

June 2017

SLIS Student Research Journal, Vol.7, Iss.1

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SLIS Student Research Journal, Vol.7, Iss.1

Keywords

SLIS Student Research Journal, SRJ, San Jose State University, School of Information, iSchool, School of Library & Information Science

SAN JOSÉ STATE UNIVERSITY, SCHOOL OF INFORMATION

SLIS Student Research Journal

Volume 7, Issue 1 (2017)

ISSN 2160-7753

VOLUME 7, ISSUE 1

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June 2017

Structure and Significance

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This issue of the *SLIS Student Research Journal* features two articles addressing schema, structure, and theory in LIS. In an invited contribution, Dr. Mary Bolin proposes applying linguistic theories and frameworks to LIS research. Bolin states that librarians “already recognize the significance of the language that we use” (p. 1), and suggests that interdisciplinary methods may strengthen investigations in areas of LIS research concerned with semantic structures and communicative events. Bolin suggests numerous convergences between the disciplines: how typology may be used for parsing qualitative data, or semantic frames for examining relationships and meaning in metadata schemas; discourse analysis and genre theory also offer intriguing possibilities for examining user communities in library contexts.

In our peer-reviewed section, MLIS candidate Chloe Noland evaluates the interoperability of Library of Congress Classification and Elazar at two libraries of the American Jewish University. Noland compares bibliographic metadata from the two collections, considering semantic accuracy and user impacts. Noland determines that although in the academic context it is unclear which classification system may be preferable, “for purposes of Jewish themes and subjects...Elazar overwhelmingly provides the best specificity” (p. 12). This article will be of interest to special collections librarians and cataloguing and metadata specialists.

This thirteenth issue of the *SRJ* closes my tenure as Editor-in-Chief with the journal. It has been a year of significant development in organizational planning, yielding a refreshed strategic plan for the *SRJ*, revisions to our recruitment, orientation, and training for editors, and the launch of a new peer-reviewed *reviews* section for the journal. These accomplishments build on the work of 50 student editors who have contributed to the *SLIS Student Research Journal* since its establishment in 2010. Student editors have designed the journal’s aims and scope, planned operations, reviewed and edited manuscripts, promoted the *SRJ* to a diverse readership, and built the journal’s reputation. The *SRJ* is distinct as the only student governed, double-blind peer reviewed MLIS journal in North America publishing graduate student scholarship. Strong operations and governance at the *SRJ* have produced more than 50 refereed articles over seven years. However, the *SRJ* has also provided a unique forum for MLIS candidates to experience scholarly communication as editors, reviewers, teammates, and managers.

Acknowledgements

The opportunity to work for the *SRJ* as Editor-in-Chief has been the highlight of my MLIS; it has brought depth and theory into my academic experience. The accomplishments of my tenure as EIC were supported by a team of dedicated editors, and the exceptional educational support and guidance of Dr. Anthony Bernier in his role as *SRJ* Faculty Advisor. I am also grateful to Dr. Michelle Riedlinger and Dr. Linda Pardy from the University of the Fraser Valley, who encouraged me to pursue my academic interests and become the first in my family to complete a master’s degree.

June 2017

Linguistics and LIS: A Research Agenda

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Bolin, M. K. (2017). Linguistics and LIS: A research agenda. *SLIS Student Research Journal*, 7(1). Retrieved from <http://scholarworks.sjsu.edu/slissrj/vol7/iss1/2>

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Linguistics is an interdisciplinary field that draws from study of languages, including English, and fields such as psychology, sociology, cognitive science, computer science, and anthropology. Library and Information Science (LIS) is also interdisciplinary, and can be studied using techniques from the humanities, social science, and science. The many theories and methods of linguistic research can be extremely useful and have significant explanatory power for LIS. This article presents a research agenda for LIS that proposes the use of linguistic analysis methods.

The elements of language are phonology, morphology, syntax, and semantics. The study of linguistics includes those areas, but also includes discourse analysis, linguistics universals and typology, sociolinguistics, psycholinguistics, language and cognition, language acquisition (including child language and second language acquisition), and many other topics and approaches. Language is a semiotic system, a system of signs. Halliday (1978) calls language a *social semiotic*. Written and spoken language are systems of signs that are used and understood by speakers. Languages and variants of languages are used in speech communities (e.g., speakers of Parisian French) and discourse communities (e.g., librarians) for purposes that include those of business and commerce, education, government, medicine, law, and every kind of human social and cultural event and occasion. We talk to each other, we read and write, and we carry out daily endeavors and long-term goals using language. As librarians, we already recognize the significance of the language that we use, in controlled vocabularies, in OPAC displays, in library signage and marketing, and in planning and problem-solving. As researchers, we can use the techniques of linguistic analysis to further unpack those plans and problems, and discover new theories and frameworks for helping library patrons discover and use information.

There is substantial and groundbreaking work being done in areas of library and information science such as search engine optimization, semantic web, natural language processing, and linked data. Those subjects are certainly linguistically oriented and often draw on the techniques of linguistic analysis, but this article does not focus on that area of the LIS and related literature. It provides information on frameworks, theories, and methods used in linguistics as they might be applied to many areas of LIS.

Typology

Typologies are used by many fields, but they are widely used in linguistic research, often as part of the search for linguistic universals: features or elements that are common to all, most, or many languages, and the contrast between the most and least common types in an area. Typology is used in research on semantic areas like kinship, color terms, and other culturally-salient phenomena, as well as syntax (the most and least common order of grammatical constituents in different languages). For example, the default order of constituents in English is subject-verb-object (SVO). SVO is one of the most common word order types, while OVS is the least common (“Word Order,” n.d.). Comrie (1989), Croft (1990), Greenberg (2005), and other scholars have compared the characteristics of different languages to identify universal phenomena. Prototype semantics can also be used to create typologies (Lakoff, 1986; Rosch, 1973, 1977). In prototype theory, there are

semantic categories with central and peripheral members. Members of a speech or discourse community may not agree on the boundaries of a category, but there is agreement about the center of the category or about its best representative, for example, a sparrow is a more typical bird than a penguin. Typology can be used in LIS research for studying things like librarian faculty status (Bolin 2007, 2008a, 2008b), library organizational patterns (Bolin, forthcoming 2017), and many other areas of library programs and services. It requires gathering data to answer a research question and then answering the question by dividing the data into types. The types are created using clusters of characteristics; for example, Bolin (2007) gathered data about librarian status at US land grant universities, and used characteristics such as eligibility for tenure, librarian rank system, and other things to create a typology of librarian status that including three faculty types and one staff type. There could be many other applications of linguistic typology to LIS. Those include:

- Models of liaison librarianship in academic libraries considering assignment of subject areas, services provided, types of instruction, and so on.
- A framework for collection evaluation based on format, age, use and other characteristics.
- Performance evaluation for librarians and staff, including frequency, depth, interactivity, rating scale, and areas of assessment.
- Access policies, including patron categories, loan periods, fines, licensing, and use of electronic resources.
- Cataloging and metadata workflows, including division of labor, MARC and non-MARC metadata, use of repositories such as CONTENTdm and Rosetta, et cetera.

