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# Collecting Middle-Class Memories?

The Pandemic, Technology, and Crowdsourced Archives

# TIZIAN ZUMTHURM and STEFAN KREBS

**ABSTRACT:** Early in the COVID-19 pandemic, many groups initiated crowdsourced archives that invite members of the public to upload personal material connected to the pandemic. By archiving and publishing how "ordinary" people experienced and perceived the pandemic, these platforms influence how the pandemic is remembered and how historians will write about it. This article presents the example of covidmemory.lu and compares contributions to this platform from Luxembourg with others from German speaking countries. Analyzing users' thoughts about empty streets and skies and their experiences with computers and phones for work and leisure at home, this article discusses the potential and the limitations of crowdsourced archives for future historians of technology.

Future historians writing about the COVID-19 era will have to deal with an unprecedented amount of source material. It is safe to say that the current pandemic will be documented unlike any other before. Among the many initiatives to preserve material about COVID-19, crowdsourced online archives stand out because their content is published immediately.<sup>1</sup> This paper draws on submissions to our Luxembourg platform covidmemory.lu and similar platforms in Germany, Austria, and Switzerland to discuss three interlinked fields of interest to historians of technology. First, we describe how contributors experienced the absence of various mundane technologies during the first lockdown. The second part explores how contributors embraced digital technologies to work and socialize during the pandemic. Finally, we reflect on how digital technology—hardware and software—shapes crowdsourced archives. Our aim is not to write a (literally) contemporary history of technology during the pandemic, but to

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1. Zumthurm, "Crowdsourced COVID-19 Collections."

highlight what future historians will—and will not—be able to retrieve from crowdsourced archives.

#### Covidmemory.lu: A Crowdsourced COVID-19 Archive

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Covidmemory.lu is "a platform to collect COVID19 related photos, videos, stories, and interviews from/with ordinary people living or working in Luxembourg."<sup>2</sup> It was developed at the Luxembourg Centre for Contemporary and Digital History (C<sup>2</sup>DH). Initiated by our colleague Sean Takats at the start of the first lockdown in March 2020, it went online on April 3, 2020. It allowed users to upload texts and media to document their everyday experiences of the pandemic and explore what others had shared. People are still encouraged to upload. They can do so via a simple online form asking them the date of their experience, their name, and email address (these three fields are compulsory but the latter two are not published), and an optional nickname and location. Following in the tradition of history workshops, rapid response collections like covidmemory.lu aim to counter silences in state archives and secure materials that would otherwise not be preserved.<sup>3</sup>

To date, covidmemory.lu hosts 347 contributions, the vast majority from the first lockdown in spring 2020 and the subsequent period when lockdown measures were lifted. Since September 2020, we have received fewer than seventy contributions, many of them still documenting experiences from the first wave, even though the following period saw many more cases, hospitalizations, and deaths. Roughly half of the entries are based on photographs. There are also creative and reflective texts, cartoons and drawings, links and screenshots, public documents, and videos. About a quarter of the items found on the platform showcase individual creative efforts: poems, pictures, artwork, and hand-sewn masks.

Such "crowdsourced archives" as we propose to call them, about specific events or issues, have become increasingly popular since the emergence of Web 2.0 after the turn of the millennium.<sup>4</sup> In 2008, the Roy Rosenzweig Center for History and New Media launched the open-source software Omeka, its design based on past experience with various crowdsourced archives. Today, many such platforms, including covidmemory.lu, use the expanded version, Omeka S, to collect, organize, and display contributions.<sup>5</sup>

2. "COVID-19 Memories," accessed Feburary 24, 2022, https://covidmemory.lu/.

4. Sheila A. Brennan and T. Mills Kelly, "Why Collecting History Online is Web 1.5," Roy Rozenzweig Center for History and New Media, March 2009, https://rrchnm. org/essay/why-collecting-history-online-is-web-1-5/; Caswell and Mallick, "Collecting the Easily Missed Stories"; Cohen and Rosenzweig, *Digital History*, especially Chap 6; Yakel, "Inviting the User."

5. "Omeka - Project," accessed February 24, 2022, https://omeka.org/about/project/. Also: Sheila, "What's Next for Digital Memory Banks?" Lot 49: Little Bits on History,

<sup>3.</sup> Carter, "Of Things Said and Unsaid"; Haskins, "Between Archive and Participation"; Strasser et al., "'Citizen Science'?"; Thomas, Fowler, and Johnson, *Silence of the Archive*.

