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Participatory memory – historiography – research? Exploring representations of the Holocaust on social media

1 Introduction

Right. Now can we please STOP making Holocaust trends on tiktok? It's straight up antisemitism and you all let it slide.¹

This tweet exemplifies reactions to TikTok users who, in the summer of 2020, immersed themselves in the role of Holocaust victims in POV ("Point of View") videos. What followed was global outrage, the deletion of many videos and overwhelmed apologies from the creators. Attempts to contextualise these media practices within the realm of memory culture and to inquire about the creators' intentions were rarely made.² While the State Museum Auschwitz-Birkenau at least suggested using the videos to inspire discussion, "not to shame & attack young people whose motivation seem very diverse", Tobias Ebbrecht-Hartmann and Tom Divon argued: "Let TikTok Creators Pretend to Be Victims of the Nazis. It Strengthens Holocaust Memory".⁴

The later so-called "Holocaust Challenge" is not the only example of how the representation of the Holocaust on social media repeatedly causes controversial reactions. In the past, the remediation of historical figures or the online presence of historical institutions sparked debates on the (limits of) representations of history and/or their appropriateness on social media. Sharing selfies from concentration camp memorials has also been widely criticised – although they are increasingly

¹ Tweet by @aquarosaee, 18 August 2020, https://twitter.com/aquarosaee/status/1295780784159305736. All digital sources were last accessed on 20 October 2023.

² Nicole Froio, "We Asked TikTokers Why They're Pretending to Be Holocaust Victims," Wired UK, 12 August 2020, https://www.wired.co.uk/article/tiktok-holocaust-pov.

³ "Kritik an Tiktok-Trend: Nutzer verkleiden sich als Holocaust-Opfer," DER STANDARD, 27 August 2020, https://www.derstandard.de/story/2000119619725/kritik-an-tiktok-trend-nutzer-verkleiden-sich-als-holocaust-opfer.

⁴ Tobias Ebbrecht-Hartmann and Tom Divon, "Let TikTok Creators Pretend to Be Victims of the Nazis. It Strengthens Holocaust Memory," *Haaretz*, 10 September 2020, https://www.haaretz.com/us-news/2020-09-10/ty-article-opinion/.premium/let-tiktok-users-pretend-to-be-victims-of-the-nazis-it-strengthens-holocaust-memory/0000017f-e9ae-df5f-a17f-fbfe01820000.

seen as a new form of remembrance and documentation practice by visitors, comparable to postcards, guestbook entries and (travel) diaries.⁵

The example of the Holocaust illustrates that in social media established forms of commemoration are being "softened", and normative boundaries are being (con) tested and re-defined through new formats, subjects or communication practices. Some studies on the Holocaust in memory cultures indicate that the discursive potential of social media is often not fully exploited and that established narratives and memory discourses are reproduced on the platforms, which are often tied to (national) gatekeepers such as institutions or states. 6 On the other hand, the variety of history-related references, especially in audiovisual media – the hashtag #holocaust alone has been shared 889,000 times on Instagram and accessed 1.9 billion times on TikTok (as of May 2024) – inevitably gives the impression that not just a canon is being mediated. Instagram accounts like @nichtsophiescholl and initiatives like the Coalition for Pluralistic Public Discourse, but also right-wing influencers make it evident that social media create spaces for negotiation processes. Due to the pluralisation of actors and practices, it is argued that social media have led to a "democratisation" of communication and remembrance regarding the Holocaust. Whether and how this "democratisation", understood as a participation in and cocreation of knowledge (discourses) in the public sphere, occurs in the context of the Holocaust, will be analysed in this chapter by looking at the Instagram and Tik-Tok platforms.

As the terms "democratisation" and "participation" are frequently used but highly contested in discourses around social media, an initial contextualisation is intended. Subsequently, examples and practices will be examined based on research discourses and my own exploratory investigations.⁸ In addition, practical research challenges in dealing with audiovisual platforms will be addressed. Here, "citizen science" will be discussed as a possible participatory research approach that enables collaborative forms of knowledge production not only at the level of narratives, but also in research itself - thus taking into account the changed production and distribution of knowledge in the digital space.

⁵ Iris Groschek, "Social Media an Gedenkstätten zwischen #weremember und #yolocaust: Ein praxisorientierter Beitrag zu Formen der Weitergabe von Erinnerung in digitalen Medien," in Entgrenzte Erinnerung, ed. Anne-Berenike Rothstein and Stefanie Pilzweger-Steiner (Berlin/Boston: De Gruyter Oldenbourg, 2020), 69-89.

⁶ Hannes Burkhardt, Geschichte in den Social Media: Nationalsozialismus und Holocaust in Erinnerungskulturen auf Facebook, Twitter, Pinterest und Instagram (Göttingen: V&R unipress, 2021).

⁷ Christian Bunnenberg, Thorsten Logge and Nils Steffen, "SocialMediaHistory: Geschichtemachen in Sozialen Medien" Historische Anthropologie 29(2) (15 September 2021): 283.

⁸ They are based on my experiences in the project "SocialMediaHistory" which will be discussed further in section 4.

2 Democratisation, participation and social media

The examination of the interplay between social media and democracy is a central area of research, particularly within political and communication science. While earlier research "largely pointed in a prodemocratic direction", 9 at least since the US presidential election in 2016, a noticeable shift can be observed. Social media are now increasingly "blamed for almost everything that is wrong with democracy"from disinformation and filter bubbles to online targeting and even radicalisation.¹⁰ While there are also voices pointing out that "the magnitude and prevalence of the alleged technology-related problems are overblown", 11 some of its structural features nevertheless "pose a threat to a well-informed and inclusive public". ¹² Lafont is primarily referring to the business model of social media platforms here, which involves data collection and algorithmic personalisation and, due to low access thresholds and easy production possibilities for (potentially) everyone, simultaneously entails a decline in the importance of traditional media and their related quality criteria.¹³

The concept of democratisation in the context of social media draws on a myth of the 1980s and 1990s and is also courted by the platform operators. In this sense, the applications of Web 2.0 function as a "realised many-to-many public sphere, in which first knowledge and now actions would be democratised in a global 'participatory culture'". 14 In this process "[e]arly conceptions of digital democracy as a virtual public sphere or civic commons have been replaced by a new technological optimism for democratic renewal based upon the open and collaborative networking characteristics of social media". ¹⁵ Their open nature thus facilitates "what Charles Leadbeater (2008) called the 'mass-collaboration' of

⁹ Joshua A. Tucker and Nathaniel Persily, "Introduction," in Social Media and Democracy: The State of the Field, Prospects for Reform, ed. Nathaniel Persily and Joshua A. Tucker (Cambridge: Cambridge University Press, 2020), 1.

¹⁰ Helen Margetts, "9. Rethinking Democracy with Social Media," The Political Quarterly 90(1) (2019): 107.

¹¹ Tucker and Persily, "Introduction," 2.

¹² Christina Lafont, "Deliberative Demokratie nach der digitalen Transformation," APuZ 73(43-45) (20 October 2023): 17. Own translation.

¹³ Lafont, "Deliberative Demokratie," 11–12.

