ALISE 2013 Doctoral Poster Session Abstracts
(In alphabetical order by last name -- including poster number)
Title
Effects of Gatekeeping of the Diffusion of Information

Abstract
In the main, investigation of the structure of social networks has been in the area of social search (Milgram, 1967; Granovetter, 1973; Killworth & Bernard, 1978; Adamic & Adar, 2005). Schnettler (2009) points out that the diffusion process in social networks is not well understood. Rogers (2003) defines diffusion as the process by which information is spread through a network. From a practical perspective, understanding the diffusion process is useful because it shows how information spreads through a marketplace or social community. This could involve a disease, a new product or personal information. This knowledge allows researchers to strategically place individuals in the network to disseminate, regulate, or prevent the spread of the information. While this process has been theorized (Rogers, 2003), few behavioral studies have examined it. A likely reason for this because the phenomenon is difficult to observe in the field, as knowledge of the boundaries of a social network is necessary and often unknown. Therefore, empirical research is needed in this area.

Gatekeeping theory provides a framework from which to study the process of information diffusion. Gatekeeping is the process of information control (Lewin, 1951). Gates are decision or action points and gatekeepers are those individuals responsible for making the information control decisions (Shoemaker & Vos, 2009). Also, forces exist at each gate that influence the decision process (Lewin, 1951). Further, Lewin (1951) argues that any network actor can be a gatekeeper. This suggests that being a gatekeeper is a role one takes on. Shoemaker and Vos (2009) argue that gatekeepers are not equally influential in the process of information control.

At the point that information is received, the actor must decide whether or not to pass the information along through the network and at each gate forces exist (Shoemaker & Vos, 2009). Forces can be either positive or negative and their polarity is not constant (Lewin, 1951) and these forces can be in competition with one another (Shoemaker & Vos, 2009). At the point information is received, the network actor must decide whether or not to pass the information along through the network. Two forces that are relevant to the diffusion process are the activity level of the gatekeepers and the network location of the gatekeepers.

The landing of the Mars Rover, Curiosity, was followed using Twitter hashtags to observe the effect of gatekeeper activity level and gatekeeper location on information diffusion. The advantage of using Twitter data is that a social network can be visualized using the followed/follower relationships. Diffusion paths can then be visualized atop the social network, which allows one to observe the network influencers and structural holes. Using the Twitter API, tweets were collected from July 1 through September 30. Curiosity hashtags will be mined using a datamining approach. Structural equation modeling will be employed to analyze the data.
2. C. Sean Burns (245)

University of Missouri

Title
Google Scholar and Free or Open Access Scholarly Content: Impact on Academic Libraries

Abstract
This study examines the bibliographic references that users of a social computing web application collect in order to measure the probability of the use of non-library electronic discovery services and open access content. The purpose is to understand the strategic future of academic libraries.

In 2010 Ithaka S+R (Schonfeld & Housewright) published the results of a 2009 survey that asked faculty about their scholarly communication behaviors and attitudes. The research report claims that information seeking "practices have shifted rapidly in recent years, and as a result the academic library is increasingly being disintermediated from the discovery process, risking irrelevance in one of its core functional areas" (p. 2). Specifically, the report suggests researchers in the sciences, social sciences, and the humanities are moving away from the library building, the librarians, and the library's services and towards general purpose search engines and other electronic resources to satisfy their document needs. In turn, these movements supposedly result in a less relevant academic library. For example, although search and discovery through electronic services include those subscribed by the library, the report reveals, at the network level, the heavy use of non-library electronic resource discovery services. For instance, searching with Google and Google Scholar, both counted here as non-library electronic resource discovery services, ranked third place in the discovery process (~70%), behind searching electronic, full text databases (~90%), and following citations (~90%), a process referred to as chaining (Ellis, Cox, & Hall, 1993).

The Ithaka report does not identify an additional concern regarding the state of affairs at the network level. Academic library users may not just use alternate services for document discovery but these alternate services may lead to full text electronic documents, such as open access content. That is, we may ask whether open access content, in combination with changing information seeking "practices," makes it possible to bypass the library's collections, in addition to its discovery services, and whether this results in another kind of disintermediation.

There are two key questions to ask. The first question has two parts and concerns how much content is freely accessible via scholarly search engines, such as Google Scholar, and how influential is that content (as measured by citation counts). The second question is conditional on the first. If Google Scholar is able to locate many full text scholarly documents, then what does that mean for the strategic future of academic libraries? In order to answer the first question, this dissertation is based on a systematic random sample (n = 999) of bibliographic references, collected by users of a social reference management application, and longitudinal (three-year) bibliometric data of these references, which was collected from Google Scholar. To answer the second question, the bibliometric findings are interpreted within a decision theoretical framework aided by Herbert Simon's (1955) notion of bounded rationality. Specifically, the
theory offers an explanation for why users may prefer and choose one discovery service over another given that people operate with "limited knowledge and ability" (p. 114).

References


3. Barbara W. Burton (178)

Rutgers University

Title
Factors Influencing Information Sharing Behavior of Academic Faculty Members

Abstract
This research seeks to learn more about information sharing behavior by examining where and why academic faculty members share their academic output. There has been significant work done on faculty’s reluctance to share material with Institutional Repositories but less done on sharing through personal web sites and other less formal channels. This research builds on Constant’s typography of information as either expertise or product by seeking to categorize type of output. Social Exchange Theory is also applied to help understand the sharing decision when both positive and negative aspects of sharing are identified by faculty members. The research model uses three elements impacting the sharing decision which are: the specific type of academic information being shared, the attributes of the available channels (personal web sites, open access journals, departmental web sites, disciplinary web sites and discussion lists, online conference proceedings and general scholarly web sites) and the perceived outcome of the sharing decision (positive, negative or unknown). The individual characteristics of the faculty member (faculty level, department and discipline) are viewed as environmental factors with a mediating influence on the sharing decision. Data are gathered from a faculty survey as well as in-depth interviews with select faculty members. Also studied is how faculty members’ use of social media sites may impact use of scholarly channels for sharing.

4. Mónica Colón-Aguirre (142)

University of Tennessee/Simmons College

Title
Organizational Storytelling in Academic Libraries: Roles, Addressees and Perceptions
Abstract
Libraries have survived throughout millennia while retaining particular characteristics that help define them as organizations. In today’s society, the role of libraries as repositories of human knowledge is starting to be questioned. Recently, issues regarding the administration of libraries in modern society relate mostly to technological changes that have taken place in the last three decades that have changed the way people approach information. These issues include the advent of the Internet, which has made possible the existence of free online search engines. Other concerns include library anxiety, library personnel’s seeming unfamiliarity with marketing strategies, and demographic changes affecting the profession.

This study focuses on academic libraries, by exploring the world of the academic library employee through one of the most recent alternatives to organizational studies: knowledge management. Knowledge management is a relatively new approach to management, which originated as a reaction to the concepts of a knowledge society in the post-industrial era. It focuses on people as the main components of organizations, and explores ways in which the knowledge created by them allows organizations to innovate. Storytelling has been identified as one of the ways knowledge is transferred among employees. Organizational storytelling is one way of capturing and disseminating knowledge since it allows members of the organization to share their experiences with other organizational members and to communicate metaphors and analogies that reflect the complex cycle of knowledge in organizations.

This qualitative study explores the perceptions academic reference librarians have regarding the stories shared among employees with similar responsibilities. Long interviews were conducted at four different universities, all members of the Association of Southeastern Research Libraries (ASERL). A total of 20 academic librarians participated in this study. All of the participants possess an M.L.S. degree or equivalent, are full time employees in their academic institutions and work at the reference desk as part of their responsibilities. The following three research questions helped to guide and focus this study: RQ 1: What is the role of organizational storytelling in the academic library setting? RQ 2: What kind of knowledge is being transferred through the stories shared among librarians? RQ 3: How is the role of organizational storytelling understood by reference librarians?

The findings of this study suggest that the main role of organizational storytelling among academic librarians working the reference desk aligns better with a cultural understanding of storytelling than with some of the roles the literature assigns to the phenomenon. In this study, the organizational storytelling taking place among the participants centers mostly on: stories as a warning system, stories told for the purpose of finding comfort, stories told in order to prepare others, and stories that explain current working conditions. In addition, this study found that the knowledge transferred was tacit and emphasized social interactions. Five main themes emerged from the data: unusual patrons, former supervisors, poor administrators, former employees, and past crises. The results also point at the participants’ having negative perspectives regarding the role of the stories they share, with many classifying these as gossip.

5. Clayton A. Copeland (195)
Title
Equity of Access to Information: A Comparative Exploration of Library Accessibility and Information Access from Differently-able Patrons’ Perspectives

Abstract
The Freedom of Information Act (FOIA) and the precepts of intellectual freedom help ensure the inalienable right to access information. While these documents were not designed with physical access in mind, they established the principle of equity of access to information, an imperative factor for all library patrons and especially for diverse patrons and patrons who are differently-able or have disabilities.

The Rehabilitation Act of 1973, the 1980s “Decade of the Disabled,” and the Americans with Disabilities Act of 1990 stimulated increased awareness regarding rights of patrons who are differently-able for improved access to education, employment, and information (United Nations, 1982). While diversity remains a critical focus for libraries, many remain inaccessible for their patrons who are differently-able (Copeland, 2011; Mates, 2011). In recent years, few studies have investigated how accessibility, physical and virtual, might be improved. Published research studies investigating library accessibility and services from the perspectives of people who are differently-able are virtually non-existent. In an effort to move information access and accessibility initiatives for differently-able patrons beyond cursory investigations of compliance with the Americans with Disabilities Act (ADA), this study sought historical and societal understandings of disability and explored how libraries’ infrastructure impacts patrons’ access to information. The exploratory study was a multi-dimensional investigation of public library accessibility and services, and included analyses of the built environment, as well as analyses of library services, and interactions between patrons and staff. A mixed-methods approach utilizing a nationally distributed survey and in-depth qualitative inquiry, offered comparative analyses of library accessibility for patrons who self-identify as being differently-able or as having a disability and those who are typically-able or who do not self-identify as having a disability. Ultimately, the study raised larger equity of access to information issues that present with these populations through distinct, observable, and measurable manifestations.

