History and Genealogy: A Study of the Relationship between Genealogical Research and Interest in History

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Abstract

Genealogists make up an important segment of libraries' and archives' user population. This study explores the connection between genealogical research and interest in history to better understand user interests and needs. A survey of three North Carolina genealogical societies was compared to the answers of graduate students at the University of North Carolina – Chapel Hill. The results indicate that genealogists tended to be more interested in history in general than the students and revealed some common motivations for genealogical research between the two groups. Both groups enjoyed learning the context of ancestors' lives, exploring the continuity of family traits, and building a narrative. Distinct from the students, genealogists also tended to like community, the learning process, and problem-solving. These findings can help information professionals develop more effective resources for and provide better service to their genealogist patrons.

Introduction

Genealogy is an important pastime for many and is acknowledged to be the fastest-growing hobby in the United States.[1] More than just entertainment or an antiquated interest in people and places long gone, genealogical research meets an affective need to know one's place in the world and "find a few fixed points in a world of constant

change."[2] Knowing one's family background gives the genealogist a sense of identity and self-worth, offering him or her a place in a wider narrative and contributing to psychological well-being.[3]

As an already large and ever-growing group, genealogists also compose a significant segment of archives' patrons. While the proportion varies based on an institution's size and collecting focus, studies report that family historians compose from fifty to ninety percent of special collections users.[4] For example, in the early 2000s, eighty-five percent of National Archives visitors were searching for genealogical information.[5] In 2010, nearly a quarter of Archives.gov website visitors self-identified as a "genealogist or family historian."[6]

When planning the services that accomplish their institutional mission and serve their patrons, it is vital that archives and libraries understand user needs. Beginning in the 1980s, archivists called for a more robust and systematic study of special collection users and their research projects, proposing they "begin to think of archives administration as client-centered, not materials centered."[7] In the past thirty years, libraries and archives have increasingly adopted a customer-centered focus.[8] Access and use are core values of the Society of American Archivists, seeking to "promote and provide the widest possible accessibility of materials," which is done most effectively when patrons are well understood.[9]

Given the importance of knowing user needs and interests for effective services, this study will explore the relationship between family historians' pursuit of genealogy and their interest in history more broadly. Increasingly, genealogical research has become a quest for personal heritage, which "combines the history of one's ancestors with

the story of where they lived, worked, and died, interlaced with the history of events in the local community."[10] Archivists and instruction librarians in particular can also engage genealogists' interest in history when assisting them with their genealogical inquiries. Genealogy is one of the best ways for the public to connect with history, realizing how profoundly our past impacts who we are in the present. It is also a prime opportunity for information professionals to provide quality services and encourage wider collection use. This research paper explores the idea that the pursuit of amateur genealogical research, defined as researching one's ancestors online or at repositories, tends to spark interest in history in general as measured by spending leisure time learning about historical trends or topics. As family historians spend more time learning about their forbears, do they tend to also increasingly enjoy studying the world their ancestors inhabited?

Literature Review

While few scholars have studied the relationship between genealogical research and interest in history more broadly, many have conducted relevant user studies in the field of information and library science, or studied interest from a psychological or educational perspective. Interdisciplinary work on leisure also provides some important insights.

In the information and library science body of work, the terms "genealogy" and "family history research" are often used interchangeably, but some scholars claim a difference. Paul Darby and Paul Clough define genealogy as "the systematic tracing of an individual's ancestors and their key information," while family history research "seeks to go

further by unearthing supplementary information about ancestors' home, educational, working, social and political lives."[11] Combining these two components, Nick Barratt describes a new genre of historical research called "personal heritage," which combines the study of one's ancestors' history with local and social history.[12]

Although genealogists are reportedly many archives' largest user group, they have often been neglected in the literature. In the 1970s librarians bemoaned their anecdotal antagonism with genealogists, who were perceived to be incompetent, inexperienced, and burdensome.[13] This attitude began to change when genealogists began to visit local repositories in increasing numbers, often attributed to the publication in 1976 of Alex Haley's book *Roots* and the subsequent television series.[14] As more genealogists flocked to libraries, archives, and special collections, studies emerged to understand the population's demographics. Anecdotal evidence and sample populations indicate a majority of female genealogists, but it is unclear if this finding can be generalized.[15] Family historians tend to be well-educated and middle-aged or older, as this demographic has the leisure time and resources to research their ancestors.[16]

Other scholars have moved from studying user characteristics to needs and motivations. Patrick Cadell ties the increase in amateur genealogical research to the rising mobility of recent generations, as people move further and more frequently than ever before, losing their rootedness in time and space and creating an "ever-increasing demand to meet what for many people has become a psychological need."[17] Participants in another study pursued genealogy to "learn… about one's roots and identity." Some self-identified

as the custodian of their family's history, rooting their entire family in its past.[18] Elizabeth Yakel also connects family history with a search for identity, while Hannah Little explores the archives as part of the "articulation of the self" that "connects the self to the other."[19] Little also discusses the "imaginative and performative aspects of archives within... genealogical storytelling," touching on another facet of genealogy as identity formation: the construction of narrative.[20] Family historians look not just for lists of facts but for a story in which they play a part.[21] Genealogists must mingle "historical time," the large and impersonal events in history, with "autobiographical time" of lived and remembered personal experiences.[22]

Studies of genealogists' search strategies and preferred sources are also important, but largely discuss sources for tracing family lines to the exclusion of historical background sources.[23] Other articles offer case studies of genealogy workshops, although again, these tend to focus on training for tracking family lineage rather than conducting background research.[24] Some recent articles do acknowledge genealogists' need for contextual information: Duff and Johnson's description of the research process includes a final stage of fleshing out historical context, after collecting data about individuals.[25] Darby and Clough's study proposes an eight-step model of family history research which notes change over time in source use as family historians pursue more difficult research.[26]

Finally, a few scholars have noted the importance of "orienting information" and the related concept of exploratory search for family historians as they delve deeper into their family's past.[27] Orienting information is used to understand the basics of a new topic and stay abreast of

developments in that subject area, while exploratory search involves browsing rather than searching for a known item.[28] The more genealogists learn and the farther back in time they go, the more background (orienting) information they require to interpret sources and understand their ancestors' lives. The kinds of questions that genealogists ask transition from a search for factual information (what year did my great-grandparents get married?) to exploration (what was life like for them growing up in Colorado in the 1890s?). In fact, both these concepts fit into Reijo Savolainen's model of everyday life information seeking (ELIS).[29] As opposed to the many studies that examine job-related information seeking and use, ELIS models information-seeking behavior for other activities such as health care, hobbies, and other personal pursuits. Furthermore, the search for identity and belonging which motivates much genealogical research is related to mastery of life, a component of ELIS that describes maintaining control and understanding of the "order of things" in one's life. Genealogists may be attempting to situate themselves in the world and understand their family context, past and present.[30]

The library science literature about genealogists has come a long way from lamenting librarians' least favorite patrons to understanding their motivations and strategies. But more work can be done to better serve most libraries' largest constituency. Drawing on other disciplines, we can form a more well-rounded understanding of genealogists' interests. The fields of psychology and education have both produced important work on the concept of interest, operationalizing a subjective idea into something to measure and study. Suzanne Hidi and K. Ann Renninger define interest as "the psychological state of engaging or the predisposition to

reengage with particular classes of objects, events, or ideas over time."[31] Interest is "a source of intrinsic motivation for learning," making it vital for public awareness and education.[32] Interest is formed through a cognitive-emotional regulation system, in which positive cognitive/rational and emotional interactions with a particular object or idea increase interest.[33] Similarly, others locate the emergence of interest when individuals evaluate an event or item's novelty, complexity, and comprehensibility.[34]

Furthermore, paralleling the emotional needs met by genealogical research, the basic human needs for competence, autonomy, and relatedness are motivations for interest development.[35] Additionally, scholars have distinguished between individual interest and situational interest: the former is "a psychological state of interest in reference to a particular content domain or class of activities," while the latter "refers to interest that primarily emerges from and is supported by the environment," and may or may not be long-lasting.[36] The result is a four-phase model of interest development: triggered situational interest, maintained situational interest, emerging individual interest, and well-developed individual interest.[37] This process can be useful for understanding the evolution of genealogists' interest in history.

Relating the psychology of interest to history education, multiple educators have suggested that a way to make history "real, vital, and meaningful to... students" is to personalize history by encouraging students to talk with older relatives and learn about earlier generations.[38] Offering another approach to generating student interest, Berry, et al. used emotional images to engage students in the history classroom.[39] The education literature on student interest

mirrors the information science literature on genealogists' motivations.

Also drawing on studies of interest, the literature on leisure and hobbies sheds light on the practices of genealogists. The concept of individual interest is meaningful in that it explains a person's pursuit of a given domain and its concomitant activities. However, some have challenged this understanding in favor of emphasizing the "organic nature of persistent engagement," highlighting the wide range of factors that influence interest and diverse levels of possible engagement. A person's persistent engagement in a practice is continually shaped by the totality of that person's experiences: interpersonal and community interactions, individual preferences, outside constraints and conditions.[40] Another component to leisure activities is the serious leisure framework: the "systematic pursuit of an amateur, hobbyist, or volunteer activity sufficiently substantial, interesting, and fulfilling for the participant to find a (leisure) career there acquiring and expressing a combination of its special skills, knowledge, and experience," as opposed to short-term and less-skilled casual or project-based leisure activities.[41] As a serious leisure activity, genealogy requires practitioners to develop a high level of skill as they encounter a wide variety of sources and technologies, making them more likely to interact with information professionals.[42]

From local historical societies to academic research libraries, repositories of all kinds receive genealogists searching for factual information, orienting information, or both. These researchers bring a range of interests and motivations such as the need for self-understanding, connectedness, and a place in a historical narrative.

Information specialists have gradually moved from a collections-centered approach to a user-centered approach, and explanations of interest from psychology and education can complement user studies and help practitioners understand how user interest develops, particularly in serious leisure activities. Informed by this interdisciplinary framework, this study will seek to build on the current body of literature and further explore a particular subset of genealogists' interests and needs.

Methodology

While past studies of genealogists have collected both quantitative and qualitative data, the methods have been limited to surveys and interviews.[43] Other related studies show a wider range of methods. Studies of leisure activities include ethnography or field research, interviews alone, surveys alone, and both surveys and interviews. The relevant psychology studies about interest display an even greater variety; for example, Patall's study of interest and choice used a Likert scale, while Silvia discussed several studies that measured physiological changes to compare interest and other emotions.[44] As an exploratory study not designed to determine direct causation, this project follows the example of previous user studies gathering both qualitative and quantitative data using a survey. While the sample size was too small for statistical significance, the results could nonetheless enhance the existing body of literature and future studies, including discovery of a correlation between genealogy research and historical interest.

For the purposes of this study, a "genealogist" is defined as someone who gathers information about his or her family and its history, or another person's family, in a

professional or nonprofessional capacity. Next, the idea of "interest" in history is defined as spending free time researching or exploring a historical topic or time period for personal pleasure. "History" is taken to refer to all past events, trends, or institutions, whether local, regional or national. This definition is in contrast to "family history" which is characterized by collecting names, dates, and facts directly related to one's forbears. The concept of interest in history was measured by asking respondents about preferred genres of books and films, preferred school subjects, and museums or historic sites visited, as well as open-ended questions about interest in history as related to genealogy. The questions were intended to measure behaviors indicative of underlying attitudes. The survey was developed in consultation with Dr. Helen Tibbo, Alumni Distinguished professor at the School of Information and Library Science at the University of North Carolina at Chapel Hill. See the Appendix for survey questions.

The survey was designed to take about ten minutes to complete. The first section asked about respondents' genealogical research habits, such as frequency and duration. The second portion gauged interest in history based on preferred books and films and historic institution visits, followed by statements that respondents could agree or disagree with. Finally, two open-ended questions and basic demographic questions closed the survey. No personally identifying information was solicited so that respondents would remain anonymous.

In order to establish a baseline of interest in history against which to compare genealogists' answers, the survey was administered online to a control population of master's students from the School of Information and Library Science

(SILS) at UNC Chapel Hill, with the results forming a self-selecting sample. The survey was sent to the student email list on January 12, 2015, with an introductory message describing the survey as measuring academic and personal interests so participants would not initially know it was about genealogy. An additional question at the beginning of the survey asked if the respondent was completing the Archives and Records Management Concentration so I could compare their answers with non-archives students in case there was a bias towards historical interest. The School of Information and Library Science currently has 193 master's students enrolled, and twenty-nine responded (about a 15% response rate). While the SILS population is not representative of the general US population in age, education, and other demographics, it provided a response set to compare with genealogists' answers. The average time for this group to complete the survey was eight minutes.

The same survey was sent to a convenience sample of three local genealogy societies, except the question about the archives concentration was replaced with the question, "Do you research genealogy as a hobby or a profession?" A link to the online survey was sent to the Durham-Orange County Genealogical Society (D-OGS) email list on December 16, 2014, the North Carolina Genealogical Society (NCGS) newsletter on January 5, 2015, and the Wake County Genealogical Society (WCGS) on January 28, 2015. Additionally, I attended a meeting of the Wake County Genealogical Society and offered a paper version of the same survey, with three results. These were then entered into the online survey system for ease of analysis. The NCGS has about one thousand members, including those outside the state of North Carolina; D-OGS, around one hundred and

fifty; and WCGS, about one hundred. The survey achieved a 5.8% response rate (73 responses out of 1,250 recipients). Because the survey was sent to genealogy societies in North Carolina it cannot be generalized to all genealogists, and members of a genealogical society may have different characteristics and attributes than non-member genealogists. This population spent significantly longer to complete the survey, with an average time of 41 minutes. Perhaps the time spent is indicative of the group's passion for the subject compared with the majority of SILS students.