¹⁴ Kurt Imhof, "Demokratisierung durch Social Media?," in Demokratisierung durch Social Media?: Mediensymposium 2012, ed. Kurt Imhof u. a. (Wiesbaden: Springer Fachmedien Wiesbaden, 2015), 16. Own translation.

¹⁵ Brian D. Loader and Dan Mercea, "Networking Democracy?," Information, Communication & Society 14(6) (1 September 2011): 757.

individuals and groups who become the source of new innovations and ideas in democratic practices" - or in the case of addressing the Holocaust, of history and memory (practices).

According to Cayce Myers and James F. Hamilton, "the democratic possibilities for social media" can be understood as a new genre for "historical research, composition, and representation" that "creates a new way to rhetorically participate within culture". 18 This development is in continuity with earlier efforts to democratise historical work, that emerged especially since the 1960s and, in the form of history associations and workshops, formed a "counter-movement to the established forms and formats of academic and media historiography". 19 Considering the participatory potential of social media in general, the authors' hope that social media could contribute to a historical representation that is more inclusive, diverse and dialogic²⁰ does not seem to be entirely feasible. Although these "open up unprecedented opportunities for their users to participate in the social public sphere", ²¹ "internet use in general as well as active contribution and participation [...] are unequally distributed"²² due to technical, financial, personal, or structural reasons.

Even on "participatory platforms, hierarchies and differences are formed that give some users more opportunities than others". 23 Wulf Kansteiner therefore is right in pointing out that "the new media of collective remembrance are often embedded in traditional power structures". ²⁴ It is especially the platform companies, driven by capitalist exploitation interests, that have a governing role here, as their technical, infrastructural and regulatory frameworks determine how participation can take place. 25 Jan-Hinrik Schmidt calls that a "participation paradox", as companies like Meta and Bytedance provide communication and

¹⁶ Loader and Mercea, "Networking Democracy?," 759.

¹⁷ Cayce Myers and James F. Hamilton, "Open genre, new possibilities: democratizing history via social media," Rethinking History 19(2) (3 April 2015): 1.

¹⁸ Myers and Hamilton, "Democratizing history," 7.

¹⁹ Bunnenberg, Logge, and Steffen, "SocialMediaHistory," 278; "Democratizing history," 3.

²⁰ Myers and Hamilton, "Democratizing history," 9-12.

²¹ Jan-Hinrik Schmidt, Social Media, Medienwissen kompakt (Wiesbaden: Springer Fachmedien, 2013), 92. Own translation.

²² Schmidt, "Das Partizipationsparadox," 79-80. Own translation.

²³ Schmidt, "Das Partizipationsparadox," 77. Own translation.

²⁴ Wulf Kansteiner, "Transnational Holocaust Memory, Digital Culture and the End of Reception Studies," in The twentieth century in European memory: transcultural mediation and reception, ed. Tea Sindbæk Andersen and Barbara Törnquist Plewa, European studies, Volume 34 (Leiden; Boston: Brill, 2017), 310.

²⁵ Schmidt, "Das Partizipationsparadox," 87.

participation opportunities, but "allow their users little or no co-determination". ²⁶ Victoria Grace Walden therefore emphasises that "[c]elebratory hopes for participatory media futures" have now given way to more critical evaluations, stating that the "Web 2.0 has not been as successful in creating participatory cultures as hoped". 27 Following Barney et al. and numerous others, she points out that we nevertheless already live in a "participatory condition": 28 "Where institutions, by which they mean large media corporations, but we could also include museums, can go wrong is by thinking that participation is about granting users agency [...] rather than respecting and acknowledging them as already actants of memory and social change". 29

For the political context, Helen Margetts cautions that we "need to stop denigrating tiny acts and extend our idea of what is democratic participation". 30 She emphasises that "the key difference that social media have brought to the democratic landscape is a raft of new activities which are characterised by being really small, extending below the bottom rung of the ladder of participation". 31 Accordingly, in the context of the representation of the Holocaust, not only posts but also likes, comments or shares can be understood as responsive and participatory acts that involve users in a "process of memory work" and make them part of a "memory of the multitude": "[A]ll over the place, scattered yet simultaneous and searchable: connected, networked, archived". 33

3 Holocaust and social media

It is not surprising that the participative possibilities are also the subject of many studies on Holocaust memory, which has a long tradition of dealing with

²⁶ Schmidt, "Das Partizipationsparadox," 89. Own translation.

²⁷ Victoria Grace Walden, "Afterword: Digital Holocaust Memory Futures: Through Paradigms of Immersion and Interactivity and Beyond," in Digital Holocaust Memory, Education and Research, ed. Victoria Grace Walden (Cham: Springer International Publishing, 2021), 284.

²⁸ Walden, "Afterword," 285.

²⁹ Walden, "Afterword," 285.

³⁰ Margetts, "Rethinking Democracy," 120.

³¹ Margetts, "Rethinking Democracy," 108.

³² Tobias Ebbrecht-Hartmann, "Hashtags, Stories, Videomemes. Die Erinnerung an den Holocaust auf TikTok und Instagram," in Digital Memory: Neue Perspektiven für die Erinnerungsarbeit, ed. Iris Groschek and Habbo Knoch (Göttingen: Wallstein Verlag, 2023), 160.

³³ Andrew Hoskins, "Memory of the multitude: the end of collective memory," in Digital memory studies: media pasts in transition, ed. Andrew Hoskins (New York: Routledge, Taylor & Francis Group, 2018), 86.

the digital.³⁴ The call for the conference, which preceded this essay, also states that internet applications in particular "live from the broad participation of the public". 35 From a media archaeology perspective, Walden points out that participation is not a new phenomenon, "but digital technologies have extended its possibilities". 36 In social media, the blurring of distinct roles of recipients and producers shows the "tension between institutional authorial control and the consumers' desire to engage with history on their own terms and according to their own narrative/aesthetic preferences". 37 Beyond that, the platforms "facilitate a global dialogue about the meaning of the Holocaust in the present, allowing for a nuanced understanding of its implications". ³⁸ Eva Pfanzelter therefore describes them as a "paramount example for transcultural mediation processes between history and memory, between commemoration, technology and culture, between institutionalized and public history". 39 The emerging (participatory) practices are constantly placed in relation to other medial predecessors – be it analogue Holocaust culture, 40 film and television 41 or "forms of play". 42 It can be observed that not only the digital Holocaust discourse, despite all expansion of previous boundaries of representation, consequently always follows "well known pathways in terms of aesthetics and historical narrative traditions". 43 Examples like the remediation of historical figures indicate that scholarly criticism and social negotiations also have their iterations. The concerns raised in 2009 regarding trivialisation, blurring of fact and fiction and the absence of contex-

³⁴ For the state of research, see Eva Pfanzelter, "Performing the Holocaust on social networks: digitality, transcultural memory and new forms of narrating," Kultura Popularna 1(50) (1 January 2017); 136–151; Burkhardt, Geschichte in den Social Media; Victoria Grace Walden, ed., Digital Holocaust Memory, Education and Research (Cham: Springer International Publishing, 2021).

³⁵ https://www.ehri-project.eu/registrate-first-ehri-conference-connected-histories-memoriesand-narratives-holocaust-digital-space.