Findings indicated statistically significant differences in library accessibility and information access between the respondent groups. Across numerous dimensions, perceived library accessibility and information access are not equitable between respondents identifying as typically-able or differently-able. Components perceived as “equitable” between the groups were also identified as “problematic.” Regardless of ability status, respondents indicated that access quality needs improvement. Application of critical theory to information access revealed that social constructs directly inform library accessibility and information access. Recognizing disability and information access as social constructions allows for re-conceptualization of disability as a defect within the individual to a characteristic created by interactions with society, and by societal response to characteristics labeled as disabilities. This research calls into question the taken-for-granted perception of disability as being within the individual and places it in the center of society. It highlights the reality that inequity of information access exists as a result of environmental, built environment or architectural, technological, and attitudinal barriers. By offering patrons who self-identify as being differently-able opportunities to share their lived
experiences, this research took an important first step in recognizing the value of all perspectives. It allowed previously silenced voices to offer important information and implications for LIS education and practice.

6. Morgan Daniels (169)

University of Michigan

Title
Learning from Museum Collections: The Creation of New Knowledge from Old Data in Botany and Archaeology

Abstract
The data deluge and recent advances in data collection and analysis techniques have lead to an increasing interest in the use of datasets by researchers who did not create them (referred to as data reuse). Recent studies explore the difficulties of making data accessible for reuse as well as the problems of understanding datasets created by others (Akmon et al. 2011, Zimmerman 2008). One important data provider is largely overlooked from these discussions: the museum. As collectors and curators of objects recording cultural and natural history, museums have long made data accessible to researchers. Opportunities for including museum data in larger datasets are only beginning to emerge, as consortia develop tools for cross-collection access to museum data. Little is known, however, about the needs of researchers for the successful reuse of museum data and how well these data represent the underlying collections. This study examines the practices of botanists and archaeologists in their use of collections from two museums. Based on 40 semi-structured interviews with botanists, archaeologists, and museum staff, this work uncovers the information needs of research users, how researchers perceive the relationship between museum objects and their descriptions in the research process, and the impact of museum practices for digital representation on reuse.

For archaeologists and botanists, public museum catalogs are often an important starting point for data discovery, but are rarely sufficient for research purposes. Researchers often require more detailed data about the object(s) of study and may want to interact with the object first hand to analyze it. Using data from interviews with users and museum staff, I develop a typology of research interactions with museum collections, linking the research questions brought to museum objects with the kinds of interactions users have with the objects themselves and the metadata surrounding them.

My findings highlight the importance of contextual information concerning research design behind data (object) collection as a key component of successful reuse. For example, the context in which an object was found is of paramount importance in both judging the quality of data and in making use of it for research, whether that is information about the strata in which an archaeological object was discovered or a description of the habitat of a botanical specimen. Both groups of researchers have experienced changing standards and technologies for recording contextual information, making some older data less useful for analysis. Archaeologists need to understand the provenience of an object, linking it to a particular location. Objects lacking that
level of detail can still be useful, but must be approached with different research questions. Likewise, botanists studying the geographic range in which a particular species is found require a degree of certainty about location identification to judge whether a specimen may be included or removed from their dataset. The findings of this study have important implications for the representation of museum objects for research audiences. They are also relevant to researchers studying data reuse, museum staff creating representation systems, and data curators working with data from multiple, heterogeneous sources.

References


7. Christine D’Arpa (222)

University of Illinois at Urbana-Champaign

Title
“Procure, propagate, and distribute among the people”; The Information Services of the Department of Agriculture, 1862-1888

Abstract
Prior to the establishment of the U.S. Department of Agriculture in 1862 and concurrent with its growth and development, farmers had myriad ways of sharing and communicating agricultural information. Some of that information was rooted in experimental practice, but much was anecdotal and based on years of farming experience. The historiography of U.S. agriculture demonstrates that farmers both needed and used that information – information they created, circulated, and consumed in their work as farmers. The introduction of information work at the Department not only altered the kind and amount of information that farmers had access to but effectively sought to redefine who the “experts” were through the production and dissemination of the results of publically funded applied scientific research for agriculture conducted by scientists at the newly formed Department or work by others filtered though the institution and thus vetted by it.

Information work at the Department of Agriculture drew on surveys conducted by the department. These were sent to as many as 30,000 correspondents at a time to inquire about crop yields and soil conditions, for example. Most of the informants were directly associated with agriculture throughout the United States and its territories. Many were farmers. The research of the Department disseminated to farmers included information on new tools, more efficient farming practices (especially with reference to ensuring healthy and productive soil), better seeds, new plants, and statistical information about crop yields, the weather, and market prices.
The vehicle for much of this information transfer was the annual reports of the Department of Agriculture. The annual reports communicated the work of the Department. They were freely available to the public via the Department and the Congress and mailed free of charge by the US Postal Service. The annual reports were bound volumes ranging from 400 to 800 pages with print runs that reached 400,000 by 1888. These unique, complex, and rich primary resources -- government documents -- are at the center of my research and are the primary source for my data. The archival record for the Department of Agriculture in its first decades is scant. These reports are critical to our understanding of its work and how it functioned. My close reading of them is the first to carefully examine the annual reports with an eye to the history and character of the information work of the Department of Agriculture.

My dissertation is an historical examination of the development of the Department of Agriculture that looks specifically at its information functions from 1862-1888 – the period before it was elevated to cabinet-level status. Using the annual reports of the Department of Agriculture to identify and examine those functions, I situate its information work within the context of the emergence of the modern state and American empire, and industrializing capitalism with Marxist historiography and the political economy of information as my conceptual framework.

8. Sheri Edwards (204)

University of Tennessee

Title
Enablers of and constraints to human information behavior in hospice care volunteerism

Abstract
End-of-life care in the US, often known as “hospice care,” has seen an explosive growth in the last decade, with almost 39% of all deaths in 2008 in the US, as reported by the Centers for Disease Control and Prevention, occurring while under the care of a hospice program. A central aspect of hospice care is (unpaid) volunteer work, which is unique among other types of volunteer work in that it is strictly regulated by the Medicare hospice benefit, in which 94% of all hospices participate. As a cost-savings measure, Medicare requires that at least 5% of total patient care hours are undertaken by volunteers. However, hospice care volunteerism faces immediate, substantial, and unyielding structural pressures, including an aging society that increasingly relies on hospice care and the volunteerism therein; legal requirements for hospice care agencies to document their efforts to recruit, train, and retain volunteers; volunteers’ call for continuous training; volunteers’ uncertainties about their roles in hospice care and about their hospice agency’s “pecking order”; and the inherent potential of a lack of consistent and accurate information-sharing among the hospice care team, including the volunteer. Therefore, we need to unravel the path by which the volunteer acquires information so as to identify volunteers’ knowledge gaps and how they might affect the volunteer’s ability to serve a hospice care patient with the full compassion and caring called for by hospice care philosophy. As such, this study adapts Robert Taylor’s concept of the information use environment (IUE) in order to identify and explore those factors that enable and constrain the information behavior of the hospice volunteer coordinator, who is the primary overseer of the hospice volunteer and the volunteer’s chief source of information. The IUE emphasizes the social context of all routine action related to
information use, which is well-suited to this study, given the necessary social interaction between volunteer coordinators and volunteers; and it has been identified as a major conceptual development in information behavior studies. Since almost no formal knowledge exists in library and information science about the information behavior within a hospice care environment, a qualitative methodological approach was taken for this study in order to explore the dimensions of that behavior and the enablers and constraints that govern that behavior. Interviews took place in East Tennessee, western North Carolina, and northeast Georgia. Data analysis indicates that the volunteer coordinator’s information seeking and use behavior is helped mostly by the availability of the interdisciplinary team, and hindered by a lack of quality and quantity in volunteer training materials, the withholding of patient information by the patient’s family members, and in uncertainty in knowing which questions to ask when information is needed. Moreover, while the volunteer coordinator exploits government and corporate bureaucratic structures in order to meet his or her information needs, those bureaucracies, in turn, exploit the volunteer spirit of hospice care.

9. Delicia Tiera Greene (209)

Syracuse University

Title
Reading as a Communal Practice: Examining the Reading Engagements, Identity Constructions, & Social Factors Present in an Online Young Adult Book Club

Abstract
This case study explores how young adults’ identities are constructed in a Facebook Book Club. Identity construction will be examined from the following perspectives: (1) how facilitation influences identity construction, (2) how sense of community influences identity construction and (3) how gendered perspectives influences identity construction.

Significance
This study explores how identity is constructed in the following ways: through the facilitation of discussion by library media specialists, through the creation of community by young adult participants, and through young adults’ gendered perspectives. Based on the overwhelming appeal of online book clubs, this study seeks to explore young adults’ level of engagement with literacy in the hopes of influencing the work of librarians, teachers, and web designers.

Methodology
The Book Club included both students and school media specialists from four local high schools. The Book Club was moderated and facilitated by four school media specialists. More than one hundred high school students participated in the online book club. Student participants ranged in age from 14-17.
Discourse Analysis was used to analyze book club posts by both students and school media specialists. Chat A and Chat B are both excerpts of book discussions based on the novel *Thirteen Reasons Why*. Chat A focuses on facilitation and identity construction, while Chat B focuses on sense of community and identity construction. Lastly, Chat C is an excerpt of a book discussion based on the novel *PUSH*. Chat C focuses on gendered perspectives & identity construction.
Frameworks

Bucholtz & Hall’s Identity Framework (Emergence Principle) (Chat A, Chat C)
Bucholtz & Hall’s (2005, p. 587) analysis of identity framework examines interactions and identity construction among participants. The Emergence Principle challenges more traditional views of identity that focuses on an individual’s sense of self within an individual mind by focusing on how identities are discursively created in social interaction.

Rosenblatt’s Reader Response Framework (Chat A, Chat C)
Rosenblatt’s (1995, p. 91) Reader Response Theory suggests that readers use their own experiences and knowledge bases to make meaning from written texts. It also illustrates how they may respond with an efferent stance, in which they pull text, moral renderings and cautionary warnings from the stories.

McMillan & Chavis’ Sense of Community (Chat B)
McMillan & Chavis’ (1986, p. 9) Sense of Community is “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together.”

