

# Historians and the Use of Primary Source Materials in the Digital Age

Alexandra Chassanoff

## ABSTRACT

This study examines how academic historians search for, access, and use primary source materials in their research pursuits. Recruited historians completed an online questionnaire about current information practices and potential information needs in archival settings. The results shed light on the most frequent methods historians use to search for primary source materials; the types of primary source documents they are most likely to use; whether they access materials online or in person; their use of digitized archival collections; factors they consider important in their decision to use archival collections; and what might prevent them from using collections.

© Alexandra Chassanoff. 

## KEY WORDS

Online Collections, Local History Collections, Digital Environment

There have been widespread changes in access to archival materials over the last decade. Institutions now regularly provide online access to archival finding aids and catalogs. Many institutions are digitizing portions of their archival materials and providing online access through search interfaces. A 2010 survey of the Association of Research Libraries' (ARL) special collections and archives reported active digitization programs at 72% of the member institutions surveyed; 47% have participated in large-scale digitization projects.<sup>1</sup> Presumably, such changes in the information environment have had some impact on how historians search for, access, and use primary source materials. Yet relatively few studies have examined how the information behavior of scholars working with archival materials has changed in the digital era.

This study is an attempt to understand better how one particular group of individuals, academic historians in the United States, find and use primary source materials. The following research questions will be explored: 1) how historians search for materials; 2) what types of primary source documents they are most likely to use; 3) how they access materials; and 4) how they evaluate online digitized primary source materials.

The results of this research may inform how archival research environments can better serve the information needs of academic historians doing research with primary source materials. In particular, this study may benefit the larger archives community by shedding light on how historians use digitized archival collections, enhancing the currently sparse body of research concerning digital collection usage. Understanding this new information environment, along with the corresponding changes in research practices, is critical to building effective infrastructures to support historical research in archival settings.

## Literature Review

More than twenty years ago, in a user study conducted on researchers in women's history, Diane Beattie lamented the fact that archivists had done very little research on "how users actually locate archival materials, and therefore have no way of measuring the usefulness of current descriptive systems."<sup>2</sup> This appears to continue to be the case today. Studies exploring the information behavior of historians in archives were undertaken nearly a decade ago,<sup>3</sup> in the early stages of archival digitization efforts. Empirical work that examines historians' use of digitized primary source materials is either limited to citation analysis<sup>4</sup> or lumped into a wider discussion of how humanities scholars use electronic resources. Therefore, this literature review will be divided into three sections: 1) the larger context of humanities scholars' research practices, including information-seeking behavior; 2) how historians search for and use materials in archival settings; and 3) assessing the scholarly impact of digital collections.

## RESEARCH PRACTICES OF HUMANITIES SCHOLARS

The development of effective scholarly infrastructures depends on understanding the evolving information behaviors and research practices of scholars.<sup>5</sup> Humanities scholars' needs may range from broad exploratory searches to in-depth examination and analysis of source documents. In an influential study, Sue Stone called for an exploration of how humanities scholars use the information they acquire.<sup>6</sup> In the digital age, such questions become more pressing as we begin to understand and assess how digital tools and technologies have affected scholarly workflow and overall information behavior. What are the information needs and uses of humanities scholars? How do these needs and uses change in the digital environment? What structures are needed to support and enable scholarly inquiry?

While the literature on humanities scholars' research practices is rich and varied, emergent themes help shed light on their information needs and use. One highly touted perspective is that humanities scholars work independently.<sup>7</sup> Humanities scholars tend to perform information-seeking tasks themselves rather than delegate to others, as such activities are seen as paramount to their interpretative abilities.<sup>8</sup>

At the same time, a strong sense of collaboration among peers emerges from the literature. *Scholarly Work in the Humanities and the Evolving Information Environment*, a 2002 report on changing humanities research practices, noted the importance of the "grapevine" as "crucial for supplying references to recent books or articles that might not yet be indexed or cited."<sup>9</sup> Access to online tools such as email, mailing lists, blogs, and wikis can facilitate collaboration and communication among scholars.<sup>10</sup> The presence of an invisible college, or an informal network of colleagues, enables researchers with limited time to "opt for those techniques that have the highest reward-cost ratio."<sup>11</sup>

Divergent and unpredictable routes characterize research pursuits; methods typically involve "tracing intellectual paths, 'excavating' textual references from documents, and item-by-item review of artifacts held in relevant archival collections."<sup>12</sup> Consequently, browsing is a particularly instrumental function in scholarly workflow. Scholars perform interpretation through the critical practices of reading, browsing, and annotating. They produce "extensive marginal notes, annotating photocopies or personal copies or attaching adhesive notes to a text."<sup>13</sup>

Humanities scholars tend to use a wide array of materials, with an emphasis on primary and secondary sources.<sup>14</sup> Consulting related works (often called "footnote chaining") is essential. Secondary materials are often consulted for background information or to gain awareness of current research in a field. As an interpretive discipline, a critical function of humanities scholarship remains

selecting and structuring meaningful groups of materials. The authenticity and reliability of materials is seen to be the hallmark of trustworthy humanities research endeavors. Even in the earliest user studies, humanities scholars expressed a strong preference for having access to original documents.<sup>15</sup>

#### HISTORIANS' INFORMATION-SEEKING BEHAVIOR IN ARCHIVAL SETTINGS

Historical research in the archives is a multistage, iterative process. Historians may use a broad, "path-breaking" approach to research, proposing new ways of looking at old problems, or they may opt for a narrow, "microhistoric" approach, examining or documenting a specific community of interest or problem.<sup>16</sup> Research activities can go on concurrently and may span multiple research projects. Historians often begin their research in archives by orienting themselves to collections; as they build on contextual knowledge and acquire relevant materials, they further refine and develop their information needs.<sup>17</sup> Charles Cole's investigation of 45 history doctoral students formulating their theses found two essential components at work for students processing information: the *picture* and the *jigsaw*. As Cole explained, "The jigsaw appears to be the Ph.D. history student's conceptual thesis and the picture is the background 'data' from which the jigsaw emerges."<sup>18</sup> Cole's research showed how the cognitive aspects of information processing can affect knowledge formulation in historical research.

