegal aliens” from their catalog, and use the term “‘undocumented’ instead of ‘illegal’ in reference to immigrants.”¹² The students worked with Dartmouth College librarian John DeSantis to submit five proposals in June 2014 through LC’s Subject Authority Cooperative Program (SACO). Table 1 includes the five subject heading changes that were originally proposed.

LC rejected the proposed revisions to the five subject headings in their *Summary of Decisions* dated December 15, 2014. In the decision to reject the proposal, LC stated that “Illegal aliens is an inherently legal heading, and as such the preference is to use the legal terminology,” elaborating on this by stating that “mixing an inherently legal concept with one that is not inherently legal leads to problems with the structure and maintenance of LCSH, and makes assignment of headings difficult.”¹³

At the 2016 ALA Midwinter Meeting in Boston, Gross submitted a “Resolution on Replacing the Library of Congress Subject Heading ‘Illegal Aliens’ with ‘Undocumented Immigrants,’” written in collaboration with others (including input from Berman), to the Social Responsibilities Round Table (SRRT), which voted to bring the resolution forward for consideration by ALA Council.¹⁴ ALA Council is ALA’s governing body and consists of one hundred councilors at large, elected by ALA membership, which “delegates to the divisions of the Association authority to plan and carry out programs and activities with policy established by Council.”¹⁵ The resolution gained the support of several ALA groups beyond the SRRT, including the National Association to Promote Library and Information Services to Latinos and the Spanish Speaking (REFORMA), the Ethnic and Multicultural Exchange Round Table (EMIERT), the Seminar on the Acquisition of Latin American Library Materials (SALALM), ALA’s Intellectual Freedom Committee (IFC), the Intellectual Freedom Round Table (IFRT), and SAC. ALA Council passed the resolution nearly unanimously, and SAC formed a working group, led by Gross, to review the LCSH “Illegal aliens” and report to SAC with recommendations.¹⁶

LC’s Summary of Decisions, dated March 21, 2016, announced that the “heading Illegal aliens [would] be canceled and replaced by two headings, ‘Noncitizens’ and ‘Unauthorized immigration,’ which may be assigned together to describe resources about people who illegally reside in a country.”¹⁷ The full decision was outlined in a statement titled “Library of Congress to Cancel the Subject Heading ‘Illegal Aliens.’”¹⁸

In April 2016, US Representative Diane Black introduced H.R. 4926 to the House during the 114th Congress, commonly known as the “Stopping Partisan Policy at the Library of Congress Act,” which directed LC to retain the headings “Aliens” and “Illegal aliens.”¹⁹ Despite much discussion and debate, H.R. 4926 was not considered for a vote during the 114th Congress. The bill was instead directed to the House Committee on House Administration at the end of the legislative session, which essentially meant the end of it. However, it did not mean that it was the end of congressional interest in the topic.

In May 2016, the House Appropriations Committee, chaired by US Representative Tom Graves, introduced bill H.R. 5325, otherwise known as the “Continuing Appropriations and Military Construction, Veteran Affairs, and Related Agencies Appropriations Act, 2017.” Included within this bill was language related to LC and the management of subject headings:

To the extent practicable, the Committee instructs the Library to maintain certain subject headings that reflect terminology used in title 8, United States Code.²⁰

Several lengthy discussions ensued in the House regarding the inclusion of this language in the bill. Most of the exchanges about the appropriateness of including this provision in the rest of the bill were between Representative Tom Graves, arguing for the inclusion of the language, and Representative Debbie Wasserman-Schultz, arguing against any interference of Congress in LC’s work and its subject headings. While the appropriations bill passed the House of Representatives with this wording intact, this was not the final wording of the bill that was signed into law.

The legislation that was ultimately enacted is reflected on page H4033 of Congressional Record, volume 163 no. 76 Book III (May 3, 2017):

Subject Headings: In lieu of report language related to the Library of Congress' subject headings, the Library of Congress is directed to make publicly available its process for changing or adding subject headings. It is expected that the Library use a process to change or add subject headings that is clearly defined, transparent, and allows input from stakeholders including those in the congressional community. The process should consider appropriate sources of common terminology used to refer to a concept, including current statutory language and other legal reference sources; and other sources, such as reference materials; websites; and, titles in the Library of Congress' collection.²¹

LC stated in May 2016 that they would accept public feedback for the proposal to change the "Illegal aliens" heading. This comment period has remained open, and LC has made no formal public statements regarding revisions to LCSH "Illegal aliens" since 2016.

During this period of debate in Congress, the ALA ALCTS SAC Working Group on the LCSH "Illegal aliens" continued to work. The Working Group reported back to SAC at the 2016 American Library Association Annual Conference, and published the July 2016 *Report from the SAC Working Group on the LCSH "Illegal aliens."* The Working Group concurred with LC's decision to change the subject heading "Aliens" to "Noncitizens," however, the group recommended replacing "Illegal aliens" with "Undocumented immigrants," except in cases where "Illegal aliens" was assigned to resources about noncitizens who were not immigrants.²² The report also indicated that "where the subject heading Illegal aliens has been assigned to works about nonimmigrants, more specific terms should be assigned."²³

Three years later, the 2019 release of the documentary film *Change the Subject* revitalized the conversation around what progress had been made to change the "Illegal aliens" subject heading since 2016. *Change the Subject* focuses on the activism of Óscar Rubén Cornejo Cásares and Melissa Padilla, two Dartmouth University students in 2014 whose passion for rectifying the derogatory language used to describe people led to a movement to change the "Illegal aliens" subject heading. Library staff across the country began to ask what they could do to address the term "Illegal aliens" in their local catalogs as the library community awaits official revisions to the terms by LC.

The ALCTS Subject Analysis Committee formed the SAC Working Group on Alternatives to LCSH "Illegal

aliens" in June 2019. The Working Group was charged with focusing on identifying and compiling various methods for individual libraries, library systems, or consortia systems to change this subject heading at the local level. The first order of business was to get a sense of what institutions were currently doing to address the continued use of "Illegal aliens" as part of LCSH. The OCLC Research Library Partnership has also provided a synopsis of discussions about this issue held by its Metadata Managers Focus Group in 2019, and strategies for using alternative subject headings on their blog, which provides a more detailed explanation of how to implement changes.²⁴

Method

To gain a broader perspective, the working group developed and distributed a survey in September and October of 2019 to gather information from staff across a range of libraries and other cultural heritage institutions regarding how they were addressing the subject heading at their institutions.

Survey Design

The survey was developed and administered using Google Forms. The survey was not anonymous; name, email address, and institution affiliation for the individual who responded to the survey were requested if follow up for details on implementation was necessary. To determine patterns of solutions across library systems, participants were asked to identify which integrated library system (ILS) or library services platform (LSP) and any discovery tools they used. The survey also asked respondents to identify whether the library catalog was used by a single institution, or across a library system or consortium.

Participants were asked if changes were made in their local catalog to the LCSH "Illegal aliens." If changes were made, or if there were plans to make changes, they were asked if the changes were instituted as a one-time global change or were part of an ongoing process (e.g., changes needed as new records were imported). Participants were asked to state which role(s) was responsible for making the changes at the institution and what changes were made to accommodate local headings if local headings were used. Survey participants were asked to estimate how long it took to implement these changes.

Additional questions addressed challenges libraries encountered, what other library personnel participated in the project, whether/how the project was communicated to stakeholders, and if there had been responses to changes that had been made. The survey ended with a request for participants to share institutional workflow documentation created for their project, followed by an open-ended

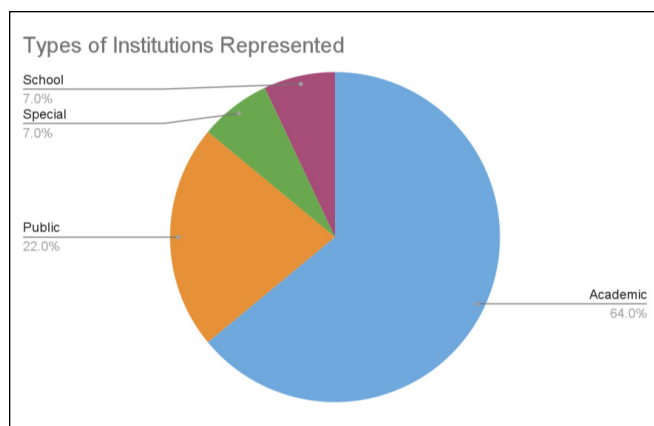


Figure 1. Types of Institutions Represented by Percentage. Chart depicting types of libraries represented in the responses by percentage: academic (64%), public (22%), special (7%), and school (7%).

question for further comments or questions for the working group.

Survey Distribution

The working group drafted an email call for participation, which was distributed to various email discussion lists plus individuals who were previously identified as having changed the headings at their institutions. The survey was posted to the former Library Information Technology Association's (LITA) discussion list; the Ex Libris' Users of North America (ELUNA) discussion list; the user community discussion list for the Ex Libris' Library Management System, Alma also known as the "ALMA" discussion list; the "AUTO-CAT" discussion list for cataloging professionals in libraries throughout the world; the "PCC-LIST," an e-mail discussion list intended primarily for NACO participants and for Program for Cooperative Cataloging (PCC) participants in general; the "SALALM" discussion list, for the Seminar on the Acquisition of Latin American Library Materials (SALALM); the Online Audiovisual Catalogers (OLAC) discussion list; "MOUG-L," the Music OCLC Users Group discussion list for the dissemination of information and the discussion of issues and topics of interest to music library professionals; the Radical Cataloging discussion list (RADCAT); the National Association to Promote Library and Information Services to Latinos and the Spanish Speaking, "REFORMA," discussion list; the Progressive Librarians Guild (PLG) discussion list; and ALA's Social Responsibilities Round Table (SRRT) discussion list.²⁵ Additional posts were made on the Open Cataloging Rules Google Group, the Troublesome Catalogers Facebook Group, and via Twitter.

Certain libraries were brought to the group's attention as organizations that had undertaken this work and

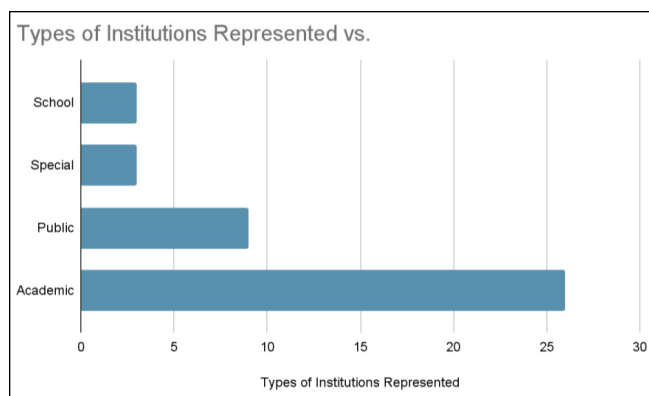


Figure 2. Types of Institutions Represented by Number. Bar graph depicting types of libraries represented in the responses by number: academic (26), public (9), special (3), and school (3).

should be asked to participate in the survey directly. These institutions included the University of Colorado at Boulder, Yale University, Denver Public Library, Bard College, Williamsburg Regional Library, Michigan State University, Lawrence Public Library, Regis University, and Hennepin County Library. Working group members reached out to individuals from these organizations and requested their participation in the survey.

Survey Results

Types of Libraries Represented

The survey received forty individual responses in total. The types of libraries represented include academic, public, special, and school libraries. Libraries from across the United States are represented plus one from Canada and one from the United Kingdom. The size of libraries also varied from small, local church collections to K-12 school collections to large universities and entire county library systems.

Library Systems Represented

All the major ILS and LSP systems were represented in the survey. Sierra accounted for 24.4 percent of the responses followed by Alma, Horizon, Symphony, and Millennium with 9.8 percent. Voyager represented 7.3 percent while Destiny and the open source Koha each represented 4.9 percent. Representing 2.4 percent of the total responses is Apollo, the open source Evergreen and OPALS, Library-World, and Polaris. Two respondents listed their ILS as either SirsiDynix or Workflows. A few popular discovery interfaces are represented in the survey, including Blacklight, Primo, EBSCO Discovery, and Summon. The highest number of respondents, 24.4 percent, reported having no discovery system.

Trends in the Results

There were several popular trends, which included

- adding a new heading to the record in a local or MARC field without removing the corresponding “Illegal aliens” subject heading;
- replacing the “Illegal aliens” subject heading in bibliographic records;
- creating a local authority record in the backend library system; or
- creating a local authority record in the discovery system.

Of those who added alternative language to their system, the majority opted to use “Undocumented immigrants” for “Illegal aliens” and all other instances where subject heading included “illegal aliens.” For example, “Women illegal aliens” became “Women undocumented immigrants” and “Children of illegal aliens” became “Children of undocumented immigrants.” Some of the institutions also opted to add a local heading for “Noncitizens” to use in place of the LCSH “Aliens,” and noted that this was to help clarify language across bibliographic records. During record cleanup, they reported that they discovered the “Aliens” subject heading was misapplied to titles about extraterrestrial beings rather than noncitizens.

One subject heading for which there was not a standardized replacement was “Alien detention centers.” Some libraries changed (or planned to change) “Alien detention centers” to “Undocumented immigrant centers,” and others suggested “Immigrant detention centers,” “Detention centres for undocumented immigrants,” or “Noncitizen detention centers.”

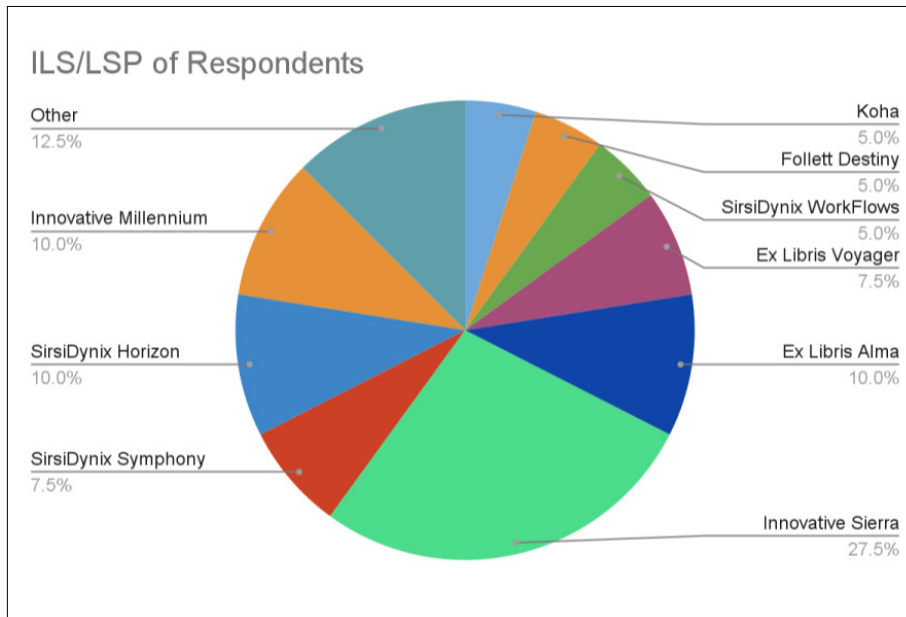


Figure 3. All of the major integrated library systems (ILS) and library services platforms (LSP) systems are represented in the survey. Ill’s Sierra accounts for 27.5% of the responses followed by Ex Libris’ Alma, SirsiDynix’s Horizon and Symphony, and Ill’s Millennium with 10%. Ex Libris’ Voyager represented 7.5% while Follett’s Destiny and the open source Koha each represented 5%. Less than 5% of the total responses represented by “Other” are Biblionix’s Apollo, the open source Evergreen and OPALS, LibraryWorld, and Ill’s Polaris. Two respondents listed their ILS as either SirsiDynix or Workflows.”