Conclusion
This case study reveals that facilitator’s question types influence how participants respond and help to shape identity. In addition, it reveals how “sense of community” influences young adult participation and also shapes one’s personal and social identity. This case study addresses how one’s gendered identity influences one’s position in the world and demonstrates and determines how one asserts himself in an online conversation with members of the opposite sex.

10. Matthew R. Griffis (160)
University of Western Ontario

Title
Space, Power and the Public Library: A Multicase Examination of the Public Library as Organization Space

Abstract
Library buildings are an important part of a public library’s function and identity. They provide the library as an organization with a place to exist and act as a “face” for the public library as a civic institution. Ultimately, a library’s physical shape, design, and appearance—its spatial organization—have a profound effect on how library users and staff experience the library as a place. This multicase study examines the spatial organization of three mid-sized public library buildings in the province of Ontario, Canada and explores how their designs prescribe spatial behavior and identity according to library organizational objectives. Most specifically the study explores the extent to which the designs of the three libraries reproduce the relations of power between the library and its public that originated with the modern public library building “type” in the late nineteenth and early twentieth centuries.
To explore the study’s research questions a multiple case study design was adopted, employing qualitative data collection methods and analysis. Site visits were conducted to three, purposefully-selected public library buildings (i.e., “cases”) of relatively similar size but varying ages and architectural styles: first, a neo-classical Carnegie library (updated with extensive renovations and additions); second, a library of the late-Modernist period containing no additions or extensions; and third, a post-Modernist (and recently completed) library building exemplifying the most current application of library design principles. Each site visit lasted 5 days. Site visits included: blueprint and facility planning report analysis (to understand the library space as conceived by planners and architects); organizational document analysis (to understand the library’s organizational goals and service objectives); in-depth, semi-structured interviews with a total of 48 respondents (24 library users and 24 library staff members across all three libraries, to understand how, and for what reasons, library users and staff use space within the library building); cognitive mapping exercises with interview participants (to understand how users and staff members perceive landmarks and boundaries within the library); observations and photography (to record general library activity); and historical research (to understand each library’s unique contexts).

Study findings indicate that, while public libraries have over the past one hundred years most certainly broadened their organizational roles, broadened their attitudes toward service and collections (e.g., fiction, and information consumption as recreation), and have even embraced new paradigms of library design (e.g., the “user-centered” library), many of the fundamental principles that defined the spatial organization of the modern public library as a “type” one century ago are very present in the three case libraries. These principles relate to power, control, and the construction of “the library” as an authoritative “knowing organization” whose “business” centers on the act of mediating between people and information. This not only calls into question the public library’s progressiveness over the last century but also hints at its ability to survive in the new century.

11. Lala Hajibayova (221)

Indiana University—Bloomington

Title
Factors influencing user-generated vocabularies: An investigation of the effects of resource content and genre on tagging

Abstract
Previous studies of folksonomies have investigated the functionality, subject representativeness, and level of tag agreement in user-generated tagging vocabularies, often by comparing them to more traditional representational systems. Research on user-generated tagging vocabularies has yet to investigate two important assumptions on which many of these studies have been based: that a user-generated vocabulary constitutes a shared indexing language which can be used to represent the intellectual content of resources; and that a user-generated vocabulary facilitates the findability of resources. Comparative studies of user-generated tags and indexing languages have been based, in large part, on attempts to match user-generated tags with controlled vocabularies (e.g., Kipp, 2006; Lin et al., 2006; Rolla, 2009; Wetterstrom, 2008). For example, Yi and Chan (2009) suggest that user-generated tags tend to include narrower or more “specific terms” (p.
such as “names of software applications, hardware products, or technologies” (p. 892). However, questions remain as to how "broad" is a broader term and how "narrow" or "more specific" is a narrower term.

More important is the issue of basic level categories, which have been suggested by Golder and Huberman (2006) and Munk and Mork (2007) as a primary source of perceived agreement in user-generated vocabularies. Rosch et al. (1976) claim that categories at the basic level of conceptual abstraction are more cognitively efficient and therefore more accessible to users; but the contextual nature of basic level categories leads to problems in applying Rosch's theory across individuals, situations and cultures. Thus, while researchers have generally assumed that the preferred level of abstraction for tags assigned by users is the basic level, this assumption has not yet been investigated in user-generated vocabularies.

This study is designed to determine if there is a predominant level of abstraction in user-generated vocabularies and if there are differences in the preferred level of abstraction of user-generated tags based on either the intellectual content or the genre of the resources tagged. The proposed research investigates the broad question “Is a particular level of abstraction dominant in user-generated tags?”

To investigate whether there is a predominant level of abstraction in user-generated vocabularies and whether the intellectual content or the genre of a resource affects a user’s tagging vocabulary, a quasi-experimental study was conducted. A group of 40 subjects, recruited from members of the faculty and the student body at Indiana University in Bloomington, were asked to assign tags to 36 online resources, each of which represented one of three resource genres identified by Rosso (2005) (i.e., news article, blog, ecommerce) and one of four non-biological categories used by Rosch et al. (1976) (i.e., tool, fruit, clothing, and vehicle). Analysis of user-generated tagging vocabulary showed that subjects preferred to assign tags representing the basic (orange) and subordinate (navel oranges) levels of abstraction rather than superordinate (fruit) level of abstraction.

References


12. Peter A. Hook (241)

Indiana University—Bloomington

Title
The Structure and Evolution of the Academic Discipline of Law in the United States: Generation and Validation of Course-Subject Co-Occurrence Maps

Abstract
The structure of the academic discipline of law in the United States has never been empirically determined and mapped spatially. While it has been described in essays and other writings on the history of law school education, it has never been revealed through the exploration of large datasets and determined through replicable, objective means. This work seeks to answer whether course-subject analysis produces topic maps that are consistent with expert opinion and other indicia of the topical similarity of law school course subjects. Course-subject analysis examines instances of the same professor teaching multiple, different courses over one academic year as reflected in the annual directories of the American Association of Law Schools (AALS, 1931, 2010). 112,000 course-subject events are used to produce maps for years 1931-32, 1972-73, and 2010-11—roughly, forty year intervals.

Two different levels of treatments are used to produce different combination of maps to be evaluated. At the preprocessing stage, three normalization treatments are used: Association Strength, Cosine, and no normalization. As to the ordination and layout of the maps, three different layout techniques are used: Common Space Multidimensional scaling (MDS), VOSViewer, and Spring-Force Algorithms. Additionally, three different clustering approaches are used on the non-spatialized data: Factor Analysis, K-Means, and QAP Analysis.
The maps created by all combinations of the first two treatments are evaluated against several different indicia of topical similarity. The first is data from a card sort exercise of the 2010-11 topics performed by 18 experts in the field of law school education. Another indicia of similarity are course subjects that had either previously been joined or are subsequently merged as used by the annual AALS directories and their listing of teachers by subject. Additional indicia of similarity include the syndetic structure of the AALS subjects (‘includes’ and ‘see also’ statements), super groupings of legal categories as used by the Current Index to Legal Periodicals, Jackson and Gee’s categories of elective courses (1975), and the results of the three different cluster analyses. The resultant best map from the combination of these treatments will be shown to the same 18 experts for ultimate validation and comment. Initial visualizations lend support to the assertion that faculty members teach courses that are topically related and that course-subject analysis is a valid technique to make maps of a domain.

References


13. Elisabeth A. Jones (173)

University of Washington

Title
Constructing the Universal Library

Abstract
Large-scale digitization initiatives (LSDIs) like Google Books and the Open Content Alliance (OCA), which have already made millions of books freely searchable online, have extraordinary transformative potential for the future of public information access. The expanded access to books that they provide has the potential to reshape myriad social structures, from scholarship to citizenship to creativity1 – not to mention publishing, authorship, and libraries. Yet, despite this potential, these projects remain underassessed as social phenomena, aside from their legal implications.

As a first step toward a more rigorous conceptualization of LSDIs, my dissertation situates them in historical context, as attempts to democratize access to information. More specifically, I argue that projects like Google Books and the OCA represent new instantiations of a very old impulse – providing free information to as broad an audience as possible – earlier embodied by the
nineteenth-century American public library movement. And further parallels exist: for example, their top-down approach, their phenomenally wealthy benefactors, their democracy-building rhetoric, and their strong focus on bookbased information.

The dissertation comprises a nested comparative case study analysis of the early years of two LSDIs already noted and two early American public library systems – the Boston Public Library and the Carnegie Libraries – employing a theoretical lens informed by structuration theory and social construction of technologies. More specifically, I explore the following research questions:

1. What were the initial motivations for pursuing each project expressed by and among key stakeholders?
2. How did those responsible for casting the initial shape of each project conceive of what they were doing – or hoping to do – in terms of the intended user base and collection scope?
3. How did each project ultimately go about achieving the goals and definitions outlined in questions 1 and 2, particularly in their implementation of administrative processes and technological/physical structures?

For the public libraries, the research has been primarily archival: piecing together correspondence, meeting minutes, and other historical evidence to construct a picture of the processes involved in the development of library structures and policies. For the digitization initiatives, data collection included eighteen semistructured interviews with project leaders and designers, supplemented by public statements, digitization contracts, and other primary and secondary sources. Data analysis for all cases followed an analytical-inductive approach, in which all 196 primary source documents were qualitatively coded, using a framework iteratively developed based on the theoretical model, prior literature, and the primary sources themselves.

Though data analysis remains incomplete, several interesting findings are already emerging. For example, though each case entailed the early generosity of donors with little practical knowledge about libraries, success seems to have required the recruitment of other individuals with more of a mind for the details. And although in three of the four cases – the Carnegie program, Google Books, and the OCA – the initial leadership eventually lost interest and drifted away, the things they had already produced – library buildings worldwide, millions and millions of digital books – remained behind, providing structures and resources that simultaneously facilitated and constrained the further development of information access in their wake.