The history of this program illustrates how practical needs and technological developments intertwine, also in the humanities, and would make for an illuminating case study.

This paper uses covidmemory.lu as a starting point to exemplify what kind of material is being collected in crowdsourced archives, paying particular attention to contributions that tell us something about technology and culture. To show that ours is not an isolated case, we refer to other crowdsourced archives from the (largely) German-speaking countries that share our open collecting strategy: the *comeback* archive in Austria, the *cor-onarchiv* in Germany, and *corona-memory* in Switzerland.

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### Absent Technologies: Silent Streets and Empty Skies

During the first weeks of the pandemic in 2020, the lockdown changed the public space, as many covidmemory.lu contributors noted. The silence and slowing down in cities, together with related environmental issues, were among the most report-worthy consequences of the measures accompanying the first wave of infections. There are numerous photographs of public spaces without cars or planes. The extraordinary atmosphere is even better captured in the various videos on crowdsourced archives. These contributions illustrate how the omnipresence of technology became palpable through its very absence.

User Kayal crossed Luxembourg City's imposing Grand Duchess Charlotte Bridge by car at lunchtime on March 24, 2020. The scene is described as "ghostly," because "it should be full of cars and buses."<sup>6</sup> User Sonja called her May 4 contribution, consisting of six photographs of various roads in Luxembourg without traffic, "empty streets. . . . apocalypse scenes."<sup>7</sup> Some people described precisely what they found ghostly, apocalyptic, or simply surprising: "A lonely cyclist coming back from his daily exercice [sic] was surprised by the quietness of the area," user drakewla wrote about his trip on April 13 to Croix de Gasperich, the intersection between three of the country's six highways (fig. 1).<sup>8</sup>

The extraordinary nature of the situation becomes especially impressive when you watch videos depicting similar scenes. At 4 pm on May 2,

Museums, Collecting, & Digital Things, May 6, 2013, https://www.lotfortynine.org/2013/05/whats-next-for-digital-memory-banks/.

<sup>6.</sup> Kayal, "D'Roud Breck ouni Autoen . . .," Covidmemory.lu, April 28, 2020, https://covidmemory.lu/memory/393.

<sup>7.</sup> Sonja, "Empty Streets. . . ., Apocalypse Scenes," Covidmemory.lu, May 9, 2020, https://covidmemory.lu/memory/499.

<sup>8.</sup> Drakewla, "Silence at Croix de Gasperich," Covidmemory.lu, April 18, 2020, https://covidmemory.lu/memory/247.

<sup>9.</sup> Anna, "Stille Autobahnen," Comeback, May 7, 2020, https://corona-archiv.unigraz.at/s/ComeBack/item/258.

<sup>10.</sup> Bob Van Zandt, "Silent City – Luxembourg," Covidmemory.lu, June 8, 2020, https://covidmemory.lu/memory/786.

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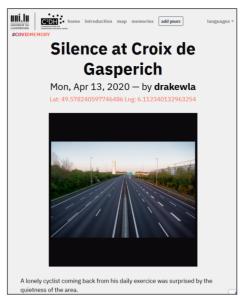


FIG. 1 Noticing Absence: An example of the many contributions of empty public space. (Source: Drakewala, "Silence at Croix de Gasperich," uploaded to covidmemory.lu on April 18, 2020.)

2020, a man stood on a bridge over the famous Brenner Highway connecting Italy and Austria. No car had passed for more than five minutes.<sup>9</sup> In a rather professionally made video, Bob van Zandt takes us through Luxembourg City on March 28 (a Sunday). We hear wind, birds, a fountain, a skateboard, the occasional tram and bicycle, but rarely an engine, except for one street cleaning vehicle. The author comments that the "once bustling city I call home has changed a lot in the last 3 weeks" and says: "I want my city back!"<sup>10</sup> From Brussels comes a shorter video with similar images, but Laure has a different view: "Without the unnecessary cars everywhere, even bigger cities recover their lost beauty, become livable again."<sup>11</sup>

Covidmemory.lu users also draw our attention to surprising aspects of cars' disappearance from the public space. An anonymous user reported on April 7, 2020, from Belval, the University of Luxembourg campus: "usually buzzing with people, cars and buses. There is sound and noise coming from every corner, from people chatting, car horns, restaurants serving delicious meals or bars playing music. The absence of people and cars has made some usually very well-hidden creatures of the night show their faces in broad daylight: a surprisingly large number of very cute looking but super shy stray cats."<sup>12</sup>

11. Laure, "City Rediscovered," Covidmemory.lu, April 19, 2020, https://covid-memory.lu/memory/255.

12. "Stray Cats Come Out of Hiding," Covidmemory.lu, April 10, 2020, https://co vidmemory.lu/memory/155.

