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Abstract

Digital libraries, digital collections, digital archives—just a few of the common terms used to describe the output of large-scale digitization efforts. While the term digital library is commonly used by librarians, the term itself reflects the specific disciplinary and technical environments in which the concept for a “digital library” was first imagined. Terminology has been well-explored in academic libraries, but questions remain regarding how meaningful digital library and related terms are to the users of digitized archival collections. In 2016, a reverse category test was conducted with target users of Utah State University Libraries’ digital collections to determine what labels users associate with different types of library materials. More than just an issue of semantics, this article explores the critical role that naming plays in how users understand these collections, while offering insight into how to make digitized materials more findable and usable in online environments.

This paper was refereed by Weave's peer reviewers.

Introduction

Communicating the scope and value of library collections is a perennial problem that has only come into sharper focus as more and more libraries adopt a user-centered approach to design and outreach. One key element of a user-centered library is creating effective labels for library collections and services that make sense to users and reflect their natural language. For digitized materials, particularly in the areas of special collections and archives, labeling can be an especially difficult problem. Special collections are, by nature, esoteric and often require mediation by archival specialists to access and use. When digitized and placed online, these unique materials are likely to attract a new and wider audience who may have little or no experience navigating special collections. Adding to this potential confusion, a diverse range of terminology exists for describing digitized archival collections on the websites of Association of Research Libraries member libraries (Table 1). Although the term *digital collections* appears to be increasingly popular, the use of *digital library*, *digital archives*, and similar variations continue to persist, and are still quite popular. Additionally, disparate terms sometimes occur together, appearing at different points in website navigation, and in the case of state libraries and historical societies, may be supplanted altogether by “branded” names that may or may not be meaningful to users. This creates an overall confusing environment for online users, who without the benefit of mediation by archival specialists, are left to form their own interpretations for the vast range of vocabulary they may encounter. In this article, we will explore how users perceive different labels and associate them with different types of digital materials, shedding light on this problem and pointing towards a potential solution for digital library designers.

Table 1. Sample of terms used by ARL libraries to label digitized cultural heritage collections (n=25)*

Term	Number of Occurrences
Digital Collections	17
Digital Library	6
Digital Repository	1
Digital Archives	1
e-Archives	1
Digitized Collections	2

*Different terms often occurred across the same website.

The History of the Term “Digital Libraries”

Part of the problem with the term *digital library* stems from the history of digital library development and the conflicting definitions that emerged from different disciplines working in the field of digital libraries. The term *digital library* was first used in the library literature to describe a system combining the “conventional archive of current or historically important information and knowledge, along with ephemeral material such as drafts, notes, memoranda, and files of ongoing activity” (Kahn & Cerf, 1988, p. 3). However, the inspiration for such a system can be traced back to the proliferation of scientific research and publications in the post-war United States. Questions of how libraries could store and make available a growing number of volumes, and how scholars would make sense of it all, prompted many to consider technological solutions to this information surplus (Calhoun, 2014). Bush’s (1945) “As We May Think” imagined a “memex” device capable of storing one’s entire library of books and personal documents and allowing for new ways of discovery through “associative indexing.” Many researchers such as Calhoun (2014), Fox and Marchionini (1998), and Harter (1997) also point to Licklider’s (1965) *Libraries of the Future*, which predicted many features common to today’s online information environments (p. 2; p. 36).

In 1993, the influential Research in Digital Library Initiative was launched as a joint initiative of the Defense Advanced Research Projects Agency, the National Science Foundation, and the National Aeronautics and Space Administration. Designed to spur innovation in large-scale information storage and retrieval, the program initially provided grants to projects in computer and information science. Later, after the program was extended to include the National Endowment for the Humanities, the Library of Congress, and the National Library of Medicine, more emphasis was placed on projects focused in the arts and humanities. These disparate communities—computer and information science, library science, arts, and humanities—each provided their own specialized definition of the term (Borgman, 1999, p. 228). Although libraries were involved in early projects to digitize cultural and other artifacts and create digital libraries, the field was largely characterized by the work of computer scientists and the need to develop technical infrastructure, and definitions that emerged reflected this tension (Pomerantz, Choemprayong, & Eakin, 2008). For example, Kahn and Wilensky (1995) proposed the concept of digital objects organized within a network-accessible repository, which Cleveland extends into “a collection of disparate resources and disparate systems, catering to specific communities and user groups” (1988, p. 3).

For many librarians, however, the term *digital library* was inherently problematic. While more evocative than “electronic database,” the term reduced libraries to content repositories, discounting the broader sense of community-oriented service organizations (Borgman, 1999, pp. 230–231). Battin (1998) rejected the term’s reliance on familiar metaphors of the physical

library, which might be limiting in the emerging digital information landscape. Definitions from the library and information science community reflected uncertainty about the shape digital libraries would take and how well they would be merged with traditional library practices. Harter (1997) described a continuum of forms that digital libraries could evolve into, including something similar to the web with “control zones” for authoritative content, and narrower, self-contained systems with features very similar to today’s digital libraries. Schwartz (2000) noted the muddled line between digital libraries and the growth of “hybrid” libraries, reflecting an increasing mix of print and electronic collections. Each of these approaches attempted to get at what made digital libraries distinct from their non-digital counterparts and how these two units within the library would use terminology and structures to define difference.