The creation of a typology could be used to explore any of these areas (and many others), by posing a question and gathering data to categorize attributes. For example, information on performance evaluation at a group of 50 academic libraries might yield a typology such as:

- Department chair writes a letter of evaluation for librarians once a year.
- Librarian does self-evaluation and meets with department chair to come to agreement on strong and weak points.
- Department chair uses evaluation form with rating scale.
- Some mixture of these processes is used.

The creation of the typology is a qualitative activity that assesses which characteristics are salient (e.g., the use of a rating scale in performance evaluation), as well as lumping or splitting characteristics to create types. It is a lens for analysis that can help make sense of large amounts of data. Creating a typology often uses a kind of componential analysis, first used in research on phonology to describe how sounds are differentiated (e.g., *t* and *d* are distinguished by the voicing of the alveolar stop in the case of *d*. *Voice* is the component that is used to distinguish the two sounds. Trubetskoy, 1969). Componential analysis was adopted in other areas of linguistics and has been used in semantic analysis as well, for example, the difference between the cooking terms *fry* and *bake* includes the component *oven*. Bake is described as +oven, while fry is -oven (Coseriu, 1973; Katz & Fodor, 1963).

Semantic Fields and Frames

Semantic fields are also called lexical fields, and they are groups of related words that might be synonyms from a domain (e.g., cooking), or words related in some other way. They are often used in contrastive linguistics, which compares one or more languages to see how concepts map in different languages. Bolin (1999) compared the semantic field *grace* in texts from the Bible in their original languages as well as in Latin, English, and German. The words in the field (English words include grace, mercy, kindness, compassion, and pity) did not have a one-to-one correspondence between languages. Semantic fields and frames deal with different types of meaning, which include referential, social, and encyclopedic meaning. Bolin describes these categories of meaning, saying that,

‘Referential’ meaning is the denotational, dictionary definition of the meaning of a word ... ‘[s]ocial’ or emotive meaning includes ... connotations that include social or class markers, differences in register such as slang, a word’s pejorative connotation ... ‘[e]ncyclopedic’ meaning ... is all the baggage that any word carries, referential and social meaning, plus the combined weight of all the accumulated meanings, history, and cultural associations that the word carries. (1999, p. 8)

Semantic frames start with a domain or concept rather than with a group of words. They use the encyclopedic meaning of words and concepts to understand the social, cultural, historical, and any other aspects of meaning of words in a domain. The University of California, Berkeley maintains a site called FrameNet (<https://framenet.icsi.berkeley.edu/fndrupal/>) that is a collection of semantic frames. An excerpt from the frame *accuracy* is shown in Figure 1.

Accuracy

Definition:

An **Agent** is involved in an activity whose degree of success is dependent on a parameter of the action matching a particular set of values of a continuous variable or variables (e.g. quantity, location, time). The **Agent**, or metonymically the **Instrument** or **Means** action, is described in terms of the actual or expected **Deviation** between the location, time, or quantity in the activity and the location, time, or quantity which is necessary for the intended event.

The **Longview Rangefinder** is **ACCURATE** to within one foot per hundred yards .

His estimate was **OFF** by an order of magnitude .

The **fork truck operator** must be **fairly ACCURATE** in his aim.

The **PRECISION** of the daily measurements is dependent on a number of factors.

FEs:

Core:

Agent [Agt] The individual who tries to interact with the **Target**.
Semantic Type: Sentient **The mailman** is very **EXACT** about addresses -- he has to be .

Lightshot Screenshot

[Lexical Unit Index](#)

Figure 1. The semantic frame *accuracy*.

This excerpt shows the referential definition of *accuracy*, examples of its use, and the social and grammatical participants in the concept. There are many uses for semantic fields and semantic frames in LIS research. Research using semantic fields could include:

- An analysis of the syndetic structure of Library of Congress Subject Headings (LCSH), Library of Congress Classification (LCC), or Dewey

Decimal Classification (DDC) using a semantic field for a domain, for example, food, war, industry, shelter, music, and so on.

- Semantic field analysis using an aspect of library terminology, for example, *format* as perceived by librarians and library users.
- Semantic field analysis of library staff and librarian job descriptions, for example, what are the relationships among responsibilities assigned to one or more persons or positions?
- Attributes of information as one or more semantic fields as used in MARC, Dublin Core, and other metadata schemes.

Semantic frames are broader and not as based in lexical items. LIS research could use semantic frames in many ways, for example,

- As with semantic fields, semantic frames could be used to examine areas of LCSH, LCC, and DDC to see how relationships are expressed, and determine how much of the encyclopedic meaning of words and concepts can be expressed in a controlled vocabulary or thesaurus
- Interviews with users could be used to create semantic frames for library services. Examples include instruction, collections, spaces, electronic resources, and so on. Cognitive framing by users may be quite different than the frames used by librarians. Reconciling those frames could improve library services.
- The organizational structure of libraries could be analyzed and re-engineered using semantic frames. Exploring frames such as service, employment, education and training, as well as the frames for library services such as cataloging, reference, circulation, and so on, can provide insight and help generate new ideas.

Discourse Analysis

Discourse is often defined as “language in use” or “language above the level of the sentence,” (“Discourse,” n.d.), for example, longer texts or utterances that have significant social and cultural meaning. Discourse analysis is used by many fields, sometimes using techniques that may not be considered linguistic analysis. Approaches to discourse analysis that may be useful in LIS including analysis of spoken discourse, for example, a reference interview, which is a communicative event that has meaning in the discourse community of librarians. The need for positive interactions makes it worthwhile to analyze the discourse of events such as these in which librarians and users interact.

