

Minding the Gap:
Issues in Archiving Electronic Discourse
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Abstract

In this paper I will be reviewing issues that are involved with archiving electronic discourse. The term electronic discourse for this paper will refer to any sort of digital contribution via the World Wide Web. These include, but are not exclusive to, emails, websites, blogging, micro-blogging, commenting on blogs, ratings (e.g. items, services, movies, books, etc.), personal and professional profiles, and social networking sites. While some individuals are interested in the aspect of forgetting their discourse as soon as they type the words others believe, especially in the archival field, that it is necessary to preserve this growing portion of the fabric of social history to prevent any sort of cultural collective amnesia. In conclusion I will discuss concerns in archiving electronic discourse including privacy, copyright, and access.

Minding the Gap: Issues in Archiving Electronic Discourse

Everyone has that old shoebox with letters written decades ago from one family member to another or a collection of their grandmother's diaries locked away in a truck waiting to be explored. I myself have both. However, in the digital age of the World Wide Web beginning in the late twentieth century the concept of producing letters and handwritten documents has literally become a relic of a bygone era. Letters and greeting cards have metamorphosed into emails and e-cards. Diaries have become websites, blogs, and micro-blogs. Whereas micro-blogging, more popularly known as tweeting, can take seconds to create, websites and blogs take hours, but all of these can be deleted in an instant. With the deletion of those items goes memoria, from the mundane to the inspired. This loss will be felt in generations to come as gap in the social historical structure of the world, western or otherwise.

Individuals working in the fields of archives and special collections, including librarian Paul Mogren, Ph.D. of the University of Utah's J. Willard Marriott Library (personal communication, April 21, 2011), are concerned as to the collective amnesia that will develop as a result of a loss of the hand written record. What will future generations know about the day to day lives of those living on the planet during the turn of the twenty-first century? This is the question archivists are asking knowing it is a race against time to archive born digital content that can be deleted in an instant.

With the ease of deletion and perceived anonymity of the Web some believe in the ephemeral nature of its digital born content. They tend to think of the here and now and not of what becomes of their various blogs, tweets, and comments. According to the Library of Congress' (LoC) blog page negative comments as to the news that LoC was had acquired as a gift from Twitter and was preserving all public archived tweets (Raymond, 2010, April 14), fall

into the realm of the whole thing being a waste of time and an invasion of privacy. These two issues, while perhaps important to the individual commenter, speaks to a definite lack of historical perspective and extreme naivety in how they interact on the Web.

It is therefore an arduous task that is set out before archivists to handle web based electronic discourse, in its various formats e.g. email, websites, blogs, social networking sites, etc. Some of those institutions taking on the task of archiving include the Library of Congress, The Center for History and New Media out of George Mason University (collaborator on September 11 Digital Archive site), The Social Networks and Archives Project involving several universities, and even independent non-profit groups like The Internet Archive and The Story of My Life Foundation. Issues that need to be addressed by these groups include privacy, copyright, and access. Here I will address these particular issues and discuss how they are currently being treated.

The World Wide Web of Electronic Discourse

There is a massive amount of information floating on the digital threads composing the World Wide Web. Each day people around the world contribute to the growth through a variety of electronic discourse including emails, websites, blogs, comments, and tweets. José van Dijck (2007) profoundly states in his book *Mediated Memories in the Digital Age* that, "Personal cultural memory is coming out of the shoebox and becoming part of a global digital culture" (p. 52). Personally, I have at least three email accounts (personal, work, and scholastic), three websites (one professional and two scholastic), two Facebook accounts (personal and professional), one Twitter account, and accounts with Goodreads and LinkedIn along with belonging to several listservs. My cat has an email account, a Facebook account, and a YouTube account. Frankly, it is even shocking to me how much I contribute to the electronic discourse.

