Open Forum

Victoria Grace Walden*

Is Digitalization a Blessing or a Curse for Holocaust Memorialization?

https://doi.org/10.1515/eehs-2023-0008
Published online March 10, 2023

I recently commented on the international furore provoked by the plans Moscow filmmaker Ilya Khrzhanovsky leaked in May 2020 for the renovation of the Babyn Yar Holocaust Memorial Centre.[1] In its critique, The New York Times[2] states that a computer algorithm designed to create a personalised museum experience would assign visitors the roles of executioner, collaborator, or victim: donning a VR headset, they would be placed into the historical scenes of the massacre with the use of deep fake technology. The media storm that erupted after this leak led to Khrzhanovsky's plans being dropped.

Putting the controversy aside, Khrzhanovsky's proposal was nevertheless ambitious in foregrounding the symbiotic relationship between computational and human agency in digital environments, which is an affordance of contemporary technologies rarely emphasised in Holocaust museums and memorial sites' digital projects. One of the issues often neglected when we pose the questions "is digitalisation a blessing or a curse for Holocaust memorialisation?", is that digital interventions are not entirely automated and out of human control; rather they are an entanglement between computational and human logics and materialities.[3] To put this more bluntly, whether digitalization of Holocaust memorialisation is a blessing or a curse depends on human application and response. This is not to dismiss the significance of the computation and its logics, but rather to emphasise that these are designed, programmed, supervised, monitored and used by humans,

1 Victoria Grace Walden, "Afterword: Digital Holocaust Memory Futures: Through Paradigms of Immersion and Interactivity," in *Digital Holocaust Memory, Education and Research*, ed. Victoria Grace Walden (Basingstoke: Palgrave Macmillan, 2021), 267–96.

2 https://www.nytimes.com/2020/05/11/world/europe/ukraine-holocaust-babyn-yar.html, accessed on February 8, 2023.

3 Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham NC and London: Duke University Press, 2007).

***Corresponding author: Victoria Grace Walden**, University of Sussex, Brighton, BN1 9RH, UK, E-mail: v.walden@sussex.ac.uk. https://orcid.org/0000-0002-5298-8810

and affect human responses. In essence, the computational plane of reality is not entirely distinct from the human.

In this *Open Forum* piece, I want to emphasise the negotiation between humans and computer systems, by focusing on two concerns foregrounded by Khrzhanovsky's project: automation and interactivity.

1 Automation

Automation is not a new phenomenon, but it is beginning to have more of an impact on Holocaust memory therefore more critical attention needs to be given to it in our field. As Bassett and Roberts argue, there has been a cyclical pattern of automation celebration and anxiety since the 1950s, both manifest with every new technological trend.[4] This has most recently been articulated in debates about machine learning. Khrzhanovsky's proposal would not be the first application of machine learning for Holocaust memorialization. *Dimensions in Testimony* (USC Shoah Foundation) uses Natural Language Processing (NLP) so that projections of survivors can respond to participants' questions. Stegmaier and Ushakova, involved in the development of Russian and German contributions to the project, have highlighted some of the cultural sensitivities raised by working across languages which requires careful interventions by human researchers to "teach" the NLP program effectively.[5] The Arolsen Archives' *Marbles of Memory* on Telegram allows users to seemingly communicate with a chatbot that will answer their questions and give historical information and sources about particular sites. Nevertheless, the program offers a pre-designed tour with only limited options that are made visible via a decision tree logic. Information Retrieval is a core technology in archival databases, which, Presner has argued, can provide a deeper reading of collections by highlighting peripheral sources usually omitted from the grand narratives of the Holocaust.[6] Reading, however, is more sceptical recognising that algorithms retrieving data rely on humans selecting search words. Her early observation study concluded that

4 Caroline Bassett and Ben Roberts, "Automation Now and Then: Automation Fevers, Anxieties and Utopias," *New Formations: A Journal of Culture/Theory/Politics,* no. 98 (2009): 9–28.

5 Sanna Steigmaier and Svetlana Ushakova, "The Production of German- and Russian Language Interactive Biographies (Trans) National Holocaust Memory between the Broadcast and Hyper-connective Ages," in *Digital Holocaust Memory, Education and Research,* ed. Victoria Grace Walden (Basingstoke: Palgrave Macmillan, 2021), 61–96.