³⁶ Walden, "Afterword," 285.

³⁷ Wulf Kansteiner, "The Holocaust in the 21st century: digital anxiety, transnational cosmopolitanism, and never again genocide without memory," in Digital memory studies: media pasts in transition, ed. Andrew Hoskins (New York: Routledge, Taylor & Francis Group, 2018), 114.

³⁸ Stefania Manca, Juliana Elisa Raffaghelli and Albert Sangrà, "A Learning Ecology-Based Approach for Enhancing Digital Holocaust Memory in European Cultural Heritage Education," Heliyon 9 (2023). doi:10.1016/j.heliyon.2023.e19286.

³⁹ Eva Pfanzelter, "Performing the Holocaust on social networks: digitality, transcultural memory and new forms of narrating," Kultura Popularna 1(50) (1 January 2017): 137.

⁴⁰ Kansteiner, "Digital Anxiety," 114.

⁴¹ Ebbrecht-Hartmann, "TikTok und Instagram," 153.

⁴² Carmelle Stephens, "Playing Pretend on Social Media," in Digital Holocaust Memory, Education and Research, ed. Victoria Grace Walden (Cham: Springer International Publishing, 2021), 237-265.

⁴³ Pfanzelter, "Performing the Holocaust on social networks," 146.

tualisation in the Facebook profile of Holocaust victim Henio Zytomirski, 44 were articulated in nearly identical terms in response to the Instagram profile of German resistance fighter Sophie Scholl (@ichbinsophiescholl) in 2021. What is noteworthy here is not so much the existence of traditions in media criticism but rather that such formats are still perceived as innovative and novel, even after nearly 15 years of practice.45

Historical scholarship in particular is only slowly tapping into social media (also and especially for other subject areas). Meanwhile, in Holocaust and Memory Studies, there is an increasing tendency to view new practices of remembering and re-presenting less critically or problematic. Instead, particularly destructive phenomena, such as antisemitism, historical revisionism or fake news, are addressed as issues demanding collective reaction from creators, educators and platforms. 46 Walden points out that there is still little reflection on the interrelationship between research and practice, as research so far "rarely foregrounds research practices, in terms of how Holocaust memory and education are informed by research, how researchers create their digital outputs or how user research is developed to analyse the success of initiatives". ⁴⁷ Interdisciplinary perspectives could also be expanded, as the predominantly journal-based publication culture on digital holocaust memory "has limited discussion so far into silos that repeat the broader divides of digital humanities, software studies, and media and cultural studies". 48 Tirosh and Mikel-Arieli further conclude that "'marginal', peripheral, non-hegemonic, alternative Holocaust narratives"49 have rarely been addressed in articles to date. In the context of social media, the challenge is that such narratives and practices are sometimes difficult to access due to algorithmic pre-structuring, language-filtered search results or vast amounts of data. As section 5 illustrates, research on audiovisual platforms in particular is associated with technical, legal and ethical challenges, which also result

⁴⁴ Eva Pfanzelter, "Inszenierung – Vernetzung – Performanz: Holocaust-Repräsentationen im Netz," in Holocaust'-Fiktion, ed. Dirk Rupnow and Iris Roebling-Grau (Brill Fink, 2015), 63-83.

⁴⁵ Mia Berg and Christian Kuchler, ed., ichbinsophiescholl: Darstellung und Diskussion von Geschichte in Social Media (Göttingen: Wallstein Verlag, 2023).

^{46 &}quot;Addressing Holocaust Distortion in Social Media. Guidelines and recommendations for memorials and museums," https://holocaust-socialmedia.eu/wp-content/uploads/Addressing-Holo caust-distortion-website.pdf.

⁴⁷ Victoria Grace Walden, "Defining the Digital in Digital Holocaust Memory, Education and Research," in Digital Holocaust Memory, Education and Research, ed. Victoria Grace Walden (Cham: Springer International Publishing, 2021), 2.

⁴⁸ Walden, "Defining the Digital," 4.

⁴⁹ Noam Tirosh and Roni Mikel-Arieli, "What we talk about when we talk about digital Holocaust memory: A systematic analysis of research published in academic journals, 2010-2022, "The Communication Review 26(2) (3 April 2023): 159.

in a disproportionate amount of previous research literature being dedicated to platforms such as Twitter, blogs, Facebook or Wikipedia, which allow easier access to data, and their textual contents. Ebbrecht-Hartmann emphasises that it is the modes of representation on visual platforms that "can be particularly related to the muchdiscussed challenges of an aesthetic after Auschwitz". 50 These include forms of "presencing, which embeds the images of memory and history videos into a relational network of contemporary and often self-referential everyday documentation", as well as fragmentary and segmented posts that can be linked through hashtags, multimodal compositions and overlays.⁵¹ The following section will therefore present specific examples from Instagram and TikTok.⁵² The selected dimensions of *Memory*, Historiography and Research are of course not distinct, but are intended to serve as spotlights that enable an approximation of a participatory field.

3.1 Memory

Social media platforms serve as important 'memory ecologies', enabling diverse memory practices such as posting, linking and sharing content. The specific characteristics of each platform influence how they are used to negotiate, commemorate and educate about the Holocaust, providing multiple avenues of engagement beyond traditional public discourse and formal education.53

Media have always stored, conveyed, and structured memory and history. As media evolution progresses, the division of collective memory into a generational, institutionally transmitted cultural "long-term memory" and an everyday, informal "short-term memory" is becoming increasingly blurred.⁵⁴ In social media this gives rise to a convoluted memory culture⁵⁵ which is characterised by a fragmentation of individual and collective memories.⁵⁶ This development has been dis-

⁵⁰ Ebbrecht-Hartmann, "TikTok und Instagram," 152. Own translation.

⁵¹ Ebbrecht-Hartmann, "TikTok und Instagram," 152. Own translation.

⁵² The focus will be on non-institutional actors. For ethical reasons, contributions from private users will only be discussed in abstract terms and not cited.

⁵³ Manca et al., "Enhancing Digital Holocaust Memory."

⁵⁴ Jan Assmann, "Das kulturelle Gedächtnis," Erwägen, Wissen, Ethik 13(2) (2002): 239-247.

⁵⁵ Ebbrecht-Hartmann, "TikTok und Instagram," 151.