From Snail Mail to Electronic Mail

Letter writing comprised a good deal of long distance communication prior to the digital age, even more so prior to the development of the telephone. Letters and related correspondence make up a vast amount of physical archives today. However, a shift occurred in the act of writing letters in the 1990s with the advent of a fully accessible World Wide Web. Most notably it allowed for the average citizen with Internet access to create websites and activate email accounts. Email standing for electronic mail allows users to communicate across the world in mere seconds.

Correspondence, information, and exchanges of ideas began to take less time to complete with the advent of the Web. Susan Lukesh's 1999 article relays the story of two friends one, a former professor located in Philadelphia and the second, a professor located in Jerusalem who communicated with each other via email during the first Gulf War. Consequently they published their emails into a book. Most people do not write emails profoundly enough to consider composing a book.

However, most do not take into consideration the many things that affect the world so profoundly including everything from natural disasters to joyous occasions. We then communicate to our circle of acquaintances, friends, and loved ones wondering if they heard the terrible or wonderful news, wondering if they are or know someone affected by the occurrence. Unfortunately because of many security issues dealing with email access we are currently restricted to purposefully contributing these items to the appropriate archival arena. An example of contributed emails documenting the September 11, 2001 attack on the World Trade Center can be found on the official *September 11 Digital Archive* (<http://911digitalarchive.org/index.php>).

Journaling via Websites, Blogs, and Micro-blogs

A progression has emerged over the last nearly twenty years in which the Web has developed. First the fashion was to create websites dedicated to self identification, presenting static pages introducing ourselves, our families, and our ideas to a new found world. Over time websites have diversified allowing for niches in the marketplace whether personal, academic, business, or social. Websites tell the stories of companies, schools, and people. This prompted the non-profit company Internet Archive (IA) (<http://www.archive.org/>) to archive sites across the Web.

Using a system of web crawlers, IA tracks and records all publicly accessible sites available on the Web. Visitors to the IA site can use the Wayback Machine to view websites dating back to the inception of IA's work in 1996. Its system allows for private files to be skipped as well as owner initiated requests for removals to be honored. The one disadvantage of IA's Wayback Machine is that defunct websites (e.g. sites that are missing images and links) impede the viewer from truly seeing what the original website looked like. The LoC has also delved into archiving websites selecting sites based on cultural, historical, political, religious, and social criteria since 2000 (<http://www.loc.gov/webarchiving/index.html>).

While websites have their merits, they do not allow in many cases for the ease of daily updating. By the late 1990s Web logs or blogs became the new way to journal Online. With blogs, clients can design their page as informal as they like, with a daily or weekly diary, to as formal as they like with professional looking journalist websites, and anywhere in between. Blogs allow people the opportunity to be seen by billions. They also include a variety of privacy levels for those not so inclined to share with the whole world.

Blogs are perpetually editable which may seem in opposition to the true intention of a journal or diary. However, some individuals – including notable historical figure Anne Frank kept a diary to tell her personal story of struggle during World War II – continuously edited their journal entries, composing them for future publishing. José van Dijck (2007) writes in his book *Mediated Memories in the Digital Age* that,

As time proceeds, memories of experiences inevitably evolve; revising one's past inscriptions is a natural part of a process of personal growth. . . . Although the Internet is often characterized as a transient, evanescent medium, lifelogs have both the ability to fix and the potential to morph (p. 75).

Therefore a person who perpetually edits their blog is not tampering with an artifact and making it less authentic, but instead creating a work in progress.

Catherine O'Sullivan's 2005 piece "Diaries, On-line Diaries, and the Future Loss to Archives; or Blogs and the Blogging Bloggers Who Blog Them," gives an extensive history of diaries and blogs with the emphasis of the importance of archiving blogs for the preservation of cultural memory. She suggests that archivists actively seek and develop methods of appraisal and acquisition as a base for preservation and management. To actively acquire blogs O'Sullivan proposes using web crawlers resembling that of IA to acquire blogs across the Web. To prevent any ill feelings she advocates gaining permission from the blog's owner for archival preservation. O'Sullivan is moving in the right direction however it should be explored as how to truly preserve blogs without having any data loss similar to that mentioned above concerning IA's Wayback Machine.