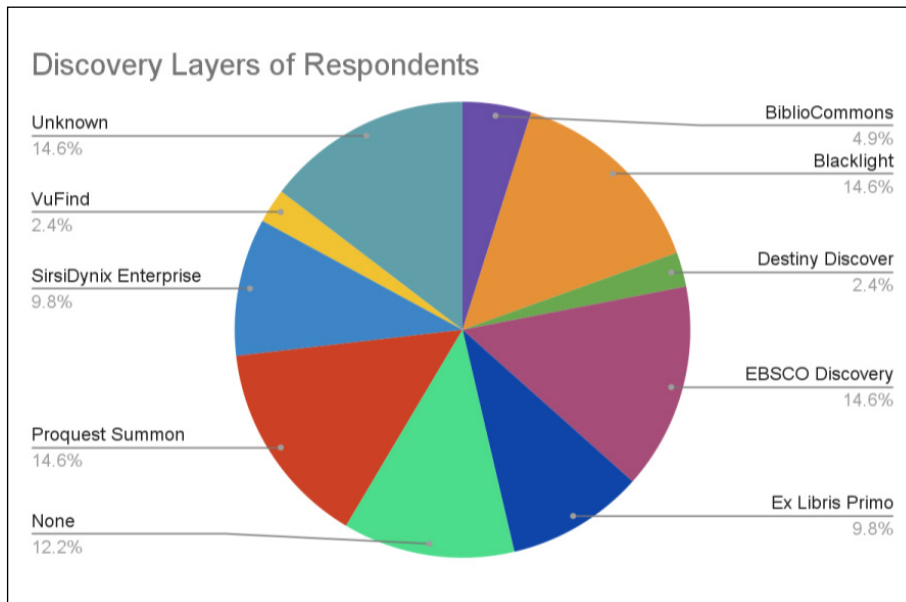


Figure 4. Chart of discovery systems represented. A number of popular discovery interfaces are represented in the survey results including BiblioCommons (4.9%), Blacklight (14.6%), Destiny Discover (2.4%), EBSCO Discovery Services (14.6%), Ex Libris Primo (9.8%), Proquest Summon (14.6%), SisiDynix Enterprise (9.8%), and VuFind (2.4%). Roughly 14.6% of respondents did not include or were not sure of their discovery layer, while 12.2% reported no discovery layer.

Strategies: Adding Additional Access Points

Retaining the “Illegal aliens” LCSH and adding additional terms has the benefits of providing the maximum subject and keyword access to bibliographic records. Libraries noted that simply adding new headings (usually coded ‘\$2 local’ or including a project name in the subfield 2) was quicker than revising headings.²⁶ Adding additional access points as local subject headings prevents these headings from being removed or overlaid when a newer version of the bibliographic record is imported.

In contrast, the January 2016 ALA resolution CD#34 formally recognized the “Illegal aliens” terminology is “dehumanizing, offensive, and inflammatory.”²⁷ Retaining this vocabulary results in harmful and insensitive language continuing to display in library catalogs, thereby minimizing the positive impact of adopting inclusive language for better search and discovery. From a public services perspective, the continued use of problematic language as subject headings may lead to possible confusion among library users and library employees regarding acceptable terminology to search and discover items related to undocumented immigrants.

Strategies: Replacing “Illegal Aliens” Directly in Records

For smaller institutions and those lacking more advanced ILS/discovery systems, manually replacing the “Illegal aliens” heading in bibliographic records with alternate terminology may be a viable strategy. This approach has the benefit of being simple to implement, and the problematic language is removed entirely from bibliographic records. One drawback is that manual replacement of this term requires additional workflows and recataloging of materials, which may not work for certain institutions depending on cataloging priorities and staffing support for ongoing record maintenance. Bibliographic-level maintenance for individual records is likely also not sustainable for large collections and libraries with mixed formats (print, electronic).

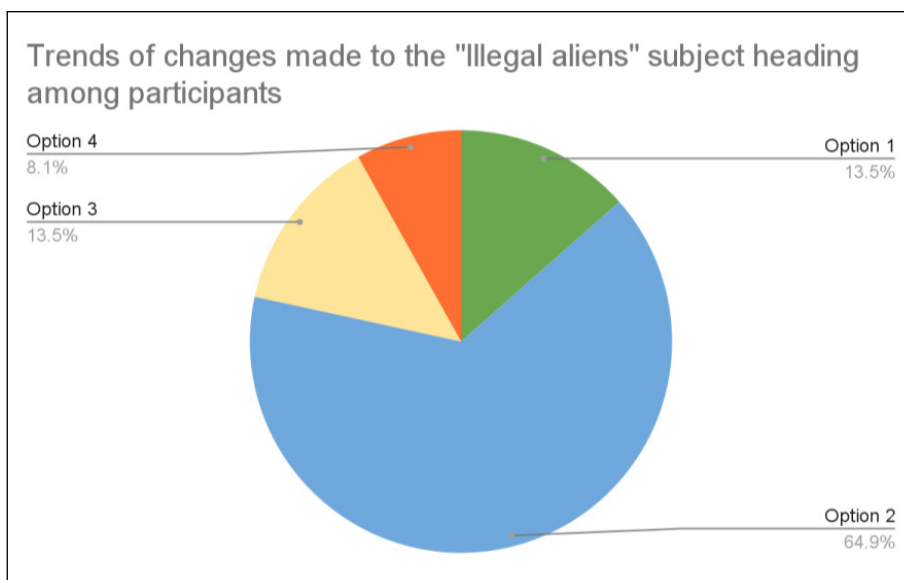


Figure 5. Trends of changes made to the “Illegal aliens” subject heading among participants. There were several popular trends among libraries making changes to the “Illegal aliens” subject heading, which included either option 1: adding a new heading into the record in a local or MARC field without removing the corresponding “Illegal aliens” subject heading (13.5% of respondents); option 2: replacing the “Illegal aliens” subject heading in the local bibliographic records (64.9% of respondents); option 3: creating a local authority record in the back-end library system (13.5% of respondents); or option 4: creating a local authority record in the discovery system (8.1% of respondents).“ Trends of changes made to the “Illegal aliens” subject heading among participants. There were several popular trends among libraries making changes to the “Illegal aliens” subject heading, which included either option 1: adding a new heading into the record in a local or MARC field without removing the corresponding “Illegal aliens” subject heading (13.5% of respondents); option 2: replacing the “Illegal aliens” subject heading in the local bibliographic records (64.9% of respondents); option 3: creating a local authority record in the back-end library system (13.5% of respondents); or option 4: creating a local authority record in the discovery system (8.1% of respondents).

Some libraries implemented automated replacement using normalization rules or regular expressions in their system, and catalogers are not expected to manually make this change at the point of cataloging. Systematic conversion of the headings was then undertaken regularly; the survey revealed that once a month was a typical maintenance period. Batch replacement and automation create an efficient ongoing system of reviewing headings in bibliographic records, both for previously cataloged and newly added materials. Since automation or batch replacements still requires some human intervention, staff time for periodic review is part of this methodology to address the subject heading.

Strategies: Replacing Display Terms with Alternate Vocabularies

Some discovery systems can retain the “Illegal aliens” heading in the library’s bibliographic data while displaying

a variant phrase in the library's public catalog. This may be the best alternative when it is available. The benefits of this approach are that the integrity of the core data is maintained. This also ensures that when LC revises this heading in the official LCSH, libraries using this approach can use their traditional authority control methods to update bibliographic records as they normally would. However, the problematic language will continue to appear on the staff side within catalog records until this change is made.

An example of this approach was undertaken by Villanova University's Falvey Library, which created mappings in VuFind's MARC record indexing rules and created a custom record driver to display "Undocumented immigrants" where "Illegal aliens" existed within subject fields. Their codes are available on the library's blog.²⁸ Similarly, the California State (CalState) University Libraries consortium changed the heading display in their discovery layer through a suite of normalization rules in their discovery layer, Ex Libris's Primo.²⁹ These norm rules transform the display of the text strings "Aliens" to "Noncitizens" and "Illegal aliens" to "Undocumented immigrants" in subject headings in Primo records and the Primo facet *Topics*, resulting in a transformation consisting of twelve subject heading changes. This solution displays the desired LCSH in MARC records yet enables users to search by both terms.³⁰ The Washington Research Library Consortium plans to implement similar discovery layer-level transformations in Ex Libris's Primo VE.

Challenges Encountered

The most frequently encountered challenges reported by survey respondents included

- deciding how to make changes on a consortium-wide basis;
- deciding on which alternative vocabulary/terminology to use;
- unanticipated bibliographic maintenance, especially confusion regarding terms such as "aliens" versus "extraterrestrials";
- database syncing issues causing a delay in displaying revisions;
- inconsistencies, such as forgetting to revise headings that are not alphabetically near "Illegal aliens" (e.g., "Children of illegal aliens");
- keeping up with revising headings in newly imported bibliographic records; and
- workload/staffing issues.

One challenge reported by many libraries was automated authority programs, such as Sierra's AACP (Automated Authority Control Program), or those undertaken

regularly by vendors potentially overwriting/reverting the manual revisions that had been made to these headings. Many workarounds were created to address this issue, but those strategies varied greatly depending on the systems and vendors involved.

Making Changes in a Consortial Environment

Based on survey results, consortia that have made these changes include the California State University Libraries, the Linn Libraries Consortium (Oregon), the Michigan State University Libraries, the Orbis Cascade Alliance, the SUNY Libraries Consortium, the Tri-College Libraries Consortium (Pennsylvania), the Triangle Research Libraries Network (North Carolina), and the Washington Research Library Consortium (planned as of June 2020). Following are three short case studies of the decision-making process library consortia used to make these changes: the California State University Libraries, the SUNY Libraries Consortium, and the Orbis Cascade Alliance.

The California State University Libraries began discussing this issue after the SAC Working Group distributed its survey in fall 2019. Some technical services staff on the CalState Unified Library Management Systems (ULMS) technical services discussion list raised the question of whether the consortium should act and implied support for doing so. In response, Israel Yáñez and Luiz Mendes prepared a presentation for one of CalState's monthly Tech Services Open Forums about the issue and suggested three potential technical solutions for the changes. Forum attendees were nearly unanimous in their support of pursuing one of the options. The proposal was forwarded to CalState's ULMS Resource Management Functional Committee and the ULMS Steering Committee. It was also shared on the technical services discussion list for comments and feedback from stakeholders, where it received positive comments and support. The Steering Committee approved the recommendation and forwarded it to the CSU Council of Library Deans (COLD), who voted to approve the changes, which went into effect in January 2020. According to Yáñez, "No one voiced any objections, or implied we should not do anything at all, at any step along the way. We are all part of the CSU system. Diversity and inclusion are significant values in the CSU system, so I didn't expect to hear objections . . . I think one of the keys to our success in getting this done lies in the fact that we presented the background of the problem, three options for how to address it, and then began the conversation. The conversation included, of course, 'should we do this?' It's harder to say no to that when you are presented with three possible approaches, each with their pros and cons, of how it could be done."³¹

After the SUNY Libraries Consortium migrated to Alma in July 2019, its Metadata Standards and Procedures

Committee (SMSP) began looking at projects to implement throughout the consortium. Changing the “Illegal aliens” subject headings was discussed at SMSP meetings in fall 2019, and the SMSP agreed that it was a worthwhile project to pursue. After research and testing various options, the SMSP discussed the options and decided not only to use normalization rules to change the subject headings in their display system (Ex Libris’s Primo VE), but also to change the subject headings in the MARC records in their library management system (Ex Libris’s Alma). Maggie McGee, the SUNY Library Services Network Zone Coordinator responsible for determining how to implement the changes, explained the SMSP’s rationale: “We wanted to be inclusive of not only our end users, but of our staff and faculty members working within SUNY.”³²

SUNY’s Metadata Standards and Procedures Committee wrote a proposal to make the changes and submitted it to the SUNY Library Consortium, which approved the proposal in January 2020. The initiative was presented at a monthly meeting to the consortia, and a LibGuide was created for reference. SUNY’s implementation of the changes began in June 2020, and were executed in three phases. In phase 1, completed in June 2020, normalization rules were applied to omit the term “Illegal aliens” and “aliens” from displaying in the full record display in PrimoVE for physical and electronic records in all three Alma Zones (Institution Zones, Network Zone, and Community Zone).³³ Phase 2 was completed in August 2020, and normalization rules were implemented that replaced LCSH containing “illegal aliens” with “undocumented immigrants,” and “aliens” with “non-citizen” for physical and electronic records in each institution’s Institution Zone. In phase 3, also completed in August 2020, the same normalization rules for phase 2 were implemented for all physical records in the Network Zone. Unfortunately, system limitations prevent records from Ex Libris’s Central Discovery Index (primarily e-books and e-journals facilitating searching at the title, chapter, and article-level) from being affected by these normalization rules.³⁴

In fall/winter 2020, the Orbis Cascade Alliance made the recommended changes in member libraries’ discovery layers via developing a suite of Primo normalization rules based on those used by CalState. The issue of the offensive LCSH was brought to the attention of the Alliance’s Cataloging Standing Group (CSG) in March 2019. Because Alliance institutions represent a diverse range of thirty-seven institutions and share bibliographic records in an Alma Network Zone, the CSG first examined the pros and cons of making these changes locally or at the network level in a discussion paper in December 2019.³⁵ In spring 2020, the CSG circulated this discussion paper among the Alliance technical services staff community for feedback. Simultaneously, the CSG surveyed the technical services representatives from each Alliance institution on whether

to leave the decision of enhancing bibliographic records up to each library or to create an Alliance-wide policy to add the local subject headings to records at the network level. Twenty-five of thirty-seven technical service representatives for Alliance institutions responded to the survey, with twenty-three supporting creating an Alliance-wide policy.

The CSG contacted the California State University Libraries for the Primo normalization rules that they used to make this change in June 2020. Additionally, the CSG sought input from public services librarians on the rationale and impact of the changes and incorporated this information into a formal recommendation to implement these rules at the consortium level.³⁶ The CSG sent this recommendation to the Shared Content and Technical Services (SCTS) Team, under which the CSG operates, for approval. The SCTS team approved the recommendation, which then went to the Alliance Council for review, where it was subsequently unanimously approved in September 2020. In the fall and winter of 2020, the Alliance’s Norm Rules Standing Group finalized the suite of normalization rules to facilitate these changes in Primo, with changes implemented in January 2021.³⁷

Although library consortia differ in organization and culture, library staff interested in making these changes within a consortial environment may benefit from the following strategies:

- working within existing consortial cataloging or technical services groups to discuss and recommend these changes up the chain of command to decision makers;
- partnering with public service librarians and/or institutional organizations that support undocumented students in articulating the need for these changes and their potential impacts on users;
- conducting consortial surveys to gauge stakeholders’ opinions on making these changes;
- contacting other consortia who have successfully made these changes for technical support or ideas for reaching consensus; and
- leveraging or referencing existing consortial equity, diversity, and inclusion policies and efforts.

Communicating Changes

Most respondents reported circulating information about changes made only within their institution, often via administrative comments, email, or internal newsletters. Others went beyond this to share information about the changes via communications directly to their larger community (this was particularly the case for academic libraries, who noted sharing the change with their institution, e.g., campus or school), or with the public at large. Examples of public communication about revising this heading include

statements from the California State University Libraries in 2019, the SUNY Library Consortium in 2020, and Villanova University's Falvey Memorial Library in 2020.³⁸

Community Responses to Changes Made

The overwhelming majority of respondents reported positive or neutral responses to this change. Of the thirty-four respondents who replied to the survey question "Have you received any response to the changes? If so, was it positive or negative?," twenty-six reported that they received only positive comments, primarily from staff or administration. Very few libraries reported receiving comments from the public.

Six institutions reported that there were no responses to the changes, and three reported mixed results. Comments received about the changes included questions about the scalability of similar projects and finding/prioritizing other offensive LCSH. Negative responses to the changes included one respondent who received communication to their reference department in which a national conservative student newspaper questioned the project. In response, the library gave a brief and factual response including background on the issue. A respondent stated that "some catalogers were less enthusiastic" about the change (though it was not clear whether because of workload issues or ideological disagreements), and another noted that they had made changes consortium-wide without asking permission, so there was discontent about the method but not about the change itself.

Next Steps

In January 2020, working group members submitted a proposal to the ALCTS board to create a website compiling information about the various changes libraries had made within their catalogs to revise or replace this heading.³⁹ As of October 2020, the working group is collaborating with the ALA staff to create this website, which will serve as a clearinghouse for members of the library community who wish to share information about their libraries' revisions.

