

## **The Intentional Archive: Why Historians Need to Become Archivists (or Begin to Think and Act Like Them)**

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### The Dilemma of Digital Ephemerality

Historically relevant and important digital information is disappearing almost as quickly as we are creating it. Such data, “born digital” as the current phrase would have it, include not only email, but also digital photographs, digital audio and video (in a variety of formats), web pages and websites, and non-email text materials, such as instant and text messaging and weblogs or “blogs.”

To focus for a moment on that most ubiquitous of digital formats, email (which has overwhelmingly replaced text on paper over the past fifteen years as the form of administrative and decision-making communication): most individuals, including those in official positions in government, business and the academy, make little if any effort to save, let alone archive, the dozens or hundreds of email messages that they send and receive daily. Email servers at most academic and corporate institutions are set up to purge email files after a fixed period of time (often as short as a month) in order to free up vital storage capacity. Individuals can (and some do) make the effort to save and database their sent and received email messages, but this is uncommon.

Even those academic and business people who routinely save their emails rarely participate in archiving efforts at their institutions. Large corporations, largely motivated by fear of law suits, have begun to embrace a variety of new commercial products like Assentor Enterprise and MessageRite that offer the possibility of automated, large-scale email archiving and retrieval. But such solutions are extremely expensive. Government agencies are under increasing pressure to preserve official email messages but such efforts are recent and have only been partially successful in securing and systematically archiving the staggering number of government-generated email messages. As a result a vital resource for future scholars and researchers that will be essential in helping them

reconstruct the history of events and institutions is literally vanishing into the digital Trash or Recycle Bins of millions of computers around the world.<sup>1</sup>

Troubled by these rapid and far-reaching developments, historians and archivists alike have undertaken efforts over the past five years to address the dramatic impact digital data are having on our research libraries and archives and, more generally, on our ability to secure and transmit our historical heritage to the next generation of scholars and citizens. National initiatives have been launched to convert traditional scholarly forms (e.g. print academic journals) to digital formats that can be quickly indexed and accessed by scholars right from their computer desktops. The most obvious example of such efforts is J-STOR, which has already put online more than 600 scholarly journals in the arts and sciences. The Library of Congress has begun a series of long-range projects to define, test and promulgate a set of digital standards that will help secure and preserve archival information produced in a range of digital formats. One such initiative is trying to research and test the best ways to preserve for the long term (I think at this point we're not talking centuries; most of us would settle for 25 years) the vast array of digital video formats that seem to emerge with depressing regularity in the digital marketplace. At a more systemic level, it is important to note the fine work of an organization such as the Council on Library and Information Resources (CLIR), which has done so much in the past few years to launch an important dialogue about digital preservation and the growing impact of fully digital libraries and archives.<sup>2</sup>

Despite such important steps by scholars, librarians and archivists, there remains, overall, a general lack of clearly accepted archiving standards and practices for collecting and preserving the range of digital materials. The absence of commonly accepted digital archiving practices is exacerbated by the continuing problem of dead or dying digital media formats and what to do to preserve data and produced materials originally rendered in those formats. Most storage media for digital materials are short-lived. Magnetic formats such as floppy disks and magnetic tape deteriorate in a very short time compared to paper, with a time frame of twenty or even ten years of useful life expectancy before deterioration sets in. A further challenge is that digital technologies change rapidly and frequently lack backward compatibility to older formats. A CD-ROM may last physically

for decades but it may be impossible to find a computer that can read it two decades after it was produced.<sup>3</sup>

As important as it is for us to solve the long-term problems of digital archiving and preservation, such technical/administrative solutions cannot respond to the related question: will the next generation of historians understand, value and deploy digital materials when they set about “doing history?” There are some hopeful signs. The production and publication of several acclaimed and widely used digital history materials over the past decade, including H-NET’s ever expanding listservs, *The Valley of the Shadow* CD-ROM and website, and our own *Who Built America?* CD-ROM and *History Matters* website helped the history profession see the possibilities of doing history digitally. So too has the recent launch of a new and successful Ph.D. program in History and New Media at George Mason University, headed by my long-time colleague, Roy Rosenzweig. Many younger scholars have begun to discover and incorporate digital data, drawn from a variety of sources, into their scholarly work.<sup>4</sup>

Despite such positive steps, however, the history profession has remained stubbornly locked into old ways of researching and writing history. This is not surprising, given the general reluctance of academics to adopt new ways of finding and interpreting historical data and presenting their scholarly work. I often think of university-based scholars as old-school fraternity members who justify the hazing of new recruits because “that’s what I had to go through when I entered the fraternity.” Such ossified thinking stifles innovation and prevents the profession from responding nimbly and appropriately to new approaches and new opportunities for “doing history” and evaluating historical contributions. In this respect, archivists and librarians are far ahead of historians in understanding the “Choices and Challenges” (as the conference title so aptly puts it) facing all of us in the digital age.

