



Memory, archives and the Web

Jeannette A. Bastian

Simmons University (USA)
jeannette.bastian@simmons.edu, ORCID 0000-0002-1408-8926

ABSTRACT

Posing the question of whether digital technologies change the dynamics of the relationship between archives and memory, this essay explores the expanding role of memory on the World Wide Web and the evolving relationship between memory and archives. The author explores definitions of memory with a focus on collective memory, introduces the technologies of memory and gives examples of the memory/archives relationship on the web.

KEYWORDS

memory, collective memory, World Wide Web, Web, archives, records

Pamięć, archiwa i Internet

STRESZCZENIE

Artykuł, stawiając pytanie o to, czy technologie cyfrowe zmieniają dynamikę relacji między archiwami a pamięcią, bada rosnącą rolę pamięci w sieci WWW oraz ewoluujące relacje między pamięcią a archiwami. Autorka analizuje definicje pamięci, skupiając się na pamięci zbiorowej, przedstawia technologie pamięci i podaje przykłady relacji między pamięcią a archiwami w sieci.

SŁOWA KLUCZOWE

pamięć, pamięć zbiorowa, World Wide Web, Internet, archiwa, dane

Introduction

In the final decades of the 20th century, scientists and scholars became concerned that the world might be in danger of losing its memory. As the internet ingested data and then just as often lost it, as technologies rapidly became obsolete and replaced with new models and as digitized, information, fragile and often not migrated, seemed in constant peril of vanishing altogether, historians, archivists and computer scientists increasingly sounded the alarm about rapid disappearance of current memory. They gloomily predicted a “digital dark age” and portended “a dark future with no memory”¹. By the late 1990’s, “the web’s

¹ I. Milligan, *Averting the digital dark age. How Archivists, Librarians, and Technologists Built the Web a Memory*, Baltimore 2024, p. 1.

ephemerality became a challenge as thousands raced to join the »information superhighway«², and as the amount of information on the web increased so did the scramble to preserve data and avert loss.

As efforts to retain data over ever-changing platforms, to create storage for digital spaces, and to resolve increasingly complex issues of retrieval and access were intensified, “archiving the web” suddenly emerged as both the concept and the phrase that might resolve this dilemma. “Suddenly archives are popping up everywhere”, noted media scholar Wolfgang Ernst in the introduction to his book on archives and media theory *Digital Memory and the Archive*, adding that “a lot of our software-based interaction online now has to do with archival metaphors”³. Today, websites proliferate and web archiving, the process of collecting, preserving and providing access to materials on the World Wide Web, has not only become a constant in technology parlance, but an essential part of current archival practice. “As the live web changes over time”, notes Emily Maemura and her colleagues, “web archiving aims to preserve a record of the web’s past”⁴. Web archiving focuses on collection, storage and preservation of data, but also points to preservation of memory and to evolving nature of the relationship between archives and memory in the digital space. As a Society of American Archivists notes: “To comprehensively represent records created in the 21st century, it’s imperative that select websites and other web-based resources be captured, stored, managed, described, and made accessible as appropriate”⁵. In addition, many websites that are not part of an intentional web archiving strategy also focus on archival storage, preservation, and accessibility as sites of memory.

The evolving relationship between memory and archives is the primary subject of this essay that asks whether digital technologies, specifically web technologies, change the dynamics between memory and archives, in particular collective or social memory. As noted by Franz Scholze in his writings on web archiving, “Web archiving has therefore become in recent years as a central building block of

² Ibidem, p. 2.

³ J. Parika, *Introduction* [in:] W. Ernst, *Digital memory and the archive*, Minneapolis 2013, p. 1.

⁴ E. Maemura, N. Worby, I. Milligan, C. Becker, *If these crawls could talk: Studying and documenting web archives provenance*, “Journal of the Association for Information Science and Technology” 2018, vol. 69(10), p. 1223.

⁵ Society of American Archivists, September 2025 SAA post advertising a workshop on Web Archiving Fundamentals, https://mysaa.archivists.org/nc__event?id=a0IUUV000003W8iHYAS [access: 24.09.2025].

cultural memory”⁶. In the analog environment, it is the archive/record that sparks the memory, traditionally, but in the digital space of the Web, to what extent does the memory produce the archive? By shrinking the spaces between the creation of the record and the memory that it engenders, do the memory and archive conflate? And if so, what are the implications, both for memory and for archives? According to media scholar Ekaterina Haskins, “»digital memory«, more than any other form of mediation, collapses the assumed distinction between modern »archival« memory and traditional »lived« memory by combining the function of storage and ordering on the one hand, and of presence and interactivity on the other”⁷. If digital memory indeed fuses modern and traditional archival memory, then does the digital environment also offer opportunities to expand the reach of both archives and memory? This essay considers these questions within the context of the unfolding role of memory in archival work – from an initially minor one in the writing of history, to its growing legitimacy in the 20th century and its prominence in the digital realm in the 21st.