While some scholars saw the digital library as a distinct form, others positioned digital libraries as an evolution of the conventional library organization. For example, Lynch (1997) described digital libraries as having many of the same structural elements of traditional librarianship, with content only stored and accessed in a digital form. Reflecting this focus on a structured, institutional approach, the Digital Library Federation proposed the following definition:

Digital libraries are organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities (Waters, 1998).

In this sense, a digital library is not a container for digital objects, but a community-enabling organization that provides access and value-added services for user communities. Similarly, Lynch (2002) distinguishes between digital collections as raw content, and digital libraries “as the systems that make digital collections come alive, make them usefully accessible, that make them useful for accomplishing work, and that connect them with communities.” Even without a common definition or a shared understanding of what *digital library* meant, usage of the term became widespread as a result of the Digital Library Initiative program grants (Fox, Akscyn, Furuta, & Leggett, 1995, p. 24).

Over the last half century, we have seen many meanings for the term digital libraries used to the point where users often do not know what they will find when they enter the digital library. While the usage of the term digital library has shifted over the years from the memex device to digitized special collections, the incorporation of electronic resources and e-books have thrown a wrench into an agreed upon usage of the term. As we will show, by considering our users’ assumptions we can find an easier and more usable path for our digitized special collections materials to meet the needs and expectations of our community.

The Usability of Contemporary Digital Libraries

If defined as community-service organizations, the success and sustainability of a digital library should be closely tied to understanding and catering to the needs of its user communities. Although digital libraries are no longer a novel concept, how to relate these collections to users with coherent, user-centered branding and terminology remains an open question. Borgman (1999) noted that a digital library could be thought of as a standalone branch within a library system (p. 237). While this provides a helpful model for understanding the relationship between digital libraries and their sponsoring institutions, unlike physical libraries, it is much more difficult to define the user community of a digital library. Because so much usage occurs virtually and often originates from locations beyond the local library community, Lynch (2002) cautioned against making assumptions about the motivations and end goals of the users of digital libraries.

Although much research has been conducted regarding users' perceptions and usability issues related to digital libraries, the problem of what to call digital libraries so that users can make sense of them has not been well explored. Kelly (2014) provided a comprehensive overview of user research within the broadly-defined area of digital libraries. Usability studies of digital libraries have mostly involved case studies, while a few explored specific interface problems (Dickson, 2008; Xie, 2007), or issues like multilingual support (Smith, 2006) and content accessibility (Southwell & Slater, 2012; Xie, Babu, Joo, & Fuller, 2015). Surveys of users' perceptions and acceptance of digital libraries are more relevant, but provide limited insight into the problem of collection branding. Thong, Weiyin, and Kar Yan (2004) pointed to factors like clear, relatable terminology in digital library interfaces, and previous exposure as important factors in user acceptance of a digital library. Although the authors did not discuss the specific term *digital library*, their findings suggest overlap between usability terminology and the marketability of digital libraries. Xie (2008) pointed to lack of cohesiveness across digital library collections, noting that digital libraries, broadly, were difficult for users to search and use, and suggesting that developers consider branding separate digital libraries by the scope or theme of collections.

Research Questions

While this terminology for digital libraries is acceptable and perhaps necessary for researchers in particular fields and library professionals, what about the end-users of digital libraries? Fox et al. note, "the phrase 'digital library' evokes a different impression in each reader" (1995, p. 24). What does this label evoke for the users of special collections? What about the typical undergraduate student user of an academic library? Is it clear to these and other users what a digital library may contain, and importantly, what parts of the larger academic library are not included? Longstanding usability research indicates that people do not read websites in detail. Instead, they scan for keywords, headings, and links that seem related to their information need (Nielsen, 1997; Nielsen Norman Group, 2014). Users hunt for links that have a high "information scent" based on the presence of descriptive link text that suggests a high probability of finding the needed content (Nielsen, 2003). With this in mind, how usable is the label *digital library* as an access point for digitized archival materials? What keyword terms might have a stronger information scent for users, and how can those terms be incorporated

into access points for our digital materials? More than just an issue of semantics, the branding and labeling we employ in digital library interfaces plays a critical role in helping users find, utilize, and understand archival and special collections in the online environment.

To address this issue, we designed and administered a survey-based test to answer the following questions:

What terms are library users most likely to associate with different materials commonly found in digital libraries?

What terms are potentially confusing or likely to be misunderstood by users? In particular, does the term *digital library* get confused for other general material types, such as e-books?