Additional Resources for Institutions Interested in Enacting Changes

Alternative Controlled Vocabularies

A list of alternative controlled vocabularies was originally

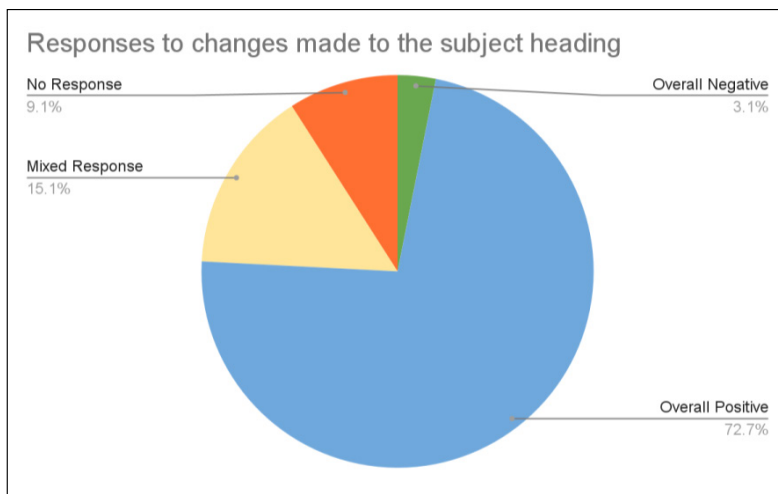


Figure 6. Responses to changes made. Figure 6 is a chart that depicts the overall tone of responses to institutional changes made to the "Illegal aliens" subject headings by percentage: Overall Positive (72.2%), No Response (16.7%), Mixed Response (8.3%), and Overall Negative (2.8%).

included as an appendix document titled "ATT-3-other-controlled-vocabularies" of the *2016 Report from the SAC Working Group on the LCSH "Illegal aliens."*⁴⁰ These sources were consulted again in March 2021 to confirm if any change in terminology has occurred since the original list was compiled. One source, EBSCO's Academic Search Premier, has changed its preferred term to "UNDOCUMENTED immigrants" from "ILLEGAL aliens." EuroVoc, the multilingual, multidisciplinary thesaurus covering the activities of the EU and the European Parliament in particular, has changed its preferred term to "illegal migration" from "illegal immigration."⁴¹ From the other sources for which access was available, some have made minor changes; none of them have replaced a term containing "undocumented" with one containing the word "illegal." The alternative controlled vocabularies list from the *2016 Report from the SAC Working Group on the LCSH "Illegal aliens."* is still a wonderful resource for those looking for documentation to support changes to subject headings containing the phrase "illegal aliens."

Conclusion

Survey participants were asked, "What would you do differently if given the chance to make these changes again?" The most frequent response was "Nothing," with the second most frequent being, "Make the changes sooner." The working group suggests that any change libraries can make to implement less offensive language in their catalogs is better than doing nothing because it is unclear when LC will move forward with changing the LCSH.

Recommendations for the “best” solution for each institution will vary, depending on the community’s needs, the organizational structure that governs decisions within their catalog, and the capacity of the system(s) used to display the catalog. This working group has taken a broad approach in attempting to compile options and discussing the pros and cons of each alternative.

Respondents were asked if they had comments or questions for the working group, and many comments were enthusiastic about the group’s work and the work that had been done in their library (and others) to make this change. They saw this challenge as a unique opportunity for cataloging and public services personnel to collaborate on an issue

was important to their library’s users. Many commented that they were interested in learning more about other LCSHs that might be outdated or disparaging.

LC’s delay to revise this heading is unfortunate and the library community should not lose sight of the real pain and alienation that having this offensive terminology in our catalogs can entail for members of a marginalized community. However, one positive of this situation is that it has provided library and other cultural heritage institution personnel with the opportunity to take concrete steps towards ensuring that the terminology we use in our work is inclusive and respectful.

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Representational Belonging in Collections

A Comparative Study of Leading Trade Publications in Architecture

Emilee Mathews

This study stems from a simple question: how do libraries reflect the communities they serve? The research analyzes a subset of periodical literature to measure how women are reflected, specifically women of color, in architecture library collections. It focuses on four major publishing outputs of architecture literature to sample the ratio of women leaders in featured architectural firms. These commonly used periodicals were chosen to measure which firms are presented to an architectural readership. The findings document variation in demographic representation, but evidences that across the board firms covered in these publications have proportionately less women of color in their leadership teams. Librarians will find takeaways for both collection development and management and public services.

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This study stems from a simple question: how do libraries reflect the communities they serve? As the American Library Association (ALA) statement "Diverse Collections: An Interpretation of the Library Bill of Rights" states, "Library workers have an obligation to select, maintain, and support access to content on subjects by diverse authors and creators that meets—as closely as possible—the needs, interests, and abilities of all the people the library serves."¹ Put another way, Drabinski explicitly discusses the impact collection development librarians have: "We buy one book to the exclusion of probably thousands of others. And in the process we build our libraries as one kind of world, one that can never encompass all the possibilities of how we might organize ourselves in social, cultural, political, and, critically, material space."² Together, these assertions suggest that resources should be carefully curated to ensure broad inclusion, but with many library collections numbering in the thousands if not millions, how can we measure libraries' adherence to this value?

The vast scale of the printed word precludes easy answers. However, it does provide a productive avenue of exploration. To supply one possible response to the originating question, this study assesses the architectural field and focuses on trade periodicals, literature specifically geared toward the specialized information needs of a professional in a specific field. Architectural publishing abounds in trade periodicals—out of forty-six journals deemed core to the discipline by the Association of Architecture School Librarians, twenty-three (50 percent) are trade periodicals.³ Architecture serves as an excellent focus because there is extensive documentation of demographic representation across a number of factors, most widely, gender and race and as such, there are existing datasets with which to compare new findings. In December 2018, the *New York Times*

published the opinion piece “Where are all the Female Architects?” in which the author details the dearth of women architects in the US: 50 percent of architecture students are women, yet women only make up 20 percent of licensed architects.⁴ Even more so, the Directory of African American Architects, actively maintained by the National Organization of Minority Architects (NOMA), lists only five hundred Black women who are licensed architects, or 0.4 percent of the profession: fifteen times less than the overall population of Black women in the United States.⁵

Architecture clearly has some inequities built into the profession and looking to architectural education could provide a way to increase diversity in future professionals. Nevertheless, higher education continues to struggle with rectifying structural systems of bias. This was particularly visible in late May and early June 2020, when, after the killing of George Floyd, many institutions issued solidarity statements.⁶ Student organizations and faculty groups in turn demanded meaningful reform, such as increasing the proportion of marginalized racial groups in the faculty body and the curriculum.⁷ Of particular interest to this study is the statement issued by Black architecture students at Columbia University’s Graduate School of Architecture, Planning, and Preservation program, who listed the following as third in their list of twelve demands:

Support Sustained Access to and Development of Legitimate Scholarly and Professional Resources. Appraisal of the tools and resources made available to support academic and professional growth must be an immediate and ongoing endeavor. *Remediation of the lack of black voices present in the scholarly and design materials available at Avery Architectural & Fine Arts Library is essential to this.*⁸ (italics added)

How architecture school library collections serve as a resource to its students while mirroring the profession is thrown into stark relief. Reflecting diverse voices—or lack thereof—in the architectural library’s collection is important to equitably educate aspiring architects about the profession to provide a plethora of role models.

This study seeks to investigate how library collections instantiate diversity to determine whether collections are reflective of the communities they serve. The author selected four key trade publications: *Architectural Record*, *Architectural Review*, *Detail*, and *l’Architecture d’Aujourd’hui*, concentrating on papers published in 2019, as the most recent volumes available covering a full year. These publications are core to the field of architecture and frequently used by currently practicing and aspiring architects.⁹ The journals were chosen as sources of precedent research, while striking a balance of different countries and

differing editorial scopes. Further, they each feature current and upcoming projects by leading architecture firms, a tool that the field uses widely for keeping abreast of trends while gaining inspiration for their own design work. With respect to Drabinski’s assertion that collections reflect a worldview, trade periodicals create a worldview of what is important to a field. By concentrating on architecture firms in trade publications, the study takes the pulse of the field outside of the most famous architects (often referred to as “starchitects”).

Literature Review

The literature under review encompassed both architectural discourse and LIS, as this study draws from and adds to both fields.

Women in Architecture

Women’s exclusion from the architecture field is a well-known issue: Stratigakos’ book provides a historical trajectory, placing the origin of modern debate in 1872.¹⁰ Stratigakos discusses a major moment in women’s inclusion in architecture—in 2004, Zaha Hadid was the first woman awarded the Pritzker Prize (frequently referred to as architecture’s Nobel Prize). This major win was met with gendered discussion of her physical characteristics vastly beyond that which any other winner of the prize received.¹¹ Another well-known controversy was the Pritzker Prize awarded to Robert Venturi in 1991, which did not credit Venturi’s firm partner Denise Scott Brown. Scott Brown’s essay “Room at the Top” chronicles the jurors’ refusal to award her credit, despite the intensively collaborative nature of their joint practice.¹² In 2013, a petition was formed for the Pritzker Prize to retroactively award Scott Brown the prize alongside Venturi; however, the organization refused to do so.¹³

In the UK, the leading trade publication *Architects’ Journal* has run an annual “Women in Architecture” survey to gather information on women’s experiences and to measure change over time. In their first survey report in 2011, they document widespread experiences of discrimination and pay inequity as women are less likely to be promoted through the “glass ceiling,” resulting in stagnating career opportunities and wages, and many operating under the belief that they cannot have both a career and a family.¹⁴ In 2019, discrimination and pay gap inequity continues to be a systemic issue across architecture firms.¹⁵

The core organizations serving the architectural profession across the US have released multiple studies in the last decade. Nicholson’s “Where Are the Women? Measuring Progress on Gender in Architecture,” which combines

multiple datasets from organizations across the profession, shows a complex picture, with both improvements and stagnation.¹⁶

A report produced by National Council of Architectural Review Board (NCARB) and the National Organization of Minority Architects (NOMA) documents that people of color have more difficulty in achieving licensure because of lack of support from firms, and is felt especially by women of color.¹⁷ They also document a strong lack of Black people in firm leadership. Nicholson recently published a report on Black people in architecture, surveying across the school pipeline to architecture licensing. He similarly finds that there are a number of roadblocks to success in the profession, including student debt particularly felt by Black women.¹⁸

The Missing 32% project was started in 2014 to highlight inequality in the profession, and to address the fact that women made up approximately 50 percent of architecture students, but only 18 percent of practicing architects, according to data available at that time.¹⁹ The project was started to better understand how and where this retention gap happened. After the symposia and findings from the Missing 32% project, the San Francisco chapter of the American Institute of Architects created the “Equity by Design: Voices, Values, Vision!” survey and published initial findings in 2019.²⁰ With 14,360 responses across the field of architecture, it is the largest survey of its kind, and showed that White respondents were more likely to be promoted earlier in their career than people of color, and that of those who had childcare responsibilities, women had more than men.²¹

Notably, however, compared to other countries, the US and the UK’s numbers are not necessarily typical of women architects. Tavella compares statistics across ten countries, primarily in Europe, and finds that the proportion of women architects varies significantly, with Greece the highest at 58 percent, and Austria the lowest at 18 percent.²² Out of the ten countries under discussion, the UK and the US come in at eighth and ninth respectively, both at 25 percent.

Collections Diversity Audits

Diversity audits of collections have gained more traction in librarianship recently in response to heightened awareness of equity issues in libraries. Diversity audits measure how diverse the collection is and may consider authors, the main characters, and the subject. There are many methodologies that may be used to conduct one. Ciszek and Young’s paper provides a literature review of papers on assessment initiatives in large academic collections in which they group study methodology along two axes: collections versus user-centered and quantitative versus qualitative.²³ Quantitative methods of measuring collection diversity include Worldcat

analysis (generally of subject headings and classification), comparison to standard bibliography, and development of diversity codes. The comprehensive annotated bibliography from Semenza, Koury, and Shropshire is also a valuable resource.²⁴

A professional commitment to the importance of diversity and inclusion is increasingly emphasized in recent scholarship. Cruz provides perspective through a detailed literature review of the connections between ideals and action.²⁵ Morales, Knowles, and Bourg discuss at a broad, philosophical level the importance of diversity across libraries and librarianship, but also connect it with the importance of collections: “To ensure that library collections truly do reflect the profession’s stated commitment to diversity, academic librarians must actively and aggressively collect resources by and about underrepresented groups.”²⁶ In her role as university librarian at the Massachusetts Institute of Technology, Bourg led the libraries to issue an interesting white paper on explicitly connecting social justice to collections, with recommendations across collecting, including vendor and publisher choices.²⁷

Diversity audit literature spans multiple functional areas of librarianship and collection development and management is a core area of consideration, given that collections are an integral aspect of library resources. Bishop’s seminal essay uses the metaphors of windows and mirrors to discuss the importance of providing children books that readers can both see themselves reflected in, plus books that help them understand others’ experiences.²⁸ Williams and Deyoe’s recent study analyzes diverse children’s books holdings across public libraries.²⁹

Blume discusses the importance of gaps in demand-driven acquisition (DDA) through analyzing subject headings of DDA titles purchased.³⁰ In terms of methodology, only one diversity audit focuses on online resources, specifically on diverse content in databases. The methodology used a defined set of diversity-related keywords, and searched each database for those keywords, with the assumption that higher levels of keywords correlate to more diverse content.³¹ While published twenty years ago, Vega García’s study offers valuable insight on how periodicals have been collected by members of the Association of Research Libraries.³² Delaney’s study similarly uses bibliographies to analyze holdings.³³

Berthould and Finn bring this focus to the intersection of collection development and cataloging. They explain that

collections are outward-facing. . . . If we are serious about commitments to social justice, inclusion, accessibility, and representation, our collections absolutely should reflect this. Our collections have the potential to be a tangible embodiment of the very noble things we say we want to do. As such, we

must critically assess our current practices and begin to develop guiding principles that will shape praxis.³⁴

Caswell, Cifor, and Ramirez discuss an archive of South Asians in the US, and specifically how a set of individuals of that same identity perceive it through semi-structured interviews. Findings highlight respondents' increased perceptions of self-worth and belonging connected to seeing people of similar backgrounds reflected in the archive. The authors pair those findings with terms such as *symbolic annihilation*, which is borrowed from media theory to characterize the lack of representation to the point of not existing within a space, and what they term as *representational belonging*—its opposite.³⁵ Still within the realm of special collections and archives, Bowers, Crowe, and Keeran take on the importance of addressing collections specifically in the context of a campus highly implicated with settlers' massacre and erasure of Native Americans.³⁶

Acquiring materials and providing description and access are important; however, which collections are used in outreach and events are also a key area to ensuring diversity values are upheld. Mortensen provides a methodology from the public library perspective, measuring across youth story time, film series, and book clubs. To create the dataset, the team variously researched the protagonists, authors, or directors, looking at biographies and other sources of demographic information, and spent no more than seven to eight minutes before indicating that the individual's demographic characteristics were unknown.³⁷

A number of papers focus on the reflection of specific marginalized identities in collections and the impact on those communities, such as Schiff's elucidation of Roma representation in film.³⁸ Roy discusses the continued need to proactively provide resources and services for indigenous communities, with special attention paid to developing collections. Her recommendations include following awards and publishers for high-quality resources.³⁹ Alexander likewise points to reputable publishers with established reputations in selecting indigenous authors to add to the collection.⁴⁰

Within disciplinary specialties, a few papers have been written across arts and humanities fields. Stone measures the gender and race of a subset of published playwrights by researching each playwright through their websites and interviews.⁴¹ Kristik evaluates literature collections by determining diversity book awards and using those lists as an evaluation tool.⁴²

Only one published diversity audit article targets art and design collections.⁴³ The study focuses on print monographs and analyzed each author's identity. Significantly, they also discuss the importance of involving faculty members and other members of the community in improving diversity of collections.

As far as the author is aware, this project adds a critical new perspective in two ways: first, no diversity audit has specifically focused on architecture collections; and second, no other literature has analyzed periodical paper content. Only one diversity audit focused on online resources, and specifically examined diverse content in databases through keyword searches.⁴⁴ Vega García's study tracks periodicals holdings, not their specific content.⁴⁵ Thus, the project adds new knowledge to begin to fill an existing gap in the field and provides recommendations for architecture librarianship, but which also can be leveraged more broadly.

Method

Building on Caswell, Cifor, and Ramirez's findings, this study theorizes that a similar set of tenets exist in regards to symbolic annihilation and representational belonging. While they focused on primary source collections, trade literature is also about identity, as it is targeted to a specific profession and intended to provide insight on the concerns of a professional within that field.

This study sought to answer a specific research question: "What is the representation of women, specifically women of color, in architecture library collections?" It did so by analyzing a sample of trade journals that are core to architecture library collections and frequently used for precedent research. The National Architectural Accrediting Board (NAAB) defines one of the key learning outcomes for students, Use of Precedents, as the "ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects."⁴⁶ Precedents are important not only while studying architectural history, but also are core to the pedagogy of design studios, in which architecture students are trained to design their own contributions to the built environment.⁴⁷ Trade periodicals in architecture are an important source of precedent research, as they extensively document projects. In the author's experience as a reference librarian who has frequently worked with students seeking precedents, architectural trade literature is a rich source for such material, and indeed this experience serves as a major impetus for the focus of this study.

