



Telling Our Stories / Animating Our Past: A Status Report on Oral History and Digital Media

Steven High, Jessica Mills, & Stacey Zembrzycki
Concordia University

ABSTRACT *Tens of thousands of oral history interviews sitting in archival drawers, on computer hard drives, or on library bookshelves have never been listened to. Thousands of new interviews are being added each year by the many large testimony projects now underway, including Canada's Truth and Reconciliation Commission and the Historica-Dominion Institute's Memory Project. Although the existence of these immense collections is widely known, the interviews are difficult to access. How can we combine oral history and new media to insure that the potential of such important projects is fully realized? Emergent and digital technologies are opening up new possibilities for accessing Canadian memories and transmitting them to various audiences. New forms of media are changing the ways we think about and do oral and public history.*

KEYWORDS *Ethnography; History; Multimedia; New media; Orality/Oral culture; Participatory action; Research methods*

RÉSUMÉ *Des milliers d'entrevues d'histoire orale oubliées dans des tiroirs d'archives, sur des disques durs et sur des étagères de bibliothèque n'ont jamais été écoutées. En même temps, chaque année, de nouvelles entrevues viennent s'ajouter par milliers dans le cadre de grands projets de témoignage, y compris la Commission de vérité et réconciliation du Canada et le Projet Mémoire de l'Institut Historica-Dominion. Bien que l'existence de ces collections immenses ne soit guère un secret, les entretiens sont difficiles d'accès. Comment peut-on combiner l'histoire orale et les nouveaux médias afin de réaliser pleinement le potentiel de projets si importants? Des technologies numériques récentes présentent de nouvelles possibilités pour accéder aux souvenirs canadiens et les transmettre à divers publics. En effet, de nouvelles formes de média sont en train de changer les manières de penser et de pratiquer l'histoire orale et publique.*

MOTS CLÉS *Ethnographie; Histoire; Multimédias; Nouveaux médias; Oralité/culture orale; Action participante; Méthodes de recherche*

Introduction

Tens of thousands of recorded oral history interviews are preserved in Canadian archives. Thousands more are now being recorded by Canada's Truth and Recon-

Steven High is Professor and Canada Research Chair in Oral History at Concordia University. Department of History, Concordia University, 1455 De Maisonneuve Boulevard West, Montréal, QC H3G 1M8. Email: shigh@alcor.concordia.ca . **Jessica Mills** received her master's degree in 2011 for her oral history project on the Point Sainte-Charles district of Montréal. Email: jessicajmills@gmail.com. **Stacey Zembrzycki** is a visiting oral historian at Concordia University's Centre for Oral History and Digital Storytelling. Email: stacey.zembrzycki@gmail.com .

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iliation Commission into the devastation caused by residential schooling in Aboriginal communities. For its part, the Historica-Dominion Institute has embarked on a new project with veterans of the Korean War, after interviewing several thousand Canadian veterans of World War II. Meanwhile, the federal government's Community Historic Recognition Program has resulted in other community-based commemorative and educational projects that explore the experiences of ethnocultural communities affected by historical wartime measures and/or immigration restrictions. As a result, a number of interviewing projects are underway in Chinese, Italian, Indo-Canadian, and Jewish communities across the country. But how easily can these interviews be accessed by Canadians? Who is listening to the stories being recorded? How might we go beyond collection?

If the past is any indication, these interviews will sit in boxes on archival shelves or on computer hard drives, largely unlistened to. During the 1990s, Steven Spielberg's Shoah Visual History Foundation recorded over 54,000 Jewish testimonies of the Holocaust. (Kushner, 2006). The existence of this immense collection is widely known, but the interviews held in California are difficult to access. The collection has therefore become more of a monument than a place to listen and learn. We know of its existence and can point to it, but how many of us have actually listened to a single one of these survivor interviews? Will the testimony of Aboriginal residential school survivors face the same fate? How might we insure that the potential of these important projects and others like them is fully realized?

This article on oral history and digital media, based on a survey of 157 public and oral historians from around the world, supplemented by in-depth interviews, aims to explore how emergent and digital technologies are opening up new possibilities for accessing Canadian memories and transmitting them to various audiences. At present, we have an incredible opportunity to deploy new digital tools and new media practices to reconnect Canadians with their pasts. Oral and public history, or *l'histoire appliquée*, as it is known in Québec, emerged in the 1970s in response to growing public interest in heritage and memory (Riopel, 2003). It represents a shift not only in the intended audience, but also in how and why we do research. Oral and public historians—with their home in a variety of academic disciplines—frequently forge collaborative partnerships with communities and communicate their findings in a variety of ways.

Digital tools provide new ways of listening to, sharing, and telling life stories. They are also enabling us to explore places in new ways and are reshaping how we remember and narrate our own lives and those of others (Massey, 1995; Opp & Walsh, 2010). Digital technologies are even transforming how we understand, represent, and interpret the past:

Part of the effort to bring content to everyone has to recognize that predominantly as we go forward the computing device is going to be in your pocket and not on a desktop, and not a laptop; it might be an iPad, it might be a little bit bigger than an iPod, so we have to really think about what it means to let people interact with history out in the world. (Sharon Leon, interviewed October 26, 2010)

These transformative changes are evident in our universities as well as in public history



institutions such as museums, historic sites, and archives. New history and heritage policies and practices have come about as a result.

The rise of “intangible cultural heritage” in the museum world, for instance, enshrined in the 2003 UNESCO Convention for the Safeguarding of Intangible Cultural Heritage, is “opening up new and exciting perspectives in the realm of museology” (Turgeon, 2010, p. 18). *Intangible culture* is defined by UNESCO as “practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts, and cultural spaces associated therewith—that communities, groups and, in some cases, individuals recognize as part of their cultural heritage” (UNESCO, 2003). Life history and other oral stories are, of course, central to this broadly defined notion of intangible culture. The timing is not coincidental; new digital technologies have made the intangible much more tangible in recent years. The result, according to Laurier Turgeon, is a “new era of heritage.” People are seeking a heritage that is interactive, participatory, and living.