Once the data was gathered, the responses were aggregated in the Qualtrics program for analysis. The answers to open-ended questions were iteratively coded beginning with open coding and followed by axial coding to identify broader, more general concepts. I also ran the results through free textual analysis software to identify the most commonly used words.

Results

SILS Students

From the SILS population, 68% had searched for genealogical information. Seventy-four percent indicated having searched once or twice, 16% once a year, and 11% once a month. Forty-three percent of respondents had researched genealogy for other people; this figure might be larger than the general population because as information specialists they are likely to research for others in a personal or professional capacity. Unsurprisingly given the students' demographics, the number of years doing genealogy was low: 38% reported none, 27% less than one year, 31% 1-5 years, and 4% (one respondent) 6-10 years.

For the questions indicating interest in history I compared the answers of students completing the Archives and Records Management concentration (32%) with those who were not; however, there were too few participants to discover a significant difference. When asked about preferred book genres and allowed to check all that applied, literary fiction/poetry was most popular, chosen by 81% - unsurprising for a field that attracts many English majors. Historical fiction was the second-most common, at 73%. When choosing a single favorite genre, again literary fiction/ poetry was most popular at 23%. When asked to check all preferred genres of film, historical films were most popular, selected by 88% of respondents and closely followed by drama at 85%. However, as a single favorite genre drama was most prevalent. Eighty-one percent of respondents reported watching at least one documentary in the past three months, with 73% having viewed one on a historical topic. Slightly over half (54%) had visited a history museum in the past three months, and 65% a historic site.

Fig. 1. Frequency of research among SILS students who reported doing genealogy.

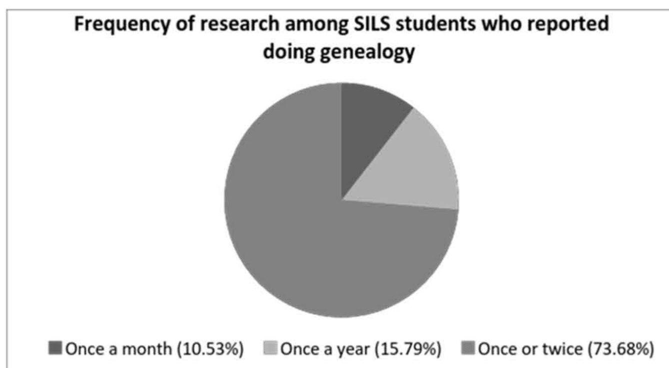
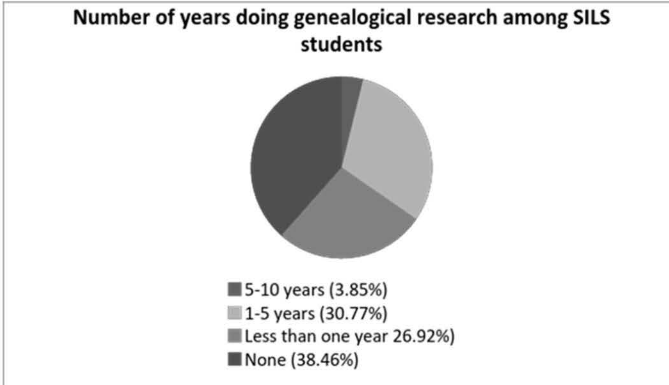


Fig. 2. SILS students' years of experience conducting genealogical research



The questions about attitudes towards genealogy included statements with which respondents could strongly agree, agree, disagree, or strongly disagree. The results were roughly the same for the two survey groups except for the statement "researching genealogy sparks my interest in historical topics and makes me want to know more about history in general," with which no genealogists disagreed while 27% of students either disagreed or strongly disagreed. More students also disagreed with the statements "The most important thing is to construct a family tree and know names and dates," and "I enjoy learning the history of my local area."

Two open-ended questions allowed respondents to write free-text answers: "What do you like about genealogy?" and "Has your interest in history grown since you started genealogy? Please explain." A text analyzer determined the most frequently used words (excluding very short and common words), and responses were then coded

and labeled based on content analysis. Each response could have multiple codes. For the student responses to the first question, the word "family" was the most commonly used (7 times), followed by "like" (5), "knowing" (4), and "interesting," "past," "learning," and "them" (3 each). The most prevalent reason given was learning the context or background of their family, with six students writing about

Table 1: Codes applied to SILS student responses to the question, "What do you like about genealogy?"

* Percentage of answers including the theme rounded to nearest percent

Theme	Percentage*
Historical context/background of family	40%
Narrative	20%
Continuity	20%
Impact of historical events on individuals	13%
What life was like	13%
Interesting facts	13%
Do not like it	13%
Understanding one's roots	13%
Personal connection to famous people	13%
Identity	7%
Finding relatives	7%
Personal connection to history	7%

this theme. For example, one respondent noted that genealogy "provides interesting facts about family and background on ancestors" (SILS Student 5). Similar concepts were the impact of historical events on individuals and knowing what life was like for ancestors, mentioned by two respondents each. Three respondents mentioned enjoying stories and narrative: "Fleshing out names and dates with contextual information – building a narrative" (SILS Student 8), while three included a related theme of continuity with the past. Three respondents mentioned personal connections to famous people or historical events, and two indicated not liking genealogy. See Table 1 for a full list of codes assigned.

In response to the second question, "Has your interest in history grown since you started genealogy?" "history" was the most common word at seven counts, then "interest" or "interested" at six. Five answered yes, five no, and two indicated that they do not do genealogy. Some did not like history, found no connection, or thought genealogy was subordinate to history. Of those who answered yes, explanations of how their interest in history changed included increased interest in particular ethnic groups, time periods, or places; a more personal connection to history; or more interest in what life was like for people of the past. See Table 2 for a full list of codes applied.

Genealogists

Ninety-five percent of genealogists indicated researching genealogy as a hobby and 5% as a profession. Sixty-six percent researched once a week, 38% once a month, 5% once a year, and one respondent checked "never." Eighty-seven percent reported researching for others. Thirty-

Table 2: Codes applied to SILS student responses to the question, "Has your interest in history grown since starting genealogy? Please explain."

*Percentage of answers including the theme (rounded to nearest percent)

Theme	Percentage
Do not do genealogy	17%
No connection between two interests	17%
History is more personal	17%
Knowing what life was like	17%
Changing focus/interests in history	17%
No change in interest	17%
New interest in particular ethnic history/heritage	8%
Understanding impact of ancestors' lives	8%
Do not like history	8%

nine percent of respondents had been researching genealogy for over twenty years; 31%, ten to twenty; and 13% five to ten years or one to five years each. When asked to report all book genres they enjoyed, 72% included historical nonfiction, followed by historical fiction (65%), mysteries, (65%), and biographies/autobiographies (63%). When choosing a single favorite genre, historical non-fiction was first at 31%, followed by mystery at 24%. Historical films were most popular, included by 80% of respondents; however, drama was the single most commonly watched. Seventy-nine percent of respondents had viewed at least one documentary film in the past three months, and 89% of these included a historical topic. Fifty-four percent had visited a

history museum in the past three months, and 66% a historic site.

Fig. 3. Genealogists' years of experience conducting genealogical research

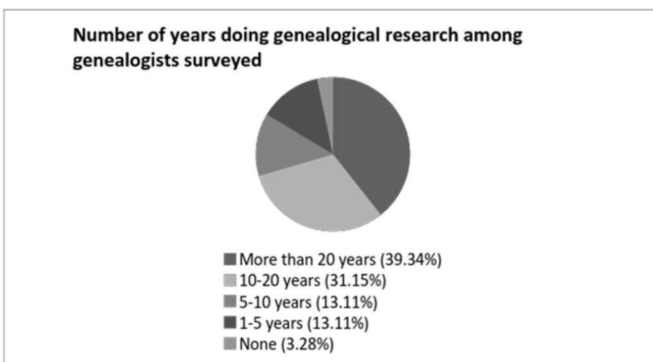
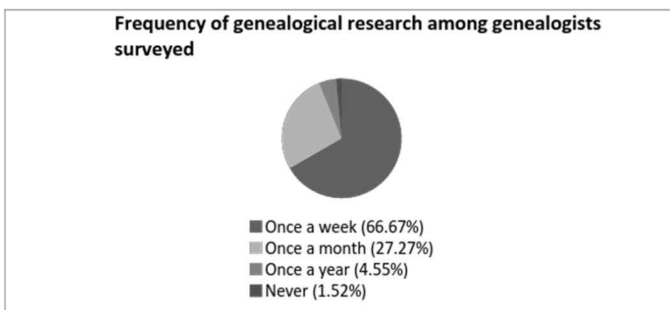


Fig. 4. Frequency of genealogical research among genealogists surveyed



In response to the first open-ended question, "What do you like about genealogy?" the genealogists' answers used words like "family" (18), "ancestors" (12), "people," "where," and "context" (9 each), "learning," "lives," and "finding" (7). The responses included some of the same

themes found among SILS students: enjoying learning about historical context and what life was like for ancestors (for example, Genealogist 47 wrote "finding information on how my ancestors lived, their occupations and achievements, how they migrated"), as well as feeling a personal connection to ancestors, history, or famous people. A few mentioned the themes of continuity or narrative, for example, "finding information on . . . the personal talents that have been passed down through the years" (Genealogist 47). There was also a shared interest between the two groups in knowing "where I come from," labeled as a concern for origins or roots. However two of the major concepts enjoyed by genealogists were absent from SILS respondents. First, many genealogists indicated their enjoyment of the research process and learning new information. For example, one genealogist liked "the search, the surprises, the knowledge learned" (Genealogist 29). While a couple of SILS students stated they enjoyed learning interesting facts, the genealogists' responses indicate a deeper enjoyment of learning that comes with researching genealogy. A second point of departure is the number of genealogists who enjoy the problem-solving aspect of genealogy, like fitting together pieces of a puzzle: one genealogist called it "detective work" (Genealogist 25). None of the SILS students mentioned such an approach, while nine of the genealogists did. See Table 3 for a full list of codes applied.

The second open-ended question asked if the respondents' interest in history had increased as since beginning genealogical research, and how. Genealogists' explanations included words like "history" or "historical" (33), "family," (17), "interest/ed" (16), "events" (9), "research" (8) and "ancestor/s" (11). While

Table 3: Codes applied to genealogist responses to the question, "What do you like about genealogy?"	
Theme	**Percentage of answers including the theme (rounded to nearest percent)**
Learning/research	23%
Context/background	23%
What life was like	23%
Problem/puzzle solving	21%
Personal connection to ancestors	19%
Understanding one's roots	19%
Impact of historical events on individuals	12%
Community	9%
Continuity	9%
Finding relatives	7%
Interesting individuals	7%
Personal connection to history	5%
Identity	5%
Narrative	5%
Finding ancestors	2%
History of place	2%
Personal connection to famous people	2%

hardly surprising, this word frequency analysis shows the importance of family, knowledge or learning, and sustained interest in a genealogical endeavor. Thirty-three answered

yes, eleven said no – five of these were interested in history already and their level of interest remained the same – and three did not answer yes or no. Like the students, a few genealogists indicated a shifting focus of their historical interests such as the history of particular places, a personal connection to historical events, and what life was like. For the genealogists more than the students some concepts carried over from the first question: many indicated increased interest in learning the historical context of their ancestors, or the impacts of historical events: "Understanding the impact of historical events turns a light on the family in a way no BMDD [birth, marriage and death records] can do. Watching the effects of WWII on my family as the war progressed has made me more likely to read a book about London during the war, but that would have been unlikely had I not began to explore family genealogy" (Genealogist 15). Another idea absent from the SILS group but important for the genealogists was increased interest in history for better insights into relatives and their choices. See Table 4 for a list of codes assigned. Tables 5, 6, and 7 offer comparisons of the two groups' answers.

Discussion

The survey results show a clear correlation between conducting genealogical research and some of the indicators of interest in history, such as preferred book and film genres. The genealogists preferred books and films on historical topics compared to the SILS students, although the likelihood of having visited a museum or a historic site was remarkably similar. Displaying the cognitive-emotional dimension of interest, the positive results and feelings from doing genealogy reinforced and increased interest in family

Table 4: Codes applied to genealogist responses to the question, "Has your interest in history grown since starting genealogy? Please explain."	
Theme	**Percentage of answers including the theme (rounded to nearest percent)**
Better understanding of context/background	26%
Impact of historical events on individuals	17%
Changing focus/interests in history	15%
Better understanding ancestors and their choices	13%
Personal connection to historical events	11%
Interest in history of particular places	9%
Desire to know more about interesting facts or individuals	6%
Interest in history came first	6%
Greater sense of identity	4%
Knowing what life was like	4%

Table 5: Comparison of shared codes for the question, "What do you like about genealogy?"		
Theme	**Genealogists**	**SILS Students**
Family's historical context/background	23%	40%
What life was like	23%	13%
Understanding one's roots	19%	13%
Impact of historical events on individuals	12%	13%
Continuity	9%	20%
Finding relatives	7%	7%
Personal connection to history	5%	7%
Narrative	5%	20%
Identity	5%	7%
Personal connection to famous people	2%	13%

Table 6: Comparison of shared codes for the question, "Has your interest in history grown since starting genealogy? Please explain."		
Theme	**Genealogists**	**SILS students**
Changing focus/interests in history	15%	17%
Personal connection to history	11%	17%
Already interested in history	6%	17%
Understanding what life was like	4%	17%

Table 7: Comparison of responses to the question, "Has your interest in history grown since starting genealogy?"					
Group	**Yes**	**No (total)**	**No (interest remained the same)**	**Unclear response**	**N/A (do not do genealogy)**
Genealogists	70%	23%	45% of "no" responses	6%	0%
SILS students	42%	42%	20% of "no" responses	0%	17%

history research. The genealogists' free responses also display some interesting trends when compared to the control population. Not only were some of the most common concepts found in both answer sets, but they also supported the genealogists' motivations identified in earlier user studies. A 1994 survey by Ronald Lambert found that the majority of respondents were inspired to "learn about one's roots and identity" and "get to know ancestors as people," which are comparable to some of the codes in this study.[45] Both SILS students and genealogists enjoyed learning about

their families' context: ten genealogists wrote about researching historical background information, as did six SILS students, while twelve genealogists included learning context as part of the reason for more interest. Genealogist 26 wrote that they liked "putting my family in the context of its time and place." SILS student 20 enjoyed "learning about the historical context and events that led up to the way my family lives now." Others expressed interest in knowing where they came from and understanding their heritage, which was classified as a search for roots: eight genealogists and two students liked knowing their family's origins. Such interests in filling out the historical background of families' lives and exploring heritage are similar to Lambert's "learning about one's roots."

