

Visualizing Identities in LIS Literature

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This paper is based on statistical and qualitative analysis of library and information science (LIS) literature. Our study asks the question of whether, and if so, how, and how often, the discourse generated by scholarly literature in LIS engages discussion about identity in LIS, what topics are covered, and whether the articles engage praxis, or the application of theory to practice. Through searches in LISTA database that cross-referenced identity terms (e.g., Gender, LGBT) with terms describing prominent areas in the LIS field, we collected quantitative data and analyzed the co-occurrence of keywords and created network visualizations. We used a qualitative coding scheme to rate abstracts in terms of their relevance and actionability. Both modes of analysis show that generalized conversations about identity are most common, and praxis is rarely achieved. Using critical approaches to LIS, we explore the ramifications of silences within LIS literature upon the pedagogical and professional discourse.

Keywords: academic publishing, critical pedagogy, critical theory, intersectionality, LIS education, LIS scholarship, praxis, visualization

In her recent article on diversity in library staffing, Jennifer Vinopal (2016) asks why it is so difficult for a field committed to the ideal of a diverse workforce to reflect that in its practice. Even as policies and vision statements have evolved to articulate the importance of diversity in achieving the library's service mission, the historically white, female demographics of the profession remain relatively unchanged.

Vinopal considers structural factors that contribute to the profession's lack of diversity, including the ways in which a dominant group's ignorance of the subtleties of bias maintains the status quo. Using the ClimateQUAL:

Organizational Climate and Diversity Assessment as an example, she explores the ways in which libraries measure and talk about organizational and staff attitudes and beliefs about diversity.

This article examines another space where beliefs and attitudes are articulated: the literature that the profession produces, codifies in its publications, and presents to students. How library and information science (LIS) literature incorporates, or ignores, conversations about identities ultimately contributes to the presence, or absence, of diversity in the field. The literature of a discipline marks the key debates, ideas, concepts, and conceits of an academic field. As a sanctioned articulation of the field's best work, peer-reviewed journal articles shape the discourse of LIS as an academic discipline. While discourse is typically characterized as practices of language use standard to a particular group, linguist James Gee (1991, p. 3) argues that it is also an "identity kit." He describes his professional discourse community as a linguist and academic

as comprising both physical things such as journals and universities, and abstract things such as norms and values. Thus, while discourses make it possible to communicate using a shared professional language, they also make it possible to use ineffable cues to recognize other members of a discourse community. Importantly, Gee notes that discourses are also ideological, in that when individuals are engaged in the discourse, they engage with a certain set of values. It is this broader sense of discourse, and ideology in particular, that we consider in this article.

Discourses influence practice and help shape communities. They also confer power: With a strong understanding of the discourse of LIS, a reader is better able to participate in the community and to identify with this group. And while the literature may overtly claim to want an increase in diversity, its own discursive structure may betray this desire. For example, Hathcock (2015) notes that diversity initiatives in LIS often reinscribe the primacy of whiteness in the field. She critiques calls for diversity that do little to make space within the library profession for changes to the

KEY POINTS

- As one constitutive element of the discourses of the LIS field, academic literature articulates the beliefs and values of the field.
- Using a Freirean lens that privileges the importance of dialogue to analyze data visualizations of search results from the LISTA database, the authors explore whether and how the literature addresses issues of identity within the field.
- Findings indicate that while the LIS literature addresses identity in general ways, it rarely covers action taken within the field or specific conversations around identity issues.

professional discourse that would welcome a range of job candidates. She argues that through these practices, the field underscores whiteness within the profession as decidedly normal and posits other racial or ethnic identities as “other.” By examining the discourses around race, class, gender, and sexuality within the LIS literature, our article explores the extent to which the dominant ideology of the literature contributes to or challenges hegemony in the field.

We contend that scholarly literature holds influence over the field as one of its primary pedagogical tools. The texts we generate as a profession not only provide a record of concerns within the field over time; they also shape current conversations in classrooms. LIS students engage with this literature in their courses. LIS professors read this work to stay current. Organizations that provide funding for LIS-related projects and grants use this literature as the basis for their requests for proposals. Practitioners turn to this work to learn about best practices. It is therefore crucial to examine the LIS literature as a pedagogical tool that is generated by, but also generative of, the LIS community.

Our study therefore asks the question of whether the discourse generated by scholarly literature in LIS serves as a form of praxis— and if so, how, and how often. Grounded in the critical pedagogy of Paulo Freire (1970), we posit praxis as crucial to problem-posing or inquiry-based approaches to teaching and learning. We define the term broadly as an iterative process of applying theory to practice and applying lessons from practice to shape the development of theory. To truly engage in praxis, Freire argues that groups must identify and articulate their problems or questions, through dialogue. For Freire, dialogue is an exchange of ideas between and among equals; it is the most important pedagogical tool, and through dialogue communities can plan action and reflect on their actions. The continuous circuit of action and reflection is the basis for praxis. We approach academic literature as a form of scholarly dialogue, through which members of the community exchange ideas, reflections, theories, and actions.

Background

In *Pedagogy of the Oppressed*, Freire (1970) argues for the essential nature of dialogue in achieving praxis. As an exchange of ideas among equals, dialogue is a meaning-making practice: “To exist, humanly, is to *name* the world,” (p. 88; emphasis in original). However, naming is not a neutral practice. Scholarship in gender studies and queer theory has historically critiqued the practice of creating static names and categories. Literature in both fields argues that language and culture do not develop in a vacuum; both contain meanings shaped by cultural and social contexts. As Judith Butler (1990) notes, gender is performed according to social and cultural norms, and therefore discourses and conceptions of gender are shaped by these performances, and are thus socially and culturally bound. Similarly,

feminist and queer-theorist critiques of subject classification have argued that the naming of categories used to describe identity groups is similarly reductive, reflecting the biases of the hegemonic notions of identity at a given moment in time. Even as classification systems strive to simply describe discourse, they also play a role in shaping it.

Emily Drabinski (2013) notes that current categories do not always include a spectrum of experiences and identities. By choosing to name a category in a certain way, we create channels of communication that cannot be neutral and fail to accommodate the mobile and multiple identities of their subjects. Drabinski offers the example of librarian scholarship and activism that contributed to changes in Library of Congress Classifications (LCC) and Library of Congress Subject Headings (LCSH) over the past several decades. Most recently, the Joint Steering Committee for Development of the Resource, Description, and Access (RDA) framework voted to deprecate the gender term list for RDA rule 9.7, allowing agencies to enter whatever labels (or no labels) they feel are appropriate for a person's gender (Joint Steering Committee for the Resource Development, Application Framework, 2015). The altering of LCC classification demonstrates that identity—influenced by culture and context—is constantly changing, and our language must be malleable enough to account for these changes. Queer theory encourages constant evaluation and rethinking of how people use language to describe human experience, art, ephemera, and identities.