Bloggng, prompted by an increasing trend in cell phone text and instant messages (IMs), has developed a new and popular derivative known as micro-blogging. Micro-blogging involves

sharing the self with the world similar to blogging, but in fewer words. Whereas the blog is more contemplative micro-blogging or using the Twitter vernacular, tweeting is far more concise.

Tweets involve 140 characters and can take various forms including website links, photos, and sentiments such as Michelle Lancaster's tweets, "Dark chocolate [T]oblerone. Extra large bar. Oh yes.," (2011, May 5) or "Tell me about it. I was chuntering on last night about *padded* training bras" (2011, April 13) both of which can be found on her Twitter site

(<http://twitter.com/#!/michlan>). The second quote recently earned the author a mention in the Merriam-Webster Online (2011) list of *Top 10 Favorite British Words* for the word *chunter* (emphasis added). This inclusion by Merriam-Webster Online shows the impact of micro-blogging and Twitter on social historical context which is why the LoC felt a need to preserve Twitter's public tweets.

In 2010 the LoC announced that it had been gifted Twitter's archive of public tweets in an effort to preserve the momentous swell of cultural history generated by the company's popular micro-blogging venture. Due to such an interest in this particular action by the LoC, especially noting those wondering why they would be interested in preserving all that goes on, on Twitter the LoC dedicated a FAQ page to explain their reasoning. The FAQ page states,

Twitter is part of the historical record of communication, news reporting, and social trends – all of which complement the Library's existing cultural heritage collections. It is a direct record of important events . . . [and] it is a platform for citizen journalism Individually tweets might seem insignificant, but viewed in the aggregate, they can be a resource for future generations to understand life in the 21st century (Raymond, 2010, April 28).

The site further explains that a majority of tweets will be used to highlight established digital collections within the parameters of the LoC. A goal of the LoC for this project is to prevent a gap in the social history by documenting they daily lives and uncommon occurrences that people feel a need to express.

Networking via Social Networking Sites, Profiles, and Communities

Along with creating websites and blogging Web users are interested in becoming a part of a community, whether it is a place to share a love of books such as Goodreads, to advance oneself in one's profession such as LinkedIn, or just to connect as in Facebook. I myself belong to all three. These sites are also important in the social history of the twenty-first century. Future researchers will be able find trends in books, occupations, and things people are discussing with their closest or not so closest friends.

Joanne Garde-Hansen (2009) discusses the concept of personal archive fever, referring to Derrida's work, *Archive Fever*, and its relevance to social networking sites (SNS) as a desire to use SNSs and similar electronic discourse (e.g. profiles, communities, blogs, micro-blogs, and websites) to create a personal archive on the web. However, Hansen does not deal with the ephemeral nature of the digital Web and the need to permanently archive materials such as SNSs. Similar to blogging and websites these profiles, communities, and SNS may be archived in the same way that Catherine O'Sullivan (2005) suggested in order to prevent loss of current social data.

Collective Amnesia

Today mail is derogatorily referred to as snail mail however sending letters at one point was such an integral part of daily life that postal systems would routinely have more than one delivery service during the day. In the digital age of the twenty-first century mail has evolved

into email, instant messages, texts, and tweets. Whether the messages are a long contemplative composition on developing the next scientific discovery or quick witted digital short hand on the latest gossip they have both meaning and context in the sender's and receiver's realm of understanding. Therefore they also have meaning and context in the fabric of social history. Because there may be little to no handwritten documentation left in some societal situations, those depending solely on electronic discourse, there is a strong chance that a gap will form in the historical record leading to collective amnesia in these scenarios.