#### Origins of the September 11 Digital Archive

Rather than going on, *ad nauseam*, criticizing historians in specific and academics in general for their short sightedness (this is a blood sport for academic administrators like me), I’d rather turn to a recent project that hopefully points us in a more positive

direction with respect to digital history and what we can do, at least at the level of collecting, presentation and preservation, to improve and sustain our efforts.

Let me say something about how my colleagues and I originally became involved in such digital work. I co-founded the American Social History Project (ASHP) a quarter century ago with the late distinguished social historian, Herbert Gutman, to find new ways to present to a broad, popular audience the best new historical scholarship that had reshaped the history profession over the past two decades. ASHP has always tried to push the boundaries of how history is done and presented, extending our work beyond text to encompass film, video, and, after 1991, digital media including CD-ROMs and websites. With the evolution of digital media throughout the 1990s we came to understand that these diverse formats allowed us as historians to present a richer, more complex, more nuanced and diverse history that could be used and understood well beyond the college classroom. Most of that digital work has been done over the past dozen years in collaboration with Roy Rosenzweig's Center for History and New Media (CHNM) at George Mason University, including our *Who Built America?* CD-ROMs, our *History Matters* website, and our French Revolution book-CD-ROM-web project.<sup>5</sup>

CHNM had begun another project early in 2001, supported by a major grant from the Alfred P. Sloan Foundation, entitled ECHO. ECHO was designed by CHNM to collect and present the history of science, technology and industry by soliciting online contributions from individual scientists and inventors. In the immediate aftermath of the September 11 attacks, the Sloan Foundation, a New-York City based entity, decided it wanted and needed to intervene to help the city recover from the devastating blow. In addition to providing relief funds to first responders' families, Sloan staff also expressed concern, growing out of their support for ECHO and other digital history projects, that without a coherent and deliberate plan to capture digital materials related to the 9/11 attacks such materials would be lost. The foundation staff was especially focused early on in wanting to assure the preservation of stories of individuals who had personally experienced the events of 9/11, both those inside or in the immediate vicinity of the World Trade Center towers and the Pentagon. They called CHNM and ASHP to a meeting in November 2001 and challenged us to think about what historians would want to know about these events fifty years from now as scholars and researchers attempted to

reconstruct what happened, why it happened and how diverse people were affected by what happened and how they interpreted the events that they either participated in or witnessed that day. They encouraged us to submit a proposal very quickly that addressed this set of questions. And Sloan quickly provided major funding to underwrite the project for two years.<sup>6</sup>

We decided to undertake this massive project because we had a sense, as historians, that such digital materials would be central to any future understanding of the events of 9/11 and their larger political, social and economic meaning. And that without our active and immediate intervention, these crucial digital materials would be lost. We decided we couldn't be passive in the face of this unprecedented world-historical event. Nor could we assume that the kinds of diverse information and materials that future researchers and historians might want to have access to would simply be available in the future, despite the fact that this was one of the most well documented (in every sense of the term) events in human history. In essence, after decades of depending on archivists to gather, catalog and make accessible the vital data that we needed to do our work as historians, we decided that we would now have to function as archivists in this very special present context to make it possible for historians to do their work in the future.