Memory

Memory itself is a ubiquitous term but one with discipline-specific meanings. While generally referring to storing and retrieving of information, memory also encompasses a wide spectrum of notions, including both short-term and long-term memory, sensory memory, physical memory, individual memory and collective memory. And while each discipline grapples with memory through the prism of its own critical structures – behavioral, psychological, literary, historical – there are also commonalities. Sociologist Paul Connerton writes that a critical aspect of memory is the way in which memory is communicated, both immediately and over time and generations; and that “to study the formation of memory is to study those acts of transfer that make remembering in common possible”⁸. He proposed that this transfer happens in several ways – through commemoration and commemorative ceremonies, and through bodily

⁶ F. Scholze, *Securing traces in the digital stream, web archiving as cultural memory task*, “Zeitschrift für bibliothekswesen und bibliographie” 2025, vol. 72(2), p. 1.

⁷ E. Haskins, *Between archive and participation: Public memory in a digital age*, “Rhetoric Society Quarterly” 2007, vol. 37, pp. 401–402.

⁸ P. Connerton, *How societies remember*, Cambridge 1989, p. 39.

practices, both incorporated and inscribed. An incorporated practice is an action of transmission performed by the body such as a conscious handshake, or a culturally specific gesture generally understood by a particular community, which Connerton describes as “a mnemonic of the body”⁹. An inscribed practice refers to transmission through writing or other media forms. Today many of those media forms including the World Wide Web are digital.

Archival memory, the focus of this essay, can trigger personal memory but more broadly addresses collective or social memory. As Margaret Hedstrom and her colleagues note, “Archives are frequently characterized as crucial institutions of social memory, and many professional activities are considered forms of memory preservation”¹⁰. In their essay *Invoking “collective memory”: mapping the emergence of a concept in archival science*, they identify 4 areas of archival concern including their role as a “symbolic foundation for collective memory [...] the many different ways that archives enable feelings of a common past feeding into a collective identity” and “the role of records, archives, and archivists in the creation, construction, and propagation of social memory”¹¹. Considering this volatile and symbolic relationship, this essay will briefly trace the evolution of archival memory from the 19th century historians’ privileging of written archives over the unreliability of memory, to the development of collective memory theory, Memory Studies and the digital expansion of archival memory through the World Wide Web.

From history to memory

In the mid-19th century, European historians began to look to archives for the evidence of history. Previous to that time, history had been struggling to become an independent discipline. It was not until the late 17th and early 18th centuries that history had become “increasingly accepted as independently valuable without the validation of the universal principles of philosophy or

⁹ Ibidem, pp. 74–75.

¹⁰ M. Hedstrom, T. Jacobsen, R.L. Punzalan, *Invoking “collective memory”: mapping the emergence of a concept in archival science*, “Archival Science” 2013, vol. 13, p. 218.

¹¹ Ibidem, p. 219.

the coherence of rhetoric”¹². Along with other academic scholarship of that time, the tools of the historian were primarily empirical, relying on philosophical reconstructions, first-hand accounts, and the work of previous historians, although archival documents were not ignored and were to some extent relied upon for historical work. Not to do so, wrote a scholar in the 1707, “would be just like someone who set out to work on a religious book without first diligently gathering readings from the Bible”¹³.

However, by the mid-19th century historians, led by German historian Leopold von Ranke, turned towards archival documentation more comprehensively and began to “equate professional historical studies with scholarship based on archival research”¹⁴. Von Ranke was the founder of source-based history focused on archival research and the analysis of historical documents and texts, primarily those found in archives. He believed in historical objectivity, historical truth and trustworthiness and that by using the primary sources in the archives, “one could trust the work of one’s fellow historians because one understood and shared their procedures of working and writing. Even historians who did not share Ranke’s belief in historical objectivity described critical methods as such a guarantee”¹⁵.

Reliance upon archives as representing evidence and truth established a methodological structure for the discipline of History that to some extent persists today. Equating archives with truth and neutrality was an inevitable consequence of such historians’ perspective. Archives were valued because they spoke the truth, were trustworthy and objective. This maxim was further reinforced by archivists themselves, notably Hilary Jenkinson in the 1920’s, and became a persistent mantra until the mid-20th century when historians began to question the role of documents as the only reliable historical source in favor of a postmodern skepticism that questioned neutrality, objective truth, and universal values. The rise of social history with its focus on study of ordinary people challenged these formerly accepted notions. Post-modernism re-examined long-held beliefs around knowledge, and representation; and, importantly, sought alternate sources of history outside the archives.