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People also found the absence of airplanes noteworthy. As with cars, it was the lack of noise that user Luke found striking on April 12, 2020, when he "saw a Cargolux plane fly by, followed once again by a great silence filled with birdsong."<sup>13</sup> Others noted the absence of contrails and, much like the empty streets, found something utopic in it. "Does it feel like an Arthur C. Clarke novel?" an anonymous user commented on a photograph of a completely blue sky.<sup>14</sup>

The above-mentioned submissions illustrate the astonishment of many users at the absence of once omnipresent technologies in the public space. People were noticing (the absence of) something that usually went unnoticed: the sounds and smells of engines, trails of water vapor, a hectic pace. They were noticing the absence of the permanent presence of technologies. We argue that this perspective and the inherent romanticizing of the pandemic's impact are characteristic of the urban middle classes. It is telling, for example, that public transport, which did not stop operating during the lockdown, hardly ever features in the submissions. We cannot elaborate on that point here, but the observed yearning for less noise and less stress and the welcoming of a slower pace were also documented for the car-free Sundays during the 1970s oil crisis. People in Bavaria, Germany, told cheerful stories of this time, "of idyllic walks on the motorway or of the remarkably clean air in the cities."<sup>15</sup> Swiss families embraced the opportunity for a bicycle outing precisely because they could leave their one or more cars at home.<sup>16</sup>

#### Wearisome Video Calls, Welcome Video Calls: Stay at Home

While cars and airplanes disappeared from our eyes and ears in spring 2020, other technologies gained in significance. At home, the use of smartphones and personal computers took up much space, partly because remote work became the "new normal" for many and leisure activities were facilitated or indeed only possible with digital technologies.

"Remote work came unexpectedly and the dining table became the new two-person office," user JaMu from Heidelberg summarized the main challenge on March 29, 2020.<sup>17</sup> This particular entry comes with a photo-

13. Luke, "Les avions ont disparu," Covidmemory.lu, April 12, 2020, https://covid-memory.lu/memory/182.

14. "No Contrails in the Sky," Covidmemory.lu, April 12, 2020, https://covidmemory.lu/memory/186.

15. Regina Fanderl, "Erster autofreier Sonntag in der Ölkrise," *Kalenderblatt*, Radio Bayern 2, November 25, 2020, https://www.br.de/radio/bayern2/sendungen/kalen-derblatt/erster-autofreier-sonntag-in-der-oelkrise-104.html.

16. "Vor 40 Jahren: Sonntagsfahrverbot in der Schweiz," News-Clip SRF, November 25, 2013, https://www.srf.ch/news/schweiz/vor-40-jahren-sonntagsfahrverbot-in-der-schweiz.

17. JaMu, "Sonntagsfrühstück im Home Office," Coronarchiv, March 29, 2020, https://coronarchiv.blogs.uni-hamburg.de/item/?id=359.

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graph of a small wooden table stacked with two computer screens and keyboards, a laptop, as well as plates, cups, jars and other remains of a "Sunday breakfast."18 Roxy's contribution from Witten in Germany's Ruhr area, called "'Mutti'-Tasking Extrem(!)," conveys a similar image.<sup>19</sup> In a photograph of her home office, we see not only a personal computer, a telephone and office equipment, but also an iron and a sewing machine. During the day, Roxy did the laundry, cooked meals, looked after her children aged one and three, all the while answering emails and attending video calls for work. In the evening, like many others, she sewed masks for friends and family, a frequent task which led to a revival—or renewed visibility—of the sewing machine. Blending professional and family life was not always as funny as in the following contribution.<sup>20</sup> An anonymous user described how their daughter of four was at first fascinated by the insights into the professional world she could now get at home. Technology played a central role: she saw "4 notebooks, headsets, videoconferences" and converted her toy cash register into a computer.<sup>21</sup> But after four days, the conclusion was, "computer is silly, phone calls annoying," and it is not clear whether the user was speaking for themselves or the daughter (fig. 2).