For purposes of clarity and accuracy, it is important to distinguish between terminology, user interface labels, and branding. While each is important for how we communicate to users, they impact the user experience in different ways. Here we refer to terminology as a general usage of a word to describe an object in a technical sense. Even though terminology may be useful and accepted by a community of practitioners, this does not mean a given term is understandable to end users. On the other hand, it is essential that labels for links and other user interface controls are understandable to end users and free of jargon. Similarly, a “brand” still needs to be relatable and communicate value to the user but can take more creative liberties in how it represents a service or collection. Generally, jargon and brand names are problematic when used as labels in library websites (Kupersmith, 2012). For the purposes of this study, we use *digital library* and similar terms to refer to mainly online collections of digitized cultural heritage objects and other materials. As we will show, this term is clearly jargon, poorly defined within the library community, and problematic both for the labeling and branding of digitized cultural heritage materials.

Methods

Over the past three years, Utah State University Libraries engaged in a significant overhaul of its main library website, employing a user-centered approach that entailed user testing and iterative design. Prior to this project, all digitized materials from our Special Collections & Archives, as well as the institutional repository, were accessible through a link labeled *digital library*. In developing a new information architecture for the website, including more user-friendly navigation, the lack of consensus in the community, on campus, or inside the library itself over what *digital library* represented was obvious. This was confirmed in usability testing of the library homepage. While doing this usability testing it became clear that users tasked with finding a historic photograph of the campus struggled to locate the link to the digital library and expressed confusion with the terminology. This project sought to address this problem by refining the terminology to be more user-centered.

Throughout the spring and summer of 2016, we developed and administered a Qualtrics survey with two sections. The first section presented participants with a reverse category test, a method that is commonly used in testing library navigation labels (Hennig, 2001; Whang, 2008). For our test, participants were given five task-based questions that asked them to choose the label they would be most likely to click on to find different material types commonly found in digital libraries. In addition, a sixth task asking participants which label they would choose for a science e-book was included to test whether any labels might be associated with a more traditional, non-archival item. Label options were selected to represent the range of terms found in our analysis of ARL member websites. The term *digital* was selected because it was more common than other synonyms, such as *e-* or *online*, and was included for each option in order to remove it as a factor in participants' decision-making. Instead, we wanted to test users' perceptions of more semantically distinct variations on the term *library*, such as *archives* and *collections*. Along with "Digital Collections," the variant "Digital History Collections" was also included to test whether the modifier *history* might impact participants' label choices for different items. This approach was advantageous for testing the usability of opaque terms like *Digital Library*. As opposed to a category test in which users simply list what they expect to find for different labels, the inclusion of task-based scenarios helped to contextualize the label choices as a whole, eliminating the need to explain the nature of our digital collections to users in order for them to understand the purpose of the test. This reduced the potential for bias and increased the chances that participants would model real-world behavior based on accomplishing a task, rather than considering what to call our broad set of collections.

Text of Survey:

The Library is trying to improve the labels we use for links on the library website. We need your help to make sure the labels we choose are appropriate and make sense to you. The row at the top includes potential labels for links on the website. For each question on the left, please select the label you would most likely click on to find that item. Don't worry about where things are on the current website. There are no right or wrong answers—we want to know which one you think makes the most sense.

Task-based questions:

Where would you click to find online photographs of USU from the 1930s?

Where would you click to find an e-book on particle physics?

Where would you click to read online diaries of Mormon pioneers?

Where would you click to find newspapers from the 1950s?

Where would you click to find old USU yearbooks that you can read online?

Where would you click to find recorded interviews with Latino immigrants to Cache Valley [Utah]?

Label options:

Digital History Collections

Digital Library

Digital Archives

Digital Collections

Participants were not given a “none of the above” option, but were not required to select an option for each task. Instead, the second section provided an open-ended question that asked: “What term(s) would you suggest for a link to the Library’s database of digitized photographs, newspapers, regional history, and folklore items?”

We recruited survey participants from several user groups considered part of the target audience of USU’s Special Collections & Archives: undergraduate students enrolled in a history class; undergraduate students from our general student population; student employees in the library; and community members, primarily retirees enrolled in a continuing education program. Although virtual access outside of the local campus community makes up a significant percentage of overall use of the digital collections, we felt these local groups could serve as a reasonable stand-in for virtual users. Archives staff have also observed that these groups will often seek in-person assistance with locating materials that are available through online collections, making them an important source of information for improving the findability and overall user experience of digital collections. We administered surveys in-person to these groups, either by recruiting participants from around the library building, by visiting classrooms, or by attending outreach events. In addition, the survey was distributed electronically to university and local public library staff. Because users often have a limited understanding of the full scope of library collections, we felt it was important that results from library patrons were qualified by the experience and expertise of librarians and other library staff. This would allow for comparisons between the perceptions of end users and how library staff conceptualize these collections both from their own personal experience, and based on their knowledge of users in a reference environment.

