The Information Behavior of Scholars in the Humanities and Social Sciences

Team 2

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The information behavior (IB) of scholars has long provided a fruitful area of inquiry within library and information science research. Over decades of investigation, researchers have identified and analyzed the major IB attributes of this group. Drawing on this literature and our own fieldwork, we attempted to understand the general IB characteristics of scholars in both the humanities and social sciences, and determine their similarities and differences, if any.

Literature Review

After reviewing major works in the field by Chu (1999), Cole (1998), Stone (1982), Ellis (1993), Slater (1988) and others, we focused on four articles we felt illuminated central IB characteristics of scholars as they vary across the humanities and social sciences. The scope of these articles ranges from broad examinations of IB characteristics in the humanities and social sciences, to a closer investigation of interdisciplinary issues and global perspectives.

Rebecca Watson-Boone's (1994) review of the literature on the IB of humanities scholars provides a good overview of the information needs and habits of humanists before the widespread use of the Internet. Drawing on 16 studies published between 1983 and 1992, Watson-Boone identifies the following major characteristics of humanists' IB. Scholars in the humanities tend to work alone, and personal interpretation of material is central to their work. Humanists use a wide variety of materials in their work, primarily monographs, and rarely consult general bibliographic works, indexes, and other secondary services. Instead they track down primary materials by following references in other works and by sometimes consulting colleagues. They often consult archivists and special librarians, but rarely use general reference librarians. In contrast to earlier findings by Stone, Watson-Boone argued that humanists "graze" within texts and their colleagues' minds, rather than "browse" through collections, shelves, or catalogs. Watson-Boone also differs from many authors in her discussion about technology and user education. Rather than providing more training on online catalogs and databases, librarians might better support humanities scholars by asking them directly about their needs and changing the tools to fit those needs.

A 1989 study by Mary Folster, surveying University of Wisconsin-Madison faculty and students in four social science disciplines, provides a general overview of social scientists' IB. Folster found that journals continued to be the leading source of information used by social scientists, and showed that this was true for both students and faculty. Folster's findings indicated that the next most popular sources of information for faculty and graduate students (post-prelim) were locating citations, referring to one's personal library, and consulting colleagues in one's own department. Consulting a known expert or reference librarian were sources of information that fell much further down the list of priorities, ranking 11th and 12th for faculty and even lower for post-prelim students. Browsing library shelves was even less popular than using a librarian.

The increasing growth of interdisciplinary study among scholars has prompted LIS researchers to explore their unique information needs and search techniques. Using qualitative data obtained from 215 questionnaires, Lynn Westbrook (2003) sought to answer the questions surrounding the library use, support, and strategies experienced by women's studies (WS) faculty. Interdisciplinary scholars deal with a high degree of scatter in their work, meaning they require information from a broad array of disciplines in order to answer pertinent research questions. A common complaint that appeared in the study was the vast amount of information in the field and the time needed to "keep up with it." Common sources of information used were books, journals, government documents, people networks, databases, Internet, media, and archival material. WS scholars identified multiple search strategies such as alert services, tracing citations, browsing, building a personal collection, and developing a personal network. The most essential implication of Westbrook's study was the need to design a series of filters for scholars attempting to identify and understand issues in a variety of fields.

Providing a more global perspective, Hannah Francis' 2005 study of the IB of social scientists surveyed social science faculty at a university in the West Indies. She discovered that their IB is very similar to that of social scientists studied elsewhere, in both developed and developing countries. Francis found that social scientists rely on journal literature to "support their research and current awareness activities" (p. 70). Although they prefer resources in electronic format, the majority of social scientists in this study does not use online databases on a regular basis and typically use the library to

obtain journal articles. Moreover, the scholars in this study also rely heavily on informal sources of information in their research, such as colleagues. Francis' conclusion, supported by other IB literature from developing countries (Agrawal, 1987; Romanos de Tiratel, 2000), demonstrates that scholarly IB in the social sciences is largely universal. Considering this finding in practice may have important implications for social science scholars around the world.