People also quickly appropriated remote work tools to socialize in their leisure time. "In order to meet our friends, we did some ConfCalls at Apero or Lunch Time," explained Reikapix from Bascharage in south-west Lux-embourg.<sup>22</sup> The photograph of an anonymous user aged "80+" from Switzerland reminds us that there is another "virus-free means of contact": the telephone. The contributor added that they had also learned something new, namely how to make video calls.<sup>23</sup> Numerous people described how they used new technologies for the first time. Mango from Reckange-sur-Mess in southern Luxembourg is with an association that usually holds storytelling sessions at primary schools. Together with her daughters, she learned how to create a video and upload it to YouTube.<sup>24</sup>

A great variety of leisure activities during the lockdown occurred via livestream, and this sometimes changed their configuration. The women at the "TV Cham" sports club in central Switzerland did their workouts in

18. JaMu, "Sonntagsfrühstück im Home Office."

19. Roxy, "'Mutti'-Tasking Extrem(!)," Coronarchiv, April 10, 2020, https://coronarchiv.blogs.uni-hamburg.de/item/?id=1310.

20. On the burden of combining care and paid work: Zumthurm and Krebs, "COVID-19 digital memory banks."

21. "Videokonferenz für Kinder," Corona-memoy.ch, accessed February 23, 2022, https://www.corona-memory.ch/s/corona-memory/item/5373.

22. Reikapix, "ConfCall with Friends," Covidmemory.lu, April 22, 2020 https://co vidmemory.lu/memory/307.

23. "Virenfreie Kontaktmöglichkeit," accessed February 23, 2022, https://www.cor ona-memory.ch/s/corona-memory/item/5293.

24. Mango, "Ma première vidéo sur Youtube," Covidmemory.lu, May 8, 2020 https://covidmemory.lu/memory/476.

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FIG. 2 Remote work: A playful entry on how technologies take over in the private space. (Source: "Videokonferenz für Kinder," uploaded to coronamemoy.ch by an anonymous user on an unknown date.)

front of their screens.<sup>25</sup> Sabine from Graz celebrated Palm Sunday 2020 with a livestream from St. Stephen's Cathedral in Vienna.<sup>26</sup> User GL read BBC News via the app, found "a link to download an 'Internet Memorial Service Mobile App' from Hong Kong Authorities to create memorial webpages for lost loved ones," and wondered "which algorithms make these ads appear on my phone in Luxembourg."<sup>27</sup> A simple pen and paper game requires many more technological devices in an online environment, as HerrBolz from Wuppertal explains. The organizer and narrator needed "two iPads, a mobile phone, a stand-alone computer, plus microphone, headset, and streaming options." His conclusion: "Once you see your friends on Skype and the first laugh thunders through your headset, far too loud and in terrible quality, then you know: it was worth the effort!"<sup>28</sup> blue\_ocean\_30 from Plombières in north-east Belgium shares this positive assessment of social media. They had planned a big birthday party, which had to be cancelled: "A dear friend then called me via Skype for a virtual

25. "Frauenriege des TV Cham im Online-Training," Corona-memoy.ch, May 20, 2020, https://www.corona-memory.ch/s/corona-memory/item/1673.

26. Sabine, "Palmweihe von Zuhause," Comeback, April 5, 2020, https://corona-archiv.uni-graz.at/s/ComeBack/item/1133.

27. GL, "Internet Memorial Service Mobile App," Covidmemory.lu, April 13, 2020, https://covidmemory.lu/memory/195.

28. HerrBolz, "Pen & Paper: Man Braucht Stift, Papier und Freunde in einem Raum. Normalerweise," Coronarchiv, April 20, 2020, https://coronarchiv.blogs.uni-hamburg. de/item/?id=1994.

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toast, which finally brought something beautiful to this lonely day. Thanks to social media, I didn't feel quite so alone on this special day after all. And that's how I will remember my 40th birthday forever."<sup>29</sup>

Many of the contributions are ambivalent about the role of digital technologies in the private space during lockdown. The technology of crowdsourced archives partly explains this pattern. Unlike the usual everyday interactions with social media, contributing to rapid response archives is less intuitive and more time consuming. The critical assessment of some digital technologies also has to do with the kind of people that seem to be attracted to our platform and its technology. In our final section, we show that these two points are connected and reflect on how they affect the value of such online archives for future historiography.