Journals Analyzed

The author extensively reviewed these journals for papers that featured architectural works by firms. For each identified firm, demographic research was undertaken to determine the proportion of women, specifically women of color, in leadership across the architecture firms highlighted. The study focused on architecture firms because those trained

in architecture are more likely to work for a firm.⁴⁸ The focus on leadership reflected the field's documented problem with retaining and promoting diverse individuals.⁴⁹ As Pitts et al. point out, "The relative homogeneity of leadership within the profession may contribute to a number of difficulties for those from diverse backgrounds entering the field, from implicit bias to difficulty finding mentors who can address identity-specific career development concerns on the basis of personal experience, to difficulty envisioning oneself in leadership positions in the future."⁵⁰

The journals considered are *Architectural Record*, *Architectural Review*, *l'Architecture d'Aujourd'hui*, and *Detail*. *Architectural Record* will forthwith be referred to as *Record* to reduce repetition and also avoid confusion with *Architectural Review*, a similarly named publication, which will hereafter be referred to as *Review*. *L'Architecture d'Aujourd'hui*, commonly referred to as 'AA', will also adhere to this title for simplicity; *Detail* will remain the same. All are listed as "Fundamental" (the most important category) in the Association of Architecture School Librarian's Core Periodicals list, which is articulated as "overall publication quality, robustness, reputation, and longevity."⁵¹ They were selected as mainstream publications that document current architectural projects from around the world, and thus sources for precedent research.⁵² They were also selected to provide a balance of geographic location and editorial premise.

Each of the four journals has a slightly different scope. *Record* provides global coverage of building types with a strong US presence, accompanied by high quality illustrations. Significantly, *Review* explicitly states its editorial position as socially relevant and critical while emphasizing a historical perspective.⁵³ 'AA' is directed by renowned architect Jean Nouvel, with its board comprising fellow prestigious figures in the profession such as Frank Gehry and Shigeru Ban.⁵⁴ In addition to themed issues, 'AA' frequently covers current projects and case studies by firms.⁵⁵ The German publication *Detail* almost exclusively focuses on current projects, with textual description and extremely high quality technical illustrations of the details of buildings.⁵⁶ Of the descriptions of editorial scope, *Review* seems to have the most socially driven, critical standpoint that not only discusses building projects, but also how the built environment affects society and vice versa.

Data Collection

The *Avery Index to Architectural Periodicals* provided an effective method to isolate the individual papers from these publications by year. Once identified, these citations and related metadata were exported to a spreadsheet. For each paper that listed specific firms using Avery's specialized metadata field "Company/Entity," the author determined

what firms were discussed in the paper and documented those in a specific field (see figure 1). It is important to note that the dataset is limited to papers with one or more "Company/Entity," irrespective of whether an individual was listed in the "People" field. This was done to ensure that the dataset only measured architectural firms, not individual architects to keep within the identified scope.

The researcher hired graduate students from the Illinois School of Architecture to assist with data collection to ensure that they understood the culture of and terminology used by architectural firms to guarantee that the data are as accurate as possible. The author and research assistants gathered the following data about each firm by reviewing the firm's website, and social media accounts (i.e., Facebook, Twitter, Instagram, LinkedIn):

- Total number of employees. This was then coded into a variable of firm size using the AIA's definition of small (up to fourteen employees), medium (fifteen to forty-nine employees), and large (more than fifty employees).
- Type of services the firm offers. This was left as a free text field where research assistants supplied the terms that they saw reflected in the firm's self-characterization from their official website. The assistants' backgrounds in architecture ensured that they would be well-positioned to perform this specialized task.
- Racism statement. This documented whether a firm had issued a statement addressing anti-Black racism after the murder of George Floyd. This field had three choices: Yes, No, and Kind of. "Yes" meant that the firm had either issued a public statement accessible on its website or on its social media that explicitly acknowledged anti-Black racism. "No" indicated that there was no public-facing indication of acknowledgment. "Kind of" was used to indicate ambiguous gestures, such as that the firm in question had posted a black square in their social media (generally Instagram) but did not use hashtags or textual description to indicate any explicit rationale for doing so.

Additionally, data was collected on how many total leaders led each firm to generate percentages of women and women of color against this total. Generally, firms will specifically categorize leadership on their website, and leaders bear titles such as principals, partners, or associates. Of those identified as firm leadership, research assistants notated the number of women in leadership roles, and specifically the number of women of color in leadership. They pursued this research by initially registering all who at best visual inference present as women. For the purposes of data collection "woman" was defined as a feminine-presenting

A disused canal in Zacatecas, Mexico, is transformed into an imaginative playground for neighborhood children

Language:	English
Authors:	Klimoski, Alex
Source:	<i>Architectural record</i> . 2019 Sept., v.207, n.9, p.39-40. photos
Place of Publication:	Illinois
Publication Date:	2019
Document Type:	journal article
Subject Terms:	Canals -- Alterations and additions -- Mexico -- Zacatecas Playgrounds -- Fresnillo Playground. -- 21st century -- Mexico -- Zacatecas Adaptive reuse -- Canals into playgrounds Housing -- Public -- Alterations and additions -- Mexico -- Zacatecas
People:	Montiel, Rozana, 1972-
Company:	Rozana Montiel Architects
Avery Number:	AB.Ar44
Revision Date:	20191004
ISSN:	0003-858X
Abstract:	Part of revitalization of 40-year-old public housing development, named Manuel M. Ponce, in Zacatecas, funded by Instituto del Fondo Nacional de la Vivienda para los Trabajadores (INFONAVIT).

Figure 1. Example of article highlighting an architecture firm in Avery Index to Architectural Periodicals.

person who uses she/her/hers pronouns. A “woman of color” was defined as meeting the definition of “woman” and also as having non-Caucasian skin tone or facial features.

For each of these individuals, the research assistants determined what gender pronouns were used and if they self-identify as a member of a race through their professional biography on the firm’s website, personal website, LinkedIn, interviews published in magazines such as *Madame Architect*, or other web content via a Google search.⁵⁷ Searching was limited to ten minutes per person to ensure that the research assistants could complete workflows for the dataset (which included 726 total women across all four publications). If self-identification or reputable third-party identification of race or gender was not able to confirm the inferred characteristics, the demographics of the person in question were categorized as probable but unknown. Once demographic research was completed with all women in leadership positions for a specific firm, the total number of women and total number of women of color in the spreadsheet were indicated, inclusive of those coded as probable. Percentages were then generated from these numbers: the overall proportion of women in leadership, as well as that of women of color against overall leadership.

Advantages and Limitations to the Methodology

The methodology of researching individuals’ demographic backgrounds and assigning an inferred characteristic if no positive affirmation is available is used in some, though not all, diversity audit data gathering approaches. Other methods include using bibliographies (Vega García, Delaney-Lehman), awards (Roy, Kristik), or identifying specialized, reputable publishers (Roy, Alexander). While these all have the virtue of using an authoritative list rather than introducing the author’s bias into the data gathering apparatus, they also have deficits: bibliographies quickly become outdated, and awards may only be used if the field in question has awards for this type of publication. Further, a study using these methods would only sample very few of the total published output. The methodology used for this study was chosen to be applicable to a broader set of individuals, rather than those who have been honored by an (necessarily) exclusive award system.

The methodology matches most closely what Ciszek and Young define as quantitative/collection-centered, using diversity codes.⁵⁸ Other LIS papers using this methodology

of identifying a set of authors and conducting demographic research on those individuals include those by Stone and Mortensen.⁵⁹ Outside of LIS literature, a recent study on artist diversity in art museums' permanent collections deploys a similar methodology, albeit on a larger scale, using data science methods and used Amazon Mechanical Turks for demographic research labor.⁶⁰ Other social research methods lend credence to this paper's methodology: McCormick et al. discuss the reliability of visual evaluation of demographic characteristics, and find although not perfect, it is fairly accurate.⁶¹ Additionally, Contreras, Banaji, and Mitchell's paper demonstrates that race and gender are among the first visual characteristics that people notice about others.⁶² However, Song problematizes the notion of connecting visibility and race, saying that "Visibility (signifying non-White) has been central to our understandings of a stigmatized ethnic minority status. But exactly who is considered visible in constantly changing and diversifying multi-ethnic societies, is less than clear."⁶³ Song importunes scholars to be more mindful of mixed race as she highlights the prevalence of considering minority status as tied to being visibly non-White. While Song points to socially constructed, complex notions of race, she does show its pervasiveness in categorizing others. Since this paper seeks to measure normative notions of gender and race through mainstream publications, the methodology is relatively suitable to the purpose at hand.

Additionally, the methodology was shaped to move toward anti-racist research methodology. Reflection on questions such as that which Sefa Dei poses, "What motivated me to undertake this study and why, and what did I envision as its result? How would my research benefit my subjects, and how would I balance my responsibilities to my academic profession, funding agencies, and the local communities I have worked with?" has helped the author flesh out the study's purpose and trajectory.⁶⁴ While the present study was not qualitative in nature, ensuring considering the study's impact throughout the research process has enabled a more thoughtful, nuanced approach to how to conduct a diversity audit and why.

Regarding timeframe, the data should be fairly accurate since it was collected in 2020 for papers published in 2019. However, not every company mentioned in 2019 publications were discoverable in 2020 as some lacked websites, and the websites of others were under maintenance while research was taking place in August–September 2020. Others split into different firms after the publication of the paper, or in some cases it was not discernable in which arm of a studio practice the project took place as some architects have multiple individual practices or participate in collaborative groups beyond firms. In these cases, the firms in question were excluded from the dataset.

The final dataset consisted of 354 firms with some

duplication as firms were counted each time they were covered, i.e., counted more than once if they were covered multiple times in the same magazine or the other three magazines. This choice was made to be the most illustrative of what a reader of these magazines would encounter. For example, if a reader encountered multiple papers highlighting the same firm, then that demonstrates its importance to what is valued in the field. When compared to a dataset completely deduplicated to 338 unique firms, the difference is minor—one percent or less in all instances (see table 2). The author derived an additional dataset that deduplicated firms to only one unique entry per journal and includes 340 firms. Dataset 1 (354 firm dataset, no deduplication) is used in question one below; dataset 2 (340 firms, deduplicated to one unique entry per journal) was used for the remaining questions. The completely deduplicated dataset is offered for comparison throughout the tables and figures provided.

There was a wide variance in the number of firms featured by each publication: 'AA' only covered 26 firms, whereas *Record* had a total of 160. Data analysis was run on each journal to determine statistical significance specifically for 'AA' against the other journals, using t-test measures in the data analysis add-on of Microsoft Excel. The t-test results indicated that the data were within acceptable range to be comparable to one another.

Findings

The resulting dataset included 160 firms in *Record*, 69 in *Review*, 26 in 'AA', and 99 in *Detail*, for a total of 354 firms (see table 1). In deduplicating to only one entry per firm per journal dataset, *Record* still has 160 firms, 65 in *Review*, 25 in 'AA', and 90 in *Detail*. Table 2 shows the differences in percentages between deduplicated and original dataset; in most cases, the change in percentages is one percent or less.

The author's guiding questions included the following:

1. What are the demographic proportions of firm leadership covered by individual journals? Would they be comparable to demographic and occupational data gathered by other sources? Would there be an effect based on editorial scope? Would the prevalence of this issue in national discourse have any effect? Per Tavella's paper, the US and the UK are poorly rated in overall proportion of women architects, and so the author posited that *Record* and *Review* may reflect this as well.⁶⁵ However, much of the literature about representation is published out of those countries, so these publications may be more aware of the need to cover diverse firms. Germany (ranked fourth) and France (ranked sixth) have higher percentages of women architects, at 43 and 38 percent, respectively,

Table 1. Number of firms featured in 2019 articles, broken down by each journal, and compared by no deduplication versus deduplicated to one entry per journal

	<i>Record</i>	<i>Review</i>	'A'A'	<i>Detail</i>	Total
Number of firms featured in 2019 (no deduplication)	160	69	26	99	354
Number of firms featured in 2019, (deduplicated to 1 entry per journal)	160	65	25	90	340

Table 2. Percentage of women leadership in architecture firms versus percentage of women of color leadership in architecture firms, with the dataset compared from no deduplication, deduplicated to one entry per journal, and deduplicated to one unique entry across entire dataset.

	% of women in leadership	% of women of color in leadership
All firms without deduplication	25	7
Firms deduplicated to only 1 entry per publication	25	6
Firm deduplicated to 1 across all publications	24	6

so this may also be reflected in their periodicals.

2. Would the size of firm have an effect on the proportion of women leadership? Anecdotally, women architects tend to practice in small firms or as solo practitioners, so if this anecdotal evidence were borne out in the data, small and medium size firms would be more likely to have higher percentages of women leadership.⁶⁶
3. Would different areas of specialization (such as interior design, lighting, urban planning, etc.) within the firms covered have different concentrations of women in leadership roles? The author surmised that out of the types of companies investigated, interior design firms would be more likely to have women leaders, and construction and engineering companies less likely.⁶⁷
4. Would explicit support for social justice causes be more likely to be expressed by firms with higher leadership percentages of women of color?

Question 1: Individual Journals' Coverage

Firms covered by the journals had an overall average of 24 percent women leaders reflected in the firms highlighted, and 6 percent women of color—both measured against overall leadership (see figure 2). *Record* outperformed the other journals, with 28 percent women leadership in firms mentioned, and 9 percent women of color in leadership roles. The next best performing journal was 'A'A', with 26 percent women in leadership, and 9 percent women of color. *Review* and *Detail* performed below the others: *Review* had 22 percent women and 4 percent women of color; and *Detail* had 19 percent women, and 2 percent women of color. The data distribution was negatively skewed due to the large number of firms with no or few women in their leadership, so medians were analyzed to provide another

access point (see figure 3). Across all journals, the median percentage of women in leadership roles was 20 percent, and the median of women of color in leadership roles was zero. For all women in leadership roles, *Record's* median was 25 percent, and 'A'A' was 23 percent, tracking fairly closely with their averages. However, *Review* and *Detail's* median percentages were far below than their averages, at 14 percent and 11 percent respectively.

Question 2: Size of Firm

This question was somewhat borne out in the data (see figure 4). Overall, women were more reflected in leadership of small firms, which averaged 31 percent women leadership, with medium firms at 20 percent and large firms at 24 percent respectively; women of color averaged 9 percent leadership in small firms, while attaining smaller proportions in medium and large firms, at 6 percent and 3 percent respectively. Once the numbers were broken down by individual journals, a different pattern emerged. *Record's* average increased significantly in small firms, with 37 percent of overall women, and 17 percent women of color leaders. Among medium and large firms, both held at 25 percent for overall women leaders, and at 8 percent and 4 percent correspondingly for women of color. With respect to the journal dataset, 'A'A' also performed well in this measure with 29 percent overall women leaders in small firms, and 13 percent women of color. Medium and large firms did fairly well with all women leaders averaging at 26 percent and 22 percent respectively, but performed less well for women of color, with 1 percent and 2 percent each. *Review* did fairly well with women leaders across firm size, with 26 percent for small, 18 percent for medium, and 23 percent for large, and *Detail's* performance was somewhat similar, with 27 percent for small, 11 percent for medium, and 21 percent for large firms. However, both *Review* and *Detail*

numbers were particularly poor in regard to women of color; small firms highlighted in these journals had 3 percent and 4 percent each, while medium held at 1 percent and 0 percent; large firms at 2 percent and 1 percent. Data seem to confirm the anecdotal evidence that small firms are more likely to have women leaders, whereas large firms are less likely to have women of any race in leadership roles, and particularly women of color. Surprisingly, medium firms frequently performed worse than large firms across the spread.

Question 3: Type of Firm

This question considered how well women were represented in leadership of different firm specializations, with interiors being more likely, and construction and engineering less, based on anecdotal evidence. This supposition was not confirmed in the data, but neither were there enough data to firmly corroborate the author’s predictions (see table 3). The firms were divided into the following categories (with multiple types possible): Interiors/Interior Design (8), Architecture (144), Planning (10), Urbanism/Urban Design (10), Engineering and Construction (5); Landscape Architecture (8); Lighting (2), Design (2), and Architecture and Research (1). The category with the highest concentration was Architecture and Research (1), which performed at 100 percent women of color. Second was “Design,” with 61 percent women and 25 percent women of color.⁶⁸ Landscape architecture was next, with women leadership at 36 percent, and performed well with 9 percent women of color. Surprisingly, architecture firms did better than expected with 27 percent women and 10 percent women of color. Regarding overall women leadership, the next types are listed in descending order: Lighting (40 percent), Urbanism/Urban Design (24 percent), Interiors (23 percent), Engineering and Construction (20 percent), and Planning performing the worst at 17 percent. However, with respect to women of color, the order is quite different: Urbanism/Urbanism at 6 percent, Interiors at 4 percent, Lighting and Planning were both 1 percent, and Engineering and Construction were 0 percent. While some interesting variances emerged through the data, the data are insufficient to test for significant difference. This reporting should be considered anecdotal and bears further investigation before any meaningful conclusions are drawn.