Research practices within archival settings appear to be changing due to the impact of modern digital technologies. In addition to the fact that many archives provide online access to digitized versions of primary source materials, personal capture devices are now permitted in many reading rooms. Digital cameras, flatbed scanners, and laptops enable historians to personally document archival materials of interest. A recent survey investigating the changing research practices of historians found widespread use of digital cameras and scanning equipment to capture primary source materials, claiming it was "perhaps the single most significant shift in research practices among historians, and one with as-yet largely unrecognized implications for the work of historical research and its support."<sup>19</sup> Numerous publications on best practices for digital capture activities over the last decade suggest that new kinds of workflows have begun to emerge in archival settings.<sup>20</sup>

Historians typically consult a large number of institutions during the archival research process.<sup>21</sup> Archival institutions may include public or university libraries, academic special collections/repositories, state or local historical societies, museums, and state or government archives. Not surprisingly, the types of institutions historians consult may depend significantly on their specific topics of historical research. In his citation analysis study on social historians,

Fredric Miller found a low use of state and local archives, calling them “the most underutilized resources in the nation’s archival system.”<sup>22</sup> Meanwhile, Wendy Duff, Barbara Craig, and Joan Cherry, also looking at social historians, found an extremely high use (90%) of provincial archives.<sup>23</sup> Their specific focus on Canadian history rather than an overall focus on social history topics may explain the high use.

Similarly, the types of archival materials used by historians often relate to their topics of research. Historians working on biographical research, for example, tend to use “collection-oriented tools” like finding aids.<sup>24</sup> In some cases, limited archival holdings on subjects may force historians to use non-traditional types of sources. Diane Beattie’s research on Canadian historians studying women’s history showed frequent use of photographs and oral history recordings; she attributed this to the dearth of archival materials related to women’s history.<sup>25</sup>

The literature does not provide conclusive evidence on historians’ preferred search and retrieval strategies in archival settings. When asked about the methods they most often used to locate primary sources, historians cited published finding aids,<sup>26</sup> the consultation of an archivist,<sup>27</sup> and following leads or citations found in printed books.<sup>28</sup> In part, the discrepancies could be attributed to different goals in each research study. For example, Tibbo and Anderson were concerned with the impact of digital tools on historians’ search behaviors. Thus, they categorized search methods as *either* print or electronic. Other semantic differences complicate effective comparisons across studies. What historians might consider to be the *most useful* methods for locating materials does not necessarily translate into the *most frequently used*. In Beattie’s study, historians claimed that they most frequently consulted archivists in their search for materials but cited finding aids to be the most useful in their search.<sup>29</sup> Another complicating factor is a tendency in research studies to collapse the individual tasks associated with information search, retrieval, and use into a single behavior (often, “information-seeking”) that fails to account for multiple steps in the research process. Historians may *begin* their search by talking to an archivist, who then may point them to an electronic database where they might *retrieve* a source. Finally, many studies do not account for the fact that the methods historians use to search for unknown materials may be quite different from how they search for known materials. Duff’s characterization of a historian who “orients” herself in archives would suggest that search behavior might differ according to familiarity.<sup>30</sup>

## SCHOLARLY USE OF DIGITIZED COLLECTIONS

Overall, the emergence of digitized primary source collections is generally portrayed as positive for humanities scholarship. Some of the major advantages of digital collections include the ease of using digital formats, fast access, and better searching techniques.<sup>31</sup> Access to primary source materials is seen as especially beneficial for scholars; preliminary browsing of digital library collections can save time and money for scholars in judging the relevance of materials to their research.<sup>32</sup>

At the same time, scholars also acknowledge challenges in digitizing primary source materials, particularly for preserving context. The LAIRAH (Log Analysis of Internet Resources in the Arts and Humanities) project, a fifteen-month inquiry into the factors that determine use (and neglect) of digital materials in the arts and humanities, found that users require a tremendous amount of information to discern both context and relevance. In the absence of a physical browsing space, the authors noted it can be difficult to comprehend both the coverage and extensiveness of the resource. They explained, "Scholars can browse a library shelf or journal issues and quickly determine the approximate extent of the resources available, and thus be sure that they do not miss anything important, but this is much more difficult in the case of digital resources."<sup>33</sup>

The general lack of empirical data about digital collection usage is seen to be problematic. One study on digital resource use, conducted in 2006 at the University of California, Berkeley, reported that "The 'build it and they will come' approach has resulted in a widely acknowledged supply-driven movement," but it is not yet clear just how much scholars are using available digital collections. The authors asserted the importance of studying use and reuse, particularly to assuage the fears of funding agencies that are "concerned about the low level of use of available digital resources among the teaching faculty of our institutions."<sup>34</sup>

The research on scholarly use of digital collections tends to focus primarily on quantifying use through transaction log analysis or citation analysis, rather than exploring scholarly use of, and satisfaction with, digital resources. While the former is helpful for uncovering usage patterns, it is not appropriate for understanding aspects of information use. As Laura Sheble and Barbara Wildemuth pointed out, transaction logs "cannot tell us anything about the users' cognitive or affective responses during the system interaction."<sup>35</sup> Citation analysis is only partially helpful; scholars may consult many types of primary source materials in the course of their research but not necessarily cite them.

Particular challenges lie in building effective infrastructure for historians to use digitized archival materials. To provide a seamless experience for historical research, infrastructure should support both historical practices and

technological efforts. In their report summarizing the history of computer-aided historical research, Onno Boonstra, Leen Breure, and Peter Doorn explained the importance and the intricacies of achieving this delicate balance:

Better infrastructure is needed in order to guarantee a transfer of results from the methodological and technical level to the daily practice of historical research. On the contrary, denying these challenges and opportunities will, in the long run, segregate the study of history from the technical capabilities currently being developed in the information society and will turn “the computer” into an awkward tool with limited use and usability for historians.<sup>36</sup>

How do the archivist and the historian, each possessing different domain expertise, work together effectively? What role does the archivist play in constructing authentic digital environments? How should historical materials be displayed and presented so that context is not lost? These are pressing questions that need to be addressed. Continued research on the evolving information needs of academic historians will aid the construction of successful archival research environments.