We used our orientation as social historians first to ask what kinds of information and perspectives were not being fully represented in the huge effusion of documentary evidence that began to emerge in the immediate aftermath of September 11. Venerable institutions like the *New York Times* were doing a good job presenting immediate and often in-depth information about the victims of the attacks. The *Times*' series of biographies of the nearly 3,000 victims who died in the WTC towers was particularly compelling and will prove especially useful for future historians intent on constructing a picture of the victims of the attacks. But what about the larger framework in which most people experienced these events? In particular, what about the attitudes and perspectives of ordinary citizens, especially those deeply affected by the attacks who were not necessarily inside the buildings but whose lives were profoundly affected by what happened there?<sup>7</sup>

## The Evolution and Growth of the Archive

Our first challenge was to provide a public space, a forum, on the web (see [www.September11DigitalArchive.org](http://www.September11DigitalArchive.org)) for people to tell their stories and to deposit the rich array of digital evidence that they created personally or received that would help future historians document what ordinary people saw on 9/11 and what they experienced in the aftermath. We got the initial version of the September 11 Digital Archive website up on the Internet in early January 2002, just two months after Sloan called us in for our first meeting on the project. Our first goal was to allow individuals to easily and quickly deposit their stories about what happened to them on the day of the attacks and also the emails they received and/or sent in the immediate aftermath of the attacks. Our sense was those email messages (the full extent of which we could not even begin to comprehend) would contain insights about how ordinary people experienced 9/11, how it shaped their subsequent behavior and beliefs, and how they came to interpret the meaning of those events in their lives and for the nation and world. Many people chose to tell their individual stories in digital text form, sometimes sent as email messages to friends, family and colleagues, other times written as separate word processed stories. We also found and secured in the archive various listservs and blogs that had been obsessed with discussing the events of 9/11 and its aftermath.<sup>8</sup>

“Build it and they will come” may work in fantasy baseball movies but it isn’t too successful a recruiting strategy for getting people to submit their digital materials on the web. We had to resort to old-fashioned retail advertising, including sending students down to Ground Zero and to the Pentagon to hand out postcards describing the archive, giving our URL, and encouraging people to submit their digital stories and other digital materials online. We were not above harassing friends, family and academic colleagues to submit their own stories and to ask those that they worked and lived with to do the same. We also used mass email announcements to different targeted constituencies, including government agencies, business groups, labor unions, and student and faculty groups, to drive traffic to our site. We had limited success with these promotional strategies in the first six months of the project, managing to generate a modest if not spectacular number of online submissions.

We also decided that it was important that the 9/11 Digital Archive provide a space for the general public to deposit what we reasoned would be a large number of digital still and moving images as well as digital sound recordings, including telephone answering machine and voice mail messages. We were intent on finding and digitizing as many of the extraordinary number of flyers that people pasted up all over Manhattan in an effort to find out what happened to their loved ones who literally disappeared when the towers came down and to express their grief at what had happened to the city. We also wanted to include myriad political and organizational flyers that went up all over the city in the immediate aftermath of the attacks. While these were not “born digital” resources, we reasoned that they were an important historical source that we needed to include in the collection. We were fortunate to secure the wonderful collection of Michael Ragsdale, a video maker who made it his business to collect almost a thousand flyers from all over the city in the year following the attacks. We also saved nearly one hundred “Flash” files, animated programs that depicted the varying individual responses locally and internationally to the 9/11 attacks.<sup>9</sup>

And we decided right from the outset that the site could not simply solicit and archive individual contributions but, at the same time, had to provide ready access to individual users and teachers and students who were interested in exploring and utilizing the archive’s growing digital resources to help them make sense of what happened on 9/11. That decision added an extra burden of designing a site that was capable of doing two things at once: making it easy for people to contribute their digital materials; and making it possible for people to use the information on the site, to read, see, and hear what we were collecting and archiving immediately.

We used the first six months of the project to make basic technical and design decisions about our website. Under the leadership of the design staff at the American Social History Project (Josh Brown and Andrea Vasquez), we tried out different design configurations of the website, settling in the end for a clean interface, which was not too image heavy and gave users a sense of simplicity and accessibility and relative speed of navigation. We thought use of the site should require minimal clicking around and waiting time for things to load.