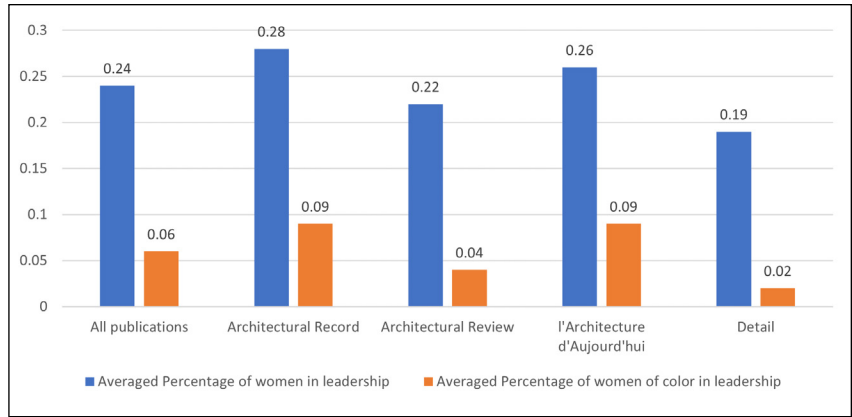


Figure 2. Averaged percentage of women in leadership compared to women of color in leadership across publications

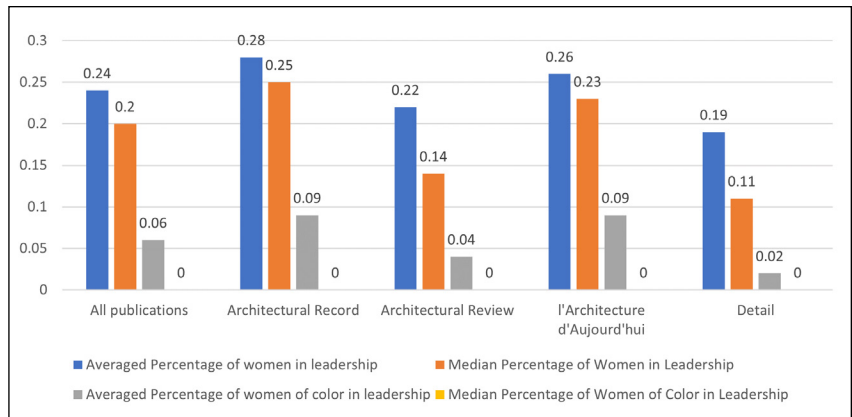


Figure 3. Mean vs. median for women and women of color leadership across publications

Question 4: Black Lives Matter (BLM) Statement More Likely to Have Women of Color in Leadership Roles

This question also did not perform as predicted in the data (see figure 5). Those with a clear BLM statement (fifty-two total or 15 percent of overall dataset) included forty-three from *Record* (27 percent), four from *Review* (6 percent), one from ‘AA’ (4 percent), and four from *Detail* (4 percent).⁶⁹ The firms that made a more ambiguous gesture included fifty-six total firms, thirty-three firms from *Record* (21 percent), twelve from *Review* (19 percent), one from ‘AA’ (4 percent), and ten from *Detail* (11 percent). Across all publications, 232 of 340 firms, or 68 percent, did not issue any statement that was detected by researchers.⁷⁰ When broken down by individual journal, the 232 was comprised of eighty-four firms from *Record* (53 percent), forty-nine firms from *Review* (75 percent), twenty-three firms from ‘AA’ (92 percent), and seventy-six firms from *Detail* (84 percent). For

all publications, those firms that issued a clear BLM statement had 34 percent women leadership on average; *Record's* was 32 percent, *Review's* was 63 percent, *AA* was 23 percent, and *Detail* was 31 percent. Interestingly, *Review* continued to outperform other journals in women of color proportionately; 25 percent average, whereas the other journals came in at 12 percent for *Record*, 5 percent for *AA*, and 4 percent for *Detail*. However, upon further reflection it made sense that most the highest concentration of architecture firms that had issued a statement was in the US-based publication, since BLM is a movement emerging from the US.

Architectural Record Compared to Reports in the United States

Because *Record* is an American publication, the author assembled other comparable data sources that are specific to the US to better understand its performance (see table 4). The AIA 2018 Firm survey reports 29 percent of principals and partners are women and also that there are 11 percent minorities in these leadership positions.⁷¹ Unfortunately it does not break down the data in terms of both gender and minority status.⁷² Nicholson's "Where are the Women?" report referenced above consolidates and analyzes many relevant statistics: compared more broadly, the US Census shows that women make up 51 percent of the overall US population, 57 percent of all enrolled college students, and 22 percent AIA associates.⁷³ *Record's* number at 28 percent tracks quite closely with the AIA firm survey, and performs better than many of the metrics assembled by Nicholson.

It is not currently possible to track meaningful data for all women of color in architecture. In nearly every report, statistics for women and people of color are tracked separately. However, there is reasonably accurate information for Black women available thanks to the frequently updated Directory of African American Architects (see table 5).⁷⁴ The Directory shows five hundred licensed Black women architects, or 0.4 percent of the overall licensed architects in the US. Comparing this against the data generated for

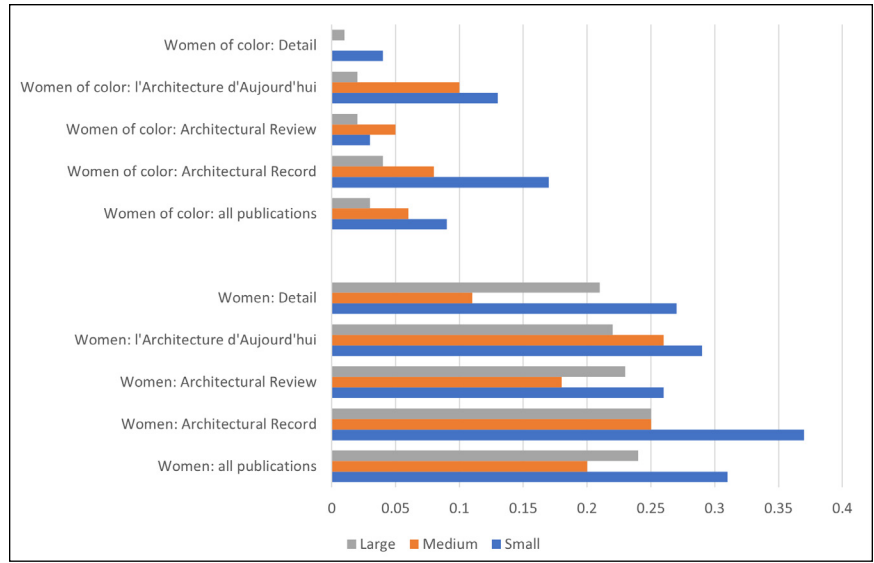


Figure 4. Percentages of women and women of color in leadership, broken down by firm size

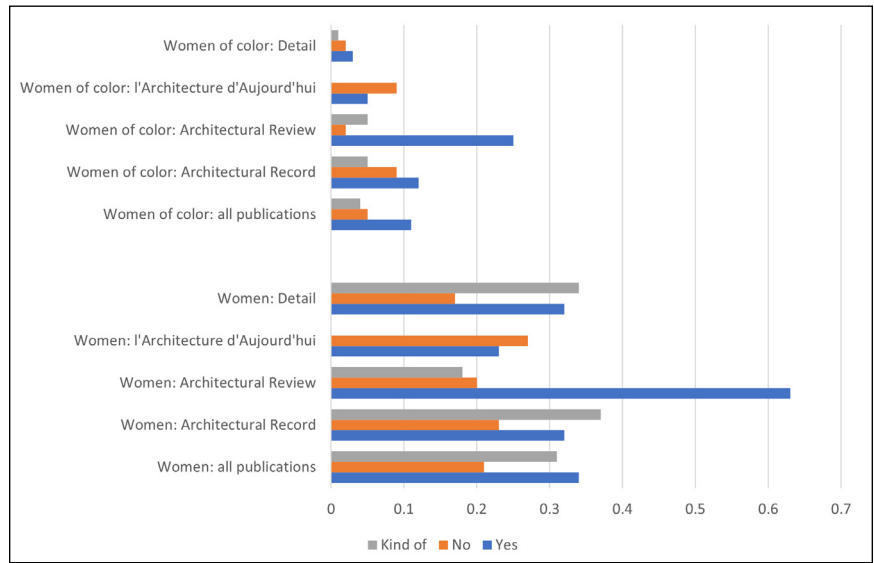


Figure 5. BLM statements (Yes, Kind of, No), modelled across publications and broken down by individual periodicals

this study's dataset showed that two out of 1,344, or 0.01 percent of all firm leaders highlighted by *Record*, are Black women. Again, ACSA Data Resources prove helpful: Nicholson reports Black women make up 1.9 percent of all architecture graduates in the US, whereas they make up 6 percent of the overall US population (see table 3).⁷⁵

In thinking about Black women compared to all women in data specific to the United States, juxtaposing these external data sources in comparison to the information gathered in this dataset is also revealing (see table 6): Black

Table 3. Types of architecture firm practice, number of firms in each category, and averaged percentage of women leaders of architecture firms versus percentage of women of color in architecture firms.

Type of firm	Number	% of Women Leaders	% of Women of Color Leaders
Architecture	144	27	10
Architecture & Research	1	100	100
Design	2	61	25
Engineering and Construction	5	20	0
Interiors/Interior Design	8	23	4
Landscape Architecture	8	36	9
Lighting	2	40	1
Planning	10	17	1
Urbanism/Urban Design	10	24	6

Table 4. Women architecture firm leaders in *Record* dataset compared other data sources for US women architects.

<i>Record</i>	US Census	% of Women enrolled College Students	% of Women enrolled in NAAB Accredited Architecture Programs	% of Women Principals and Partners
28	51	57	46	29

Sources: 2010 US Census; Kendall A. Nicholson, “Where Are the Women? Measuring Progress on Gender in Architecture,” ACSA Data Resources, June 2020, <https://www.acsa-arch.org/resources/data-resources/where-are-the-women-measuring-progress-on-gender-in-architecture-2/>; Kermit Baker et al., “The Business of Architecture: AIA Firm Survey 2018,” American Institute of Architects, August 2018.

Table 5. Black women architecture firm leaders in *Record* dataset compared to other data sources for US Black women architects.

% of Black Women Leaders of Architecture Firms in <i>Record</i>	% of Licensed Black Women Architects	% of Black Women Architecture graduates	% of Black women in US Census
0.01	0.4	1.9	6

Sources: Directory of African American Architects, accessed November 20, 2020, <https://blackarchitect.us/about/>; Kendall A. Nicholson, “Where Are the Women? Measuring Progress on Gender in Architecture,” ACSA Data Resources, June 2020, <https://www.acsa-arch.org/resources/data-resources/where-are-the-women-measuring-progress-on-gender-in-architecture-2/>.

women make up 13 percent of all women in the US census, are 3.9 percent of total women graduates of architecture programs, and make up 1.8 percent of all licensed women architects. Comparing this specific dataset of the women researched in *Record*, Black women make up only 0.05 percent of all women leaders.

Discussion

Trade literature is the focus of this study because of its position as an expression of the field, as a way to see that “representational belonging” through the architects and projects they feature as a source of role models and precedents. The relationship between library collections and role models is reflected in professional policy and in the literature. In its Policy Manual, ALA states that one key objective for integrating diversity in their values is to “promot[e] the publication, development, and purchase of materials, resources

and exhibits that present positive role models from diverse populations.”⁷⁶ Role models are important in any field, but certainly true within architecture; Omoyeni et al. discuss the visibility of role models as both extremely important and widely acknowledged in the field, drawing not only from architectural discourse but also that of social psychology.⁷⁷ The Royal Institute of British Architecture’s (RIBA) recent report emphasizes the importance of “promoting positive and inclusive role models in the profession and supporting progressive employment practice.”⁷⁸ Trade publications’ position as an indicator of to whom to pay attention in the field would certainly be a place where role models may be sought. Thus, who they promote is worthy of investigation to determine who is construed as belonging and who is not.

The data findings were surprising in many ways, but also in how they aligned closely with other metrics, such when as compared against those assembled by Tavella (see table 7). *Record* was consistently the most equitable journal, highlighting the highest proportion of women in the

Table 6. Tabulation of Black women architecture firm leaders versus all women architecture firm leaders in Record dataset, compared to other data sources for Black women architects versus all women architects, and US Census population.

% of Black Women Leaders vs. All Women Leaders of Architecture Firms in Record	% of Licensed Black Women Architects vs. all Licensed Women Architects	% of Black Women Architecture Graduates vs. All Women Architecture Graduates	% of Black Women vs. All Women in the United States
0.05	1.8	3.9	13

Sources: Directory of African American Architects, accessed November 20, 2020, <https://blackarchitect.us/about/>; Kendall A. Nicholson, “Where Are the Women? Measuring Progress on Gender in Architecture,” ACSA Data Resources, June 2020, <https://www.acsa-arch.org/resources/data-resources/where-are-the-women-measuring-progress-on-gender-in-architecture-2/>; 2010 US Census.

Table 7. Percentage of all women leaders of architecture firms broken down by journal, compared to data source for licensed women architects by country of publication.

United States		United Kingdom		France		Germany	
% of All Women Leaders in Record	% of Licensed Women Architects in US	% of Women Leaders in Review	% of Licensed Architects in UK	% of Women Leaders in ‘A’A’	% of Licensed Architects in France	% of Women Leaders in 2019 Detail	% of Licensed Architects in Germany
28	25	22	25	26	38	19	43

Source: Paola Tavella, “La Scalata delle Donne all’Architettura,” *Abitare*, June 9, 2017, <https://www.abitare.it/en/research/studies/2017/06/09/architecture-women/>.

leadership of firms. ‘A’A’ came in second and was followed by *Review* and *Detail*. *Detail*’s highly technical focus could provide some rationale for why they may not have been as focused on social representation. ‘A’A’ was surprising in its high ranking as compared to its editorial scope; however, in looking at the overall percentage of women architects in France, the results are less impressive. Perhaps most disappointing was the *Review*, which expressly details their commitment to showcasing relevant social issues in their publication but their firm coverage did not reflect this expression of values. While each journal was not limited to architectural projects in their country, nor to firms that primarily practice in their country, it can be argued that the journal reflects its cultural context.

While the proportion of women leaders was lackluster in all journals except for *Record*, women of color were particularly underrepresented, most notably in *Review* and *Detail*, suggesting that while women’s representation has been an ongoing issue, what needs more attention and improvement is representation of women of color. This is also reflected in the Equity by Design survey, which has shown overall improvement for increased numbers of white women in leadership positions, but less improvement for people of color.⁷⁹ This evidences Crenshaw’s observations on overlapping systems of oppression evidenced by her use of the term intersectionality.⁸⁰

Unexpectedly, very few firms chose to explicitly issue a BLM statement in the wake of George Floyd’s murder. Architecture as a field may find that the profession would be more diverse if firms would embed values and social

issues much more explicitly in communications, practices, and workplace (among a comprehensive set of initiatives).⁸¹

As far as the motivating question of whether this subset of the library’s collection reflects the community it serves: the evidence, while limited, is telling. At best it reinforces already low representation; at worst, it elides marginalized individuals’ contributions to the discourse of architecture. These journals were chosen in part because they typify trade periodicals in architecture. Based on the editorial scope of the other journals in the Fundamental section of the AASL Core Periodicals List, there is no indication that other Fundamental journals cover more diverse content. *A + U (Architecture + Urbanism)* may be considered “diverse” from an American perspective. The same may be said of *C3 Korea* or *GA* (published in Asia). In contrast, the National Organization of Minority Architects (NOMA) publication is relegated to Topical, which is defined as “highly specialized or regionally focused.”⁸² Perhaps that is the issue encapsulated: the concerns of minority architects (in NOMA’s parlance) are further minoritized. This begs the question of whether it is time to reconsider the AASL Core Periodicals list.

How might a subject specialist interpret this data? It shows that mainstream publications are not likely to reflect the field as more diverse than it is in reality, and may indeed be suggesting that the field is whiter and more male than it is in actuality. Referencing the earlier discussion of how collections, and specifically trade literature, may be an important source for role models and representational belonging, architectural library collections are providing role models that are predominately male, and almost exclusively white.

By extension, architectural library collections are demonstrating those who identify as white and male are those who most belong.