Hope Olson (2001) describes the tendency within LIS to ascribe neutrality to our practices. She notes that while standardized systems of cataloging, or the use of a controlled vocabulary, saves labor and creates a system of shared meanings, this shorthand also serves to obfuscate the nuances inherent in identities; they “hide their exclusions under the guise of neutrality” (p. 640). The status quo is expressed through controlled vocabulary, but it is also instantiated by it and accepted as fact. By interrogating the role of neutrality and the presumption of universality across classification systems, Olson demonstrates how attempts to neutralize language actually subvert particular identities.

Neutrality is also critiqued within critical library pedagogy. In his work on academic librarianship, James Elmborg (2006) notes that typical library instruction is riddled with assumptions about what students know, or ought to know, about research, and pushes us to reconsider what constitutes research itself. As a space that non-traditional students, and those who are less academically successful, might find intimidating, the library is already imbued with multiple meanings for groups who have not always felt welcomed there. Critical library pedagogy asks educators to consider the context in which students are situated in their everyday lives and consider these contexts as they plan library instruction. Feminist library pedagogy goes further, by encouraging instructors to include the lives

and knowledge of students in their lesson planning and to teach from the standpoint that all knowing is partial (Accardi, 2013).

Christine Pawley (2006) uses critical race theory to critique the use of vague language when discussing race and gender in LIS literature. Pawley critiques the use of general or “umbrella” terms, such as “multicultural” and “minority,” to gloss over in-depth discussions about race. Further, Pawley’s critique raises the question of intersectionality, or a recognition that our identities are not comprised of a single node but rather characterized by multiple and interrelated identity categories.

To address some of the possible gaps and silences in LIS literature, our group chose to focus on collecting data that use both specific and generalized identity terms. We identified the discussion of intersectionality as the most nuanced form of discourse about identity. First articulated by Kimberle Crenshaw (1989), the term gained visibility in academic writing when feminists such as Patricia Hill Collins (1990) and bell hooks (1981) described the multiple oppressions faced by black women to be intersectional oppressions. They argue that there is no way to separate race and gender, since both factors contribute to their lived experiences and to the ways in which they are perceived and addressed by the world around them. Within the LIS field, intersectionality is useful for shaping a critique of the project of classification, as its very existence contributes to the difficulty of creating discrete categories, as Olson (2001) and Pawley (2006) suggest. Discourses of intersectional identities can account for these complexities, and when LIS scholars use the language of intersectionality to discuss identity, their work contributes to a new narrative that can hold these differences. In our study, we therefore identified abstracts that indicated an intersectional perspective to have the greatest benefit to LIS discourse.

As both Pawley (2006) and Olson (2001) note, the naming of identities, or their obfuscation, creates the conditions of possibility for lived realities. Our actions as LIS professionals are sanctioned by the types of identities permissible in LIS spaces. Therefore, we looked to the literature not only for discussions of identity but also for the ways in which the writings of LIS professionals and academics might cause a shift in practice by making space for identities that are multiple, complex, and intersectional to figure into the discourse. We therefore draw on Freire’s (1970) notion of praxis as both central to LIS work and necessary within literature. John J. Doherty (2005/2006) argues that praxis should be central to LIS practice, since LIS is a field that engages with information literacy and hegemonic knowledge structures. However, as Doherty notes, much of the discussion within LIS literature focuses on technical aspects of librarianship, ignoring the social contexts that inevitably bring power structures into conflict with human identities within the field.

Praxis-oriented LIS engages with identity intersections, both in theory and in practice, and with both the field’s practitioners and its patrons. It

necessarily should be reflected in the literature of the field. We have positioned praxis as the goal for LIS literature that moves the field forward and engages critically with identity intersections as they are represented within LIS. Our research reflects on LIS literature and on the silences and assumptions documented through the subject terms that describe LIS articles, either moving the field toward reflective praxis or not.

Methodology

This study resulted from a collaboration between two courses at a US-based LIS school, one on gender and intersectionality (G&I) in LIS and another on information visualization (IV). Gender and intersectionality students investigated the past 30 years of library literature for content about gender, feminism, and their intersectionalities with race, class, and sexual orientation. This data set was shared with visualization students, who analyzed and visualized the data, with input from the G&I students on design choices and domain-specific content. Faculty participated in these steps and others described below.

Our research was guided by a grounded theory approach, which engages researchers simultaneously in the collection and analysis of data (Mansourian, 2006). While reading theoretical texts about race, gender, and LIS, G&I students simultaneously explored databases to examine how problems of neutrality and bias appear within scholarly search results. We returned to concepts from these texts in qualitative portions of our research, such as naming topic clusters, developing coding schema, and applying those codes to article abstracts.

This study also employs IV to present complex data in a more accessible way (Card, Mackinlay, & Shneiderman, 1999). Visual depictions of complex research data also allow for the potential reuse, reinterpreting, and sharing of results (Heer 2006; Isenberg, Elmqvist, Scholtz, Cernea, Ma, & Hagen, 2011). By visualizing our findings, we hope to highlight issues that are not being discussed in the literature, with an eye toward interventions that make LIS a more inclusive field.

LISTA searches

To create our data set, G&I students searched EBSCO's *Library, Information Science & Technology Abstracts* (LISTA) database, which indexes over 750 journals in LIS. Each student conducted a preliminary search of approximately 13 subject terms taken from articles assigned in the course. This preliminary search was important for exploring the scope of subject terms in the database, as well as for seeing the limitations of controlled vocabularies in investigating identity topics. Students found that searching for some subject terms, such as "Feminist theory," returned few results, many of which were book reviews and not relevant to the research questions being asked. Therefore, it was collectively determined that identity search

terms had to be broadened and paired with LIS-related terms to obtain articles that dealt specifically with issues of identity in the field. In addition to terms related to the field and its institutions (e.g., libraries, archives, information science), we included terms related to people (e.g., librarians, archivists), given the special nature of subjectivities in discussions of identities.