Lambert's category of "getting to know ancestors as people" was found in answers indicating a personal connection to ancestors. Eight genealogists liked feeling a personal connection to their predecessors, and more listed a desire to know what life was like for them: ten genealogists and two students expressed this desire in answer to the first open-ended question, and two from each group included it as part of their increased interest in history. For genealogist 44, genealogy "provides a snapshot of my ancestors during a period of time and helps to provide a connection." SILS student 22 became more interested in history because "knowing more about individuals in my family paints a more detailed picture of what life was like in different time periods."

Finally, while the theme of identity or self-perception is not readily apparent in the majority of responses, it is still an important topic to consider. One genealogist wrote, "As I've researched the family, [history]

has provided a backdrop for understanding myself, my parents, and all the people preceding us by establishing the time and geographic markers that tell me more about them" (Genealogist 15). Another noted that as an African American, researching genealogy has given them a history to identify with when it was difficult to appreciate the exclusive mainstream history (Genealogist 66). One student explained that genealogy "gives me a sense of my own identity by learning from whom (and where) I come from" (SILS student 13). As a final example, another genealogist enjoyed "the sense of being part of something greater than myself" (Genealogist 59). While these people spoke explicitly of how genealogy contributed to their self-understanding, some related concepts also appeared: forming personal connections to ancestors or history, finding "roots," building communities, and weaving a narrative in which they play a part. These responses all reveal affective and deeply personal needs for connection, identity, story, and meaning, while showing that such needs are met not only by researching genealogy but also by connecting to history.[46]

Additional overlapping ideas between the two answer sets include building a narrative, shifting focus of interest based on research threads, and understanding how historical events influenced individuals. However, other major concepts were only mentioned by the genealogists. While it is difficult to establish causation rather than correlation, perhaps some interests and insights only emerge with more time spent on genealogy. Most of the SILS students who researched genealogy had been doing it for less than five years, while many from the genealogical societies had been researching for over twenty years. On the other hand, it is possible that these interests motivated the

genealogists from the beginning and contributed to their sustained pursuit of the hobby. Further research is needed to explore the emergence of the concepts unique to the genealogist respondents.

First, a few of the genealogists mentioned liking the community that comes with pursuing genealogy, either meeting new people during research or deeper familial connections. One genealogist wrote, "I believe that having your genealogy and sharing it with your children and family members can give a family a solid foundation" (Genealogist 64). Elizabeth Yakel explored the concept of genealogists as "communities of records," groups who find personal meaning in the records and form community with genealogists and family in the process.[47] Perhaps this sense of community only comes with time, as genealogists exhaust the easy sources of information and must rely more on the aid of peers.

Another prominent theme in the genealogists' answers was the joy of finding new information and learning new things. While a few of the SILS students mentioned learning interesting new facts ("I enjoy knowing the stories of my ancestors' lives. Some of them have had really interesting existences," SILS student 19), many genealogists expressed a deeper sense of satisfaction in their research endeavors. Perhaps this indicates the feeling of accomplishment from a deeper and longer investment in the search for genealogical information. Some noted an interest in learning more about particular places, such as Genealogist 12: "I enjoy doing research and making connections, following 'hints' to find more details, and learning about the areas and history of places where our ancestors lived." Others found pleasure in the research process itself: "It's

or special collection that receives genealogy requests can benefit from a better understanding of its patrons' needs. Several studies in the literature review have already identified the importance of historical context for moving on from names and dates to understanding ancestors' lives, and for exploring the intersection of individual and societal history. Background information both informs what kinds of sources to look for at advanced stages of research, and enhances understanding of ancestors' lives and decisions, as further confirmed by this study. Information professionals can direct patrons to history books or collections on the time period genealogists are studying, in addition to sources directly supporting family tree construction. This will contribute to increased collection use and patron awareness of the repository's holdings.

Librarians and archivists can tailor workshops, brochures, online guides, and other user services to ensure that they include information about conducting historical research, which seems from the literature to be a lacuna in current practice. While many articles gave examples of genealogy workshops to develop the skills used in this serious leisure pursuit, none mentioned workshops about researching historical background information. There is a great opportunity for archivists and librarians to host genealogy workshops that discuss local history or that highlight particularly rich historical collections. Of course, genealogists will benefit from these services and from information professionals who are more aware of their needs. Furthermore, many genealogists indicated shifting areas of historical interest based on their current line of research. Librarians and archivists must be prepared to keep up with the ever-changing needs and of these researchers.

mostly original research – my ancestors may not have been researched . . . before" (Genealogist 20). Darby and Clough suggested an eight-step model of genealogists' family history research, with continuous learning as an inherent part of the research process.[48] Perhaps the longer genealogists engage in their research, the more aware they are of this ongoing learning process.

Finally, a third point of departure between the genealogists and the students was the theme of puzzle or problem solving. Nine genealogists elaborated on this aspect when asked what they liked about genealogy. Genealogist 16 wrote, "I love putting the 'puzzle' pieces together about my heritage." Another listed "problem solving" (Genealogist 14). Such responses indicate that beyond the emotional fulfillment of knowing one's heritage, genealogy brings the satisfaction of working on a challenging puzzle. Such an inclination for detective work is further supported by preferences for mystery fiction. When asked to check all book genres of interest, mystery/thriller tied in second place for most commonly selected. When choosing a single favorite type of book, 24% of genealogist respondents selected mystery/thriller, second only to historical non-fiction. These responses indicate a more cut-and-dried, quantifiable aspect of genealogy – such as tracking down an elusive place of birth to fill in on the family tree – that complements the more qualitative aspects like context and heritage that are difficult to measure. And the prevalence of both factors in the responses indicates that both are essential pieces to family heritage research. This theme is also a fruitful area for future research.

The results of this study are useful for information professionals whose users include genealogists. Any library

One final note for information professionals is the number of SILS students who had engaged in genealogy research at least once. Over half had done genealogy at some point, indicating that even beyond the large numbers of self-identified genealogists who are members of genealogical societies, many others may dabble from time to time and would continue if given the opportunity. Some creative engagement with this marginally interested group could lead to increasing interest in genealogy and history, and more interaction with the library or repository.

Summary

The impetus to create or continue a family genealogy comes in many forms; less explored are the results of such research, especially the connection between interest in family history and in wider historical trends. Survey results from three North Carolina genealogical societies and from graduate students at the University of North Carolina at Chapel Hill indicated a self-reported increase in interest in history resulting from genealogical research. For the majority of genealogists, the deeper they searched in their family's past, the more they became interested in the larger historical forces that shaped their family's lives.

Respondents were asked about their book and film preferences, and answered open-ended questions about their interest in genealogy and history. Some themes in the answers were common to both the genealogists and the students, such as learning the context of ancestors' lives and what life was like, finding identity in family continuity, and constructing a narrative. Other concepts were found only among genealogists, like enjoyment of the research process, building community, and puzzle solving. Perhaps the shared

answers are common motivations in all stages of research, while the latter themes develop over many years. Further exploration of these answers is an area for future research.

A better understanding of genealogists' interests, motivations, and needs and their relationship to history can help information professionals provide better services. These conclusions can aid librarians and archivists in their design of user services to assist patrons not only with their family trees, but with their historical endeavors as well. Because interest in history often precedes family history research and is modified or intensified by it, information professionals can recommend genealogical materials to patrons with an interest in history. The results of this research project contribute to the body of literature on genealogists and promote a better understanding of a significant segment of libraries' and archives' user populations.

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Appendix: Survey Questions

1. Genealogist Survey: Do you research genealogy as a hobby or as a profession? Hobby / Profession
   SILS Student Survey: Are you completing the Archives and Records Management Concentration at SILS? Yes/No

2. Have you ever searched for genealogical information about your family? Yes / No
   If so, about how frequently? Please circle the best answer.
   Never
   Once or twice
   Once a year
   Once a month
   Once a week

3. Have you ever searched for genealogical information for others? Yes/No
   If so, about how frequently? Please circle the best answer.
   Never
   Once or twice
   Once a year
   Once a month
   Once a week

4. Number of years doing genealogical research:
   None
   Less than one year
   1-5 years
   5-10 years
   10-20 years
   more than 20 years

5. Amount of time spent per month on genealogy:
   None
   Up to one hour
   1-5 hours
   5-10 hours
   10-20 hours
   more than 20 hours

6. Please rank the following topics in order from 1-10 based on your interest, 1 being the topic you like the most and 10 the least.

___Art
___Music
___Social studies/history
___Psychology/sociology
___Biology/Life sciences
___English/literature
___Chemistry
___Physics
___Foreign languages
___Math

7. What genre of books do you like to read? Check all that apply.
___Mystery/thriller fiction
___Science fiction
___Romance
___Fantasy
___Historical fiction
___Literary fiction and poetry
___Autobiographies/biographies
___Historical non-fiction
___Other narrative non-fiction
___Self-help
___Religious books
___Reference books

8. What is your favorite type of book? Please check one.
___Mystery/thriller fiction
___Science fiction
___Romance
___Fantasy
___Historical fiction
___Literary fiction and poetry
___Autobiographies/biographies
___Historical non-fiction
___Other narrative non-fiction
___Self-help
___Religious books
___Reference books

9. What kind of films do you like? Check all that apply.
   ___Action
   ___Adventure
   ___Comedy
   ___Drama
   ___Historical
   ___Horror/Thriller
   ___Musical
   ___Science Fiction
   ___War

10. What is your favorite genre of movies? Please check one.
    ___Action
    ___Adventure
    ___Comedy
    ___Drama
    ___Historical
    ___Horror/Thriller
    ___Musical
    ___Science Fiction
    ___War

11. What genre of films do you watch most often? Please check one.
    ___Action
    ___Adventure
    ___Comedy
    ___Drama
    ___Historical
    ___Horror/Thriller
    ___Musical
    ___Science Fiction
    ___War

12. Have you watched any documentaries in the past three months? Yes / No
    If so, on what topic?
    History
    Science

Contemporary issues

13. Have you visited a history museum in the past three months? Yes / No

14. Have you visited a historic site in the past three months? Yes / No

15. When conducting genealogy research, do you look for information about surrounding societal events/cultural context of ancestors?
    Yes /No I don't research genealogy

16. My main interest in my heritage is pushing back lines of ancestry and knowing names in my family tree.
    Strongly agree
    Agree
    Disagree
    Strongly disagree

17. When I come across sources/kinds of documents that have required outside research to understand the item's use and purpose, I conduct the necessary research.
    Always
    Frequently
    Sometimes
    Rarely
    Never
    Does not apply

18. Researching genealogy sparks my interest in historical topics and makes me want to know more about history in general.
    Strongly agree
    Agree
    Disagree
    Strongly disagree

19. The most important thing is to construct a family tree and know names and dates.

Strongly agree
Agree
Disagree
Strongly disagree

20. I enjoy learning the history of my local area.
    Strongly agree
    Agree
    Disagree
    Strongly disagree

21. What do you like about genealogy?

22. Did you have an interest in history before starting genealogy? Yes / No

23. Has your interest in history grown since you started genealogy? Please explain.

24. Please indicate your age as of today:
    18-25
    26-35
    36-45
    46-55
    56-65
    66-75
    76 or older

25. Please indicate your gender:
    Male Female Decline to answer

26. Please indicate your race or ethnicity. Check all that apply:
    ___Latino/Hispanic
    ___Black/African American
    ___White
    ___American Indian
    ___Asian
    ___Other
    ___Decline to answer

27. Please indicate your highest level of education completed as of today:
High school or GED
Associate's degree
Bachelor's degree
Master's degree
Doctorate

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Who Are We, What Are We?: Archival Identity, Digital Records, and the Quest for Professionalization

by Dallas Hanbury

Abstract

By the mid-1990s, the prolific growth of electronic records forced archivists to re-examine the continued relevance of T.R. Schellenberg's value-assigning appraisal methodologies to the profession. This re-assessment of appraisal culminated in the fin-de siècle debate between one group of archivists, the neo-Jenkinsonians, who rejected appraisal, with the exception of unique circumstances, and their opponents, who clung to value-assigning appraisal methodologies. The debate between the two groups revealed that archivists partly form their professional identities through commitment or opposition to archival theories. Readers can also understand the review of appraisal's centrality to the profession in the context of the longstanding desire of professional archivists to achieve greater levels of professionalization for themselves and the field. The article concludes that the profession has accepted elements of both Jenkinsonian appraisal theory and value-assigning appraisal methodologies as a way to deal with the challenges posed by electronic records, protect personal professional identities, and increase the professional stature of the field.