14. Soohyung Joo (184)

University of Wisconsin-Milwaukee

Title
Evaluating User-System Interactions during the Information Retrieval Process in Digital Libraries
Abstract

Introduction
This study intends to develop a multi-tiered evaluation framework for digital libraries focusing on system support for user interactions in IR processes. The product of the study will be a three layered evaluation framework for user system interactions. The evaluation framework consists of specific evaluation criteria and measures at physical, cognitive and affective levels. It assesses in what ways and to what extent a digital library supports different types of user system interactions. Here are the research questions for this study: 1) What are the types of system supports users need to apply search tactics during the IR process? In what ways does the system support users’ application of search tactics during the IR process?; 2) To what extent do digital libraries support users’ application of search tactics at three hierarchical levels—physical, cognitive and affective—during the IR process?; 3) How does system support affect IR outputs and outcomes, such as overall satisfaction, knowledge change and aspectual recall?

Conceptual Framework
A conceptual evaluation framework has been developed based on three aspects of interactive IR. First, the conceptual framework measures interactions in two aspects: how users intellectually engage in the IR process and how the system supports user engagement in applying different types of search tactics. Second, the evaluation framework assesses user engagement and system support in applying thirteen types of search tactics. Third, the evaluation framework assesses user-system interactions at three hierarchical levels.

Methodology
To answer the three research questions, a user study was designed. The study attempts to apply the evaluation framework to Library of Congress Digital Collections. Sixty student subjects will be collected from a state university. Multiple methods are used to collect the data: 1) pre-questionnaires; 2) search logs; 3) think-aloud protocols; 4) post-questionnaires. Three different types of search tasks were designed in this study: known-item search, specific information search, and subject-oriented search. Both qualitative and quantitative methods will be used for data analysis. Qualitative analysis, in particular open coding method and content analysis will be used to identify types of user engagements and system supports. Quantitative analysis, including statistical tests, will be used to analyze search tactic patterns, to measure system support, and to examine the effects of system support on IR outputs.

Preliminary Results
As of Sep 27th 2012, fifty six subjects participated in this study. This proposal summarizes some preliminary findings from the tentative analysis of those fifty-six subjects. Initial types of user engagements and corresponding system supports for each type of search tactics were identified based on open coding method. In addition, user engagement was investigated by exploring their application of search tactics. Preliminary results revealed that on average users spent the most time in evaluating individual items or search results. Query creation and exploration tactics were the two main strategies to start a search session, and evaluation tactics showed high occurrence probability throughout the session. In addition, the preliminary analysis revealed that different types of system support significantly influence knowledge increase, aspectual recall, or satisfaction to search results.
15. Nouf Khashman (249)

McGill University

**Title**
Intersections of Arab Culture and Web Interface Design

**Abstract**

**Introduction**

Based on data collected from 40 countries, the cultural anthropologist Geert Hofstede (1980) proposed four dimensions of national culture by which individual countries could be evaluated. These dimensions comprise: *Power Distance*-the extent to which the less powerful members of societies expect and accept that power is distributed unequally; *Individualism*-the extent to which individuals are integrated into groups; *Masculinity/Femininity*-assertiveness and competitiveness versus modesty and caring; and *Uncertainty Avoidance*-intolerance for uncertainty and ambiguity. A fifth dimension, *Long-Term Orientation*-the degree of future orientation-was added later in 1982 when Hofstede expanded his model to include 10 more individual countries and three regions. In these three regions Hofstede grouped together several countries based on the assumption of them having identical cultural traits. These regions are East Africa, West Africa, and the Arabic-speaking countries (Hofstede, 2001). The Arabic-speaking countries comprised Egypt, Lebanon, Libya, Kuwait, Iraq, Saudi Arabia and the United Arab Emirates. Hofstede’s model has been heavily applied in web interface research to determine how culture affects website design and usability. However, in the case of Arab countries, such an analysis can present problems. This is partly because Hofstede failed to assign comparative scores to individual countries in the three regions as he had done for the original 40 countries, a potential shortcoming followed by researchers exploring cross-cultural interface design in Arab countries. My research investigates whether the design of websites culturally vary across Arab countries, individually and as a group, using Hofstede’s model based on its interpretation in web design domain made by Marcus and Gould (2000).

**Methodology**

This research study applied the established cultural content analysis method of Barber and Badre (1998). The components in this research are the web design elements, described by Barber and Badre (1998) as “cultural markers”, which have been proven to be prevalent and possibly preferred within a particular cultural group. The organizational (page layout, symmetry), navigational (menus and links, search engines, site maps), and graphical (icons, images, colors, page customization) web design elements will be inspected in the Arabic home pages of 330 university and government websites from 17 Arab countries. The description and frequency of occurrence of each design element will be counted, converted, matched, correlated and compared to the scores of Arab countries on the cultural dimensions. These design elements will be compared within the group of seven Arab countries; within the group of the excluded countries; between these two groups; and for each individual country.

**Results**

Our previous research (Khashman & Large, 2011, 2012) indicated that Hofstede’s model of culture did not fully reflect the design characteristics of Arabic Web interfaces from these
countries as composite groups. The second part of the research that will be reported focused on comparing these countries individually rather than a group. The sites were analyzed for presence of social models (national and/or religious), restriction to access information, ability to customize the site, visitor counter, page layout (vertical vs. horizontal), menus (simple vs. complex), image animation and depiction (officials vs. citizens, individuals vs. groups, men vs. women vs. mixed), search engines, site maps, and frequently asked questions FAQ.

**Implications**
The results of this research will generate an adequate representation of Arab countries in cross-cultural interface analysis, whether they are treated individually or as a group.

**References**


Khashman, N. & Large, A. (2012). Arabic web interface design through the eyes of Hofstede. Poster presentation at the American Association for Information Science and Technology (ASIS&T) conference. Baltimore, MA.


16. Min-Chun Ku (190)

Syracuse University

**Title**
Investigating Genre-Credibility Relations in Faculty Scholars’ Teaching Tasks

**Abstract**
Faculty scholars engage in various information practices in their teaching tasks. They seek and use diverse information documents. They also make credibility assessment when they interact with documents (Rieh & Belkin, 2000) and their credibility assessment involves complex
decisions beyond just accepting or rejecting documents. They consider how to use information instantiated in a document to achieve their teaching goals. Regrettably, existing credibility research often stops once documents are selected, especially in the scholarly information-practices field.

Additionally, professional task is one of the contextual factors that determine document assessment in workplace information-seeking and use (Byström & Hansen, 2005; Freund, 2008). The genre of a document, on the other hand, is one of the clues used to differentiate among sources (Crowston & Kwaśnik, 2003). Faculty scholars’ tasks and the document genres they interact with affect the types of credibility judgments they make as well as the criteria and cues they use to make those judgments (Hilligoss and Rieh, 2008). However, previous research does not explicate the impact of tasks and document genres on faculty scholars’ perceived credibility and use of documents. Therefore, we suffer from insufficient knowledge of the mutual shaping of credibility assessment and information use practices with respect to document genres in their professional task performance.

Furthermore, certain document genres better serve certain types of information needs (Roussinov, et al., 2001). However, despite the potential benefits that the identification of document genres might contribute to searching, navigation and comprehension of information (Crowston & Kwaśnik, 2003; Rosso & Haas, 2011), researchers rarely exploit it to facilitate credibility assessment and scholarly information practices. The extant literature’s predominant focus on research tasks also necessitates more research on teaching tasks. The goal of my dissertation research has been to bridge the gaps between theories and practices through a study of genre-credibility relations in faculty scholars’ teaching tasks.

My research questions are: (1) What are the types of credibility judgments faculty scholars make about document genres in their teaching tasks? (2) What are the criteria and cues faculty scholars use to judge the credibility of document genres in their teaching tasks? (3) How do faculty scholars use the document genres they have assessed in their teaching tasks?

My study participants are selected based on theoretical sampling of three disciplines’ curricula. I use qualitative citation analysis to identify the document genres they use. I then interview them to elicit data about the types of credibility judgments they make about document genres and the criteria and cues they use to make those judgments. The interview transcripts will be inductively content analyzed according to six facets of teaching tasks. My outcome will include a systematic characterization of document genres based on my participants’ credibility assessment and information use practices in their teaching tasks. The results will allow me to develop a model that can serve as a conceptual foundation for future research on assessing and using document genres in contexts. My findings can also provide guidance to the design of information services and systems.
References


17. Chris Landbeck (199)
Florida State University

Title
Indexing Editorial Cartoons: An Exploratory Study

Abstract
While access to images in general has improved in the last 20 years, access to political cartoons lags behind access to other types of images. While there have been piecemeal or ad hoc efforts to organize large cartoon collections, these efforts have been based on the wants and needs of the
organizers, publishers, or collectors. The Library of Congress provides uneven access to the largest collection of editorial cartoons in the world. The Doonesbury collection provides access to series of strips, the New Yorker collection of cartoons is described on an ad hoc basis, and the CNN archive of political cartoons provides access only by date. Compare these to ARTstor, Corbis Images, and the Getty and the Guggenheim imagebases, and a gap in coverage, treatment, and research become evident. We know little concerning the habits and expectations of users vis-à-vis editorial cartoons; the gap in knowledge to be addressed in this study is that which exists between what we know about describing images in general and describing editorial cartoons in the specific.

This research used content analysis to derive categories of descriptors from both a tagging activity and a simulated query activity. The cartoons of the five most recent usable Pulitzer Prize-winning cartoonists were shown to participants drawn from both academic professions presumed to have an interest in the description of cartoons and from random participants. Both of the activities used a customized version of the steve.tagger software. The analysis was based on Jörgensen’s 12 Classes of image description.

Participants (N=51) were evenly split between self-identified political leaning and between genders, non-degree holders held a 3:2 margin over degree holders, and collectively left between 83 and 107 terms per cartoon for the tagging activity and between three and nine terms per cartoon for the query activity. Preliminary results show that the Class Abstract Concepts is the most often used type of descriptor in both political cartoon tagging and querying, followed by People, Objects, and Content/Story, comprising over 85% of all descriptors. Within the tagging activity, large differences in behavior were found between degree holders and non-degree holders, but not between man and women or between conservative, moderates, and liberals. In the query activity, the opposite was true: education made little difference, but gender and political leaning each showed marked differences.

These results differ greatly from those who used the same kinds of tagging and simulated query methods. In seven other studies that followed Jörgensen’s original work, the class Location was found to be in the top third of the most frequently used Classes. In this study, Abstract Concepts was the most often used, but was seldom used in the other studies. However, most studies, including this one, found that the People and the Literal Objects within an image were often used in its description or in a search for it, each placing in the top third of Class frequency in seven out of eight studies.