Eight LIS terms (“Librarian*,” “Library labor,” “Library,” “Library education,” “Library science,” “Information science,” “Archives,” and “Archivist”) were paired with 13 identity terms (“Gender,” “Civil Rights,” “Identity,” “Diversity in education,” “Feminism,” “Racism,” “Social justice,” “Multiculturalism,” “Diversity in the workplace,” “Minorit*,” “Stereotypes,” “Sex discrimination,” and “LGBT people”) to conduct a total of 104 unique searches. An asterisk was used to capture singular and plural forms of the same term (e.g., “Librarian” and “Librarians”). Search criteria were set to subject term and constrained to English language articles; reviews were excluded. The date range of the search was constrained to the period 1975–2013. Initially, we conducted searches back to 1960, but only a handful of articles were returned before 1975. The upper limit was set to 2013 to ensure complete results for each year, given lags in indexing some articles.

These searches returned 1,262 unique articles, which form the data set for this study.¹ Article metadata, including subject classifications and publication dates, were analyzed by the IV students using the free visualization program Tableau Public.² Upon inspection of the metadata, we discovered that LISTA uses multiple fields in its subject term search: DE (mostly LIS-specific terms), KW (keywords of varying nature), and SU (broader subjects and proper names, but occasionally LIS-specific terms). Because LISTA does not provide any crosswalks (tables that map elements from one schema onto another) or definition of these terms, we generally avoided collocation, leaving the subject headings to speak for themselves. Only in analyzing term frequency did we group together subterms (e.g., “DE Librarians” and “DE Librarians—Employment”) and orthographic variations (e.g., “KW Public libraries” and “KW public libraries”) within the same field, as well as identical terms across fields (e.g., “DE Libraries” and “KW Libraries”), in order to achieve more accurate counts. In general, however, we found little semantic overlap between the three fields, given their varying roles.

In some cases where we attempted to measure the prominence of a term across time, relative frequency rather than absolute frequency was used to compensate for the varying number of publications each year (for data on publication counts, see [Figure 1](#)). Relative frequencies were computed by dividing the total number of occurrences of a given term in a specific year by all terms used during that year and expressed as percentages rather than counts.

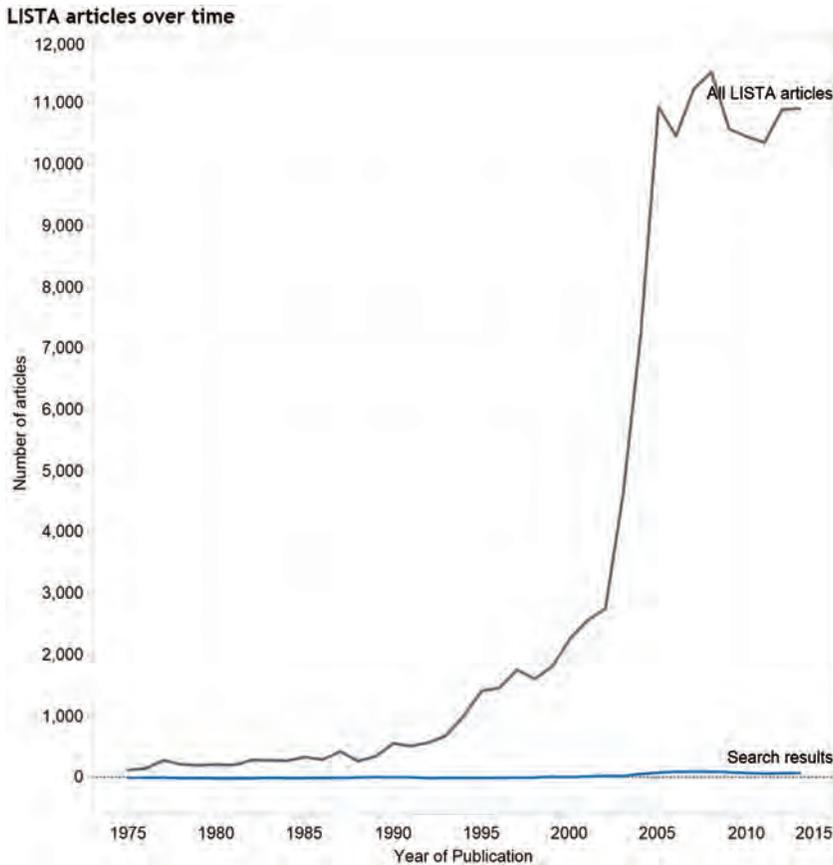


Figure 1: LISTA articles over time

Coding of abstracts

After our initial findings revealed that most results were returned by searches using general terms (e.g., “Multicultural,” “Diversity”), we determined that a more critical approach was necessary. Accordingly, the authors of this paper (four G&I students and two faculty members) read and coded article abstracts using two separate scales: one to measure relevance and another to approximate the degree to which an article might shift discourse and practice in the field. For example, an abstract broadly discussing diversity in libraries would be rated low on both scales, while a highly rated abstract might describe multiple specific identity groups and plans to address their unique needs in a library space.

To ensure consistent codings, we chose 20 articles at random and each researcher applied ratings to them across two five-point scales: shift in discourse and practice, and discussion of identity. After the initial coding trial, this was reduced to four rating levels: not applicable, and three levels

of engagement per scale. The final relevance codings were A = intersectional, B = binary/multiple groups, C = general, and D = N/A. Codings for shift were 3 = praxis, 2 = advocacy/critical engagement, 1 = awareness, and 0 = N/A. The 1,262 abstracts were split evenly between researchers, who each used the new coding rubrics to assess relevance and shift.

Topic networks

A term co-occurrence network was also constructed to examine larger topical areas of the literature. Since our interest here was in patterns of connectivity among terms (rather than frequency), all 3,236 unique terms present in the data set were used in their raw forms without collocation. An undirected edge was attributed between two terms whenever both occurred in the same article. These 31,434 edges were analyzed using the free and open source software Gephi.³ Clustering was performed using the Modularity function (Blondel, Guillaume, Lambiotte, & Lefebvre, 2008; Lambiotte, Delvenne, & Barahona, 2009) to detect groups of terms more related to each other than to the rest of the terms in the network. Our Modularity parameters (randomized, use weights, resolution = 1.25) resulted in 18 topic clusters, 11 of which were assigned a title based on manual inspection of their terms and discussion among both classes. Terms in the co-occurrence network were subsequently colored based on their topic, and topic frequency line graphs were produced to analyze the presence of each topic over time.