In the comment area on a blog titled *5 Ways Social Media Will Change Recorded History* by Ben Parr one commenter, Liz (2008, November 18), referring to persons who communicate using social networking sites states, " It is still a small segment of the population...most of the people I know in offline life don't have blogs or use Twitter" (2008, November 18). She is then seconded by Kelly (2008, November 19) who adds her opinion by noting that the particular segment of the population extensively using electronic discourse

are NOT representative of their contemporaries offline . . . people they work with, study with, date, people in their family, at their grocery store... most of the world around them every day is NOT on [T]witter and [F]acebook documenting their every move for the whole world (and nobody) to see (2008, November 19).

Liz (2008, November 19) then delightedly responds to her new compatriot with thanks and "Please contact me via Twitter (nwjerseyliz) and let's exchange email addresses if you'd like to talk further" (2008, November 19). Apparently while most of the world suffers from lack of access to social networking and electronic discourse according to Liz this does not seem to be a personal issue. Yet, without her candid outpouring of

information, e.g. her Twitter persona, I would not have been able to find Liz Pullen (<http://twitter.com/#!/nwjerseyliz>) on that particular networking site.

What to Preserve?

So who is to say what deserves to be collected and what does not? Many archives are already collecting tangible items including diaries, letters, business and educational papers, manuscripts, and government documents. However, a growing and younger population is communicating exclusively in the digital sphere. This electronic discourse has been a concern to the archival community dating back to at least the 1990s. A 1996 report *Preserving Digital Information* references the notion of the fragility of cultural memory in the digital age and the need to properly preserve that information for the long term.

The ephemeral nature of email is also documented in Lukesh's (1999) piece "Email and Potential Loss to future Archives and Scholarship or the Dog that Didn't Bark," where she expresses the need to archive emails, especially those of the scientific community. While her work centers on the documentation and preliminary work involving scientific discourse, are emails pertaining to the September 11, 2001 attack on the World Trade Center any less important? According to September 11 Digital Archive Director Tom Scheinfeldt they are not. In fact Scheinfeldt stated that, "It is our policy to preserve everything" (as cited in Caswell, 2009). Preserving everything can be a heavy burden in a time period when even archivists are well aware of perils in long term digital storage.

Still, there is a sense that governments and similarly large institutions need to work to accomplish the massive archival storage of the ever increasing amounts of electronic discourse. Alexander Stille's 1999 *New Yorker* article, "Overload," reflects issues prevalent over almost two decades later, noting that in the future there will be an increase of governmental databases

because "E-mail programs were not written with long-term storage in mind" (as cited in Lukesh, 1999, September 6). Private industry is therefore interested only in providing a service and not in documenting the collective history of its customers unless there is a financial advantage. Of course it could be asked how many individuals spend the time saving every email sent and received for future historical merit. Few people if any, outside of government. Most periodically delete items and clear out their trash folder to make room for current messages.

Digital Memory and Forgetting

People for all their efforts to contribute to social networking sites and put their personal stamp on the digital age seem to want to forget past misdeeds involving any particular electronic discourse. The issue of forgetting is addressed by Viktor Mayer-Schönberger in his book *Delete: The Virtue of Forgetting in the Digital Age*. Mayer-Schönberger suggests that things such as electronic discourse and digital files prevent people from the grace of forgetting the past. He states, "Digital remembering undermines the important role forgetting performs, and thus threatens us individually and as a society in our capacity to learn, to reason, and to act in time" (Mayer-Schönberger, 2009, p. 197-198). His point is that it is difficult to evolve as a person when the whole world has access to what you did at any point in your personal history. José van Dijck (2007) takes the opposing viewpoint when considering the delicate nature of digital files stating, "Memory does matter, perhaps even more so in the digital age" (p. 48). However, the naivety of those who post on social networking sites seems to be what gets some into perpetual trouble regarding their own personal privacy and future implications.