¹² K.R. Eskildsen, *Inventing the archive: Testimony and virtue in modern historiography*, “History of the Human Sciences” 2013, vol. 26(4), p. 10.

¹³ I. Milligan, *Averting the digital dark age...*, p. 19.

¹⁴ P. Herman, *The heroic study of records: The contested persona of the archival historian*, “History of the Human Sciences” 2013, vol. 26(4), p. 68.

¹⁵ I. Milligan, *Averting the digital dark age...*, p. 19.

The awareness of memory being central to understanding social history blossomed in the latter part of the 20th century driven partially by the postmodern “turn” and the shift towards social history by historians and other scholars. A critical aspect of that shift was the recognition that the official written documents only told part of the story and that cataclysmic events such as the Holocaust could only be fully understood through the voices of the victims and the witnesses¹⁶. Memory Studies, which consolidated the theory regarding that recognition, brought memory into academia, building an active discipline that in the 21st century continues to gain strength as a legitimate field of research. Memory studies signal a move away from reliance on traditional archival documentation towards the recognition that memory “adds unique and valuable perspective to our understanding in ways that would otherwise be missed”¹⁷. Constructing and reifying theory and developing frameworks formed the fundamentals of this new discipline and established memory as a legitimate area of study and research. Driven at least in part by the recognition that ever-developing technologies both facilitate memory and hold the constant threat of forgetting, the study of memory is increasingly a component of a wide range of disciplines.

The foundations of modern memory theory are largely based on Maurice Halbwachs’ insight published in early 20th century that collective memory is a social construct and that individuals view the past in the present through multiple social frameworks. Halbwachs published his classic *Collective Memory* in the 1920s but it was not until the 1970s that the “memory boom” exploded and memory studies emerged as an academically acceptable pursuit as social historians and other scholars recognized that certain human actions and collective aspects of events could not be explained by traditional historical sources alone. Memory studies in the late 19th and early 20th century had focused on the role of memory in formation of national identities. Memory studies in the late 20th century became paths to studying the marginalized, the undocumented and the under-documented aspects of society and history. They continue this path today.

Memory studies encompass both personal and collective memory, but it is the area of collective, social and cultural memory that has most captured scholarly

¹⁶ A. Wiewiorka, *The Era of the Witness*, New York 2006, p. XII.

¹⁷ *The collective memory reader*, eds. J. Olick, V. Vinitzky-Seroussi, D. Levy, Oxford 2012, pp. 3–5.

attention. In their 2012 introduction, the editors of *The Collective Memory Reader* offer a broad perspective on the wide net cast by memory, writing that “the new insight of memory studies is [...] not merely that memory is omnipresent but that it is at once situated in social frameworks (e.g. family and nation), enabled by changing media technologies (e.g. the Internet and digital recording), confronted with cultural institutions (e.g. memorials and museums), and shaped by political circumstances (e.g. wars and catastrophes)”. They point out that “social frameworks and historical circumstances change over time [...] Studying (and theorizing) memory allows us to shift our focus from time to temporalities, and thus to understand what categories people, groups and cultures employ to make sense of their lives”¹⁸. Important for the themes of this essay is their inclusion of the influence of technologies on memory.

Essentially, memory is a social phenomenon. Halbwachs’ central insight, that “while the collective memory endures and draws strength from its base in a coherent body of people, it is individuals as group members who remember [...] every collective memory requires the support of a group delimited in time and space”, captures this social aspect while it also highlights its ambiguity. Memory exists on both the personal and the collective level, the one affecting the other but fueled by a common recognition.

Memory is also intimately tied to identity, both the collective and the individual. Memory is not a phenomenon of the past, but is bound up in the present and as sociologist Barry Schwartz argues “collective memory reflects reality by interpreting the past in terms of images appropriate and relevant to the present; it shapes reality by providing people with a program in terms of which their present lines of conduct can be formulated and enacted; it frames reality through standards in terms of which the effectiveness and moral qualities of their conduct can be discerned”¹⁹. Studying memory, in other words, opens windows into understanding communities and cultures in new ways, ways that may not be possible through traditional documentation.

The postmodern turn in academia ironically also signaled an academic “archival turn” (or perhaps a re-turn). It reinforced the need to reconsider traditional archival sources but also advocated a rigid critique of these sources, widening their interpretation, questioning accepted truths in archives and introducing

¹⁸ Ibidem, p. 17.

