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Future Pasts: Web Archives and Public History as Challenges for Historians of Education in Times of COVID-19

Abstract: The COVID-19 pandemic has not only sparked a renewed interest in history; it has also focused our attention on how the present can be historically preserved. Therefore, it is safe to predict that the COVID-19 crisis and its documentation will be analyzed by future historians, and it will bring about methodological and technological changes that affect our ways of working as historians of education. This chapter will examine the following: First, it looks at some basic characteristics of web archives and how they challenge our work as historians. Second, it offers reflections on different modes of archival access and on how this may affect current concepts of the past. Third, the chapter discusses how web archives relate to public history and, next, introduces the Education & Pandemics Archive launched by the International Standing Conference for the History of Education (ISCHE). The chapter will also provide preliminary insights into how web archives may affect our work as historians of education. Web archives offer different structures, opportunities for different interactions and technological environments. They can be characterized by collaborative processes by networked data within a flattened structure, and by interconnected hardware and software environments. Web archives are user-friendly, flexible and invite us to get involved and to develop new historical dimensions.

Keywords: COVID-19, web archives, collaboration, mediation, community response

The human response to the virus has been to find to limit contamination, complemented by techno-optimistic hopes about tracing apps and the race to achieve herd immunity through a vaccine. Yet as an underlying potentiality, the virus is concretely *there* as a gigantic distributed entity that implies a number of obstructions to a linear temporality moving forward.

Henriette Steiner and Kristin Veel, Touch in Time of Corona (2021).

Introduction

The COVID-19 pandemic has not only posed a challenge to society in all kinds of areas, including public and social life, work, consumption, mobility, health systems, technology, and education; it has also demonstrated the limits of human agency. At the same time, the notion of living in an extraordinary present has filled many of us with hope that the COVID-19 crisis will become a historical turning point and serve as a stimulus and encouragement to work towards better, post-anthropocentric futures and new ecological relations.

During the "second wave" of the COVID-19 pandemic, which led to lockdowns in many parts of the world in 2020 and 2021, the German government released three short videos entitled #besonderehelden to encourage people to stay at home. While the videos were aimed at the general public, they specifically targeted voung adults in their late teens or early twenties. The hashtag #besonderehelden ("special heroes") was circulated on Twitter and, indeed, the videos were soon given English subtitles and began to draw worldwide attention on social media. A tweet by Canadian Prime Minister Justin Trudeau featuring one of the videos received some 16,000,000 likes within 15 hours (@JustinTrudeau, November 15, 2020).

The videos project the COVID-19 pandemic into the past of a potential future. This past, in turn, is documented through biographical interviews with an older generation that is imagined having been young and heroic in 2020. These fictional memories also feature a COVID-19 album made in 2020, an artifact presenting the COVID-19 pandemic as a remarkable past that, in the videos, is used to generate narratives connecting different generations and dimensions in time. The ironic quintessence of the videos is that staying at home and doing nothing was the extraordinary contribution of the younger generation during the fight against the COVID-19 pandemic. The everyday lives of the young COVID-19 heroes were defined by being lazy, eating take-out food, participating in digital communities, and sitting on the sofa or lying in bed while isolating physically, alone or with a partner or close friend. The videos were made in the style of war testimonies; however, the "weapons" and "heroic" virtues of the young COVID-19 generation are somewhat surprising: in the videos we are told that it is passivity and patience that made these young men and women stand out.

^{1 &}quot;Videos der Bundesregierung #besonderehelden – Zusammen gegen Corona," Die Bundesregierung, accessed July 29, 2022, https://dserver.bundestag.de/btd/19/257/1925769.pdf.

The German video clips suggest that much like a war, the COVID-19 crisis was and is a threatening, extraordinary, and critical moment in history. With the continuing spread of the pandemic, both politicians and scientists around the world have been adopting a kind of wartime rhetoric by suggesting that the people must stand united and heroically fight the virus.² War and pandemics are made to relate to and mirror each other. Indeed, as early as 1947, Albert Camus, in his novel La peste (The Plague), used a contagious virus as an allegory for the horrors caused by the German invasion and the Second World War. The wartime rhetoric of the COVID-19 crisis is also heightened by the fact that most propaganda has concentrated on the safety and internal unity of nationstates while ignoring the global geographies of the crisis, the immense diversity of vulnerable populations, and the related inequalities and hardships.³ In the meantime, national vaccination campaigns have been rolled out and governments have been competing as to their achievements in fighting the crisis while producing new internal divisions - such as, for example, between vaccinated and unvaccinated people - and failing to show solidarity with the Global South.