Fieldwork Summary

This study was designed as an exploratory study of the IB of scholars in the humanities and social sciences, using existing models of scholarly information behavior as a framework. Our fieldwork was guided by Marcia Bates' Berrypicking model (2005), in which she describes the search for, use, and retrieval of information as a constantly shifting, non-linear process.

For a more in-depth look at the IB of scholars in the social sciences and humanities, we collected data using interview and survey methods. The interviews each consisted of 21 open-ended questions (see appendix A), with participants recruited through personal connections at the University of Washington and other nearby universities. We conducted three interviews, two with humanities scholars and one with a social scientist. The interviews lasted between 30 and 60 minutes, each being taped and then transcribed. Anonymity was ensured by assigning each participant a pseudonym.

Additionally, we designed a survey of 23 questions (see appendix B) in Catalyst and sent it out via e-mail to approximately 62 scholars in a variety of disciplines within the humanities and social sciences at the University of Washington and other academic institutions. Sixteen surveys were returned and analyzed, producing a response rate of almost 26%. 56% were humanists representing scholars in literature, philosophy, history, education, art/architecture and art history; 31% were social scientists (all economists), and 13% were interdisciplinary (information science and cultural studies). Anonymity was assured by excluding any personal information in the survey design.

Our survey and interview results revealed a broad range of IB among scholars in the humanities and social sciences, some of which we expected based on the literature and others we did not anticipate. In analyzing our subjects' IB, we focused on five

distinct yet inter-related components: information needs, information sources, information seeking & gathering, information use, and information management.

Many of our subjects expressed a need for information about a wide variety of topics and methodologies beyond the traditional boundaries of their discipline. As one might expect, the need for information from other fields was especially great among interdisciplinary scholars; however scholars in more clearly defined disciplines also needed information from sources beyond their fields. For instance, Deborah, an English scholar, noted that she incorporates methodological approaches from the social sciences, public policy, and other areas in the humanities, in her scholarly work and thus needs information from a wide range of disciplines.

Several of our interviewees and survey respondents also expressed a need for reliable information from authoritative sources that are "highly regarded by other scholars" in their field as Naomi, an information science PhD candidate, mentioned. Scholars across disciplines mentioned that they continuously returned to certain journals, monographs, databases and other sources that they had found to be reliable and authoritative from past experience. Some scholars actively dismissed internet search engines and other web-based resources such as Wikipedia and electronic-only journals as unreliable sources of information. However, a surprisingly large number of the survey respondents mentioned using Google Scholar and other internet search engines in their research, a finding which will be discussed further below.

The scholars we studied drew on many kinds of sources, formal and informal, in their work. Consistent with the findings in the literature (Westbrook), most of the scholars who named their colleagues as an informal information source were located in social science and interdisciplinary fields. John, a theologian, mentioned that he hesitates to seek out his colleagues as an information source because he fears it reveals his "inability to find something" and exposes his inadequacy as a scholar to others. This fear is not surprising in the context of a humanist endeavor, where individual interpretation is paramount and scholars are expected to be expert researchers who primarily work alone (Stone; Watson-Boone; Case, 1991; Chu; Wiberley & Jones, 1989).

Formal sources used by scholars included books, journals, library catalogs, databases, articles in popular and scholarly press, and the Internet. Our review of the

literature indicated that personal libraries would be an important source of information for humanities scholars (Watson-Boone, East, 2005); however none of our survey respondents mentioned personal libraries and the topic did not arise in interviews. This omission may be an artifact of the study design, as we did not include "personal library" as one of the resources respondents checked off as an information source.

Not surprisingly, most respondents did not include librarians as important information sources. Reflecting the well-documented trend towards librarian avoidance among scholars (Stone; Case; Watson-Boone; Wiberley & Jones; East), most of our subjects reported their questions were too simple to require a librarian's assistance or felt their searching skills could suffice. The one survey respondent who did mention seeking a librarian's assistance reported that his information need was not satisfactorily resolved. It seems plausible that this person was struggling to locate the information he wanted and ultimately resorted to asking a librarian for assistance after exhausting other search strategies.