Beyond the specifics of subject specialization, any librarian whose responsibilities include collection development should carefully consider how their individual and collective acquisition and management choices affect the worldview they construct through the collections they build. This consideration can be applied to both collection management and development, including retrospective collecting to fill gaps. Using this approach as an outreach mechanism to attract students and faculty à la Manuell, McEntee, and Chester would ensure that the library's collecting activities are visible and not just the "history of the white man," in the words of Bowers, Crowe, and Keeran. Furthermore, the "Equity by Design" survey dataset shows that "Our youngest respondents were by far the most diverse, with the survey pool increasingly white and male amongst older respondents. This suggests that the composition of the industry is changing, and that we all have work to do to support this more diverse pipeline."⁸³ The shift in demographics seen in the profession is certainly related to the students who elect to pursue architecture as a profession. Architectural libraries must consider how to shift processes and practices proactively to be better positioned to support diverse students, such as embracing the recommendations from the Columbia students discussed above. That being said, in fiscal environments which have steadily reduced librarians' abilities to collect, systematic retrospective collection development may not be financially feasible, nor will materials necessarily still be available. Looking outside of books and journals for information, and focusing on curating available web resources rather than or in addition to more traditional collections may be a more suitable way to increase collection diversity while reducing dependence on the publishing ecosystem.

Conclusion

This initial dataset can serve as the basis for further study through enhancement with additional variables, data sources, and methodologies. In addition to studying the place of publication, the location of the firm itself could be analyzed and compared to national statistics such as those highlighted by Tavella. Additionally, the demographic composition of the publication's editorial and full-time staff writers could be compared against those featured. It would be worthwhile to expand the journals covered to publications from a greater geographical spectrum. Another expansion might include comparison to similar fields such as visual arts.

This study focused on "visible" identity aspects of gender and race. Other demographic characteristics, such as sexuality or disability, are not adequately addressed using this methodology. A methodology that includes more qualitative information or self-identified information from architects themselves would be a better way to document these characteristics and is a direction the author is considering for future studies to complement the quantitative, collection-centered methodology used in this study.

The publications sampled for this study are evolving and changing to meet the needs of the field. For example, *Review* editors state, "For us, the term editorial practice encompasses, among other things, the processes by which decisions are made about the subjects and themes discussed as well as the writers, architects, photographers and illustrators who are published both in print and online. The [*Review*] is committed to *consistently diversifying who is visible in all of its spaces and platforms*"⁸⁴ (italics added for emphasis). An eventual comparative study to examine the impact of attempts to improve relative to the data in this study could inform the development of recommended practices for making progress on visibility and the related construct of belonging.

This research was initially conceived in the context of an initiative to remedy collection gaps, to increase students' awareness to architecture students of contributions to the field by women architects, and to partner with key stakeholders across the campus community to support efforts of improving career success for women in architecture. The original intention was to pair this study with outreach and events. Unfortunately, the COVID-19 pandemic interrupted plans but these activities will be undertaken as health and safety considerations allow. Regardless of format of outreach, building community with the library's constituents means responsible and transparent stewardship to cooperatively enrich collections.

Within libraries, collections are a foundational expression of building an equitable worldview. Drabinski's essay about libraries' neutrality (or lack thereof) demonstrates a critical need to assess what worlds librarians build through collection development and management. As Honma states, "All too often the library is viewed as an egalitarian institution providing universal access to information for the general public. However, such idealized visions of a mythic benevolence tend to conveniently gloss over the library's susceptibility in reproducing and perpetuating racist social structures found throughout the rest of society."⁸⁵ Pawley points out that "library collections themselves constitute a kind of legacy—one that successive generations of librarians inherit and tend to take for granted."⁸⁶ Combined, these assertions advise collection development librarians not to

accept collections as *a priori*, but rather to actively shape them to be more inclusive worldviews.

In the context of academic libraries, Quinn outlines a vision for how this can contribute to a liberatory education: “Libraries are uniquely positioned as spaces for undirected learning, where choices can be made and tangents can be followed without necessarily being restricted by time or remit. Librarians have a role in creating an environment without restrictions, and facilitating the individual goals of the library’s diverse groups.”⁸⁷ Collections are a core aspect of that mission provision. In this author’s opinion, facilitating self-directed learning through library resource provision means offering titles in which “representational belonging” is at the fore.

But developing and managing collections with representational belonging in mind is only one piece of the solution. Hudson has problematized the value of inclusion rhetoric that such diversity audit measures have inherently taken as true.⁸⁸ He argues that by focusing on calling out misalignments between collections and populations, the focus is diverted from actual, systemic, meaningful change.

Race remains undertheorized in the field in no small part because of the overwhelming LIS emphasis on the practical and the technical, and the attendant failure to recognize inquiry into matters of power and meaning as a worthwhile undertaking in its own right: it is difficult to undertake sustained collective discussions of theory, culture, and history when the vast majority of the intellectual output in the field collectively teaches us that research is best when it is accompanied by commodity solutions in the form of concrete policy recommendations, competencies, standards, activities, and other things that can be captured in bullet-pointed lists.⁸⁹

Without a concomitant engagement with broader systemic change and necessary, difficult dialogues, libraries will not be able to change enough for their collections to be relevant.

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LibraryThing and Literary Works Revisited

Are Social and Library Cataloging Just as Complementary as they were a Decade Ago?

Philip Hider and Gemma Steele

Providing access to literary works remains a challenge for catalogers and metadata librarians, notwithstanding modern advances such as the introduction of the Guidelines on Subject Access to Individual Works of Fiction, Drama etc. and the Library of Congress Genre/Form Terms. This study explores how harnessing the social cataloging of fiction and other belles-lettres might help meet this challenge. Samples of records from the catalogs of a university and a public library were compared with their equivalents in the LibraryThing (LT) platform, using a similar study reported in this journal ten years prior as a baseline. Most of the library titles were found in LT, and most were linked to tags that still offered additional access points of considerable value beyond the subject and genre headings included in the library records. However, the number of relevant and useful tags attached to each title varied considerably, as indeed did the quantity and quality of the headings. The authors analyze how the tags complemented the headings and identify genre, setting, theme, characters, and authorial attributes as key elements of description for social catalogers of literary works.

Social cataloging sites such as LibraryThing (LT) and Goodreads have given the reading public the opportunity not merely to use bibliographic records, but also to create them. In contrast to how library cataloging is sometimes viewed (as a rather arcane exercise), these sites have become remarkably popular. LT touts itself as a platform for “a community of 2,550,000 book lovers,” while Goodreads claimed around 90 million members as of July 2019.¹ It would appear that any difficulties people might encounter with library bibliographic records do not dampen their enthusiasm for sharing details about their own collections. In some cases, this enthusiasm might not extend to much more than using existing records, which are typically based on library bibliographic records. However, in other cases, users of these sites are happy to also contribute their own cataloging, adding tags, reviews, and other elements to become *social catalogers*.

The contribution of these social catalogers makes to the cause of access provision started to be investigated not long after these sites were first launched, in the mid to late 2000s, as outlined in the literature review below. While these investigations have led to the general view of social cataloging complementing the work of professional metadata librarians, exactly how and to what extent the former adds value, potentially, to the latter depends on the context

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of particular systems, sources and materials. This context remains under-researched.

Belles-lettres is a category of material of particular interest in relation to social cataloging. Not only is it a category that is well represented in sites such as LT, it is also one that has been less well covered by traditional cataloging practices. However, few studies of the social cataloging of fiction and other literature have been published. This paper aims to help address this gap, presenting research that builds on a study reported about ten years ago in this journal, by DeZelar-Tiedman.²

The new research questions whether the added value of LT tags for literature that DeZelar-Tiedman identified has increased or decreased in the intervening decade, and why. The authors are mindful of how LT and similar sites have grown their user base and coverage during this period, but also of the important developments in the library cataloging of belles-lettres in the 2010s, including the application of the *Library of Congress Genre/Form Terms* (LCGFT), a new list of headings covering literary works, among other materials. The current study also extends the earlier study by comparing tags for works owned by both a public and a university library, and by conducting additional analysis on the new samples. While libraries continue to grapple with the best ways to leverage social cataloging, library professionals need to ask ourselves whether this has become less (or more) of a pressing issue, at least for particular types of resources.

Literature Review

Social Tagging and Social Cataloging Studies

Interest in user-generated metadata predates the social cataloging sites that began to appear in the mid- to late 2000s, with calls for “democratic indexing” to address the limitations of library cataloging first made more than a decade earlier. Most notably, Hilderley and Rafferty argued that the tagging of artistic and literary works by the public at large could be particularly effective if structured according to the various levels of meaning of works of the imagination.³ However, it was the advent of “Web 2.0” and an online environment that readily accommodated user tagging that established social tagging as a major area of research in library and information science (LIS). Scholars such as Mai, and Pando and Almeida, championed social tagging’s postmodernist approach to knowledge organization, affording multiple viewpoints over the singular perspective of an intermediary or expert.⁴

Social tagging research has been summarized by Rafferty, who notes that “social tagging generally means the practice whereby internet users generate keywords to

describe, categorize, or comment on digital content.”⁵ However, tags can also be added to records of physical objects, just as headings are added to records for these resources created in library catalogs: this practice has become known as social cataloging, a particular subset of social tagging.⁶ Other categories of social tagging have also been identified, such as the those that relate to how different platforms and systems allow for different degrees of participation. Some platforms, including LT, allow all site users, or at least all subscribers, to contribute tags for a given resource, whereas others enable only the contributor of the resource, or particular categories of user, to do so.⁷

One strand of social tagging research has explored the different motivations of taggers, and the kinds of tags that result from them. Some tags may be less helpful in facilitating access to the wider community, and are more of a “personal” nature, representing an idiosyncratic relationship between tagger and resource of little relevance for the user population in general.⁸ The extent to which users are prepared to tag may well vary according to the function and purpose of the platform being used.

In cases where tags can be generated in significant quantities and where many of these tags are added to provide access for users at large, their value has been generally regarded as complementary to that of any controlled indexing added by information professionals such as library catalogers.⁹ Strengths identified include tags’ flexibility and currency, plus their broader accommodation of multiple viewpoints and terminologies. They tend to provide a greater level of “recall,” but a lower level of “precision,” to use the classical measures of indexing quality.¹⁰ Social tagging is usually a much cheaper option than professional indexing; indeed, in many contemporary file sharing environments, it may be the only option that is sufficiently scalable.¹¹ However, despite the apparent inclusive nature of social tagging, studies have shown how a relatively small number of “supertaggers” tend to produce the lion’s share of many “folksonomies” (i.e., the social tagging aggregations).¹² Regardless, no indexing, whether produced by a large number of people or by a single person, is devoid of ideology and bias.¹³

Since the 2000s, the complementarity of library cataloging and social tagging has been explored in various studies, many of which have focused on the nature and value of social cataloging. A majority have made use of the publicly accessible, and popular, LT site. Typically, social cataloging tags are compared with headings created by library supplied cataloging for the same resources. In an early study, Heymann and Garcia-Molina found that many, though by no means all, of the tags in the LT and Goodreads sites were of value from an access perspective.¹⁴ They also found that tags and library-assigned subject headings were assigned in similar frequency ratios, suggesting a similar “depth” in

the social and professional approaches. Rolla compared the tags from LT and the Library of Congress Subject Headings (LCSH) on OCLC WorldCat records for a small sample of common materials, and found both similarities and differences.¹⁵ There were many more tags than there were headings, even in this early period of social cataloging, and many tags that did not correspond to the terms in the headings; some of the tags were personal in nature, while others were more descriptive. In contrast, for each item there were some concepts, at a broad level, that could be identified in both the tags and headings. A breakdown of the less useful and more “personal” tags to be found in LT was provided by Lawson, and includes reading status, date, gift suggestion and location of the copy.¹⁶

Adler focused on the LT tags used in “transgender books,” showing how they often differed in both language and concept from the headings assigned by libraries.¹⁷ Meanwhile, Thomas, Caudle, and Schmitz compared the tags and headings for ten popular books, employing a taxonomy that covered certain semantic relationships, such as broader and narrower terms.¹⁸ A similar study of tags for a wider range of academic library materials was conducted by Voorbij, using a sample of 160 records, while DeZelar-Tiedman compared the LT tags and subject headings specifically for sequences of literary works in a university library collection.¹⁹

DeZelar-Tiedman’s study focused on how the retrieval value that LT tags might add to the headings already provided in her university library’s catalog. Samples of records for literary works by twentieth- and twenty-first-century American and British authors, which had been classified as such, were collected from the catalog; their headings were then compared with the tags assigned to matching works in LT, or at least with the works’ thirty most frequently assigned tags, where applicable. DeZelar-Tiedman found that 43.0 percent of the sampled works contained LT tags, but no LCSH, while a further 33.8 percent contained both LCSH and LT tags. Among a sub-sample of fifty works linked to both LCSH and LT tags, there were numerous instances of the complementary nature of the headings and tags, providing “a more complete view of the nature and thematic elements of the work than either sources does alone.”²⁰

Iyer and Bungo based their analysis on a sample of books in complementary and alternative medicine, and classified both the tags that related and that did not relate to the headings into various broad categories, such as “time period” and “locations.”²¹ A more statistical approach was taken by Lu, Park, and Hu, who analyzed the overlap between LT tags and LCSH using the Jaccard index, counting the terms in common divided by the total number of terms, based on lists of the most frequently occurring tags and headings.²² The very limited degree of overlap, and the large dataset,

suggested considerable potential for LT tags to complement LCSH. In a more practical study, Pirmann conducted a usability analysis of a library catalog augmented with social tagging.²³ She found that the participants made good use of both headings and tags, for different purposes, confirming their complementary nature.

Šaupel conducted an extensive study of different ways that novels were described by publishers, librarians, literary theorists, and readers.²⁴ In relation to the last category, she examined the tags and reviews added by users of LT and the Amazon bookstore for twenty well-known novels. She identified that the LT tags covered a number of elements for all the novels: literary character, genre, topic, author, position in literary history, and place. There was a strong correlation between the LT and Amazon tags’ coverage of elements, while a few elements were prevalent across the descriptions produced by publishers, librarians, literary theorists and readers alike: story, information about the author, genre, personal experience with reading the novel, and evaluation.

Pecoskie, Spitteri, and Tarulli compared the tags and headings in Canadian public library catalogs for award-winning fiction.²⁵ In this case, the tags were entered directly into the catalog by library users, rather than in a social cataloging platform. The analysis revealed differences in the distributions of tags and headings across the typology the authors constructed, with proportionately more tags representing awards, tone, and topic, and with more headings representing genre, location, and period. The authors also compared their results with the elements included in models of fiction description previously put forward for readers’ advisory services, as listed below, finding some discrepancies.

- Award/recognition
- Genre
- Setting
- Real events
- Factual information
- Pacing
- Paratext
- Specific characters
- Characters’ occupations
- Time
- Plot development
- Ending
- Readability
- Advice to readers
- Emotional experience
- Subject
- Characters’ relationships
- Intended audience
- Library influences
- Size/length of book

The use of social tagging in library catalogs has been promoted by these authors in other publications, including Tarulli's *The Library Catalogue as Social Space*.²⁶

There have been fewer studies of social cataloging in more recent times. Vaidya and Harinadrayana performed an analysis similar to that of Lu, Park, and Hu, that focused on LIS materials, and found a similarly low level of overlap, as did Samanta and Rath in their study of LT tags in the field of economics.²⁷ Michael and Han examined the tagging in an academic library catalog over a seven-year period, finding uneven coverage, with some tags of promise, and others of lesser utility.²⁸ Hider searched the LT site for tags representing various fiction genres listed on Wikipedia that were not on the LCGFT list, and compared their presence in LT with those representing a sample of genres that were included in LCGFT, finding the former to be more prevalent than the latter.²⁹

Library Cataloging of Belles-Lettres

One category of material that has been less well served by library supplied cataloging are works of the imagination, including literary works or belles-lettres. Indeed, until recently, the cataloging of fiction and other belles-lettres tended to be quite minimal. Literary works were classified and indexed with reference to a few broad facets, such as form, language, nationality, and period, but subjects and genres were not addressed, partly because of the difficulties catalogers might face in determining them. This approach, however, severely limited readers' access to their libraries' literature collections, leading to a number of initiatives over the past thirty years to address this deficiency.³⁰ Of particular note is the American Library Association's development of its *Guidelines on Subject Access to Individual Works of Fiction, Drama etc.* (GSAFD), which provided a framework for subject-related access points to be created by catalogers of literary materials, and then the development of the LCGFT, begun in 2007, which now covers a wide range of materials, including literature, and others such as music and film.³¹

These developments have led to changes in cataloging practices and fuller levels of bibliographic records for fiction and other literary works, including the analysis and indexing of literary subjects and genres. However, the extent to which practices have changed across the library community as a whole is unclear. Likewise, it is not clear that the new practices, where they do occur, align with the findings from those studies that have explored how readers seek out literary works. While findings from these studies have highlighted the diversity of methods and strategies employed by readers to this end, they also identified several core elements for search systems to cover. For instance, Beghtol proposed that the facets of characters, events,

spaces and times are "fundamental data categories for fiction," while Ranta noted the need to cover both denotative and connotative elements, and Pejtersen and Austin found that public library users sought fiction according to the four basic elements of subject matter, frame, author's intention and accessibility.³²

Many of the empirical studies of how readers sought out fiction and other literary materials were based on interviews and surveys. However, the provision of access to fiction outside of librarianship has also been analyzed to help inform the enhancement of access to literary collections within libraries. Adkins and Bossaller compared the access points to fiction provided in online bookstores, readers' advisory databases and library catalogs, finding that together the sources covered a wide range of elements, with the different platforms offering complementary means of access to a significant extent.³³ Elements that were frequently identified across the platforms included emotional experience, explicit content, factual information, specific characters, characters' occupations, characters' relationships, setting, time, plot development, pacing, and subjects. Recently, Hider and Spiller mapped the fiction genres used in online bookstores and Wikipedia to those of LCGFT, revealing many discrepancies between the commercial and library vocabularies, and also amongst the bookstores, some of which appeared to be based on geography.³⁴

Method

This paper reports on a study that replicated and extended the study conducted by DeZelar-Tiedman.³⁵ The focus was likewise on user tags employed in LT to describe and potentially enhance access to belles-lettres, but ten years later. Two new samples were collected: the first was derived from the same source of bibliographic records as those in the earlier study (the University of Minnesota Libraries catalog, MNCAT), and the second was based on the run of adult fiction arranged alphabetically by author in the nearby Madison (WI) Public Library.³⁶ The samples were collected in October 2019 and March 2020, respectively.