As has been pointed out, the widespread rhetoric of war has also raised awareness of living in an extremely threatening moment in history. Viral diseases and wars are perceived as catastrophes of the same kind: they both force us to face up to our vulnerability, ignorance, and lack of foresight; they both elicit horror, monotony, and exhaustion; and they both make it difficult for us to envisage better futures from which we can look back and celebrate our achievements.4 This may explain why the COVID-19 crisis quickly prompted people to discover how previous generations dealt with similar health crises. The plague and the socalled Spanish flu have been held up as prominent examples of historical threats to humanity. People have been interested in how health crises were fought in the past, how isolation and new hygiene measures impacted both private and public lives, and how nation states, legal authorities, and international organizations evolved into the primary agents of control. However, the selection of historical reference points has been highly subjective, and recent pandemics (e.g., swine

² See: Henry Irving, "What the Second World War Tells Us about Enlisting 'the People' in the Fight against Covid-19," School of Cultural Studies and Humanities Blog, March 29, 2020, accessed July 22, 2022. https://www.leedsbeckett.ac.uk/blogs/school-of-cultural-studiesand-humanities/2020/03/fight-against-covid19/.

³ See, e.g., Priscilla Wald, Contagious: Cultures, Carriers, and the Outbreak Narrative (Durham, NC: Duke University Press, 2008).

⁴ Elisabeth Bronfen, Angesteckt: Zeitgemässes über Pandemie und Kultur (Basel: Echtzeit, 2020).

flu, HIV/AIDS, etc.) have generally not been part of the picture. Much like colonial concepts of infection, disease has been represented as a distant and alien external threat requiring a collective (national) change in behavior, containment, and immunization, rather than something that can bring about structural ecological and social change at the global level.⁵

The COVID-19 pandemic has not only sparked a renewed interest in history and in how human health affected all aspects of societies in the past; it has also focused our attention on how the present can be historically preserved in order to become part of public debate and a fruitful future harvest. History departments, cultural organizations, national archives, and museums worldwide have started discussion forums and initiatives to gather and create collective memories of individual and community responses to COVID-19. Indeed, the COVID-19 crisis has marked the launch of numerous open-source web archives collecting experiences of everyday life around the globe.

These initiatives provide an abundance of material documenting how key areas of society have changed during or as a result of the COVID-19 pandemic, although it seems highly likely that the most troubled communities have lacked the technological means to contribute their own experiences and stories. Nevertheless, these archives also make us aware of the fact that individual and local experiences can connect us with distant parts of the world and different social strata – even if the intensity of pandemics, their duration and effects, and their social, political, and economic contexts vary tremendously. In August 2020, the

⁵ Isolation and containment policy in general were and still are measures applied towards those who don't belong in times of migration: see, e.g., Rosa Salzberg, *Welcome to Venice: Arriving in the Renaissance City*, accessed September 16, 2021, https://uploads.knightlab.com/story mapjs/553127cc2148d9582332d733c55f7a65/venice-arrival-city/index.html; Rosa Salzberg, "Controlling and Documenting Migration via Urban 'Spaces of Arrival' in Early Modern Venice," in *Migration Policies and Materialities of Identification in European Cities: Papers and Gates*, 1500–2000, ed. Hilde Greefs and Anne Winter (London: Routledge, 2018), 27–45.

⁶ Shiqi Lin, "Archives of the Future: Documentary Impulse in a Time of Crisis," *positions – episteme issue 2: covid-19 pandemic*, accessed September 19, 2021, http://positionspolitics.org/episteme-2-lin/.

⁷ See, e.g., the discussion forum series organized by the Raphael Samuel History Centre, accessed July 22, 2022. https://raphaelsamuelhistorycentre.com/2020/10/14/covid-19-in-historical-perspective-an-in-conversation-series/; for more information on digital COVID-19 archives, see https://covidmemory.lu/; https://coronarchiv.geschichte.uni-hamburg.de/projector/s/coronarchive/page/welcome; and https://cc.au.dk/en/warcnet/warcnet-papers/.

⁸ See, e.g., the information on COVID-19 archives on the website of the International Federation for Public History: Thomas Cauvin, "Mapping Public History Projects about COVID 19," International Federation for Public History, updated April 24, 2020, accessed July 22, 2022. https://ifph. hypotheses.org/3225.

New York Times published an article entitled "In New Jersey, Tanzania, Peru, TV Lessons Replace Online Learning."9 Documenting how TV and educational podcasts, as well as mobile apps, e-learning and education by radio, are used in both poor and wealthy regions of the world, the article vividly brought home the pandemic's educational consequences around the globe.