The scholars we examined employed a wide-range of searching and information-seeking behaviors, which did not follow a singular, straightforward path. In these respects, their IB might be best explained by Bates' Berrypicking model. Bates argues that people do not search for information using one query and one method, as had been previously assumed in the literature on information retrieval. Rather, they "berrypick," retrieving small bits of information haphazardly through a search process that constantly evolves and changes (Bates, 2005, p. 60). Of the several search methods Bates mentions (subject searching, footnote chasing, journal run, area scanning, etc), many were commonly used by the scholars we studied. A popular method mentioned by our interviewees was combing secondary works for reference citations, then following those citations to other sources, and repeating the process. This process, referred to in the literature as "chaining" (Green, 2000, p.206; Duff & Johnson, 2002, p. 475), was described by Naomi as "snowballing." Other search methods described included browsing books, articles, and other documents, actively searching topical databases and library catalogs, and serendipitously encountering unexpected information in a variety of contexts.

Beyond these typical behaviors, our respondents displayed one unexpected information seeking behavior. 75% of the survey respondents often performed searches in Google Scholar and other internet search engines in preliminary attempts to find information about websites for experts, technical or government organizations, journal articles, and other subjects. One survey respondent remarked, "You can always find something on Google." This attitude contradicted a well-documented reluctance to use internet search tools (Watson-Boone; Stone; Case) as well as the responses of some of our other research subjects. One potential explanation for this contradiction may rest in the datedness of the literature, which has not thoroughly examined scholars' IB in an era of widespread internet usage. Since our sample population is quite small, it is difficult to determine what may account for differences among our subjects' attitudes towards internet searches.

Once scholars had located information, they employed several common strategies to manage that information. Scholars across disciplines reported collecting large amounts of information for use in a variety of projects that ranged from teaching, to book reviews, to producing original research for publication. Much of the information they did not use immediately, if ever; Deborah reported that she probably used only about 30% of the information she gathered. The rest she stored in her mind or in personal files for future reference, gave away or threw away. John and Naomi described similar strategies; Naomi mentioned that she "rarely" threw anything away. Echoing the interviewees, all the survey respondents noted that they use some form of electronic filing system to keep track of their information. These systems include saving to disk locally or on a shared network, storing websites as favorites, and using the EndNote database. In addition, a few scholars indicated that they use paper files to store information in the form of printed articles, clippings, and notes jotted down and stored in folders and loose-leaf binders.

Two notable discrepancies between the literature review and fieldwork findings were the increased use of electronic sources and the limited use of personal reference and monograph collections. Based on the interview and survey results, scholars are taking advantage of the technological advances designed to assist them in their research. Also contrary to the literature was the limited use of personal collections noted by the participants in the online survey. This may be a result of the increased use of technology.

Fewer scholars require a book on their shelf when they can access the same information from their computer at minimal cost and sometimes, at greater speed. Overall, the scholars' behavior was consistent with each others'. This is partially due to the fact that the majority of scholars represent 3-4 institutions, causing overlap between them. Universities foster a specific research culture, norms, and techniques, creating a like-mindedness among their faculty.

The purpose of the literature review and fieldwork was to compare and contrast the IB of scholars in the humanities and social sciences. Both groups share the same need for comprehensive and authoritative work, use of citations and serendipitous encounters, and various methods of information management. Major differences between the humanists and social scientists respectively include the use of primary documents versus bibliographies, individual research versus collaboration with colleagues, and library as laboratory versus field setting as laboratory. As a result of this study, several implications exist for information professionals: equip scholars to access and use technological resources, continue to build strong professional partnerships with scholars, and integrate information literacy into the formal training of future scholars. To best support scholars in their work, it is essential to understand their IB so that they might contribute valuable knowledge to the academic community and society as a whole.

