Integrating Informatics in Humanities Activities and Research

Stephen Paling  
University of Wisconsin-Madison  
Madison, Wisconsin, U.S.A.  
paling@wisc.edu

Sarah Buchanan  
University of California, Los Angeles  
Los Angeles, California, U.S.A.  
sarahab@ucla.edu

Catherine Larkin  
Long Island University  
Brookville, New York, U.S.A.  
clarkin@liu.edu

ABSTRACT
This blended theoretical and application-oriented panel will focus on the technologies, metadata standards, and professional tools useful in facilitating humanities activities and research for scholarly and general audiences. Humanities projects are currently being developed with new technical components which enhance overall scholarly use and relevance in this digital era. While digital library and collection projects have been developed on an individual and institutional level, work remains to be done in the area of broad pedagogical goals and community-driven expectations. Characteristics of the humanities disciplines - including the visual arts, history, and literature - will be analyzed with a focus on contextualizing those areas most applicable for digital activity modules and learning activities. This panel would consider how recent advances in digital humanities scholarship can align with ASIS&T members' expertise in interface design, retrieval, and users' information-seeking behavior. Activities related to the description of study objects including cataloging and subject alignment will be assessed and interrogated. Building on the concepts introduced at a 2008 AM panel discussion (http://www.asis.org/Conferences/AM08/papers/45.html), this panel will feature presenters' work toward bringing humane information resources both digitized and born-digital to web-based portals, and will advance a community-based information needs appraisal. An analysis of how the digital humanities can further support SIG-Arts & Humanities members' endeavors and research initiatives in a professional capacity will also be presented.

Keywords
Research informatics, research pedagogy, cataloging, social informatics, digital humanities, arts community, humanities computing.

INTRODUCTION
We conceptualize arts and humanities information seekers as a community, and study the use of information and technology by community members. Perspectives of resource creators and users are contextualized by the scope and disciplinary relevance of certain electronic resources. Examples of digitally available research resources include library catalog records, image and text retrieval systems, original artworks, and special collections exhibits. Within the visual arts, research will be presented which documents the relative satisfaction with electronic and print resources in a novel schema and technique. Historical subject resources which have been collected and descriptively cataloged have demonstrable research potential when delivered online. The organization of literary works is re-assessed in light of two theoretical paradigms. Through analysis of these research tools and interactive activities, we develop a picture of current and future pedagogies which may be unique to the arts and humanities communities.

A Study of Information-Seeking Behaviors and Processes in Subsets of Visual Arts Humanities Scholars: Toward a New Model in Image and Text Retrieval

Research was directed at achieving an understanding of the complex processes involved in the information-seeking behaviors of subsets of visual arts humanities scholars and developing an information-seeking model in image and text retrieval for the domain. At the core of this study is the perception that overall there had been an extraordinary deficiency and lack of progress in understanding and addressing specific domain needs. Although former studies raised important questions about the idiosyncratic information-seeking behaviors and processes of visual arts humanities scholars and their methodologies, a current understanding is necessary to document persistent and distinctive information requirements within the population, to note changes over time, and to determine the extent to which technology has impacted the information-seeking experience within the domain.

The techniques used to gather data included a self-administered questionnaire adapted from previous studies (Stam, 1984; Bates et al, 1995; Cobbledick, 1996; Rose,
which was used to query subsets of visual arts humanities scholars from three academic institutions on demographic information, their use of information resources and their approaches to locating information; an interactive survey instrument using both Web-based and academic image and text retrieval systems to examine user satisfaction and frustration among subsets; audio recorded think-aloud protocol to gather experiential data during the implementation of the interactive survey, coded to identify frequencies of various elements of Larkin’s adapted schema (Yang, 2003); and an Information Horizon graphical representation technique (Sonnenwald, 2005) used to enable participants to report on their individual information sources, thus capturing data that could be lost by traditional methods such as questionnaires or surveys.

It was proposed for this research that along with our limited understanding about how members of the visual arts community seek and use both imagery and textual information vital for scholarly investigations in their domain, the proliferation of electronic images and texts have become a source of encouragement as well as unease for these scholars. In contrast to most other disciplines, visual arts scholars who are increasingly reliant upon electronic sources (especially images) remain intimidated by technology and question the prospect of accessing electronically many of the documents necessary to accomplish their unique research agendas.