While it is safe to predict that the COVID-19 crisis and its documentation will be analyzed by future historians, it seems clear that it will bring about methodological and technological changes that affect our ways of working as historians of education. This is what we want to reflect upon in this chapter. We will first look at some basic characteristics of web archives and how they challenge our work as historians. Second, we will reflect on different modes of archival access and on how this may affect current concepts of the past. Third, we will discuss how web archives relate to public history and, next, introduce the Education & Pandemics Archive launched by the International Standing Conference for the History of Education (ISCHE). Finally, we will close with a brief preliminary conclusion on how web archives may affect our work as historians of education in an "age of abundance" ruled by digital technologies. 10

The Structure and Materiality of Web Archives

Made By Us, a group of U.S.-based history and civic organizations, in August 2020 mapped more than 450 COVID-19 crowdsourcing initiatives worldwide, all of them designed to encourage the general public to self-document and share their COVID-19 memories and to upload images, audio files, texts, videos, and other content.¹¹ To visualize the number and locations of COVID-19 web archives, Made By Us placed pin icons on a Google map of the world. This visualization overwhelms the

⁹ Benjamin Mueller and Mitra Taj, "In New Jersey, Tanzania, Peru, TV Lessons Replace Online Learning," New York Times, updated August 20, 2020, accessed 22 July 2022. https://www.ny times.com/2020/08/17/world/coronavirus-television-schools.html.

¹⁰ Ian Milligan, History in the Age of Abundance: How the Web Is Transforming Historical Research (Montreal: McGill-Queen's University Press, 2019); Alexis C. Madrigal, "The Way We Write History Has Changed," The Atlantic, January 21, 2020, accessed July 22, 2022. https://www. theatlantic.com/technology/archive/2020/01/smartphone-archives-history-photography/ 605284/.

¹¹ See Made By Us, "YOU Are the Primary Source," Medium, April 16, 2020, accessed July 22, 2022. https://medium.com/history-made-by-us/you-are-the-primary-source-211c33053bcf; Cauvin, "Mapping Public History Projects." Another collection of COVID-19 web archives is available at https://archive-it.org/collections/13529.

viewers through the sheer quantity of icons; it also shows the global imbalance in the distribution of digital COVID-19 memory projects, mirroring the economic, technological, cultural, and political differences that in turn determine which voices are or will be collected. Thus, the technological divide not only creates an imbalance in terms of what will be recorded by whom, but also which populations will be able to build communities at a distance by participating in the creation of local, national, and international web archives.

Indeed, many scholars stress that web archives are incomplete and problematic because of a lack of accessibility, trust, transparency, and inclusivity. 12 This concerns both technological and knowledge infrastructures, as well as institutional barriers and copyright issues: "In gathering, preserving, curating, publishing, and/or analyzing an intangible and massive born-digital heritage, key stakeholders, whether they are libraries, private companies, scholars or others, face challenges which are particularly critical when they concern the sustainability, accountability and inclusiveness of, and engagement with, web archives."13 Therefore, many smaller web archives and blogs run by universities, individual scholars, and scientific associations avoid copyright conflicts, data loss, and data storage problems by linking some of their contents (e.g., URLs to websites or videos and audios hosted on YouTube, Vimeo, Spotify or Soundcloud) to gigantic digital preservation initiatives like the Internet Archive (IA)/Wayback Machine whose contents are preserved, searchable, and time stamped.14

Historians also need to be aware of the importance of born-digital documents as primary sources and gain a fresh and comprehensive understanding of what should be perceived as historical record. Born-digital and digitized documents invite historians to think about how they relate to non-haptic archives, and to reflect upon different forms of authenticity, orders of historical time, and sensory relationships with historical sources. 15 Moving beyond the idea and authority of the traditional (national) archive therefore involves a major shift in perspective.¹⁶

¹² Nils Brügger and Ian Milligan, The Sage Handbook of Web History (London: Sage, 2019), 5-6; Valérie Schafer and Jane Winters, "The Values of Web Archives," International Journal of Digital Humanities 2 (June 10, 2021): 129-144. https://doi.org/10.1007/s42803-021-00037-0.

¹³ Schafer and Winters, "The Values of Web Archives."

¹⁴ For a brief overview of the history and structure of the Internet Archive, see https://en.wiki pedia.org/wiki/Internet_Archive. The Internet Archive can be accessed at https://archive.org/.

¹⁵ Milligan, History in the Age of Abundance.