We also used the initial period to build our backend infrastructure and architecture (under the leadership of Dan Cohen and Jim Sparrow at CHNM) that we knew would be essential if and when we received the major influx of digital materials we hoped and expected. We decided early on to use Open Source software rather than purchasing commercial software products. Open Source, which is an entirely non-commercial computing environment, encourages current programmers to freely adopt and adapt our structures and tools for the development of similar archival projects as well as future programmers to more easily reproduce our server environment. We settled on Linux-based PHP and MySQL, both of which were in wide use around the world for databasing and serving large amounts of digital data on the web. We have also used open mark-up standards such as XML to make it possible for future researchers to be able to access what we have collected. Every discrete object in the collection has been assigned a permanent object identifier (reflected in the URL), which allows for stable references and the assurance that future users will always be able to find that exact object, regardless of how and in what formats those objects were served originally on our website. We also deployed an easy to use search function that allowed users who wanted to read and hear and see particular materials on particular subjects to navigate the collection quickly and easily.<sup>10</sup>

We also had to develop a series of basic procedures and protocols for accepting online submissions of materials to ensure the legal and historical integrity of the materials and to protect the privacy of the contributors. Let me quote my CHNM colleague Jim Sparrow's description of our process, because it gives a clear sense of what is involved in sustaining such online collecting efforts:

Our software permitted us to record the unique IP address of each of our contributors, who were also required to provide a name, email address and their age, before their contributions would be accepted. Immediately upon receiving an entry our software sent an email message to the address provided, thus sending the contributor an official record of his or her entry, while informing us of invented or expired addresses when these messages bounced back to us. Then, before the entry was added to the official Archive collections and displayed publicly on the site, we vetted each entry. Among



other things, we checked the contributor's age, tried to establish that the contributed item was not clearly something produced by someone else (e.g. a news agency), and quickly confirmed that it was relevant to September 11 and not wildly inappropriate in its use of language or imagery. After an entry was fully processed, it remained in the collections exactly as it had been entered, and was displayed on the website according to the contributor's specifications.<sup>11</sup>

As with many ASHP-CHNM projects, the 9/11 Digital Archive ended up becoming something of a mini-Works Progress Administration for history graduate students, many of whom were employed in these archiving, cataloging and vetting tasks.

We set up a relatively easy online submission process, which included a clear, non-exclusive electronic grant of rights by contributors to the archive. We made sure that contributors understood that they controlled the intellectual property to their submissions and that we had no commercial or legal designs on anything that they submitted. We gave our contributors maximum control over their submissions, including the unlimited right to ask that we remove any of their materials from public display on our website at any time. To date, that attitude has resulted in no more than a handful of such requests out of the tens of thousands of submissions that we have received in the last two and half years.<sup>12</sup>

The real burst of online submissions came, interestingly enough, on the one-year anniversary of September 11. The existence of the archive was mentioned (along with our URL) in a number of newspaper and television pieces on 9/11, including on a CNN cablecast and on their website, in an AP wire service story syndicated in hundreds of small and mid-size newspapers around the country, and on a New York City local television broadcast. This publicity drove significant traffic to the site and we received several thousand new submissions in just a few days around the first anniversary of the 9/11 attacks. This spate of digital submissions, which came in all shapes and sizes, tended, however, to be skewed toward particular groups and individuals who, taken as a whole, did not represent the broad range of submissions that we had hoped for. That fact helped us realize that we would need to do additional targeted outreach and collecting in

particular communities, if the archive were truly to encompass the wide range of individual and collective responses to the 9/11 attacks.

We began that outreach process in earnest early in 2003 by securing a grant from the Rockefeller Foundation to conduct video interviews in three dialects with members of the Chinatown community in lower Manhattan. We also developed a Spanish-language version of the site to encourage input from the large Latino communities in New York City and Washington D.C., and sent project staff to Shanksville, Pennsylvania to solicit contributions from that community, which had been the site of the crash of United Flight 93, the only hijacked plane not to hit its intended target the morning of the attacks. Finally, we also worked closely with a research center at the CUNY Graduate Center to reach out to the Arab/Muslim community in New York City and, via the Internet and the telephone, to Arab and Muslim Americans across the country. Even though the 72 interviews carried out for this project did not represent the full range of opinions of Arab and/or Muslim Americans, the voices of these individuals provide invaluable insights about what members of these communities felt on the day of the attacks and what they have experienced since.<sup>13</sup>