The findings of this study identified a domain in flux, with traditional methodologies still intact, a significant change in the volume of use of electronic resources, and evidence of a more social working environment. For example, there were significant Pearson’s correlations found in regards to senior participants and a number of traditional resources, such as an art slide collection and traveling to see original works, yet there was no significant difference regarding regard or experience with computer use for research or Internet use in general. Overall, reactions to electronic academic resources were negative due to a lack of familiarity with these more complicated systems. Larkin’s (2010) Ecological Information-Seeking Model devised for this study, offers a conceptual visual aid and an alternative framework that can accommodate future dynamic shifts in information-seeking in the visual arts.

**Reconsidering the Organization of Literary Works: Is It Time for a New Paradigm?**

The organization of literary works has often been problematic. Many literary works lack the clear topics to which we can assign traditional subject headings, and library classification schemes often provide only general groupings, e.g., by broad historical period. There has been some effort (e.g., Beghtol, 1994) to produce alternative groupings, e.g., by broad historical periods. However, there has been no significant effort to produce new paradigms for organizing literary works, and no system has been consistently deployed. This part of the panel asks two questions:

- Is it time to reject traditional cataloging as the dominant paradigm for organizing literary works in libraries?
- What might a new paradigm for organizing literary works look like?

This part of the panel will look at two broad paradigms, social informatics and fuzzy sets, that, taken together, suggest new ways of looking at the organization of literary works. It will incorporate data from two studies currently in progress.

Social informatics (Kling, 1999), the study of the social impact of computing, provides a theoretical model for looking at genres as social structures. Rather than seeing...
genres as defined by generic characteristics of works, we can see literary works as being embedded in a social network. This suggests that metadata describing the social relationships that make up a genre may be more useful than the tools of traditional cataloging.

Fuzzy sets (Zadeh, 1965) provide a theoretical model for examining whether literary works are as amenable as nonliterary works to being placed in indexical relationships, i.e., whether it can be usefully pointed to by subject terms. The evidence suggests that literary works as indeed not as amenable to these relationships as nonliterary works are.

Taken together the evidence from the research studies in progress suggests a possible new paradigm for organizing literary works in which those works are described as being embedded in a social network. The information for the new elements that would make up the new metadata paradigm is easily available and easy to describe.

**PANEL FORMAT AND STRATEGY**
The panel will be introduced by the moderator, who will provide an outline of the discussion and identify the fellow two panelists and topics. Panelists will address theoretical commonalities and observations alongside disciplinary examples within 15-20 minutes each. During the final third of the panel, specific topics will be problematized by the moderator, who will invite participatory discussion from session attendees. Attendees will be encouraged to contribute comments both during and proceeding the presentations.

**ANTICIPATED AUDIENCE**
Members and non-members of ASIS&T who have a scholarly and/or general interest in computing activities as applied within the arts and humanities, broadly defined, may find one or more topics applicable to their work. SIG-Arts & Humanities, SIG-Social Informatics, SIG-Visualization, Images & Sound, SIG-Digital Libraries, SIG-Human Computer Interaction, and SIG-Library Technologies members may find this panel of interest. We propose inclusion as a classic panel in Track 6 – Information in Context: Economic, Social, and Policy Perspectives, as evidenced by discussion of community usages and social informatics.

**PANELIST BIOGRAPHIES AND POSITION STATEMENTS**

**Stephen Paling (moderator, co-organizer)**
Stephen Paling is an Assistant Professor in the School of Library and Information Studies at the University of Wisconsin-Madison.

**Position Statement**: Social informatics provides a valuable theoretical framework that we can use to productively re-examine foundational ideas in our field, e.g. the idea that the traditional cataloging paradigm is well-suited to all types of works. Fuzzy sets provide a complementary set of tools for examining different types of texts and their amenability to traditional subject analysis.

**Sarah Buchanan (co-organizer)**
Sarah Buchanan is a cataloger of rare books and archival materials at the University of California, Los Angeles.

**Position Statement**: Collection stewards can enhance the tools for examining different types of texts and their types of works the traditional cataloging paradigm is well suited to all types of works. Fuzzy sets provide a complementary set of tools for examining different types of texts and their amenability to traditional subject analysis.

**Catherine Larkin**
Catherine Larkin is an Assistant Professor in the B. Davis Schwartz Memorial Library at Long Island University where she serves as Digital Initiatives and Art Image Librarian. She also teaches undergraduate and graduate students in the Art History Program at Long Island University’s C. W. Post Campus.

**Position Statement**: Information retrieval (IR) in the visual arts is a compelling topic because of its collective necessity for image and text research materials. However, in today’s image laden environment, this topic, broadly characterized, has applications across many disciplines. Unlike former domain studies, it is most likely the first wide-ranging examination of the use of both traditional and electronic IR resources and first to offer an emerging model in image and text retrieval for the visual arts.

**REFERENCES**