¹⁶ Benjamin H. Bratton suggests a vision of the future in which the nation state as an ordering principle of modern historical thinking will be replaced by a rather accidental, "more plural, more contradictory, more composite, and more polyscalar" planetary IT megastructure that is

Traditional archives and museums were and continue to be perceived as physically immobile buildings where historical sources are collected, conserved, restored, and administered in scientifically organized and structured ways. Catalogs, inventories, directories, collection descriptions, and guides on collection-specific archiving procedures (most of which are now online as well) are typical means of supporting, framing, and shaping historical research. During the nineteenth century (and beyond), a central purpose of archives and museums was to represent the glory of the nation state, as well as the causal structure of progress and achievements in time and space.¹⁷ Another fundamental rule of traditional archiving is the principle of provenance defined as the relationship between historical documents and their creators rather than their subject matters. The German philosopher Hans Blumenberg has pointed out that the metaphorical use of the term "source" in historical research directly refers to this obsession with discovering the authentic origin of a tangible document.18

Meanwhile, historians are eager to extend the use and principles of traditional source criticism to born-digital and digitized documents. 19 This also means that we need to reflect on the material and technological changes of archiving. Indeed, one of the most important issues we need to consider is the materiality or physicality of web archives.²⁰ Drawing on the philosophy of technology, media history, and the concept of material hermeneutics, it can be argued that technologies create physical mass, meaning, and memory by means of mediati-

connected by design, interfaces, and machines. See Benjamin H. Bratton, The Stack: On Software and Sovereignty (Cambridge, MA: MIT Press, 2015), 17.

¹⁷ Sina Steglich, "The Archive as Chronotopos in the Nineteenth Century: Towards a History of Archival Times," History and Theory 60, no. 2 (2021): 234-48; Tony Bennett, The Birth of the Museum: History, Theory, Politics (London: Routledge, 1995).

¹⁸ Hans Blumenberg, Quellen, Ströme, Eisberge (Berlin: Suhrkamp, 2012); see also Karin Priem and Lynn Fendler, "'Rationale Trennung' oder 'Marriage d'Amour': Zum Verhältnis von Geschichte und Philosophie in der Erziehungswissenschaft," Zeitschrift für Pädagogik 61, no. 5 (2015): 643–63. According to Priem and Fendler, there are six basic fetishes of modern history: archive, chronology, humanist agent, causality, continuity and progress, and nation-state.

¹⁹ For a wonderful example of teaching students digital source criticism, visit https://ranke2. uni.lu/. See also Stefan Krebs and Tizian Zumthurm, "COVID-19 Digital Memory Banks: Challenges and Opportunities for Historians of Education," Paedagogica Historica, forthcoming.

²⁰ Andreas Fickers, "Authenticity: Historical Data Integrity and the Layered Material of Digital Objects," in Digital Roots: Historicizing Media and Communication Concepts of the Digital Age, ed. Gabriele Balbi, Nelson Ribeiro, Valérie Schafer, and Christian Schwarzenegger (Berlin:

zation.²¹ This also applies to analog media and paper archives. History, after all, is always mediated. What has changed, however, are the media with which we record historical experience, their material nature, and the technological ecologies of web archives that invite infinite (re-)mediation processes.²² Because of these technological properties, web archives can be described as layered and networked data assemblages, and their technological physicality and operational modes differ tremendously from traditional paper archives:

From an etymological perspective, the digital does not refer to the electronic or computerbased processing of information, but to the numerical representation of information in a finite series of discrete elements - ones and zeros. The measurement of the quantity of data in defined units - bytes and bits - dates back to the 1960s [. . .] Data as 'objects' and historical sources thus always have mass and momentum, i.e. their material properties determine both the costs and the physical possibilities or storage, retrieval and use [...] In order to make the information encoded in the bits and bytes readable and usable, transcription and migration, i.e. translation or decoding by computer programs (software) and the transfer of data to different stage media (hardware), are required.²³

The specific materiality of web archives, therefore, is characterized by the "interweaving of hardware and software environments" that is usually not transparent to users and professional historians.²⁴ Indeed, contents of web archives consist of accumulated, mobile, and reproducible files or data and thus are characterized by physical plasticity. Data are curated in the invisible backend and are presented and made searchable by specifically designed interfaces, keywords, tags, and other metadata assigned to the files by the curators of web archives. Similar to the traditional archive, curators' decisions are not always transparent, especially as many web archiving initiatives are not under the auspices of national archives and their conventions. Archivists and professional historians therefore need to understand and critically deal with the specific design of web archives, and they also need to reflect upon the impact of technology on the quality and trustworthiness of born-digital and digitized documents. Digital source criticism and curation also need to look at the provenance of digital documents and add relevant information to the metadata of a file. What has

De Gruyter, 2021), 300. The essay can be downloaded at https://www.degruyter.com/docu ment/doi/10.1515/9783110740202/html.

²¹ Don Ihde, Expanding Hermeneutics: Visualism in Science (Evanston, IL: Northwestern University Press, 1999); see also Fickers, "Authenticity," 303.

²² Jay David Bolter and Richard Grusin, Remediation: Understanding New Media (Cambridge, MA: MIT Press, 1999).

²³ Fickers, "Authenticity," 304.