While some may regret the absolute nonsense tweeted in a drunken state and wish to forget the fact that they willingly added it to the human record knowing it cannot be erased, no matter how one tries. Not everything has to be sensational in the realm of digital discourse some,

if not most things, are mundane. Like journal entries that catalog daily chores, the weather, and where someone went out to dinner the digital age catalogs the daily lives bloggers and tweeters lead. One commenter, Michael (2010, April 20), on the LoC blog about archiving Twitter opines,

At some point in the (far) future, people may be glad that archiving of tweets and other online data was done. It documents humanity and what we are at this point in time. It would be like looking backwards in time – regardless if your tweets are menial or earth-shatteringly useful. Future generations would be able to see what ails us, inspire us and more by looking at snippets of archived tweets. It is immensely useful for humanity’s history. Don’t just think, ‘Me, Me, Me’. Whatever we do now online is a legacy to humanity’s future and captures the essence of who we are (2010, April 20).

Still a good of the population will dwell on the subject of who would be interested in the daily grind of a normal life a hundred years from now? But it is truly the mundane regular day to day activities sprinkled with comments on world events that will interest the historical researcher generations into the future.

Without the marked effort to archive electronic discourse in a variety of social networking and websites, a significant portion of the social context would be lost. Annemaree Lloyd (2007) reflects that,

[T]he discursive practices of memory institutions are critical in ensuring that knowledge is accessible to present and future generations. This places them in an often downplayed, yet powerful and influential, position as keepers of cultural truth, shapers of memory and guardians of sanctioned knowledge (p. 56).

Memory institutions such as archives whether governmental, academic, or private have a heavy burden with my issues to face.

Issues of Archiving

In researching collective amnesia in the digital age I have come across three pressing issues as to the collection and preservation of electronic discourse on the Web. The goal for most government, academic institutions, and private foundations is to create a point of access to the growing social historical digital content of the early twenty-first century. Yet, there are some out there that while they post, tweet, and comment in the public realm are fearful of what the archived future will bring.

Privacy in a Public World

The biggest concern for individuals when the LoC announced that they were to preserve all public tweets from the micro-blogging site, Twitter was whether their public tweets would be accessible forever. While this is a valid concern in the eyes of the Twitter clients many missed the point that the project only concerned public tweets. For Twitter the default for users is public posting of their tweets. In order for the tweets to be private one must purposefully adjust their account.

Some persons commenting on the LoC blog *How Tweet it is* tried in vain to explain to tweeters that it was their choice to essentially release information out into the world. One commenter, Korodzik (2010, April 22) went so far as to use sarcasm stating, "Now the whole world/the evil government will be able to read my tweets... the tweets which I, personally, have published on the Internet for all to see, but somehow was never concerned with anyone accessing them, until now!" What can one truly believe to be private when posting on the Web using publicly accessible sites?

As Twitter is an American entity based in the United States of America some international subscribers are also worried. However, it is hard to tell how this affects Michelle Lancaster (<http://twitter.com/#!/michlan>) of England who's tweet is featured on the Merriam-Webster Online website. When she found out that her public tweet was on the dictionary's website for the whole world to see she responded via Twitter, "I'm famous. Queue here for autographs. [Merriam-Webster Online link]" and "I'm thrilled that my claim to fame is DICTIONARY- based. *nods enthusiastically* (2011, April 22). It is uncertain as to Michelle's opinion of her tweets being potentially archived in perpetuity.

The reaction to the LoC's acquisition of Twitter's archive has led to the creation of #NoLOC.org an entity that assists in removing, what they refer to as, stale data from your Twitter account. The company will at your request delete tweets prior to them becoming archived by Twitter and being forwarded to the LoC. I am not quite certain how this actually works, however the key is to include a special code of characters with each tweet. Therefore the company promises that a person's real time tweet will not come back to haunt them in the future. While #NoLOC.org does not have anything against Twitter's terms of service and its right to give publicly accessible tweets on the Twitter site to whomever they wish the main concern is that those same tweets will be kept in perpetuity by the LoC.

In his blog post, *5 Ways Social Media Will Change Recorded History*, Ben Parr (2008, November 18) lists how electronic discourse in the twenty-first century will affect the future of recorded history. Three of the five items on Parr's list are based on the issue of privacy and include:

1) Everyone will have the ability to know what you did and who you were with on a daily basis. . . . 4) There is little room for hiding details about our lives. . . . 5)

An ethical war over the use of this information will arise (Parr, 2008).