There are, however, strong disciplinary barriers to the development of new media tools and to their subsequent adoption. A tool that one discipline may use extensively may be virtually unknown in a cognate discipline. Despite the growing numbers of university-based researchers “going public” in one way or another, disciplinary structures have been slow to change—university-based research remains trapped in older structures that may or may not serve us well.

That said, new collaborative spaces have emerged in Canadian universities thanks to the Canada Research Chairs (CRC) program, the Canada Foundation for Innovation (CFI), and the proliferating number of large collaborative grants. Hundreds of new research labs, institutes, and centres have popped up *in, between, and across* humanities and social science departments. There are growing collaborative links to researchers and creators in fine arts, engineering, the sciences, and business as well as with community-based researchers. Many of these spaces of collaboration, collision, and conversation are functioning as creative incubators for research innovation and collaborative process. Only time will tell whether these research units represent a fundamental rethinking of what it means to be a humanities or social science scholar.

These interdisciplinary spaces often connect disciplines that were not, until recently, viewed as “cognate disciplines.” Take, for example, the Centre for Oral History and Digital Storytelling (COHDS), a research unit of Concordia University in Montréal, Québec. Founded in 2006 and made possible with a CFI grant, its mission is to explore the connections between oral history, new media, the arts, and wider communities. Community-based researchers, artists, and heritage organizations are an integral part of the centre’s practice. COHDS has also been the source of a great deal of digital innovation. One of the most exciting cross-disciplinary contact zones at COHDS is that between the departments of history and communications. The result has included promising new forays into digital storytelling, animation, participatory mapping, photo voice, and radio production. In the past seven years, software development has also become a core part of the work we do at COHDS.

The Montréal Life Stories project, a seven-year research project funded by the Social Sciences and Humanities Research Council of Canada’s (SSHRC’s) Community-University Research Alliance (CURA) program, is a prime example of the creativity



that has resulted from this cross-disciplinary and community-university collaboration. The CURA program (now merged into SSHRC's new Partnership program) is a special one in that communities are supposed to become partners in research and not just objects of study. Community participation in the research process must therefore be real and sustained. The Montréal Life Stories project is recording the life stories of 500 Montréalers who fled war, genocide, or other human rights violations in Rwanda, Cambodia, Haiti, and Hitler's Europe. As you can imagine, these are hard stories to tell. And they are hard stories to hear. In this project, we invite survivors who have been interviewed to co-produce online digital stories—beginning with the question: What story do you want to tell the world? Oral history and participatory media have therefore become fused, over the life of the project.

“Sharing authority” is at the core of our research and creative practices at the COHDS. Michael Frisch popularized the term in 1990 to describe the dual authority of the oral history interview—the expert authority of the interviewer and the experiential authority of the interviewee (Frisch, 1990). We take this idea and extend it to the entire research process (High, 2010). For Frisch, “[a] commitment to sharing authority is a beginning, not a destination. There are no easy answers or formulas and no simple lessons” (Frisch, 2003, p. 112). Learning with, rather than learning about, requires university-based researchers and artists to leave their offices and studios to carve out new collaborative spaces (Greenspan, 1998; Greenspan & Bolkosky, 2006).

Oral and public historians are particularly well placed in this regard, given that our work has long sought both to incorporate analogue and digital technologies into our research practice and connect people to their stories and those told by others. Now, more than ever, users are also the makers of new digital tools. To this end, our report—a longer version with policy recommendations was prepared for SSHRC and the federal government—considers the emerging place of new media in oral and public history. We also produced an online Oral Historian's Digital Toolbox (<http://storytelling.concordia.ca/oralhistorianstoolbox/>) to accompany the report, which brings together and reviews almost 100 existing digital tools.

Assessing the field

New forms of media are quickly changing the ways we think about and do oral and public history; historians are now using a variety of digital technologies to record, organize, catalogue, interpret, share, and exhibit the stories that they collect. Indeed, we are in a transformative period, especially when it comes to thinking about what happens after the interview. “This is an important point,” one of us has argued elsewhere, “as oral historians have been so focused on the making of the interview that we have spent remarkably little time thinking about what to do with the audio or video recordings once they are made” (High, 2010, p. 101). Usually confined to museums and archives, our stories have begun to leave these buildings and take to the streets with the emergence of MP3 players, iPods, iPads, and smartphones. The prevalence of mobile technologies is allowing us to explore places, and our connections to them, in new ways (Butler, 2007; Butler & Miller, 2005).

To build upon these observations, we created a broad qualitative survey that focused exclusively on how new media is changing the practices of oral and public his-



torians; the focus was on best practices, new media tools, collaborative projects, and the dissemination of results. In total, 157 participants from around the world responded to this survey. The results were interesting in terms of both content and omissions. Not surprisingly, oral and public historians agreed that new media was opening up exciting possibilities for practice, especially in terms of dissemination. For the most part, practitioners are using new media to record, edit, and archive interviews, and to share their oral history interviews with wider audiences. Few, however, are employing tools that change their practice and push them to critically engage with stories outside and beyond the interview space. As one respondent put it:

There has been a lot of discussion regarding the potential of new media tools to revolutionize the way we do history and put the “orality” back in oral history. However, oral histories are still primarily a source used to construct textual accounts. Indeed, while excellent Internet-based examples do exist in which the past is presented and engaged with in a radically different way (i.e., a non-linear narrative structure or multi-sensory experience), I do question the degree to which new media is currently impacting the way oral history is being done, in particular how it is packaged for people other than the researcher, at large given the fact that the primary outcome of this research continues to be articles and monographs. (Anonymous survey respondent)

As Michael Frisch has noted, the “Deep Dark Secret of oral history is that nobody spends much time listening to or watching recorded and collected interview documents” (Frisch, 2008, p. 223). Favouring the convenience that text offers—it is a fast and easy means through which an interview may be accessed—“the shift from voice to text [has been] ... extensive and controlling” (p. 223), and for some researchers, even natural (Frisch, 2006). Survey respondents cited funding and a lack of training as the major hurdles to adoption of new media both in the classroom and in scholarly output. “[My] major impediment [to employing new media],” one respondent declared, “is cost and the learning curve. I cannot become a technological specialist and I don’t have any tech specialists who can work closely with me to develop this new media. The media has to be simplified to be usable.” Another respondent spoke about the obstacles to the use of new media tools and their development more bluntly: “Everyone wants to do it, but no one quite knows how.” Although oral and public historians readily admit to using social media and tools that employ GPS, our survey indicates that they are not incorporating these resources into their practice as yet.