⁵⁶ Roberta Bartoletti, "Memory and Social Media: New Forms of Remembering and Forgetting," in Learning from Memory: Body, Memory and Technology in a Globalizing World, ed. Bianca Maria Pirani (Newcastle: Cambridge Scholars, 2011), 82-111.

cussed under a variety of keywords⁵⁷ such as "prosthetic memory", ⁵⁸ "i-memory", ⁵⁹ or "co-historicity".60

The "mediatisation of memory" is based on ideas of Maurice Halbwachs and Pierre Nora, who have argued that history and memory are continuously renegotiated through media in the present. 62 Socially or institutionally predetermined relevance structures are supplemented, if not replaced, by the interests and needs of the users – but also those of the platform operators. 63 In the digital ecosystem, they have an "immense influence on what will be remembered". 64

One example of the diverse debates and reaction processes on the platforms is the Instagram account @auschwitzfitpics. From January to March 2019, the account was used to repost selfies taken at the Auschwitz-Birkenau Museum. Although the identity of the account owner and their intentions were not explicitly disclosed, it becomes apparent that the account served as a critique of the users' media practices, which can also be seen in projects such as YOLOCAUST by Shahak Shapira. While the predominant sentiment expressed by commentators was one of dismay and condemnation of the featured images, criticism was also directed towards the account. Frequently, this was based on the misunderstanding that the account operator had also created the images. What can also be observed is explicit criticism regarding the practice of exposing other users through reposts. This was often combined with a call to other users to report the page – even four years after the last post. Notably, in contrast to YOLOCAUST, the criticised users and

⁵⁷ For an overview of the different terms used to describe forms of digital memory, see Pfanzelter, "Performing the Holocaust on social networks"; Pfanzelter, "Inszenierung – Vernetzung – Performanz".

⁵⁸ Margaret-Anne Hutton, "Putting Metaphor Centre-Stage: A Case Study of Alison Landsberg's 'Prosthetic Memory," Memory Studies 15(1) (1 February 2022): 230-242.

⁵⁹ Tobias Ebbrecht-Hartmann and Lital Henig, "I-Memory: Selfies and Self-Witnessing in #Uploading Holocaust (2016)," in Digital Holocaust Memory, Education and Research, ed. Victoria Grace Walden (Cham: Springer International Publishing, 2021), 213-235.

⁶⁰ Martin Pogačar, "Digital heritage: co-historicity and the multicultural heritage of former Yugoslavia," Dve domovini. Razprave o izseljenstvu. Two Homelands. Migration Studies 39 (2014): 111-124.

⁶¹ Andrew Hoskins, "29. The mediatization of memory," in Mediatization of Communication, ed. Knut Lundby (Berlin/Boston: De Gruyter, 2014), 661-680.

⁶² Pfanzelter, "Inszenierung - Vernetzung - Performanz," 74.

⁶³ Mia Berg and Andrea Lorenz, "Doing (Digital) History - Kollaborative Formen der Erforschung von Geschichte in sozialen Medien im Projekt #SocialMediaHistory," 7 March 2022, https://doi.org/10.5281/ZENODO.6327925.

⁶⁴ Angeliki Tzouganatou and Jennifer Krueckeberg, "FROM MONOPOLIZING MEMORY TO CO-CREATING IT: OPENNESS AND EQUITY IN THE DIGITAL ECOSYSTEM," AoIR Selected Papers of Internet Research, 15 September 2021, https://doi.org/10.5210/spir.v2021i0.12255.

their photos were not anonymised. Due to the limited outreach of the account, a lack of media attention and the fact that reposts on Instagram are only possible via screenshots, effectively severing the link to the original image creators, it is likely that only a small number of those depicted were aware of their presence on the account. Occasionally, however, they were tagged by other users under the corresponding post.

The Auschwitz Memorial's Instagram account (@auschwitzmemorial) exemplifies that reposts do not necessarily have to be problematic. Almost daily the account shares user photos – not selfies – of the historical site, thereby increasing the visibility of these users and their perspectives through tags. However, these are not traditional reposts, but rather a practice of updating and (re)contextualisation. In the image captions, emotional accounts of visiting the historical site are, for instance, replaced by information on historical contexts or contemporary poems. Here, Ebbrecht-Hartmann's observation of social media as a space with a non-hierarchical structure is evident, as it "invites a participatory form of remembering and encourages participants to react and respond". 65 Interpretation and remembrance of the historical site are continually reshaped, negotiated and discussed between users and the institution.

Another level of negotiation occurs between users and platforms, in terms of content and features, but also on the policy level. Divon and Ebbrecht-Hartmann have elaborated how "TikTok's features and functions can be adopted and appropriated to the specific needs of individual and institutional creators". 66 They identified six modes of historical storytelling on TikTok: Commemorative, Responsive, Explanatory, Educational, Visit, and Testimony. These various modes also became necessary because "remembering as a participatory practice" does not just have positive implications. The spread of disinformation also functions as a "populist collective action"⁶⁷ and "participatory effort", taking "advantage of the affordances and dynamics of social media". 68 Numerous studies have shown that Holocaust de-

⁶⁵ Ebbrecht-Hartmann, "TikTok und Instagram," 162. Own Translation.

⁶⁶ Tobias Ebbrecht-Hartmann and Tom Divon, "Serious TikTok: Can You Learn About the Holocaust in 60 Seconds?," Digital Holocaust Memory (blog), 24 March 2022, https://reframe.sussex.ac.uk/ digitalholocaustmemory/2022/03/24/can-you-learn-about-the-holocaust-in-60-seconds-on-tiktok/.

⁶⁷ Florian Wintterlin et al., "It's Us against Them up There': Spreading Online Disinformation as Populist Collective Action," Computers in Human Behavior 146 (September 2023): 107784.

^{68 &}quot;What Is Participatory Disinformation?," Center for an Informed Public, 26 May 2021, https:// www.cip.uw.edu/2021/05/26/participatory-disinformation-kate-starbird/. See also the concept of "dark participation": Thomas Quandt and Johanna Klapproth, "Dark participation: Conception, reception, and extensions," in Challenges and perspectives of hate speech research, ed. Christian Strippel et al., https://doi.org/10.48541/dcr.v12.15.

nial and antisemitism are widespread. 69 Therefore, acts of counter speech must also be part of a participatory, democratic remembrance of the Holocaust. 70 for which Jewish TikTokers in particular have developed a variety of media strategies. 71 It is notable that these sometimes extend beyond social media, enabling participation in other spaces. This is exemplified, for instance, in the Oversight Board that "reviews content decisions made by Meta [...] and can choose to overturn or uphold" these decisions. 72 The focus is on cases "that potentially affect many users worldwide, are of crucial importance to public discourse, or raise important questions about Meta's policies". This includes cases of Holocaust denial on Instagram, for which anyone can provide public comments or assessments as part of the review process.⁷³

On an institutional level, the UNESCO report History under attack: Holocaust denial and distortion on social media has developed recommendations for policymakers and governments, academia, civil society, education as well as social media companies. 74 Not only here does it become evident that participatory memory of the Holocaust is a joint negotiation process within and outside of social media, which is constantly being reconstituted between different actors. Stefania Manca argues that "the presence of Holocaust references on social media and the intense emotional engagement of users highlights the impact of the globalization of Holocaust remembrance". 75 In this context, the different actors not only serve as memory agents but also as participatory speakers for their individual interpretations of the past.⁷⁶

⁶⁹ Tom Divon and Tobias Ebbrecht-Hartmann, "#JewishTikTok. The JewToks' Fight against Antisemitism," in TikTok Cultures in the United States, ed. Trevor Boffone (London: Routledge, 2022), 47-58; Monika Hübscher and Sabine Von Mering, ed., Antisemitism on Social Media (London: Routledge, 2022).

⁷⁰ Project "Countering Holocaust Distortion on social media," https://holocaust-socialmedia.eu/.

⁷¹ Divon and Ebbrecht-Hartmann, "#JewishTikTok. The JewToks' Fight against Antisemitism."