Introduction

The theories that archivists support play a significant role in shaping their individual professional identities. Some archivists may find it hard to modify their theoretical convictions, even as the profession confronts

issues and events that significantly challenge the continued effectiveness of its core theories. While some in the profession will advocate for the review of archival theory, demanding revisions or abandonment as appropriate, others who have incorporated into their personal professional identities theories that have come under review will feel threatened. Nevertheless, certain issues demand a critical examination of existing archival theory. In particular, the proliferation of electronic records has for years increasingly challenged archivists. Terry Cook asserted in his article on the history of archival ideas that electronic records arguably represent the largest and most widely felt issue confronting the profession.[1]

This article uses the fin-de siècle debate between the neo-Jenkinsonians and their opponents over the appropriateness of conducting appraisal on electronic records as a vehicle to explore the efforts of archivists to protect individual professional identities, grapple with the theoretical challenges posed by this format, and increase the professional stature of the field.[2] Neo-Jenkinsonian appraisal theory, named after English archivist Sir Hilary Jenkinson, argues that archivists should not practice appraisal, with the exception of unique circumstances, and that true records contain four characteristics: natural accumulation, authenticity, impartiality, and cohesion. Furthermore, neo-Jenkinsonian appraisal theory greatly emphasizes documenting and understanding the chains of custody and provenances of records.[3] Their opponents conversely argued that records require some appraisal. As a result of their spirited debate, the neo-Jenkinsonians and their opponents refined current archival theory and made new contributions to the profession's existing theoretical base, thereby

advancing the professionalization of their field.

Abraham Flexnor and Talcott Parsons: Professions and Societies

One way of exploring the impact of the debate between the neo-Jenkinsonians and their opponents is to use organizational concepts borrowed from the fields of education and sociology. Education critic Abraham Flexnor believed that true professions possessed or practiced five major components: intellectualism, practitioners' deep and sustained responsibility for the advancement of their profession, a significant and expanding base in "learned disciplines," meaningful service to society, and the establishment of stringent standards for professionalization.[4] Flexnor's definition of a profession provides the framework for understanding one component of the debate between the neo-Jenkinsonians and their detractors: the desire to further professionalize.

Harvard sociologist Talcott Parsons spent decades studying societal structures and what elements make up a healthy society. He, and other sociologists labeled as "functionalists," proposed that shared beliefs, harmony, consensus, the ability to tolerate and accommodate diverse opinions, and personal voluntary commitments to society represented key components of a healthy society.[5] Parsons used the term "anomie" to describe the chaos that could occur when the elements he considered necessary to a healthy society were missing.[6]

Parsons dwelled at length on voluntary commitments to a society and what effect they had on its health. According to his biographer, Uta Gerhardt, Parsons believed voluntary commitment to agreed-upon values,

rather than coerced support, made for a true democracy and a healthier society.[7] Parsons also believed democracy represented the best possible society type because it relied on volunteerism to thrive. Using this lens, the fin-de siècle appraisal debate reveals the good societal health of the profession. Archivists *chose* to participate enthusiastically, if not vociferously, in the argument, thereby demonstrating their voluntary commitment to the profession.[8]

Sir Hillary Jenkinson and T. R. Schellenberg: Diverging Viewpoints on Appraisal

The debate between the neo-Jenkinsonians and their opponents has its origins in the theories of appraisal developed by English archivist Sir Hilary Jenkinson and his American counterpart Theodore R. Schellenberg. Jenkinson and Schellenberg developed groundbreaking appraisal theories in the early and mid-twentieth century that over decades influenced countless archivists in the United Kingdom, United States, Canada, Australia, and elsewhere. Their theories have endured as archivists continue to use, modify, refine, and update them in various ways.

In his now famous *Manual of Archival Administration*, Jenkinson argued that the essential duty of the archivist is to protect the original order and characteristics of records from disruption, thereby ensuring their ability to serve as uncorrupted evidence of the actions of their creators.[9] Jenkinson asserted that true records possessed four characteristics: natural accumulation, authenticity, impartiality, and cohesion. He believed that establishing chains of custody as completely as possible protected the original order of records and helped uncover their provenances, significantly adding to their evidential

value. Jenkinson taught that archivists should rarely conduct appraisal, but rather focus on understanding the chains of custody and provenance of records, as well as identifying records worth preserving based on their evidential, informational, or intrinsic value. However, he conceded that if unusual circumstances occurred, like war, in which the widespread destruction of records regularly took place, appraisal became necessary.[10] In an attempt to retain theoretical purity, Jenkinson proposed that records managers should decide the disposition of records under the advisement of archivists.[11] Jenkinson's acceptance of the need to practice appraisal during wartime indicated how for some archivists practical considerations would soon assume greater importance than theoretical purity. The expansion of the British government during World War I resulted in the production of government records on a scale larger than ever before, making the destruction of records a necessity.

In 1956, American archivist T.R. Schellenberg set forth his own appraisal theory in *Modern Archives: Principles and Techniques*. He advised archivists to actively divide the value of archival materials into two groups: primary and secondary. He defined primary value as the value records had to their creators. Secondary value represented the worth, or enduring value, records had to researchers.[12] Schellenberg believed archivists should appraise records for their secondary value. He subdivided secondary value into two groups: evidential and informational. Evidential value focuses on how records, as well as the creators and processes that created them, exist in relation to each other. It also concentrates on documenting the actions of creators and the processes that produced records. Informational value derives from how the contents

of records add to the information about particular topics or subjects.[13]

To better understand Jenkinson and Schellenberg's competing thoughts on appraisal, one should consider the educational and professional contexts in which both received their educations, worked, and developed their theories. Jenkinson received training in the classics at Cambridge University and graduated in 1904. He joined the United Kingdom's Public Record Office in 1906, where he remained for forty-eight years until his retirement in 1954. At the beginning of Jenkinson's career the British Empire had reached its zenith, and had a long-established archives tradition; by the time Jenkinson began working at the Public Record Office, the agency had existed for sixty-eight years.[14]

Schellenberg had an educational experience similar to Jenkinson's, earning advanced degrees in history. He received a bachelor's degree in 1928 and a Master's degree in 1930, both from the University of Kansas. He took a Ph.D. from the University of Pennsylvania in 1934 and started working at the National Archives in 1935.[15] While the Public Record Office had been well-established when Jenkinson arrived in 1906, the National Archives in 1935 had been founded only a year earlier and confronted an enormous records backlog. The newness of the National Archives, as well as the explosion of bureaucratic offices created in response to the Great Depression, greatly contributed to the backlog of records. That backlog only increased during World War II as the government produced enormous quantities of records as a result of involvement in the conflict. This experience caused Schellenberg to believe that archivists should appraise records to reduce their quantity and gain intellectual control over them.

On a broader level, Schellenberg wanted to lessen the influence of Jenkinsonian appraisal theory on American archivists, and to provide them with an approach to appraisal that took into account the circumstances in which they worked. Schellenberg believed that much of European archival theory simply did not help American archivists address the backlog challenges they faced in the mid-twentieth century. Jane F. Smith, in her profile of Schellenberg, argued that he consciously worked toward developing a uniquely American position on archival appraisal.[16] In his article comparing Schellenberg and Jenkinson's positions on appraisal, Reto Tschan echoed Smith's point, and added that Schellenberg wrote *Modern Archives* as a rejoinder to Jenkinson's *A Manual of Archival Administration*.[17]

Jenkinson and Schellenberg's competing thoughts on appraisal became the profession's two most dominant viewpoints on the topic, informing and shaping generations of archivists to the present day. Archivists adopted or modified Jenkinson and Schellenberg's appraisal theories because they addressed current needs, responded to contemporary issues, or aligned with their individual beliefs regarding appraisal. For archivists more open to the evolution of archival theory, the emphasis Schellenberg placed on reviewing records, assigning them a value, and then acquiring or rejecting them, resonated. Archivists less amenable to theoretical change found Jenkinson's near-total ban on appraisal appealing. Schellenberg and Jenkinson continue to find adherents and defenders because archivists have found that both theoretical positions can accommodate revision and update, and thereby respond to contemporary issues.

The Neo-Jenkinsonians: Revising Old Theories for New Problems

In the 1990s, the rapid growth of electronic records prompted archivists to consider new strategies to appraise, preserve, and provide access to them. Jenkinson's emphasis on chain of custody became particularly attractive to a group of archivists eventually labeled as "neo-Jenkinsonians." Faced with preserving the records of government and corporate entities who regularly shift their shape and size and transfer irregular amounts of records, archivists find it difficult enough to discern provenance.[18] The amorphous existence of electronic records, in which unchanging originals do not usually exist at all or for long, makes conducting appraisal even more difficult. Furthermore, the ease with which systems can generate digital records has caused an explosion in the number of such records, making it extremely challenging, even impossible, for archivists to appraise them the same way as non-digital materials. Terry Cook recognized that the neo-Jenkinsonian emphasis on documenting provenance had a definite appeal to those struggling with the challenge of appraising electronic records.[19]

Other archivists found Jenkinson's thoughts on appraisal enticing for different reasons. Some, like Canadian Luciana Duranti, were drawn to the idea that archives exist, or should exist, as uncorrupted evidence conveying truth. In 1994, Duranti argued that archivists who conduct appraisal violate at least two of the four characteristics Jenkinson identified as defining true records: they disrupt the cohesive and impartial nature of records.[20] She believed that to ensure the public's continued faith in the impartial and evidence-bearing nature of records and the ability of archives to

protect them as such, archivists must ensure that the records they care for have and will remain free from tampering, including that which she believed would occur by appraising them.[21] Duranti, like Jenkinson, believed that preserving records in their original order, structure, and form represented the chief duty of archivists.[22]

Duranti objected not so much to selection as to assigning value:

> The question that spurred the writing of this piece was whether appraisal should be made an integral and necessary component of archival science. In so far as appraisal equals attribution of value, the answer is no, because the idea of value is in conflict with the nature of archives. If instead appraisal is considered just as a modern term for selection (either within an archives or among a number of archives) and acquisition, then it has to be acknowledged that appraisal has belonged to archival science since its first formulations and applications.[23]

For those who might try to defend appraisal by arguing that they appraised not the records themselves but their provenances, Duranti countered, "Any attribution of value… is inescapably directed to content, even when it is carried out on the basis of provenance (be it creatorship, function, or procedure) because the assumption on which it is based is that good provenance equals good content."[24]
Like Duranti, fellow Canadian Heather MacNeil felt establishing and understanding the provenances of records represented the key task for archivists.[25] Provenance constitutes the value of a particular record in a distinct context, or in relation to other records and provenances.

MacNeil so valued establishing and understanding the provenances of electronic records that she suggested archivists become involved in creating records producing systems.[26] Another Canadian archival theorist, David Bearman, agreed with MacNeil, arguing that if archivists played an active and direct role in designing records-generating systems, they could better predict what records the systems will create, immediately know and understand the provenances of generated records, and thereby more ably discern their evidential and informational value.[27]

Jenkinson's writing left clues about how he would feel regarding archivists working with records creators to design records-creating systems. Although he believed it within their duties to produce guidelines to help records creators and managers select records for preservation, Jenkinson might have considered archivists directly participating in the design of records-creating systems a violation of what he regarded as their professional functions. Jenkinson wrote:

> If we look at the objections we have already raised to the possible methods of destroying portions of our older Archive collections, we shall see that all are based on the difficulties that arise when the Archivist and the Historian are given what amounts to a share in the creation of those Archives which it is their true business only to keep and use respectfully…[28]

Whether Jenkinson would regard electronic records and their accompanying challenges as such an extreme departure from the issues archivists have historically faced that they warrant a temporary deviation from strict adherence to his appraisal theory remains harder to discern. It is unknowable what he

would have thought of the archivists who have forged ahead, working to create standardized structures for electronic records and specifying the format and content of the accompanying metadata.

Opponents of Jenkinson and Neo-Jenkinsonian Appraisal Theory

Some archivists have dismissed Jenkinsonian and neo-Jenkinsonian appraisal theory. A need for flexibility, brought about by the rapidly changing information environments in which they work, partially drives their rejection of Jenkinson's deep commitment to a keeper mentality. Although scholars have pointed out Jenkinson's theoretical flexibility when situations dictated such a course of action, many archivists felt he did not go far enough.[29] Archivists have also repudiated Jenkinsonian and neo-Jenkinsonian appraisal theory by rejecting the idea that they must unequivocally cleave to certain theories, ideals, and practices long perceived as core to the identity of the profession. Loyalty to Schellenberg's enduring and influential position on appraisal also played a role. The persistent impact of Schellenberg's stance on appraisal and mid-century criticism of Jenkinsonian appraisal theory became especially evident in the mid-1990s, when Frank Boles and Mark A. Greene strongly opposed the rise of neo-Jenkinsonian appraisal theories, deeming them too stiff to respond to the contemporary contexts archivists work in and the issues they face. They particularly disagreed with Duranti's positions that archivists must resist modifying or discarding the concept of enduring public memory and maintain responsibility for sustaining the public's faith in archives based on perpetual preservation of evidence-

conveying records related to public law. Duranti argued that archivists need to uphold both ideas because the Romans established them as mechanisms to maintain public law, and because Roman law, in her opinion, forms the basis of general domestic jurisprudence (at least in Europe) and the bedrock of a unifying European cultural identity. Boles and Greene countered, stating that society has relieved archives of these obligations because it has developed other mechanisms to do so, particularly "through wide publication, dissemination, and preservation of laws and other critical texts."[30]

Boles and Greene also took issue with Duranti's stance that archivists should try to find practices and methodologies that first conform to theory, and then address the contexts in which they work and the issues they confront.[31] They argued that practices and methodologies for archivists should first consider how to deal successfully with those challenges and conundrums, and then adhere to the theories some archivists believe inform the true identity of the profession. Boles and Greene further argued that modern records—especially electronic ones—do not often meet Jenkinson's four characteristics of true records: naturally accumulated, impartial, authentic, and cohesive.