## Research Methodology and Findings

This research study sought to explore how academic historians currently search for, access, and use primary source materials. In particular, I was interested in whether research practices have significantly changed because of the implementation of new technologies, and, if so, in what ways. This study sought participation from a wide range of academic historians in the United States from many subfields in an attempt to present a state-of-the-art perspective on the information needs and uses of historian scholars using primary source materials.

A survey instrument was designed and modified based on a similar study conducted by Helen Tibbo and following feedback from Tibbo and Ian Anderson, who undertook related research as part of the Primarily History Project.<sup>37</sup> An online questionnaire was developed using Qualtrics, a survey system accessible to faculty and students at the University of North Carolina, Chapel Hill. The final survey consisted of 22 questions in 4 different sections.<sup>38</sup> Respondents were asked to give basic demographic and professional information, summarize their topics of research and teaching history, comment on how they search for and access primary source materials, and describe their use of digitized primary source materials. The fourth section was only available to survey respondents who indicated that they had consulted digitized sources.

Recruitment invitations were sent to the members of 10 electronic mailing lists that were part of the Humanities and Social Sciences Net Online (H-NET),

a large online discussion network. Thematic lists that focused on the study and practice of many subfields in the history of the United States were selected.<sup>39</sup> Both the recruitment email and the follow-up reminder email requested participation from only faculty who studied American history at degree-granting institutions in the United States.

One-hundred-and-ninety respondents began the survey, and 100 respondents provided useful answers for data analysis. Of these 100 respondents, 14 were removed from the data set because they did not meet the criteria of the study sample as indicated by their professional demographics. Therefore, the final study included responses from 86 academic historians.

DEMOGRAPHIC INFORMATION

The first section of the survey focused on demographic information. Respondents were asked to identify their professional rank, gender, age range, and number of years teaching history at their current institution. They were also asked to describe their primary research interests, primary sources taught, and their institution’s Carnegie Basic Classification.<sup>40</sup>

The majority of respondents identified themselves as either associate professors (20, or 23%) or assistant professors (23, or 26%). All levels of faculty ranks were represented in this sample. Females numbered 58 (67%), and 28 were male (32%). The majority (57, or 66%) had been teaching history between 1 and 5 years. While specific university information was not collected, most respondents came from universities with high research activities as designated by their institutions’ Carnegie Basic Classification.

Table 1. Gender and Professional Rank of Respondents (n = 86)

Gender	Female	58
	Male	28
Professional Rank	Adjunct professor	14
	Assistant professor	23
	Associate professor	20
	Dean/Department head	1
	Distinguished professor	1
	Endowed chair	1
	Professor	11
	Professor emeritus/emerita	2
	Research professor	1
	Teaching professor	4
	Visiting professor	4
	Other	4



Types of Research Projects

Participants next were asked about the last research project for which they needed to locate mostly unknown primary source materials (i.e., they did not begin the project knowing where all/most of the relevant materials were.) Participants were asked to provide information on their topic of research, chronological period of study, year they began and ended their research, and the institutions they consulted during their research.

A wide array of research topics was reported, with an emphasis on cultural and social history. Approximately half of all respondents reported working on women’s history; topics included “19th century women’s lives as they appear in popular print culture” and “20th Century women’s visual culture during war-time.” The highest number of respondents cited the twentieth century as their chronological period of interest. Half (43, or 50%) had begun researching their current topic within the past five years, and just over half (48, or 56%) described the status of their research as “ongoing” at the time they completed the survey.<sup>41</sup>

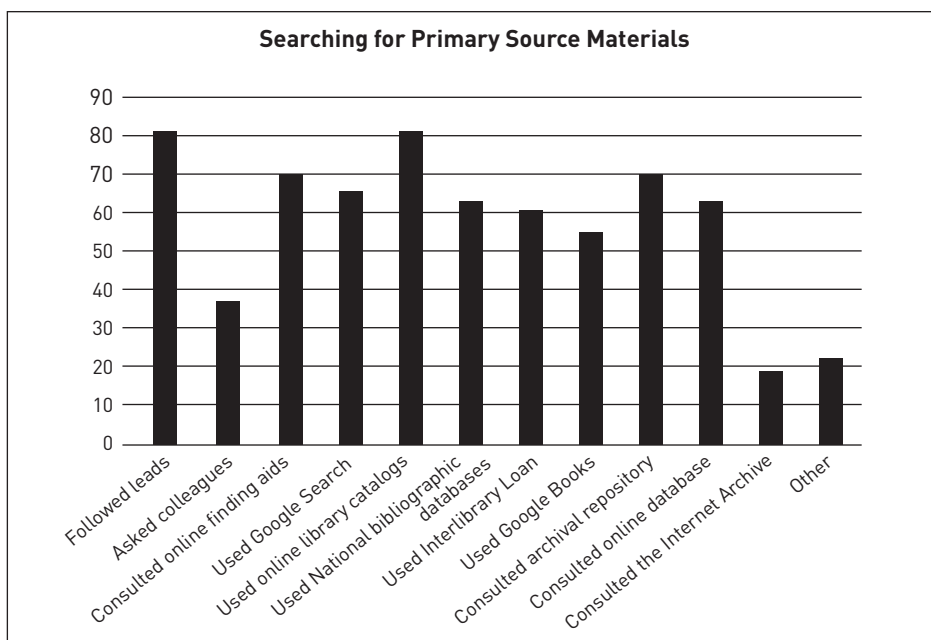
The next question asked historians about the types of archival institutions they consulted during their research process. In a free-text response, survey recipients were able to list many different types of repositories at both the federal and local levels. Individual responses were then categorized into types of institutions.<sup>42</sup> Government archives (such as the National Archives) were reported as most frequently used, while college/university archives were also widely consulted. On average, most respondents were consulting at least 3 different types of archives to locate materials.