Findings and discussion

Search results

The 1,262 unique articles in this data set represent only a fraction (0.95%) of LISTA's 132,535 English-language journal articles between 1975 and 2013 (see [Figure 1](#)). Though the yearly average over this period is slightly higher (1.7%), the prevalence of articles about identity and LIS has decreased in recent years and remains comparatively low (see [Figure 2](#) for sample comparisons). Between 2002 and 2013, the yearly average of all articles classified under identity and LIS terms (0.9%) was about the same as "E-books" (1%), half that of "Metadata" (2%), and minuscule in comparison to "Management" (24%). That a single subject term would receive over 20 times the attention of our entire set of identity- and LIS-related terms speaks to a marginalization of these topics in the literature.

Of the articles that constitute this small subset of LIS literature, the search terms with the most results were umbrella terms: "Minorit*" (534 articles), "Diversity" (286 articles), and "Multicultural" (249 articles). Identity terms that returned the fewest number of articles were "Racism" (48 articles), "Sex discrimination" (54 articles), and "Feminism" (69 articles) (see [Figure 3](#)). Some articles were returned by only one search, but most (65%) were returned by multiple searches.

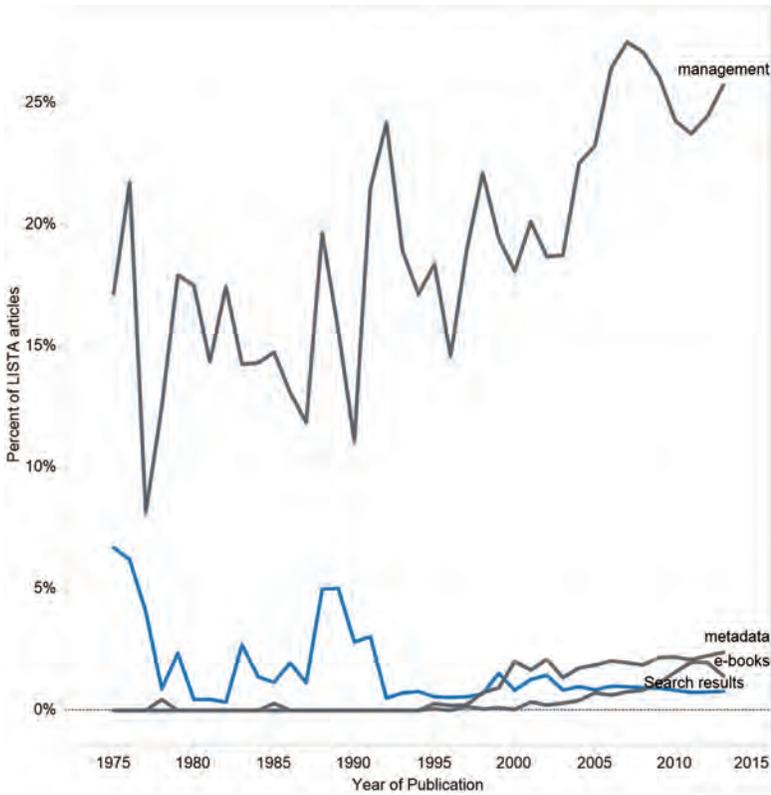


Figure 2: LISTA articles over time (selected subjects, relative frequency)

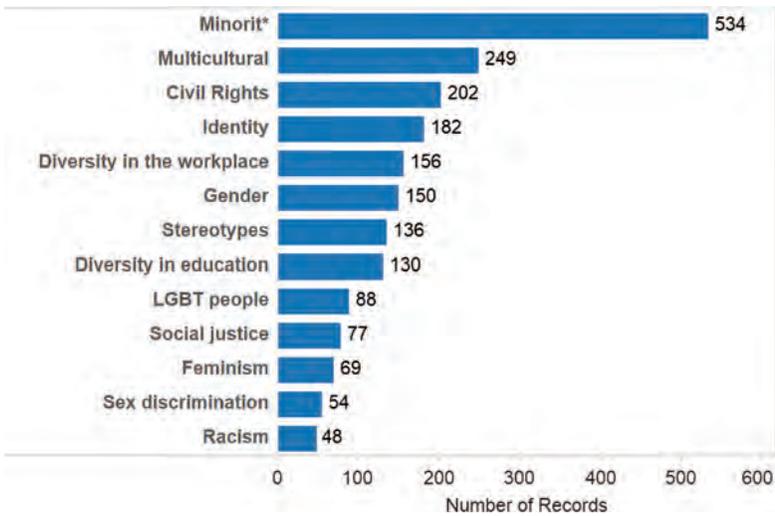


Figure 3: Search results (identity terms)

Identity search terms	LIS search terms							TOTAL	
	Archives	Archivist	Information science	Librarian*	Library	Library education	Library science		Library labor
Civil Rights	24	5	2	28	132	1	10		202
Diversity in education	2		64	14	35	7	8		130
Diversity in the workplace	1	2	1	45	83	5	19		156
Feminism	7	1	3	11	35	1	11		69
Gender	7	1	21	25	73	8	15		150
Identity	24	10	18	35	70	5	20		182
LGBT people	11	2	3	13	53		6		88
Minorit*	16	9	14	116	301	27	50	1	534
Multicultural	8	2	18	37	156	7	21		249
Racism	1			10	29	1	7		48
Sex discrimination			3	20	27	2	2		54
Social justice	16	4	3	11	33	2	8		77
Stereotypes			4	60	57	3	12		136
TOTAL	117	36	154	425	1,084	69	189	1	2,075

Figure 4: Heatmap of search results

Viewing search pairs using a heatmap visualization (Figure 4) reveals a similar pattern as the individual identity terms, with umbrella terms yielding the most results. The top three pairings were “Minorit*” and “Library” (300 results), “Multicultural” and “Library” (156 results), and “Civil Rights” and “Library” (132 results). The pairings that returned the fewest results were “Sex discrimination” and “Library education” (two results), and “Diversity in the workplace” and “Archivist” (two results). The pairings “Feminism” and “Information science,” “Sex discrimination” and “Information science,” and “Stereotypes” and “Library education” each returned three results. Also of note are the seven search pairings that returned no results: “Sex discrimination” and “Stereotypes” paired with “Archives”; “Racism,” “Sex discrimination,” and “Stereotypes” paired with “Archivist”; “Racism” paired with “Information science”; and “LGBT people” paired with “Library education.” Further, for pairs with the terms “Archives,” “Archivist,” and “Information science,” there were never more than 65 results, indicating that identity issues and their relation to archives and information science are under-explored in LIS literature.