Discourse analysis methods include examining the intersection of syntax and semantics, that is, how grammatical forms encode meaning, the study of dialects and *registers* (language varieties used in social or professional situations, e.g., the language of medicine), critical discourse analysis (Fairclough 1989), which decodes and critiques power relationships, and many others. Conversation analysis, for example, studies the interactions of two or more speakers, including turn-taking, pragmatic meaning, and so on. The analysis of written texts can examine the cohesive devices link parts of a text together. Intertextuality — the relationship of one text with another — is a vital concept in the analysis of both written and spoken discourse (Kristeva, 1984). Both written and spoken discourse can follow scripts,

patterns, and schema that can be analyzed. (Halliday, 1978; Hoey, 2001; Hodge & Cress, 1988, 1993; Swales, 1990)

A useful place to start in considering discourse analysis techniques is Halliday's (1978) systemic-functional linguistics (SFL). SFL approaches language by considering its functions; that is, linguistic elements as they are used to create meaning. SFL's *system networks*, are systems which give choices to speakers. Those choices are determined by social identities and situations. The options and choices create a *register*, which Halliday calls "a recognizable language variety" (1978, p. 7). Examples include the language of medicine, education, or of a situation such as a reference interview in a library. SFL uses *register variables* to encode meaning. *Field* encodes ideational meaning (what a text or discourse is about). *Tenor* encodes interpersonal meaning (the participants and their roles and status). *Mode* encodes textual meaning (the devices that link the text together). Situational contexts of language are expressed by registers, and genre is the outermost layer, representing the cultural context and the genres used by a culture. Halliday (1978) describes language as a *social semiotic*, which is a system of signs that encode meaning. That social setting includes discourse communities (Nystrand 1982), which are professional or other social or cultural groups, who use language to mark themselves as members of their communities.

Halliday deals with genre, but the work of Swales's (1990, 2004) on genre analysis is significant. Genre analysis categorizes texts according to their use by certain communities. Other significant work on genre includes Hoey (2001) on the analysis of written texts, Fairclough (1995) who writes on CDA, van Dijk (1995) Lemke (1995b), Yates (1989), Yates and Orlikowski (2002), and Orlikowski and Yates (1994). Lemke, Yates, and Orlikowski have all produced substantial and significant research on the use of genres and discourses in organizations (including any office environment.)

Discourse analysis may draw on the concept of a *communicative event* (Gumperz and Hymes, 1972). Communicative events (e.g., a job interview, a lecture, religious service) have rules and expectations that are familiar to discourse community members. Discourse analysis pays close attention to the concept of *voice*, that is, the people and communities implicitly present in a text. Texts with more than one voice represented are called *heteroglossic* or described as having voices in "heteroglossic opposition." (Bakhtin, 1935). Bolin (2014), states that, "among academic librarians, there are the voices of reference, instruction, and collection development that were identified and discussed by Lemke (1999a) in his analysis of an academic library's re-design of its website." In Lemke's view, "the Reference Orientation voice articulates a discourse formation in which primary positive valuations attach to servicing the user's needs for information" (p. 30). The voice of the reference orientation advocated for a website that would give maximum access to users. In heteroglossic opposition was the instruction orientation voice that advocated the "teach a man to fish" approach, that is, to instruct users in how to find information rather than simply providing the information to them. This illustrates how contrasting voices and opposing discourses can still be based on the same ideology: the idea that librarians should use their expertise to provide services to users. Geertz (1973) introduced the idea of *thick* description, which examines a culture or community from the inside (as a

member.) Likewise, Pike (1967) described *emic* and *etic* description, an allusion to the phonological concepts phonemic and phonetic. Librarians who do research on the discourse of their own community will produce an emic description, while an outsider would produce an etic one.

Examples of LIS research projects using discourse analysis include:

- Analysis of spoken or other interactive discourse in the library, including in-person, phone, and chat reference.
- Examination of internal communicative events such as evaluation conferences, interviews with job candidates, committee meetings, and so on.
- Research on the various discourse communities among library users including students (who come from different speech communities, socio-economic levels, and academic fields), faculty (who also vary demographically and have various information needs depending on their area of research), and other library users.
- Analysis of written texts and images such as letters and emails sent to library users, signage, press releases and announcements, and so on.

Genres of Organizational Communication

Genre analysis may be viewed as an aspect of discourse analysis. All organizations use both spoken and written genres to communicate. They may be unique to one organization or type of organization, but in practice there are genres that are shared by nearly all organizations and certainly by types of organizations. They may include something as generic as the memo, genres associated with employment such as vacancy announcements, letter of offer, contracts, job descriptions, and evaluations, as well as common but more specialized genres such as invoices, budget documents, annual reports, et cetera. Swales (1990, 2004) is a leading scholar on genres, and he describes genre sets and genre chains that are used in organizations, for example, the chain of documents used in hiring: vacancy announcement, letter of application, resume, interview questions, and letter of offer. Genres must meet expectations that are understood by the communities that use the genres. In hiring, for example, an organization judges a letter of application according to whether it meets the genre expectations, in terms of formal writing, appropriate content, and general characteristics of its appearance (e.g., not written on purple paper using Comic Sans). Bolin (2007, 2014, forthcoming 2017) examines genres used in academic libraries, including academic librarian appointment documents (e.g., promotion and tenure standards), academic library websites, and organizational charts. Genre analysis uses the techniques of discourse analysis, including determining authorship, uncovering the voices that are present in the text, the patterns the texts follow, who the participants are, what their relationship is, and how language encodes all these things. Possible research projects using genre analysis include:

- Examining a genre of organizational communication to gain understanding of how the use of that genre affects the library's programs and services, for example, what is being communicated by the library website?

- Examining internal genres to reveal how employees are being hired, retained, educated, and encouraged, and to see what organizational values are encoded in genres such as performance evaluation.
- Looking at interactions with patrons as a genre and using data such as chat reference transcripts to improve service by understanding how this genre can be used.
- Simmons (2005) discusses the application of genre theory to instruction in information literacy by librarians. She proposes using genre theory to introduce students to the discourse of various disciplines and move toward Critical Information Literacy, a version of Freire's (1970) critical pedagogy.

Existing Studies

There is already interesting LIS research that uses linguistic approaches, including discourse analysis, various linguistic approaches to semantics, and the examination of documents, conversations, and other texts produced in and by libraries. The following is a selection of recent studies.

Many LIS researchers have used semantic analysis as, including Al-Daihani and Abrahams (2016), who examine the discourse of library use of social media. Zhang, Bhowmick, and Tanaka (2016) look at semantic change in search terms. Hudon, Mas, and Gazo (2005) explore the semantics of ad hoc classification in digital libraries. Tilley and Walter (2016, January) explore the semantics of subject terms. Tsakonas and Papatheodorou (2011) propose semantic enhancement to strengthen the evaluation of digital libraries. Thellefsen, Thellefsen, and Sørensen (2013) explore the mediation of emotion by cognition and the resulting creation of meaning.

Typologies and semantic fields and frames have proven useful for scholars in LIS. Bolin (2007, 2008a, 2008b, forthcoming 2017) created typologies of librarian status and organizational patterns in academic libraries. Fleming-May (2011) creates a typology of library use by examining facets of searching and user behavior. Yang-woo (2014) examines ambiguity in the representation of information needs using a typology of ambiguity. Pomerantz (2005) looks at question taxonomies (e.g., of reference questions) through a linguistic lens. Ofoghi, Yearwood, and Ma (2009) look at the use of semantic frames in information processing. Gruzitis and Dannélls (2017) use University of California, Berkeley's FrameNet as a basis for natural language processing. Boholm (2017) and Colenciuc (2017) are not studies of LIS but are useful for understanding semantic fields. Boholm is a semantic field study that looks at the concept risk in English and Colenciuc uses semantic field theory to examine money in English.