⁷² https://www.oversightboard.com/decision/.

⁷³ https://oversightboard.com/news/1322362521715433-oversight-board-announces-holocaust-de nial-case/.

⁷⁴ UNESCO Report "History under attack: Holocaust denial and distortion on social media,"https://unesdoc.unesco.org/ark:/48223/pf0000382159.

⁷⁵ Manca et al., "Enhancing Digital Holocaust Memory."

⁷⁶ Vivien Sommer, "9 Erinnerungsjournalismus und neue Sprecher:innen: Grenzverschiebungen in erinnerungskulturellen Debatten," in Handbuch kommunikationswissenschaftliche Erinnerungsforschung, ed. Christian Pentzold and Christine Lohmeier (De Gruyter, 2022), 207–230; Manca et al., "Enhancing Digital Holocaust Memory."

3.2 Historiography

Social media not only change memory practices, but also influence how and by whom history is told and written. The focus of this section is less on a scholarly form of historiography than on the observation that in social media "authors and visitors (as co-creators) engage in the practice of digital storytelling (Lambert 2013)". Sonnected to this is not only the question of how the past can be "rerepresenced as well as historiographically communicated", but more importantly questions of actors, agency and agenda setting. Martin Pogačar states that "memory, remembering and vernacular archiving and cultural heritage discourses empower individuals to co-create micro-narratives and micro-archives based on excavated content". Even in cases where only known or familiar narratives are remediated (instead of telling own stories), "new connections and interpretations can emerge, be taken up, transformed, updated, or potentially distorted" through the narrative and discursive modes of social media.

Ebbrecht-Hartmann illustrates this interconnected storytelling with the example of Holocaust survivors who have been particularly active on TikTok since early 2021. Connections and extensions arise primarily because many of the survivors respond to user comments and questions with video answers, and users, in turn, create video responses (Duets or Stitches) to the survivor's videos. This forms a virtual testimony from individual segments, collaboratively created by the account holders and users. Undeniably, a community of memory is constituted here, but at the same time, the focus is also often placed on everyday topics or lesser-known aspects, which thus receive more attention.

This is also visible in the #FrauenImWiderstand campaign, initiated by historians and journalists Jasmin Lörchner, Bianca Walther and Laura Baumgarten. Their aim was to introduce women who had resisted the Nazi regime, both individually and as part of Jewish, communist, or socialist groups. The campaign was

⁷⁷ For an initial overview of various definitions of the relationship between memory and history, see Stephanie Decker, John Hassard and Michael Rowlinson, "Rethinking History and Memory in Organization Studies: The Case for Historiographical Reflexivity," *Human Relations* 74(8) (1. August 2021): 1123–1155.

⁷⁸ Pogačar, "Digital heritage," 117.

⁷⁹ Vivian Sobchack, "Afterword: Media Archaeology and Re-Presencing the Past," in *Media Archaeology: Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (Berkeley: University of California Press, 2011), 323.

⁸⁰ Pogačar, "Digital heritage," 117.

⁸¹ Ebbrecht-Hartmann, "TikTok und Instagram," 162. Own translation.

⁸² Ebbrecht-Hartmann, "TikTok und Instagram," 155.

launched in response to the Instagram project @ichbinsophiescholl and sought to counter the one-sided focus on well-known figures like Sophie Scholl, which is sometimes criticised for serving a German "longing for exoneration". 83 The contributions were initially gathered on Twitter and later the Instagram account @frauenimwiderstand. Under the same hashtag, other users also shared posts on women in resistance. Examples like these make it clear that social media campaigns, projects or posts do not operate in isolation: "Ultimately, the interplay between fragments of the past disseminated in the segment structure of social media, along with networked forms of memory, leads to new historical configurations in which different historical events and memories can come into - sometimes guite tense – relationships with each other". 84

The project "Zum Feind gemacht", initiated by the Bundesverband Information & Beratung für NS-Verfolgte e.V. (Federal Association for Information and Counselling for Victims of Nazi Persecution), shows that cross-media links are also conceivable. The exploration of the various, often unknown or underrepresented groups persecuted under National Socialism is not only presented on Facebook, Instagram and TikTok (@zumfeindgemacht) but also accompanied by a website. The site provides information about historical persons, places and events, and additionally also offers a platform for people to submit their own (family) experiences in order to tell their own stories.⁸⁵

Instagram accounts like @dieanachronistin, where Nora Hespers explores the resistance of her grandfather, Theo Hespers, or @tadschu, where Patrick Figaj traces his grandfather's life as a so-called "heimatloser Ausländer", underline that the transformation of "passive spectators into socially and morally responsible agents"86 associated with social media does not necessarily need to be enabled by institutions. In addition to a personal perspective and the creation of relations between the present and historical remnants, a mode of scientific reflection can be observed here that goes beyond the mere representation of history or historical knowledge.

⁸³ Nora Hespers and Charlotte Jahnz, "Häppchenweise Sophie Scholl. Kritische Anmerkungen zum Instagram-Kanal @ichbinsophiescholl," in ichbinsophiescholl: Darstellung und Diskussion von Geschichte in Social Media, ed. Mia Berg and Christian Kuchler (Göttingen: Wallstein Verlag, 2023), 144-164.

⁸⁴ Ebbrecht-Hartmann, "TikTok und Instagram," 162. Own translation.

⁸⁵ https://zumfeindgemacht.de/.

⁸⁶ Manca et al., "Enhancing Digital Holocaust Memory."

3.3 Research

On 2 April 2022, the account @tadschu posted an aerial photograph taken by the US Air Force in 1944 and started its explanation of the material in the caption with the words: "Online research today provides insights that were hardly imaginable just a few years ago". 87 The post is just one example of how social media not only narrates history but also makes work processes transparent. Such practices can be seen as an example of science communication. We have argued that history-related science posts are characterised primarily by breaking linear narratives and establishing transparency, as well as addressing processes, ambiguities, and personal reflections.⁸⁸ This happens not only when, for example, @augustaschacht explains where memorial sites derive their knowledge of forced labour, 89 or when @arolsenarchives presents its collections. 90 Instead, it is primarily non-institutional actors or individuals without a historical background or education who disseminate historical knowledge (and scholarship) in this form.

One of the latest popular examples is Susanne Siegert, who uses Instagram (@kz.aussenlager.muehldorf) and TikTok (@keine.erinnerungskultur) to educate people about the Holocaust and raise awareness about the history of the Mühldorfer Hart subcamp of the Dachau concentration camp. Siegert, who grew up near Mühldorf, initially had no knowledge of the camp until she visited its memorial sites in 2020. Since then, she has conducted extensive (online) research and shared her findings on social media. She focuses on the stories of individuals connected to the camp and sheds light on the daily lives and atrocities faced by the prisoners. At the same time, she makes her approaches and methods transparent, gives updates on often lengthy/years-long research⁹¹ or asks users for support, e.g., with the transcription or translation of historical sources. 92 On TikTok, she also engages in broader Holocaust education, critically deconstructs stereotypes and myths or ex-

⁸⁷ Instagram-Post by @tadschu, 2 April 2022, https://www.instagram.com/p/Cb2rBddMCYA/?img_ index=2.