Both samples were somewhat random and derived in similar fashion, and similar to how the sample in the earlier study was collected. For the belles-lettres in the university collection, the two call number sequences used by DeZelar-Tiedman, based on LCC, PR6001-6126 and PS3500-3626, were displayed in MNCAT. The sequences cover the modern works of English and American literary authors. As in DeZelar-Tiedman's study, the 125th record listed was identified for the sample, though in this study, the records were counted in reverse from the end of the sequences. Again, as in the earlier study, "literary criticism" and "publications that collected or compiled works of literary authors that

were originally published separately” were excluded from the sample.³⁷

A total of 330 records were included in the first sample, compared with the 444 records DeZelar-Tiedman used. Criticism and collected works were excluded from the sample after the counting in the current study, but prior in the case of the earlier study, which would have contributed to the smaller size of the new sample. The overall population is likely to have grown, of course, though some weeding might have occurred, while possible changes to the catalog’s call number browse function might also have been a factor. Regardless, the sample was deemed sufficiently close in size to that of the earlier study to allow for comparison.

With the public library collection, its various forms of belles-lettres were scattered across different sequences, with adult fiction arranged separately. Given that fiction was the predominant literary form in both university and public library collections, the authors focused on this sequence and collected a sample in a similar way, by means of its online catalog. Thus, every 125th record was identified for the sample, until 400 records were identified, after which collected works were excluded. It should be noted that this sequence included small numbers of fiction originally written in languages other than English. A total of 346 records were included in the second sample.

The following elements in the records of both samples were recorded in Excel spreadsheets: title, author, year of publication, and the number of subject and related (MARC 6xx) headings, excluding foreign language headings, divided by subject vocabulary (LCSH, LCGFT, FAST, etc.). Each title was then searched in LT. (This social cataloging platform was chosen to facilitate comparison with the DeZelar-Tiedman study, although Goodreads appears to be the more popular platform nowadays, and could well be worth using as an alternative basis for future research in this area.) When matching works were found, the tags used for the first match listed (by “relevance”) were copied into the Excel spreadsheets with each of their frequencies (i.e., the number of times the tag had been assigned by different users to the work). All tags assigned for each work were counted and recorded, as tags that were assigned more than once (i.e., by multiple users) to each work. Links to the catalog record and to the LT record were also included on the spreadsheets.

Following the earlier study, sub-samples of fifty titles were created for more detailed analysis. While literary form was used to structure the sub-sample in the previous study, the titles for this study were randomly selected from all the titles with LT tags in each of the two new samples. This was because the public library sample was limited to fiction. The distribution of form across the university sub-sample reflected that of its parent sample fairly closely (mean percentage difference being 6.8 percent). For each title in the

two sub-samples, its LT tags were compared to its headings in similar, though modified, fashion to that of the earlier study, in which each tag was run against all the recorded headings for the title. In this study, each tag was compared with all the headings’ subfields, as this was deemed a more equivalent unit of analysis than the whole heading. As with the earlier study, in cases of titles with more than thirty tags, only the thirty most frequently used tags were analyzed. Each tag was categorised using an expanded version of DeZelar-Tiedman’s scheme, which had consisted of the five categories of Exact Match (M), Partial Match (PM), No Match: Specificity (NS), No Match: Vocabulary (NV), and No Match: New (NN), as defined below. The additional categories were used for those tags that fell outside of DeZelar-Tiedman’s scheme, such as those that not associated with subjects. These other categories, namely Multiple Subjects (MS), Mixed (MX), Not Subject: Personal and Bibliographic Description (NSM), Not Subject: Personal (NSP), Not Subject: Bibliographic Description (NSS), and Not Determined (ND), are likewise defined below. In cases of multiple applicability, the tag was recorded in the highest-listed category. Tags that described a format of the work not represented by the bibliographic record were set aside.

Multiple Subjects (MS) = the tag consists of multiple terms pertaining to one or more of the following five categories, but which do not articulate as a single compound concept.

Exact Match (M) = the tag matches exactly (except for capitalization) a subfield, and only that subfield, of a recorded heading. The subfield could be the first subfield of a heading.

Partial Match (PM) = the tag matches all the words of a subfield, and only that subfield, but the form of at least one of the words varies (in terms of spelling, hyphenation, plural/singular, verb vs. noun, etc.).

No Match: Specificity (NS) = the tag’s meaning relates to the concept represented by one or more subfields in the recoded headings, but not at the same level, i.e., is either more general or more specific (or both).

No Match: Vocabulary (NV) = the tag’s meaning is synonymous or near-synonymous with a subfield of a recorded heading, but uses one or more different words.

No Match: New (NN) = the tag represents a concept not covered by or hierarchically related to any

of the concepts in any of the headings and their subfields.

Mixed (MX) = the tag includes elements pertaining to one or more category above and one or more category below.

Not Subject: Personal and Bibliographic Description (NSM) = the tag covers both of the categories below.

Not Subject: Personal (NSP) = the tag serves a personal function for the tagger.

Not Subject: Bibliographic Description (NSB) = the tag is potentially covered in other parts of the bibliographic record and not by LCSH or LCGFT.

Not Subject: Space (NSS) = the tag consists of a space only.

Not Determined (ND) = the category for the tag could not be confidently assigned, i.e., its meaning was unclear.

The two authors categorized the tags for the first six titles in parallel, comparing and discussing their classifications after each title. After the sixth title, agreement reached a level of 97 percent, and the second author proceeded to categorize the remaining tags on her own.

To gauge the usefulness of the non-matching tags that pertained to subject (PM, NS, NV, and NN), the relevant tags were then evaluated according to the following three-point scale: “adds considerable value to the headings,” “adds some value to the headings,” or “adds little or no value to the headings.” Clearly this scale allowed for considerable variation in its interpretation and application, but the same author rated the tags across the two sub-samples, so that it could be used as a means of broad comparison. It also facilitated the identification of good examples of particularly useful tags, for the supplementation of library bibliographic headings, and of examples where their value in this respect was limited.

Modifying the last component of the earlier study, the nature of the non-matching, new-concept tags (NN) was analyzed and compared across the two sub-samples. Similar, though slightly different, categories were used for a first pass. Whereas DeZelar-Tiedman identified forms, genres, topical, geographic, chronological, and characters, mirroring LC structures, the authors decided to treat genres as part of an “abstract noun” category, given that genres were not always readily distinguishable from topics. In contrast, abstract and concrete nouns are more distinguishable, and the authors felt that this distinction might be of interest. Place name and personal name categories generally

corresponded to the earlier study’s geographic and character categories. Additionally, an “affective” category was used to investigate the extent to which reader experience was explicitly indicated, outside of indications of genre. A “discipline/field” category was introduced to distinguish these tags from those of topic, form, and genre. Another departure from the earlier study was that the same sub-sample was used this time, whereas the tags analyzed in this component of the previous study were those linked to the works for which no LCSH had been assigned. Tags were recorded in the highest-listed applicable category.

Combination (M) = the tag consists of multiple terms that pertain to more than one of the categories below

Affective (A) = the tag indicates one or more emotions that the work elicits (often adjectively)

Discipline/field (D) = the tag indicates the discipline/field(s) of study to which the work belongs

Form (F) = the tag indicates the form(s) or genre(s) of the material

Subject: Common Abstract Noun (CA) = the tag contains a common abstract noun

Subject: Common Concrete Noun (CC) = the tag contains a common concrete noun

Subject: Place Name (PL) = the tag contains a place name (proper noun)

Subject: Person Name (PE) = the tag contains a person’s name (proper noun)

Subject: Other Proper Noun (PO) = the tag contains a proper noun that represents neither a place or person

Other (O) = the tag contains a concept not belonging to any of the above categories

Given the complexity of what “subject” means in the case of literary works, a second pass was conducted, in which the tags were coded inductively.

Findings

Table 1 shows the different genre distributions of the old and new MNCAT samples. The new sample included

considerably more material classified under “other,” proportionately. This may be partly due to a looser interpretation of the excluded categories (literary criticism and collected works). While the previous study indicated differences in the match rates of different genres, table 2 makes it clear that match rates have increased over the past decade in all genres, with the exception of short stories. Overall, coverage has increased from about 80 to 90 percent, reflecting how the social cataloging platform has increased its user base and coverage over the past decade. Of particular note is the 98.1 percent match rate for novels in the new sample. Even poetry, the genre with the lowest match rate, has almost three quarters of its instances covered on LT.

The sample of adult fiction from the Madison Public Library mostly consisted of novels, as might be expected, though 4.0 percent were short stories, and 1.7 percent “other.” This may have been one reason why its overall match rate was particularly high, as table 3 shows, although it also seems likely that the sort of material collected by the public library would be especially likely to show up on the LT platform due to greater popularity and accessibility (especially if it is stocked in public libraries). Its greater overall currency could also be a factor.

A breakdown of the presence of subject and related headings in the catalogs versus tags in LT is shown in table 4. Although current cataloging practices have increased the proportion of MNCAT records with headings, as table 4 shows, there are still about a third without headings, but with corresponding tags in LT, suggesting that there remains a strong case to explore the use of social tagging to enhance access to literary collections in academic libraries. With the Madison Public Library, all sampled records came with one or more headings, while the majority of the 98.3 percent matching titles in LT were tagged. Again, the high proportion of titles with tags could likely be attributed to the mainstream and contemporary nature of many of these titles, while the pervasiveness of the headings may be due to contractual agreements with the library’s suppliers.

Of course, the presence of headings or tags does not reveal anything about their number or quality. Table 5 provides a picture of typical quantities of headings and tags, with the median number of headings in the new sample of MNCAT records and the median number of tags in the matching LT titles broken down by genre. Whereas the MNCAT records typically include one or two headings, perhaps divided into two or three of four subfield elements, corresponding LT titles are typically linked to much larger numbers of tags. However, these numbers vary greatly across the sampled works, as shown in the breakdown. Novels are typically assigned many more tags than are poetry anthologies, no doubt partly because they are tagged by many more users on average. Similarly, even within these categories, quantities vary enormously. The full range for

Table 1. Genres in MNCAT samples

Genre	DeZelar-Tiedman Study		New MNCAT Study	
	N	%	N	%
Novel	244	55.0	154	46.7
Drama	96	21.6	27	8.2
Poetry	45	10.1	73	22.1
Short stories	38	8.6	24	7.3
Other	21	4.7	52	15.8
Total	444	100	330	100

Table 2. Match rates for the MNCAT samples

Genre	DeZelar- Tiedman Study %	New Lit Study %
Novel	89.9	98.1
Drama	68.8	88.9
Poetry	68.9	74.0
Short stories	98.5	95.8
Other	81.0	88.5
Total	82.7	90.3

Table 3. Overall match rates across the three samples

Sample	N	Matches on LT	Match %
DeZelar-Tiedman study	444	367	82.7
MNCAT 2019	330	298	90.3
Madison PL	346	340	98.3

Table 4. Headings vs tags in the three samples

	DeZelar-Tiedman Study (%)	New Lit Study (%)	Madison (%)
No headings, no LT tags	5.0	5.5	0.0
No headings, not in LT	13.1	4.8	0.0
Headings, no LT tags	1.0	2.7	2.6
Headings, not in LT	4.3	4.8	1.7
No headings, but LT tags	43.0	33.9	0.0
Headings and LT tags	33.8	48.2	95.7

the 298 titles that match up with the new MNCAT sample is 0–3,303 tags. It should also be noted that the number of tags per record tends to drop substantially if tags assigned by only one user are discounted: the highest number of tags for the 298 titles is then 689, with the median dropping from 27 to 5.

Table 6 demonstrates that these quantities hide a very marked trend in library cataloging towards providing

Table 5. Median numbers of headings and tags

Genre	Median No. of Headings	Median No. of Tags
Novel	2	66
Drama	0	10
Poetry	0	4
Short stories	1	32
Other	3	35.5

Table 6. Trend in heading numbers

Library records	Pre-1990	1990s	2000s	2010s
N	145	85	72	28
Median no. of headings	0	2	3.5	11
% with at least one heading	36.6	63.5	70.8	92.9

Table 7. Tags in the new MNCAT and Madison samples

	M	PM	NS	NV	NN	MX	MS	NSP	NSB	NSM	NSS	ND
MNCAT (N)	80	17	248	25	399	2	8	172	83	1	6	46
MNCAT (%)	7.4	1.6	22.8	2.3	36.7	0.2	0.7	15.8	7.6	0.1	0.6	4.2
Madison (N)	69	8	205	19	362	14	3	285	174	3	0	30
Madison (%)	5.9	0.7	17.5	1.6	30.9	1.2	0.3	24.3	14.8	0.3	0.0	2.6

Table 8. Tag types across the three sub-samples (%)

	M	PM	NS	NV	NN
Earlier MNCAT	8.9	9.8	11	16.4	53.9
New MNCAT	10.6	2.3	31.9	3.4	51.8
Madison	10.7	1.2	31.3	2.0	54.8

greater access to literary works. If the new MNCAT sample is chronologically divided, the very sparse subject headings assigned to works published and generally acquired before the 1990s can be contrasted with a dramatic increase through the 2010s. Indexing for the subjects of fiction and other imaginary works has become much more common in many libraries, while the adoption of LCGFT has clearly also occurred in the case of the University of Minnesota, with 68 LCGFT headings in the new sample. Likewise, there are 442 LCGFT headings in the Madison Public Library sample (most of which would have been published in the 2010s). In addition to the greater numbers of LC headings, many of the more recent records included more non-LC subject headings, though some of these may overlap with the LC headings.

Whereas large proportions of literary titles in LT may be linked to more tags than their corresponding titles in library catalogs are linked to headings and subdivisions, the

question of quality remains. Results from the analyses of the three sub-samples of fifty works provide an indication of the tags' value. Table 7 provides the two new sub-samples' breakdown across all the categories used in the revised and expanded scheme (see "Method" section). Significantly more tags, proportionately, are related to subject or genre in the MNCAT-based sub-sample: 70.8 percent compared with 56.6 percent, excluding the few tags that were "mixed." Otherwise, the distributions are quite similar, with the largest numbers in the categories of "No Match: New," "No Match: Specificity," and "Not Subject: Personal." These results indicate large numbers of tags with the potential to supplement subject and genre access to literary works, as was found in the earlier study.

The numbers in the categories used in the earlier study's scheme were also compared across all three sub-samples. These are shown as percentages in table 8, with all the non-applicable tags discounted. There are similar percentages for the new concept category, i.e., about half. The percentages for the exact matches are also similar, but there are about three times as many specificity variants in the new sub-samples, and many more partial and vocabulary variants in the earlier sub-sample. Much

of the variance could be due to the matching being done at the subfield level in the case of the new sub-samples. The distributions of the two new sub-samples are very similar. Overall, tables 7 and 8 suggest that tagging behavior, in terms of the nature of the tags, does not vary all that much across time and material, at least within the literary realm.