There are many examples of discourse analysis as applied to LIS topics. Bolin (2007, 2014, forthcoming 2017) analyzes the discourse of written texts used in libraries, finding various voices and discourses of service, professionalism, and so on. Forrester, Ramsden, and Reason (1997) look generally at the analysis of conversation and other discourse in libraries. Willett (2016) analyzes the discourse of makerspaces in library literature and social media. Koshik and Okazawa (2012) use conversation analysis to examine chat reference transcripts. Waters (2004) analyzes the discourse of library annual reports. Hicks (2016) examines discourses of advocacy and service and their role in librarian professional identities. Budd

(2006) proposes discourse analysis to examine communication in LIS. Morris (2010) examines the information science aspect of the interpretation of text. Rabina, Drabinski, and Paradise (2016) use discourse analysis to understand the information needs of people in prison. Hicks (2016) looks the semantics of the concepts library and librarian. Olsson (2016) explores the discourse and semantics of the concept of library users. Oliphant (2015) makes the case for using discourse analysis as a path to social justice research in libraries.

Genre has also been of interest to LIS scholars. Simmons (2005) sees librarians as *discourse mediators* and advocates the use of genre theory in information literacy instruction. Bolin (2007, 2014, forthcoming 2017) looks at librarian appointment documents, library websites, and library organizational charts as genres with particular uses and expectations. Hinton (2008) looks at the genre characteristics and expectations of a library blog. Nahotko (2016) examines groups of genres in the organization of knowledge, including cataloging and metadata. Skouvig and Andersen (2015) use genre to study the history of information. MacNeil and Douglas (2015) study the evolution of genre in a catalog of archives.

Conclusion

Librarians come to the profession with a master's degree in library and information science (MLIS) that was preceded by an undergraduate degree that is virtually always in some other field: English, French, history, art history, music, biology, computer science, and so on. Depending on the nature and quality of their undergraduate program, librarians may be informed by the literature and research methods of those disciplines. They may also have other graduate degrees, a second master's or a doctorate in a subject such as education, history, English, or any other discipline that will have provided formative experiences with professional literature and research methods and theoretical frameworks. Any of these can fruitfully inform LIS research and practice. Linguistics, with its focus on discourse, semantics, syntax, anthropology, and sociology, among other things, can be useful in any area of LIS. This article has briefly reviewed some prominent frameworks and methods in linguistic research, along with ideas for applying them to LIS research. These ideas may be more familiar and straightforward to librarians who have a background in linguistics, but there is a large body of interesting literature that is accessible to librarians and scholars who would like to learn more about linguistics and its methods.

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June 2017

Classification Methods in Context at Theological Libraries: A Case Study

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Acknowledgements

The author would like to thank Lisa Silverman, Director of the Burton Sperber Jewish Community Library, and Paul Miller, Director of the Bel and Jack M. Ostrow Library, for their support and insight into this study. Additional thanks goes to SJSU iSchool faculty member Dr. Mary Bolin, whose seminar on contemporary metadata practices inspired this project.

Recommended Citation

Noland, C. G. (2017). Classification Methods in Context at Theological Libraries: A Case Study. *SLIS Student Research Journal*, 7(1). Retrieved from <http://scholarworks.sjsu.edu/slissrj/vol7/iss1/3>

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Classification Methods in Context at Theological Libraries: A Case Study

Cover Page Footnote

The author would like to thank Lisa Silverman, Director of the Burton Sperber Jewish Community Library, and Paul Miller, Director of the Bel and Jack M. Ostrow Library, for their support and insight into this study. Additional thanks goes to SJSU iSchool faculty member Dr. Mary Bolin, whose seminar on contemporary metadata practices inspired this project.

The decisions that lead to best practices in library collection maintenance, arrangement, and interoperability design are remarkably complex. The information professional charged with such decisions must make considerations that often do not inform one another. For example, patron needs are a separate issue from budget constraints, as is adherence to principles of traditional classification structure in an increasingly sophisticated digital landscape. Design of interoperability standards with similar or coexisting collections is also a key component of easy record access and retrieval.

These standardizing issues are further compounded in libraries that fulfill more than one role, such as academic libraries at theological universities. Under the umbrella of a religious institution, the library functions as both a broad, educational resource and a specialized, theological collection for its community of students and researchers. As collections serve multiple roles, the fixed layout of their knowledge categorization is simultaneously affected.

This study compares two libraries operating within American Jewish University (AJU). Both collections utilize a separate classification system and staff, but share resources such as duplicate records, shelf space, and integrated library software (ILS). Consolidation into one classification system provides a potential opportunity to increase access to records and usability for both patrons and staff. However, such an undertaking would require extensive time as well as an overhaul of taxonomical structure, and is perhaps unrealistic. Consideration must be given to the libraries' separate missions, patron needs, and resource constraints. In addition, the question of bibliographic context, whether it is rooted in academia or in Judaism itself, is an ongoing debate.

Examining the history, user needs, and principles of arrangement in both libraries can illuminate potential areas of increased interoperability between the two collections. Specifically, this study aims to determine the efficacy of consolidation into one scheme, and explore whether this is a realistic solution for improving interoperability, record retrieval, and access between the two libraries at AJU. In order to achieve this, a history of the two collections and summaries of their classification systems are discussed. This is followed by a literature review focusing on theological issues in classification, and a simple content analysis performed on five records shared by both of AJU's libraries. A conclusion as to whether or not consolidation is a realistic solution, with suggestions for further research, is then determined.

History and Background

A Tale of Two Libraries

Filtering education through the lens of theology creates a unique information setting; one such setting can be examined at the two libraries located at the American Jewish University in Los Angeles, California. This Judaic university has a long history of merging programs and practices. Originally founded in 1947 as the University of Judaism, AJU merged with the Brandeis-Bardin Institute in 2007 and connected two campuses: the Brandeis-Bardin campus in Simi Valley and the Familian Campus in Bel Air (AJU, 2017). The latter campus is home to two libraries. The Ostrow Library is the university's main academic and scholarly

library, and the newly opened Burton Sperber Community Library houses a complementary Judaic collection. The Community Library aims to serve the greater Los Angeles population as well as the research and recreational needs of AJU's faculty and students.