While these are practical concerns when dealing with the masses of individuals sharing so much personal information with the rest of the world, one should take into account the personal responsibility of how much of that information is too much.

Like Twitter most blogs, SNSs, and communities have conditions of service including privacy measures. Generally the default privacy setting is public which puts the burden of privacy on the user. Facebook has an extensive array of privacy measures for clients to employ. So much so it can lead to confusion. The IA has an extensive Terms of Use page (2001, March 10) that covers everything from how the content of the IA site can be used to issues in privacy and copyright. Accordingly use of the IA site denotes an agreement to all of the terms of usage. Other institutions, including the LoC also employ this reasoned approach to privacy and terms of usage. Still, no matter what one does someone will have issues with their personal privacy in the face of making themselves public.

Copyright, Who Owns What?

Issues in copyright law for the digital age are of a great concern to all archivists. Who has rights to one's tweets and blogs? Is it the host or the client? Some sites, including Twitter note that it is the host that holds the copyright of the posting while the client keeps the rights to the content. However this still allows them to do what they see fit with the tweets including gifting the archives to the LoC. Website copyrights usually belong to the client or owner and not the host. IA again uses its Terms of Use page to allow for issues in copyrights. It states that,

The Internet Archive respects the intellectual property rights and other proprietary rights of others. The Internet Archive may, in appropriate circumstances and at its discretion, remove certain content or disable access to content that appears to infringe the copyright or other intellectual property rights of others (2001, March 10).

Similar wording can also be found on the Twitter Terms of Usage page (<http://twitter.com/tos>) as well. Again Catherine O'Sullivan proposition on contacting users prior to allowing access to archived sites is an excellent methodic approach to the issue of copyright. However, it should be measured against the knowledge that all persons may not be accessible to give their consent. In this lies the very difficulty of the copyright issue in digital formats.

Access

The final issue to be discussed is that of access. While hosting sites including Twitter and Facebook have the ability archive postings they are not usually accessible and therefore serve no viable purpose. Many websites archive material, however they have little ability to provide for searchable access to those same archives involving such items as finding aids. The goal of archival institutions, including several mentioned above, is to allow access to archived items that are part of the social public realm involving various formats of electronic discourse.

It is uncertain as to the longevity of websites and businesses that come and go at the whims of economy or of society. However, institutions such as the LoC have an extensive longevity of over 210 years. Even private foundations including IA and The Story of My Life Foundation cannot truly state that they will be around forever. When they are gone what then happens to the information entrusted to these entities?

Still, there are matters concerning the perpetual storage of the digital content that will be collected over time that must be addressed. In his Presidential Address H. Thomas Hickerson (2001) on the "Ten Challenges for the Archival Profession" states that, "The development of technological infrastructure should incorporate features enhancing our ability to manage recorded information effectively, and individual repositories must be adequately equipped to address the needs of today's and tomorrow's information environment" (p. 15). In the current field of digital preservation there are many more issues that need to be addressed in order to create a viable and accessible future. Those issues are best left for another paper.

Conclusion

Archival institutions are headed in the right direction by collecting what they can of the electronic discourse available in the public realm. The LoC has a laborious task ahead searching through the Twitter archives and adding to its digital collection. With every difficulty there is a definite drive to archive the social content of the World Wide Web whether public or private. Technology for preserving digital data will be the easier than the fight against forgetting. It is up to archivists to make the bloggers and tweeters of today realize that they are forming the history of tomorrow.

Citizens of the twenty-first century have a great opportunity to expand the field of societal knowledge, more so than any other time in history even if it is to tout current likes, dislikes, or opinions of padded bras. If they are unwilling to participate in the collection by opting out using Twitter codes their voices will be lost. Generations of thoughts, feelings, and mundane routines will be missing. It is therefore up to archival institutions to close that historical gap and prevent collective amnesia in the digital age.

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