We also built collaborative ties to other archives and museums, with the goal of having those links help us generate additional submissions. We formed collaborative connections to institutions as diverse as the New-York Historical Society (where we placed a computer terminal to collect people's stories after they finished seeing the society's first 9/11 exhibit); public libraries in Somerset County, Pennsylvania (where Shanksville is located); and public schools in the New York City and Washington D.C. metropolitan areas. We also collaborated with the National Museum of American History, where their first anniversary exhibit on 9/11, "Bearing Witness" ended with an opportunity for the thousands of exhibit visitors to tell their stories and recount their thoughts about 9/11. The NMAH exhibit allowed people literally to record their feelings in voicemail messages on a special telephone (which we then captured digitally), and also by using old fashioned pencil and paper (which we scanned in bulk and later imported into the archive's database). In the end, we secured thousands of new stories for the archive from visitors as they exited the NMAH exhibition.<sup>14</sup>

Some of the most interesting and important material in our collection, including the wealth of international material, found its way into the Archive because of the intense labor of Archive staff, who trolled the web for 9/11-related material and then followed up with creators to solicit their contributions.

By the end of 2003 (the end of our Sloan Foundation funding), two years after we had conceived and launched the September 11 Digital Archive, we had collected a total of nearly 150,000 digital items, including 45,000 personal narratives; 62,000 emails and electronic communications (including “blogs” and listservs); 14,000 digital images; 6,000 text documents; and 4,500 audio and video and audio files, many of which we streamed on our website. The 9/11 site in the same two-year period received nearly 120 million hits and more than two million unique visitors. And it consistently ranks to this day first or second among more than 7 million “September 11” websites indexed by Google.

#### Filling out the 9/11 Collection and Ensuring the Permanence of the Archive

The overall success of the September 11 Digital Archive in the past two years has increased our visibility and also our overall responsibility for developing long-term strategies for assuring the archive’s availability in the future. One such responsibility has taken the form of working with other 9/11-related archives, several of which have asked us to help their collections to survive and remain available to the general public on the web. Two such collaborations are of particular note. The first is with the Sonic Memorial project, which collected hundreds of voicemails from inside the World Trade Center towers, concert recordings from the WTC Plaza, works by WTC artists-in-residence, home movies, tourist videos, rare on-site field recordings, newsreels, and oral histories. The second, and by far our most important collaboration to date, has been with “Here Is New York: A Democracy of Photographs.” That project was among the most visible 9/11 projects internationally in the aftermath of the attacks, built around a 6,000 photograph collection of images of September 11 taken by mostly professional photographers in and around Ground Zero in the immediate aftermath of the 9/11 attacks. In addition to the 6,000 digitized photographs, several thousand of which were printed and exhibited all over the world and published in a widely sold photo book, HNY received hundreds of thousands of email messages on its website from individuals from around the world,

reflecting on the meaning of 9/11. HNY also solicited nearly 600 digital video interviews of individuals in New York City, the Pentagon and Shanksville, Pennsylvania, to record their feelings and reactions to the events of 9/11. After more than a year's negotiation and the formal dissolution of the HNY organization earlier this year, the HNY collection was legally accessioned by the September 11 Digital Archive, significantly enhancing and expanding our collection of 9/11 materials. One key reason the HNY people reached out to the September 11 Digital Archive to accession their digital materials was our overall reputation for respecting the rights and feelings of the thousands of people who submitted materials to our site and also because we had developed a plan for stabilizing and securing our archive and making certain that it would have a long and enduring existence.<sup>15</sup>

This brings me to the final piece of the puzzle: our effort to secure a permanent home for the 9/11 Digital Archive once we formally cease operations in the next several years (though our Sloan funding ended in January 2004, we continue to accept individual submissions and to serve the 9/11 Digital Archive website from our George Mason University-based computer operation). After a relatively intense negotiation, the Library of Congress agreed to accession the entire 9/11 Digital Archive, which the LC announced at a major convocation held in Washington on September 10, 2003. All of the 9/11 Digital Archive servers and our website will ultimately be turned over to the LC, where it will be made available on premises to researchers. The September 11 Digital Archive was the first major, fully digital collection ever accessioned by the Library of Congress.<sup>16</sup>