18. Dorian Lange (6)
University of Missouri

Title
The Republic of Korea’s Public Libraries: A Critical Examination of Censorship Practices

Abstract
Institutionally, public libraries should be dedicated to protecting and promoting intellectual freedom. Public libraries commonly protect the rights of individuals to read, write, and access information of their choosing by rejecting censorship. According to the United Nations
Educational, Scientific, and Cultural Organization (UNESCO) and the International Federation of Library Associations and Institutions (IFLA) this is a universal obligation of all public libraries, no matter their country of origin. Unfortunately, the Republic of Korea's (commonly known as ‘South Korea’ but hereafter referred to only as the ROK) public libraries practice censorship. My dissertation research sought to obtain data that described the censorship practices in ROK public libraries and to identify how and why censorship continues to occur in these organizations.

My dissertation research was collected in a public library in a major city in the ROK over a period of approximately ten months. I used a critical conceptual framework to establish a framework for my research and to provide an explanation of the position that I planned to maintain when examining my data. The critical theoretical perspective was most appropriate to my inquiry because through my research, I not only attempted to understand how censorship was being used to deny public library users’ the ability to autonomously determine their own information behaviors, but I also intended to use my data to bring attention to the problem of censorship in the ROK’s public libraries.

The methodological theory I used to obtain my data was "grounded theory". As grounded theory is essentially grounded in the data, my theory emerged after a substantial amount of data had been collected. Grounded theory requires a substantial amount of fieldwork to occur. Fifteen formal interviews and significant amounts of observation were conducted in my research setting. In using grounded theory, I was constantly analyzing, comparing, and testing my data. This constant analysis supported a continuous exploration of the phenomena. This allowed me to rigorously and continuously scrutinize the research process in an effort to obtain the richest, most comprehensive data available.

In order to properly assess the ROK’s public library censorship practices, I utilized three research questions:

- **What censorship is occurring in the ROK’s public libraries?**
- **Who is responsible for the censorship that occurs in the ROK’s public libraries?**
- **How does the censorship in public libraries inhibit the ROK’s democracy?**

Ultimately, through extensive data analysis, I was able to draw several conclusions from my research. First, extensive censorship occurs in ROK public libraries. This censorship occurs in the collection, digitally, and in the use of meeting rooms. The primary censored topics include homosexuality, sexuality (including solely educational materials), anti-government sentiments, and North Korea. Secondly, censorship occurs because of cultural constraints, misogynistic paternalistic principles, and government mandates. Third, through a substantial literature review, it was determined that censorship in the ROK’s public libraries is destructive to critical thought, participation, and weakens the structure of their democracy.

19. Laura Ruth Lenhart (197)

University of Arizona
Privacy and Property: Market-inalienable property rights and large aggregations of personal data

Abstract
My research draws on Michael Walzer’s seminal Spheres of Justice to develop a eudaimonistic approach to social policy that takes the social understandings of different goods to be important factors in the distribution of that good. In my dissertation, I use this as a framework for adapting and developing intellectual property schemas to better meet the challenges of digital culture and globalization. In particular, I argue that our intellectual property schemas and policies need to be more sensitive to the diversity of values expressed by different kinds of intellectual goods. One of the problematic aspects of standard approaches to intellectual property lies in a philosophical conception of property as a necessarily marketable good—if something is property then it can be sold. Much of Anglo-American intellectual property law is based on the idea that the author or creator is a proprietor of a commodity, whose interests must be ultimately balanced with the common good (Rose, 1994; Saunders, 1992). This poster presents research from a chapter of my dissertation that develops a property-based approach to personal information with an important and novel contribution: property rights in large aggregations of data should be market-inalienable.

Typical approaches to the protection of personal information will, for good reason, see these as issues of privacy rather than property. Yet once we have accepted a broader notion of property, it makes sense to say that privacy concerns ground a kind of property right in collections of personal information. Social and legal theorists have tended to see private property as a mechanism that allows individuals greater freedom through their ability to control things around them (cf. Waldron, 1988). Privacy concerns are typically related to issues of integrity and identity; they tend to track our need to develop ourselves away from scrutiny (cf. DeCew, 2012). However, the rise of digital culture and the information society undermines the distinction between “the things around us” and the personal information that partially constitutes our identity. I argue that there aren’t good reasons against privacy as a ground for a kind of property right, but there are good reasons to think that privacy considerations are salient in determining who should control access to personal information.

Personal information is deeply implicated in identity. Large aggregations of personal are different in nature from the bits of data that compose them (cf. Nissenbaum, 2010). Aggregated data allows profiling of a very large range of a person’s activities and preferences, and also enables others to make very accurate predictions about activities and preferences where data is not available. This information has market value because of what people want to use it for: influencing behavior. As a result, large aggregations of personal information (though not necessarily smaller collections demarcated by social understandings or specific spheres like education or healthcare) should not be commodified because they objectify persons wrongfully.

20. Jessica Lingel (208)

Rutgers University

Title
Information Tactics and Urban Spaces: Portraits of Transnational Migrants

Abstract

My dissertation investigates different kinds of mobility – technological and social as well as geographic. Research on transnationalism spans a number of disciplines, including sociology, immigration studies and urban studies, but these areas often overlook the role of information and technology. My dissertation bridges a human computer interaction interest in information and technology with a critical interest in understanding transnationalism in terms of everyday life. Key questions guiding this project include: how do transnational migrants make sense of new urban environments? What are the spatial, temporal and social dimensions of information practices among transnational migrants in unfamiliar city spaces?

To address these questions, I use an ethnomethodological approach, focusing on information practices and technological use. As a theoretical frame, I draw on de Certeau’s work on everyday life, particularly his divide of tactics (as improvised and individual) and strategies (as planned and institutional) to conceptualize the interpretive work of transnational migrants in New York City, focusing on information practices through which transnational migrants produce and organize everyday life.

My dissertation brings together the experiences of 18 transnational migrants from 17 countries. Rather than focusing on one nationality or neighborhood, I focus on information practices that emerge across divergent backgrounds and experiences. I combine a number of qualitative approaches to gather rich, complex accounts of transnational movements. In addition to interviewing participants repeatedly over the course of several months, I ask them to draw maps of their neighborhoods, and to take me on walks through city space in their daily lives. This multi-faceted approach yields rich, layered accounts of migration and urban experience.

I present my findings along three dimensions of information practices: spatial, temporal and social. First, I identify practices of wandering and boundary making as important means of becoming familiar with new urban space. These practices vary in their technological sophistication, allowing for a critique of overly narrow constructions of urban space as hyper-technological. I then turn to a consideration of familiarity as forming over time. Rather than a linear process of information gathering, practices are piecemeal and relational, meaning that transnational migrants recognize their own expertise in relation to other newcomers. The third dimension of analysis centers on social networks, specifically social media. I compare the use of Facebook and Meetup among transnational migrants to understand the affordances different social network sites, and the negotiation of frequently conflicting socio-cultural norms online.

This research contributes to scholarship on human information behavior and everyday life information practices, as well as urban studies scholarship that would benefit from an increased understanding of how not only city natives, but city strangers conceptualize urban space. There are also implications for design of social media applications looking to facilitate or enrich transnational communication and relationships, and online resources that provide acculturation resources to newcomers in a particular locale.

21. Nancy Marksbury (224)
Long Island University

**Title**
Crossing Boundaries of Gender and Culture in Computer-Mediated Communication: A Content Analysis of A Trust Game

**Abstract**
Technology makes the world a smaller place, allowing people to cross boundaries – boundaries of time and space, and boundaries introduced by cultural differences. One problem that may surface when crossing these boundaries is misunderstanding and miscommunication, particularly for virtual work teams. Past studies have reported how culture and media-type influence people’s behavior and communication. However, one factor not fully examined is how gender and culture interact in computer-mediated communication (CMC) and collaborative activities. It is our objective to investigate if and how these differences manifest in CMC in order to aid cooperation among individuals involved in remote collaborations.

In this study, 41 Chinese and 40 American students were paired cross-culturally with 4 confederates (Chinese male, Chinese female, US male and US female). Participant gender (male vs. female) and gender paring (female-female, female-male, male-female, and male-male) were counter balanced. The task was a game simulating a month-long day trading investment partnership, which was developed based on the traditional trust exercise of a prisoner’s dilemma. Instant message (IM) transcripts were coded using a traditional scheme for analyzing small group communication behaviors. High inter-coder reliability was established with a Kappa of .90. Analyses of Variance (ANOVAs) of communication code frequencies by culture and gender were performed.

Significant differences in the communication process emerge in the sociolinguistic analysis. Of cultural comparisons, U.S. participants utilized more task-related communication \(F(1, 75) = 10.32, p < .05\) and more words \(F(1, 75) = 3.83, p < .05\) than Chinese participants. Chinese participants generated more relationship-related communication codes \(F(1, 79) = 6.29, p < .01\), and more than twice as many emoticons than the US participants \(F(1, 78) = 4.62, p < .03\).

Interactions of gender pairings by culture are illuminated with post hoc analyses. American males used significantly more words in the repairing trust stage when paired with another male than in mixed pairs \(t(10) = 2.58; p < .03\). Chinese males used more relational comments when paired with females, rather than males \(t(18) = 2.19; p < .04\). Chinese females paired with males used more emoticons \(t(19) = 2.41; p < .03\) than American females when paired with males. These results provide evidence that interactions of gender and cultural differences emerge when using CMC in online collaborations. Further, the linguistic behavior exhibited by these participants was driven more by the gender of their partner rather than the participant’s own gender.

To support cooperation and collaboration among individuals in a globalized economy that is increasingly more diverse, understanding how to transcend stereotypes that affect our relations with others is essential. Particularly for intergroup communication, effects of gender and culture and the interaction on communication in work groups are important for increasing human
capacity and for designing systems that support the work of learners and communicators in synchronous and asynchronous discussions. These results may have implications for systems designers and practitioners in business, industry and education.