The Ostrow Library seeks to meet the needs of AJU's faculty and students, in addition to those of scholars of Jewish civilization and culture unaffiliated with the university. In addition to biblical, historical, and philosophical resources, it houses 110,000 print volumes, including Hebrew and Yiddish texts. Its Lowy-Winkler Family Rare Book Center contains 4,000 Judaic bibles dating back to the 16th century (AJU, 2017). Furthermore, Ostrow Library's extensive collection of published dissertations encompasses a wide variety of Jewish subjects, its microfilm collection contains manuscripts from the Jewish Theological Seminary, and its archives hold many Israeli newspapers from the turn of the 20th century (AJU, 2017). The Ostrow Library is also part of a larger consortium of Los Angeles-based university libraries, enabling it to offer additional resources to students across the city and state through the Worldcat database and interlibrary loan program.

The Sperber Community Library, in contrast, is a product of the merger between the former Peter M. Kahn Jewish Community Library of Los Angeles and the Sinai Temple Blumenthal Library. While its collection of about 11,000 items is significantly smaller than the Ostrow Library, its fiction and juvenile sections focus specifically on Judaic folklore, ritual practice, and holidays. This makes idle browsing for children and adults effortless, as well as subject-friendly when parents quickly need information on a particular event or detail of a ritual. Acquisitions focus on contemporary titles, and the collection offers new and popular selections of Jewish-oriented reading and research. Additionally, the Sperber "strives to become a community focal point for Jewish intellectual and cultural life in Los Angeles by offering informative and relevant programming for everyone" (Sperber Community Library, 2017). Types of programming include monthly book and film clubs, genealogy-based research sessions, author panels, and family-friendly story-time and craft events.

These two library collections contrast and complement each other, but also present a challenge in interoperability. Consolidating both collections into a unified classification scheme could increase simplicity of access for patrons and staff, minimize duplicate catalog records, and eliminate the need for staff training on two distinct systems. Consolidation could therefore increase many efficiencies, but whether mass reorganization would benefit or hinder information retrieval overall for the AJU libraries requires further discussion of their classification schemes in context. The following section is a detailed explanation of both these systems, and their specific contribution to organization of Judaic materials.

Elazar: A Classification System for Libraries of Judaica

In 1950, Daniel Elazar, a Jewish librarian, developed the Judaic library classification system most commonly referred to as the Elazar System or Elazar Scheme. While organizing the 10,000-volume library at the United Hebrew Schools (UHS) in Detroit, Michigan, Elazar realized there was a need for a classification schema based on Judaic terminology, history and practice. Elazar

noted that the commonly used classification schemes, Library of Congress Classification (LCC) and the Dewey Decimal System (DDC), “[incorporated] the Bible, Judaism, and Israel into a general, non-Jewish world of knowledge without relating Jewish and Jewish-Oriented subjects to one another” (Elazar, 2008, p. 16).

The Elazar System imitates DDC’s first summary faceted structure by using the ten main classes numbered 000-900. However, each class corresponds specifically to Jewish texts, history, critical thinking, and overall pedagogy. Elazar aimed to improve browsing capability by organizing the collection in a linear, historical order: *Biblical Studies* in 001 were followed by *Classical Judaica (Laws and Myths)* in 100, *Observance and Practice* in 200, *Education* in 300, *Languages and Science* in 400, *Literature* in 500, *Society and the Arts* in 600, *History, Geography and Biography* in 700, *Israel and Zionism* in 800, and *General Works* in 900 (Elazar, 2008). Elazar worked with his brother, David, to write and test the first drafts of the system in the 1950s; they circulated the system among other libraries and Jewish catalogers in 1962 for critique. Initial reactions were unenthusiastic, and it was not until 1968 that the first edition was published by Wayne State University Press (Schopert, 2014). Elazar himself worked as a Science Librarian at Wayne State University (WSU), which utilized the Elazar scheme in its manuscript form prior to publication, essentially as an elaborative tool for Judaic materials within their DDC system. However, its use was ultimately discontinued when the university switched to LCC in 1964 (D. Breneau, personal communication, April 26, 2017). The third and most recent edition of Elazar was published in 1997, by Jason Aronson, Inc.

The fundamental advantage of this system is that its intuitive logic makes it much more user-friendly, most notably for Jewish rabbis and scholars. Additionally, organizing a juvenile section with these classes makes it fairly easy for parents to find appropriate texts with which to educate and familiarize their children with Jewish traditions. In collections organized with LCC or DDC, Jewish texts wound up scattered throughout a library, with no discernible association with each other. As Schopert (2014) notes, “at the time Elazar was developed, DDC had one assigned number for Judaism (296). Other books related to Judaism were found in various locations throughout a library” (p. 427). Despite this intuitive layout, the main disadvantage of Elazar is its specificity and lack of standardizing capability. In fact, this was the major complaint of Jewish librarians and catalogers during the system’s initial critique. Reviewers did not see it as functional within the larger scope of an academic collection, whose patrons included non-Jewish researchers or needed documents unrelated to Jewish culture (Elazar, 2008).

For these reasons, Elazar has most largely been implemented in synagogue libraries, or special collections that are specifically devoted to the Talmud and other rabbinical literature. The Sperber Community Library utilizes this classification scheme, undoubtedly due to the fact that its resources largely draws from children’s books in Jewish temple school libraries, and were previously cataloged in this fashion.

Library of Congress Classification (LCC)

Since its implementation at the Library of Congress (LC) at the turn of the 20th century, the Library of Congress Classification system (LCC) has been used in almost every research and academic library in the United States. Herbert Putnam, the Librarian of Congress from 1899 to 1939, fashioned the scheme for the LC collection after DDC, the Cutter Expansive Classification, and his own Putnam Classification System, which he developed while working as head librarian at the Minneapolis Athenaeum (Library of Congress, 2014).

LCC is semi-hierarchical and is organized by letters of the alphabet instead of by numbers. Its 21 basic classes each correspond to a letter of the alphabet (A is *General Works*, B is *Philosophy*, C is *Auxiliary Sciences*, etc.), and each class can be further subdivided by adding an additional letter. For example, “class N, *Art*, has subclasses NA, *Architecture*, NB, *Sculpture*, ND, *Painting*...each subclass includes a loosely hierarchical arrangement of the topics pertinent to the subclass, going from the general to the more specific” (LC, 2014). The topics are represented by either a single number or grouping of numbers and are sometimes extended past the decimal point.

Organizing from broad subject areas to specific topics demonstrates relationships among subjects, just as indenting subtopics under larger topics in an outline does (LC, 2014). For purposes of organizing material in a large, academic setting, this flow of indexing is intended to be relational, cross-referential, and continuous. LC further aids in the development and understanding of related topics with its Library of Congress Subject Headings (LCSH), a controlled vocabulary that assigns keywords, or headings, to specific genres, people, places, events, and time periods.

For purposes of bibliographic control, as well as for searching capabilities in library catalogs, these tools allow a researcher to narrow and widen the search scope. The fact that most academic and research libraries in the United States use LCC as their standard classification system is important to note, as utilization of LCC promotes interoperability through numerous collections, library consortiums, and interlibrary loan programs. The Ostrow Library employs LCC as their classification scheme, largely due to its academic standing and familiarity to patrons.