Results

In total, we received fifty responses from target end users, and thirty-one responses from library staff members in area libraries (Table 2). Tables 3–8 show responses for each reverse category question. Despite USU Libraries’ original choice of “digital library” for special collections materials, overwhelmingly, participants identified *digital library* as the label they would select to find e-books. The remaining items were associated with a broader range of labels. Newer materials or materials associated with the contemporary community or

University were spread amongst the labels “Digital Collections” and “Digital Archives.” It is not surprising that “history” was a favorable term for respondents, based on several of the survey’s scenarios. Many participants selected the label “Digital History Collections” for scenarios related to materials that were clearly historical. For example, in response to the question about Mormon pioneer diaries, 61 percent favored “Digital History Collections” over 17 percent for “Digital Collection,” and for photographs from the 1930s, 43 percent chose “Digital History Collections” over 16 percent for “Digital Collections.” Curiously, the interviews with Cache Valley immigrant families, described as oral histories by scholars, were not associated as often with historic collections with only 15 percent of participants placing it in “Digital History Collections” and 53 percent placing it in “Digital Collections.”

Table 2. Survey Participants by Group.

Population	Number of Participants
Library Undergraduate Student Workers	6
General Undergraduate Students	16
Undergraduate Students in History Class	9
Community Members	19
USU Library Staff	20
Local Public Librarians	11
Total	81

These preliminary results suggest some level of discomfort with items which are temporally new (i.e., created in the past decade) identified as historical along with other older special collections materials. Participants can be partially forgiven for this because of the well-tread scholarly tension between what is history and what is not (Carr, 1961; Hobsbawm & Ranger, 1983). A potential solution would be to have two collections, one historical and one contemporary, and yet this does not seem to make much sense in terms of usability and only complicates our issues.

Results were consistent across the various age groups, with very little difference except for community members suggesting different terms in response to the open-ended question than the student or library staff groups. Overall “Digital History Collections” was the most popular label. The label “Digital Archives,” popular in some library circles, was picked as the classification for many of the University archival materials, like yearbooks, newspapers, and photographs, but less often for historical objects like the diaries or interviews.

Table 3. Where would you click to find online photographs of USU from the 1930s?

Population	Digital Library	Digital Collections	Digital Archives	Digital History Collections
Library Undergraduate Student Workers (n=6)	0	2	1	3
General Undergraduate Students (n=16)	1	2	6	7
Undergraduate Students in History Class (n=9)	1	2	2	4
Community Members (n=19)	1	0	8	10
USU Library Staff (n=20)	1	5	6	8
Local Public Librarians (n=11)	1	2	5	3
Total (n=81)	5	13	28	35 (43%)

Table 4. Where would you click to find an e-book on particle physics?

Population	Digital Library	Digital Collections	Digital Archives	Digital History Collections
Library Undergraduate Student Workers (n=6)	6	0	0	0

General Undergraduate Students (n=16)	12	4	0	0
Undergraduate Students in History Class (n=9)	9	0	0	0
Community Members (n=19)	14	3	2	0
USU Library Staff (n=20)	16	4	0	0
Local Public Librarians (n=11)	11	0	0	0
Total (n=81)	68 (84%)	11	2	0

Table 5. Where would you click to read online diaries of Mormon pioneers?

Population	Digital Library	Digital Collections	Digital Archives	Digital History Collections
Library Undergraduate Student Workers (n=6)	1	2	1	2
General Undergraduate Students (n=16)	1	2	2	11
Undergraduate Students in History Class (n=9)	0	0	1	8
Community Members (n=19)	1	4	1	13
USU Library Staff (n=20)	1	4	5	10

Local Public Librarians (n=11)	1	2	3	5
Total (n=81)	5	14	13	49 (61%)

Table 6. Where would you click to find newspapers from the 1950s that you can view online?

Population	Digital Library	Digital Collections	Digital Archives	Digital History Collections
Library Undergraduate Student Workers (n=6)	0	0	3	3
General Undergraduate Students (n=16)	1	1	10	4
Undergraduate Students in History Class (n=9)	0	1	3	5
Community Members (n=19)	2	2	8	7
USU Library Staff (n=19)*	2	5	7	5
Local Public Librarians (n=11)	1	2	5	3
Total (n=80)*	6	11	36 (44%)	27

*Indicates that not all participants selected an answer for this question.

Table 7. Where would you click to find old USU yearbooks that you can read online?

Population	Digital Library	Digital Collections	Digital Archives	Digital History Collections

Library Undergraduate Student Workers (n=6)	0	0	2	4
General Undergraduate Students (n=16)	0	5	5	6
Undergraduate Students in History Class (n=9)	2	1	4	2
Community Members (n=19)	1	6	8	4
USU Library Staff (n=20)	3	4	7	6
Local Public Librarians (n=11)	2	2	4	3
Total (n=81)	8	18	30 (37%)	25

Table 8. Where would you click to find recorded interviews with Latino immigrants to Cache valley from 2012?