Based on historical precedent of discussions of gender and librarianship as a feminized field (Brand, 1992; Harris, 1992; Pawley, 2005), we anticipated finding a strong presence of discussions around gender in our searches. However, we found that articles dealing with gender had some of the fewest returns, often surpassed by umbrella identity terms such as “Multicultural” and “Diversity.” The heat map shows the stark difference in number of records between specific identity subject term records, such as “Racism,” “Sex discrimination,” and “LGBT people,” with results in the single digits, and general identity terms. We interpret this discrepancy as indicative of a focus on general categories within the literature that elides the political aspects of librarianship and LIS professions. Avoiding specific language around identity evades difficult conversations that LIS professionals might not want to face (Pawley 2006; Schlesselman-Tarango 2016).

Those searches that returned no results show silences within the LIS literature, particularly around gender and sexuality. These omissions may be related to assumptions about the normative status of whiteness and femaleness within librarianship (Olson 2001; Schlesselman-Tarango 2016). Because this view of the field is so entrenched within cultural visions of the library, it is neither challenged nor addressed within the literature.

“LIS education” searches indicate that interventions are necessary, particularly for incoming professionals. Pawley (2006) points out that the lack of explicit discussions of identity in the LIS literature means that many LIS students will never discuss race or other identity categories as they impact LIS work (2006). Investigating the extent to which works discussing race, gender, and sexuality appear on LIS syllabi or are cited in LIS literature may provide further insight into this issue and inspire related interventions.

Relevance

Our coding of abstracts for relevance showed that discussion of intersectionality is rare (37 articles, 2.9%), with most articles discussing identity in general ways (564 articles, 44.5%) and nearly one-quarter of search results not discussing identity in relevant ways (304, 24.1%), at least not in ways discernible from their abstracts (see [Figure 5](#)). Many of these latter articles take up such topics as civil liberties (especially the Patriot Act and the Snowden revelations), professional identity (e.g., law librarians), and librarian stereotypes (e.g., *Glee*) that do not explicitly reference categories such as race, gender, class, and other identities.

When relevance codings were analyzed in terms of identity search terms, we found that more general discussions of identity occurred in articles returned by umbrella terms such as “Diversity in education” (89 articles, 68% of “Diversity in education” results), “Multicultural” (180 articles, 72%), and “Minorit*” (289 articles, 54%) (see [Figure 6](#)). However, abstracts that discussed the identities of two or more groups

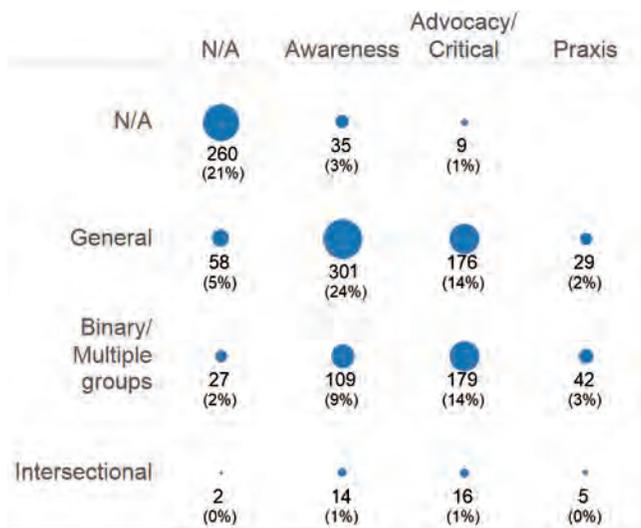


Figure 5: Coding of article abstracts by relevance and shift

	N/A	General	Binary/ Multiple groups	Intersectional
Civil Rights	128 (63%)	42 (21%)	29 (14%)	3 (1%)
Diversity in education	21 (16%)	89 (68%)	11 (8%)	9 (7%)
Diversity in the workplace	9 (6%)	112 (72%)	22 (14%)	13 (8%)
Feminism	4 (6%)	32 (46%)	29 (42%)	4 (6%)
Gender	12 (8%)	56 (37%)	68 (45%)	14 (9%)
Identity	106 (58%)	34 (19%)	37 (20%)	5 (3%)
LGBT people	3 (3%)	18 (20%)	63 (72%)	4 (5%)
Minorit*	41 (8%)	289 (54%)	194 (36%)	10 (2%)
Multicultural	20 (8%)	180 (72%)	45 (18%)	4 (2%)
Racism	3 (6%)	22 (46%)	16 (33%)	7 (15%)
Sex discrimination	3 (6%)	18 (33%)	33 (61%)	
Social justice	25 (32%)	42 (55%)	10 (13%)	
Stereotypes	67 (49%)	44 (32%)	25 (18%)	

Figure 6: Relevance by identity search terms (% of results)

(coded as “Binary/Multiple groups”) were linked to more specific identity search terms, such as “LGBT People” (63 articles, 72%) and “Sex discrimination” (33 articles, 61%). Abstracts with the subject heading “Racism” had the highest rate of intersectional discourse, with 15% (7 articles).

	N/A	Awareness	Advocacy/ Critical	Praxis
Civil Rights	122 (60%)	50 (25%)	25 (12%)	5 (2%)
Diversity in education	19 (15%)	41 (32%)	54 (42%)	16 (12%)
Diversity in the workplace	10 (6%)	68 (44%)	66 (42%)	12 (8%)
Feminism	15 (22%)	25 (36%)	27 (39%)	2 (3%)
Gender	23 (15%)	59 (39%)	57 (38%)	11 (7%)
Identity	98 (54%)	39 (21%)	36 (20%)	9 (5%)
LGBT people	3 (3%)	30 (34%)	41 (47%)	14 (16%)
Minorit ^t	76 (14%)	223 (42%)	200 (37%)	35 (7%)
Multicultural	29 (12%)	108 (43%)	91 (37%)	21 (8%)
Racism	8 (17%)	19 (40%)	17 (35%)	4 (8%)
Sex discrimination	12 (22%)	16 (30%)	22 (41%)	4 (7%)
Social justice	26 (34%)	24 (31%)	27 (35%)	
Stereotypes	79 (58%)	28 (21%)	24 (18%)	5 (4%)

Figure 7: Shift by identity search terms (& of results)

Shifts in discourse and practice

Our codings of abstracts for shift in discourse and practice shows that the majority of articles (806 articles, 63.8%) are either irrelevant or only very broadly related to raising awareness in the field. However, nearly one-third of articles (380 articles, 30.1%) do engage critically with specific groups, collections, or other points of practice within LIS. Those we recorded as praxis (76 articles, 6%) draw explicit connections between this work and identity categories, linking theory and practice in their approach. When we look at how shifts are discussed among different identity terms, praxis appears most often in “LGBT people” (16% of shift codings in the term) and “Diversity in education” (12%), but even these reflect only a fraction of the articles in the term overall (see [Figure 7](#)).