To deepen our understanding of geo-located media and digital history, two areas that hold tremendous possibility for oral and public historians, we brought three people to Montreal for mini-residencies lasting two to three days each. Each visitor gave a public lecture, held a series of workshops, consulted with interested students and COHDS affiliates, and met with our team to share their perspectives on and knowledge about new media.

Our first two visitors had extensive experience with the free GPS software mscape, funded by the British government and developed collaboratively by Hewlett Packard (HP), the University of Bristol, and the Appliance Studio between 2002 and 2007 (Stenton, Hull, Goddi, Reid, Clayton, Melamed, & Wee, 2007). Mscape interested us

a great deal because of its ability to critically engage users in participatory mapping exercises and place-based interpretation methods on smartphones. The design of the software also spoke to our own collaborative digital storytelling initiative within the Montreal Life Stories project. Through a discussion of a project based in Bristol, U.K., an mscape of wartime childhood memories (Miskelly, Cater, Fleuriot, Williams, & Wood, n.d.), we were able to imagine audio tours that move beyond the telling of consensual stories. In particular, the software makes the sharing of conflicting and overlapping tales possible through its “speaker” and “pan” options; users can hear a story in one ear and another told by someone else in the other. By providing access to a hotspot option for maps and/or photographs, mscape also opens up possibilities for non-linear interactions with stories. The challenge in these types of community-based projects always revolves around how best to capture the multiple and even divergent voices of its members. Again, this software helped us imagine audio tours with multiple or conflicting story lines. The resulting community narrative, and the process through which it was created, provide a fascinating site of interpretation and an important point of departure for honest dialogue.

That said, there are real limits to mscape. Although the software may still be downloaded, HP discontinued its development, favouring proprietary development instead. Further, the current software is limited to PC users, GPS remains imprecise, and in an urban context, or on cloudy days, it is unreliable. A new start-up company, Calvium (see AppFurnace website), has undertaken to develop an mscape tool that will run on iPhones, Androids, and smartphones, but this has yet to be released. This software holds great potential, especially in regards to gaming, WiFi, and Bluetooth technologies, but we continue to wonder about its larger implications. What is lost in this shift to mobile technologies, especially in terms of commercial control? Instead of encouraging us to express ourselves and explore our own world and our connections to it, mobile applications sell experiences. The mscape example also highlights the thorny issue of sustainability, both in terms of digital tools and the audio tours that result. For example, the mscape of wartime childhood memories created by our guests five years ago is no longer available online for download.

Our third visitor, William Turkel, one of Canada’s foremost digital historians, helped us explore the points of connection between oral, public, and digital history; there has been surprisingly little contact between these fields. Instead of advocating for a quick shift, he emphasized the importance of generational change. It takes time not only to alter institutional and disciplinary barriers, but also to build “communities of practice” that will enable collaboration between historians, hackers, and other practitioners—essential relationships in sustaining open source movements. Slowing down will, in his opinion, allow us to spend more time researching tools that are already widely available. We must shift from development to experimentation. The benefits of learning a programming language or a new tool are immense. Take, for example, those tools that facilitate embodied learning, be it *in situ* experiences or in replicated environments, both tangible and intangible. In this area, augmented reality—the layering of stories onto the built environment—and the smartphone applications that have resulted hold great potential for making old stories accessible to the public in



new and innovative ways (Anderson, 2004; Carpiano, 2009; Sheller & Urry, 2006). Holding a phone up and seeing both what is there and what was once there goes to a very different place than earlier projects like [murmur] (Eaket, 2008, see also Wershler & Mann, 2010). We must start to harness the power implicit in technology we encounter in our daily lives because we are entering a period that is and will continue to be dominated by ubiquitous and pervasive computing.

Site visits

The discussion we began with Turkel continued to evolve in our site visit to the Roy Rosenzweig Center for History and New Media (CHNM) at George Mason University in Fairfax, Virginia. While there, we conducted interviews with Dan Cohen, CHNM Director; Sharon Leon, Director of Public Projects; and Jeremy Boggs, Creative Lead Programmer. Our conversations focused on best practices and how they relate to the development and support of a dynamic and flexible digital history space. CHNM has played a leading role in creating and sustaining open source software, like Zotero and Omeka, and so we focused on its strategies. Similar to Turkel's remarks, Cohen, Leon, and Boggs emphasized the importance of fostering a "community of practice," which includes both developers and an interdisciplinary base of users. CHNM has also put a great deal of effort into "crowd sourcing," enabling the software it creates to dynamically evolve and meet users' needs. Through these collaborative endeavours, CHNM has managed to create inclusive digital spaces that facilitate a range of interesting and interdisciplinary projects. Given our interests in oral and public history, two of the most inspiring projects to come out of CHNM's Omeka are the Bracero History Archive and the Hurricane Digital Memory Bank.

To further explore the intersection between oral history, new media, and the arts, our research took us to City Lore, a community organization in New York City that oversees various projects, including Place Matters and City of Memory, an online memory map. Both of these initiatives look at place from different vantage points that are particularly interesting to us given their emphasis on participatory practices. Place Matters maintains a standing survey of "places that matter" to people. Since 2003, people have been able to nominate places that are important to them, large or small, and these locations then form the basis of an eclectic list that is used for educational and preservation purposes. Although it came out of a similar spirit, City of Memory employs another approach. Whereas Place Matters begins with a place, "with City of Memory the memory comes first and it usually can be placed" (Marci Reaven, interviewed November 2, 2010). Not surprisingly, City of Memory, and the places it documents, tend to be more personal in nature.