¹⁹ B. Schwartz, *Abraham Lincoln and the forge of national memory*, Chicago 2000, p. 18.

witnessing and memory as legitimate sources of history. Finding ways to document the undocumented and the silenced and to uncover counter-narratives to those in official documents led to questioning of the adequacy of the archival record for conveying the voices of the marginalized. This inadequacy of the official archives is highlighted, for example, by scholars such as Saddiya Hartman, who, seeking to recover the voices of enslaved women, finds that the official archive cannot help her because the archive only contains the records of actions against the enslaved. Hartman asks: “how does one recuperate lives entangled with and impossible to differentiate from the terrible utterances that condemned them to death, the account books that identified them as units of value, the invoices that claimed them as property, and the banal chronicles that stripped them of human features?”²⁰. Seeking alternative sources, literary scholar Santanu Das similarly notes that “when the archival knowledge is woefully asymmetrical, the histories difficult and painful, and the local actors largely non-literate and silent, it is important to go beyond official documents and consider a wider range of cultural material – objects, photographs, sketches, paintings, songs, gossip, rumour, alongside historical fiction”²¹.

The broad-ranging view of what an archive might contain was conceptualized by academia as a theoretical metaphorical space that could also include many physical as well as memory spaces. In this postmodern intervention, both memory and the archives assumed a new character, one that questioned neutrality and immutable truths in favor of relationships that embraced alternate sources of information and one that accommodated a wide variety of forms and formats. Although this “academic” view of the archives has been largely seen by archivists themselves as secondary or even immaterial to archival work²², this reinterpretation of the archive has paralleled the archivists questioning the neutrality of the documents in their care. This questioning has revealed archival memory as more complex than merely storing and preserving the records

²⁰ S. Hartman, *Venus in two acts*, “Small Axe” 2008, no. 26(2), vol. 12, pp. 10, 3.

²¹ S. Das, *Reconceptualising the colonial archive: war, subaltern, and the literary*, “Literary Res/Recherche Littéraire” 2021, vol. 37, p. 240.

²² For more on the archivist reaction to the academic archives see: M. Caswell, “*The Archive’ is not an archives: On acknowledging the intellectual contributions of archival studies*,” “Reconstruction: Studies in Contemporary Culture” 2016, vol. 16(1), special issue “Archives on Fire”, <https://escholarship.org/uc/item/7bn4v1fk> [access: 24.09.2025].

of the past. Archivists today are probing these nuanced and deeper implications both for records creation and records processes²³.

Archivists and memory

Belief that memory in some form plays a pivotal role in archives has been a constant over many decades of archival practice. Although memory making and recording did not begin with Jenkinson and has manifested in many forms ever since humans felt the need to communicate, Australian archivist Michael Piggott points out that Jenkinson recognizes in “archives a memory role from the moment they exist as records”²⁴. Jenkinson links preserving of information and supporting of memory to the creation of archives, writing in his groundbreaking 1922 *Manual of Archives Administration*:

“The official or responsible person [...] who has to preside over any continuous series of business functions, the manager of a small estate at one end of the scale, the controller of a kingdom’s finances at the other, relies for the support of his authority on memory: so soon as writing becomes general in use he adopts the preservation of pieces of writing as a convenient form of artificial memory and in doing so starts a collection of Archives”²⁵.

The keeping of archives and their relationship to memory was made explicit in 1991 when then International Council on Archives President Jean-Pierre Wallot coined the term “houses of memory” referring to the treasures of our past contained within archival institutions, where, he maintained, archivists are the holders of the “keys to collective memory”²⁶. Wallot suggested that archives could be both physical spaces and memory spaces. As physical spaces, they store and hold their contents, as memory spaces they are the vessels of

²³ See for example: J. Douglas, M. Ballin, J. Lapp, *Introduction: Special Issue – Toward Person-Centered Archival Theory and Practice*, “Archivaria” 2022, vol. 94, pp. 5–21; M. Caswell, *Urgent Archives. Enacting Liberatory Memory Work*, Abingdon-on-Thames 2021.

²⁴ M. Piggott, *Archives and memory* [in:] *Archives: recordkeeping in society*, eds. S. McKemmish, M. Piggott, B. Reed, F. Upward, Wagga Wagga 2005, p. 300.

²⁵ H. Jenkinson, *A Manual of Archive Administration*, London 1937, p. 23.

²⁶ J.-P. Wallot, *Building a living memory for the history of our present: New perspectives on archival appraisal*, “Journal of the Canadian Historical Association” 1991, vol. 2, p. 282.

the collective memory of their use and users, as well as of their own creation and institutional past. As both physical and memory spaces they may stand as symbolic representations of particular values or ideas.