Table 2. Types of Institutions by Frequency of Use (n = 86)

College/university archives	72
Corporate archives	3
Government archives	87
Historical societies	52
Museums	19
Religious archives	2
Special collections	33

Searching for Primary Source Materials

The next section of the survey asked respondents about the techniques and methods they use in searching for primary source materials. Nearly all respondents (82, or 95%) indicated that they follow leads found in books or articles.



**FIGURE 1.** Historians use these methods in their search for primary source materials ( $n = 86$ ).

Additionally, they reported frequently consulting library catalogs, archival repository websites, and finding aids.

Overall, historians described a nonlinear search process employing a wide variety of methods; on average, respondents listed at least 8. Most respondents mentioned the use of both print and electronic resources to search for materials of interest. One respondent explained: “To begin with—following leads in secondary source footnotes. Then, when I got a better idea of the repositories, online finding aids and archival repository websites. I also am a big fan of Worldcat.”

Most of the historians surveyed could not identify just one method they found to be the most useful in their searches. Rather, a combination of approaches helps historians get to materials of interest. Many respondents noted the importance of online tools to the search process. In fact, though almost all historians mentioned using leads found in books and articles, a great many (59, or 68%) cited combinations of online tools as being the most useful for locating materials.

Indeed, the use of online tools early in the information search process, particularly Google Search, helps historians assess the research landscape. One respondent wrote:

Google search is helpful as a first step to assess quickly what’s “out there” on a potential new research topic. Has anyone written about it (does a book

appear on Amazon); is it an incident widely known? NOT finding lots of “hits” is valuable—tells me that a new project is untrod ground. Then I turn to the likely repositories (L of Congress, etc.). Google books quickly identifies current and older studies or references. Ancestry.com not only helps with identifying vital stats of key players, but also reveals primary sources such as passport applications (with photos!), newspaper articles, and other period primary sources.

USE OF PRIMARY SOURCE MATERIALS

In an attempt to understand and conceptualize patterns in the use of archival materials, the next section of the survey asked respondents specifically about the materials they consult in their research. What types of sources do they use most frequently? Do they access sources online, in person, or both? When might they choose to look at sources in person after locating them online? What might be the potential barriers and challenges to using materials?

Seventy-six respondents indicated that they consult newspapers and correspondence in their research. Books, periodicals, and manuscripts were also mentioned with high use. The fact that historians most frequently use newspapers and correspondence is consistent with results obtained by Helen Tibbo<sup>43</sup> and Ian Anderson<sup>44</sup> when they undertook similar research. Perhaps more interesting, however, is the high use of nontextual materials: 54 respondents indicated that

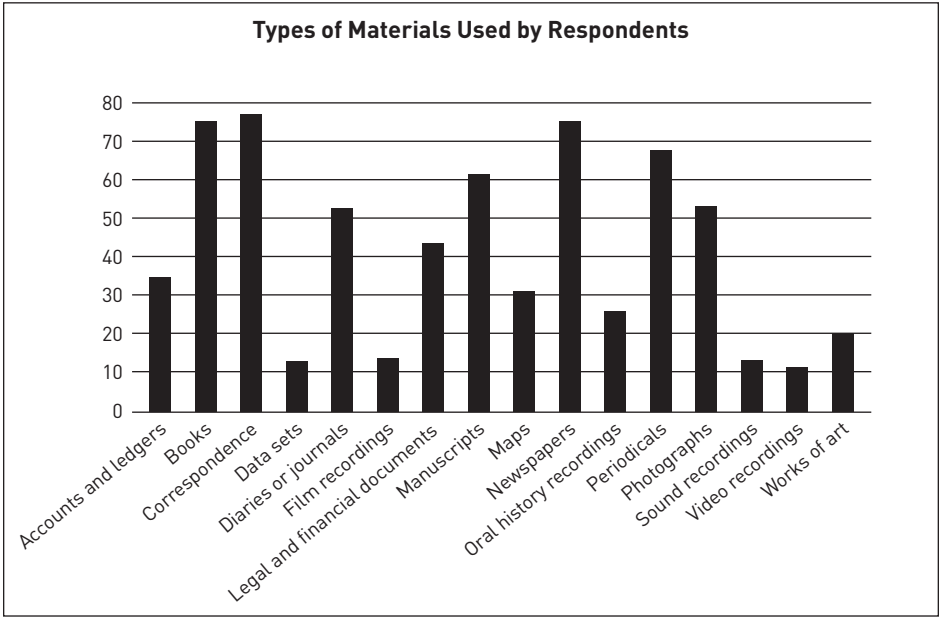


FIGURE 2. Respondents use these types of primary source materials (n = 86).

they use photographs, and 26 mentioned oral history recordings. Of course, the types of materials historians use could be expected to be influenced by their time periods of interest and topics of research. A majority of this survey's respondents could be classified as social historians studying women's history, a subfield that has had to embrace the use of nontraditional materials due to the paucity of archival holdings for their subjects of interest.<sup>45</sup>

The next question asked respondents to indicate whether they access primary source materials online, in person, or through a combination of both methods. Respondents reported that they primarily access accounts and ledgers, correspondence, diaries, and manuscripts in person; there was some indication that respondents who access materials online also pursue them in person, though the order in which this occurs is not evident. Surprisingly, respondents reported that they access works of art, oral histories, photographs, sound recordings, film recordings, and video recordings more frequently online than in person.