Boles and Greene asserted that people assume the authenticity of records for practical reasons, not because they believe archivists have vetted each one. The public, archivists, or civil servants cannot take the time to verify the truthfulness of every document. Assuming the validity and veracity of a record helps society conduct its business in as smooth a manner as possible. Boles and Greene contended that not only does society assume the authenticity of most records because it suits its purposes, it also does so because

safeguards and systems exist to deal with inauthentic records.[32]

As for not disrupting the cohesive and naturally accumulated nature of archives, Boles and Greene assert that archives cannot keep every record just because certain theories mandate they do so. They argued that the records produced by contemporary society relate to each other in more ways than a one-to-one relationship. Deaccessioning some records during appraisal thus does not harm the remaining records. In fact, it could increase the value of those kept for preservation because the interrelationships among the remaining ones may become clearer.[33]

Boles and Greene especially took exception to the idea that archivists impartially keep records. They claimed that the American legal system regards archivists as having an active role in ensuring records achieve various accountabilities. Boles and Greene wrote, "American law does not accept the concept of impartiality and requires governmental archivists to look beyond it in making appraisal decisions."[34] In short, as circumstances and contexts change, so too does the value and efficacy of value-assigning appraisal methodologies.[35] Jenkinson's appraisal principles and four characteristics of a true record do not constitute unending professional imperatives immune to debate and revision.

Terry Cook concurred with Boles and Greene. If archivists embraced the evolution of archival theory, they could better address how to appraise, acquire, preserve, and provide access to records in changing archival contexts.[36] Writing in the late 1990s, amidst the growing challenges posed by electronic records, Cook cautioned against inflexibility and resistance to change. Cook warned

archivists unwilling or struggling to adapt traditional, decreasingly viable theory to electronic records, "Electronic records present this stark challenge to archivists: core archival principles will only be preserved by discarding many of their traditional interpretations and practical applications."[37] At the same time, Cook realized electronic records had rapidly accelerated normal, ongoing changes to theories, methodologies, and practices archivists had long considered essential to their professional identities. He anticipated the distress this would cause and attempted to provide comfort and encouragement:

> [The] changing nature of archival theory over time becomes a professional strength, not a weakness. Indeed the best archival theorists have usually been those able to recognize and articulate broad, often radical changes in society, in organizational structure, and in record-keeping technologies, and then integrate the impact of these changes into archival work and thought.[38]

Discussion

The neo-Jenkinsonians and their opponents both believed that their perspectives on appraisal helped raise the professional stature of the profession. Although not explicitly expressed in the readings cited in this piece, a close analysis of the writings of the neo-Jenkinsonians and their opponents reveals a deep desire to further professionalize the field. They merely differed on how to accomplish the goal that they both desired. One need only to look at Terry Cook's eloquent plea for archivists to update their positions on archival theory to better respond to the contexts in which they work and the issues they face, or Duranti's firm commitment to a professional archival identity of enduring

public memory and public faith in archives, to find examples of archivists' respect for the professionalism of archives.

While Duranti saw holding fast to long-established, identity-driven theory as the best way to deal with new challenges, Boles, Greene, and Cook believed voluntary participation in the creation of new theoretical approaches represented the ideal way to address the field's most vexing problems. Perhaps most intriguing though, was the position of Heather MacNeil, who expressed a willingness to respond to the various dilemmas archivists face with some degree of theoretical flexibility, provided it did not violate her most core beliefs in Jenkinsonian appraisal theory. MacNeil's stance, based on finding a middle ground and achieving compromise, offers a unique avenue to better address the questions electronic records pose to archives, maintain individual archival identities, and achieve greater personal and profession-wide professionalization.

Cook and Duranti also reinforce the argument that archivists defend their positions on appraisal to avoid the uncertainty caused by change, to protect their individual professional identities, and to preserve what they believe represents the ideal, and even correct or true, identity of the profession. Again, however, archivists differ on what beliefs regarding appraisal theory they must hold to shape the overall identity of the profession, and hence why the neo-Jenkinsonians and their opponents wanted their positions on appraisal theory regarded as the most valid. Widespread acceptance of one viewpoint or the other by archivists meant it had a better chance to play a significant role in shaping the current, and possibly future, identity of the profession.

In their quest to find ways to gain intellectual control over electronic records, increase the

professionalization of the field, and maintain individual professional identities, archivists in Canada and the United States appear to have accepted elements of both neo-Jenkinsonian and Schellenberg's value-assigning appraisal theory. Indeed, even before the debate regarding the place of value-assigning appraisal theory in the profession reached a crescendo, some archivists began calling for placing a greater emphasis on documenting the provenances of electronic records. In 1994 Terry Cook wrote—in reference to the challenges electronic records posed to records creation and preservation—that "archivists and information professionals must take charge and move from being passive custodians to active documenters, from managing the actual record to understanding the conceptual context, business processes, and functional purpose behind its creation."[39] Although archivists remain concerned about the informational content of electronic records, as the years have passed they have become increasingly preoccupied with determining the informational and evidential composition of the provenance of electronic records. The fact that original electronic records do not exist at all or for long caused this shift in emphasis. Since electronic records can and often do undergo constant change, their informational content can and often does as well. However, each event in the life of a digital record, from the moment of creation to every instance of editing, has a unique provenance archivists can document.

Although Duranti argued conducting appraisal by studying the provenance of a record still violated core archival beliefs and threatened the identity of the profession, archivists have increasingly explored the various possibilities associated with this appraisal strategy. David Bearman's suggestion that archivists play a role in the creation of

records-generating systems provides evidence of this trend. By aiding in the design of a records producing-system, archivists can potentially gain an unprecedented level of understanding of the provenances of records. Bearman stated, "Documentation of the link between data content and the context of creation and use of…records is essential if records (archives or manuscripts) are to have value as evidence."[40] Good provenance, in terms of the ability to document, understand, and perhaps even create it, enables archivists to better map the links between digital records and their provenances, as well as the numerous connections among electronic records themselves.

Interestingly, the more the neo-Jenkinsonians sought to defend Jenkinsonian appraisal theory and maintain its usefulness and relevancy to a changing profession, the more they modified it, especially in advocating that archivists play a role in designing and creating records producing systems. In trying to stay true to Jenkinson's beliefs and instructions regarding appraisal, the neo-Jenkinsonians ironically heeded the call of Terry Cook to adapt and respond to context and necessity. While archivists like Frank Boles and Mark A. Greene viewed the neo-Jenkinsonians as inflexible, they may have overlooked their efforts to adapt their theoretical perspectives on appraisal to the changing contexts archivists work in and the issues that they face. As they worked to identify weaknesses in Duranti's defense of a long-standing conception of archives and how archivists have evaluated records in the past, Greene and Boles might have missed the voices of other neo-Jenkinsonians, like Heather MacNeil, who revealed both a belief in Jenkinsonian appraisal theory and a willingness to alter it, to a point, to better address the issues that archivists

face in a changing archival environment.

The relative youth of the profession as compared to other fields, like law and medicine, has inspired archivists to attempt to solidify and refine its identity by claiming certain tasks, products, methodologies, practices, and theories as belonging to archives.[41] Although archivists do create and refine archival theory and make an effort to expand the boundaries of the profession, they have also exhibited a natural desire to consolidate certain practices, methodologies, theories, and theoretical outlooks into a mass representing the identity of the profession. The neo-Jenkinsonians' strident defense of their theoretical position and their opponents' frustration with what they believed represented stubborn inflexibility on the part of the neo-Jenkinsonians can be viewed through this prism of professionalization.

As Terry Cook pointed out, an identity for the profession in tune with the contexts in which it exists and labors develops when archivists exhibit a willingness to accept the realities they face, and then accordingly change and adapt.[42] As an addendum to Cook's point, the profession more ably moves toward the goal of increased professionalization when it voluntarily engages in discussions about a range of issues, including how to appraise electronic records, how to preserve individual professional identities, and how to raise the professional stature of archives. That the neo-Jenkinsonians and their opponents did so, and archivists continue to do so, not only with fellow practitioners, but also with professionals from other fields, particularly library and information science, demonstrates that the archives profession has and will continue to raise its professional stature. It further shows that

in addition to expanding archival theory, the profession recognizes that open, honest dialogue also serves as a productive way to discover solutions to some of the most pressing issues that archivists face, including the development of a clearer sense of who they are, and what they are.

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NOTES

1. Terry Cook, "What is Past is Prologue: A History of Archival Ideas Since 1898 and the Future Paradigm Shift," Archivaria 43 (Spring 1997): 43-44.
2. Canadian Terry Cook used the term "neo-Jenkinsonian" to describe archivists who either expressed significant admiration for, or adhered to in a meaningful degree, Hillary Jenkinson's appraisal theory. See Cook, 25.
3. Luciana Duranti, "The Concept of Appraisal and Archival Theory," American Archivist 57 (1994): 334-335; Frank Boles and Mark A. Greene, "Et Tu Schellenberg?: Thoughts on the Dagger of American Appraisal Theory," American Archivist 59, no. 3 (Summer 1996): 305, 306.
4. Thomas Neville Bonner, Iconoclast: Abraham Flexner and a Life in Learning (Baltimore: Johns Hopkins University Press, 2002), 139.
5. A. Javier Trevino, ed., Talcott Parsons Today: His Theory and Legacy in Contemporary Sociology (Lanham, MD: Rowman & Littlefield Publishers, Inc., 2001), xxxii, xxix.
6. Uta Gerhardt, Talcott Parsons: An Intellectual Biography (New York: Cambridge University Press, 2002), 35.
7. Ibid., 212-13.
8. Ibid., 50-51, 212-213, 214-15. Parsons contended voluntary participation in a society emphasizing legality,

security, and rationality represented the best, healthiest, societal type. In this societal structure, people make numerous value commitments to it and each other. By doing so, they voluntarily work toward strengthening its legality, security, and rationality. In more common terms, people in this society "pay it forward."

9. Hillary Jenkinson, A Manual of Archival Administration (Oxford: Clarendon Press, 1922).
10. Ibid., "The Choice of Records for Preservation in Wartime: Some Practical Hints," in Selected Writings of Sir Hilary Jenkinson, ed. by Roger H. Ellis and Peter Walne, (Chicago: Society of American Archivists, 2003), 186-88.
11. Frank Boles and Mark A. Greene, "Et Tu Schellenberg?: Thoughts on the Dagger of American Appraisal Theory," American Archivist 59, no. 3 (Summer 1996): , 306.
12. T. R. Schellenberg, Modern Archives: Principles and Techniques (Chicago: Society of American Archivists, 1956), 16.
13. Reto Tschan, "A Comparison of Jenkinson and Schellenberg on Appraisal," American Archivist 65, no. 2 (Fall-Winter 2002): 180, 184.
14. Terry Eastwood, "Jenkinson's Writings on Some Enduring Archival Themes," American Archivist 67, no. 1 (Spring-Summer, 2004): 31-32.
15. Jane F. Smith, "Theodore R. Schellenberg: Americanizer and Popularizer," American Archivist 44, no. 4 (Fall 1981): 315-316.
16. Ibid., 316, 324.
17. Tschan, 179
18. Entities with strict, stable hierarchical structures who when they transferred records to archives often provided complete, closed series, with fairly to highly clear provenances generally characterizes the conditions under which Jenkinson developed his appraisal theory. Entities with structures possessing only a passing resemblance to old corporate or governmental hierarchies, who rapidly and often regularly shift their shape, as well as transfer irregular amounts of records with future accruals highly possible, whose provenances archivists often find difficult

or impossible to discern basically describes the context in which the neo-Jenkinsonians worked to employ Jenkinson's thoughts on appraisal.

19. Cook, "What is Past is Prologue," 25.
20. Many other archivists have expressed the same argument. In "Orders of Value: Probing the Theoretical Terms of Archival Practice," Archivaria 32 (Summer 1991): 78-100, Brien Brothman carefully employs choice words, mainly "archival order" to further clarify the point. He uses the term "archival order" to explain the impact archivists really have on records' original order when they conduct appraisal. The way a records creator (s) filed or stored their records represents records' original order. When archivists acquire those records and appraise them, they may rearrange, deaccession, and destroy or transfer to another repository the unwanted records. This action disrupts records' original order, but creates archival order. In short, archival order means arranging records in a certain way to gain greater intellectual control over them. (See Brothman, pg. 85).
21. Duranti's fears of tampering appear well-founded in at least one context. Scholar Robert McIntosh provides numerous examples of archivists arranging, re-arranging, accessioning, and deaccessioning records for purposes other than selecting records that best convey evidence, with the term "best" being subjective and relative. See Robert McIntosh's "The Great War, Archives, and Modern Memory," Archivaria 46 (Fall1998): 1-31.
22. Duranti, 336.
23. Ibid., 344.
24. Ibid., 336.
25. Heather MacNeil, "Archival Theory and Practice: Between Two Paradigms," Archivaria 37 (Spring 1994): 6.
26. Ibid., 11.
27. David Bearman, "Documenting Documentation," Archivaria 34 (Summer 1992): 39.
28. Ibid., A Manual of Archival Administration: Including the Problem of War Archives and Archive Making (Oxford: Clarendon Press, 1922), 149, accessed June 24,

2015 https://archive.org/stream/manualofarchivea00iljenk#page/148/mode/2up

29. See Jenkinson's "The Choice of Records for Preservation in Wartime: Some Practical Hints," in Selected Writings of Sir Hilary Jenkinson, edited by Roger H. Ellis and Peter Waine, (Chicago: Society of American Archivists, 2003), 186-88.
30. Boles and Greene, 300-301.
31. Ibid.,, 309.
32. Ibid., 305.
33. Ibid., 307.
34. Ibid., 304.
35. Ibid., 310.
36. Cook, 46.
37. Ibid., 42.
38. Ibid., 46.
39. Terry Cook, "Electronic Records, Paper Minds: The Revolution in Information Management and Archives in the Post-Custodial and Post-Modernist Era," Archives and Social Studies: A Journal of Disciplinary Research 1, no. 0 (March 2007): 428-429.
40. Bearman, 301.
41. In "Trusting Archivists: The Role of Archival Ethics Codes in Establishing Public Faith," American Archivist 67, no. 1 (Spring/Summer 2004): 20, Glenn Dingwall argued establishing archival codes of ethics serves as another important way the profession can increase its professionalization.
42. Cook, "What is Past is Prologue," 42, 46.