### Lessons for Historians and Archivists

There are several lessons that archivists can draw from our experience conceiving and developing the September 11 Digital Archive. The first is that archivists and historians alike must realize the importance of digital data as they consider the possibilities of collecting historically important materials in the future. The second is that historians and archivists can't assume that such digital data will automatically find their way into libraries and archival collections; they must go out and aggressively pursue them. Digital data are simply too ephemeral to trust that they will survive somehow, years after being "born digital." Third, large-scale digital history projects are generally

too big, too complex, and too demanding technically for single institutions to undertake on their own. If archives do not have sufficient technical expertise on staff to help them decide on issues related to digital collecting, they should reach out to nearby universities and colleges to tap history and computer science departments for their expertise in these technical areas. I think we need to make a virtue out of necessity, since one of the joys of doing large-scale digital collecting projects is the possibility of collaborating with diverse people and institutions. We also need more engaged and ongoing dialogue about the process of doing digital collecting, as this conference amply demonstrates. We must continue to support and encourage efforts by CLIR, the LC and other institutions and alliances to stabilize, secure and standardize the collection of digital data.<sup>17</sup>

My concluding thought is that we don't have the luxury any longer of simply collecting and archiving historical materials and putting off decisions about public access to these materials to some point in the (usually distant) future. The nature of digital media—the ubiquitous formats in which they are created and the diversity of people who create them; the possibilities (even the political and moral responsibility) of making those digital materials immediately accessible to the public—puts pressure on archives and libraries to develop and implement presentational strategies that allow rapid public access to newly accessioned digital resources. This is not meant to imply that the public must be provided with instant and total access via the web to all digital collections as soon as they are collected. There are surely intermediate and quite appropriate interim steps—including limited, on-site access for qualified researchers via fixed computer work stations—which archives can and should prudently adopt. But archivists need to begin thinking about public presentation of digital materials at the same time as those digital materials are accessioned into their collections.

We live in a world in which the comfortable and maybe even beneficial separation between creation and deployment of historical source materials no longer obtains. As archivists and historians we need to embrace the heady and scary possibilities that the confluence of digital history makes possible and work together to find solutions that assure broad public access.

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I want to acknowledge the good suggestions of my colleagues Josh Brown and Roy Rosenzweig, and my friend, Bob Lamm, all of whom read and commented on an earlier draft of this presentation.

<sup>1</sup> Information about commercial email archiving and retrieval products can be found at [www.assentor.com](http://www.assentor.com) and [www.messengerite.com](http://www.messengerite.com).

<sup>2</sup> See [www.jstor.org](http://www.jstor.org) for information about JSTOR's digital journal project. The Library of Congress has played a lead role in the National Digital Information Infrastructure and Preservation Program (NDIIPP). Information about the program can be found at [www.digitalpreservation.gov](http://www.digitalpreservation.gov). Information about the various digital initiatives of the Council on Library and Information Resources (CLIR) can be found at [www.clir.org/activities/activities.html](http://www.clir.org/activities/activities.html).

<sup>3</sup> When my colleagues and I completed work on the first *Who Built America?* CD-ROM and had it published by the Voyager Company eleven years ago, we thought we had assured its long-term viability by deciding to port it over to the Windows environment from its original Macintosh authoring platform. Unfortunately, the Windows version of the CD-ROM only ran on Windows 3.1 and 95, the two Windows operating systems that existed in 1995 when the work was originally done. By 2002, with the near ubiquity of Windows NT, 2000 and XP, the Windows version of the *WBA?* CD-ROM no longer ran. Fortunately, we were able to find and convince the original programmer to retrofit the Windows version so that it ran on the latest Windows OS. We have no way of knowing if it will continue to operate on Windows in the future without continued tweaking and reformatting.

<sup>4</sup> The extensive list of history related H-NET networks can be found at [www.h-net.org](http://www.h-net.org). Information about *The Valley of the Shadow* can be found at <http://valley.vcdh.virginia.edu/>. The two *Who Built America?* CD-ROMs can be found at [www.ashp.cuny.edu/WBAcd-roms.html](http://www.ashp.cuny.edu/WBAcd-roms.html) while the *History Matters* website can be found at <http://historymatters.gmu.edu/>. Information on GMU's new Ph.D. program in history and new media can be found at <http://chnm.gmu.edu/historyarthistory/graduate/doctoral/index.html>.

<sup>5</sup> See <http://www.ashp.cuny.edu/digital.html>.

<sup>6</sup> Information about the ECHO project can be found at <http://echo.gmu.edu/>. The Sloan Foundation website is <http://www.sloan.org/>.