Term frequencies

Overall, the three most commonly occurring terms applied to the articles in our data set were “Libraries” (206 occurrences), “Librarians” (194 occurrences), and “Multiculturalism” (188 occurrences). This includes all terms applied to all articles, regardless of whether they were included as initial search terms.⁴ To investigate discussions of libraries and librarians, we grouped together all terms that contained “library” or “libraries” and, separately, “librarian,” “librarians,” “employee,” and “workforce,” excluding from both sets terms about professional associations, work processes, and LIS schools. The resulting graph ([Figure 8](#)) shows a lesser and declining interest in librarians since 1995, with the trend first beginning in 1988.

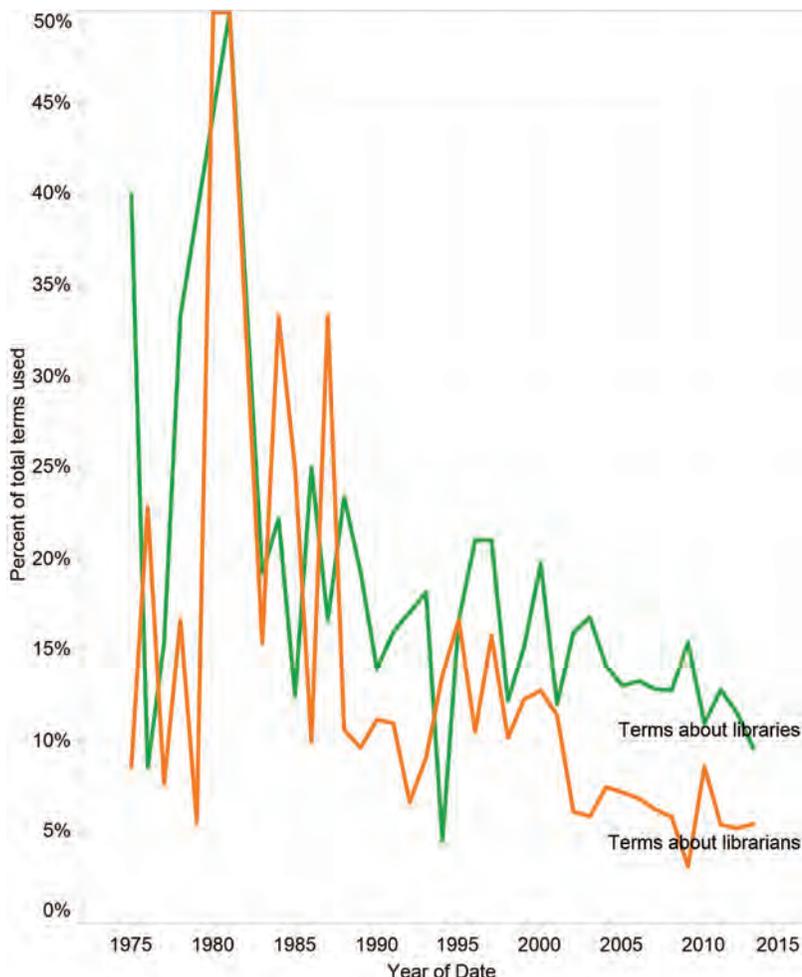


Figure 8: Term frequency over time (libraries and librarians, relative)

When emphasis is placed on the library as a space rather than librarians as subjects, explicit discussion of librarian identities is challenging. The dearth of specific discussions of identities within the LIS literature denies these necessarily political and particular engagements. When we discuss libraries in broad strokes, rather than the work of librarians as particular and contextual, we avoid politicizing the roles that librarians and information professionals play within society. As Drabinski (2013) notes, librarians and patrons are people, and subjectivities matter (2013). The silences that the heat map (Figure 4) and relative frequency graph (Figure 8) point out raise important questions about the assumptions that are allowed to go unquestioned about librarian identities and the work of librarians.

Topic clusters

Of the 11 named topic clusters generated by our term co-occurrence network, the largest topics were “Diversity and the profession” (containing 611 terms), “Libraries and democracy” (562 terms), “Public libraries and culture” (495 terms), and “Archives and social justice” (406 terms). The top 20 terms in each topic are given in [Table 1](#).

Inspection of these terms reveals varying levels of relevance to identity—a point also supported by our relevance codings discussed above. For example, “Libraries and democracy” contains several terms related to “Civil Rights,” which turns out to be mostly about civil liberties (e.g., “Access to information,” “Privacy,” and “Freedom of information”) rather than historical engagements with race during the Civil Rights movement. By contrast, “Archives and social justice” contains such terms as “Feminism,” “Identity,” and “Collective memory,” which are clearly related to subjectivities and discussions surrounding them.

The largest topic, “Diversity and the profession,” contains terms related to the LIS profession (e.g., “Professional identity,” “Conference & conventions,” “Information professionals”) alongside terms about academic librarianship. Upon inspection of the co-occurrence networks, we discovered a set of bridge terms related to diversity and hiring practices, which resulted in the mixed composition of this large topic. We attribute this connection to the presence of Title IX initiatives in higher education, as well as longstanding connections between college campuses and discussions of race, gender, and other identities. These affinities may point to the usefulness of literature on academic librarianship in addressing inequities in the field at large.

Though “Diversity and the profession” is the largest topic in the data set, it has a lower average yearly frequency (29.5%) than “Libraries and democracy” (32.1%). Over time, the average yearly frequency of most topics has decreased (see [Figure 9](#)), largely due to the emergence of new topics, such as “Minorities and information services” (in 1990), “Children’s literature and gender stereotypes” (in 1991), and “Identity and sexuality” (in 2002), which take up a small but appreciable share of topic space in the field. Two topics appear to be increasing in frequency: “Archives and social justice,” perhaps due to the rise in digital archives and new collections dealing with identity groups, and “Identity and information literacy,” which considers online interfaces and information-seeking behaviors, including LGBTQ groups that have often sought information outside of traditional institutional structures.