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2016 Gene J. Williams Award Winner

The Gene J. Williams Award, presented annually by the Society of North Carolina Archivists, recognizes excellence for a paper on an archival topic written by a North Carolina graduate student for a graduate level course. This award honors the late Gene J. Williams, archivist at the North Carolina Division of Archives and History and at East Carolina University and charter member of the Society of North Carolina Archivists.

We've Got Mail: Email Preservation at a Small, Private University

by Nahali (Holly) Croft

Background

During my two years as a graduate student, Campbell University, a private, religious-affiliated university, employed me as an intern, first to work with digitization and later to work in its archive with both analog and digital materials. The school has two libraries, and the archive falls under the purview of the main library. Though there is an archive, the university does not employ an archivist or a records manager. None of the librarians at the university have specific archival training, but the state's traveling archivist program brought three visiting archivists to campus in 2015 in order to provide recommendations on how to better preserve and provide access to the materials that have been collected.[1] Both of my supervisors were cataloging librarians, with one having a specialization in metadata. Because I was specifically studying archival

standards and practices, as I learned skills that directly related to my work, I was given wide berth to implement them in the archive. Often my supervisors relied on me to understand and develop best practices for all aspects of preservation of the university's records.

Being a private university, there is no state-prescribed mandate for records retention, and the university has never provided the archive with a mandate for collecting school records. Even with this, the librarians are committed to asking for records from the different departments, and they hold at least partial records from all four past university presidents, beginning with records from the university's founder that are over 100 years old.

The university's third president retired in 2003, and the fourth president moved to the position of president pro tempore in 2015 upon his retirement. Though the archive has partial records for the third president, there are still files contained in his office in the main library. As the fourth president is still an active faculty member, any records from his administration will remain in his possession until he retires. Both of these men headed the school at a time where materials began to be created digitally. Both used email regularly. The collections of these two individuals, which will certainly end up in the university archive, were the most pressing cases for why the school needed to implement a workflow for email ingest. However, at any time, the archive might have received records from faculty members or prestigious alumni that would have necessitated such a procedure even earlier.

This paper will discuss the obstacles and solutions to implementing an email preservation system at a small university. I reviewed five possible programs for the best fit

for the situation, though only three were considered seriously for implementation. At the conclusion, I will discuss why the path taken was most appropriate, which may benefit others looking to implement similar systems.

Background and Relevant Literature

Departmental records make up much of the archive's collection. However, the collection also contains other materials of interest to the school, including past presidents' personal correspondence. Email, being a type of correspondence, functions in the same manner as the letters of yesteryear, documenting events, transactions, and relationships.[2] In 2011, the Pew Research Center found that 92 percent of adults who use computers also use email, and 60 percent check email at least once a day.[3] An estimated 212 billion emails will be sent in 2016, fifty-eight percent of which will originate in businesses.[4]

Emails create a "stream of evidence" concerning the activities of individuals or entities. As much as three-fourths of a company's best insight comes from email correspondence, and it is the most used method in both academia and corporate environments to "generate, organise, share and leverage knowledge."[5] Not all of the value of email correspondence comes from the content of individual emails. Analyzing a corpus of emails can provide a more comprehensive look at the activities and decision-making processes within an organization than paper-based records have traditionally provided.[6] "Narrative searches," where researchers find critical clues scattered over many different emails within one individual's account, have also been useful in learning more about the personal lives of those who donate their personal papers to libraries and archives, even

within professional email accounts. These narrative structures do not take place in a linear structure. They develop over time, and often include correspondence with many different individuals. It has become imperative to find a system that will preserve messages in a way that ensures the collection is usable for researchers. However, not every email contains historical significance. Elements of a well-curated email collection include an organizational structure with defined categories, a lack of junk mail, and little to no inclusion of "daily traffic," such as announcements.[7]

Part of the issue with preserving emails is the variance in the clients used to access user accounts. While Microsoft dominates the "enterprise email market segment," there were over 4,000 clients available in 2012.[8] Clients do not store and track emails in the same manner.[9] Settings on the client can conflict with servers, instruct servers to delete messages stored on them, and create incomplete backups, just to name a few of issues one may find when working with emails. Coupled with user error, purposeful deletion, or even hacking, email is susceptible to loss.[10]

The "cloud" has brought its own challenges to email preservation. The affordability and accessibility of cloud-based storage for email has drawn in users, particularly with its integration of utility tools like messenger applications and office programs. Using cloud computing requires users to provide their data to a provider and then completely trust the provider's ability to keep the data confidential. However, cloud security is not always a consideration to the user until it becomes a problem.[11] Having everything in digital storage has lulled many into believing that their information is securely backed up, but in reality, third parties can and do steal information. Another issue arises when faced with data

loss: some users have found companies that host the cloud storage have little to no customer service and users have little recourse when told their messages are unrecoverable.[12]

Another concern with email preservation is that an email is not one piece or file, but rather a collection of data — a composite object.[13] The email header acts as an envelope, containing information including the sender's email and IP addresses, the receiver's email address, the subject, time of creation, delivery stamps, servers in transit, carbon copy and blind carbon copy information, and content length. Other aspects of the email include the body, encoding, and attachments.[14] In order to ensure the integrity and authenticity of messages, the InSpect Project at King's College found that there are 14 message header properties and 50 message body properties in a single email that need to persist. As[15] email headers, in particular, can serve as legal evidence, maintaining the integrity of emails should be a concern for anyone tasked with the responsibility of preserving it.[16]

Repositories should be aware that freedom of information laws and civil discovery laws apply to emails, and the burden of producing the records may then fall on the archive if it owns the only known copies of an account.[17] By 2005, one out of every five organizations in the United States had received subpoenas for employee email in regards to discrimination claims.[18] Notably, *Victor Staley, Inc. v. Creative Pipe, Inc.* found that the duty to preserve relevant evidence is owed to the government, not to opposing parties. In other words, companies or other entities issued subpoenas are legally required to respond to the government, not the plaintiff. Further, because there is no national standard for document preservation, organizations should design policies

that comply with the toughest demands imposed by any court in order to avoid prosecution.[19]

Archivists may expect to receive entire email collections, which can be quite large and span decades.[20] From a research perspective, having a complete collection increases the research potential, though libraries and archives may still carry out selection activities based upon evidential value, aesthetic value, market value, associational value, and exhibition value.[21] Archivists should also be prepared to receive accounts residing on both "dead" and "live" computers.[22]

The Library of Congress's archiving tips for personal email provide the following steps to ensure proper preservation:

1. Identify all email sources.
2. Decide which messages have long-term value.
3. Export the selected messages.
4. Organize the saved messages.
5. Make copies and manage them in different places.[23]

These steps provide the foundation for the inclusion of email in the existing workflow for digital materials, though the archive also needs to establish physical and intellectual control of the items — something that would not be necessary for personal archiving.[24] The University of Illinois' "Digital Accession and Processing Workflow" and OCLC's "Walk This Way: Detailed Steps for Transferring Born Digital Content from Media You Can Read In-House" are particularly useful for implementing a workflow for digital materials.[25]

Chris Prom offers several suggestions for email preservation tools, including Aid4Mail, Emailchemy, and Xena, which are systems that I reviewed for the university's archive. The instructors in my digital forensics for digital collections course suggested I also review readpst in the BitCurator environment and ePADD.[26] As with all software systems, these will update and evolve, and new software will be created that may warrant a review at a later time. For the purposes of this study, programs chosen for review follow Prom's three suggestions for institutions: "defining policies, choosing appropriate tools, and implementing them in the light of local environmental factors and available resources."[27]

Fitting Email into the Digital Workflow

The Campbell University archive contains both analog and digital materials. The digital materials include items digitized for the university's digital library — images of newspapers, yearbooks, and photos — and born-digital materials, mostly photos, video talks, and sermons. As the archive acquires items, accession records are created. Digitized files are given new, separate records from the analog formats. Personal information is removed, and then metadata is assigned. Files are then copied so that there is a preservation copy and an access copy. Access copies are stored on the university's server as part of the digital library, and preservation copies are stored in the archive with documentation, including reference, provenance, context, and fixity information.[28]

In the current workflow, there has not yet been cause to utilize write blockers, create disk images, or conduct forensic explorations for content, since library staff created

the majority of the digital files for digitization. However, the library will eventually receive a disk or a flash drive from a donor, which will necessitate the need for a more robust ingest process. Through classes in electronic records management and digital forensics, I have had the opportunity to explore programs that will assist with those processes and plan for their future usage in the workflow. However, email seemed to require tools specific to that medium in order to ensure those files would be stored in a client-neutral, open source format. Providing access to emails once they were preserved was yet another concern. Finally, cost was a factor as well. In a university that does not have either an archivist or a records manager, funds for managing archival workflows are small. This paper has given me the opportunity to explore tools that fill a gap in the digital materials workflow.

Archiving Email in Practice

The university uses Microsoft Office Exchange as the standard for faculty, staff, and student emails. Being proprietary software, emails are stored in a different format than open source clients such as Thunderbird or Eudora, which utilize text-based formats.[29] The computer assigned to me does not have Microsoft Office installed, though it is standard on all faculty computers. I access my university email through the online Exchange server. However, because the university may change providers in the future, and the archive could receive personal email files that are in a different format, it became important to select a system that could handle multiple email file formats. Because the library does not yet have access to all of the third president's files, there is concern that his emails may be in an outdated format.

For purposes of testing the email programs, I chose to use Windows Mail, which is available freely as part of the Windows 10 operating system, and which exports emails in an EML format. For readpst, I wanted to see its functionality with a PST file, so one of the librarians allowed me to use her account as a test case.

With my status as an intern at the university, I had a known end date for my employment, at which time the school would bring in another graduate student. Knowing that we were developing a workflow for people other than me to use molded the choices made during this project. Through my coursework, I have developed a comfort level with digital forensics processes and tools that the librarians at the university do not have. I could not be certain that the intern that replaced me would come into the job having experience with different operating systems, command line programs, and the Open Archival Information System (OAIS) reference model.[30] With these parameters in mind, I have reviewed briefly programs that would not fit our situation, but have focused on the ones that would.

Aid4Mail

The features included in Aid4Mail immediately drew my interest.[31] This program is able to convert and migrate 40 email formats. One of its strengths is that it will convert email files from clients that have been defunct for years, such as Netscape Messenger and MSN Mail. This system also allows conversion to multiple formats, including CSV and XML. Outlook mail formats can be converted to either of the de facto preservation formats — MBOX and EML — as well as ZIP and PMX. The process is simple, having a series of choices during set up that ensure the

correct location is selected for the email being preserved and that it will be converted into the file type the user desires. I used Aid4Mail for Archivists in the demo mode, meaning I was only able to convert and work with 50 emails, but that was enough to assess how the program would work in the university's setting. The downside for Aid4Mail was the cost. This program is the most expensive of the programs tested because a new professional license must be purchased for each PC on which the program is installed, and discounts only apply to large orders placed at one time, which placed it outside of Campbell University's budget constraints.