This characterization of “houses of memory” as the treasures of our past where archivists are the holders of the “keys to collective memory”, became a familiar trope in the archival mythos. From “houses of memory” to “tacit memory”, from “memory triggers” to “touchstones of memory”²⁷, memory and archives are linked together and share an implicit and synergistic relationship. As in the Jenkinson quote above, the need to remember led to the need to document. In turn, the document creates the archive and the archive then recreates the memory. Often characterized as “the collective memory of the nation”, national archives appropriate that relationship directly through their mission statements and their public faces.

But archivists have many other connections with memory. Memory and archives are interlinked in other aspects of archival practice as well. Not only do archivists collect, manage and preserve the “stuff” of memory, but through appraisal, they participate majorly in determining its perpetuation. What gets remembered and what gets forgotten may not be entirely in the hands of archivists, but they do have prominent roles to play in those decisions. In digital environments, long-term stability and survival may be dependent upon archival and preservation skills. Despite all these correlations, however, archivists often question the actual value of the archives/memory relationship, characterizing records as the impetus for memory rather than as embodiments of the memory itself.

80 years after Jenkinson proclaimed archives as a form of artificial memory, Terry Cook and Joan Schwartz noted that “archives – as records – wield power over the shape and direction of historical scholarship, collective memory, and national identity, over how we know ourselves as individuals, groups and societies”²⁸. Cook foregrounded memory as one of the four paradigms shaping archives in the 20th and 21st centuries. He asserted that “beyond evidence, archives also preserve memory. And they create memory”²⁹.

²⁷ For further discussion of these terms see: E. Ketelaar, *Tacit narratives, The meanings of archives*, “Archival Science” 2001, vol. 1 pp. 131–141; L. Millar, *Discharging our debt: The evolution of the total archives concept in English Canada*, “Archivaria” 1998, vol. 46, pp. 103–146.

²⁸ J.M. Schwartz, T. Cook, *Archives, records, and power: The making of modern memory*, “Archival Science” 2002, vol. 2, p. 2.

²⁹ T. Cook, *Evidence, memory, identity, and community: four shifting archival paradigms*, “Archival Science” 2013, vol. 13, p. 101.

That archivists have traditionally considered archives as memory triggers rather than the actual memory itself, implies not only that it is the physical record that generates the memory but that there is a significant time differential between the creation of archives and the sparking of the memory. As Cook observed in 1966, the traditional approach and often the popular understanding of archives is that “Archivists remember the past, not the future; they deal with history, not current or future events. They do not construct social memory [...] Archivists are guardians of the past, not its interpreters. Archivists are in the preservation business not the memory one”³⁰. Archives precede the memory and through archives, events are remembered and as Laura Millar has written, “records, along with stories, artifacts, songs, rituals, traditions, and myriad other non-documentary touchstones, are used to shape memories into narratives and to transform information and recollection from the individual to the collective”³¹.

In the dynamic and fluid world of the Web however, the distance between an event and the memory is drastically shortened, “many events witness a gap of only minutes between events and collections”³². This almost instantaneous creation of both the archives of the event and the memory of the event suggests that archives not only preserve and create memory but that the need to remember also creates the impetus for the archives – in some respects not so far removed from Jenkinson’s “artificial memory”.

A case in point is the iconic September 11 Digital Archive. Within hours of the terrorist attacks of September 11, 2001, instantly recognizing the enormity of this event and the need for immediate documentation, “archivists and librarians were capturing webpages, television feeds, voicemail messages and email messages”³³, writes Ian Milligan in his recounting of the creation of the September 11 Digital Archive. He notes that “within weeks, new and emerging memory websites were created” that included digital spaces for anyone to record their experiences and reactions. The September 11 Digital Archive at the Roy Rosenzweig Center for History and New Media at George Mason University not only aggregated many of these collections on a website but opened its site

³⁰ T. Cook, *Remembering the future: Appraisal of records and the role of archives in constructing social memory* [in:] *Archives, documentation, and institutions of social memory: essays from the Sawyer Seminar*, ed. F. Blouin Jr., W. Rosenberg, Ann Arbor 2006, pp. 169–170.

³¹ L. Millar, *Discharging our debt...*, p. 119.

³² I. Milligan, *Averting the digital dark age...*, p. 160.

³³ *Ibidem*, p. 138.

to all who wished to contribute, “collecting and archiving first-hand accounts, emails and other electronic communications, digital photographs and artworks, and a range of other digital materials related to the attacks”³⁴. This first example of a web archive demonstrated not only the ability of the web to preserve documentation and capture memories but also to create a wide-ranging collective memory.