**Table 3. How Respondents Reported Accessing Primary Source Materials by Type (n = 86)**

	Online	In Person	Combined
Accounts and ledgers	9	36	8
Books	57	75	52
Correspondence	18	74	17
Data sets	14	9	5
Diaries	17	49	12
Film recordings	9	8	6
Legal/financial documents	19	35	10
Manuscripts	20	62	19
Maps	23	24	14
Newspapers	64	59	46
Oral histories	13	17	6
Photographs	41	43	33
Periodicals	55	52	42
Sound recordings	10	6	5
Video recordings	10	6	5
Works of art	17	16	13

Out of the 86 individuals surveyed, 25 (or 29%) indicated that they pursue in-person access to materials after first seeing them online. Respondents gave a variety of reasons for this behavior. Some expressed dissatisfaction with the

quality of digitized materials, preferring to view them in person. A historian who studies nineteenth-century agriculture explained:

Many images of grape growing were low-quality PDFs online, and I wanted high-quality ones for my own viewing and for copying for publication. Some horticultural journals were online, but I wanted to touch them and flip the pages for the real feel of the journal (books too).

Other historians mentioned concern over the completeness of the online source and its related materials. For example, one respondent pointed out that some sources are only partially digitized. One respondent compared online research to sowing a seed, where “the physical activity pursued after the initial contact is the harvest.” Another respondent mentioned the need to see the other materials in a collection that provides context.

USE OF DIGITIZED PRIMARY SOURCE MATERIALS

The final section of the survey asked specifically about the use of digitized primary source materials in online environments. The majority (80, or 93%) had used digitized materials in their research endeavors. Eighty respondents went on to complete the rest of the survey.

**Table 4. Factors Influencing Respondents’ Use of Digitized Materials (n = 80)**

The reputation of the archival repository	57
Description in online finding aid	46
The ability to access the entire collection online	45
Information regarding the provenance of an item of interest	39
Whether materials in the collection were downloadable	37
Information regarding the provenance of the overall collection	33
Availability of transcripts	28
Ability to consult an archivist about the collection	20
Other	12

Overall, findings suggest that historians seem to feel most comfortable using digitized sources when an online environment replicates essential attributes found in archives. Materials should be obtained from a reputable repository, and the online finding aid should provide detailed description. Historians want to be able to access the entire collection online and obtain any needed information about an item’s provenance. Indeed, the possibility that certain materials are omitted from an online collection appears to be more of a concern

than it is in person at an archives. The appraisal process, in other words, seems to be more transparent to online users.

I'm not sure I can explain this well, but I'd really need to know that I was getting the entire collection (can I do an exhaustive search and not be concerned that someone else missed some important item?) *and* the process of using the collection would need to simulate "live" archival conditions in that I'd need full information on the collection, be assured that the collection wasn't "edited" and the like. To some degree, researchers rely on standardized/ethical archival practices and procedures, so I'd want to be assured that these same practices were used in an online environment.

Trust is also a recurring theme. One respondent claimed that he/she feels more confident using sources when he/she had "access to the original image of the primary source rather than to a transcribed version, especially when there is no description of what rules they used to transcribe documents."

The last question on the survey asked historians to comment on the types of sources they would like to see digitized. Out of the 80 respondents who completed this section, 27 (or 33%) mentioned wanting searchable online access to full runs of historical newspapers. Other highly desired items include manuscripts, oral histories, popular magazines, photographs, and diaries/journals.

## Conclusion

The growth in online research tools and increased access to digitized primary source materials has changed the ways in which scholars work in archives. Given the explosive growth of digitized archival materials, respondents indicated an interest in having uniform access to sources and the ability to scope "what's out there." As one respondent pointed out, "There is a great deal of new sites containing digital archived material that spring up every day. However, there is no one place to go find them, get updated on new archives, etc. Right now the best list of free digital newspaper archives is a wiki."

The quality of digital surrogates in the online environment factors heavily into historians' use of digitized materials. In particular, respondents noted that inadequate or poor transcriptions of source materials present significant challenges. Respondents requested that libraries and archives digitize and make available materials in as close to their original condition as possible—"just the original primary source documents in their infancy please." Another concern is the reproduction quality of the digital surrogates. One respondent explained, "I can imagine going to primary sources because of bad reproduction quality, which is an ongoing concern with online sources. And there is nothing like the real thing for a historian, giving immediacy to one's relationship with documents and images created by historical actors."

The respondents in this survey also seem to recognize the prominent role of the archivist in providing access to online materials. This suggests a need to incorporate more documentation of the processing performed on digitized collections. Many respondents mentioned wanting more information about the digitization process, including how archivists make choices about what materials to digitize. Incomplete or poorly edited versions of digitized sources without clear explanations are frustrating for respondents and make them less likely to trust their online experience. They want assurance that the entirety of the archival collection is made available to them.

Archival research environments need to support the hybrid nature and nuances of the historical research process, itself an ever-changing set of information practices. Many of the respondents in this survey indicated that they use combinations of online and in-person techniques during their research activities. Their paths may well depend on how much information they already have on a research topic. For example, historians may approach archivists to ask them about where to begin their research, but might employ a different approach as they become familiar with a collection. The use of online tools like Google may be beneficial for giving historians a snapshot of the research landscape, but they may use finding aids or consultations with archivists once they move into a different stage of their research. Research tools need to be flexible enough so it ultimately does not matter whether historians access materials online or in person.

The impact digital technologies have had on historical methodologies and scholarly workflow needs to be explored in greater depth. The accumulation of born-digital artifacts generated by personal digital capture devices during archival visits presents interesting organizational and intellectual challenges for future historians. As historians develop their own digital collections, it will become essential that they can seamlessly integrate tools for organizing, annotating, and analyzing primary source materials into their workflows.

Such significant changes in the scholarly research environment suggest that archivists could be well served by investigating the *factors* and *qualities* that influence historians' interactions with primary source materials. What do historians consider to be the most useful and informative aspects of primary source materials? How do they evaluate sources as evidence and use them in historical arguments? What kinds of contextual information do historians need to aid in their interpretation and analysis? Investigating *how* historians use primary source materials in their research pursuits would go a long way toward developing new models for understanding and measuring uses that go beyond citation analysis. Rather than focusing solely on frequency of use, or facilitating better search and retrieval methods, archivists should consider how information needs adapt and change as new knowledge is acquired.

## Appendix: Survey Instrument

### Historians and the Use of Primary Source Materials in the Digital Age

This brief survey intends to discover how U.S. academic historians are searching for, evaluating, and using primary source materials in the 21st century. We sincerely appreciate your time, effort, and your disciplinary perspective that is critical to this project.