Literature Review

Religious Classification Needs in a Secular World

Although the professional literature on issues of classification in religious libraries is quite diverse, there is a lack of research specifically comparing interoperability design between Judaic and academic classification in coexisting collections. In most cases, the library in question will adopt one or the other and follow the standard academic path, or the Judaic (or special collection) path. The latter possibility is facilitated by the development of several Judaic classification schemes in addition to Elazar. Schoppert (2014) mentions several alternative schemes used in North America, including the Weine Classification Scheme, the Abraham Freidus Classification Scheme for the Jewish Division of the New York

Public Library, the Gershom Scholem Classification Scheme for the Jewish National and University Library, and the Leikind Classification Scheme (p. 424).

The dichotomy between standardization and specification in religious classification is equally exemplified in the many Christian-based schemes developed throughout the world. Most notable is the Union Classification system, developed by Julia Pettee at the turn of the 20th century. This system was a staple of church libraries well into the 1970s, when the introduction of library automation systems trumped specification with access and ease of use (Butler, 2013). Pettee's belief in context as well as standardization provoked a desire for a system that would both integrate "an infinite number of correlated parts" as well as avoid putting theological students into "a glass cage separate from the world" (Butler, 2013, p. 22). Pettee's project took over fifteen years to complete but ultimately failed to consolidate all theological collections on a universal level, and many of its nuances reflect the same desire for specification as Elazar's scheme.

The challenges of dealing with interoperable design and mixed collection policies is similarly exemplified in a study of Eastern religions. Idrees (2012) explored the problems with organizing Islamic materials by interviewing information professionals handling these types of collections. When discussing the problem of adopting "incoherent, inconsistent, and non-uniform practices" (Idrees, 2012, p. 172) in attempts to classify Islamic material along with broader subjects, library staff chiefly advocated for developing a new, independent classification system for such materials. Another suggestion was to adjust and expand standard classification systems as needed in order to reflect the local requirements of institutions (Idrees, 2012, p. 177).

Many libraries based in theological settings but limited by traditional classification systems choose to adjust their system to better serve their patrons. Some librarians change the conceptual and physical layout of their collections based on nuances in classification systems that hinder access for their patrons. Woodward (2011) worked in an Indian seminary library where, for the majority of patrons, English was their third or fourth language, and they could not make sense of the DDC call numbers. Woodward rearranged the classes into broad categories, in an effort to make information accessible:

I found it particularly useful when dealing with the *Counseling* classification, where I had subjects like counseling, sex, marriage, sickness (read alcoholism/abortion), children, families, growing old and coping with death. I gave *Counseling* the main number, every other subject became point 1, point 2, point 3, etc, and they all went on the same set of shelves (p. 115).

While this hybrid solution seems to work well in some libraries, it is merely a localized solution, which fails to address a more systemic problem. Religious collections lack accurate vocabulary and classification to satisfy specificity of topic while still maintaining order and consistency in workflow and patron access. As Idrees (2012) notes, "having multiple systems of classification has its own repercussions. It affects uniformity of the system and complicates training of both staff and library users" (p. 178). The only solution suggested thus far has been the call for implementation of a new system that both supports

theological order and does not conflict with notations of standard systems (Idrees, 2012, p. 179). However, this would require extensive collaboration between the institutions that manage standard schemes (such as LCC and DDC) and the religious librarians that manage theological collections (Idrees, 2012, p. 180).

Putting aside the problem of mixed collection policies, issues of arrangement and consolidation of records have never been an easy task in Judaic libraries. Drobnicki (2014) discusses the difficulty in deciding whether to classify Holocaust denial literature in the same section as traditional history of Judaism: “Should they be classified with a call number that places them physically next to the books that are generally accepted to be standard, accurate histories of the Holocaust?” (p. 56). In this instance, context is part of the discussion, and cataloging librarians must use their own judgment and personal knowledge of their community to determine the best fit. The often subjective methods of classifying Judaic materials is further complicated by a library’s distinct programs and missions. Stahl and Kushner (2014) point out the issue of conflicting goals in Judaic libraries that have simultaneously related but unique missions. Specifically, the authors question whether a collection development policy structured for a research library can also be used for a synagogue or seminary collection (Stahl & Kushner, 2014, p. 18). Considerations such as these illuminate the problems in classification decisions and in the differing administrative structures of theological libraries.

LCC and Elazar in Theological and Academic Settings

The implications of implementing LCC in a theological setting, or conversely Elazar in an academic setting, bring with them their own unique problems. As previously stated, LCC is not organized from or within a Judaic context; it is organized within the context of a secular, academic worldview. Elazar, on the other hand, was developed specifically by Jewish librarians to be used for easier retrieval of Judaic materials. As such, it is ideally suited to either a special collection or community library, rather than a broad, academic collection.

From an outsider’s perspective, LCC’s lack of specificity in organizing Jewish content is not necessarily viewed as a lack of support or interest in the Judaic way of life, but rather as part of the general problem of identifying specific topics within broad, standardized systems. As early as 1995, LCC made additions to their published schedules to include sub-classifications pertaining to Judaic philosophy, biblical studies, general history, folklore, law, agriculture, arts and literature, and more (Ruderman, 2000). Specifically, the incorporation of *Hasidism* as a subtopic allowed librarians to isolate works about this particular Jewish sect by region and country, as well as to classify separate movements within the sect itself (Ruderman, 2000, p. 31).

Despite these improvements, authors such as Connors (2009) bring to light the issues of inherent bias in the vocabulary and enumerative structure of LCC, and suggest that terminology needs updating to allow for specific as well as broad searching contexts. Specifically, Connors notes LCSH’s lack of specification between the terms *Hebrew Bible*, *Old Testament*, and *New Testament*. This lack of distinction reflects Christian understandings of these holy books, and is often referred to as *Christian primacy*.

Not only is the actual language of the term ‘Old Testament’ problematic because of its Christian origin, but the bias pervades the cross references as well. Library of Congress's authority file continues to lack a see reference from ‘Jewish Bible’ to the authorized term *Bible. O.T.*, and other see references such as ‘Five books of Moses’ were not included until the mid-1980s. Cross references from variant names are essential for the uniform title to work in directing searchers to the proper heading (Conners, 2009, p. 2).

Further examination of the conceptual structure of LCC's arrangement of Jewish topics reveals the categorization of *Jews* as “a narrower term of *Christianity*” (Schoppert, 2014, p. 427). This bias is additionally evident in other subject headings lists, such as the Sears list, often used as a companion to LCSH in small collections. Referring to inadequacies in subject cataloging concerning the Sears list, Elsesser notes that “librarians have a responsibility to avoid employing labels which connote or imply a judgment...as an ethical matter, this seems an unassailable position; as a practical matter, it can help avoid inconsistencies and cataloging trauma” (as cited in Rofofsky, 2011, p. 116).