Population	Digital Library	Digital Collections	Digital Archives	Digital History Collections
Library Undergraduate Student Workers (n=5)*	1	1	3	0
General Undergraduate Students (n=16)	1	10	3	2
Undergraduate Students in History Class (n=9)	1	6	1	1
Community Members (n=18)*	4	8	1	5
USU Library Staff (n=20)	5	12	2	1

Local Public Librarians (n=11)	2	5	1	3
Total (n=79)*	14	42 (53%)	11	12

*Indicates that not all participants selected an answer for this question.

In response to the open-ended question, participants suggested many novel combinations of “archives,” “digital,” and “history,” but most responses used one or more of the label choices from our previous question (Table 9). The most popular response was “Digital Archives,” followed by more traditional terms like archives or collections, indicating little consensus among participants. Some participants also dropped the term “digital” entirely, favoring terms like “archives” or “historical archives.” As an example, the preference for “historical” and “archives” over “digital library” for older materials were different than how we labeled our collections, since “digital library” was the term for all this material. On the other hand, e-books have never been associated with the title “digital library” within our system, yet respondents overwhelmingly chose that term for those materials.

Table 9. What term(s) would you suggest for a link to the Library’s database of digitized photographs, newspapers, regional history, and folklore items?

Population	Suggested Terms
Library Undergraduate Student Workers (n=1)	<ul style="list-style-type: none"> • Digital Special Collections
General Undergraduate Students (n=7)	<ul style="list-style-type: none"> • Historical Database • Digital archives • Digital archives, with subcategories for different types • Digital media collection • Digital Library • Historical archives with sub sections
Undergraduate Students in	<ul style="list-style-type: none"> • Regional collections

History Class (n=2)	<ul style="list-style-type: none"> • For photos...digital images
Community Members (n=6)	<ul style="list-style-type: none"> • Pre - Digital Data - Historical • Digital archives • Microfish [<i>sic</i>] • Digital History Database • Archives • Archives
USU Library Staff (n=4)	<ul style="list-style-type: none"> • Either Digital Library or Digital Archives • Digital Archives or Digital History Collections • Digital Historical Media • USU related = archives; General materials (not specific to USU) = library; fewer choices, less confusion
Local Public Librarians (n=5)	<ul style="list-style-type: none"> • Digital [<i>sic</i>] library • Digital Collections - I think that the resulting page would benefit from having a menu of options (hierarchy of sorts) that use words like e-books, digital history collections, USU history, or other categories represented in the Digital Collections that people could choose. • Digital Collections seems best. Digital Archives sounds more academic to me, so it may depend on the audience that you're catering to. • Digital Archives • All in one database? If so, then digital collections (digital library second choice)

Discussion

Our findings demonstrate that our survey participants struggle to interpret many popular terms used to label digital library collections. Despite many attempts at a formal definition, as our ARL survey above shows, conflicting uses persist in the library literature, ranging from collections of digitized archival materials, to subscription databases, to broad information

access points like library web sites (Comeaux, 2008, p. 461). Additionally, significant variation continues to exist in how libraries and other cultural heritage institutions label their digital collections. Confusing, jargon-heavy labels and brand names are a well-documented usability problem (Kupersmith, 2012), and while librarians have debated the merits of different terms, there has been little to no discussion of what labels like *digital library*, *digital archive*, and *digital collection* actually mean to users. In particular, the term *digital library* is not only ill-defined in the library community, but based on our findings, seems to be poorly understood by library users.

Interestingly, several participants seemed to recognize the limitations of using a single term to describe such broad collections and use cases from our scenarios. Instead of just a single link label, some participants suggested a secondary level of navigation based around material type, with one participant suggesting categorization based around whether it was a USU-related collection or non-USU collection. Together, these findings suggest that there are inherent problems not only with the specific label *digital library*, but with the concept of digital libraries as distinct entities that can be fully understood without understanding their constituent parts.

Several participants suggested labels that did not include the term “digital,” which raises the question of how popular a format-neutral label might have been if included as a survey option. It is worth considering whether users now expect libraries to be hybrid, with some resources available online, and others located in a physical collection. If this is the case, it would indicate a need to fundamentally shift how we have been branding and integrating special collections into the larger (increasingly digital) library environment. When items from special collections are digitized do the scanned objects become something different and something no longer in special collections? Should the inverse be used, with special collections that are not available digitally being separated and branded differently from those that are easily available online? From a user-centered perspective, this dichotomy may no longer be necessary, let alone desirable. This was clear in the differences amongst the suggestions from the community members, many of which were retirees, versus younger participants more familiar with digital objects. The retirees suggested we continue to use terms like “archives” and “microfiche” even if the objects were digital; which illuminates a comfort with one format (or, in the case of microfiche, another transformation) than with the newer digitized format. For items housed in USU’s Special Collections & Archives, the connection with the physical object is important; however, all objects from the collection will not be digitized, and therefore, a separate online portal, with a descriptive label, will be necessary for those interested in the full weight of the collection.