In this immediate and flattened Web world, are the traditional relationships between archives and memory turned on their head? Rather than archives shaping memory, does memory to some extent shape archives? Does the need to preserve the memory create the need for the archive, does the archive in turn create the memory and are the lines between memory and archives therefore blurred? Describing web archiving as a socio-technical phenomenon, media scholar Ed Summers writes: “Understanding the socio-technical conditions that give rise to a web archive requires a socio-technical perspective – that is, a perspective that examines the ways that human agency and technologies co-produce each other but avoids privileging either the social or technical aspects as determining the other”³⁵.

Conflating the technical archive and social memory offers one way to approach the convergence of archives and memory, while fluidity of information on the Web suggests another. Do digital spaces, where information can be brought together, combined, and coalesce, also offer deeper ways to encompass memory as well as archives? The web allows displaying such facets of archival memory as cannot easily be depicted, let alone stored, in the analog environment; expressions not considered archival in the analog world, can be accessed in the digital one. The September 11 Digital Archive, for example, includes artifacts, oral testimonies, images, stories – an array of materials that demonstrate ways in which the digital environment expands archival memory. This combination of forms and formats also supports the concept of “Technologies of Memory”, a term coined by communications scholar Marita Sturken.

³⁴ The September 11 Digital Archive, Saving the History of September 11, 2001, <https://911digitalarchive.org> [access: 26.09.2025].

³⁵ E. Summers, *Appraisal talk in web archives*, “Archivaria” 2020, vol. 89, p. 79.

“Technologies of Memory”

In the 1990s, Sturken challenged the traditional relationship between archives and memory by describing a more immediate interface between the individual and the memory, a relationship that explores the ability of technologies to express memory³⁶. Sturken suggested that the memory in the moment is sufficient within itself as she referenced a vast array of cultural products and texts including photographs, films, artifacts and documents as “technologies of memory [...] in that they embody and generate memory and are thus implicated in the power dynamics of memory’s production”³⁷. Noting that the cultural narratives of history and the textual narratives can equally be considered as evidence, she asserted that “memory is a narrative rather than a replica of an experience that can be retrieved and relived”³⁸. Pointing to the material items left as memorials at the Vietnam Wall of names in Washington, D.C., as personal memories of public events, she sees turning cultural memory into national narrative as an archival task, writing that “personal memory, cultural memory and history do not exist within neatly defined borders. Rather, memory and memory objects can move from one realm to another, shifting meaning and context. Thus, personal memories can sometimes be subsumed into history, and elements of cultural history can exist in concert with historical narratives”³⁹.

Considering the digital technologies of memory, not only the Web, but cell phones and the many forms of social media, Nancy Van House and Elizabeth Churchill also see that “explicit and tacit models of social and personal memory are »baked into« the design of these technologies”⁴⁰. They highlight “the role of capture, storage and retrieval technologies in what is remembered, collectively and personally”, concluding that “technologies are being developed to support human memory in everyday practice”⁴¹. At the same time, they warn of the hazards not only from data loss or inability to preserve, but from the designers of the technology itself, they write “it is important to understand how engineers and

³⁶ See for example: N. van House, E.F. Churchill, *Technologies of Memory: Key Issues and Critical Perspectives*, “Memory Studies” 2008, vol. 1(3), pp. 295–310.

³⁷ M. Sturken, *Tangled memories; The Vietnam War, the AIDS epidemic, and the politics of remembering*, Berkley 1997, p. 10.

³⁸ Ibidem, p. 7.

³⁹ Ibidem, pp. 7–8.

⁴⁰ N. van House, E.F. Churchill, *Technologies of Memory...*, p. 297.

⁴¹ Ibidem, pp. 299, 306.

designers are actively creating the mechanisms we use every day for the storage and retrieval of all that precious information [...] the technologies of memory will strongly influence what can and will be remembered”⁴².

How memory creates the Web/How the Web creates memory

The September 11 Digital Archive was a pioneering endeavor not only in web archiving but in demonstrating the power of the web to create and preserve memories, as well as the larger collective memory of an event itself. Since 2001, the abilities of the web to capture, collect and archive memory have only expanded.

3 examples of archives and memory on the Web:

1. A 2022 essay on the internet sources of China’s Cultural Revolution under Mao Tse Tung⁴³. The authors explore web sites, video clips and recordings to “show the new possibilities offered by the »digital turn« in the study of historical reality and in the practice of memory as a political tool”⁴⁴. They assert that “It is becoming clear that, with the resources afforded by the Web, a brand-new way of linking up words and images, text and visual sources, has become possible, providing the study of history and memory with unexplored tracts of promising terrain”. They claim that through technologies of memory, “history can now be experienced by those who did not live through it”⁴⁵.
2. The 858 website is a series of videos documenting the 2011 Tahir Square revolution in Egypt. The archive consists of 1662 video images recorded on a smart phone, each capturing and witnessing a particular moment of the 18 days of the Tahir Square revolution. Together, they constitute powerful visual testimonies of the event⁴⁶. The videos were compiled by Mosireen, an independent media group, who hoped to use the videos in a trial, which never happened. The author of an article on this site, Amir-

⁴² Ibidem, p. 302.