## Access and Attraction: The Role of Technology in Crowdsourced Archives

When the Luxembourg government announced the closure of restaurants and bars in November 2020, we asked people on the C<sup>2</sup>DH Facebook page to share their thoughts and experiences on covidmemory.lu. We received twenty-nine comments on Facebook-mostly from people expressing their frustration-but no entries whatsoever on covidmemory.lu. This particular government measure was, unsurprisingly, met with an exceptionally loud public outcry.<sup>30</sup> This example illustrates how technological setups influence the sort of contributions that end up in crowdsourced archives. Once users are logged in, Facebook and similar platforms allow them to react and comment immediately on whatever they encounter. When it comes to events such as restaurant closures, this mechanism seems to encourage spontaneous and emotional reactions. When someone wants to share something on covidmemory.lu or other crowdsourced archives, by contrast, they have to fill in a form, provide personal or anonymized details and accept the legal conditions anew each time they contribute. In the digital space, that is a considerable barrier.

In our case, this technological framing, along with the languages and channels we used to appeal for contributions, had the effect that we seem to receive more contributions from social groups that also tend to be over-represented in traditional archives: the middle class.<sup>31</sup> We deduce this from the domestic settings and technical devices depicted in the photographs, but we

29. blue\_ocean\_30, "J'ai fêté ma quarantaine en quarantaine," Covidmemory.lu, May 1, 2020, https://covidmemory.lu/memory/413.

30. It would be worth analyzing in more detail the social media accounts in COVID-19 archives and actual submissions.

31. Covidmemory.lu is available in Luxembourgish, German, French, and English. We reached out to the public through newspapers, public radio stations, posters, and social media.

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also see from the user statistics that about 50 percent of the contributors used Apple devices.<sup>32</sup> Besides the comparatively numerous entries of a creative nature, their individual perspective is remarkable: only about a quarter of all the contributions presented a negative view of the situation.<sup>33</sup> One explanation for this finding is that most entries were collected during the first wave, when things were still new and interesting. At the same time, people can only adopt such a perspective if they were not suffering overtly negative effects from the health measures. People working in the health sector, in public transport, retail or similar areas, or who had lost their job due to the measures would certainly assess the situation differently.

This observation brings us to one of the crucial questions that remains unanswered in the existing literature. How will crowdsourced archives shape future historiographies? Publications on such rapid response collections have focused on their establishment, maintenance, and outreach practice.<sup>34</sup> Only rarely have they looked at the content, and then often from the viewpoint of therapeutic value or use of the platforms and their connection with individual and collective trauma.<sup>35</sup> This research hints at something that we think should be taken more seriously: When it comes to memory, the digital space is, according to media theorist Wolfgang Ernst, "not primarily about memory as cultural record but rather about a performative form of memory as communication."<sup>36</sup> This shift forces us to rethink how historical knowledge in crowdsourced archives is epistemically constituted and how scholars can reflect on and write about it. Looking at the content of crowdsourced archives and reflecting on where it comes from, as we have done in this paper, is a first step in this direction.

When analyzing contributions on crowdsourced archives, historians and other researchers have to bear in mind that one performative dimension of "memory as communication" in Web 2.0 contributions is that people tend to present themselves in a positive light.<sup>37</sup> In our case, this effect is exacerbated by the fact that crowdsourced archives, like social media platforms, are based on ego-documents. Using such material only, future historians might have a picture of the pandemic that is biased towards the picturesque. However, the platforms also collected more critical voices even if

32. Our Google Analytics shows that 26.4% of all visitors since April 2020 used iOS and 21.6% Macintosh.

33. Such categorization is of course subjective, but the trend is clear: over a third of the contributions to covidmemory.lu take a relatively neutral perspective and another third a clearly or mostly positive one.

34. Atiso and Freeland, "Identifying the Social"; McGrath and Peaker, "Our Marathon."

35. Telles da Silveira, "From Instant History"; Recuber, "Prosumption of Commemoration"; Rivard, "Archiving Disaster."

36. Ernst, Digital Memory, 99.

37. Ernst, *Digital Memory*, 99; Schlosser, "Self-disclosure versus self-presentation"; Zheng et al., "Self-Presentation on Social Media"; Smith and Watson, "Virtually Me."

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On similar lines, digital platforms are also spaces of self-affirmation: by contributing and following the contributions of others, users are assured that they are not alone in whatever they experienced. This is the functional basis that explains why crowdsourced archives, especially on tragic events, also have a curative function.<sup>38</sup> At the same time, these dynamics of self-affirmation involve the risk that contributions simply echo trends in the web and other media, as could be argued for the case of photographs of empty streets. In this case, crowdsourced archives produce sources that could be found elsewhere too and create more of the same. Similarly, the curatorial framing matters. People answer to the wording on the website's call to contribute, respond to the advertisements they encounter, and react to what the curators say in public.