The explosion of digitization efforts, coupled with a find-it-now attitude of scholars and students, means the online distribution of special collections materials is not showing signs of slowing down. Overholt (2013) identified “distribution” as the key to the future of special collections in uncertain and challenging times:

...it hardly needs to be said that digitization, and the ability to share digitized materials widely, is enacting a wholesale transformation [yet] frustratingly, there is still far too much friction in the process of matching users with the materials they need. (p. 15).

Overholt identifies several potential stumbling blocks for access for patrons, including institutional silos and lack of openness. While this addresses the larger searchability issues amongst many digitized collections, it does not settle the user experience issues within the individual institutional collections. This will continue to be an ongoing problem and more research is needed. With the confusion surrounding the naming of our digital collections, how do we cater to the user that searches specifically in our institution's collections? For institutions with a range of collections and services, how does this and other confusing jargon weigh down the overall user experience, not just for special collections materials, but online catalogs, e-books, and other electronic materials that could all be reasonably considered part of a *digital library* from the perspective of end users?

As a result of this survey, we settled on the term "digital collections," as a catchall for digitized and born-digital material from USU's Special Collections & Archives, with "Digital History Collections" serving as the specific branding or label for our Digital Asset Management System portal. The word "digital" tells users the format of the objects, while "collections" signifies to users that the items are from our special collections because this term reflects the physical location. In an assessment of library jargon, Hutcherson (2004) found that nearly 60 percent of undergraduate students could identify what librarians meant when they used "collection," which put it on par with "citation" and "catalog" and well above more obscure terms like "controlled vocabulary" or "Boolean" (p. 352). While not the most popular of the options in the survey, it was preferred enough over digital library to justify the change. We anticipate that this name change will not solve all the search issues and labeling confusion, but it is a step in the right direction. Further outreach and marketing will be necessary to highlight the collections and connect users to the materials.

It is necessary to balance the needs of users with different backgrounds and levels of expertise in navigating library environments. As a naming device, the word *digital* does not describe the item or the collections, even in the case of born-digital materials, rather it describes the format of the item or the collection. Within our discussions, both with users and with our colleagues, it is clear there is a distinct tension surrounding the word *digital*. Internet savvy special collections consumers wish that all items be accessible online, but, on the other hand, less technologically-inclined users do not want real objects superseded by the digital, nor in most cases would archivists.

In user experience circles, a tension exists between experts and novices; one where novices may be confused by arcane structures and naming systems, while experts may be frustrated by a more guided and easy-to-use approach (Hassenzahl, 2004, p. 34). To extend this example to libraries and archives, an expert scholar well-versed in library jargon and collection structures

would be frustrated by a design built to guide and teach new patrons. A classic example is “catalog,” a term that endures from analog libraries and may be very relatable to more expert library users, and yet can be easily confusing for newer patrons. Both the branding of our services and how we label our websites and user interfaces need to account for all levels of user knowledge and experience while considering how these factors impact the accessibility of our collections. This becomes difficult in the case of digital libraries which, while comparable to commercial search engines or websites like Flickr, exhibit many of the same complexities as physical archives. In our survey results, users’ choices were telling in terms of how we as librarians view special collections and what our patrons expect, but also demonstrate the limitations of universal labels.

An additional layer of complexity stems from the fact that many digitized collections are created as surrogates for the physical collections within the archives or library and connect with a “real object” in the archives. Thus, the digital form is just an expression of an object, and not, as is central to our naming struggles, a defining feature of the object itself. Despite fears to the contrary, archival materials are not in danger of being lost to the digital. On this transformation towards digital libraries, Battin (1998) reminds us that “books and paper will not disappear, and digital capacities continue to be add-ons rather than simple replacements” (p. 273). Digitization is a supplement to the rich materials housed in USU’s Special Collections & Archives. This results in the term “digital” being added to labels for these materials to note their difference from the real object.

Conclusion

Digitization, as Prochaska (2009) suggests, has opened collections to broader audiences and become the center of attention within the library. As the drive for digital surrogates of cultural heritage objects increases, the need to create online collections that are meaningful and useful to our communities must be at the forefront of these discussions. As popular culture becomes increasingly tied to the web and online media, “digital” becomes less a signifier of uniqueness, and more an expectation among users. For library collections to remain relevant, we need to consider whether *digital library* and similar terms are still useful for communicating the value of an institution’s unique online materials and their relationship with wider library collections, both print and electronic.

Good labeling is a key factor for making usable websites. In the case of library websites, our goal of connecting users with information resources, and presenting those resources accurately, is further complicated by what we know about user behavior, including how users read (or don’t read) on the web, confusion over library and research jargon, and continued problems with library technology and systems integration. With increasing focus placed on library user experience, how should we confront these problems in order to highlight library materials, rather than hiding or hindering their use, while also supporting users’ desire for speed and simplicity? In some cases, separate branding and distinct labeling may be necessary, but for many libraries it may be time to consider repositioning their digital collections as part of the wider library ecosystem. Is a distinct, branded portal for digital

collections necessary for end users who already expect nearly everything to be online? For users seeking to fulfill an information need, this may be a case where the whole is not greater than the sum of its parts. Instead, more usable digital libraries may be those that favor bringing objects to the surface rather than expecting users to navigate self-contained, curated collections. With this in mind, perhaps attention needs to shift toward providing closer integration with web-scale discovery services and other starting points for user research, like commercial search engines.

Problems with library jargon are unlikely to go away. Even as older terms are replaced with more accessible, user-centric language, new library services and changes in technology promise a continuous supply of obscure vocabulary terms. Even still, as librarians, we should make it our mission to elucidate these terms and clarify the nature of our collections, both through user research and user-centered information design, as well as support strategies like library instruction. As more users discover our unique materials, librarians will need to bridge the gap between their expertise as collection creators and managers and the goal of making online environments that are accessible for a broad range of audiences. While seemingly minor, labeling our collections in ways that are meaningful to our users is an important first step towards realizing such environments.

References

- Battin, P. (1998). Leadership in a transformational age. In B. L. Hawkins, & P. Battin (Eds.). *The mirage of continuity: Reconfiguring academic information resources for the 21st century* (pp. 260–270). Washington, DC: Council on Library and Information Resources and the Association of American Universities.
- Borgman, C. L. (1999). What are digital libraries? Competing visions. *Information Processing & Management*, 35(3), 227–243. [https://doi.org/10.1016/S0306-4573\(98\)00059-4](https://doi.org/10.1016/S0306-4573(98)00059-4)
- Bush, V. (1945). As we may think. *Atlantic Magazine*. Retrieved from <https://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/>
- Calhoun, K. (2014). Emergence and definitions of digital libraries. In *Exploring digital libraries: Foundations, practice, prospects* (pp. 1–26). London: Facet Publishing; Chicago: ALA Neal-Schuman.
- Carr, E. H. (1961). *What is history?* Cambridge: University of Cambridge Press.
- Cleveland, G. (1998). Digital libraries: Definitions, issues and challenges. *UDT occasional paper #8*. Retrieved from <https://archive.ifla.org/VI/5/op/udtop8/udt-op8.pdf>
- Comeaux, D. (2008). Usability studies and user-centered design in digital libraries. *Journal of Web Librarianship*, 2(2–3), 457–475. <http://doi.org/10.1080/19322900802190696>
- Dickson, M. (2008). CONTENTdm digital collection management software and end-user efficacy. *Journal of Web Librarianship*, 2(2/3), 339–379.

<http://doi.org/10.1080/19322900802190852>

- Fox, E. A., Akscyn, R. M., Furuta, R. K., & Leggett, J. J. (1995). Digital libraries. *Communications of the ACM*, 38(4), 22–28. <https://doi.org/10.1145/205323.205325>
- Fox, E. A., & Marchionini, G. (1998). Toward a worldwide digital library. *Communications of the ACM*, 41(4), 29–32. <https://doi.org/10.1145/273035.273043>
- Harter, S. P. (1997). Scholarly communication and the digital library: Problems and issues. *Texas Digital Library*, 1(1). Retrieved from <https://journals.tdl.org/jodi/index.php/jodi/article/view/4/4>
- Hassenzahl, M. (2004). The thing and I: Understanding the relationship between user and product. In M.A. Blythe, K. Overbeeke, A. F. Monk, & P. C. Wright (Eds.), *Funology: From usability to enjoyment* (pp. 31–42). <http://doi.org/10.1007/1-4020-2967-5> [<http://doi.org/10.1007/1-4020-2967-5>]
- Hennig, N. (2001). Card sorting usability tests of the MIT Libraries' web site: categories from the user's point of view. In N. Ed.). *Usability assessment of library-related web sites: Methods and case studies* (pp. 88–99). Chicago: LITA, American Library Association.
- Hobsbawm, E., & Ranger, T. (Eds.). (1983). *The invention of tradition*. Cambridge: Cambridge University Press.
- Hutcherson, N. B. (2004). Library jargon: Student recognition of terms and concepts commonly used by librarians in the classroom. *College & Research Libraries*, 65(4), 349–354. <https://doi.org/10.5860/crl.65.4.349> [<https://doi.org/10.5860/crl.65.4.349>]
- Kahn, R. E., & Cerf, V. G. (1988). *The Digital Library Project (Vol. 1): The world of knowbots: An open architecture for a digital library system and a plan for its development [DRAFT]*. Corporation for National Research Initiatives. Retrieved from <http://hdl.handle.net/4263537/2091> [<http://hdl.handle.net/4263537/2091>]
- Kahn, R., & Wilensky, R. (1995). A framework for distributed digital object services. *D-Lib Magazine*. Retrieved from: <http://www.cnri.reston.va.us/home/cstr/arch/k-w.html>
- Kelly, E. J. (2014). Assessment of digitized library and archives materials: A literature review. *Journal of Web Librarianship*, 8(4), 384–403. <http://doi.org/10.1080/19322909.2014.954740>
- Kupersmith, J. (2012). *Library terms that users understand*. Berkeley, CA: UC Berkeley Library. Retrieved from: <http://escholarship.org/uc/item/3qq499w7> [<http://escholarship.org/uc/item/3qq499w7>]
- Licklider, J. C. R. (1965). *Libraries of the future*. Cambridge, MA: MIT Press.