⁴³ M. Tesini, L. Zambarnardi, *When memory exceeds history: The emerging visual Internet Archive on the cultural revolution*, “Information, Communication and Society” 2022, vol. 25(8), p. 1067.

⁴⁴ Ibidem, p. 1068.

⁴⁵ Ibidem, p. 1069.

⁴⁶ 858: An Archive of Resistance, <https://858.ma/> [access: 28.07.2025].

Hussein Radjy, who interviewed members of Mosireen writes “When I spoke with members of Mosireen, they described the act of assembling their video archive as a defense of the revolution’s memory against the regime”, and he notes that “In a society where dissent has become dangerous, Mosireen’s archive is an exercise in the subversive power of memory”⁴⁷.

3. Documenting Ferguson, a web archive at the University of Washington, documenting the shooting of Michael Brown in 2014 includes an array of crowd-sourced memory technologies as the site notes “Multiple contributors shared original digital content, such as images, video, audio, and stories related to memorials, community meetings, rallies, and protests that occurred in Ferguson and throughout the broader region of St. Louis County and City”⁴⁸. 10 years after the event, viewers are still invited to add to the site, keeping it fresh and relevant.

Conclusion

Memory has always had its own story to tell. On the web it is a story told to an ever-widening audience using an increasingly creative toolbox of digital tools. On the web and through the many technologies of memory, memory is a powerful information component as it becomes increasingly relevant to understanding both current and past events. In his 2003 book on archives appraisal, *No Innocent Deposits*, Richard Cox stated that “whatever comes into the archives and how it gets there might be beside the point because archives are a symbolic waystation on the road to collective memory”⁴⁹, suggesting that memory is at the heart of the archival mission. Memory, as both an archival process and an archival product, continues to evolve and fulfill that mission in the digital space as it has in the analog.

In a 2009 essay, I explored the relationship between archives and memory through the enduring memory of an iconic late 19th century labor strike in

⁴⁷ R. Amir-Hussein Radjy, *How to save the memories of the Egyptian Revolution*, The Atlantic, 25 January 2018, <https://www.theatlantic.com/international/archive/2018/01> [access: 7.08.2025].

⁴⁸ Documenting Ferguson, <https://digitalexhibits.library.wustl.edu/s/ferguson/page/home> [access: 28.08.2025].

⁴⁹ R. Cox, *No Innocent Deposits, Forming Archives by Rethinking Appraisal*, Lanham 2003, p. 234.

Homestead, Pennsylvania⁵⁰. The persistence of the collective memory of the Homestead Strike that continues to the present day, expressed through poetry, song, images, conferences, websites, and even materially through markers and buildings, suggests that “memory becomes a significant contributor to the documentary record”. In addition to extending the memory of the event itself, it also offers a creative way to fill in some of the undocumented spaces. I pointed out that “Although archivists might rightly say that the acts of preserving and describing records and making records available to researchers in themselves maintain memory, the material and intellectual variety of records as well as the mutable qualities of memories themselves suggest that the archives/memory relationship holds the promise of greater comprehensiveness and inclusivity”⁵¹. While archives of the Homestead Strike are primarily analog, digital as well as digitized records on the web offer even greater opportunity for creating a broad and longitudinal memory record. Archiving the web is also archiving memory, through all the technologies of memory that the web facilitates. Archivists should take full advantage of the values that memory brings and see memory not only as an enhancement to web archives but as their primary feature.

Bibliography

- Amir-Hussein Radjy R., *How to save the memories of the Egyptian Revolution*, The Atlantic, 25 January 2018, <https://www.theatlantic.com/international/archive/2018/01> [access: 7.08.2025].
- Bastian J.A., *Flowers for Homestead: A Case Study in Archives and Collective Memory*, “American Archivist” 2009, vol. 72, pp. 113–132.
- Caswell M., ‘The Archive’ is not an archives: On acknowledging the intellectual contributions of archival studies, “Reconstruction: Studies in Contemporary Culture” 2016, vol. 16(1), special issue “Archives on Fire”, <https://escholarship.org/uc/item/7bn4v1fk> [access: 24.09.2025].
- Caswell M., *Urgent Archives. Enacting Liberatory Memory Work*, Abingdon-on-Thames 2021.
- Connerton P., *How societies remember*, Cambridge 1989.
- Cook T., *Evidence, memory, identity, and community: four shifting archival paradigms*, “Archival Science” 2013, vol. 13, pp. 95–120.