Researchers will have to pay attention to detail in order to meaningfully interpret differences. Historians always value multi-perspectivity, but the exercise of cross-referencing sources becomes even more important when dealing with sources from online platforms. While, through the performative action of their users, crowdsourced archives reflect contemporary trends and narratives, they also contain entries that differ. Diaries and reflective texts as well as contributions with a unique perspective or theme are still plentiful, especially valuable, and difficult to find in other archives.

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#### Bibliography

- Atiso, Kodjo, and Chris Freeland. "Identifying the Social and Technical Barriers Affecting Engagement in Online Community Archives: A Preliminary Study of 'Documenting Ferguson' Archive." *Library Philosophy and Practice* 1377 (2016).
- Carter, Rodney G.S. "Of Things Said and Unsaid: Power, Archival Silences, and Power in Silence." *Archivaria* 61 (2006): 215–33.
- Caswell, Michelle, and Samip Mallick. "Collecting the Easily Missed Stories: Digital Participatory Microhistory and the South Asian American Dig-ital Archive." *Archives and Manuscripts* 42, no. 1 (2014): 73– 86.
- Cohen, Daniel, and Roy Rosenzweig. *Digital History: A Guide to Gathering, Preserving, and Presenting the Past on the Web.* University of Pennsylvania Press, 2006.

38. Telles da Silveira, "From Instant History"; Recuber, "Prosumption of Commemoration"; Rivard, "Archiving Disaster."

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- Ernst, Wolfgang. *Digital Memory and the Archive*. University of Minnesota Press, 2013.
- Haskins, Ekaterina. "Between Archive and Participation: Public Memory in a Digital Age." *Rhetoric Society Quarterly* 37, no. 4 (2007): 401–22.
- McGrath, Jim, and Alicia Peaker. "Our Marathon: The Role of Graduate Student and Library Labor in Making the Boston Bombing Digital Archive." In *Digital Humanities, Libraries, and Partnerships*, edited by Robin Kear and Kate Joranson, 19–29. Elsevier, 2018.

Telles da Silveira, Pedro. "From Instant History to the Infinite Archive: Digital Archiving, Memory and the Practical Past at the Roy Rosenzweig Center for History and New Media." *Historein* 17, no. 2 (2018).

- Recuber, Timothy. "The Prosumption of Commemoration: Disasters, Digital Memory Banks, and Online Collective Memory." *American Behavioral Scientist* 56, no. 4 (2012): 531–49.
- Rivard, Courtney J. "Archiving Disaster: A Comparative Study of September 11, 2001 and Hurricane Katrina." PhD diss., UC Santa Cruz, 2012.
- Schlosser, Ann E. "Self-disclosure versus self-presentation on social media." Current Opinion in Psychology 31 (2020): 1–6.
- Smith, Sidonie, and Julia Watson. "Virtually Me: A Toolbox about Online Self-Presentation." In *Identity Technologies: Constructing the Self Online*, edited by Anna Poletti and Julie Rak, 70–95. University of Wisconsin Press, 2014.
- Strasser, Bruno J., Jérôme Baudry, Dana Mahr, Gabriela Sanchez, and Elise Tancoigne. "'Citizen Science'? Rethinking Science and Public Participation." Science & Technology Studies 32, no. 2 (2019): 52–76.
- Thomas, David, Simon Fowler, and Valerie Johnson. *The Silence of the Archive*. Facet, 2017.
- Yakel, Elizabeth. "Inviting the User into the Virtual Archives." OCLC Systems & Services: International Digital Library Perspectives 22, no. 3 (2006): 159–63.
- Zheng, Anlan, Brittany R. L. Duff, Patrick Vargas, and Mike Zhengyu Yao. "Self-Presentation on Social Media: When Self-Enhancement Confronts Self-Verification." *Journal of Interactive Advertising* 20, no. 3 (2020): 289–302.
- Zumthurm, Tizian, and Stefan Krebs. "COVID-19 Digital Memory Banks: Challenges and Opportunities for Historians of Education." *Paedagogica Historica* forthcoming (published online 2022).
- Zumthurm, Tizian. "Crowdsourced COVID-19 Collections: A Brief Overview." *International Public History* 4, no. 1 (2021): 77–83.

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