22. Evelyn Markwei (255)

University of British Columbia

Title
The everyday life information seeking behaviour of urban homeless youth

Abstract
Youth homelessness, or the issue of street children, is a growing phenomenon in cities across the world, including Sub-Saharan Africa. Homeless youth like all adolescents, deserve relevant information for successful transition to adulthood and for mastery of the challenges of homelessness. The pre-requisite for efficient provision of quality information services to any group is knowledge and understanding of their everyday life information seeking (ELIS) behaviour. A review of the literature reveals limited research into the ELIS of homeless youth in developed countries and none in Sub-Saharan Africa.

The main objectives of this study of homeless youth in the market area of Accra, Ghana are to investigate their information needs, sources of information, patterns and problems encountered in information seeking and to determine how libraries and other stakeholders can meet their information needs.

The study adopted the interpretive tradition and the ethnographic methodology. The field activities involved volunteering at a school for the children of homeless youth for the identification of key informants, observations at the research site and interaction with homeless youth to gain their trust, a pilot study to test data collection tools, recruitment of 41 homeless youth, comprising 22 males and 19 females, ages 15 to 18 years to participate in the study, collection of data using the critical incident technique and in-depth interviews till the point of data saturation, transcription of recorded interviews, identification of categories and themes from participant interviews through content analysis using the NVivo qualitative data analysis software.

The findings revealed eleven categories of information needs comprising physiological, safety, cognitive, esteem and self-actualization needs. Their preferred sources of information are primarily interpersonal, which is consistent with other ELIS studies such as Shenton and Dixon (2004). Other sources are television, radio, print media and libraries. Information seeking patterns include active and passive searching, passive attention, and a heavy reliance on their social network of friends.

Barriers to meeting their information needs include, cost, lack of education (especially among female participants), lack of time, lack of access to relevant information and educational infrastructure, information poverty, powerlessness, and lack of confidence.
The information seeking behaviours of this group of urban street youth conform to Chatman’s (2000) theory of normative behaviour, Chatman’s (1991) theory of gratification, that is, a first level life style and use of the mass media, and Savolainen’s (1995) concepts of ‘way of life’ and ‘mastery of life’, i.e. the purpose of their everyday life information seeking was to enable them gain mastery or have control over their lives.

The study is significant in many ways. The findings of the study increase the knowledge base and understanding of youth information seeking behaviour and ELIS of youth, especially homeless youth which is limited in the Library and Information Science Literature. They also reveal ELIS behaviour of homeless youth in an environment of limited services and information resources. They have implications for information dissemination and public library after-school programs and policies to facilitate provision of services and information resources for homeless youth in Ghana.

References


23. **Caroline Nappo (239)**

University of Illinois at Urbana-Champaign

**Title**
Desperate Times and Innovative Measures: How Scholars and Practitioners Promoted Information Technology as a Response to War and Poverty in the 1930s

**Abstract**
The social conditions that enabled information provision to expand in the 1930s seem, on the surface, extremely unfavorable. The United States and the entire global economy had plunged into a crippling depression that persisted for more than a decade. With Americans facing record unemployment, the 1930s was a time of extraordinary dearth. At a period when national unemployment would reach 25%, it would make sense that cultural programs would contract, or at best remain static, but certainly not expand. My research explores how a time of severe crisis could also be one of tremendous opportunity in library and information services, particularly with regard to information technology. Amidst a global economy verged on the brink of collapse...
and the looming threat of war, new library services were offered, the American Documentation Institute was founded, and scholars promoted nascent technologies for information organization – why? How could this be?

Thoughtful and strategic collaboration between historians, librarians, archivists, and documentalists was crucial. My research is also significant because it will more prominently situate the “I” within the “i” in library and information history, thereby demonstrating overlap and relationship between these areas. The histories of information science and librarianship, again, have often been cited as separate developments, which only began converging (reluctantly) in the 1960s with the mergers of library science programs and information science programs in universities. But again, my research suggests a need to revise the received narrative, which tells us that information scientists were the vigorous promoters of sophisticated advancements in information technology, and had to force librarians to accept and introduce more modern systems for information organization. In contrast, my proposed research will complicate this narrative, showing how librarians and allied professionals frequently implemented technological solutions to problems of organization and access in the 1930s. Technological innovation during the 1930s from a library-centric perspective is also a neglected topic. As I mentioned previously, the histories of information science and librarianship have often been cited as separate developments, which only began converging, reluctantly, in the 1960s with the mergers of library science programs and information science programs at the university level. This perceived schism clearly manifests itself historiographically, with histories of information technology covering this period typically emphasizing the role of documentalists (documentalism being the forerunner of information science) to the exclusion of librarians. This is an incomplete and inaccurate understanding of information technology in the 1930s. We have yet to fully consider how emergent information technologies were used to combat economic and political crises, and why did scholars and practitioners in library and information science see this potential?

24. Xuequn Pan (161)
University of North Texas

Title
Using a Task-based Approach to Explore How Chinese Graduate Students Search for Internet Health Information

Abstract
The purpose of the study was to examine the relationships between types of health information tasks and the Internet information search processes of Chinese graduate students at the University of North Texas. The participants' Internet information search processes were examined by looking at the source used to start the search, language selection, use of online translation tools, and time spent. In a computer classroom, 45 Chinese graduate students searched the Internet and completed three health information search tasks: factual task, interpretative task, and exploratory task. Data of the Chinese graduate students’ health
information search processes were gathered from Web browser history files, answer sheets, and questionnaires. Parametric and non-parametric statistical analyses were conducted to test the relationships between the types of tasks and variables identified in the search process. Results showed that task types only had a statistically significant impact on the time spent. For the three tasks, the majority of Chinese graduate students used search engines as major sources for the search starting point, utilized English as the primary language, and did not use online translation tools. The participants also reported difficulties in locating relevant answers and recommended ways to be assisted in the future when searching the Internet for health information. The study provided an understanding of Chinese graduate students’ health information seeking behavior with an aim to enrich health information user studies. The results of this study contribute to the areas of academic library services, multilingual health information system design, and task-based health information searching.

25. Amy Phillips (155)

Dominican University

Title
Framing the Public Library: The Public Perception of the Public Library in the Media

Abstract
This study was designed to investigate the public perception of the public library. The study used framing as created by Goffman and applied by media studies for its theoretical framework. The study sought to examine how the public’s framing of issues around local library campaigns reflected the public’s perception and opinion of the library. The study surveyed examined the frames that emerged in editorial newspapers texts written in conjunction with local library funding campaign between 2005-2010. To study the framing process in the editorial newspaper texts, constructionist discourse analysis was used as the study’s methodology.

There were several findings from this study the revealed how the public’s discourse created frames revealing their opinions about the public library. The study identified the top frames about public libraries that the public constructed in response to local public library funding campaigns. It investigated the correlation between frames and the results of the library funding campaigns. It explored regional and population differences between the frames. It examined how this study’s results compared with past organizational and academic research. The study’s implications provided ways for the library profession to apply framing to influence the public perception of the public library.

26. Angela Pollak (141)

University of Western Ontario

Title
“We didn’t know we were poor": How Living with Less is an Information Rich Activity
Abstract
Context and Purpose
Minimalism is a philosophy that values living with less; choosing low-cost, low-impact alternatives over expensive, materialistic options. People tend to embrace minimalist lifestyles by two methods: one driven by too many choices; the other driven by too few (Chin 2006).

The ‘many choice’ method sees people voluntarily trade consumeristic lifestyles for what they hope will be less complicated, more meaningful lives. Although minimalism takes many forms, popular minimalist practices carry familiar, marketable labels, including simple living, downward mobility, voluntary simplicity, the 100-item challenge, and do-it-yourself (DIY), just to name a few. Successful minimalism-by-choice necessitates being well informed on a variety of economic, philosophic, social and environmental agendas.

The ‘few choice’ method sees people living in rural areas, often for generations, because they may not have the desire, the means, or the opportunity to live a more consumptive lifestyle. Populations living rurally by chance of birth appear, superficially, to exist in this manner due to socio-economic disadvantage (Federation of Canadian Municipalities 2006), resulting in labels that are generally far less trendy, including poor, cheap, thrifty, frugal, practical, and economical. Yet, sustaining this minimalist lifestyle requires one to learn many creative ways of ‘making do’.

Although less is frequently viewed as poor, the minimalist lifestyle example suggests that this relationship may be somewhat misleading in this context, particularly with respect to information skills and behaviors. This poster explores the phenomenon of minimalism in the remote, rural northern Ontario village of Whitney, Ontario and the Highway 60 corridor of Algonquin Park, and describes the various information behaviors found in this context. Can people who ‘live with less’ in this environment also be described as information poor?

Theoretical Framework
This poster builds on previous LIS research in the areas of information poverty, marginalized populations, and everyday life information seeking behaviors.

The study of “information poverty” in Library and Information Science dates back to the early 1970s (Thompson 2007). Often contextualized in terms of the degree to which different populations have access to information technology resources (Hersberger 2003), it has also been examined in terms of behavioral and cultural factors as well (Childers and Post 1975). Elfreda Chatman’s studies into the everyday life information worlds of marginalized peoples (Chatman 1991; Chatman 1992; Chatman 1996; Chatman 1999) offer insight into the information behaviors of isolated populations. Finally, Savolainen’s studies of everyday life information seeking behaviors (Savolainen 2008; Savolainen 2005) and way of life (Savolainen 1995) also inform the theoretical framework.

Methodology and research methods
For my doctoral research project, I use qualitative, ethnographic methods of inquiry such as photo-voice and semi-structured interviews to explore how experience in everyday life becomes information. Data are analyzed according to grounded theory using the constant comparative
method, whereby “incidents that are found to be conceptually similar” are given “the same conceptual label” until each emerging theme is fully elaborated (Corbin and Strauss 2008).

This poster presents a subset of findings from this research project. Interview data are compared to published autobiographical data to reveal an everyday life resplendent with information behaviors and skills, many of which revolve around finding creative, resourceful, self-sufficient and low-cost solutions to everyday information needs.

**Emerging results**
Although the geographic isolation of the study area limits access to many resources people in urban environments take for granted, results suggest that people who live here – both by choice and by chance – exhibit vibrant and varied experience-based information skills.