²⁴ Ibid.

been abandoned in digital web archives, however, is the strict principle of chronologically ordered collections. To the contrary, web archives generally are more permeable systems providing data arranged by themes, keywords and tags within a flattened backend structure and offering interfaces that manage these structures in interaction with users. These interfaces allow users to access the archive, perform searches, and download data sets for the further reproduction or even manipulation of data. In order to be able to check the "integrity and consistency" of historical data and to make productive use of documents in the digital age, historians should consider collaborating with web designers and IT specialists. This way they will learn to feel more familiar with borndigital and digitized historical records, and to embrace more diverse sources and modes of collecting, writing, and presenting history.²⁵

Closeness at a Distance and New Concepts of Thinking about the Past

"Reading is never a placeless activity," writes David N. Livingstone, stressing the influence of spatiality on acquiring knowledge and information.²⁶ The same applies to the users and creators of COVID-19 web archives. Users are situated in physical places, but local curators cannot control the different locations from where web archives are accessed. Given the different localities and geographies of reception and curation, spatiality obviously affects the selection, compilation, reception, and interpretation of born-digital and digitized documents.

In the following section, we briefly want to discuss how users may experience access to digital documents. When visiting traditional archives, we take it for granted that we are able to touch and see "real" documents presented to us in chronological order within specific collections. We experience what is generally referred to as the "aura" of a document. When working in digital environments, direct touch and sight are transformed into touch and sight at a distance: touchpads, touchscreens, keyboards, computer mice, and screens facilitate human interaction with interfaces and provide a kind of nearness that is mediated by the sensorial properties of technologies and networked data.²⁷ Sensorial technologies

²⁵ See, e.g., Paul Frosh, The Poetics of Digital Media (Cambridge: Polity, 2019).

²⁶ David N. Livingstone, "Keeping Knowledge in Site," History of Education 39, no. 6 (2010): 784.

²⁷ Mark Paterson, The Senses of Touch: Haptics, Affects and Technologies, 2nd ed. (Chichester: John Wiley & Sons, 2012), 127-45; see also Don Ihde, "The Experience of Technology: Human-Machine Relations," *Philosophy & Social Criticism* 2, no. 3 (1975): 267–79.

allow us to handle, explore, and manipulate "distant" objects in various ways; we are, for example, able to pull them "close" to us and look at them in detail. Thus, we experience a "presence" that is created by means of technology. The presence of born-digital or digitized sources is, of course, a different kind of presence, but it still attracts us, makes us marvel, and inspires our work as historians.²⁸

Changes in our understanding of proximity, touch, and sight in digital environments correspond to changes in our understanding of causality in time. It could be argued that web archives represent alternative chronotypes within a structure of networked data.²⁹ While traditional archives and their chronological order facilitate linearity, continuity, and progress within a rational structure, web archives represent multilayered networks that make history appear to be fragmented, contradictory, and accidental.

Web archives and memory platforms are living archives and often preserve seemingly fleeting daily experiences of various communities. Recently created web archives that focus on the COVID-19 pandemic are centered around a sense of urgency to capture the present crisis in all its dimensions, according all its elements the same level of significance. These recordings of an exceptional presence make us wonder which future we will face, as the connection and transition between past, present, and future seems to have been fundamentally disrupted.

The impact of a rather unpredictable and even frightening future on our notion of history is the subject of an essay entitled "Historical Futures" by Zoltán Boldizsár Simon and Marek Tamm.³⁰ Challenging our widely established notion of historical time as determined by progress and betterment, Simon and Tamm argue that "today's technoscientific, anthropocentric, and sociopolitical prospects seem to escape human control in several ways" and that this loss of control leads to new concepts of thinking about the past and the future.³¹ They contend that

today, the future looks different than the past to an extent that was simply unimaginable in the modern period. New futures have emerged and have been emerging since the midtwentieth century. These new futures are historical in ways other than scenarios of continuity – progress, development, or, for that matter, decline – that we have been accustomed to in the last two centuries or so.³²

²⁸ Paterson, The Senses of Touch, 145.

²⁹ For a more detailed discussion on the management of historical time through archives, see Steglich, "The Archive as Chronotopos," 245.

³⁰ Zoltán Boldizsár Simon and Marek Tamm, "Historical Futures," *History and Theory* 60, no. 1 (2021): 3–22. https://onlinelibrary.wiley.com/doi/full/10.1111/hith.12190.

³¹ Simon and Tamm, "Historical Futures," 3-4.

³² Ibid., 7.