Momentary peaks in specific topics may be explained by external factors that affect the field. For example, “Diversity and the profession” has peaks in the 1970s and 1980s, when the Equal Rights Amendment was passed by several states and was nearing ratification. “Libraries and

Table 1: Selected topic clusters and their terms

Diversity and the profession (611 terms)	Libraries and democracy (562 terms)	Public libraries and culture (495 terms)	Archives and social justice (406 terms)
<ul style="list-style-type: none"> ● DE ACADEMIC libraries (382) ● SU DIVERSITY in education (349) ● DE LIBRARY science (326) 	<ul style="list-style-type: none"> ● DE LIBRARIES (626) ● DE LIBRARIANS (544) ● SU CIVIL rights (352) 	<ul style="list-style-type: none"> ● SU MULTICULTURALISM (598) ● DE PUBLIC libraries (514) ● DE LIBRARIES & community (272) 	<ul style="list-style-type: none"> ● DE ARCHIVES (401) ● SU SOCIAL justice (235) ● SU FEMINISM (142)
<ul style="list-style-type: none"> ● DE INFORMATION science (316) ● DE RESEARCH (292) ● SU DIVERSITY in the workplace (262) ● DE UNIVERSITIES & colleges (248) 	<ul style="list-style-type: none"> ● DE LIBRARY users (279) ● DE LIBRARY employees (267) ● SU STEREOTYPES (Social psychology) (248) ● DE ACCESS to information (157) 	<ul style="list-style-type: none"> ● SU MINORITIES (268) ● DE INFORMATION services (219) ● DE SCHOOL libraries (135) ● DE LIBRARY science research (124) 	<ul style="list-style-type: none"> ● DE ARCHIVISTS (125) ● DE WEBSITES (106) ● SU HUMAN rights (97) ● SU IDENTITY (Psychology) (94)
<ul style="list-style-type: none"> ● SU GENDER (229) ● SU PROFESSIONAL identity (198) 	<ul style="list-style-type: none"> ● SU AMERICAN Library Association (155) ● DE ASSOCIATIONS, institutions, etc. (146) 	<ul style="list-style-type: none"> ● DE STUDENTS (120) ● SU RACISM (109) 	<ul style="list-style-type: none"> ● DE DOCUMENTATION (82) ● KW Identity (66)
<ul style="list-style-type: none"> ● DE ACADEMIC librarians (148) ● DE LIBRARY education (147) ● SU CONFERENCES & conventions (119) 	<ul style="list-style-type: none"> ● DE LIBRARIES—Societies, etc. (144) ● DE LIBRARY materials (138) ● DE LIBRARY science—Societies, etc. (113) 	<ul style="list-style-type: none"> ● SU MULTICULTURAL education (104) ● SU CULTURAL pluralism (98) ● SU PUBLIC institutions (98) 	<ul style="list-style-type: none"> ● SU COLLECTIVE memory (65) ● DE ARCHIVAL materials (61) ● KW Social justice (58)

- KW diversity (114)
 - DE PRIVACY (100)
 - KW Public libraries (88)
 - DE ARCHIVES collection management (56)
 - KW Academic libraries (113)
 - DE INTELLECTUAL freedom (86)
 - DE LIBRARY media specialists (81)
 - DE RECORDS management (46)
 - DE MINORITY librarians (107)
 - DE BOOKS & reading (81)
 - DE SCHOOL librarians (75)
 - KW Collective memory (44)
 - DE INFORMATION resources management (97)
 - SU CIVIL rights—United States (81)
 - SU CULTURAL identity (75)
 - SU THEORY of knowledge (41)
 - DE LIBRARY outreach programs (84)
 - DE FREEDOM of information (80)
 - SU ETHNICITY (75)
 - SU DOCUMENTARY films (40)
 - DE INFORMATION technology (83)
 - DE LITERACY (78)
 - SU ETHNIC groups (74)
 - DE ARCHIVAL resources (39)
 - DE INFORMATION professionals (77)
 - KW Librarians (73)
 - KW public libraries (70)
 - SU PROFESSIONAL ethics (38)
 - DE LIBRARIANS—Employment (76)
 - DE INFORMATION scientists (69)
 - DE LIBRARY automation (69)
 - SU MEMORY (37)
 - DE AUTHORS (67)
 - SU CULTURE (68)
 - DE ARCHIVAL research (35)
-