Given the similarity of the tag type distributions of two new sub-samples, broadly similar levels of value that the non-matching subject-related tags add to their respective catalog record headings might be expected. Table 9 does not confirm this for certain, bearing in mind the subjective nature of the rating scale used, but neither does it suggest otherwise. Across both samples, the percentages indicate that many of the non-matching tags, over half of which pertain to subject or genre, would add significant value for access purposes. Some of the specific ways in which these tags could do this are discussed at the end of this section.

The deductive coding for the final part of the analysis is summarized in table 10. The types of new concepts are distributed quite similarly across the two new sub-samples, except for forms and common concrete nouns. Given the focus on one particular form, i.e., fiction, in the Madison Public Library sample, the former exception is to be expected. The reason for the greater proportion of concrete nouns among the Madison tags is less clear, and invites further

Table 9. Value of tags in new MNCAT and Madison sub-samples (%)

	MNCAT	Madison
Adds little or no value	19.2	22.5
Adds some value	35.3	40.2
Adds considerable value	45.5	37.3

investigation. The percentage of tags directly indicating emotions derived from the reading experience is small, while those for the other categories are broadly in line with the results of the earlier study. The “other” category comprised a mixture of tags, many of them adjectives, such as “contemporary,” “colorful,” “interwar,” and “light.” Clearly these terms related to a range of different aspects of the various works, precipitating the inductive analysis of the sub-samples, as described below.

The MNCAT sub-sample was grouped into new categories first, and then the Madison sub-sample, after which the categories were reconciled, resulting in those covered in table 11. Some tags could not be confidently included in any of the resulting categories, and were set aside; this could have affected the percentages a little, but they are reported here indicatively. The distributions of tags across the various categories were broadly similar for the two sub-samples.

The large proportion of tags that represent forms and genres not covered by the library headings confirms the initial coding. For both belles-lettres in general and fiction in particular, what the work *is*, as opposed to what it is *about*, is important for social catalogers, with their contributions adding to those forms and genres covered in the catalog records at different levels: some of the additional tags represented basic forms, such as “fiction” and “poetry,” some more specific genres, such as “thriller,” “suspense,” and “fantasy,” and others more specific still, indicating particular sub-genres or hybrid genres, such as “amateur detective” and “romantic suspense.”

The next two major categories of tag not covered by the library headings are for setting and theme. Again, while some headings for setting would have been included in some of the corresponding bibliographic records, there is clearly room for more from a social cataloging perspective. Regarding period, many of the more generic indications such as “20th century” and “1960s” have an LC equivalent. Other tags are less readily translatable, and show how social catalogers not only provide enhanced access quantitatively, and but also qualitatively, some of their tags extend beyond the vocabulary of library cataloging. Thus, there are “near future” and “pre-Katrina” among the tags. For place, most of the tags for “new” concepts are represented in LCSH, both as specific instances (“Japan,” “New Mexico,” etc.) or types of place (“wilderness,” “boarding school,” etc.).

Table 10. Types of new concepts: deductive analysis

	MNCAT (N)	MNCAT (%)	Madison (N)	Madison (%)
A	6	1.5	8	2.2
D	14	3.5	11	3.0
F	128	32.1	49	13.5
CA	123	30.8	128	35.4
CC	30	7.5	57	15.7
PL	18	4.5	21	5.8
PE	9	2.3	11	3.0
PO	10	2.5	4	1.1
O	51	12.8	54	14.9
M	10	2.5	19	5.2

This can also be said of the tags that were categorized as “occupational” settings, of which there were a fair number among the Madison sub-sample. These include “rock and roll” and “fashion.” Some of these settings might not have been identified by the library cataloger as significant, which may be symptomatic of a relative disregard for setting, as an element that is less clearly related to subject. Library catalogers may be underestimating, however, the degree to which social catalogers read fiction for their settings and the degree to which settings are thus more than incidental.

The tags for “new” concepts that pertain to “theme” are of particular interest. They tend to be less obvious than some of the others, such as those for geographic place, and in this way may be of particular value. It may be easier to find novels set in Japan, for example, than to find novels that deal with “motherhood,” “grief,” or “aging.” Some of the tags, such as “ambiguous morality” and “second chances,” are also less than readily translatable into LCSH, though most are covered by the vocabulary, including those for some relatively obscure or ill-defined concepts, such as “Afrofuturism,” “betrayal,” and “hope.”

The next group of tags not covered by the library headings indicated various characters featured in the narratives. A few were specific characters, but a larger proportion were *types* of characters, such as “Native Americans” and “fathers.” Again, most of these could be covered by LCSH, but had not been in these cases. There were also a number of non-human characters (animals, ghosts, etc.).

The only other major category, representing more than 5 percent of the tags for “new” concepts, is a loose grouping around authorial attributes. Many of these tags indicated the author’s nationality and thus the literary “tradition” of which they were a part, in a very broad sense, such as “American literature” and “US poetry.” However, there were also tags that denoted other attributes, such as gender (e.g., “women writers”) and race (“author of color”). This aspect already features quite strongly in library cataloging,

Table 11. Main types of new concepts: inductive analysis (%)

Aspect	MNCAT	Madison
Form/genre	39.0	33.7
Period	9.1	5.8
Place	5.1	6.1
Type of place	1.6	3.8
Occupational environment	0.5	5.5
Setting	15.8	21.2
Human condition	6.1	8.1
Human problem	6.4	4.9
Ideology	2.9	0.3
Theme	15.5	13.1
Specific character	1.9	2.0
Type of character	4.3	4.9
Non-human characters	1.9	3.2
Characters	8.0	10.2
Authorial attribute/tradition	13.3	6.7
Audience	0.3	4.7
Narrative style	2.4	2.0

in headings and classification, and in other elements of the bibliographic record, but perhaps not systematically enough.

Two other minor categories are included in table 11. Social catalogers indicated the intended audience for many of the works covered by the Madison sub-sample, as might have been expected, given the library's inclusion of more materials for younger readers. There were also a few tags providing additional access to narrative style, but not so many, bearing in mind that this element is not given much attention in library cataloging. Examples that appeared potentially useful included "epistolary novels," "dark," and "first person." Some of these terms are covered in LCGFT. A few other categories were also included in the second round of coding, but at even lower levels of frequency, including a category similar to the "affective" category used in the initial coding.

How LT Tags Complement LC Headings

While some of the LT tags judged more useful in their complementarity covered areas that might be regarded as weaknesses in library cataloging's treatment of literary works, other tags covered omissions in catalog records that might not have been expected. Such omissions may have been oversights or errors or the result of minimal cataloging practices. When the library cataloging was minimal, the LT tags often highlighted the seriousness of this detriment, covering concepts of great topic interest, such as "artificial

intelligence," or concepts about which it is hard to find literary works, such as "impersonation."

It was noticeable that even many of the more recent works had not been assigned LCGFT, hence the large number of "new concept" tags pertaining to genre, including very mainstream genres. It is hoped that this will be less of a weakness on the part of library cataloging in the future, though it should be noted that a work can belong to a number of different genres, some of which might only be identified as such by a minority of readers, and that "proto-genres" may not have found their way into LCGFT. Indeed, there were a number of tags for which it was assumed were intended to represent genres, but that are not presently in LCGFT, such as "romantic suspense."

Other concepts, particularly those representing themes, may remain less likely candidates for cataloging, due in part to the difficulty of identifying such concepts unless they are explicit in the secondary sources at hand (e.g., in the "blurb"). Indeed, not only might they not be identified, but even if they are identified, it can be difficult for the cataloger to assess their centrality to a given audience. Themes that emerged in the sub-sample, such as "family secrets," could be a challenge in this respect. It should be noted that not all themes that might add value need to be abstract; indeed, more concrete examples, such as "rain," might be of particular retrieval value because of their clarity of meaning.

In summary, there were tags for a wide range of concepts not covered by the library subject headings. Some of these covered gaps due to minimal cataloging practices; others were due to what may have been cataloger oversights or practical limitations to subject analysis; still others were possibly due to the narrowness of the cataloger's singular viewpoint; others due to the constraints of the rules and policies for the application of LCSH and LCGFT; and others due to the limitations of the LC vocabularies themselves. With respect to the MNCAT sub-sample, there was complementarity across the full range of materials: the various forms of literary work were all assigned useful tags not covered by the library subject headings. There were more tags usefully complementing fiction, but mainly because there was more fiction, and more tags assigned to fiction.

Conclusion

It is clear that some library catalogers are adding more headings for fiction and other literary works than was the custom in the past, and that this would make a difference to access even in comparison with the situation DeZelar-Tiedman reported a decade ago. Further, while many literary works found in library catalogs are being entered and tagged in social cataloging platforms such as LT, this tagging is at least as uneven, and probably more so in some ways, than

the indexing being added to bibliographic records. Nevertheless, while library supplied-cataloging appears to be catching up with social cataloging with respect to access provision for belles-lettres, for literary works there are as many subject-related tags available on platforms such as LT as there are headings and subdivisions in academic and public library catalogs. Not all of these tags are necessarily useful: some may be the same as the library terms, some may be inaccurate, and others may represent idiosyncratic views. However, this study confirms that many, perhaps even a majority, could enhance access, and no doubt do within the social cataloguing platform.

The question remains how library catalogs can best harness this added value offered by social cataloging, noting that around half of the LT tags do not relate to subject or genre, and some of those that do might also be considered as “noise.” If tags need to be curated, that should probably happen after acquisition and initial processing, when there is more likely to be tags from multiple social catalogers available. How realistic and scalable such curation could be is another matter.

The similar distributions of tag categories for works in the public and university library collections point to the potential utility of social cataloging in different library contexts, even if differences in collection currency, breadth, etc., exist. Tagging behavior and outcomes can still be similar across different materials within a broad area, such as literary works, at least across similar platforms.

This study also highlights particular ways in which social cataloging complements library cataloging with respect to belles-lettres. About a third of non-matching, subject-related concepts pertained to genre and form, with smaller proportions, but significant ones, relating to setting and theme. These aspects are among those included in received models of fiction access, as outlined in the literature review, and likewise feature in the two earlier studies of the social cataloging of fiction by Šauperl, and Pecoskie, Spitteri, and Tarulli.³⁸ However, the prevalence of these elements in the authors’ analysis suggests that not all of the various elements included in the received models are of equal importance, and that catalogers might do well to focus on a few key elements, such as genre, setting, theme, characters, and authorial attributes, rather than shoehorn their current practices into a long list. In fact, these key

elements are generally already aligned with the more modern library cataloging practices. Indeed, Pecoskie, Spitteri, and Tarulli found that genre, location, and period featured proportionately *more* in headings than tags.³⁹ Thus it is perhaps less a question of librarians needing to adopt a new framework and more one of integrating the social cataloging into their search systems, leveraging the taggers’ breadth of views and proximity to the material. Further, the existing models omit one element that *was* covered significantly by the tags examined in this study, namely, authorial attributes, confirming Šauperl’s finding.⁴⁰

Many of the useful non-matching concepts are represented in LCSH and LCGFT; they just were not represented in the headings assigned to the records. This would be partly due to greater numbers of taggers than catalogers and partly to the limits set by general and local cataloging policy. It may also be due to catalogers’ continued emphasis in their daily practice, on subjects, at the expense of genres and settings, both of which overlap with subjects, but can be harder to pin down. This leads to another reason for the additional tags: social catalogers tend to be closer to the work, giving rise to additional knowledge and insights about the work, as well as a stronger impetus, perhaps, to express their views of the work.

Some of the useful non-matching concepts could not be translated into LC terms, however, illustrating the shortcomings of as extensive a controlled vocabulary as LCSH. By its nature, vocabulary control will inevitably lead to a certain loss of expression. Nevertheless, it would be instructive to consider each case that social cataloging raises: in some, the term may in fact be a candidate for inclusion, whereas in others its lack of fit may shed light on the character or structure of the controlled vocabulary.

Some of the tags were particularly valuable because of the minimal cataloging in the corresponding bibliographic record. While library supplied cataloging addresses the need for greater access to belles-lettres and other works of the imagination, it does not yet do so universally, and more attention required in its coverage of concepts such as genre and setting, which overlap, but go beyond that of “subject,” whether connotatively or denotatively. Even assuming that progress continues, it looks as though there is still potential for social tagging to complement the access provided by library cataloging.

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Book Review

Elyssa M. Gould

The Electronic Resources Troubleshooting Guide. Holly Talbott and Ashley Zmau. Chicago: ALA Editions, 2020. \$60.00, 184p. (ISBN: 978-0-8389-4764-7).

The discovery and access of electronic resources is full of challenges. Complicated relationships between vendors, integrated library systems, link resolvers, and knowledge bases both guarantee the occurrence of patron access problems and obscure the root cause. In *The Electronic Resources Troubleshooting Guide*, the authors provide frameworks for solving any technological problem and then break down the components of electronic resources (e-resources) access. This book is ideal for those who have found themselves in a position where they need to develop familiarity with the problems that may occur with e-resources, as well as manager who seek to formalize e-resources troubleshooting policies.

The first six chapters of the book focus on troubleshooting processes, principles, and technologies. Problem-solving theories and methodologies are discussed along with the facts that make an individual an effective troubleshooter. The authors provide concise definitions of the technology involved in the discovery and access process, as well as detailed diagrams illustrating relationships between systems. The step-by-step descriptions of the access process make this chapter an excellent resource for any library professional looking to better understand the e-resources ecosystem.

The authors also discuss specifics, such as what information is necessary to run a troubleshooting process, including web forms, soliciting access reports, and conducting effective troubleshooting interviews; how one might gather the information necessary to begin the troubleshooting process; and identifying e-resource access issues. Formal strategies for problem-solving are discussed in a way that helps provide a baseline of understanding for what methods to use when and what benefits are available via each method. Realistic scenarios and helpful tips are used to illustrate these points. The authors also review many of the systems introduced in chapter 2. They identify some of the most common problems that occur in those systems. Of note is an analysis of the metadata sources used by the various discovery systems, the type of data, and who has control.

The book delves into the actual resolving of access issues in chapter 5. While the authors have included a few hints for solving specific problems, the bulk of the chapter

is dedicated to the principles of implementing solutions. The authors discuss the need for temporary and stopgap solutions, steps for evaluating multiple solutions, and how to plan for and prioritize during a “triage” situation. As in other chapters, they include several scenarios. What is notable about this chapter is that it is not a “how to” guide. It does not include solutions. It is almost entirely focused on principles, planning, and decision making. This will particularly appeal to new managers of e-resource staff, as it can provide guidance for setting up troubleshooting training and documentation. Examples of the most common e-resource problems and offers the most common solutions are discussed in chapter 6. The authors also include realistic scenarios for each problem and solution. For each, they demonstrate the error reporting, access chain, diagnostic steps and solutions discussed in chapters 3–5.

The book shifts toward organization, workflows, and proactive thinking in chapters 7 and 8. The authors introduce guidelines for building frameworks for troubleshooting infrastructure in an organization. Inspired by Agile project management, they define a framework for building troubleshooting workflows at any institution. This includes defining guiding principles, staff roles, establishing accountability workflows, documentation, and training.

Guiding principles are similar to an institution’s mission statement; it is a brief statement designed to define the ideals of the troubleshooting team. The authors define the troubleshooting team in three groups: the troubleshooting staff with advanced knowledge, the frontline staff who can perform basic diagnostics, and the colleagues who submit error reports. They state that a good troubleshooting workflow addresses patron needs, staff needs, and the processes mentioned in earlier chapters. However, many workflows are based on local organizational culture or specific individuals. They emphasize that a workflow should embrace Agile principles, especially keeping it simple. As the goal of establishing a workflow is to make everyone aware of the steps in the process, they provide guidelines and examples for creating troubleshooting flowcharts. The final aspect the authors address is providing training. They provide helpful information to provide training to the three troubleshooting staff types previously mention. The chapter ends with helpful hints on how to troubleshoot your troubleshooting, such

as advocating for additional staff or improving team performance. The final chapter deals with proactive troubleshooting—ways to address problems before they become access issues. This includes analyzing previous problem reports, access checking, and working with vendors.

The Electronic Resources Troubleshooting Guide is an excellent resource for new e-resources staff looking to understand the relationship between systems and understand points of failure. Normally this knowledge is obtained by years of tracking errors, but this book concisely

and clearly communicates how systems interact, why they fail, and the most common solutions. The book is also an excellent resource for someone new in a position of managing e-resources troubleshooting staff, or someone who is looking to formalize and improve their troubleshooting processes. The very clear application of Agile principles to troubleshooting e-resources will help any manager improve their processes.—Aaron Neslin (aneslin@umass.edu), *University of Massachusetts*



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