This implies that modernity and the scholarly work of modern historians no longer has any connection to post-structuralist, and even less to post-anthropocentric, transhuman, and planetary futures. It seems as though a threatening present and the urge to collect as many voices as possible on the COVID-19 crisis in web archives encourage us to question history as it has been written and discussed in the modern era.³³ Both the digital age and the COVID-19 crisis have led to an increased awareness of establishing new dimensions from where we connect to and reflect upon the past.

Web Archives as Public History

Collecting as many voices as possible means establishing collaborative processes with public audiences when preserving, curating, editing, and presenting history. Such collaboration entails negotiating and producing narratives of the past that connect archival sources with their communities and constitute meaning that may challenge archival classification systems and the work of historical experts.³⁴

These principles are also at the core of public history, and it is not surprising that most COVID-19 web archives are labelled as public history projects; they are based on community response and dedicated to the idea of making history together.35

Many concepts of public history are very much dependent on specific recording technologies that allow the massive mediation and circulation of daily experiences and specific moments in public space – in both the analog and the digital era. Elizabeth Edwards' thoughts on "photographs as public history" in her book The Camera as Historian: Amateur Photographers and Historical Imagination may be true for born-digital sources (such as Twitter feeds, podcasts, videos, etc.) as well – that is that digital audio-visual and textual productions may well be

³³ See Priem and Fendler, "Rationale Trennung," 643-63; Ariella Aïsha Azoulay, Potential History: Unlearning Imperialism (London: Verso, 2019); and Madrigal, "The Way We Write History."

³⁴ One of the most cited works in public history is Michael Frisch's A Shared Authority: Essays on the Craft and Meaning of Oral and Public History (New York: SUNY Press, 1990); Nina Simon's The Participatory Museum (Santa Cruz, CA: Museum 2.0, 2010), which is accompanied by an interactive website at www.participatorymuseum.org, is another seminal work of public history; for a post-colonial perspective on deconstructing the abusive power of archives and history, see Azoulay, Potential History.

³⁵ Cauvin, "Mapping Public History Projects."



Figure 1: Landing page of A Journal of the Plague Year (https://covid-19archive.org/s/ar chive/page/welcome).

associated or even equated with the making of public history by preserving an abundance of collective memories. Digital technologies are facilitating practices that we use to record our daily experiences which we then share on social media, in web archives and memory banks addressed at global audiences and users. At least in the global upper and middle classes, digital technologies have become popular tools to preserve historical moments and make them available for future generations. What Edwards writes about amateur photography and the British survey movement at the turn of the nineteenth to the twentieth century can also be said to apply to born-digital mass recordings of our lives during the COVID-19 crisis: "In this way, the past could resonate through the future, multiplying, disseminating, and repeating the existentially unrepeatable."³⁶ Both public history and web archives rely on the effects of mass media as technologies of memory making that enable circulation, articulation, and debate – by spreading historical moments from the local and regional to the national and to the global. This way, web archives as public history projects can establish bonds between communities and to reach out to global audiences and different social groups.

While mass recordings widen the scope of public participation in history making, they are subject to ethical and thematic filters applied by curators

³⁶ Elizabeth Edwards, *The Camera as Historian: Amateur Photographers and Historical Imagination, 1885–1918* (Durham, NC: Duke University Press, 2012), 211.

once they have been submitted to web archives. Furthermore, the aesthetical and operational dimensions of web archives are created by web designers and. as mentioned earlier, their content is searchable by interfaces and the filters provided by them. Both design and interfaces are based on previous decisions that are usually not transparent to users. However, within these limitations, web archives do allow for individual and multiple approaches to the past.

One of the most prominent web archives that was initiated at the start of the COVID-19 crisis in the spring of 2020 is A Journal of the Plague Year, a project of the School of Historical, Philosophical, and Religious Studies at Arizona State University.³⁷ It offers many insights into how closely digital technologies and public history are interconnected, though a considerable amount of data is supposedly submitted by members of the upper and lower middle-classes or collected by curators. The landing page (Figure 1) shows a banner with the different features and functions of the archive. It starts with "Share your story," a page that asks users to submit content and also provides a link to the Spanish version of the archive, which indicates that A Journal of the Plague Year is reaching out to both Americas - north and south - and beyond national borders. The "Welcome" section describes the archive and its aims; it lists the members of the international curatorial team and also includes information on external collections from around the globe that are dedicated to COVID-19. The next section of the archive is called "Browse the stories" and allows the public to search the archive. The advanced item search offers thirteen search filters (e.g., creator, medium, chronology, hashtags, and tags) for finding matching content. For example, a simple full text search for the tag "education" resulted in 3,368 matches. The list of matching items came with short descriptions per item and offered links to websites, journal and newspaper articles, and opinion papers; in addition, one can find student papers, Twitter feeds, podcasts and other oral materials (sometimes including transcriptions), photographs, flyers, and many more. The archive is abundant, and each of the entries is enriched with metadata that also indicate which tags were given by a curator and which by a contributor. Thus, the authority of archiving is divided and contributors' classifications are respected. The next item on the banner of the landing page is a "Global Pandemic Map" that shows the geographical origin of submitted materials. This is followed by "Calls" for specific contributions and a section that includes information about "Exhibits" that were created by members of the curatorial team to highlight specific contributions and their thematic scope. Next there is a section on "JOTPY Workshop Series," a call for collaboration ("Join us"), and a "Map browse" link that filters content-related tags.