⁸⁸ Mia Berg and Andrea Lorenz, "#InstaHistory – Akteur:innen und Praktiken des Doing History in den sozialen Medien," in Praktiken der Geschichtsschreibung, ed. Jürgen Büschenfeld, Marina Böddeker, and Rebecca Moltmann (Bielefeld: transcript Verlag, 2023), 86.

⁸⁹ Instagram-Post by @augustaschacht, 23 November 2022, https://www.instagram.com/reel/ ClT1Kn_jjBs/.

⁹⁰ Instagram-Post by @arolsenarchives, 26 October 2023, https://www.instagram.com/p/Cy0

⁹¹ Instagram-Post by @kz.aussenlager.muehldorf, 16 May 2023, https://www.instagram.com/reel/ CssmUtBuTSq/?igshid=MzRlODBiNWFlZA==.

⁹² Instagram-Post by @kz.aussenlager.muehldorf, 2 June 2023, https://www.instagram.com/reel/ Cs FuNTuArv/?igshid=MzRlODBiNWFlZA==.

plains right-wing extremist symbols. Furthermore, she encourages others to explore online archives and engage in active commemoration and research. For this purpose, she shares tutorials on how to request information from the Federal Archives to learn more about the past of one's own grandparents. 93 Siegert believes that a good culture of remembrance ("Gedenkkultur") involves individuals taking the initiative to investigate and learn, rather than simply consuming presented narratives. 94 The account is therefore a prime example of how memory, education and research are not separate phenomena, but "constantly intertwined". 95 However, the example also proves that "there is still substantial tension between officially accepted memory discourse as acknowledged and practised by Holocaust institutions [...] and other forms of non-expert productions that become increasingly visible in digital spaces". 96 Before launching her channels, Siegert did not receive any feedback from the association that supports the memorial sites in Mühldorf on her request whether there were any objections to the project: "I think that despite the high click numbers, my work is ridiculed and seen as a kind of second-class history education". 97 Yet, 187,000 followers on TikTok show the success and potential of active and participatory engagement with Holocaust memory and research.98

Concrete forms of collaborative research on Instagram and TikTok can be found particularly in genealogy. Users research their family histories, share tips on helpful resources, or provide guidance on other users' sources. Another one-time, but widereaching example is a cooperation between the Instagram account @museumoflostmemories and the Arolsen Archives on the occasion of International Holocaust Remembrance Day 2022. The goal of the digital museum, initiated by David Gutenmacher at the end of 2020, is "to return neglected or misplaced family mementos to their owners", such as photos or VHS tapes primarily collected at estate sales and in secondhand shops. After the items are posted on Instagram and TikTok, the combined 1.5 million followers attempt to identify the original owners using various digital and analogue search strategies – a task that can be completed in as little as two minutes or take significantly longer, if it is successful at all. 99 As part of the cooperation, an at-

⁹³ TikTok by @keine.erinnerungskultur, 17 October 2023, https://vm.tiktok.com/ZGJKj8Kfr/.

⁹⁴ Jasper von Römer, "90-Sekunden-Gedenken — Susanne Siegert", Veto Magazin (blog), 26 April 2023, https://veto-mag.de/susanne-siegert/.

⁹⁵ Walden, "Defining the Digital," 5.

⁹⁶ Walden, "Defining the Digital," 9.

⁹⁷ Jasper von Römer, "90-Sekunden-Gedenken — Susanne Siegert", Own Translation.

⁹⁸ For comparison, see the Neuengamme Concentration Camp Memorial, the most successful German-language institution, which has 35,000 followers as of May 2024.

⁹⁹ David Gutenmacher and Elizabeth McCafferty, "Experience: I Reunite Families with Their Long-lost Photos," The Guardian, 3 February 2023, https://www.theguardian.com/lifeandstyle/ 2023/feb/03/experience-i-reunite-families-with-their-longlost-photos.

tempt was made to find the family of a concentration camp prisoner whose wallet, including photos, is part of the Arolsen Archives' collection. Whether the search was successful is unknown, as no update has been posted so far. The project also raises copyright and data protection issues. While most family members are delighted to rediscover lost memories, Gutenmacher deletes the posts "if the family does not want their memories online". 101 Furthermore, the museum also touches on ethical questions, including the right to speak on behalf of the deceased. These also arise for many other institutions and archives on social media, especially since older usage agreements often did (or rather could) not anticipate the use of personal records on social media platforms, i.e., private media corporations. It is noteworthy that these questions of absence and representation are sometimes also sophisticatedly discussed by users in comments. Under a TikTok video that deals with the topic of masturbation in Anne Frank's diary in a rather sensational and lurid tone, there are many reflections on whether Anne herself would have wanted her private thoughts to be accessible to such a broad audience in the future. Discussions about trigger warnings for potentially distressing content or strategies to address specific topics or persons in an abstract manner (Algospeak) also have their counterparts in scholarly research discourse. 102

4 Social media and citizen science

It is debatable whether all the examples given are already a form of Citizen Science or merely typical media-specific forms of production, interaction and discussion. 103 If we follow the definition in the Green Paper Citizen Science Strategy 2020 for Germany, some arguments can be made in favour of this:

Citizen science describes the process of generating knowledge through various participatory formats. Participation can range from the short-term collection of data to the intensive use of leisure time to delve deeper into a research topic together with scientists and/or other volunteers, to ask questions, and to get involved in some or all phases of the research process. 104

¹⁰⁰ Instagram-Post by @museumoflostmemors and @arolsenarchives, 28 January 2022, https:// www.instagram.com/p/CZQL_Y3Aon7/.

¹⁰¹ Gutenmacher and McCafferty, "Experience."

¹⁰² Rachel L. Einwohner, "Ethical Considerations on the Use of Archived Testimonies in Holocaust Research: Beyond the IRB Exemption," Qualitative Sociology 34(3) (September 2011): 415-430.

¹⁰³ However, the concept of Citizen Science itself is used very differently depending upon the discipline. For an overview, see The Science of Citizen Science, ed. Katrin Voland et al. (Cham: Springer International Publishing, 2021).

¹⁰⁴ Mordechai (Muki) Haklay et al., "What Is Citizen Science? The Challenges of Definition," in The Science of Citizen Science, ed. Katrin Vohland et al. (Cham: Springer International Publishing, 2021), 18.