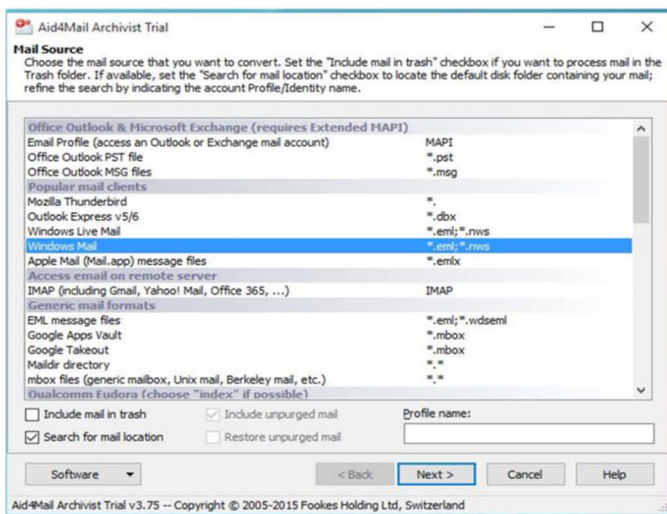


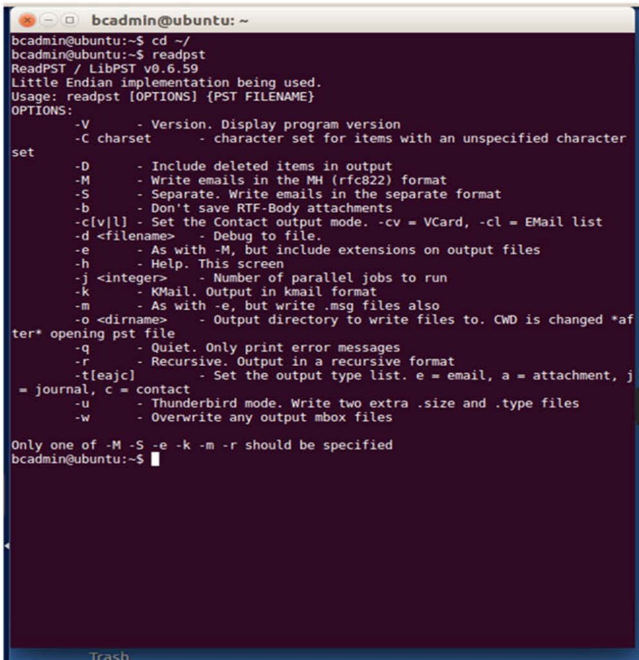
Fig. 1. Aid4Mail

readpst

The librarians at the university are not comfortable using the command line interface. Therefore, readpst is not a

good fit for the archive. Though the tool was not something that would work in our particular situation, it is worth noting the functions available to users. This tool's main function is to convert Microsoft Outlook files (PST) to MBOX, though it can convert files to simple text as well. readpst has the ability to omit attachments, include deleted items in the output, and separate each email into separate folders.[32] Though it is a command line tool, readpst can be quickly mastered and is particularly useful for exploring email header information. As readpst is available as part of the BitCurator environment, it is available freely and can be run on any type of machine through VirtualBox. It also is part of the libpst package, which is a set of tools that decode email messages in PST format.[33]

Fig. 2. readpst in the BitCurator environment



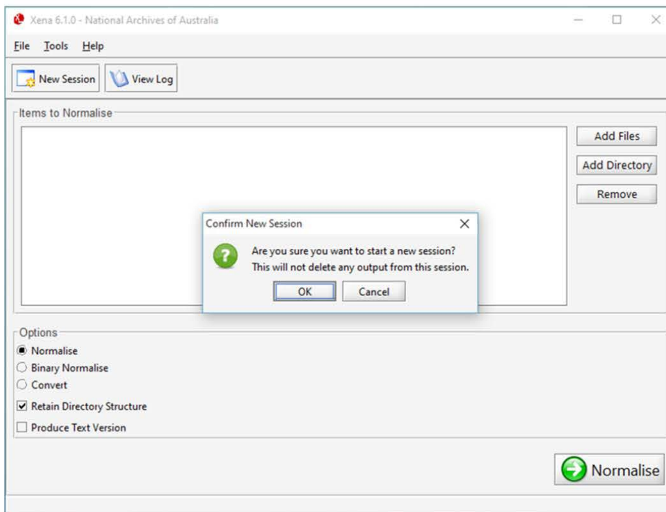


Fig. 3. Xena

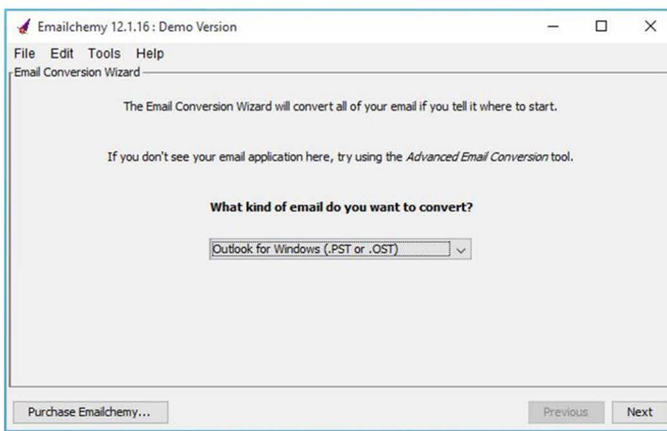
Xena

XML Electronic Normalising for Archives (Xena) is an open source tool developed by the National Archives of Australia.[35] The software incorporates readpst, but it has a graphical user interface as well as a command line interface. It is part of the National Archives' Digital Preservation Platform.[36] Xena is migration software that is not limited to email formats. It can also be used to convert and migrate office documents, images, and audio files.[37] Files are added to the system by clicking the "Add Files" button on the right of the screen, and the user has the choice to convert or normalize the files selected. There is the opportunity to create a test version before committing to a conversion. The files save in the preselected location.

A test of Xena found that the program ran very slowly, and it was impossible to see progress unless I clicked

on the View Log. The program took several minutes to complete the task of converting my email, though the "Xena Output" file was easy to find in my Documents folder. This was a task that took other software less than a minute to complete. It should also be noted that Xena has not been updated since July 31, 2013.[38]

Fig. 4. Emailchemy



Emailchemy

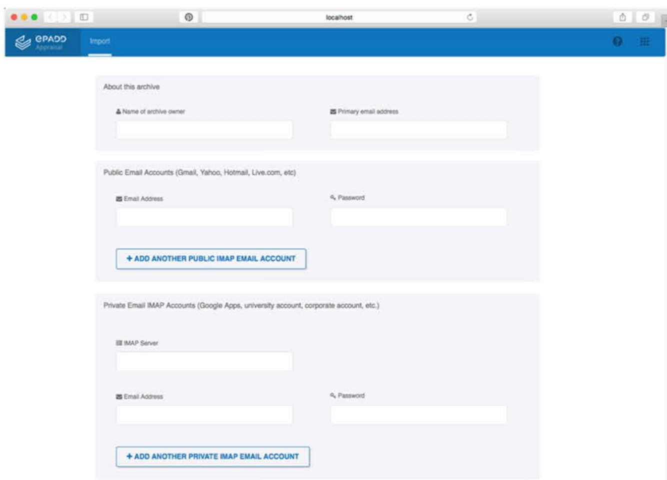
Emailchemy has a number of conversion options.[39] Like Aid4Mail, it requires purchasing a license for use. However, Emailchemy's cost is far less than Aid4Mail when purchased incrementally, so it was not priced out of reach of the university. This software program has options for both migration and management. It is also available for Macintosh for most formats, whereas Aid4Mail does not operate on Macintosh systems at all. One downside of the Macintosh version of Emailchemy is that it cannot convert or migrate AOL Mail, though the Windows version can.[40] When

running the program, the user selects how to convert the file, selecting the current file type and then the file type desired. As with Aid4Mail, I tested a trial version of Emailchemy. The demo version places the text "Please purchase Emailchemy" on every converted email to prompt the user to buy the product.

ePADD

ePADD (Email: Process, Appraise, Discover, Deliver) is supported by Stanford University's Special Collections and University Archive.[41] It is a newer system than most of the others, having just completed its proof-of-concept phase in July 2015.[42] ePADD allows the user to discover sensitive data in the appraisal mode, and during ingest, the program has the ability to concatenate information about an individual — including multiple addresses, names, or other information.[43]

Fig. 5. ePADD



For our purposes at the university, Emailchemy and ePADD were the two best options, though Xena was strongly considered in place of Emailchemy due to the cost of the latter. The combination of the two software packages is necessary to import the most common email formats, allow the user to view file contents, and identify and redact sensitive materials prior to making emails available to patrons.

Using Emailchemy and ePADD Together

One of the features that ePADD has and other email preservation systems do not is the ability to pull files directly from the Microsoft Outlook Exchange server, much like a regular email client. It begins the concatenation of users at the beginning of the process, by allowing for multiple accounts to be set up at once. If the user has already stored his or her emails as MBOX files, those can be uploaded in the Appraisal mode as well. However, other formats cannot be used, and ePADD does not have the ability to convert them. When I tried to pull the emails from the university server, the program could not authenticate them. However, once I exported them and converted them into MBOX format, the program ran smoothly.

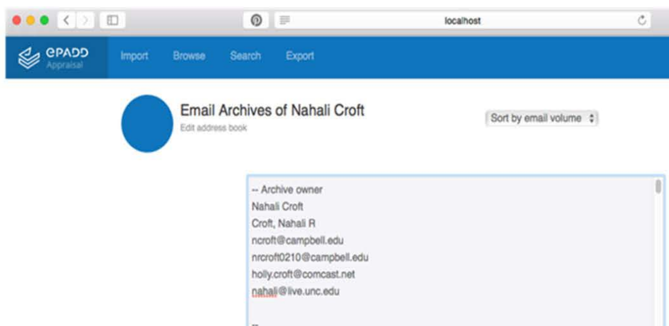
Therefore, the smoothest process is to run all incoming email accounts through Emailchemy to ensure they are in MBOX format before using the ePADD software.

The output from Emailchemy goes into a file named "converted_email" in the user's folder. A status bar appears to let the user see the process's status, and once completed, there an MBOX file appears. When the conversion is completed, this file can be reviewed in ePADD. There are four modules, which the user selects from the left side of the

screen. The program defaults to the Appraisal module, which allows users to review email prior to accessioning it to a repository.[44]

The mail can be reviewed once the MBOX file is loaded. ePADD allows the user to find all mentions of individuals, organizations, and locations, and all attachments are viewable. My email had no information deemed sensitive, so that folder was empty. In the Appraisal module, there are options to edit correspondence. This is one of the ways ePADD allows the user to concatenate individuals. For instance, I was able to add additional email addresses to my name, as pictured.

Fig. 6. Editing Correspondence

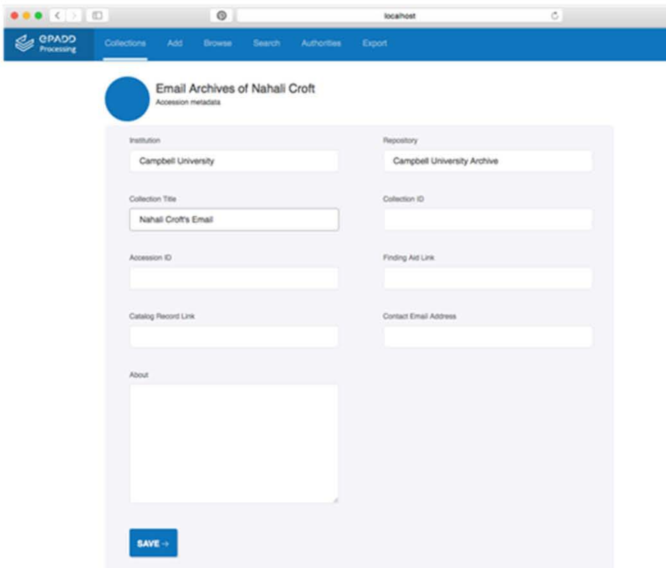


There are additional options in the Appraisal module to search and annotate emails that were not important to this workflow but might be valuable for later exploration. The export option is important if sensitive emails need to be excluded from the workflow, as the user has the ability to deselect them from transferring or to transfer certain emails with restrictions. Emails must be

exported in order to move to the Processing module because ePADD's Processing module will not recognize any files that have not been appraised and exported.[45]

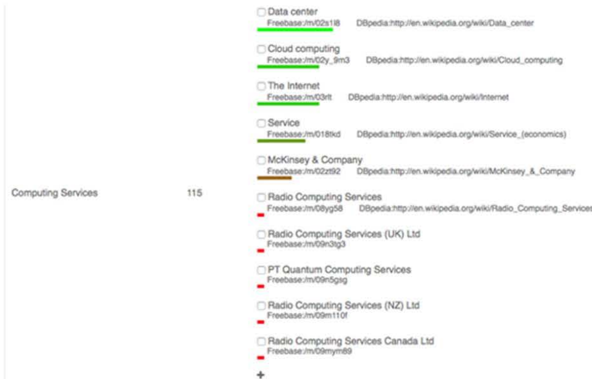
After exporting the emails, ePADD asks the user to zip the folder where they exported and submit it to the archives. Then the user may switch to the Processing module. Though the previous module had asked for the folder containing the exported files be zipped, during my testing, the Processing module imported the unzipped folder. Under the Collections tab, the user may assign metadata and accession information to the email.

Fig. 7. Assigning Metadata



ePADD has the ability to search OCLC Fast for LC Subject Headings, DBPedia, VIAF, and LCNAF.[46] When assigning metadata, some of the authority record choices were obvious, but other times, I used the "relative confidence" algorithm to find the best choice. Additionally, there were situations in which I needed to input a record because either the choice I wanted did not appear or items needed authority records that the system had not detected.

Fig. 8. Using the algorithm to find the authority record for "computing services"

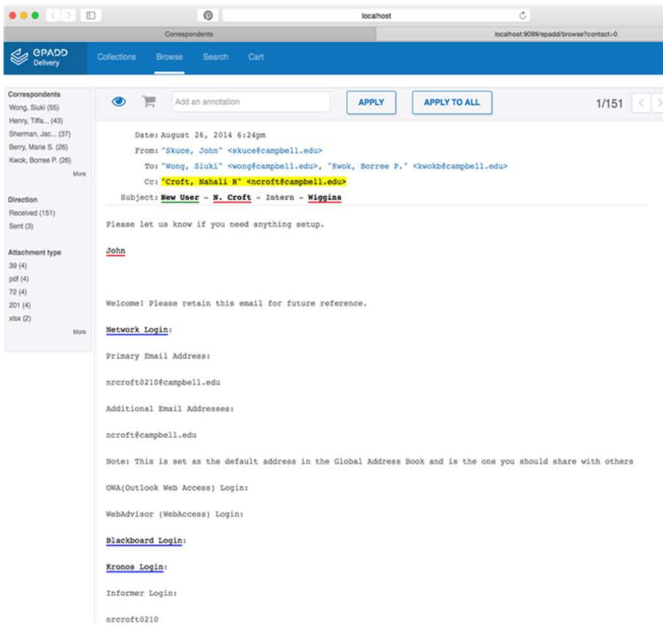


After ensuring that authority records and metadata are assigned in the Processing module, the next step is to export the data so that it can be accessed in the Delivery and Discovery modules. The Delivery module allows searching for emails and viewing full content of unrestricted messages, provides access to the emails at a managed workstation, and enables remote access in a web server.

