

Wisdom in Education

Volume 5 | Issue 2

Article 3

11-1-2015

Conceptualizing a Future for Library Classification

Risa M. Lumley

California State University, San Bernardino Palm Desert, rlumley@csusb.edu

Follow this and additional works at: <http://scholarworks.lib.csusb.edu/wie>



Part of the [Higher Education Commons](#), and the [Social and Philosophical Foundations of Education Commons](#)

Recommended Citation

Lumley, Risa M. (2015) "Conceptualizing a Future for Library Classification," *Wisdom in Education*: Vol. 5: Iss. 2, Article 3.
Available at: <http://scholarworks.lib.csusb.edu/wie/vol5/iss2/3>

This Article is brought to you for free and open access by CSUSB ScholarWorks. It has been accepted for inclusion in *Wisdom in Education* by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

Conceptualizing a Future for Library Classification

Abstract

This paper traces the roots of the positivist epistemology of librarianship; its ideals of neutrality and access as they intersect in the classification and assignment of library subject headings; and the notion of the author as it relates to the creation of library authority files. By legitimizing their own professional neutrality, librarians have wielded tremendous power over what libraries collect as well as how those works are represented, but have done so with little self-reflection. The act of classifying works and assigning subject headings is not a neutral process. It is time for librarians to use new tools such as the RDA standards to hold academic libraries accountable for assessing their collections to ensure they represent the diversity of voices that comprise the full record and collective history of our culture.

Keywords

Academic Libraries; Collection Development; Classification of Books; Knowledge Organization

Author Statement

Risa M. Lumley is the librarian at the Palm Desert Campus of California State University, San Bernardino and is pursuing a doctorate in Educational Leadership at CSUSB.

For years, the research library has been revered as a depository of objective knowledge that scientists and scholars had captured in the structure of their language and preserved as manuscripts, books, articles, and other texts. These artifacts of knowledge were then coded and cataloged and put on shelves in an organized manner alongside other manuscripts by other scholars and scientists (Radford, 1992). The library was built on the belief in the existence of a scientifically-derived and classifiable body of knowledge, and as keepers of the library, librarians have historically derived much of their professional status from their adherence to, and maintenance of, the positivist epistemology (Bales & Engle, 2012; Harris, 1986). By legitimizing their own professional neutrality, librarians have wielded tremendous power over what libraries collect and how those works are represented, but have done so with little self-reflection.

This paper will trace the roots of the positivist epistemology of librarianship, and the ideals of neutrality and access as they intersect in the classification and assignment of subject headings to the collection, and in the positivist notion of the author as it relates to the creation of library authority files. The act of classifying works and assigning subject headings cannot be a neutral process. And in this postmodern era, it is time to resurrect the author as more than a single access point in the catalog.

The library profession in the United States has traditionally conceptualized the library's role in terms of two democratic ideals: access and neutrality. "Ideally, the library has no vested interest in the content of its materials" (Radford, 1992, p. 412); it simply facilitates access to texts, which enable scholars and students to build upon and add to the knowledge discovered by others in the manner of the scientific method. Yet librarians are not only responsible for selecting the items which make up the library's collection, but also for creating access points to the collection via classification

schemes. These access points have traditionally included the title of the work, the author, and the subject(s) of the work.

According to the American Library Association, "Librarians have a professional obligation to ensure that all library users have free and equal access to the entire range of library services, materials, and programs," (American Library Association, 2008). However, equal access to library materials has been impeded by bias in subject cataloging, both in major classification schemes such as the Library of Congress Classification (LCC) and in controlled subject vocabularies such as the Library of Congress Subject Headings (LCSH), which "reflect the Eurocentric, male, Christian orientations of their originators as well as the time period in which they were constructed" (Tomren, 2003, p. 3).

From the very beginning of their profession, librarians have relied upon culturally reified experts and "tastemakers" to assist in their decisions about what to collect and preserve and which books and journals to buy. These decisions are inevitably biased, based as they are on the judgments and interests of individual university faculty and librarians and upon the publishing industry, itself an elite corps, where males outnumber females among reviewers, reviewed, and published authors, and where white authors write 90% of the books reviewed in major publications (Morales, Knowles & Bourg, 2014). These conditions privilege some books and some users of them, while marginalizing others (Raber, 2003). That academic library collections are hegemonic of the dominant discourse will be assumed in this paper. Pointing the way forward toward holding academic libraries and librarians accountable for redressing this fact via the modification of existing classification schemes is the purpose of this exploration.