#### *A. Professional Data*

1. Please indicate which title below represents your current rank:
  - ☐ Dean or department head
  - ☐ Professor
  - ☐ Associate professor
  - ☐ Assistant professor
  - ☐ Professor emeritus/emerita
  - ☐ Distinguished professor
  - ☐ Endowed chair
  - ☐ Visiting professor
  - ☐ Adjunct professor
  - ☐ Research professor
  - ☐ Assistant or associate teaching professor
  - ☐ Honorary professor
  - ☐ Other:
2. Gender:
  - ☐ Male
  - ☐ Female
  - ☐ I prefer not to answer
3. Age:
  - ☐ 25–35
  - ☐ 36–45
  - ☐ 46–55
  - ☐ 56–65
  - ☐ Over 65
  - ☐ I prefer not to answer
4. Number of years teaching history at a college or university:
5. Number of years teaching history at your current institution:
6. Primary courses you teach:
7. Primary area(s) of research:
8. Please select your institution's Carnegie classification from the list below:



- ☐ Assoc/Pub-R-S: Associate's—Public Rural-serving Small
- ☐ Assoc/Pub-R-M: Associate's—Public Rural-serving Medium
- ☐ Assoc/Pub-R-L: Associate's—Public Rural-serving Large 2
- ☐ Assoc/Pub-S-SC: Associate's—Public Suburban-serving Single Campus
- ☐ Assoc/Pub-S-MC: Associate's—Public Suburban-serving Multicampus
- ☐ Assoc/Pub-U-SC: Associate's—Public Urban-serving Single Campus
- ☐ Assoc/Pub-U-MC: Associate's—Public Urban-serving Multicampus
- ☐ Assoc/Pub-Spec: Associate's—Public Special Use
- ☐ Assoc/PrivNFP: Associate's—Private Not-for-profit
- ☐ Assoc/PrivFP: Associate's—Private For-profit
- ☐ Assoc/Pub2in4: Associate's—Public 2-year colleges under 4-year universities
- ☐ Assoc/Pub4: Associate's—Public 4-year Primarily Associate's
- ☐ Assoc/PrivNFP4: Associate's—Private Not-for-profit 4-year Primarily Associate's
- ☐ Assoc/PrivFP4: Associate's—Private For-profit 4-year Primarily Associate's
- ☐ RU/VH: Research Universities (very high research activity)
- ☐ RU/H: Research Universities (high research activity)
- ☐ DRU: Doctoral/Research Universities
- ☐ Master's L: Master's Colleges and Universities (larger programs)
- ☐ Master's M: Master's Colleges and Universities (medium programs)
- ☐ Master's S: Master's Colleges and Universities (smaller programs)
- ☐ Bac/A&S: Baccalaureate Colleges—Arts & Sciences
- ☐ Bac/Diverse: Baccalaureate Colleges—Diverse Fields
- ☐ Bac/Assoc: Baccalaureate/Associate's Colleges
- ☐ Spec/Faith: Special Focus Institutions—Theological seminaries, Bible colleges, and other faith-related institutions
- ☐ Spec/Med: Special Focus Institutions—Medical schools and medical centers
- ☐ Spec/Health: Special Focus Institutions—Other health professions schools
- ☐ Spec/Engg: Special Focus Institutions—Schools of engineering
- ☐ Spec/Tech: Special Focus Institutions—Other technology-related schools
- ☐ Spec/Bus: Special Focus Institutions—Schools of business and management

- ☐ Spec/Arts: Special Focus Institutions—Schools of art, music, and design
- ☐ Spec/Law: Special Focus Institutions—Schools of law
- ☐ Spec/Other: Special Focus Institutions—Other special-focus institutions
- ☐ Tribal: Tribal Colleges

### ***B. Research***

Please provide the following information for your current or last research project in which you needed to locate primary source materials (i.e., you did not start the project knowing where all/most of the relevant materials were located from the outset):

- 9. Topic of research:
- 10. Chronological period (e.g., 1880–1910):
- 11. Year you started this research:  
Year you ended this research or ongoing:
- 12. Main archives, special collections and repositories used in this research:

### ***C. Searching for Primary Source Materials***

- 13. Which of the following techniques/methods did you use in your search for primary source materials? Please check all that apply.
  - ☐ Followed leads (footnotes, bibliographies, textual references found in books/articles)
  - ☐ Asked colleagues
  - ☐ Consulted online finding aids (e.g., *Guide to the Cameron Family papers*)
  - ☐ Used Google search to locate materials of interest
  - ☐ Used online library catalogs
  - ☐ Used national bibliographic databases (e.g., Worldcat, Oaister)
  - ☐ Used Interlibrary loan
  - ☐ Used Google Books
  - ☐ Consulted archival repository website
  - ☐ Consulted online databases (e.g., Proquest, Ebscohost)
  - ☐ Consulted the Internet Archive (archive.org)
  - ☐ Other: (please specify)
- 14. From the list above, which technique(s) did you find to be most useful in your search for primary source materials? Please explain below.

**D. Use of Primary Source Materials**

15. For the research you just described, please indicate which types of primary source materials you used. Please check all that apply.