**References**


27. Sarah T. Roberts (196)

University of Illinois at Urbana-Champaign

**Title**

Behind the Screen: The Hidden Digital Labor of Online Content Moderation

**Abstract**

The little-known and frequently hidden digital labor practice of online content moderation, or screening of user-generated content before it is posted to social media sites, is not, as many would assume, a machine process – particularly when it involves video content. Instead, it is often performed by contract, semi-permanent or temporary workers in low-wage, low-status environments. The work tasks vacillate from the mind-numbingly repetitive and mundane to exposure to images and material that can be violent, disturbing and, at worst, psychologically damaging. “Behind the Screen: The Hidden Digital Labor of Online Content Moderation” employs semi-structured interviews and qualitative analysis that document the work-life experiences of several current and former content moderation workers, contextualizing these informational work practices both theoretically and practically. The practices and workers’ experiences are then further mapped in the context of contemporary trends of globalization, outsourcing and other economic geospatial reconfigurations, themselves facilitated by the networked digital information world and predicated on new labor arrangements that transcend traditional barriers of space and time. The research engages with topics of information access, economics and ethics in social media, connects video content moderation on theoretical grounds...
to other scholarly work on digital labor, and sites it in the greater context of the ecology of social media to the end of recognizing, acknowledging and improving the conditions under which the workers toil. The work further elucidates an important part of the digital information production chain that is almost always unseen and rarely acknowledged, and responds to collective notions of participatory media that may underestimate the costs – financial and human – to use said media. Outcomes from this research have the potential to shape regulatory and access policy for workers and social media platforms, as well as provide theoretical contributions expanding current understandings of digital labor in the contemporary information society.

28. Deborah W. Sandford (152)

Georgia State University

Title
Construction of Professional Identity Among Novice Library Media Specialists

Abstract
The purpose of this naturalistic study informed by narrative inquiry was to explore the factors that influence novice (first year) school library media specialists’ (LMSs) professional identity construction as they transitioned from pre-service to practice. For the purposes of this study identity is defined as how one sees him/herself in any given context at a certain moment in time. How LMSs describe themselves in their professional role and how their identities change from pre-service to in-service are topics rarely investigated. Using Holland, Lachicotte, Skinner, and Cain’s (1998) theory of identity and their concept of figured worlds, this study explores how four novice LMSs negotiated the identities made available to them in the figured worlds of their public K12 school environments.

The confusion and ambiguity that surrounds the roles of LMSs among educational stakeholders often creates a setting where novice LMSs struggle with constructing a professional identity. Although the struggle to negotiate their positions in public K12 education is not new, the “identity crisis” that the profession suffers seems to have reached a critical point due to changes in learning environments in the U.S. brought about by federal legislation, the implementation of standards-based teaching, the emphasis on standardized criterion referenced testing, and the proliferation and ubiquitous use of computers and the Internet as information sources. These monumental changes, having begun during the last decade of the 20th century and continuing into the present, are unprecedented in their effects on K12 education as a whole and the school library media profession in particular.

The objective of this research is to examine novice LMSs’ perceptions of the evolution of their identities as they transition from preservice to in-service. The following questions guided the study:

Guiding Questions
1. How do novice LMSs describe their professional identities?
2. How does personal history inform the construction of LMSs’ professional identity?
3. How do novice LMSs negotiate identity within the figured worlds of school
library practice in public K12 schools?

The four participants were first year LMSs recruited from a large urban school district in the
southeastern United States. Data collection took place over the course of the 2011-2012 school
year and included in-depth interviews, document analysis, journal responses, and observations.
Preliminary conclusions indicate that the figured worlds in which novice library media
practitioners begin their careers are often shaped by the experiences that faculty, administrators,
and students have had with previous LMSs and bear significance influence on the identities
afforded new LMSs.

Developing an understanding of the ways in which new LMSs construct their professional
identities will inform LMS preparation, induction, and mentoring programs and will also help the
field and its practitioners redefine themselves in ways that encourage the evolution of the work.

29. Ingbert Schmidt (244)

University of Illinois at Urbana Champaign

Title
Document & Knowledge Reincarnation in a Bumblebee Organization

Abstract
What happens when organizational knowledge is lost? Preliminary findings from an empirical
study of the social use of documents for knowledge communication indicate that there are certain
organizational factors that allow the regeneration of some kinds of knowledge. These factors
include organizational values, goals, task structures, and task requirements.

These are some of the findings from a study of knowledge communication practices that focused
on the functional role documents play. A union for graduate student employees was selected as
the research site because it has extremely high turnover, it has a strong emphasis on document
creation and archiving, and the organization always seems on the brink of falling apart as
knowledge of core skills and organizational memory are constantly being lost. Yet it manages to
be extremely successful, not only in performing its core functions, but also in using the same
strategies in response to the same issues with the same successful outcomes despite a 10 year gap
in knowledge. We might call it a “bumble-bee organization”: it seems like it should not be able
to fly, yet it flies extremely well.

The study involves participant observation, interviews, and document analysis as the three major
forms of data collection. While the method is strongly inspired by ethnography and the multi-
method approach it takes to data collection (Duneier 1999), the analysis technique is more
inspired by design methods like design ethnography and rapid ethnography (Millen 2000). The
purpose of the analysis is to understand how documents are used to communicate knowledge,
especially when they are used socially.
To examine how lost knowledge is reincarnated, this poster focuses on documents that were recreated when there has been a discontinuity in organizational knowledge. Preliminary results indicate that there are a number of different ways in which knowledge is reincarnated in these documents.

One case is documents created to facilitate particular tasks, for example phone scripts for phonebanking. Designing these scripts requires striking a sophisticated balance between conveying information and keeping the phone contact quick and simple. This skill seems to be lost every three years in the lull between bargaining cycles, despite the fact that old scripts are kept in the union’s archive. Instead, they are developed anew from people’s experience phonebanking, and from the consistency of the goals: because a few members remember the goals of phonebanking, the rest of the activity can be re-created.

Another case is documents created for solidarity work. Certain kinds of solidarity activities consistently prove controversial, and are revisited by the Executive Committee (EC) about once a year. Yet though the EC has almost entirely different people each year, the discussions are surprisingly consistent, because they result out of a fundamental conflict in the guiding values of the organization. In fact, these discussions are one of the most important ways in which the organization’s values are transmitted and remain consistent in spirit.

These cases are examples. They and others will be explored more fully in the poster itself.

Works Cited

30. Laura Sheble (243)

University of North Carolina, Chapel Hill

Title
Research Synthesis: Diffusion, Adaptations, and Impact

Abstract
Research synthesis, also called systematic review or meta-analysis, is a family of research methods that incorporate transparent and systematic techniques to analyze and report research studies with the goal of generating new knowledge or interpretations. This family of methods changed approaches to research integration within and at the boundaries of many fields of science following its emergence in psychology and education in the 1970s (Chalmers, Hedges, & Cooper, 2002). Beginning in the 1990s, research synthesis became associated with the evidence-based practice movement, and has since, in association with the randomized control trial, become
central to clinical medicine research. In other fields, the intensity of use and impact of research synthesis methods varies (Grant & Booth, 2009), though the extent of its use and how it varies is unclear due to a lack of systematic comparative studies across research fields. Knowledge of how and to what extent research synthesis is used within and across science is essential because use of these methods requires advanced information skills and services, impacts bibliometric features of research literature aggregations, and in some cases, may change how researchers select and interact with research study reports.

The overall study investigates the diffusion of research synthesis across science fields; adaptation of research synthesis within a select set of diverse fields; and the impact, or consequences of diffusion, within this smaller set of fields based on comparisons of researcher use of research synthesis versus traditional literature reviews. At the macro level, longitudinal bibliometric methods are used to describe and visualize the diffusion of research synthesis across fields, and also inform selection of fields for further investigation. At the field level, content of research synthesis publications is analyzed to describe use and adaptations over time. The impact of the use of the methods at the field level is investigated with comparative bibliometric methods. This poster focuses on study design, data identification and processing, and selected results of the macro-level stage.

123,881 unique records for items published between 1972 and 2011 were collected from the Science and Social Science Citation Indexes through a combination of keyword and cited reference queries. Analysis of records retrieved with keyword versus cited reference searches suggests that the combination of search strategies compensates for the lack of indexed abstracts prior to the 1990s, which can be problematic for longitudinal studies. When and to what extent research synthesis has been adopted differs substantially across science fields. While modern research synthesis methods were pioneered in the 1970’s, interest in the methods increased dramatically in the 1990s. Adoption continued through the 2000s, though physical science and technology fields have been more resistant to document-based research synthesis methods, and in some cases, use is negligible – if it exists at all.

This study provides novel information about the diffusion and use of document-intensive research synthesis methods; adds to diffusion of innovation research in information and library science and related to research methods; and examines differences in the construction of methods in field-specific contexts. Information pertinent to practitioners and researchers, such as field-specific information resource search strategies and use is also revealed in this multi-level study.

References


31. Miriam Sweeney (165)
Title
Servants of Cyberspace: A Critical Analysis of Microsoft's 'Ms. Dewey'

Abstract
This project uses content analysis, critical discourse analysis, and visual methods to analyze the representation, performance, and reception of Microsoft’s “Ms.Dewey.” This project frames Ms. Dewey as an anthropomorphized virtual agent and interrogates how her representation as an information provider interplays with hegemonic narratives of labor, race, and gender.

Ms. Dewey is the anthropomorphized virtual agent featured in Microsoft’s 2006 viral marketing campaign by the same name. The campaign consisted of a sleek flash interface for Microsoft’s Live Search search-engine and featured interactive film clips of actress Janina Gavankar. Gavankar depicts a sexy librarian or corporate assistant avatar in a sleek, urban office setting who responds to users’ search queries by playing back one of 600 pre-filmed discrete responses that are linked to millions of search terms for the interface.

For the purposes of this project, Ms. Dewey is characterized as an anthropomorphized virtual agent, or a computer program designed with human features, characteristics, or personality traits. The anthropomorphization of virtual agents relies heavily on the application of metaphor to contextualize and frame interactions. In other words, anthropomorphization is a tool that repurposes human skill sets for sociability for the translation of otherwise foreign interactions with computer agents into more familiar social interactions.