Campbell University's situation does not warrant using the Discovery module right now, but the Delivery

module could make email collections available at the main library. The browse function on the Delivery module will allow users to mark emails as reviewed and to add them to a cart so that they can export the files they want to their own MBOX file for saving their research.

Fig. 9. The review button and the cart are at the top left



Conclusion

Campbell University does not currently budget for the archive, and though there has been money for a digitization project, that has not extended to preserving those digital files. Therefore, the librarians are constantly looking for low- or no-cost solutions that will help maintain the records in the collection. Fortunately, many digital

preservation programs are open source, and the library has not encountered any resistance to using open source materials for digital curation and preservation from the university's administration or IT department. This made the selection of ePADD easy, as it is a robust program designed to ensure library users have access to email collections, but only after ensuring the emails are appraised and sensitive information is redacted or restricted. Emailchemy, though very easy to use, is not freeware. However, it efficiently converts a variety of email formats more quickly than most other products, so purchasing it is the best option for Campbell. With a guide provided on how to run the workflow, the combination of Emailchemy and ePADD should be easily learned by librarians at the university with little or no archival and digital curation background. This was one of the biggest concerns for this project.

Finally, ePADD will provide a straightforward means for patrons to engage in research of email collections at Campbell University once the archive has emails as part of its holding — a day that is coming soon. Too often, archivists develop workflows once a problem arises. However, here I had the opportunity to create a workflow that fit the archive's mission without the stress of a collection to process and make available.

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REVIEWS

Seth Van Hooland and Ruben Verborgh. ***Linked Data for Libraries, Archives and Museums: How to Clean, Link and Publish Your Metadata.*** **Chicago: ALA Neal-Schuman, 2014. 254 p. Illustrations, glossary, references, and index. $88.**

Linked Data for Libraries, Archives and Museums by Seth van Hooland and Ruben Verborgh is a welcome resource for information professionals interested in gaining practical knowledge about metadata, linked data, and the semantic web to provide greater access to their collections. The authors describe the publication as a handbook, and state in the introduction that their aim is to "lower the technical barrier towards understanding linked data [and to] propose a critical view of linked data, by not making an abstraction of the challenges and disadvantages involved" (5).

The authors' experiences in the private sector and in academia with metadata and linked data enable them to write with authority. Dr. Seth van Hooland is a professor, directs the MIS program at the Université libre de Bruxelles, and serves as a consultant "in the document and records management domain for both public and private organizations" (ix). Dr. Ruben Verborgh's research focus is "the connection between semantic web technologies and the web's architectural properties" with a goal of "building more intelligent clients" (ix). Dr. van Hooland and Dr. Verborgh created the Free Your Metadata Project in 2012, and soon began giving workshops on linked data and the semantic web (xi). A major impetus for their publishing this handbook was

to augment these workshops (6). The writing is clear and concise, and they break down complex subjects with many examples.

A key strength of the book lies in its structure. Technical information and theory are combined with hands-on exercises "giving the non-IT experts the opportunity to evaluate the practical use" of the various concepts presented in the handbook (5). Five of the seven chapters present hands-on case studies, allowing the reader to apply the concepts in the handbook to actual datasets from international repositories. Feedback from workshop participants informs the case studies, allowing the authors to provide detailed instructions. These case studies help the reader apply concepts presented in the handbook to real datasets from international repositories (6). The case studies often include sample screenshots of what the reader would see as he/she progresses through the exercises.

The authors define linked data as "a set of best practices for the publication of structured data on the web" (3). The best practices here focus specifically on the needs and uses of metadata by libraries, archives, and museums in describing their collections. The authors acknowledge that there are differences in descriptive practices among these three institutional types. They identify five major components of linked data: modeling, cleaning, reconciling, enriching, and publishing metadata. Each component is its own chapter. In the introduction, the authors list out the intended goals, audience, conceptual insights, and the practical skills a reader will gain from each chapter. That initial description and the actual chapter content closely match up.

Throughout the handbook, the authors analyze and

describe numerous topics ranging from "what is metadata" to RDF (Resource Description Framework) to NER (named-entity recognition), and beyond. The more complex topics are broken down into subchapters. The accompanying illustrations and tables clarify the concepts and often model how a computer program will present the data. The information is clearly organized and succinctly described. Readers will have the opportunity to build their knowledge systematically as they work through the text.

The authors reiterate throughout the handbook that linking metadata is not necessary or even applicable in every situation. For example, the case study in the "Reconciling" chapter is created to allow the reader to "assess on [their] own the potential added value" of linking their historic metadata to established vocabularies (136). The handbook is not dogmatically advocating linked data, specific programs, or specific platforms. The authors use OpenRefine throughout the case studies because it is open source and is free to download and use, which makes it easy for readers (and workshop participants) to complete the exercises associated with the case studies. In the "Enriching" chapter, the authors note the growing marketplace for NER services, and the need for cultural heritage institutions to assess these services (172). Towards this, they list a number of NER services, but more fully describe four NER services that are available at no cost. The case study for this chapter is crafted to "demonstrate the use of NER on descriptive, unstructured metadata fields" and thereby allows the reader to have a "go at the use of NER services" (180).

As previously mentioned, the authors of *Linked Data for Libraries, Archives and Museums* are the creators of the Free Your Metadata project, described on the website

as a "scientific collaboration" to assist organizations contributing cultural heritage metadata to the linked data cloud ("Free Your Metadata," accessed December 4, 2015, http://freeyourmetadata.org/about/). Though the site is not part of this review, it does contain downloadable files for use in the case studies.

Linked Data expertly follows and expands upon the linked data principles laid out by Tim Berners-Lee in his 2006 article ("Linked Data-Design Issues," accessed December 6, 2015, http://www.w3.org/DesignIssues/LinkedData.html) and 2009 TED talk. The handbook was designed for readers without "a technical background in computer science" and those with a "background in library and information science and digital humanities" (5). This book is accessible, comprehensible, and useful in understanding and applying the underlying concepts of linked data.

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Luciana Duranti and Patricia C. Franks, eds. *Encyclopedia of Archival Science.* Lanham: Rowman & Littlefield, 2015. 464p. Bibliographical references and index. $125 (hardback); $124.99 (e-book)

The *Encyclopedia of Archival Science* is a comprehensive reference text for examining the concepts, principles, and practices of the archival field. It is aimed at archival practitioners and educators alike and looks to be the overall source for information on the field in a single volume encyclopedia. With 154 encyclopedic entries on every

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archival topic from "Access/Accessibility" to "Web Archiving," the editors claim the book is "designed to aggregate the views of contemporary, well-established, and highly regarded archival scholars and professionals and those of new and aspiring scholars and professionals into one, comprehensive work describing past achievements and leading the archival field toward the future" (ix)

The entries are presented in alphabetical order by term, with a section heading for each letter and page headers that list the entries discussed on the page. This organization makes several letters entry heavy. The As have some terms you may expect to find under later headings, such as "Archival Buildings and Facilities" and "Archival Description." The text is best searched using the index, which gives good cross-listings for terms and concepts. Each encyclopedia entry has an in-depth explanation of the concept of the term, including both historic and current interpretations and a bibliography where the reader can find further information. Also included after each entry is a list of keywords and related entries to aid in further research.

The *Encyclopedia* covers core concepts for archivists in the United States, including individual entries for "Principle of Provenance" and "Principle of Respect for Original Order," while addressing a more international audience with "Principle of *Respect des Fonds*," and the mostly defunct "Principle of Pertinence." Each principle is given a multi-page spread which addresses the idea, both historical and current views, and where and how various countries have adopted the ideas. The "Principle of Pertinence" entry, for example, defines the concept, then explains the historical practice of the principle in arrangement and description. What follows is a

comprehensive discussion of how the principle affected appraisal theory in Germany, Great Britain, and the United States and Canada. The entry concludes with how the principle affects archival arrangement today.

In addition to core principles and theories, the *Encyclopedia* also covers more current and timely matters, such as "Digital Archives" and "Web Archiving." The entry on "Digital Archives" addresses the challenge of defining the term, as it can refer to born-digital materials, digitized materials, or websites that feature both. The discussion continues with individual sections on collections of born-digital records, websites that provide access to collections of digitized materials, and websites featuring different types of digitized information. The conclusion clarifies that while archival literature may continue to refer to digital archives as consisting of born-digital materials, common usage of the term will continue to mean both born-digital and digitized materials.

The encyclopedia includes an index which cross-references fifteen pages of terms found throughout the entries. The index excels at providing different forms of terms so users can find what they are looking for whether they search for "archival preservation" or for "preservation, archival."

The 110 contributors of the *Encyclopedia*'s entries represent a who's who of the international archival field, giving the text a worldwide appeal. However, having such a wide variety of authors makes for inconsistent entry formats. Almost all entries have an introduction and a conclusion, but the content of each piece can vary wildly in presentation.

Overall, the *Encyclopedia of Archival Science* presents archivists with a useful resource for historic and

current concepts and principles of archival practice. This text will be especially valuable for archival educators needing to explain complex ideas and theories to students, and to those new to the field who need refreshers on the concepts learned in graduate programs in library science.

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Diantha Dow Schull. *Archives Alive: Expanding Engagement with Public Library Archives and Special Collections.* Chicago: American Libraries Association, 2015. 352p. Index. $65 (nonmember); $58.50 (member).

The impact archives and special collections have on local communities can be seen no more clearly than in public libraries' collections. Professional discussions on the adapting roles of archives center largely on both the changing nature of access and on new ways to communicate special collections' value, especially in the online arena. Yet, these discussions often forget to mention recent increases in public programming. Public libraries' focus has turned toward more interactive and community-based services which increases the variety and type of public programming offered by their archives. By creating physical or digital access points for new patrons, innovative programming can be an effective way of increasing engagement with library collections. To survey the rapidly changing landscape of public programming, Diantha Dow Schull compiles over 100 examples from across the country in her book, *Archives Alive: Expanding Engagement with Public Library Archives and Special Collections*.

Schull interviews professionals at 13 institutions about many of their public programming projects. She

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Schull interviews professionals at 13 institutions about many of their public programming projects. She

describes each one in a short profile consisting of a brief overview of the institution and program, a more detailed description of it, a short summary of its challenges, and the future plans for the program. Each chapter contains profiles for different kinds of programs: "Art and Archives," "Community Archives," "Educational Initiatives," "Emerging Institutional Models," "Exhibitions and Related Programs," "Interactive Archives," "Lectures, Conferences, and Broadcast Programs," "National and International Programs," "Oral History and Community Documentation Projects," and "Tours, Commemorations, and Special Events." If readers seek descriptions of a particular program, a detailed Table of Contents makes it easy to find specific examples. Schull explains that *Archives Alive* provides a non-exhaustive sample of programs from around the country that reflect the changing practices in archives. In doing so, she increases their visibility within the library literature.

Each chapter begins with a brief summary drawing out common themes among the programs included in that chapter while referring to specific examples. For instance, in the chapter "Art and Archives," Schull discusses how public libraries support art in their communities through special collections programs. This may be accomplished by promoting local artists in exhibitions and performances like the Newark Public Library's Special Collections Divisions, by hosting artists in residence like the Rosenbach Library and Museum at the Free Library of Philadelphia, or by offering workshops in the arts and humanities like the Hartford History Center at the Hartford Public Library. Schull emphasizes that programs like these contextualize and spark conversation about collections while also engendering an appreciation for the arts (2).

A few chapters explore the recent trend towards community archiving as a way to both provide narrative and meaning for local groups and fill gaps in historical narratives. In the second chapter, "Community Archives," Schull discusses social media and websites as tools for community documentation which are being used at the Center for Local History at the Arlington Public Library in Virginia. She also describes the creation and rejuvenation of local history collections at programs like at Port Washington Public Library's Local History Center in New York. Chapter nine, "Oral History and Community Documentation Projects," discusses new tools for capturing local histories. Two of these include oral histories programs like the Houston Oral History Project at the Houston Metropolitan Research Center, and online tools for participatory documentation, like the digital content of the Queens Memory Project at the Queens Public Library. Schull says that redefining "local history" as "storytelling" encourages greater participation by communities (250).

Many public library archives and special collections have integrated educational programs into their outreach efforts. For instance, in the "Education Initiatives" chapter, Schull explains that many libraries create lesson plans designed for local school systems, like the Pittsburgh Iron and Steel Heritage Collection at the Carnegie Library of Pittsburgh. Lesson plans help enrich student learning by bringing traditionally inaccessible materials into classrooms. Other libraries are holding after-school programs to teach students about local history and connect the past to the present. The Birmingham Public Library in Alabama hosts a series of after-school history workshops for local students to teach them about the rich civil rights history in their city.

Other educational programs at the Schomberg Center for Research in Black Culture at the New York Public Library provide professional development opportunities to train educators to use historical resources in the classroom. They also provide a junior scholars program for middle school and high school students to engage such students in college style learning, and allows them to participate in conversations with scholars in black history. These educational programs provide value to teachers and students. Fellowships and internships (like the one at the Schomberg Center) often impact students enough to redirect students' educational directions (63).

The book contains many more examples like these that use accessible language to summarize the variety--both in subject and in format--of innovative public programming in archives. Not only does this resource provide a strong case for the benefits of these programs, but also acts as a guide for other institutions by providing the framework for the creation of such programs, and the expected challenges when implementing them. *Archives Alive* would benefit any outreach or public programming archivist or librarian. Its format and approachable language make it an ideal resource to consult when seeking inspiration for creating interactive, engaging, and forward-thinking public programs.

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