Religious persons and organizations are not the only victims of bias in classifications systems; there is evidence of prejudice against specific races, genders, and learning styles. As Tewell (2016) points out, “white supremacy inherent in classifications system[s] is thrown into sharp relief when a student asks...whether they need to search specifically for ‘white’ in the subject headings. The answer is no, pointing to an assumption of universal whiteness” (p. 293).

Issues of gender bias have been illuminated by researchers such as Olson (2002), who examined the headings and call numbers of specific books within the context of their classification systems. Olson examined eleven books that “combine[d] a feminist perspective with attention to women identifying with...African American women, Chicanos, lesbians, Asian American women, working class women, Jewish women, [and] North American aboriginal women” (p. 184). During analysis of these book's assigned subject headings and call numbers, Olson found that the “systems [in use] lack the ability to express the diversity of such book's subject matter” (as cited in Mai, 2016, p. 328), and so their actual subject matter was disregarded and marginalized within the broader context of the system. Remarking on Olson's findings, Mai (2016) concluded that even neutrality on behalf of the scheme, in order to apply to the widest audience possible, can become a form of inadvertent bias (p. 327).

Interestingly, the authors of Elazar acknowledge a major difficulty in their system, as “material with no specifically Jewish content has to be classified under another system, thus creating a situation where the user...has to learn two systems” (Elazar, 2008, p. 21). Despite this, Elazar's supporters contend that the advantages of having a system devoted specifically to Judaic thought and materials outweigh the difficulty of having to separately catalog general works. Inclusion of categories for some broader materials, such as *Comparative Religion*, *General Education*, *Psychology*, *the Middle East*, *General Reference Works*, and *Library Science* helps to mitigate the system's difficulties.

Methodology

In order to better understand the principles of organization in LCC and Elazar and gain insight into potential areas of improved interoperability design between two collections, five records for items present in both the Ostrow and Sperber libraries were chosen for a simple content analysis. Provided in the analysis are the record title, author, LCC call number, Elazar call number, and the accompanying LC Subject Headings, as provided by the shared Worldcat database. Records were chosen randomly from five subjects in order to represent a broad spectrum of arranging principles in both systems.

Due to the subjective aspect of Judaic material arrangement, this analysis focuses solely on advantages and disadvantages as they relate to the educational and theological needs of AJU's patrons. In this way, the author hopes to make clear which system better represents both contexts in their knowledge infrastructure and where context is lacking in each. This evaluation will illuminate whether consolidation is a realistic and helpful solution and, if so, which system is the better choice for consolidation of both collections. It should be understood that the small sample size of this dataset is not adequate for making broad determinations about the patterns of inconsistency in theological collections. These records serve as a starting point for further research and will only be discussed in the context of AJU's library system.

Analysis and Discussion

Table 1 <i>Comparison of LCC and Elazar classification of texts on biblical myths and laws</i>				
Title	Author	LCC Call #	Elazar Call #	LCSH Entries
The book of legends = Sefer haggadah: Legends from the Talmud and Midrash	Bialik, H. N. (ed.), Rawnitzki, Y. H. (ed.), Braude W. G. (trans.)	BM516.B52 E5 1992	140.6 Bia	Aggadah -- Translations in English.
				Midrash -- Translations in English.
				Jewish legends.
				Legends, Jewish.
				Aggadah.
				Midrash.

As both a Judaic and an academic library, the majority of Ostrow's collection is comprised of items with LCC's BM call number (*Religion -- Judaism*). *The Book of Legends = Sefer Haggadah: Legends from the Talmud and*

Midrash, edited by Hayyim N. Bialik and Yehoshoua H. Ravnitzky (see Table 1), is placed by LCC in BM516, which denotes texts on the Midrash, and is further delineated by .B52, for criticisms and commentaries. The Midrash is a supplemental commentary to the Hebrew Bible that consists of rabbinical sermons, homilies, and other stories. Elazar's structure, in contrast, already assumes a Judaic context, so they place this text in 100 (*Classical Judaica: Halakhah and Midrash*), which is specifically devoted to study of Judaic texts on law and myth; this class is subdivided into several categories. 140.6 (*Aggadah – Research and Criticism of*) is specifically devoted to a particular commentary within the Midrash that discusses the non-legal portions of the Hebrew Bible, mainly through philosophical or mystical discourse. The LCSH entries contextualize the record a step further, however, by noting that this book is a translation, and including useful, searchable headings, such as "Jewish legends." Consequently, although the Elazar system requires fewer steps to contextualize this work, LCC provides more access points via its additional subject headings.

Table 2 Comparison of LCC and Elazar classification of biographical texts				
Title	Author	LCC Call #	Elazar Call #	LCSH Entries
Unorthodox: The scandalous rejection of my Hasidic roots	Feldman, D.	F128.9.J5 F525 2012	799 Fel	Feldman, Deborah, -- 1986-
				New York (N.Y.) -- Religion.
				Satmar Hasidism -- New York (State) -- New York -- Biography.
				Satmar Hasidism -- New York (State) -- New York -- Social conditions.
				Williamsburg (New York, N.Y.) -- Religion.
				Jews -- New York (N.Y.) -- Biography.
				Jews -- New York (State) -- New York -- Biography.

Examining the LC and Elazar call numbers and subject headings ascribed to *Unorthodox: The Scandalous Rejection of My Hasidic Roots*, by Deborah Feldman (see Table 2) illuminates multiple characteristics of this work, which may not be noted if classification were uniformly consolidated into one system. This record in particular encompasses several different genres and topics; it is a contemporary discourse on Hasidic Judaism, a personal biography, and a

reference to a specific time period and geographical place. LCC uses that last category to place the work in F128.9, *History of the Americas -- United States local history, New York*. The LCSH entries further reinforce the geographical element and also suggest placement within *Jews, Social conditions, Biography, and Hasidism*. In this way, LCC covers multiple aspects of the work. Using Elazar, on the other hand, the cataloger was able to choose among several classes. This is an example of how an information professional incorporates preference and personal judgment, based on patron needs and information-seeking behavior. Although the librarian ultimately decided to place the book in 799 (*Biographies -- individual*), likely for purposes of anticipated best access, it could have also been classified geographically in 774.1 (*United States Jewry -- Middle Eastern States -- New York*). An additional possibility is 213.9 (*Hasidism -- Anti-Hasidic writings*), although the social and personal message of the book is not quite the right fit for this class. *Unorthodox* tells the story of a Jewish person realizing the importance of their faith through preliminary rejection of a Hasidic upbringing, which need not necessarily be inferred as anti-Hasidic writing.