The standards and practices of how knowledge is described and organized dictate the ways in which resources in library collections are discovered and used (Morales, Knowles, & Bourg, 2014), and many theorists

recognize that librarians have the potential to make progressive reforms to society (Raber, 2003), if they would only break free of the “contradictory theoretical consciousness” and hegemonic norms that hold them back from doing so (Bales & Engle, 2012, p. 22). Louis Althusser (2009), in particular, felt that librarians had a “social and moral responsibility” to challenge the hegemonic practices of the academic library, and to contribute to the creation of authentic knowledge and history, not simply the indoctrination of the canon (Bales & Engle, 2012). Librarians, he posited, offer a potentially progressive and transforming service, but they do so in a context that preserves their self-interest and liberal identity within the capitalist hegemony, thus allowing them to dismiss the need for critical self-examination” (Raber, 2003, p. 50). Academic librarians, especially, face the paradox that even as their collections support academic freedom, they do so from hegemonic perspectives (Bales & Engle, 2012).

Classification, together with indexing, document description, and metadata assignment, form the basis of knowledge organization (KO), and has been carried out in libraries for over a hundred years. Knowledge organization in turn supports information retrieval (IR). However, the future for these both of these library functions is being challenged by digital technologies. A shift is taking place from classification as ontology, in which everything is defined as it is, to a contemporary notion of classification as epistemology, in which everything is interpreted as it could be (Mai, 2011). The challenge for libraries now is how they can contribute to the findability (IR) of documents, given the availability of competing services such as Google, which allow users the flexibility of natural language searching.

When discussing classification schemes currently in use in academic libraries, one is likely to be discussing the Library of Congress Classification (LCC), or one of its variants.

Not only is LCC ubiquitous in the United States where it originated, but its reach is now global. As libraries worldwide have begun interacting with each other and sharing resources online, the need for standardized cataloging practices has become necessary, and the LCC has served as the framework. Librarians have responded to the need for standardized cataloging practices by establishing cooperative consortia in which cataloging departments from all over the world contribute their records to, and take their records from, shared databases. An aspect of these standardized cataloging practices is the maintenance of authority control. Authority control derives from the idea that the names of people, places, things, and concepts are authorized, meaning they are established in one particular form. In the United States, the primary organization for maintaining cataloging standards with respect to authority control is the Library of Congress, an institution of the U.S. government funded by U.S. tax dollars. The Library of Congress is not only the research library that officially serves the United States Congress, but is also regarded as the national library of the United States (Cole, 1994). It is the oldest federal cultural institution in the United States, and now its authority over the representation of knowledge is global.

The purpose of global classification becomes to represent things as they really are, free of cultural bias. To accomplish this, however, it is necessary to regard documents as containers of information which can be analyzed and described neutrally and scientifically by following a rational and systematic approach (Mai, 2011). Without even considering the global implications, the problems with this arrangement are evident. The United States itself is a diverse nation within which diverse cultures exist, and when one cultural institution sets itself up as the authority over the classification and representation of the world’s knowledge, it will reinforce the legitimacy of certain ways of being and thinking, and subordinate or

exclude others. Groups of peoples and ideas that do not fall within the "norm" represented by classification and subject standards are marginalized, and this marginalization negatively impacts the ability of users to successfully retrieve information on these topics (Tomren, 2003).

The Subject Cataloging Manual of the Library of Congress exhorts librarians to maintain their professional neutrality and to "avoid assigning headings that label topics or express personal value judgments regarding topics or materials" (Olson, 2000, p. 65). This, of course, is not possible, and library and information science researchers have grappled with the inevitability of bias in assigning subject headings, at least since the term "aboutness" was first described by Robert Fairthorne (1969). Fairthorne distinguished between two types of aboutness: "extensional aboutness" which is inherent to the document, and is fixed and unchanging; and "intensional aboutness" which is inferred from the document and is meaning-based and subject to interpretation. Intensional aboutness implies a relationship between the inanimate resource and the user engaged with its content. As a result, meaning is derived. Since library users approach resources from various perspectives and with differing purposes, the interpretations and meanings derived by different individuals from the same resource may vary greatly (Rondeau, 2014).