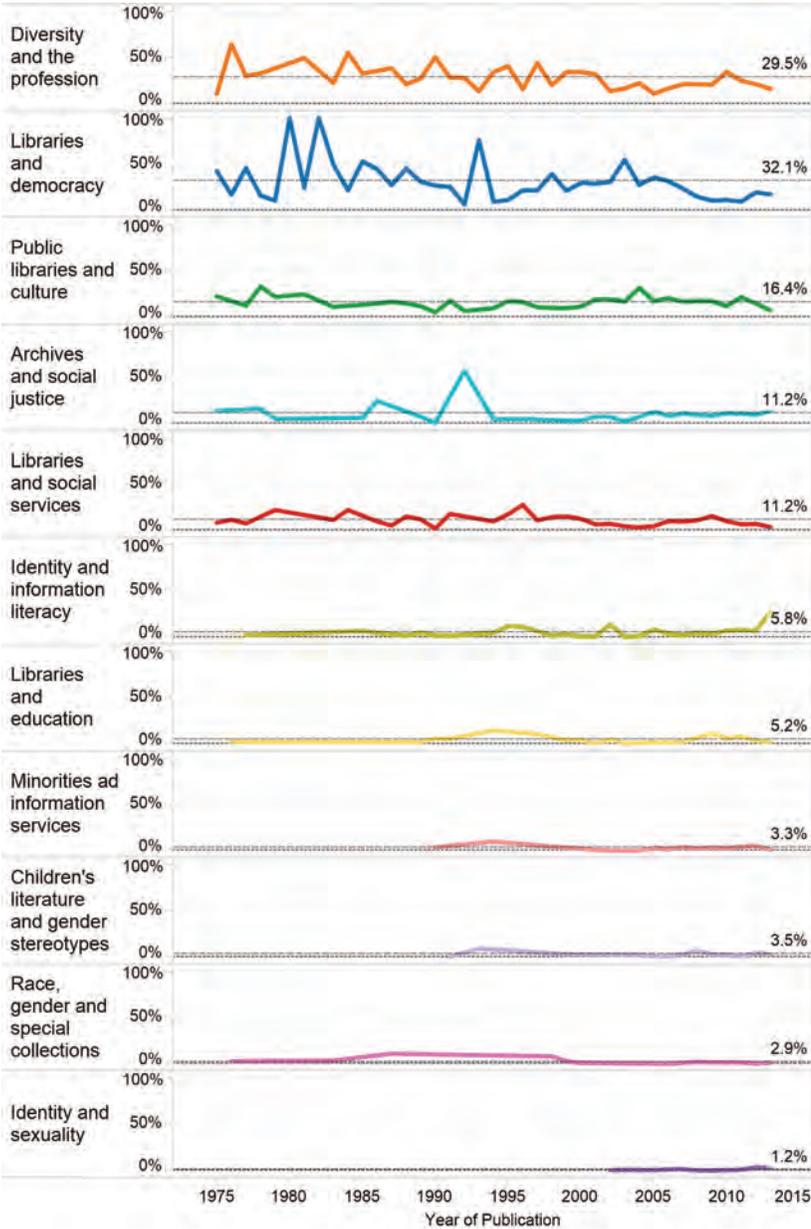


Figure 9: Topic frequency over time (relative)

democracy” spikes in 2003 following the passage of the Patriot Act (2001) and its impact on civil liberties. Whether or not internal factors (e.g., new research fronts that take up attention space, topic fatigue) are at play is unclear and would be better addressed by a broader study of LISTA.

Conclusions and future directions

Our survey of LIS literature shows that only a fraction (less than 1% of all English language journal articles in LISTA) is concerned with questions of identity, and of that fraction, the majority does not consider intersectional identities or attempt praxis in significant ways. This trend is found throughout the period 1975–2013, with momentary spikes in particular topics, and in some cases (e.g., librarians) the occurrence of identity-related terms has actually declined. Though these trends are problematic for the field in many ways, we note that the following five articles that were coded as intersectional and praxis were all published in the last decade of our search, hopefully signaling an increase in scholarship that is nuanced with respect to identities and transformative of the field: Hogan (2010), Madsen (2005), Morgan, Farrar, and Owens (2009), Plocharczyk (2006), and Schrader (2009).

It is worth pointing out that our study considers formal scholarly communications, and an inquiry into informal communications, such as blogs, newsletters, and Twitter discussions, may yield more nuanced perspectives on the role of identity in LIS. However, scholarly output is perceived as having legitimacy in ways that informal communication does not. Moreover, it has special influence on the education of LIS students and the knowledge and practices of the field. For many LIS students, scholarly articles serve as introductions to the various discourses surrounding the theories and practices of LIS. When articles do not contain critical perspectives and discussions of identity, students may believe that inquiry into these topics is not necessary or is even irrelevant to LIS practice. This belief marginalizes critical discussions as a special topic in LIS, and students may carry these beliefs into their own library practices and scholarly output after graduation, further marginalizing critical LIS discourse. This silence, in turn, has an impact on the knowledge and practices of the field, as theory and practices analyzed in scholarly articles drive both the research directions of the field as well as the policies implemented in libraries. As Pawley (2006) notes, if LIS spent as much energy dealing with race as it does with technological change, the field might look very different.

Our findings also raise the question of whether the LIS literature constitutes a true dialogue, in a Freirian sense. Is it a conversation that seeks to identify problems or tensions within a community, or is it merely a recapitulation of norms? Noting the dearth of articles that achieve praxis, we wonder about the possibility of a dialogical shift within the LIS literature, one that foregrounds exchange of ideas among equals. Through dialogue, the dominant discourse of LIS might change, as new voices contribute to the dialogue. By reading and engaging with the work that achieves praxis, a further study could contribute to a more acute diagnosis of the discourse of LIS: who has power within that discourse and therefore shapes the conversation. Such research may reveal structural inequities within the field.

What work remains to be done? Some might suggest that alternative classification schema would better reflect identities in the field and perhaps aid the field in having conversations around race, gender, class, and so on. While there is doubtless value in efforts to make subject terms less discriminatory and more inclusive, we also take seriously the critique that any naming system will reflect social and cultural biases; neutrality and the ideal of a perfect naming system are simply myths. To effect change, we must look to structures of power and the ways in which they produce injustice. Scholarship is one of these structures, and the injustice produced might be addressed through both research and teaching in LIS.

Scholars could give more explicit attention to identities in their work, particularly intersectional concepts that reflect the lived experiences of subjects. They could also engage in more work that documents and evaluates specific actions with respect to identities in the field, such as studying the long-term efficacy of “diversity” hiring initiatives in academic libraries or scholarship programs such as the Society of American Archivists Mosaic Scholarship program or the American Library Association’s Spectrum Scholarship program. Short of this step, theoretical work on identities still plays an important role in expanding the conversation and our concepts of what kinds of actions are helpful, or even possible. A study of the reception of this research (e.g., citations, downloads) might provide insights into whether and how these practices and perspectives are adopted in the field.

In conjunction with more scholarship in these areas, LIS educators could also do more to incorporate readings and assignments that engage with identities into their syllabi, and highlight identity issues in their pedagogy as well. Courses on the subject of identity in LIS, such as the course that led to this article, can also provide important spaces for such discussions. Making identity part of the conversation in graduate schools would lead to an increased number of new professionals aware of the importance of these issues, which would influence the professional discourse. Professionals already in the field can also request through job descriptions and their own publications that new graduates come prepared for dialogue about identity issues, which would incentivize its inclusion in LIS curricula. Professional organizations could also champion and provide professional development around identity issues for working LIS professionals. These efforts would help to expand students’ conceptions of what issues are worth pursuing, or even possible to pursue in the field. As Olson says of the power of practitioners, so too do we say of those who research and each in the field: “Instead of possessing this power exclusively, we who are on the inside of the information structures must create holes in our structures through which the power can leak out” (2001, p. 659). We who teach and publish in the field must create opportunities for identities to be discussed, toward changing the discourse of LIS to a more inclusive dialogue.

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Endnotes

1. See <http://bit.ly/identities-and-lis-data>.
2. See <https://public.tableau.com/en-us/s/>.
3. See <https://gephi.org>.
4. The relative frequency of each term is available at https://public.tableau.com/views/IdentitiesinLIS/Termfrequencyovertime?relative?:embed=y&:display_count=yes&:showTabs=y, with minimal collocation performed on the terms (as described in the Methodology).