³⁷ See https://covid-19archive.org/s/archive/page/welcome.

To sum up, A Journal of the Plague Year confirms that web archives share their data generously, that they are accessible, flexible, and user-friendly, and that they operate across national borders in a spirit of collaboration. Like traditional archives they too are reservoirs for curating exhibitions; however, their content is mediated differently, consists of data sets, and allows remediation and multilayered digital display.

ISCHE's Education & Pandemics Archive as a Collective **Project**

In December 2020, the International Standing Conference for the History of Education (ISCHE) initiated the Education & Pandemics Archive. After several months of hard work, it was ready to be launched and introduced to the public in June 2021 (Figure 2). With the COVID-19 crisis threatening the livelihoods of millions and shining a harsh light on existing inequalities in education, ISCHE only felt it appropriate to start this initiative.³⁸ In addition, ISCHE wanted to establish its own web archive to introduce historians of education to digital source criticism by organizing workshops that would not only offer insights into the hidden features of web archives but also into the functioning of the backend structure, web archiving, and related decisions usually not transparent to users.

The Education & Pandemics Archive was designed and developed by a group of professional web designers and IT specialists based in Milan (Italy) in collaboration with a group of historians of education (two senior scholars and six early-career researchers).³⁹ Work started with a few online meetings and an online questionnaire to gather information and ideas, followed by a first random collection of COVID-19-related material (URLs, Twitter feeds, videos, podcasts, digitized print matter and photographs, and community responses of various formats). Based on initial decisions within the team, the web designers started to develop the front- and backend and to design the user interface and the user submission form. The ISCHE team continued collecting material for the

³⁸ The ISCHE Education & Pandemics Archive has been initiated by the authors of this chapter and was approved by the ISCHE Executive Committee in December 2020. It is funded by ISCHE and the Stichting Paedagogica Historica.

³⁹ The archive is hosted on https://www.ische.org while being fully independent from the ISCHE main website in terms of both data management and design; see https://www. ische.org/education-and-pandemics-archive/#/. The members of the ISCHE Education & Pandemics Archive working group were Karin Priem, Ian Grosvenor, Ami Kobayashi, Lilli Riettiens, Inês Felix, Rafaela Silva Rabelo, Stefanie Kesteloot, and Yver Melchor.

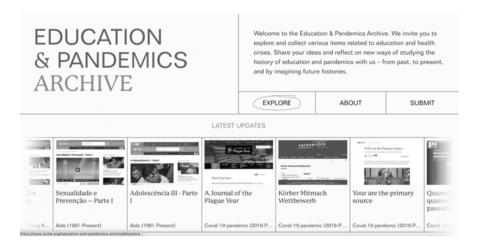


Figure 2: Landing page of the Education & Pandemics Archive (https://www.ische.org/education-and-pandemics-archive/#/).

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Figure 3: Part of the backend of the Education & Pandemics Archive (https://www.ische.org/education-and-pandemics-archive/#/).

archive and had intensive (sometimes daily) discussions online and on Slack about what the interface should look like. Another exchange revolved around the key themes and the final list of keywords and tags, the submission form, etc. The aim was to achieve a long-lasting, simple, and rather general structure that could be extended and changed by users depending on their submissions to the archive. Finally, three historians from the ISCHE team volunteered to curate

the backend that was hosted at airtable.com, a free-of-charge application that can be customized and adapted to different workflows and data collections (Figure 3).