However, such processes are not limited to participation in social media. Also, in research on social media itself, increasing attempts can be observed to include "a range of non-scientific stake-holders in the scientific process". ¹⁰⁵ In a workshop process led by Victoria Grace Walden and Kate Marrison, recommendations for "Digital Interventions in Holocaust Memory and Education" were developed in six co-creative participatory workshops, with creators and educators participating alongside researchers. 106

In the project SocialMediaHistory (2021–2024), my colleagues and I have tested citizen science as an approach in historical sciences. Together with the public, the project aimed to investigate how history takes place, can be analysed and produced on Instagram and TikTok. 107 The core of the project was a citizen advisory board (DabeiRat). Participants accompanied the project team throughout the entire project duration, bringing together various perspectives and experiences related to history on social media, ranging from first-time users to educators and content creators. Based on these "they can substantiate knowledge claims on the phenomena in question and make available to research alternative perspectives on these issues". 108 This was realised, among other things, in smaller research projects, in which different topics were explored with varying methodological approaches for four weeks at a time. All participants documented their observations and examples in a collaborative folder. Afterwards, an online meeting was held to share experiences and to summarise observations and results. Following Nina Simon's differentiation from 2010, the project can generally be classified as primarily collaborative, as it was initiated by researchers, and participants could contribute data and input. However, it also demonstrates co-creative elements, as research questions, topics and approaches were jointly developed by researchers and citizens. 109

The research project on the Holocaust was based on the observation that our internal discussions mostly circled around three examples: The Museum Auschwitz-Birkenau (Twitter), Sophie Scholl (Instagram) and the Neuengamme Concentration Camp Memorial (TikTok). Our objective therefore was to broaden the view on actors and examples while also exploring possible reasons behind differing reception experiences. In previous exchanges, we had already recognised the

¹⁰⁵ Haklay et al., "What is Citizen Science?," 16.

¹⁰⁶ https://reframe.sussex.ac.uk/digitalholocaustmemory/digital-holocaust-memory-and-educa tion-recommendations/. One report specifically focusses on the use of social media for Holocaust Memory and Education.

¹⁰⁷ Further information on the project can be found here: www.socialmediahistory.de.

¹⁰⁸ Claudia Göbel, Lucile Ottolini and Annett Schulze, "Science as a Lever: The Roles and Power of Civil Society Organisations in Citizen Science," in The Science of Citizen Science, ed. Katrin Vohland et al. (Cham: Springer International Publishing, 2021), 331–349.

¹⁰⁹ Barbara Heinisch et al., "Citizen Humanities," in The Science of Citizen Science, ed. Katrin Vohland et al. (Cham: Springer International Publishing, 2021), 97-118.

highly subjective nature of perceiving historical themes, which then led us to conduct a more systematic analysis. At this point, only a small insight into the approach and initial observations can be given. The results of the joint research will be published in an anthology at the end of the project. 110

In a first step, the private accounts of the participants were used to search for #Holocaust on Instagram and TikTok, and impressions were recorded. It quickly became apparent that even identical – sometimes even simultaneous – search queries within groups led to different search results (see figures 1 and 2).

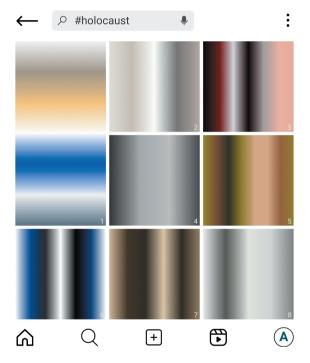


Figure 1: Instagram search results for #holocaust by person A (11 May 2023). 111

¹¹⁰ Geschichte auf Instagram und TikTok. Perspektiven auf Quellen, Methoden und Praktiken [working title], ed. Mia Berg, Andrea Lorenz and Kristin Oswald (Berlin: De Gruyter, 2024).

¹¹¹ For copyright and data protection reasons, the posts are only depicted in abstract form. They show: (1) A video of a private person holding the Israeli flag in front of the Brandenburg Gate, (2) two historical photos of the sisters Margot and Anne Frank, (3) a quote and recent portrait photo of Anita Lasker-Wallfisch, (4) a historical portrait photo of Bep Voskuijl, (5) a private person in front of the tracks at the former Auschwitz concentration camp, (6) a world map showing the legality of Holocaust denial, (7) a historical portrait photo of Betty Grebenschikoff, (8) a historical photo of Margot, Otto, Anne and Edith Frank.

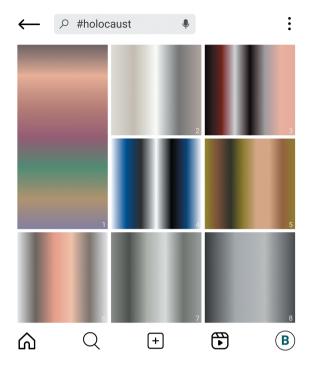


Figure 2: Instagram search results for #holocaust by person B (11 May 2023). 112

These variations were discussed in the final meeting, considering each individual's usage patterns, location, languages and other potential algorithmic influences.

With a specific focus on TikTok, this "algorithmic experience" was then examined in more detail in a second step. The influence of algorithms and questions regarding their modes and consequences are widely debated in research. 113 Our

¹¹² The posts show: (1) an interview with Edith Eger, (2) two historical photos of the sisters Margot and Anne Frank, (3) a quote and recent portrait photo of Anita Lasker-Wallfisch, (4) a world map showing the legality of Holocaust denial, (5) a private person in front of the tracks at the former Auschwitz concentration camp, (6) a historical photo of Esther Velleman with biographical data, (7) a historical photo of Peter van Pels on the beach with the Jacobson family, (8) a historical portrait photo of Bep Voskuijl.

¹¹³ For an initial overview, see Steve Rathje et al., "People Think That Social Media Platforms Do (but Should Not) Amplify Divisive Content," Perspectives on Psychological Science, 26. September 2023. For historical topics, see Anja Neubert, "Gatekeeper zum 'Markt der Erinnerung'? Wie Algorithmen historisches Erzählen auf TikTok und YouTube konfigurieren," in Historisches Erzählen in Digitalien. Theoretische Ansätze und empirische Beobachtungen zur Entwicklung historischer Sinnbildungen im digitalen Raum, ed. Alexandra Krebs and Christina Brüning (forthcoming).

intention was to conduct a very basic experiment on how algorithmic recommendation and user behaviour affect the visibility of Holocaust-related content or lead to experiences of "rabbit holes". 114 For this purpose, participants created new, anonymous and empty TikTok accounts using disposable email addresses and then searched for and interacted with content related to the Holocaust on these accounts. Subsequently, the participants requested an overview of their data from TikTok which once again made (inter)actions visible and comparable.

While data collections in the context of citizen science often face the challenge of ensuring data quality and reproducibility, in our case, the data primarily serves the reflection of subjective experiences. Embracing this subjectivity also aids reflection on the digital conditions under which the presentation, exploration and analysis of history take place: "[O]ur own understanding and appreciation of the Holocaust and engagement in its memory is defined by the media with which we experience it". 115

Citizen science in this context can not only contribute to broadening perspectives and potentially generating new questions, but also offers a pragmatic approach to dealing with the challenges of researching social media through data contributions and participatory observations. 116 Data donations, for example, are also utilised by DataSkop to explore the mechanisms of algorithmic recommender systems, to which platforms do not (yet) grant research access. Simultaneously, project participants could also explore and analyse their own data. 117 Such approaches thus contribute to the reflection of "passive interactivity" in social media participation, where we often find ourselves "unknowingly interacting with systems and providing data to the profiteers of surveillance capitalism". 118 To conclude, the complex co-dependencies should therefore be looked at that need to be addressed more thoroughly when researching social media in digital holocaust memory studies, but also (public) history.