If a text does not have meaning, but instead, the reader creates meaning as the text is read, then the reader's response to the text is the meaning of the text. Meaning, in this sense, is generated when documents are used, and meaning is thus context and use dependent (Mai, 2011). According to this logic, a document does not have a subject, but is given a subject by the reader (Hjørland, 1992). Library classification has been concerned, therefore, not with getting the subject out of the document, as much as it has been about creating the subject and expressing this interpretation in the indexing language. In this way, the library catalog can

be seen as an example of what Michel Foucault described as a site of struggle among competing systems of discourse.

Foucault believed that it is through knowledge that the culture defines itself and improves the lives of its subjects. To Foucault, to be in the presence of knowledge is enough for us to absorb it, and in libraries much depends upon the serendipity of browsing in subject areas whose very arrangement of material is a source of new knowledge (Pierre, 2005). The nature of Foucault's work was to question aspects of contemporary thought and behavior that are commonly perceived as self-evident, natural and unproblematic (Radford, 1992), which in the library would be the presumably neutral classification, arrangement, and representation of texts. Many other scholars from within and without the library profession have also accused librarians of hiding behind their presumed impartiality and strict adherence to technical procedures, at the expense of considerations of theory or praxis (Doherty, 2010; Kapitzke, 2003). Some have suggested that the technical rationalist outlook is symptomatic of the profession's inferiority complex (Doherty, 1998), or that this democratic/positivist perspective that has allowed the profession to legitimize itself has required the library to deny the ways in which it has structured itself in relation to the social and cultural structure of society (Harris, 1986).

Pierre Bourdieu wrote that, "The existence of sanctified works and of a whole system of rules which define the sacramental approach assumes the existence of an institution whose function is not only to transmit and make available but also to confer legitimacy" (Bourdieu, 1973). Henry Giroux, speaking of a "notion of self-criticism that is essential to critical theory," called into question the objectivity that positivism encourages. Rather than proclaiming a positivist notion of neutrality, critical theory, or praxis, Giroux felt one must openly take sides in the interest of struggling for a better

world (Giroux, cited in Doherty, 1998). In response to Bourdieu, Giroux argued that by “appearing to be an impartial and neutral ‘transmitter’ of the benefits of a valued culture, schools (and libraries) promote inequality in the name of fairness and objectivity” (Giroux, 1983, p. 267).

In the spirit of Giroux, the issue of addressing the bias inherent in LC subject cataloging has been the life’s work of the “radical librarian” Sanford Berman, who worked tirelessly to have the Library of Congress make revisions to offensive subject headings, such as YELLOW PERIL, MAMMIES, JEWISH QUESTION, and many others (Tomren, 2003, p. 5). Berman first wrote about the LC subject heading YELLOW PERIL in 1971, but it was not until 1989 that the heading’s use was finally cancelled by the Library of Congress (Berman, 2006). In addition to these acute manifestations of subject heading bias, Berman and others have illuminated problems of ghettoization, where subject headings gather and isolate a topic, rather than integrating it. One classic example is the treatment of American Indian materials, which have been separated from mainstream American culture by their Library of Congress subject heading and relegated to the history section, as if they are only part of the past and have no contemporary culture (Tomren, 2003, p. 3). Still other subject headings have caused topics to be marginalized as outside of the accepted norm, such as the obsolete subject heading for “WOMEN AS...” such as, “WOMEN AS PHYSICIANS” (Olson & Schlegl, 1999, p. 239). Even after subject headings are changed or eliminated from the LCSH, they are not necessarily eliminated from libraries, unless and until those individual libraries commit resources toward the retrospective cataloging of older materials.

What is scientific at any particular historical juncture is determined by which system is dominant, and not which system is true (Radford, 1992). Viewing subject headings as the descriptive or interpretive

language that scientists use to communicate within their community of practice, K. J. Gergen states, “Practically speaking, we should not dispense with the tradition. At the same time, there are inimical consequences for both the human sciences and the societies they serve. Shared agreements are essentially captivating. And in significant degree, the captivating gaze simultaneously constrains the imagination and numbs the sensitivity to consequences” (Gergen, 2014, p. 7). These scientific knowledge claims have traditionally been reinforced by libraries, but a shift is now taking place. Since searchers now often find what they need using tools other than the library online public access catalog (OPAC), many libraries are at the point of ceasing to classify their books altogether (Hjørland, 2012, p. 299). Individual library users’ experiences of subject search failure, confusion, and information overload have led to reduced reliance on the subject index and to increased use of alternate access points, such as title or natural language keyword search (Hjørland, 2012).