The most difficult decisions the team had to make were defining the themes, keywords, and tags. Most of these discussions are documented on Slack, and the plan is to publish and comment on these exchanges in the near future, as it is important to share a web archive's epistemic structure with its users. The team members working at the backend also shared many thoughts on how their decisions may shape future research and why the web as an archive will influence our future research as historians of education. A key decision of the ISCHE team was to include not only sources that refer to COVID-19 but to extend the scope to other epidemics and pandemics, past and present. As mentioned earlier, historians have looked to previous influenza pandemics to understand how former generations dealt with similar health crises. 40 The so-called Spanish influenza pandemic of 1918-20 has become the global crisis against which COVID-19 is measured. It is estimated that the Spanish flu pandemic infected between twenty and forty percent of the world population, with more than fifty million dead. The Spanish flu had been almost forgotten but was "rediscovered" in recent years by public health specialists studying the avian influenza epidemics in 2005 and 2009. As a result, Guillaume Lachenal and Gaëtan Thomas describe the Spanish flu as an "omnipresent reference in the pandemic preparedness scenarios that have guided global health security in the last two decades."41 However, Lachenal and Thomas also criticize this desire to learn from the past and their research has been described as countering an "over-reliance on the allure of 'pandemic precedents'" by advocating "an enhanced understanding of the capacity of present crises to resist historical interpretation."42 According to Lachenal and Thomas, the current situation deserves something other than "a scholarly 'spot the difference' game between more or less recent pandemic precedents," "stressing analogy, parallels or difference between the . . . crisis" and "embroidering the present crisis into a quasi-mythical structure of panic and quarantine" which has the effect of "smoothing over the intricate historicity of pandemic events." 43 Writing as

⁴⁰ Parts of the following paragraph are similar to a call for papers for a special issue of *Paedagogica Historica* written by the authors of this chapter. The special issue will be forthcoming in 2022.

⁴¹ Guillaume Lachenal and Gaëtan Thomas, "COVID-19: When History Has No Lessons," History Workshop, March 30, 2020, accessed July 22, 2022. https://www.historyworkshop.org.uk/covid-19-when-history-has-no-lessons/.

⁴² Lachenal and Thomas, "COVID-19."

⁴³ Ibid.

medical historians, Lachenal and Thomas focus on explanations and analyses based on cause and effect, similarities and differences, and on precedents that do not "map onto neat narratives." As researchers they have looked bevond influenza pandemics (to include, e.g., HIV/AIDS, SARS, and Ebola) and there are, of course, still other pandemics (measles, smallpox, polio, tuberculosis, legionnaires), each with their own situated histories of content and conjuncture, each with their own historians and historical interpretations that we may want to revise. In The Pandemic Century: A History of Global Contagion from the Spanish Flu to Covid-19, Mark Honigsbaum, after reviewing the last hundred years of epidemic outbreaks, concluded that "the only thing that is certain is that there will be new plagues and new pandemics. It is not a question of if, but when. Pestilences may be unpredictable, but they will recur."44 Certainly, more than 300 new infectious diseases have emerged in the second half of the twentieth century, and there has been, and continues to be, a zoonotic spillover as microbes leap from mammal to human hosts as a consequence of habitat destruction and industrialized agriculture.⁴⁵

These considerations by Lachenal, Thomas, and Honigsbaum also imply the necessity of finding new, more-than-human dimensions to connect to the past and write different histories of education that evolve from historical disruption and do not follow established epistemological pathways of research.

Preliminary Conclusions

This chapter has argued that we need to rethink our concepts of history, archiving, and curating. Web archives offer different structures, opportunities for different interactions, and a different technological environment. They can be characterized by collaborative processes, by networked data within a flattened structure, and by interconnected hardware and software environments. Web archives are user-friendly and flexible; they invite us to get involved and to develop new historical dimensions.

The ISCHE Education & Pandemics Archive came to life during an extraordinary present. However, it is not only dedicated to the COVID-19 crisis but also considers other epidemic and pandemic outbreaks as a series of crises often

⁴⁴ Mark Honigsbaum, The Pandemic Century: A History of Global Contagion from the Spanish Flu to Covid-19 (Cambridge, MA: Penguin, 2020), 283.

⁴⁵ See Andreas Malm, Corona, Climate, Chronic Emergency: War Communism in the Twenty-First Century (London: Verso, 2020).

overlooked in local, national, and transnational histories of education. ISCHE's initiative thus acknowledges what Honigsbaum called the "pandemic century" with its many disruptions and challenges to approaches to history that tend to prioritize humans and human control. 46 While each crisis has its own history, all of them call for post-anthropocentric reflections to explore new historical horizons for the future. In sum, we call for a fresh start in the history of education that reflects on possible shifts in historical perspective. On a technological level, we call for designing flattened and permeable structures of archiving and for preserving and embracing born-digital and digitized sources. More generally, we call for interdisciplinary and collaborative research that includes web designers and IT specialists and for engaging in vibrant and important debates in the postanthropocentric and digital age.

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⁴⁶ A groundbreaking exception that has also inspired historical research is Bruno Latour's actor-network-theory; e.g., Bruno Latour, Reassembling the Social: An Introduction to Actor-Network Theory (Oxford: Oxford University Press, 2005); see also Karin Priem, "Emerging Ecologies and Changing Relations: A Brief Manifesto for Histories of Education after COVID-19," in Paedagogica Historica (Sept. 9, 2022), doi: 10.1080/00309230.2022.2075230.

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