Embedding human traits and characteristics in virtual agents is commonly positioned as a neutral design strategy, reducing gender and race to design variables to be configured and optimized for user experience. This view obscures how race and gender function as systems of power that structure access to social and economic resources. The concept of “humanness” is strongly mediated by social power structures such as gender and race, thus the processes of anthropomorphization and personification implicitly draw on hegemonic social identity narratives that are embedded in the design and use of these programs.

Virtual agents such as Microsoft’s “Ms. Dewey” often-replicate information service functions and roles similar to those of librarians, call center operators, and personal assistants. These sectors of information work have historically been feminized, low-waged, and low status. This project demonstrates that stereotypes about information service workers, women, and people of color remain central to the representation of anthropomorphized virtual agents, and explores broader implications for using gendered/sexualized/raced agents as information science artifacts.

32. Katherine Thornton (256)

University of Washington

Title
Browsing Wikipedia: Information Structures that Support Content Exploration
Abstract

The experience of browsing Wikipedia can be so all-consuming that people colloquially invoke the trope of Alice’s fall down into the rabbit hole when they recount a session of Wikipedia surfing. They tell of sessions that could have started with a question about the USS North Carolina and ended several hours later on the page for phylum Echinodermata. In addition to the search function of Wikipedia, and the network of hyperlinks between articles, the Wikipedia community has created several information structures that support navigation. Framed against the backdrop of the theories of classification, and the discipline of information organization, this dissertation will address the spectrum of types of information structures that support navigation and browsing in Wikipedia, and will seek to understand the plurality of strategies the Wikipedia community leverages in order to organize information in Wikipedia.

Wikipedia is an online encyclopedia created entirely of user-generated content. Roughly two years after Wikipedia began, the community decided to create a category system to organize and tag the content of the site (Voss 2006). The category system has changed over time, as have conceptualizations of what role it should serve in Wikipedia. The category system was proposed, designed and implemented entirely by members of the Wikipedia community. Any Wikipedia editor has the ability to apply category labels to pages, to remove category labels to pages, to create new categories, and to suggest categories to be considered by the group for deletion.

Discussion of the category system takes place on the talk page for ‘Categorization’. Talk pages in Wikipedia are pages, which are associated with other pages, where editors can leave comments that are publicly visible in order to discuss issues related to the original page. Each article in Wikipedia, for example, has an associated talk page where editors discuss content, propose changes, explain decisions they have made about how the page should look or what the page should contain, etc.

The fact that discussion about the design and implementation of the category system has been archived within the Wikipedia site presents an opportunity to read the comments editors made throughout this process, and to understand how the category system came to be in its current form.

The research questions I pose in this project are:
1. What do Wikipedians feel the purpose of the category system is?
2. How do Wikipedians use the category system?
3. Does the category system of Wikipedia meet the needs of the community [for browsing]?
4. Does the community have any concerns or issues with the category system?
5. What is the role of the category system when considered among other information structures for browsing in Wikipedia?

I anticipate several contributions from this work. This will be the first history of the category system of Wikipedia. By discussing this history in the context of classification theory and information organization, I will be describing the purpose and nature of information organization efforts in a large-scale digital system, a necessary expansion of the knowledge in the information organization area.
Title
Empirical Studies of Image Describing and Searching Behaviors for Medical Image Users

Abstract
Researchers in the field of image indexing and retrieval face a crucial question -- how to design and develop efficient and effective systems that meet real users’ requirements by supporting them with advanced indexing and retrieval functions and options for user interaction. Previous literature indicates that two fundamental issues need more investigation: 1) How do users represent non-textual information needs? 2) How do image searchers interact with image information systems (IR) to obtain non-textual materials? To address these issues, this dissertation research carried out two sequential studies, which investigated how medical image users represented their image information needs and searched images with different search tactics. The Mental Models Theory was chosen as a theoretical framework for this research. This theory laid a theoretical foundation for the expert-intermediate-novice comparison research design of this dissertation.

The first study aimed to establish an efficient, robust, and user-centered medical image indexing procedure. In this study, the effect of domain knowledge was the independent variable, and was measured operationally by the credentials and experiences of participants in the field of Radiography (novice, intermediate, and expert). Forty-one participants in the field of Radiology were recruited. The dependent variables were the frequency of image attributes at the syntactic and semantic levels. The data collection resulted in 246 medical image descriptions provided by the study participants. Multiple methods of statistical analyses produced the following important findings about how novice and expert users describe images during search process:

1. Experts employed significantly more high-level image attributes (e.g., those requiring high-reasoning or diagnostic knowledge) to search for a medical image;
2. Novices were more likely to describe some basic objects (e.g., objects that do not require much radiological knowledge) when searching for an image;

The second study focused on the use of search tactics unique to medical image information. The study was designed to address how domain knowledge interacts with search task to influence the use of search tactics and search performance of medical image searchers. Some of the key findings are:

1. In comparison to either intermediates or novices the experts relied significantly more on the following search tactics: using newly-generated queries, spending longer time reading instructions in preparation for searching, browsing more screens of search results, carefully examining more enlarged images, and using more frequently limiting devices of a search engine to narrow down search results.
2. Novices relied most often on the re-read instruction tactic and least often on examining enlarged images and refining search tactics. This suggested that novices were unable to interpret/evaluate an image.

The contribution of these studies is: these findings are beneficial for the creation of adaptive and supportive tool sets that are appropriate for different image user groups. Additionally, this study is informative to the medical library community. Few librarians have received formal training to help users to locate image resources. The knowledge about users’ image searching behaviors enables medical librarians to design better training activities to help users establish more accurate and complete mental models about various image retrieval systems.

34. Ji Yeon Yang (216)

University of Michigan

Title
A Dyadic Approach to Understanding Information Mediation in the Workplace

Abstract
To accomplish daily tasks, organizational workers often consult their colleagues for advice on how to find or use information. Those colleagues serve as information mediators by intervening in the information seeking of others. In the process of information mediation, one’s perspective or judgment of information credibility may transfer to the other, influencing their subsequent information behavior. Taking a dyadic approach, my dissertation research investigates how workers initiate the information mediation process, how the process influences their subsequent information behavior, and how they benefit from the process, from the perspectives of both the information seeker and the information mediator. The dynamics in information mediation in the workplace deserve further research as organizations increasingly adopt social media to facilitate knowledge sharing between employees.

The research questions driving this study are:
(1) How and with what intentions do workers enter into the information mediation process?
(2) What factors affect how they perceive the credibility of advice shared during the process of information mediation?
(3) How does the information mediation process influence their subsequent information behavior?
   a. How do the trustworthiness of information mediators and the credibility of their advice affect information seekers’ acceptance and implementation of the advice?
   b. How do the information seekers’ reactions to the advice in turn affect the perspectives of information mediators?
(4) What are the positive and negative values that result from the information mediation process?

These questions require capturing naturalistic, in-the-moment experiences of both information seekers and mediators, as well as collecting in-depth narratives of those experiences. I therefore conducted a multi-method study including a two-week long online diary survey followed by
semi-structured interviews at an R&D department of a Fortune 500 manufacturing company. In the first phase, each participant was asked to record advice-receiving experiences for one week and advice-providing experiences for the other week. In order to control any order effect, about half of the participants started with advice-receiving diaries, while the rest started with advice-providing diaries. The diaries were designed to collect contextual data regarding the information mediation events and included open-ended, Likert-type, and multiple-choice questions. The interviews were conducted to obtain qualitative data on their intentions, trust perceptions, and influences associated with the information mediation experience. As a part of the interview, participants were asked to provide a diagrammic representation of their relationship with the individuals they reported in the diary using the bull’s eye method. This method was useful for the participants to recount their memories.

Preliminary data analysis reveals the following: the importance of understanding credibility and value perceptions of both information seekers and mediators, the evolving nature of information mediation as it occurs multiple times involving multiple people, and the reciprocal influence between information seekers and mediators.

This study would contribute to developing a theoretical framework for understanding dual perspectives of information mediation at work. The insights gained from the study would also contribute to practical guidelines for organizations on how to promote intra-organizational communication and inform the design and implementation of social media to support the information mediation process.

35. Zhen Yue (215)
University of Pittsburgh

Title
Investigating Search Tactics in Collaborative Exploratory Web Search

Abstract
Information seeking process is an important research topic in information seeking behavior. Investigations on search processes can either be macro-level or micro-level. The macro-level investigation focuses on establishing theoretical models while micro-level investigation focuses on the user actions. In this paper, we proposed using search tactics as means of examining search processes in collaborative exploratory search, which can be seen as a middle layer between the macro-level and micro-level. I reported a user study in which participants worked on exploratory Web search tasks using my CollabSearch system under two conditions: collaborative (COL) and individual (IND). Two methods are used to model search tactics in the exploratory search process—action pairs and Hidden Markov Model (HMM).

Considering that a single action do not have the context information, an action pair method adds local context information to the given action. However, the same action pair can also occur under different tactics. Therefore, I also proposed an automatic technique and explicitly model the latent search tactics using a Hidden Markov Model. It is a unified model that can bridge actions with search tactics. By applying the HMM model, the action sequence is transformed into the
sequence of hidden tactics, and each action is emitted by one hidden state (tactic). HMM results show that the identified usage patterns of individual information seeking behaviors are consistent with Marchionini’s Information seeking process model. With the advantages of showing the connections between search tactics and search actions, and the transitions among search tactics, we argue that Hidden Markov Model is a useful tool to investigate information seeking process.

By identifying HMM as a valid method to investigate information seeking process, I then apply it to reveal insights on the differences between search tactics in IND and COL conditions. We found that having or not having collaboration and having different collaboration styles do affect users’ search actions. Issuing queries, viewing and collecting results are categorized as actions directly related to search. The rest actions such as chat and workspace are categorized as supportive search actions. In COL, more than half of the actions are related to supportive search action pairs. And the supportive search actions are embedded in the direct search actions, especially the query formulation process. Participants in COL have fewer actions related to querying and collecting relevant information than participants in IND. However, pre-query analysis demonstrates the possible benefit of supportive search actions such as explicit communication in COL condition on helping users to generate queries.

There are two major contributions of this dissertation work. The first contribution is that I propose a new method for analyzing information seeking process which can serve as the middle layer between macro-level and micro-level investigations on search processes. The second contribution is a model of search tactics in collaborative exploratory Web search describing the collaborative search process and findings on how it is different from the individual exploratory search process.