During our visit to New York City, we interviewed Marci Reaven, the Managing Director of City Lore. Our conversation focused on how this organization, which is quite focused on oral history, is incorporating new media into its practices. City Lore has a staff of 10, composed of historians, ethnomusicologists, and folklorists, who work with schools (K-12) and communities. The organization has, however, no university affiliation, and therefore it spends a great deal of time raising money for its various projects. This was a valuable exchange, given that it provided insight into the particular challenges faced by historians who work outside university structures. Reaven ex-



plained that because of the need to independently fund City Lore's projects, the directions that the organization pursues are "partly a reflection of [its] own interests, partly a reflection of what [it] can raise money for, and partly a reflection of what's happening out in the city and the country." Funding therefore greatly affects the kinds of new media that City Lore can utilize in its work:

[We] have to sustain these continually upgraded media outlets without much funding support for those kinds of projects. One can get funds for the projects, but it's hard to get funds for the maintenance of those projects or the creation of the underlying technological framework, or for the technology maintenance, we don't have IT people on staff, we couldn't possibly afford that, and so just maintaining those websites and learning the newest technology has become quite expensive. (Marci Reaven, interviewed November 2, 2010)

Regardless of the challenges, new media, Reaven readily admits, creates opportunities that make the funding hurdles vital to overcome: "We've been doing interviews and doing research for many years on many different projects, and it's kind of wonderful to think that those projects can have these subsequent lives and be re-purposed as media stories." As the City Lore experience demonstrates, although technology has the potential to make material more readily accessible to a varied population, it continues to remain out of reach for those who lack the technology, skills, and funds necessary for its use.

Trends in the field: Accessing our stories

With the shift from analogue to digital recording devices, oral historians have been forced to experiment with a variety of audio and video editing software. Since many oral historians feel most comfortable working and authoring in text, most of those who responded to our survey, when asked about avenues for future development, indicated a desire for tools that would enable easier transcription. One tool in current use is Express Scribe, free but proprietary software developed by NCH Software. This tool, positively reviewed online, enables oral historians to play back their recordings at various speeds; they can control the software using hot keys or a pedal. An interesting alternative application, currently under development at CHNM, is a collaborative transcription tool that will allow people to collectively transcribe oral and/or visual content. The trend toward crowd sourcing is interesting in itself, but particularly in this case, as transcription is a time-consuming task.

Not surprisingly, the proverbial "holy grail" in oral history circles remains the promise of voice recognition software. The idea of automatically generated transcripts that are reliable and almost instantaneous has stimulated the imagination for years. Barely does a month go by without someone posting a voice recognition query on h-Oralist or another disciplinary listserv. Unfortunately, we are still not "there." Although a variety of tools exist, training the software to recognize various speakers' voices and then invariably cleaning up the "dirty transcripts" that result still takes a great deal of time. Another established problem with existing voice-to-text applications is that they have proven far less accurate with certain categories of people: the old, the young, and those who speak in dialect or simply have an accent. One way that oral



historians are using voice recognition software effectively, however, is in establishing the chronology, or time stamping, of the interview. In this instance, a dirty transcript is certainly good enough. While transcripts are helpful, and frequently seen as necessary, the underlying issue is that most oral historians continue to use text-based documents for histories that were originally intended to be aural (Frisch, 2006, 2008). To prevent this loss of orality at such an early stage in the process, one needs an alternative to transcription.

To this end, a number of existing and emergent initiatives are attempting to develop indexing and/or database tools that allow practitioners to interact with audio-video recordings in new ways. The four most interesting indexing and database tools that we researched appear well suited to the analysis of recorded testimony. First, Nvivo 9 is a proprietary qualitative data analysis software tool developed by QSR International in Australia to help ethnographers and others classify, sort, and arrange audio, video, or photographic data. The online tutorial provides a good sense of its potential value to oral historians. It also has on- and off-line capabilities. Cloud computing is critical for projects dealing with large volumes of video interviews that cannot be easily accessed by a local computer as well as for large-scale projects that require multiple database builders. Online databases likewise make it possible for non-local users and larger publics to interact with stories held in the database.

The limitations of Web-incompatible software are evident in InterClipper, a real-time video organizer adapted to serve the needs of oral historians. It digitizes, annotates, and indexes videotaped oral history collections, making them searchable and easily accessible. Since InterClipper permits each passage to be tagged, coded, and copied into an interactive database, it enables a deeper level of analysis of oral interviews. These strengths have led a number of projects in the United States and Canada, including Audio-Video Barn, to use this software. We have used it, too, at COHDS, to build a small database of interviews with displaced industrial workers (High & Sworn, 2009). Its main drawbacks are its price tag, its rigidity (particularly in terms of audio-video indexing), and the fact that it can only operate on PCs in an offline mode.

For its part, Testimony Software is a cross-platform authoring tool for the organization and presentation of oral history interviews; it syncs video, audio, images, and transcripts for export to a CD-ROM, DVD, or webpage. Produced by Turtle Lane Studios, this tool engages viewers through manipulable portals that facilitate the telling of stories. Testimony Software connects the stories to those who recount them by ensuring that, at a minimum, a static image of the interviewee is always central in the portal.

Finally, Stories Matter, open source audio and video indexing database software, developed by COHDS, remains one of the most accessible tools available. It renders large collections of interviews accessible and therefore usable. It enables interviews to be catalogued, searched, sorted, browsed, and clipped. We can now follow threads within interviews and across collections, making it relatively easy to map meanings. The downloadable (local) version was completed in July 2009, and the online version appeared in March 2010. The next phase in the development of Stories Matter will enable researchers and database users to map recorded life stories using geo-location indexing and mapping technology (High & Sworn, 2009; Jessee, Zembrzycki, & High, 2011).