In addition to their role in assisting users with information retrieval, and libraries with knowledge organization, subject headings have often been used by libraries for assessment purposes. Traditionally academic libraries have measured the breadth of their collections by assessing the number of volumes held in each subject area, for instance, whether as measured against some metric, there are adequate resources available in American History. The materials which comprise the library collection, however, do not exist independently of the people they were created by and are about (Moulaison, Dykas, & Budd, 2013). In response to Roland Barthes’ “Death of the Author,” Michel Foucault (1984) famously asked, “What is an author?” in order to analyze the cultural perception of an author. To Foucault, the author was “an iconic cultural phenomenon used to bound, limit, and even impede the free perception of a work” (Foucault, cited in Smiraglia, Lee, & Olson, 2011, p. 137), a

viewpoint in alignment with traditional library practice, which treats the author of a work as merely an access point in the catalog, particularly in works of non-fiction.

The Library of Congress Cataloging (LCC) system has long reflected the importance of author's voice in works of literature by including subheadings such as: Hispanic Americans—fiction; American poetry -- Jewish authors; American lesbians -- literary collections, and so on, while scholarly works of nonfiction, assumed to be objective and impartial, have not been classified in this manner. There is currently no means for measuring whose voices are represented by those works of American History which comprise the library's subject area, and whether or not all of those works were written by authors with similar or diverse backgrounds and perspectives.

To ensure that academic library collections truly represent their stated commitments to diversity and social justice, academic librarians must actively and aggressively evaluate their existing collections and redress gaps by collecting resources by and about underrepresented groups, yet the means for evaluating academic library collections in this way are limited. Traditional methods of evaluating academic library collections for diversity or multiculturalism have relied upon either measuring the collection against subject bibliographies created by scholars in the field of study, and/or by analysis of the collection by subject heading. Both of these methods are subject to inherent bias, and further, each method measures only the subject matter of the material, while ignoring the gender, ethnicity, or race of the author of the material.

Library classification systems, such as LCC, which historically relied upon the Anglo American Cataloging Rules (AACR2) for description, allowed people who were authors or creators of works to be represented in only two ways: through personal name identifiers in library records which contained character strings representing the last name of the

person, the first name, and other information to differentiate that character string from others (Moulaison, Dykes & Budd, 2013) and/or through the limited information contained in the personal name authority record (e.g.: name; pseudonyms; dates; language).

Just as assigning subject headings is fraught with inherent bias, the act of choosing a single authorized heading to represent all the forms of a person's name is often a difficult and complex task. Many authors are known to have used a variety of nicknames, pen names, or other alternative names in the course of their lifetime. The choice of authorized heading is especially difficult when some of those various names have controversial political or social connotations, and when the choice of authorizing one heading over another may seem to endorse a particular political or social ideology.

The history of American librarianship reveals a profession that has consistently overlooked its own contribution to the imbalances of power and knowledge that in turn contribute to the systemic exclusion of certain groups of people from full participation in capitalist social formations (Raber, 2003). But in 2013, the Library of Congress adopted a new content standard for Resource Description and Access (RDA), developed by the International Federation of Library Associations, which supplants (AACR2), and allows for additional attributes to be added to personal name (author) authority records. These additional attributes include gender; place of birth; place of death; country; place of residence; affiliation; address; language; field of activity; profession; and biography/history. These additional attributes have been touted in the library literature as assisting users with finding, identifying and contextualizing information, which they no doubt will. The ability to search for history texts written by Hispanic women or by Native American gay men, would provide a whole new level of contextuality for today's diverse student body. More

importantly though, the ability to measure the diversity of voice in academic library collections so that these collections can be made to be truly representative of the collective history and full record of our culture from diverse perspectives would be invaluable for the library, and transformational for the profession.

Although the RDA standard is still relatively new, a longitudinal study undertaken to measure which additional information was being added to personal name authority records in one small academic library consortium showed that gender and language were most often the additional information added (Moulaison, Dykes & Budd, 2013). One year after adopting the RDA standard, almost eight percent of records evaluated had at least one additional attribute. Almost five percent had two or more attributes added. The gender data showed that males represented 80% ($n = 34,515$) of the authors in the collections, and that English was the language used when writing for publication in 73% ($n = 22,666$) of the works. Because the language field is repeatable, more than one language may be supplied in a single authority record. Although this study examined a relatively small academic library group, it is no surprise that academic library collections in the United States are heavily skewed in favor of males and writers who use English, and unrepresentative of international demographics in scholarship over time, and definitely not representative of our increasingly diverse student body.