- ☐ Accounts and ledgers
- ☐ Books
- ☐ Correspondence
- ☐ Data sets
- ☐ Diaries or journals
- ☐ Film recordings
- ☐ Legal and financial documents
- ☐ Manuscripts
- ☐ Maps
- ☐ Newspapers
- ☐ Oral history recordings
- ☐ Photographs
- ☐ Periodicals
- ☐ Sound recordings
- ☐ Video recordings
- ☐ Works of art

16. For the research you just described, did you access the materials online? In person? Check all that apply.

	<u>Accessed online</u>	<u>Accessed in person</u>
Accounts and ledgers	<input type="checkbox"/>	<input type="checkbox"/>
Books	<input type="checkbox"/>	<input type="checkbox"/>
Correspondence	<input type="checkbox"/>	<input type="checkbox"/>
Data sets	<input type="checkbox"/>	<input type="checkbox"/>
Diaries or journals	<input type="checkbox"/>	<input type="checkbox"/>
Film recordings	<input type="checkbox"/>	<input type="checkbox"/>
Legal and financial documents	<input type="checkbox"/>	<input type="checkbox"/>
Manuscripts	<input type="checkbox"/>	<input type="checkbox"/>
Maps	<input type="checkbox"/>	<input type="checkbox"/>
Newspapers	<input type="checkbox"/>	<input type="checkbox"/>
Oral history recordings	<input type="checkbox"/>	<input type="checkbox"/>
Photographs	<input type="checkbox"/>	<input type="checkbox"/>
Periodicals	<input type="checkbox"/>	<input type="checkbox"/>
Sound recordings	<input type="checkbox"/>	<input type="checkbox"/>
Video recordings	<input type="checkbox"/>	<input type="checkbox"/>
Work of art	<input type="checkbox"/>	<input type="checkbox"/>

17. Were there any primary source materials that you viewed online first and then pursued physical access to in-person? If so, which materials and why?
18. Have you used online digitized primary source materials in your research endeavors?  
☐ Yes  
☐ No

If you have answered yes to the above question, please continue the survey. Otherwise, thank you for your time.

***E. Use of Digitized Primary Source Materials in Online Environments***

19. Which of the following factors did you consider when using online digitized primary source materials in your research endeavors? Please check all that apply.  
☐ The reputation of archival repository  
☐ The ability to access the whole collection online  
☐ Whether materials in the collection were downloadable  
☐ Information regarding the provenance of the item  
☐ Information regarding the provenance of the overall collection  
☐ Ability to consult an archivist about the collection  
☐ Availability of transcripts  
☐ Description in online finding aid  
☐ Other (please specify):
20. From the list above, which factor(s) did you consider the most important when using online digitized primary source materials in your research endeavors? Please explain below.
21. What would keep you from using online digitized primary sources?
22. What (if any) sources aren't available online that you would want digitized?

Thank you for your participation. Your input will help the archival community better serve a wide variety of researchers and is greatly appreciated. Again, your participation and responses are entirely confidential.

## NOTES

- <sup>1</sup> Jackie M. Dooley and Katherine Luce, *Taking Our Pulse: The OCLC Research Survey of Special Collections and Archives* (Dublin, Ohio: OCLC Research, 2010), 81.
- <sup>2</sup> Diane Beattie, "An Archival User Study: Researchers in the Field of Women's History," *Archivaria* 29 (1989): 43.
- <sup>3</sup> Helen Tibbo, "Primarily History in America: How U.S. Historians Search for Primary Materials at the Dawn of the Digital Age," *The American Archivist* 66, no. 1 (2003): 9–50; Ian Anderson, "Are You Being Served? Historians and the Search for Primary Sources," *Archivaria* 58 (2004): 88–129; Wendy Duff and Catherine Johnson, "Accidentally Found on Purpose: Information-Seeking Behavior of Historians in Archives," *Library Quarterly* 72, no. 4 (2002): 472–96; Wendy Duff, Barbara Craig, and Joan Cherry, "Finding and Using Archival Resources: A Cross-Canada Survey of Historians Studying Canadian History," *Archivaria* 58 (2004).
- <sup>4</sup> See Donghee Sinn, "Impact of Digital Archival Collections on Historical Research," *Journal of the American Society for Information Science and Technology* 63, no. 8 (2012): 1521–37. Sinn evaluated the impact of digital archival collection use by historians solely through the measurement of citations in academic history journals. While useful for quantifying usage statistics, such an approach does not shed light on the information-seeking behavior of historians working with digitized archival materials.
- <sup>5</sup> Christine Borgman, *Scholarship in the Digital Age: Information, Infrastructure, and the Internet* (Cambridge, Mass: MIT Press, 2007), 262.
- <sup>6</sup> Sue Stone, "Humanities Scholars: Information Needs and Uses," *Journal of Documentation* 38, no. 4 (1982): 297.
- <sup>7</sup> Stone, "Humanities Scholars: Information Needs and Uses"; American Council of Learned Societies, *Our Cultural Commonwealth: The Report of the American Council of Learned Societies Commission on Cyberinfrastructure for the Humanities and Social Sciences* (New York, 2006).
- <sup>8</sup> Stone, "Humanities Scholars: Information Needs and Uses," 294–95.
- <sup>9</sup> William Brockman, Laura Neumann, Carole Palmer, and Tonya Tidline, *Scholarly Work in the Humanities and the Evolving Information Environment* (Washington, D.C.: Digital Library Federation and Council on Library and Information Resources, 2002), 11.
- <sup>10</sup> Oya Rieger, "Humanities Scholarship in the Digital Age: The Role and Influence of Information and Communication Technologies" (PhD diss., Cornell University, 2010).
- <sup>11</sup> Stephen Stoan, "Research and Information Retrieval among Academic Researchers," *Library Trends* 39, no. 3 (1991): 248.
- <sup>12</sup> Neumann and Palmer, "The Information Work of Interdisciplinary Humanities Scholars," 98.
- <sup>13</sup> Brockman et al., *Scholarly Work in the Humanities and the Evolving Information Environment*, 7.
- <sup>14</sup> Karl Weintraub, "The Humanistic Scholar and the Library," *The Library Quarterly* 50, no. 1 (1980): 22–39.
- <sup>15</sup> Carole Palmer, "Thematic Research Collections," in *A Companion to Digital Humanities* (Oxford: Blackwell Publishing, 2004): 348–65; Stone, "Humanities Scholars," 296.
- <sup>16</sup> Donald Case, "The Collection and Use of Information by Some American Historians: A Study of Motives and Methods," *The Library Quarterly* 61, no. 1 (1991): 71.
- <sup>17</sup> Wendy Duff and Catherine Johnson, "Accidentally Found on Purpose: Information-Seeking Behavior of Historians in Archives," *Library Quarterly* 72, no. 4 (2002): 492.
- <sup>18</sup> Charles Cole, "Information Acquisition in History PhD Students: Inferencing and the Formation of Knowledge Structures," *The Library Quarterly* 68, no. 1 (1998): 42.
- <sup>19</sup> Jennifer Rumer and Roger C. Schonfeld, "Supporting the Changing Research Practices of Historians: Final Report from ITHAKA S+R," (2012), 11, <http://www.sr.ithaka.org/sites/default/files/reports/supporting-the-changing-research-practices-of-historians.pdf>.
- <sup>20</sup> Kirklin Bateman, Sheila Brennan, Douglas Mudd, and Paula Petric, "Taking a Byte Out of the Archives: Making Technology Work for You," *Perspectives: Newsletter of the American Historical Association* 43, no. 1 (2005); Richard J. Cox, "Machines in the Archives: Technology and the Coming Transformation of Archival Reference," *First Monday* 12, no. 11 (2007); Lisa Miller, Stephen K.