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Appendix A

Interview Questions – IB of Scholars

Thank you for taking the time to talk with me about how scholars seek and use information. Before we begin, I'd like to explain what we'll be doing during the interview and answer any questions you may have. The interview should take no more than 45 minutes. I'll start by asking you a few questions about the nature of your work and how information plays a role in what you do. Then I will ask you to talk about a specific example in which you needed to find or learn about something for your work.

I will use your responses in a group paper and presentation that we're doing for a course at the University of Washington on how people seek information. Your identity will remain completely anonymous. Is it all right with you if I tape record this interview to ensure I accurately document and describe your responses?

Do you have any questions before we begin?

1. What is the field you work in? What is your job title?

2. How long have you been working in this position?

3. What kind of education and/or training did you complete to obtain this position?

4. What do you do as a _____ scholar?
___

5. What role does information play in your professional life?

6. Would you say that you use a broad range of random information sources in your work, or do you typically rely on particular sources? Why either way?

7. What types of information do you generally seek out or need in your role as a scholar?

8. How do you generally go about finding the information that you need as a scholar?

9. How do you generally use the information you find?

10. Are there instances when you do not find the information you need, and if so, what do you typically do about it?

11. Do you always use the information you find?

12. If you do not use all of the information you find, what happens to that information?

Appendix A

Interview Questions – IB of Scholars

13. Do you typically feel satisfied with the information you find, and the ways and time it took to find it?

14. Do you ever encounter or unintentionally come across information that you end up using in your role as a scholar? If so, how does this happen?

15. Are there instances in your role as a scholar that you avoid information? If so, can you describe a situation in which you did this and why?

____

16. I'd like you to think of a situation that occurred within the past month where you needed to find out about something or learn something for your work. Does such an incident come clearly to mind?

17. I'd like you to walk through this event by describing what happened step by step. Let's start by hearing about what prompted the need. Can you tell me what was going on at that time?

18. So you needed information on____in order to____. What did you do from there?

19. How did you know about this source? Did you read about it, have it on file, or…? How did you think the source might help? What else do you think might have helped?

20. How did it turn out?

21. Does the situation you described differ—in terms of what you did and what happened—from similar situations that you have been in while seeking information?

22. How do you keep track of all those types of sources that you use in your work? Are there any barriers to keeping track of this information?

23. Can you identify a problem that scholars seem to have with regards to information seeking, retrieval, management, or…? Do you have any ideas about how this could be fixed?

___

23. Is there anything more you'd like to add about the event or how you use information?

Thank you very much for granting us this interview. I know how busy you are and really appreciate your taking the time to time to talk with me and help me better understand the information needs of scholars.

Appendix B

Survey – IB of Scholars

Survey of Scholar Information Behavior

Thank you for participating in this survey. Your responses will be used for a University of Washington course project studying the information behavior of scholars in the humanities and social sciences and will remain anonymous.

1. Academic/Research Discipline (e.g. psychology, history):

2. Level of Education:
   - Masters degree
   - Doctoral degree

3. Institution at which you are employed (if any):

4. Current Title:

5. Number of years you have been in this position:

6. Describe your current scholarship activities:

7. Has your research ever been formally published and/or presented?
   - Yes
   - No

8. If you responded yes to Question 7, where did you publish or present your work?

9. Describe a situation that occurred in the past month in which you needed information for your work as a scholar.

10. What prompted your information need?

11. What steps did you take to resolve your need?

12. What sources did you consult (check all that apply)?
   - Colleagues
   - Past papers, emails, correspondence
   - Librarian
   - Internet search engine
   - Index/database
   - Journal article
   - Reference book
   - Other

Appendix B

Survey – IB of Scholars

13. If you checked other in Question 12, please describe.

14. How did you know about these sources?

15. Why did you think these sources would help?

16. Which sources did you choose not to use and why?

17. Are you satisfied with the outcome of the information search and retrieval process?
    - Yes
    - No

18. If you responded no to Question 17, explain your dissatisfaction.

19. Is the situation you describe similar to others in your work?
    - Yes
    - No

20. What barriers (if any) did you encounter during your search?

21. How do you track or store information sources once you've located them?

22. Age:

23. Gender: