

Archives 2.0
The Future of Archival Access on the Web

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With the emergence and popularity of the World Wide Web, there was a big push by archivists to get finding aids online, often resulting in paper finding aids being converted into an electronic form without taking advantage of the unique features that the Web has to offer. Even with the emergence of a structure standard, EAD, online finding aids have not moved far beyond their paper counterparts. The stagnation of the electronic finding aid raises the question of what exactly is a finding aid; in the most basic terms, a finding aid is a means of access to archival material, either digital or physical. Thus, the bigger concern becomes access and how archivists can improve online access.

In the article “Encoded Archival Description: Are Finding Aids Boundary Spanners or Barriers for Users,” Elizabeth Yakel reports that “subjects had trouble understanding archival terminology and how best to search for information in finding aids” (2004, 63). Basically, research indicates that users don’t understand the archival jargon and structure and they do not want to learn a new system to find what they are looking for. Instead, users want materials to be presented to them in a format and a language that they recognize and understand. This paper will argue that user needs can be met by using the tools and principles associated with Web 2.0. It will begin with a brief introduction to and definition of Web 2.0 before turning to an examination of how Web 2.0 can be used to increase access for archival patrons and change the way that archivists think about finding aids. It will examine current uses of Web 2.0 in archives, consider how traditional archival institutions could adapt these features for their own use, and contemplate the issues and concerns that archivists have about Web 2.0.

What is Web 2.0?

Web 2.0, a term coined by Tim O'Reilly and John Battelle at a 2004 conference, refers to both the technologies being used and a set of principles being expounded. The main principle behind Web 2.0 is the idea of "turning the web into a kind of global brain" (O'Reilly). Another definition of Web 2.0 comes from Judith M. Umbach who describes it as "ubiquitous access to data, an architecture of participation, and distributed independent developers 'playing well together.' Most importantly, everything is 'always in beta'—that is, constantly open for improvement by user feedback" (2006, 192). The key concept here for archives is "an architecture of participation." The buzz surrounding Web 2.0 is that it focuses on what the user wants.

As mentioned above, there are specific technologies associated with Web 2.0. Greg Notess provides a fairly comprehensive list: "the technologies often used in connection with Web 2.0 include Ajax, blogs, APIs, clouds, CSS, RSS, social networking, tagging, and wikis" (2006, 41). This paper will look specifically at the use of social navigation, folksonomies/tagging, blogs, wikis, and mashups. The individual tools will be discussed in more detail below, but the overlying principle in all of these tools is that they focus on user interaction and input. In addition, they are cheap to implement since all of the tools are open standards.

Who is using Web 2.0?

Discussed below are two examples of personal and public archives that have incorporated Web 2.0 technologies into their websites.

The Polar Bear Expedition Digital Collections

One of the most visible examples of Web 2.0 being used by archives is found at the University of Michigan where Elizabeth Yakel, the Bentley Library staff, and a group of graduate students have created the Polar Bear Expedition Digital Collections. Online since January 2006, the collection is described by Peter Van Garderen as “an innovative access aid to over sixty digitized collections of primary and published material dealing with a U.S. military intervention in northern Russia at the end of World War I” (2006). The project was created in an attempt to “expand the capability of EAD, make the archival and research experience collaborative and participatory, and challenge the traditional finding aid structure” (Bentley Staff 2006). According to James Sweeney, one of the graduate students who worked on the project, development of the collection began before many of the Web 2.0 technologies (for example, AJAX) were available. Thus, they were unable to do as much as they would be able to do now.

The Polar Bear Expedition Digital Collections uses social navigation, which Yakel defines as “situations in which one web site visitor is aware of the... previous visitors’ navigational paths” (2006, 160). Currently, there are two methods of social navigation used on the website: link paths and comments. Link paths¹ allow the user to see what other areas researchers looked at. So, for example, a user who goes to the collection page can see areas that users, who also viewed this page, visited during their time on the site. It provides a way for the user to recognize new connections that might not have been seen in the hierarchical arrangement typical of archival finding aids.

¹ See Appendix A, Figure 1.

The second form of social navigation, comments,² is available at the bottom of every page and allows a user to post a comment about an item or collection. This form of social navigation allows users to interact with each other as well as members of the archive staff. At the SAA conference in 2006, James Sweeney mentioned that this section has actually aided in collection development. He said that users found the site, became interested in it, and then would mention that they had materials that could be added to the collection. The comments section is a great idea because it provides constant feedback from an archive's users and really allows patrons to feel involved in the collection.

The Polar Bear Expedition Digital Collection is still under construction. As James Sweeney reported at the SAA conference and as are listed on the collection website, there are many new features currently under construction. There are content improvements that are being made including the ability to rotate images, being able to view and search full-text of Polar Bear published materials, and the ability to search and browse item level descriptions. There will also be new features for individual's personal settings. These include customization of the left navigation bar, the ability to add tags to individual items and collections, being able to add a personal transcript to a diary or letter to make searching and reading easier for others, adding notes to your bookmarks as well as the ability to share bookmarks with others, and the capacity to create virtual call slips that will aid in requesting physical materials from the repository. Thus, the collection will continue to grow and integrate Web 2.0 tools.

² See Appendix A, Figure 2.

WW2 People's War

From June 2003 until January 2006, the BBC, recognizing that the World War II generation was getting old, collected the "memories of people who had lived and fought during World War II on a website; these would form the basis of a digital archive which would provide a learning resource for future generations" (BBC 2006). Participants learned how to use the computer to contribute their stories; the result is an archive with over 47,000 stories and 15,000 photographs that was created by the British people, "turning the audience into the content generators and giving them a platform to tell their stories" (BBC 2006). This website makes history come alive for its users, the descendants of the storytellers. It also helps people to recognize the importance of preserving archival material; it gives the user a personal connection to the archives, which is what Web 2.0 is all about. The site also has a message board that allows users to discuss the stories and collections. More importantly, it is going to become a permanent part of the British Library's United Kingdom Web Archiving Consortium (UKWAC). Thus, this is an example of a private archive (to some degree), created by and for the people, becoming a permanent part of a public archive.

Jump on the Bandwagon

Above are a few examples of how Web 2.0 technologies are already being used in archives. However, there are many other ways for an archive to use these tools. Below is an examination of various Web 2.0 technologies and their possible uses.

Blogs and Wikis

Blogs, short for weblogs, have gained popularity over the past few years. These days it seems like everyone has a blog, so why not an archive? It could be used to keep patrons informed of new acquisitions, special events, and anything else an archive may want to inform a patron of. Also, it allows the users to respond back and provide input.

But, this is just the tip of the iceberg for blogging. They can also be used in more creative ways. Take for example the Samuel Pepys diary. Phil Gyford runs a site that uses the Project Gutenberg version of Pepys' 17th century diary; each day he posts an entry from the diary that corresponds to the current month and day. Users can read the diary until this point, browse by subject, and view annotations.

The Massachusetts Historical Society has digital version John Quincy Adams' diaries. A user can currently browse by volume or subject interest or conduct a date search. However, if these pages were transcribed and put onto a daily blog, users would have the opportunity to view the diary as it is being "created" and get some context for the diaries. Archival materials always feel more "alive" when they can be connected to the user.

Wikis are newer than blogs, but also allow for even more user interaction. Achterman writes, "Think of wikis as collaborative workspaces in which information can be gathered, shared, evaluated, organized, or used to produce something new" (2006, 29). Wikis provide an excellent medium for patron interaction. A wiki allows users to add and alter content. This may not be the ideal tool for a finding aid, where authority issues arise, but would be a good way to allow patrons to comment on the collection, make

suggestions for collection development, discuss upcoming events, and create topical pages of interest.

Mashups

A Mashup “takes one application and overlays it on another for a completely new purpose” (B.B. 2006). In the article “Doing the Monster Mashup,” Darlene Fichter points out that “there are dozens of ways that libraries could use a map mashup. Libraries could provide a map of walking tours for their area with links to archival photographs and books in their collection” (2006, 49). Map mashups have already begun to emerge in archives (see the September 11 Digital Archive- <http://911digitalarchive.org/>). Archives can use a mashup to promote relatively unused or unique materials. For example, I did an internship at an archive where certain collection policies prevented any weeding from being done. As a result, one collection contained receipts from one man's archeological projects. A mashup linking receipts to a program like Google Earth would allow a user to recreate this man's trip and dig sites.

Folksonomies/Tagging

The most useful Web 2.0 tools for archives are tagging and folksonomy, “a naturally created classification system which arises as a result of user-based tagging” (2006, 27). So why should archivists encourage tagging and folksonomies? Margaret Hedstrom points out that, “The user community for archival materials has become increasingly diverse in recent decades and the possibility of remote access will only serve as a catalyst to the trend toward more diverse users” (Hedstrom 1998, 11). Since

folksonomy and tagging are ways for users to provide personal descriptions of metadata, these tools would add another layer to the description, potentially draw out connections that the archivist did not notice, and cater to a diverse audience. For example, an archivist may not have the time to provide an authorized authority file for each personal name that appears in a finding aid, but a genealogist may think these names are important and tag them, creating new ways to enter a collection.

In fact, the argument that is commonly used against tagging and folksonomy is what makes these tools appealing for an archive; "critics of folksonomies and tagging believe that, even with its problems, classification and taxonomies are still useful in a digital world and should not be discarded for the latest hot new thing... Without controlled vocabulary... folksonomies and tagging are imprecise, ambiguous, overly personal, and inexact" (Gordon-Murnane 2006, 29). "Overly personal" tagging is particularly useful in archives and would not be seen as a downside. Unlike catalogers, who have an index and table of contents to help determine what a work is about, archival subject headings are extremely subjective and it is often impossible for an archivist to document everything that appears in a collection.

Now, let's look at how one online library site has implemented tagging and how this model might be useful to archives. LibraryThing has been described as "the love child of Melvyl Dewey and Web 2.0" (Bates 2006). It is an online site that allows users to catalog their personal libraries and "incorporates social interactions, book recommendations, self-classification, and monitoring of new books" (Cohen 2006, 33). There are "several recommendation features, including 'people with your books also have,' 'similarly tagged books,' 'special-sauce recommendations,' and, tantalizingly,

‘most popular books you don’t have’... These recommendations are based...on your entire collection, making them potentially more relevant” (Bates 2006). LibraryThing also has RSS feeds and message boards organized according to interest. For example, users can visit boards for librarians who LibraryThing and genre boards. In a description of LibraryThing, Jim Regan asks the question, "What other amusements have librarians been keeping to themselves" (2006)?

The same thing could be said of archivists. Why not create ArchiveThing and welcome people to the world of archives? Wouldn't it be great to say, I'm an archivist, and have people know what you're talking about? This type of community would provide a great opportunity for archival patrons to share their interests with other archive users. It would be a way to merge the private and public archival communities and would also be advantageous for the archivist because it would provide constant insight into what her patrons are interested in, thus lending a hand in collection development. Since archives are different than books, ArchiveThing would be organized differently. Instead of being a place to share book catalogs, it could share digital collections and finding aids. Users could create their own digital collections, view other collections, and store favorites from other collections as well as add tags and participate in message board discussions. RSS feeds could be used to let users know when new items have been added to a collection.

There are a lot of users out there who are interested in archives and contributing to archives and just don't know what an archive is or how to participate. Take for example, blog writer, dchud, who has created a digital archive and mashup with his blog and Flickr pages. On his blog, he reports a new exhibit, all of his ticket stubs from over

the years; the blog is linked to his Flickr account where a user can view each individual ticket. He writes, " these are presented in date order, so they show something of a personal cultural evolution. That might not be interesting to anyone other than me, but, still" (*Utter Futility* 2006). If there was an online archival community, dchud could meet other users with similar interests and get tips on how to preserve his archival collection. Archivists often say that people don't realize how to preserve their materials; an online community like ArchiveThing would provide a place of fun, community, and education.

Archival Concerns: Authority Issues

One of the biggest concerns that archivists have with Web 2.0 is that authority and authenticity will be lost. Elizabeth Yakel states, "The reluctance to let researchers into the virtual archives in a more active role also has to do with the desire to maintain authoritative metadata about collections and probably to a lesser extent the authority of the archivist" (2006, 160). In the past, this authority came through original order and provenance. The Polar Bear Expedition Digital Collections shows one way that archivists can maintain the integrity and authority of the collections; "even though there are now multiple pathways to the items in the collections, they continue to be organized in accordance with the principle of original order, most simply with 'previous' and 'next' navigation between items in files. The principle of provenance is also respected by maintaining the collections as the predominant top-level structure" (Van Garderen 2006). This method allows traditional means of authority to mix with new forms of technology.

There are other ways to ensure authority and authenticity. Take another look at LibraryThing. Steven Cohen points out that "Clicking on the 'card catalog' icon enables

the user to look at the saved data plus the MARC record. The ‘person’ icon shows the ‘social data’ for the item, such as any tags from all users that were allowed to describe the book” (34). Thus, the set up of LibraryThing provides a clear distinction between what are social tags/folksonomies and what were put in place by a library. ArchiveThing could use the same structure, where one of the links leads to the finding aid information (where available) while another link provides all of the tags that archival users may have assigned to it. Authority and authenticity will be maintained while providing a richer experience for the user.

Conclusion

Web 2.0 may be a buzzword or a passing fad, but the tools available will be of great use to archivists. Currently, many archives do not have efficient finding aids and methods of access need to be rethought now, while online finding aids are still in the early stages of development. Archivists need to break away from traditions of the past and embrace methods that will provide greater access for its users. The goal of an archive is to provide the best service possible; Web 2.0 will allow archivists to do just that.

Appendix A:

Link Paths

Researchers who viewed this page also viewed:

[\(learn more...\)](#)

Henry J. Abel papers	United States Army Signal Corps photograph collection	Edwin L. Arkins diary	Frank J. McGrath photograph album.
George Albers papers	Help : Tools	Alex Heath photograph collection	Golden C. Bahr papers
Aldred S. Buckler photograph collection	Polar Bear Association photograph collection	John W. Bigelow papers	Godfrey J. Anderson Papers
Carl A. Russell papers	John Boren papers	Patrick Vincent McMenemy photograph collection	Stillman Visscher Jenks photograph collection
Ethel Fred Nordman photograph collection	Harold T. Glassford photograph collection	Charles A. Simpson papers	Frank Richard Jung photograph collection

Figure 1. Collection browse, link paths.

The screenshot shows a Firefox browser window displaying the 'Silver Parrish diary' page. The URL is http://polarbears.si.umich.edu/index.pl?node_id=432&lastnode_id=17004. The page content includes:

- Search:** A search bar with 'advanced search' link.
- Biography:** Resident of Bay City, Mich., served as sergeant, Co. B, 339th Infantry.
- Scope and content:** The diary, Sept. 1918-April 1919, a photocopy, describes his sympathy for the Russian people and the Bolshevik cause, his impressions of Russian life, housing, crops, food, and marriage, as well as fighting at Seino, Sept. and Oct. 1918, and Touigas, Oct. 1918. He also describes the difficulties in which he found himself in March 1919, when he drew up a petition protesting the presence of American troops in Russia after the end of the war. A transcript of the petition is included. The original of the diary is owned by Francis.
- Folder 1:** Diary, Sept. 1918 - April 1919.
- Comments:** A comment by penningroth on 11/13/2006 at 8:20 pm. The comment discusses the diary's reflection of issues reported by journalist Fraser Hunt in February 1919, mentioning Hunt's time with the troops in January-February 1918 and his attempt to avoid censorship.
- Login:** A login form with fields for Username and Password, and options for 'remember me', 'Forgot your password?', and 'create a new account'.
- New Users:** A list of names including Cox, Lorenz, Philip, Bull, Andrew, Margaret, Mary, Krus, Schwimmer, Stern, Tom, Laura, Emily, Urquhart, and Mike.
- New Comments:** A list of links for browsing by collection, Silver Parrish diary, Contact Us, individual name (Rabacsek, Anthony), and Contact Us.
- Footer:** Bentley Historical Library logo and contact information: 1150 Beal Ave., Ann Arbor, MI 48109-2113, (734) 764-3482.

Figure 2. Silver Parrish diary description.

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