The RDA standard asks library catalogers to enter additional information into library authority records to describe people using a formal set of attributes, once again introducing boundaries which include some people and marginalize or exclude others. Asking librarians to make these judgments immediately raises complex issues of identity and representation that threaten to perpetuate and exacerbate inequities of the past. Even briefly setting aside the problem of librarians classifying authors' personal characteristics,

the attributes themselves present numerous problems. For instance, among the personal name attributes allowed by RDA is an attribute for gender which has only two acceptable categories (male or female), thus reifying gender as a binary system. Not only is this presumed dichotomy hostile to transgender individuals, but the implication of gender as immutable and fixed in time stands in opposition to frameworks of queer theory (Billey, Drabinski, & Roberto, 2014). Despite problems such as this, and many other as yet unexplored and complex issues of representation, the RDA standard and the personal name authority attributes may still hold promise for libraries in assessing the diversity of voice in their collections. However, to visualize the transformative potential of RDA, it is necessary to understand the reasons for its development.

Resource Description and Access (RDA) was developed to replace library cataloging standards created prior to the digital age. Unlike previous standards, RDA is designed for describing resources in both digital environments and traditional library collections. The significance of RDA is that it can organize and shape bibliographical data effectively and prepare it for linked data applications in the Semantic Web. While the current Web is a Web of linked documents, the Semantic Web is a Web of linked data, based on structured relationships. Current Web-based online library catalogs are simply electronic versions of card catalogs, where the elements are indexed and can be searched online, but which still reside within the silo of the library. In contrast, the RDA standard will allow the bibliographical database of the library catalog to link to data contained within databases created by other information communities (Yang & Lee, 2013).

Not only will the library be able to share its resources through linked data, but it will also be able to harvest data from other databases, including potentially, those which allow authors and creators authority over the representation and expression of their own

identities. It is in this space that transformative action is possible. If libraries and authors agree that assessing library collections by the diversity of authors represented is a valid step toward redressing some of the institutional inequities of the past, the technological framework now exists to begin exploring solutions. Repositories can be designed which will allow authors and others to submit data to express their individual identities, from which libraries can then harvest data to assess their collections. In this way, RDA is paving a way toward a richer, more contextual future for library systems in regard to the way that persons are included in searches along with resources.

Librarians have for too long been unreflective practitioners, afraid to confront the consequences of their positivist epistemology and their technical rationalist attitudes. In order to legitimize themselves and their profession, they have not asked themselves who has benefited from their actions; who has been harmed; and who has been left out of the conversation entirely (Gergen, 2014). It is time for librarians, not only to recognize the cultural ramifications of the ways that knowledge has been classified, but to act upon this knowledge. By assessing library collections by subject area, without also considering the diversity of the authors responsible for those works, libraries have perpetuated a social injustice. If reflection moves from issues of philosophic grounding to social utility (Gergen, 2014), it is time to explore new possibilities afforded by the RDA standard and linked data to confront the hegemony of the canon and to finally ensure that academic library collections represent the collective history and full record of our culture.

References

Althusser, L. (2009). Ideology and ideological state apparatuses (Notes towards an investigation). In *The anthropology of the state:*

A reader (pp. 86– 173). New York, NY: John Wiley & Sons.

- American Library Association. (2008). Library Bill of Rights: Interpretations. In *Intellectual Freedom Manual* (8th ed.). Chicago, IL: ALA Editions. Retrieved from <http://www.ifmanual.org/part2section2>
- Bales, S. E., & Engle, L. S. (2012). The counterhegemonic academic librarian: a call to action. *Progressive Librarian*, 40, 16–40.
- Berman, S. (2006). Finding material on “those people” (and their concerns) in library catalogs. *Multicultural Review*, (June), 26–52.
- Billey, A., Drabinski, E., & Roberto, K. R. (2014). What’s gender got to do with it? A critique of RDA 9.7. *Cataloging & Classification Quarterly*, 52(4), 412–421. <http://doi.org/10.1080/01639374.2014.882465>
- Bourdieu, P. (1973). Cultural reproduction and social reproduction. In J. K. Karabel & A. H. Halsey (Eds.), *Power and Ideology in Education* (pp. 487-511). New York, NY: Oxford University Press.
- Cole, J. Y. (1994). *Capital libraries and librarians* (pp. 377–381). Washington, DC: Library of Congress.
- Doherty, J. J. (1998). The academic librarian and the hegemony of the canon. *Journal of Academic Librarianship*, 24(5), 403–06.
- Doherty, J. J. (2010). Towards self-reflection in librarianship: What is praxis? In *Questioning library neutrality: Essays from Progressive Librarian* (pp. 11–17). Sacramento, CA: Library Juice Press, LLC.
- Fairthorne, R. (1969). Content analysis, specification, and control. *Annual Review of Information Science and Technology*, 4, 73–109.
- Foucault, M., & Rabinow, P. (1984). *The Foucault reader*. New York, NY: Pantheon Books.
- Gergen, K. J. (2014). From mirroring to world-making: Research as future forming. *Journal for the Theory of Social Behaviour*, 45(3), 287-310. <http://doi.org/10.1111/jtsb.12075>