Table 3 <i>Comparison of LCC and Elazar classification of fictional texts</i>				
Title	Author	LCC Call #	Elazar Call #	LCSH Entries
American pastoral	Roth, P.	PS3568.O855 A77 1997	Fic Roth	United States -- History - - 1961-1969 -- Fiction.
				Jewish businesspeople -- Fiction.
				Bombings -- Fiction.
				New Jersey -- Fiction.
				Bombings.
				Fathers and daughters.
				Jewish businesspeople.
				New Jersey.
				United States.

Once again, the thematic subjects of *American Pastoral* (see Table 3), a fictional novel by Jewish author Philip Roth, are covered by LCC through its supplemental subject headings, and the book is appropriately placed in PS3568, *American literature -- 1961-2000*. Elazar places the book in *Fic, Roth*, which is appropriate in the context of a community library, where idle browsing by title or author is perhaps more common than in academic settings. However, Elazar inadvertently ignores the deeper themes of the text, while LCC pinpoints them with additional subject headings such as *Fathers and daughters* and *Bombings -- Fiction*.

Table 4 Comparison of LCC and Elazar classification of texts on globalization				
Title	Author	LCC Call #	Elazar Call #	LCSH Entries
The world is flat: A brief history of the twenty-first century	Friedman, T.L.	HM846.F74 2005	735 Fri	Diffusion of innovations.
				Information society.
				Globalization -- Social aspects.
				Innovations -- Diffusion.
				Internet.
				New economy.

Very often, works by Jewish authors on non-Jewish topics are included in Judaic collections. *The World is Flat: A Brief History of the Twenty-first Century*, by Thomas L. Friedman (see Table 4) is an example of a secular work on society and globalization by a Jewish author. In LCC, HM846 places the work in *Sociology (General) -- Social change*. The LCSH entries additionally categorize it within the subjects of innovation, economics, and the Internet. Elazar, conversely, places this book in 735: *History, Geography and Biography -- The Contemporary Era (20th Century--)*. Although the book's themes, as classified by LCC, could very well fit within Elazar's broader category, the latter remains generalized in the Judaic context. The most logical conclusion is that this book probably had a high number of requests, and may have been added to both collections in order to meet patron demand. In this case, simpler classification is acceptable by the Sperber Library in order to better serve their community. However, the contingency in assigning broad terms to records with specific nuances is demonstrated again, in this instance by the specialized scheme.

Arthur Schwartz's Jewish Home Cooking: Yiddish Recipes Revisited, by Arthur Schwartz (see Table 5) illuminates several more detailed distinctions between the two classification systems. A Jewish cookbook of Yiddish recipes is placed by LCC in TX724: *Home economics -- Cooking*. The accompanying LCSH entries help contextualize the content, ascribing the text to *Jews, Jewish Cooking, Social life and customs, and New York (State)*. The reason for including the geographical subheading is due to the fact that the author is a New Yorker, and includes anecdotal stories about the city within the text. Elazar has its own subtopic within the 600's (*Society and the Arts*), 699: *Cooking and Culinary Arts*. 699.2 *Regional cooking*, refers to Sephardic, Ashkenazic, or Oriental cookery, which is where Yiddish dishes would be included. While other subtopics within 699 distinguish between different types of Jewish cooking, LCC stays broad, and includes the New York subheading as a way of incorporating the author's geographical culture. Due to the fact that Elazar's structure already implies a Jewish cultural context, the call number merely delineates the type of cookbook.

Table 5 <i>Comparison of LCC and Elazar classification of texts on home economics (cooking)</i>				
Title	Author	LCC Call #	Elazar Call #	LCSH Entries
Arthur Schwartz's Jewish home cooking: Yiddish recipes revisited	Schwartz, A.	TX724.S3335 2008	699.2 Sch	Jewish cooking.
				Jews -- United States -- Social life and conditions.
				Jews -- New York (State) -- New York -- Social life and customs.
				Cookery -- Jewish.
				Jews -- Social life and customs.
				New York (State) - - New York.
				United States.

For purposes of Jewish themes and subjects, and concerns debated within the context of Judaism, Elazar overwhelmingly provides the best specificity. For the needs of education, it is less clear which system is better. LCC provides the more precise classification, as seen with *American Pastoral* (Table 3), by providing deeper thematic context with nuances of time period, location, and relationships; meanwhile, Elazar merely lumps the book into *Fic, Roth*. In essence, missing information in one scheme is consistently provided in the other. It is also worth noting that while Elazar implies greater specificity, the user in question must already be familiar with Judaica to benefit from this. LCC, on the other hand, implies less specificity, but its LCSH entries provide enhancement of themes and nuances that Elazar does not state conspicuously. Thus, a patron unfamiliar with Judaica may have an easier time interpreting and accessing theological records via LCC, while Elazar's organization chiefly benefits those already educated in Jewish terms and contexts. In this regard, further study of how theological and academic classification systems impact collection development could prove thought-provoking, particularly towards fulfillment of patron requests.

Conclusion

This study aimed to explore and provide solutions for increased interoperability design between AJU's academic and community libraries. Reviewing the literature on classification issues in religious collections revealed that the majority of theological libraries take one of three different approaches to categorizing materials: 1) use a standard scheme (e.g., LCC and LCSH), 2) employ a local and/or special scheme, such as Elazar in a Jewish collection, or 3) alter a standard scheme to match local needs. The second and third choices, although manageable in many circumstances, still fail to solve interoperability problems at large.

The limitations of LCC in a religious environment and of Elazar in an academic environment are evident upon examination. This analysis of library needs and item records reveals that, in the case of AJU, each collection depends on the other to improve its catalog and better serve its community. The fact that both libraries function better in conjunction with the other classification system as reference was an interesting discovery of this study.

Due to this insight, this author believes the division of the two classification systems is indeed a positive consequence of collection disunity. However, understanding the specific use and priorities of each library is vital. The problem arising is how to maintain interoperability between the two libraries, despite the different content and communities. Realistic solutions include increasing transparency on the shared catalog, as well as utilizing a marketing campaign to explain the mission of both libraries. These options would be much less costly and time-consuming than a reclassification process.

A deeper analysis than this study's time constraints and data sample were able to produce is needed in order to make broad determinations about interoperability design between theological and general collections. Future research could include qualitative studies comparing the classification structure of records across several different religious and secular libraries. These studies could examine differing Judaic, Christian, and Islamic schemes as compared against DDC, Colon Classification, Universal Decimal Classification, and other standard schemes. By isolating the records within the context of their classification systems, in-depth comparisons will continue to reveal more about the benefits and disadvantages that these vastly different schemes offer. Additionally, increased understanding of specific materials will help enhance metadata terminology and further determine exactly where and why context is necessary.

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