- Galbraith, and RLG Working Group, "Capture and Release": *Digital Cameras in the Reading Room* (Dublin, Ohio: OCLC Research 2010), <http://www.oclc.org/content/dam/research/publications/library/2010/2010-05.pdf>.
- <sup>21</sup> Case, "The Collection and Use of Information by Some American Historians," 74.
- <sup>22</sup> Fredric Miller, "Use, Appraisal, and Research: A Case Study of Social History," *The American Archivist* 49, no. 4 (1981): 381.
- <sup>23</sup> Duff, Craig, and Cherry, "Finding and Using Archival Resources," 59.
- <sup>24</sup> Tibbo, "Primarily History in America," 21.
- <sup>25</sup> Beattie, "An Archival User Study," 42.
- <sup>26</sup> Margaret Stieg-Dalton and Laurie Charnigo, "Historians and Their Information Sources," *College and Research Libraries* 65, no. 4 (2004): 407; Wendy Duff, Barbara Craig, and Joan Cherry, "Historians Use of Archival Sources: Promises and Pitfalls of the Digital Age," *The Public Historian* 26, no. 2 (2004): 14.
- <sup>27</sup> Beattie, "An Archival User Study," 43.
- <sup>28</sup> Anderson, "Are You Being Served?," 95; Tibbo, "Primarily History in America," 20.
- <sup>29</sup> Beattie, "An Archival User Study," 44.
- <sup>30</sup> Duff and Johnson, "Accidentally Found on Purpose," 472–96.
- <sup>31</sup> Weiyin Hong, James Thong, Wai-man Wong, and Kar-yan Tam, "Determinants of User Acceptance of Digital Libraries: An Empirical Examination of Individual Differences and System Characteristics," *Journal of Management Information Systems* 18, no. 3 (2002): 99.
- <sup>32</sup> Jane Segal and Lisa Spiro, "The Impact of Digital Resources on Humanities Research," Rice University, Fondren Library (2007), <http://library.rice.edu/services/dmc/about/projects/the-impact-of-digital-resources-on-humanities-research/>.
- <sup>33</sup> Claire Warwick, Melissa Terras, Paul Huntington, and Nikoleta Pappa, "If You Build It Will They Come? The LAIRAH Study: Quantifying the Use of Online Resources in the Arts and Humanities through Statistical Analysis of User Log Data," *Literary and Linguistic Computing* 23, no. 1 (2007): 99.
- <sup>34</sup> Diane Harley et al., *Use and Users of Digital Resources: A Focus on Undergraduate Education in the Humanities and Social Sciences* (Berkeley: University of California Center for Studies in Higher Education, 2006), 2-1, <http://escholarship.org/uc/item/8c43w24h>.
- <sup>35</sup> Laura Sheble and Barbara Wildemuth, "Transaction Logs," in *Applications of Social Research Methods to Questions in Information and Library Science*, ed. Barbara Wildemuth (Westport, Conn.: Libraries Unlimited, 2009), 174.
- <sup>36</sup> Onno Boonstra, Leen Breure, and Peter Doorn, "Past, Present, and Future of Historical Information Science," *Historical Social Research* 29 (Amsterdam: Netherlands Institute for Scientific Information, 2004), 91.
- <sup>37</sup> The survey questions needed to be adapted significantly to accurately capture the current scholarly research environment. For example, Google did not exist in 2001.
- <sup>38</sup> See Appendix for survey instrument.
- <sup>39</sup> The following mail lists were selected: H-AFRO AM, H-Amstdy, H-Memory, H-POL, H-Public, H-South, H-Survey, H-US1918-45, H-USA, and H-Women.
- <sup>40</sup> The Carnegie Basic Classification scheme provides a useful means for capturing the institutional diversity of universities. Institutions are classified through a series of attributes, including research output, size, focus, and geographical location, Carnegie Foundation for the Advancement of Teaching, "Classification Description," <http://classifications.carnegiefoundation.org/descriptions/basic.php>.
- <sup>41</sup> The survey closing date was December 1, 2011.
- <sup>42</sup> Institutions were mapped and categorized using the Society of American Archivists' overview of repository types, <http://www2.archivists.org/usingarchives/typesofarchives>. Each respondent could report on use of multiple institutions of the same type (e.g., if Respondent X used 3 types of government archives, their frequency of use was reported as 3).
- <sup>43</sup> Tibbo, "Primarily History in America," 19.
- <sup>44</sup> Anderson, "Are You Being Served?," 107.
- <sup>45</sup> Beattie, "An Archival User Study," 38.

**ABOUT THE AUTHOR**

---



Alexandra Chassanoff is pursuing a PhD at the University of North Carolina at Chapel Hill and is the project manager of the BitCurator project, which is developing a digital forensics software environment for archivists. She studies information use, digital materiality, and curation and preservation environments. In particular, her dissertation research examines how historians assess and use digitized archival photographs as evidence. Prior to graduate school, she worked as a database analyst, software consultant, and digital asset manager. She received her MSIS from UNC-Chapel Hill in 2009.