Stories Matter was completed in two phases. Phase I provided individual oral historians and related practitioners with a local database-building tool that enables them to annotate and analyze digital video and audio materials in their collections, while retaining much of the emotive power of the voice that is typically lost in the transcription process. Phase II has the additional feature of facilitating online collaboration between multiple users for the purpose of large-scale history and heritage projects. Although Stories Matter has a number of strengths, COHDS is unable to provide much in the way of IT support. Moreover, a user community, which could constantly improve the software or develop new plug-ins for it, is only now in formation. Public-sector funding is often geared toward the creation of new tools rather than their maintenance and continued development. Several of the new media projects that we contacted spoke of the growing importance of consortia and “community sourcing” that finds middle ground between commercial development on the one hand and the creation and continued support of open source tools on the other.

The searchability behind these new indexing and database tools differs from that afforded by transcription: they allow users not only to search within and between collections but also to explore themes that have often been identified by the interviewees, who double as database builders, themselves. For the most part, these kinds of tools encourage a shift away from the use of transcripts, and hence away from the loss of meta-narrative information that this practice necessarily entails. Although their use cannot completely re-create the experience of being in an actual interview, they inspire a return to engaging with the original interviews and, most importantly, their aural content.

Telling our stories

Although oral historians have been slow and even resistant to abandoning the transcript, there is a new trend toward curating oral history projects on the Web; these projects, in many respects, maintain the aural quality that is so crucial to our practice. Certainly, using the Web is the most common and widespread way that practitioners are authoring in sound. Often these projects take the form of displaying content and have limited textual interpretation. ArtBabble is a cross-disciplinary community where users may contribute art videos. The site employs social media to draw visitors to it. Similarly, CollectiveAccess and Pachyderm Services are both geared toward the museum community, but can help historians create a Web presence. The CHNM has a new player in Omeka, desktop Web-publishing software (see above), and at the end of October 2010 it added Omeka.net, the online equivalent, which is hosted by the center itself:

Omeka came out of a lot of different projects. . . . We started to realize that we kept building the same site infrastructure over again to do our public history work and we had spent enough time in the library world and the museum world to know that standardized data is really important and not widely adopted in the public history and museum community, and so we started to think about what it would take to build a “site builder.” (Sharon Leon, interviewed October 26, 2010)

Omeka offers historians a wide range of options to curate and exhibit content through a manageable interface. Adhering to various archiving standards, it can be



used to build virtual exhibits and create interpretive websites; it even allows users to collect stories from their audiences. In many respects, Omeka is similar to WordPress, though there are some important differences:

The differences start with goals for the site, what kind of site you want to build. Omeka is way more geared towards people who have collections of items that care about metadata.... So we use Dublin Cores, the standard for metadata in Omeka. There are also other ways of adding other types of metadata.... It's a matter of audience. The audience for Omeka is really small museums, libraries, people who have collections or who want to get collections from outsiders and manage that stuff and present it, in an attractive way. (Jeremy Boggs, interviewed October 26, 2010)

As open source software, Omeka's strength also lies in its community of developers. Various plug-ins for the platform already exist, including Google Translate, a creative commons management tool, and a geo-location plug-in to associate data to a Google map. These options will surely grow, particularly with the launch of Omeka.net, which gives users the ability to try the platform with little risk and cost. Omeka.net eliminates the need for in-house hosting. One site is provided for free and if more than one site is required, users can buy additional storage. Omeka is another excellent example of a multi-functional tool.

Web diffusion of content has been complemented by digital storytelling, the act of narrating one's self through multimedia; this has recently been described as the emerging "signature pedagogy" for the humanities because it integrates critical thought and creative practice (Benmayor, 2008). As part of our research, we surveyed existing platforms for digital storytelling; a digital story is a three- to five-minute online multimedia presentation that uses a combination of audio, video, and still images. If the digital storytelling movement has been dominated by the Center for Digital Storytelling at the University of California (Berkeley), and Joe Lambert (2010) in particular, its most exciting achievements to date are perhaps best seen in the work of the HistoryMakers and StoryCorps in the United States as well as the work of Marcus Foth and his collaborators in Australia (Bilandzic & Foth, 2008; Spurgeon, Burgess, Klaebe, McWilliam, Tacchi, & Tsai, 2009; Wiesner, Foth, & Bilandzic, 2009). Within the Montréal Life Stories project we invite our interviewees to co-create five-minute digital stories drawn from their longer interviews. They pick the stories to be shared and decide what might be added, such as photographs, music, et cetera. The methodology of digital storytelling is well known and numerous tools exist.

Locating our stories

In a noticeable spatial turn in the field, oral historians have expressed interest in mapping change over time. The spatial turn will likely shift toward curating projects using GPS and augmented reality, even if these have yet to be widely used. Of increasing relevance to the field is the explosion of mobile devices. These offer exciting possibilities, especially given the widespread use of downloaded applications. The potential for taking history out into the streets and exploring the past in a manner that becomes multi-sensory is very appealing for both public and oral history.





While mobile applications can prove interesting, the trend seems to be shifting toward users downloading packaged experiences and content. Just how big is the Apple iPhone application economy? Some \$200 million worth of applications are sold in Apple's iPhone store *each month* in 2009, or about \$2.4 billion per year (Malik, 2009). The Android market for apps is also exploding. Each month, Android or iPhone users download approximately 10 new apps, while iPod Touch owners download an average of 18. Writing in the *Guardian* newspaper, Stuart Jeffries notes that iPhone apps could soon be bigger than YouTube (Jeffries, 2009). The App Store's staggering success has led nearly every maker of a smartphone to mimic Apple's business model: make it easy for users to buy or freely download software created by third-party developers. Often, producing these applications and making them accessible requires a developer's licence, for iTunes for example, as well as programming knowledge, largely out of the reach of most oral historians. What is needed is not the packaged application, but rather the shell in which historians can build their own. Obviously, there is a tectonic shift toward smartphone applications—it is what people have with them. But what is lost in this shift? Are we seeing the shift from tools to express oneself and explore one's own world to prepackaged experiences? Another key problem with locative media is the accuracy and availability of GPS signals.