- Giroux, H. (1983). Theories of reproduction and resistance in the new sociology of education: A critical analysis. *Harvard Educational Review*, 53(3), 257–293.
<http://doi.org/10.17763/haer.53.3.a67x4u33g7682734>
- Harris, M. H. (1986). State class and cultural reproduction: toward a theory of library service in the United States. *Advances in Librarianship*, 14, 211–252.
- Hjørland, B. (1992). The concept of "subject" in information science. *Journal of Documentation*, 48(2), 172–200.
<http://doi.org/10.1108/eb026895>
- Hjørland, B. (2012). Is classification necessary after Google? *Journal of Documentation*, 68(3), 299–317.
<http://doi.org/10.1108/00220411211225557>
- Kapitzke, C. (2003). Information literacy: A positivist epistemology and a politics of outformation. *Educational Theory*, 53(1), 37–53. <http://doi.org/10.1111/j.1741-5446.2003.00037.x>
- Mai, J. (2011). The modernity of classification. *Journal of Documentation*, 67(4), 710–730.
<http://doi.org/10.1108/00220411111145061>
- Morales, M., Knowles, E. C., & Bourg, C. (2014). Diversity, Social Justice, and the Future of Libraries. *Portal: Libraries and the Academy*, 14(3), 439–451.
<http://doi.org/10.1353/pla.2014.0017>
- Moulaison, H. L., Dykas, F., & Budd, J. M. (2013). The author and the person: A Foucauldian reflection on the author in knowledge organization systems. *NASKO*, 4(1), 138–147.
<http://doi.org/10.7152/nasko.v4i1.14654>
- Olson, H. A. (2000). Difference, culture and change: The untapped potential of LCSH. *Cataloging & Classification Quarterly*, 29(1-2), 53–71.
http://doi.org/10.1300/J104v29n01_04
- Olson, H. A., & Schlegl, R. (1999). Bias in subject access standards: A content analysis of the critical literature. *Proceedings of the Annual Conference of CAIS / Actes Du Congrès Annuel de l'ACSI*, 236–247.
- Pierre, P. (2005). The academic library: a post-modern Lazarus? *The Australian Library Journal*, 54(2), 148–154.
<http://doi.org/10.1080/00049670.2005.10721742>
- Raber, D. (2003). Librarians as organic intellectuals: A Gramscian approach to blind spots and tunnel vision. *The Library Quarterly: Information, Community, Policy*, 73(1), 33–53.
- Radford, G. P. (1992). Positivism, Foucault, and the fantasia of the library: Conceptions of knowledge and the modern library experience. *The Library Quarterly: Information, Community, Policy*, 62(4), 408–424.
- Rondeau, S. (2014). The life and times of aboutness: A review of the library and information science literature. *Evidence Based Library and Information Practice*, 9(1), 14–35.
- Smiraglia, R. P., Lee, H.-L., & Olson, H. A. (2011). Epistemic presumptions of authorship. In *Proceedings of the 2011 iConference* (pp. 137–143). New York, NY, USA: ACM.
<http://doi.org/10.1145/1940761.1940780>
- Tomren, H. (2003). *Classification, bias, and American Indian materials* (Unpublished manuscript) Retrieved from <http://ailasacc.pbworks.com/f/BiasClassification2004.pdf>
- Yang, S. Q., & Lee, Y. Y. (2013). Organizing bibliographical data with RDA: How far have we stridden toward the semantic web? In *New Directions in Information Organization* 7, 3–27). Emerald Group.