⁵⁰ J.A. Bastian, *Flowers for homestead: A case study in archives and collective memory*, “American Archivist” 2009, vol. 72, p. 132.

⁵¹ *Ibidem*, pp. 130, 131.

- Cook T., *Remembering the future: Appraisal of records and the role of archives in constructing social memory* [in:] *Archives, documentation, and institutions of social memory: essays from the Sawyer Seminar*, ed. F. Blouin Jr., W. Rosenberg, Ann Arbor 2006, pp. 169–181.
- Cox R., *No innocent deposits, Forming archives by rethinking appraisal*, Lanham 2003.
- Das S., *Reconceptualising the colonial archive: war, subaltern, and the literary*, “Literary Res/Recherche Littéraire” 2021, vol. 37, pp. 239–250.
- Documenting Ferguson, <https://digitalexhibits.library.wustl.edu/s/ferguson/page/home> [access: 28.08.2025].
- Douglas J., Ballin M., Lapp J., *Introduction: Special Issue – Toward Person-Centered Archival Theory and Practice*, “Archivaria” 2022, vol. 94, pp. 5–21.
- Ernst W., *Digital memory and the archive*, Minneapolis 2013.
- Eskildsen K.R., *Inventing the archive: Testimony and virtue in modern historiography*, “History of the Human Sciences” 2013, vol. 26(4), pp. 8–27.
- Hartman S., *Venus in two acts*, “Small Axe” 2008, no. 26(2), vol. 12, pp. 1–14.
- Haskins E., *Between Archive and Participation: Public Memory in a Digital Age*, “Rhetoric Society Quarterly” 2007, vol. 37, pp. 401–402.
- Hedstrom M., Jacobsen T., Punzalan R.L., *Invoking “collective memory”: mapping the emergence of a concept in archival science*, “Archival Science” 2013, vol. 13, pp. 217–251.
- Herman P., *The heroic study of records: The contested persona of the archival historian*, “History of the Human Sciences”, 2013, vol. 26(4), pp. 67–83.
- House van N., Churchill E.F., *Technologies of Memory: Key issues and critical perspectives*, “Memory Studies” 2008, vol. 1(3), pp. 295–310.
- Jenkinson H., *A Manual of Archive Administration*, London 1937.
- Ketelaar E., *Tacit narratives, The meanings of archives*, “Archival Science” 2001, vol. 1, pp. 131–141.
- Maemura E., Worby N., Milligan I., Becker C., *If these crawls could talk: Studying and documenting web archives provenance*, “Journal of the Association for Information Science and Technology” 2018, vol. 69(10), pp. 1223–1233.
- Millar L., *Discharging our Debt: The Evolution of the Total Archives Concept in English Canada*, “Archivaria” 1998, vol. 46, pp. 103–146.
- Milligan I., *Averting the digital dark age. How Archivists, Librarians, and Technologists Built the Web a Memory*, Baltimore 2024.
- Piggott M., *Archives and Memory* [in:] *Archives: recordkeeping in society*, eds. S. McKemmish, M. Piggott, B. Reed, F. Upward, Wagga Wagga 2005, pp. 299–328.
- Scholze F., *Securing traces in the digital stream, web archiving as cultural memory task*, “Zeitschrift für bibliothekswesen und bibliographie” 2025, vol. 72(2), pp. 1–4.
- Schwartz B., *Abraham Lincoln and the forge of national memory*, Chicago 2000.

- Schwartz J.M., Cook T., *Archives, records, and power: The making of modern memory*, "Archival Science" 2002, vol. 2, pp. 1–19.
- Sturken M., *Tangled memories: The Vietnam War, the AIDS epidemic, and the politics of remembering*, Berkley 1997.
- Summers E., *Appraisal Talk in Web Archives*, "Archivaria" 2020, vol. 89, pp. 70–103.
- Tesini M., Zambonardi L., *When Memory Exceeds History: The Emerging Visual Internet Archive on the Cultural Revolution*, "Information, Communication and Society" 2022, vol. 25(8), pp. 1067–1081.
- The collective memory reader*, eds. J. Olick, V. Vinitzky-Seroussi, D. Levy, Oxford 2012.
- The September 11 Digital Archive, Saving the History of September 11, 2001, <https://911digitalarchive.org> [access: 26.09.2025].
- Wallot J.-P., *Building a living memory for the history of our present: New perspectives on archival appraisal*, "Journal of the Canadian Historical Association" 1991, vol. 2, pp. 263–282.
- Wieviorka A., *The Era of the Witness*, New York 2006.
- 858: An Archive of Resistance, <https://858.ma/> [access: 28.07.2025].