^{114 &}quot;TikTok's Algorithm Leads Users from Transphobic Videos to Far-Right Rabbit Holes," Media Matters for America, 5 October 2021, https://www.mediamatters.org/tiktok/tiktoks-algorithmleads-users-transphobic-videos-far-right-rabbit-holes.

¹¹⁵ Walden, "Afterword," 292.

¹¹⁶ For the ethical challenges of citizen science, see Loreta Tauginiene et al., "Ethical Challenges and Dynamic Informed Consent," in The Science of Citizen Science, ed. Katrin Vohland et al. (Cham: Springer International Publishing, 2021), 397-416.

¹¹⁷ https://algorithmwatch.org/en/what-tiktok-knows-about-you-data-donations/.

¹¹⁸ Walden, "Afterword," 286.

5 Co-dependencies

Walden has already pointed out the complex relationships that arises in digital media, not only between users and technology but also interfaces, algorithms, or code. To approach the specifics of digital interactivity, she argues that "we should take more seriously the particularities of the meeting of human and machine logics in producing and circulating memory". 119

Many researchers have noted that new archives are emerging in social media that are no longer built or managed by institutions but "diffused through a 'new memory ecology". 120 In Europe, this is mainly tied to GAFAM (Google, Amazon, Facebook, Apple, Microsoft). 121 In recent years, the POEM project has been working on the impact of this co-dependency on participatory memory practices, trying to develop "concepts, strategies and media infrastructures for socially inclusive potential futures of European Societies through culture". 122 Regarding memory and history practices, they point out that the (supposedly) public archives "are run for economic purposes in private ownership. The accessibility of these "archives" is regulated by business models and remains unclear towards the future". 123 This not only affects users' personal archives, but also the sustainability of historical-political education or future access to sources for researchers. Only recently, 404 Media presented the headline: "Elon Musk broke all the tools historians need to archive tweets about Israel-Gaza War". 124 Many of the examples of digital holocaust memory that have been discussed in research over the past 10 to 15 years are no longer accessible today, sometimes making it difficult to comprehend or reconstruct research results. The consequences of linking historical narratives to data structures and global corporations are exemplified by the Facebook profile of Henio Zytomirski. Widely discussed in media, society and research, the profile was removed by Facebook after a year for non-compliance with the company's terms of service (prohibiting the creation of Facebook accounts in the name of third parties). 125 Given the increasing number of

¹¹⁹ Walden, "Afterword," 286-287.

¹²⁰ Hoskins, "Memory of the multitude," 87.

¹²¹ José Van Dijck, David Nieborg and Thomas Poell, "Reframing Platform Power," Internet Policy Review 8(2) (30 June 2019).

¹²² https://cordis.europa.eu/project/id/764859.

¹²³ https://www.poem-horizon.eu/project-outline/.

¹²⁴ Jason Koebler, "Elon Musk Broke All the Tools Historians Need to Archive Tweets About Israel-Gaza War," 404 Media, 26 October 2023, https://www.404media.co/elon-musk-broke-all-thetools-historians-need-to-archive-tweets-about-israel-gaza-war/.

¹²⁵ https://teatrnn.pl/henio/profil-henia-na-facebooku/#zamkniecie-profilu.

social media profiles "by" historical figures, 126 this seems to be less of a problem now. However, only what has been preserved by account holders themselves, archived elsewhere on the web, or was additionally published in other formats (books, websites) can be considered archived. Even though more and more institutions have started including social media content in their collections, comprehensive archiving of audiovisual social media content especially, has not yet taken place, mainly due to technical issues, legal hurdles or lack of resources. 127

As a result, it is often not what is needed that can be researched, but what is accessible in the first place. This is evident not only in terms of archiving but also in general issues related to data collection and (automated) analysis. Three levels should be particularly emphasised here: volume, competencies and legal frameworks. 128 The proliferation of actors and content on social media comes with constantly growing amounts of data that are often no longer accessible manually. Historians have so far only sporadically had the necessary technical skills or methodological approaches to collect or examine the material, apart from smaller case studies. The situation is further complicated by the fact that platforms like Instagram only provide limited APIs or completely prohibit automated data collection. Automated access would for example enable the analysis of large source inventories, the recognition of hidden patterns or to empirically test ideas that traditional methods could not explore. 129 In the course of the citizen science research projects, we have also experienced how difficult it can be to approach objects beyond ethnographic explorations or qualitative observation, including larger datasets. In the end, the collection and analysis would probably have failed due to a lack of technical skills on the part of the project team and citizens, but which was previously not recommended by the universities due to the lack of legally secure access to social media data, especially from the Meta Group.

¹²⁶ Christine Lohmeier, Christian Schwarzenegger and Maria Schreiber, "Instamemories. Geschichte in digitalen Medien als lebendige Erinnerungskultur jenseits formaler Bildungskontexte," Medien + Erziehung (2020): 48-61.

¹²⁷ For an incomplete overview, see Eveline Vlassenroot et al., "Web-Archiving and Social Media: An Exploratory Analysis," International Journal of Digital Humanities 2(1-3) (November 2021): 107-128.

¹²⁸ We have outlined the challenges of researching social media on a technical, legal, ethical and empirical level here: Mia Berg and Andrea Lorenz, #BigDataHistory - Forschungspragmatische Überlegungen zu Geschichte in sozialen Medien, in Geschichte im digitalen Wandel? Geschichtskultur - Erinnerungspraktiken - Historisches Lernen, ed. Olaf Hartung, Johannes Meyer-Hamme and Alexandra Krebs (forthcoming).

¹²⁹ Alexis Lerner, "Quantifying the Archives: Leveraging the Norms and Tools of Data Science to Conduct Ethical Research on the Holocaust," Holocaust Studies (1 January 2021): 1–19.

The challenges in dealing with social media are also apparent in previous research on representations of the Holocaust in social media. While there have been investigations, particularly on Instagram, that work with larger datasets, the data collection either took place at a time when manual collection was still possible or before API access was limited as a result of the Cambridge Analytica scandal in 2015. Additionally, the circumstances and forms of data collection are sometimes not addressed at all – probably for good reasons.

Two things should be highlighted: Firstly, due to sample biases resulting from the available data collection methods or archives, which this text is not exempt from, the validity and representativeness of analyses should be critically examined. 130 Secondly, it must be further explored how the complex multimodal processes of meaning making and negotiation, in interaction with their intra- and extra-medial, as well as human and non-human actors in social media can be analvsed in the future. Drawing on the concept of "intra-action", Walden advocates "to consider carefully what particular interfaces mean and do, how algorithms might help or indeed hinder intentions, how code could be used to do different things for memory, how digital interfaces affect the physical landscape, how responsive technologies might affect sites, and how non-professional digital content and institutional memory relate". 131 Given the increasing acceptance of social media for digital holocaust memory and education from both institutional and private actors, the shift of current political conflicts into these spaces, often accompanied by the rise of fake news and hate speech, and the still prevailing intransparencies on the side of platforms, we will likely have much work to do in the years to come.

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¹³⁰ Rebekah Tromble, "Where Have All the Data Gone? A Critical Reflection on Academic Digital Research in the Post-API Age," Social Media + Society 7 (2021): H. 1.

¹³¹ Walden, "Afterword," 292.

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