<sup>7</sup> Access to the *NY Times*'s substantial online archive, including its compendious digital text and visual material on the September 11 attacks, must be paid for by those interested in using it. See [www.nytimes.com](http://www.nytimes.com) for details.

<sup>8</sup> Three such blogs or listservs of note on the site are: the Downtown Blackberry group ([http://www.september11digitalarchive.org/email/downtown\\_blackberry.html](http://www.september11digitalarchive.org/email/downtown_blackberry.html)); the SEPT11INFO group (<http://www.september11digitalarchive.org/sept11info/>); and the Hash House Harriers (<http://www.september11digitalarchive.org/hashers/hashers.html>).

<sup>9</sup> See [http://www.september11digitalarchive.org/collections/ragsdale\\_flyer\\_collection](http://www.september11digitalarchive.org/collections/ragsdale_flyer_collection) for the flyer collection and [http://www.september11digitalarchive.org/collections/animations\\_and\\_creations](http://www.september11digitalarchive.org/collections/animations_and_creations) for the "Flash" files.

<sup>10</sup> Detailed information about the origins and operations of the September 11 Digital Archive is best found in two publications by project staff: James T. Sparrow, "On the Web: The September 11 Digital Archive," in James B. Gardner and Peter S. LaPaglia, *Public History: Essays from the Field* (Melbourne, FL: Krieger, 2004); and Daniel J. Cohen, "History and the Second Decade of the Web," *Rethinking History* Vol. 8, No. 2, June 2004, pp. 293-301. A full list of the principal project staff who worked on the September 11 Digital Archive project can be found at [www.september11digitalarchive.org/about/staff.html](http://www.september11digitalarchive.org/about/staff.html). I would like especially to note the key role played by Tom Scheinfeldt and Greg ("Fritz") Umbach, who served as Managing Directors of the project for CHNM and ASHP respectively.

<sup>11</sup> Sparrow, "On the Web: The September 11 Digital Archive."

<sup>12</sup> See <http://www.september11digitalarchive.org/stories/add.html> and <http://www.september11digitalarchive.org/email/add.html> for details on the submission and granting of permission for individual September 11 stories and email messages.

<sup>13</sup> The Chinatown Documentation Project was done in collaboration with the Museum of Chinese in the Americas, a Chinatown-based community history museum, and Columbia University's Oral History Research Office. A Spanish-language version of the stories and email messages collected on the September 11 site can be found by simply clicking on the "en Español" button on the archive's main page (<http://www.september11digitalarchive.org/cuentos/>). The fruits of the collaboration with the Middle East

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and Middle Eastern American Center (MEMEAC) can be found at [http://911digitalarchive.org/collections/memeac\\_interviews](http://911digitalarchive.org/collections/memeac_interviews), which includes 72 anonymous interviews with Arab and Muslim immigrants and Arab Americans.

<sup>14</sup> See <http://www.911digitalarchive.org/smithsoniancards/> for the results of the more than 20,000 written recollections gathered from “Bearing Witness” visitors.

<sup>15</sup> The Sonic Memorial site is still available on the web. See <http://www.sonicmemorial.org/sonic/public/index.html>. The HNY website is currently in the process of being accessioned by the September 11 Digital Archive. HNY’s original site is only sporadically available to the public at [www.hereisnewyork.org](http://www.hereisnewyork.org).

<sup>16</sup> See <http://www.loc.gov/today/pr/2003/03-142.html> for the LC’s online report on the accessioning of the September 11 Digital Archive. The LC has also made the September 11 Digital Archive part of its ongoing NDIIPP Archive and Ingest Handling Test (AIHT), which is testing various formats and approaches for absorbing digital materials into the LC’s collections. A PowerPoint presentation on the LC’s work in this area can be found at: [http://www.digitalpreservation.gov/data\\_presentations/Shirky.pps](http://www.digitalpreservation.gov/data_presentations/Shirky.pps).

<sup>17</sup> See Roy Rosenzweig, “Scarcity or Abundance? Preserving the Past in a Digital Era” *American Historical Review* 108, 3 (June 2003): 735-762 (available online at <http://chnm.gmu.edu/assets/historyessays/scarcity.html>) for the single most important and thoughtful discussion of the dilemmas and opportunities facing historians and archivists in the burgeoning age of digital resources and archives.