- Lynch, C. (1997). Searching the Internet. *Scientific American*, 276(3), 52–56.
<http://doi.org/10.1038/scientificamerican0397-52>
[<http://doi.org/10.1038/scientificamerican0397-52>]
- Lynch, C. (2002). Digital collections, digital libraries and the digitization of cultural heritage information. *First Monday*, 7(5). <http://doi.org/10.5210/fm.v7i5.949>
[<http://doi.org/10.5210/fm.v7i5.949>]
- Nielsen, J. (1997). *How users read on the web*. Retrieved from
<https://www.nngroup.com/articles/how-users-read-on-the-web/>
[<https://www.nngroup.com/articles/how-users-read-on-the-web/>]
- Nielsen, J. (2003). *Information foraging: Why Google makes people leave your site faster*. Retrieved from <https://www.nngroup.com/articles/information-scent/>
[<https://www.nngroup.com/articles/information-scent/>]
- Nielsen Norman Group. (2014). *Writing hyperlinks: Salient, descriptive, start with keyword*. Retrieved from <https://www.nngroup.com/articles/writing-links/>
- Overholt, J. H. (2013). Five theses on the future of special collections. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*, 14(1), 15–20. Retrieved from
<http://nrs.harvard.edu/urn-3:HUL.InstRepos:10601790> [<http://nrs.harvard.edu/urn-3:HUL.InstRepos:10601790>]
- Pomerantz, J., Choemprayong, S., & Eakin, L. (2008). The development and impact of digital library funding in the United States. In D. A. Nitecki & E. G. Abels (Eds.), *Influence of funding on advances in librarianship* (Vol. 31, pp. 37–92). Retrieved from
<http://www.emeraldinsight.com/doi/pdfplus/10.1016/S0065-2830%2808%2931002-2>
[<http://www.emeraldinsight.com/doi/pdfplus/10.1016/S0065-2830%2808%2931002-2>]
- Prochaska, A. (2009). Digital special collections: The big picture. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*, 10(1) 13–24.
- Schwartz, C. (2000). Digital libraries: An overview. *The Journal of Academic Librarianship*, 26(6), 385–393.
- Smith, C. (2006). Multiple cultures, multiple intelligences: Applying cognitive theory to usability of digital libraries. *Libri: International Journal of Libraries and Information Studies*, 56(4), 227–238. <https://doi.org/10.1515/LIBR.2006.227>
- Southwell, K. L., & Slater, J. (2012). Accessibility of digital special collections using screen readers. *Library Hi Tech*, 30(3), 457–471. <https://doi.org/10.1108/07378831211266609>
[<https://doi.org/10.1108/07378831211266609>]
- Thong, J. Y., Weiyin, H., & Kar Yan, T. (2004). What leads to user acceptance of digital libraries? *Communications of The ACM*, 47(11), 79–83.

- Waters, D.J. (1998). What are digital libraries? *CLIR Issues*, (4). Retrieved from <https://www.clir.org/1998/07/clir-issues-number-4/>
- Whang, M. (2008). Card-sorting usability tests of the WMU Libraries' web site. *Journal of Web Librarianship*, 2(2-3), 205-218.
- Xie, H. I. (2007). Help features in digital libraries: Types, formats, presentation styles, and problems. *Online Information Review*, 31(6), 861-880.
<https://doi.org/10.1108/14684520710841810> [<https://doi.org/10.1108/14684520710841810>]
- Xie, H. I. (2008). Users' evaluation of digital libraries (DLs): Their uses, their criteria, and their assessment. *Information Processing & Management*, 44(3), 1346-1373.
<https://doi.org/10.1016/j.ipm.2007.10.003> [<https://doi.org/10.1016/j.ipm.2007.10.003>]
- Xie, I., Babu, R., Joo, S., & Fuller, P. (2015). Using digital libraries non-visually: Understanding the help-seeking situations of blind users. *Information Research*, 20(2), 1-23. Retrieved from <http://www.informationr.net/ir/20-2/paper673.html>
[<http://www.informationr.net/ir/20-2/paper673.html>]
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