A growing number of scholars and artists are embracing mobile methodologies that incorporate new media, the arts, and immersive technologies like GPS-activated or downloadable audio tours. The new "mobilities paradigm" is encouraging scholars to engage with the materiality of built and natural environments and with communities themselves (Anderson, 2004; Brown & Durrheim, 2009; Carpiano, 2009; Hein, Evans, & Jones, 2008; Riley & Harvey, 2007; Sheller & Urry, 2006). While mobility risks becoming a mantra, and is too often invoked uncritically, it offers us an opportunity to rethink existing research and creative practices. The walking interview, for example, has emerged as a core practice of oral history, especially among community, arts, and new media projects interested in place identity and urban change. Here, environment acts as a visual and auditory prompt to the stories being told. Storytellers, however, are not the only ones on the move. Future listeners can also walk in their footsteps using GPS technology deployed to create an immersive storytelling space or memoryscape. This immersion is never complete, though, producing a tension between past and present as users listen to a story about the past, told to an interviewer, but listened to in the present (Nold, 2009).

As we stated earlier, mscap software allows us to create GPS-guided experiences where users, with the mscap project downloaded on their GPS-enabled mobile device, can wander into a predefined space and trigger audio clips, music, directions to future hotspots, images, or any combination thereof. This particular authoring tool is, however, no longer supported by Hewlett Packard, and although it is still free and available for download, its future remains unclear. In its place is software, used for geocaching games, that works in a similar manner. Although not ideally suited to historians' needs, this software fills a gap in the market left by the discontinuation of mscap. GPS Mission, a free Web-based interface, allows users to identify waypoints that they would like participants to find. Users are then directed to these various zones, where, upon



entry, they receive GPS-triggered directions. GPS Mission allows for imagery and text to be associated with a waypoint, but not audio, an obvious and major drawback for oral and public historians. In addition, GPS Mission is marketed as a game intended to appeal to youth, thus creating a hurdle in terms of credibility in the field.

The rapid diffusion of smartphones continues to “expand the tools available to museums for mobile interpretation and raise the expectations of their audiences” (Petrie & Tallon, 2009). Fully two-thirds of U.S. consumers now have broadband Internet, and nearly half have an iPod or MP3 player. As a result, museum visitors can increasingly be expected to arrive with their own mobile devices. The days of museums and other heritage institutions providing their own equipment are clearly numbered (Doyle & Doyle, 2010). A recent symposium on hand-held devices at Tate Modern emphasized the need to simplify (or specialize) applications and devices. Koven J. Smith, of the Metropolitan Museum of Art, disagrees, suggesting that museums need to break out of the “audio tour” structure that has bounded their approach to mobile devices since the 1950s (Smith, 2009). For Smith,

Multimedia devices represent a break of sea change, in both content and platform, for audio guides. That is to say, if one thinks of the evolution of mobile interpretative devices as a straight line from AM/FM devices through personal cassette players to the now-ubiquitous random-access Mp3 players, multimedia guides do not represent the logical endpoint of that evolution, but rather a parallel and altogether different development. Multimedia guides bring with them a suite of opportunities and difficulties that only occasionally overlap with the opportunities and difficulties associated with audio guides. Although the technology has changed, the mindset that produces content for the technology has not. (Smith, 2009, n.p.)

Smith is therefore interested in shifting away from the “tour model” to a visitor-led experience that enables members of the public to search and explore, individually. This experiential or affective approach often relies on user-generated content, such as visitor micro-tagging, to generate online descriptions or commentaries of exhibited artifacts.

Similarly, Nancy Proctor urges museum curators and others to think outside the “audio tour box,” noting that in 2005 there were already over 100 hand-held pilot projects in museums around the world (Proctor, 2010). For Proctor, new media offers the possibility of designing a multimedia experience of curated stops (soundbites) and individualized tours (soundtracks). She suggests, and we tend to agree, that ArtBabble currently provides the “best model for an interface that successfully combines soundtracks, soundbites, and links to other content and applications” (Proctor, 2010, n.p.). ArtBabble is a useful example of the potential of cloud computing tools to enhance historic interpretation in the museum setting. This collaborative video portal, developed by a consortium of museums led by the Indianapolis Museum of Art, provides a full-text transcript of the art videos in the online database. ArtBabble therefore joins other community-sourcing initiatives in the museum world, such as the Steve Project, CollectionSpace, and Omeka (Wilde & Mann, 2010). Augmented reality is





another area that is exciting for its potential to blend the past with the present while out in the field.

Archiving our stories

Although most often deposited in traditional archives, recorded oral histories are, with increasing frequency, being archived online. Most of the new media conversations that took place at the Oral History Association conference (2010) were therefore quite focused on preservation and specifically on metadata, a topic that tends to be the focus of archivists and librarians, not historians.

The association of metadata with the information that you're collecting then becomes much more important. You need to tag it, and you need to not just tag it, you really need to have controlled vocabularies so that you have a standard set of terms that's being used across the whole set of collections, or across the whole collection. (William G. Cowan, interviewed October 2010)

The importance of metadata is not likely to decrease as the shift toward digital preservation takes hold. Scholars are increasingly interested in accessing interviews, done by themselves and others, to further their own projects—especially since it is now possible to access interviews in their original format rather than just through a transcript. Many oral historians are active in uploading their collections to the Web and are quite invested in sharing them with others. Often, this means that oral historians are becoming responsible for archiving much of our research material, without the expertise of archivists and librarians who have structures, systems, and appropriate standardized terminology in place and at their disposal.

The idea that archivists approach describing collections of paper records, from collection, to series, sub-series and then down to folder and item level; that we have all of these hierarchical levels that we want to start assigning descriptions to. That lends itself very easily and tidily and nicely to oral history materials, where oftentimes oral histories are part of a larger project or part of a big collection, or what you can term a collection. Then there are interviews below that, below that there might be thematic areas of an interview—early life, professional development, those kinds of phases in an interview—and then below that there are individual stories. (Kathryn Stein, interviewed October 29, 2010)

This archival turn toward metadata as well as tagging and text-mining has, in many ways, closed the distance between oral and public history and digital history, a field that has long been thinking about this shift by developing tools and strategies to meet these sorts of changes head-on.

For oral and public historians, these discussions have also led us to think about how our interviews may be used by others with objectives that are different from our own. For those who are willing and able to adopt online formats, the Internet has, in many ways, freed them from the constraints of the transcript. This freedom has, however, also led to a variety of new concerns. For instance, difficulties exist in terms of ownership and consent, particularly when consent was given before online diffusion was possible. A lack of standards in this regard, paired with a proprietary sense of protection by researchers, has led to some resistance against this type of sharing. In addi-





tion, as most content today is digital, there is theoretically no difference between the original and the copy (Boggs interview; Dan Cohen interview; Charles Hardy III, interviewed October 30, 2010). This generates fear about misuse, concern about ownership and diffusion, and misunderstandings about accessibility.

Yes, I think [new media] is changing the trends dramatically. I am much more careful to protect my narrators, knowing their words may show up on the Internet and that they will be searchable. While new media makes the information more widely available, it also puts narrators at risk for being misquoted or having materials used under another person's name, etc. etc. (Anonymous survey respondent)

Although researchers could have always accessed and misused an oral history interview when it was *not* easily accessible online, new media has created the conditions in which this kind of abuse or misuse can happen more frequently. It is important to note that this has not, however, been much of a problem. Clearly, those hoping to engage with this medium must be made more aware of measures that can be taken to prevent unauthorized use.

Sustainable funding and interoperability

There has been much discussion about varying forms of tool development, and scholars are debating the differences between open source software (where the source code is freely available and adaptable as needed), software that is free (where the source code is hidden, but the software remains free), and commercial software (where the source code is hidden and purchase is required for use). Community sourcing is also beginning to be an option here. Ethan Wilde and Laura Mann explain the latter as:

a software model that offers an alternative to the traditional vendor-driven commercial software paradigm, and a variation on the pure open source. The community is a group of users—often individuals for a group of participating institutions. Every aspect of the development process involves users, from gathering of requirements to final implementation. The approach provides the collaborating users the benefits of direct control, while mitigating the risk by sharing it across peer organizations. (Wilde & Mann, 2010, n.p.)

Although the cost of commercial software is sometimes prohibitive, the availability of continuous technical support appeals to many scholars. Community-sourced tools also raise issues of access and cost, but their strength lies in their ability to share the cost of development and upkeep between various users.

If it was community sourced, and the cost of developing it and everything gets spread out across multiple universities, then you've got a product that people will be interested in. So, I say that's another trend that's happening with software development: community sourcing. (William G. Cowan, interviewed October 2010)

A common issue regardless of the format selected for tool development revolves around funding. Centres that create tools have expressed frustration with the funding structure; securing development money is possible but securing funds to maintain,





support, and update tools is more difficult. The maintenance phase is not just as, if not more, important than the tools' creation, enabling them to have shelf life and relevance well into the future.

The increasing reliability of open source software—those that are community sourced or developed in isolation for a very specific user base—addresses some of the major problems inherent in commercial software. However, in order for open source software to be successful, above all, it needs to be stable. Broad outreach and a secure community of programmers who will continue to add to existing features by developing plug-ins are both required if stable tools are to be created and adopted by oral and public historians. One excellent example of stable open source tool development, supported by a community of developers, is CHNM's citation and research management software Zotero. It is important to stress that the structure required to establish networks like this involves not only an investment in time and money but also the ability to assess the contributions that scholars have made to this development.

A recent paper about the advantages of the community collaboration model within museums suggests that there is resistance to this kind of development because there is still a great deal of competition among and between practitioners (Wilde & Mann, 2010). Whether intrinsic or systematic, a major factor that impedes the usefulness of tools is a lack of collaboration between scholars within the field and especially between disciplines. In many cases, oral historians are developing tools in tandem with other researchers without knowing that their efforts are being duplicated. Sadly, these tools are often incompatible and the needs of users remain unfilled. Community sourcing can prevent this and facilitate the creation of complex tools that address many needs. Accessible interdisciplinary communication infrastructure is fundamental given that tools that are in development in one discipline may prove to be fruitless for some and valuable for others (William Turkel, interviewed October 6, 2010). The ease with which a user can adopt a tool is of paramount importance for encouraging oral and public historians to incorporate new media in their practices.

The funding of new media tools has to be envisioned as a sustained process. Development must go hand in hand with training and support. Additionally, compatibility among and between tools needs to be a priority.

[We] need to find ways to get more interoperability between a variety of these tools. Right now there's so many groups that are working on this, and developing tools.... People I think sometimes are reluctant to make a commitment to using a particular tool, 'cause if something happens, it's no longer being supported, then can I go to tool B and use that instead? Well, how do I get all of my data from tool A to tool B? So I'm thinking we need to be focusing on that area more ... (William G. Cowan, interviewed October 2010)

Not surprisingly, oral and public historians are quite hesitant about adopting tools that offer no such guarantee of long life. Losing their collections and/or the time and effort they have put into developing new media initiatives is a real concern that prohibits adoption. Even if the software they consider using is stable, supported, and continues to evolve, they are acutely aware of the absence of standards and the inability to mi-





grate their work to other venues or tools. This issue cannot be ignored. Perhaps practitioners would be more willing to explore the possibilities of searchable online databases, for example, if they knew that their work would not be lost should the software be discontinued or supplanted by another.

Conclusion

Making people more comfortable with digital media remains one of the hurdles of digital scholarship in some humanities and social science disciplines. Although the awarding of external grants to finance digital projects allays some of practitioners' fears, more can be done to address the unease of graduate students, post-doctoral fellows, and those at early stages of their careers. Survey respondents and interviewees, as well as the existent scholarship, tell us that many disciplinary programs have been slow to incorporate new media training into their graduate programs. The teaching of history especially needs to change. For U.S.-based oral historian Charles Hardy,

[t]he great thing about being where we are now is that there are no rules. Toss the rules out, go have fun, and trust your instincts, because the rules that you're being taught are inappropriate. They are no longer media or culturally appropriate, and they constrict you to boring. (Charles Hardy III, interviewed October 30, 2010)

Many oral historians who specialize in life history methodology and theory are forging close working relationships with filmmakers and new media practitioners, whose technical and collaborative skills are valued. Considerable methodological innovation has resulted. This article has explored some of these changes, highlighting a few of the digital tools now available. Due to these innovative tools, how we access, share, and archive recorded oral history interviews is rapidly changing. What this will mean to the writing of oral history, however, remains to be seen. Will it allow us to deepen our analysis, make new connections, and inform the ways in which we as people engage with our past? As oral historians grow more accustomed to authoring in multiple media, the collaborative potential between oral history and communications will only grow.

Interviewees

Jennifer Abraham

Jeremy Boggs. (2010, October 26). Creative Lead Programmer, Center for History and New Media, Fairfax, VA.

Michael Christel

Dan Cohen. (2010, October). Director, Center for History and New Media, Fairfax, VA.

Steve Cohen

William G. Cowan. (2010, October).

Constance Fleuriot. (2010, October). Mobile Bristol.

Michael Frisch

Cari Goetchus

Charles Hardy III. (2010, October 30).

Sharon Leon. (2010, October 26). Director of Public Projects, Center for History and New Media, Fairfax, VA.

Howard Levin

Susan L. McCormick





Clodagh Miskelly. (2010, October). University of West England, Bristol.
 Marci Reaven. (2010, November 2). Managing Director, City Lore, New York City.
 Dean Rehberger
 Kathryn Stein. (2010, October 29).
 William Turkel. (2010, October 6). Associate Professor, University of Western Ontario.
 Gerald Zahavi

Software websites

AppFurnace. Developed by Calvium. <http://www.appfurnace.com>
 CollectionSpace [collections management software]. <http://www.collectionspace.org>
 CollectiveAccess. Web-based software to catalogue, manage, and publish museum and archival collections. <http://www.collectiveaccess.org/>
 Express Scribe Transcription Software. A product of NCH Software. <http://www.nch.com.au/scribe/index.html>
 GPS Mission [geocaching software]. <http://gpsmission.com>
 InterClipper [video organizer]. <http://www.interclipper.com>
 mscope [GPS software]. <http://www.hpl.hp.com/mediascapes>
 NVivo 9 [data analysis software]. Developed by QSR International, Australia. http://www.qsrinternational.com/products_nvivo.aspx
 Omeka [research software]. A project of the Roy Rosenzweig Center for History and New Media. <http://omeka.org/>. Online equivalent at www.omeka.net
 Pachyderm Services [multimedia authoring tool]. <http://pachyderm.nmc.org>
 Stories Matter [audio and video indexing database software]. Developed by the Centre for Oral History and Digital Storytelling. <http://storytelling.concordia.ca/storiesmatter>
 Testimony Software. Oral history software by Turtle Lane Studios. <http://www.turtlelane.com.au/AOL/Testimony/testimony.html>
 Zotero [research software]. A project of the Roy Rosenzweig Center for History and New Media. <http://www.zotero.org>

Other websites

ArtBabble [video site]. <http://www.artbabble.org>
 Audio-Video Barn. A production of the Illinois State Museum's Oral History of Illinois Agriculture (OHIA) project. <http://avbarn.museum.state.il.us>
 Bracero History Archive. A project of the Roy Rosenzweig Center for History and New Media and partners. <http://braceroarchive.org>
 Canada Foundation for Innovation. <http://www.innovation.ca/en>
 Canada Research Chairs. <http://www.chairs-chaire.gc.ca>
 Center for Digital Storytelling. University of California (Berkeley). <http://www.storycenter.org>
 Centre for Oral History and Digital Storytelling (COHDS). <http://storytelling.concordia.ca>
 City Lore. A non-profit organization founded to produce programs and publications that convey the richness of New York City's cultural heritage. <http://www.citylore.org>
 City of Memory. An interactive NYC story map managed by City Lore. <http://www.cityofmemory.org/map/index.php>
 Community-University Research Alliance. <http://www.sshrc-crsh.gc.ca/funding-financement/programmes-programmes/cura-aruc-eng.aspx>
 The HistoryMakers. Interviews with African Americans. <http://www.thehistorymakers.com>
 Hurricane Digital Memory Bank. A project of the Roy Rosenzweig Center for History and New Media and partners. <http://hurricanearchive.org>
 The Memory Project. An initiative of the Historical-Dominion Institute. www.thememoryproject.com
 Montreal Life Stories. <http://www.lifestoriesmontreal.ca>
 [murmur]. <http://murmurtoronto.ca>
 Oral Historian's Digital Toolbox. <http://storytelling.concordia.ca/oralhistorianstoolbox>
 Place Matters. A joint project of City Lore and the Municipal Art Society. <http://www.placematters.net>





- Roy Rosenzweig Center for History and New Media (CHNM). George Mason University, Fairfax, VA. <http://chnm.gmu.edu>
- The Steve Project [social tagging]. <http://www.steve.museum>
- StoryCorps. Interviews with Americans of all backgrounds and beliefs. <http://storycorps.org>
- Truth and Reconciliation Commission of Canada. <http://www.myrobust.com/websites/trcinstitution/index.php?p=3>
- 2010 Tate Handheld Conference [wiki]. <http://tatehandheldconference.pbworks.com/w/page/19520838/2010%20Handheld%20Conference>
- UNESCO Convention for the Safeguarding of Intangible Cultural Heritage. <http://www.unesco.org/culture/ich/index.php?pg=00006>
- USC Shoah Foundation Institute. Visual History Archive. <http://dornsife.usc.edu/vhi>

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