6 Todd Presner, "The Ethics of the Algorithm: Close and Distant Listening in the Shoah Foundation Visual History Archive," in *Probing the Ethics of Holocaust Culture,* ed. Claudio Fogu, Wulf Kansteiner and Todd Presner (Cambridge, Mass: Harvard University Press, 2016), 175–202.

visitors tend to search for common terms, such as “Hitler”, “Auschwitz” and “Anne Frank”.[7]

Reading’s observations still resonate today. When the commercial genealogy corporation MyHeritage made its Deep Nostalgia application publicly available, it was soon used to create a deep fake of Anne Frank. This example further illustrates that the creation of simplified grand narratives with canonical figures in Holocaust education and memorialization continues to limit the application of digital media rather than any technology being problematic in itself.

These cases exemplify that automation is always reliant on an entanglement between computational and human agency. The search engine might be well-equipped to draw attention to lesser seen archive materials, but this depends on what the user inputs. Deep Nostalgia was never designed to animate Holocaust victims; a user just decided to apply it to an image of Anne Frank. It is possible to retrieve meaningful responses from the Dimensions in Testimony’s NLP, yet also useless ones, depending on the questions asked.

Often the application of artificial intelligence or machine learning for Holocaust memorialization does not foreground the impact of creator and users’ interactivity in the design. This seems counterproductive when humans play a role in creating these memory experiences with computers. The Future Memory Foundation, now based in the Netherlands has discussed the implementation of Intelligent Tutor Systems in their virtual memory apps of concentration camps.[8] It has not yet been introduced, but such application of automation starts with the relationality between human and computer, and considers how this can shape a personalised memory experience where neither is leading the other.

2 Interactivity

Whilst the role of media in Holocaust memory has historically been framed in relation to questions about the “limits of representation”, it is more appropriate to understand today’s debates in terms of the “limits of interactivity”. That is to say, critics seem less concerned about the way the Holocaust is depicted in digital presentations and more worried about the extent to which agency will be given to

7 Anna Reading, “Digital Interactivity in Public Memory Institutions: The Uses of New Technologies in Holocaust Museums,” *Media, Culture and Society* 25 (2003): 67–85.

8 Paul F.M.J. Verschure and Sytse Wierenga, “Future memory: a digital humanities approach for the preservation and presentation of the history of the Holocaust and Nazi Crimes,” *Holocaust Studies* (2021), online-first, https://doi.org/10.1080/17504902.2021.1979178, accessed on 9 February 2023.

non-expert users in re-determining the outcome of historical scenarios through simulations such as computer games.

Historical computer games "challenge the semiotic production of 'historical events' that has characterised the construction of modern historical consciousness" creating a "realm of possibility".[9] Yet, I would argue that in drawing attention to the possibilities that arise from rearranging historical information, they invite players to do the work of historians and challenge the assumption that "the past" – actual events that happened – and "history" – the narratives told about the past – are innately connected. History-making is already shaped by endless possibilities, depending on one's method, sources, and resources. Where computer games differ from the traditional work of the historian is that they make the process of *doing history* publicly available rather than solely exhibiting the outcomes.

Digital users increasingly expect forms of interactivity that are more than "clicking buttons".[10] In his critique of emerging digital Holocaust memory projects, Kansteiner contends that in the digital age, collective memories will evolve through "interactive cultural environment(s) in which individuals will no longer depend on centralized institutions".[11] The implication here is a devolution of authority over the memory narrative from Holocaust organisations to a wider, networked society. Holocaust institutions should not be absent in this space, however, any resistance to dispersing their control over how the past is remembered could jeopardise their success within it.

Recently, a representative from a Holocaust memorial site anecdotally said to me that gamification was their new "limit" when thinking about how to represent the history of their space. I would concur that gamification is a troubling approach for Holocaust memory, but that is because I understand "gamification" in the media and cultural studies context where this word refers to creating competitive conditions for users to nurture them into becoming neo-liberal consumers.[12] Gamification encourages a passivity through repetitive patterns of actions and rewards; it is a tool of interpellation. Gaming, games, or play however do not necessitate gamification. These can provide forms of interactivity that bridge the mind-body gap so as to

9 Claudio Fogu, "Digitalizing Historical Consciousness." *History and Theory* 48, no. 2 (2009): 103–21, here: 103.

10 Anna Reading, "Digital Interactivity in Public Memory Institutions: The Uses of New Technologies in Holocaust Museums," *Media, Culture and Society* 25 (2003): 67–85.

11 Wulf Kansteiner, "Alternative Worlds and Invented Communities: History and Historical Consciousness in the Age of Interactive Media," in *Manifestos for History,* ed. Keith Jenkins, S. Morgan and A. Munslow (London: Routledge, 2007), 131–148, here: 143.

12 Julie E Cohen, "The Surveillance-Innovation Complex: The Irony of the Participatory Turn," in *The Participatory Condition in the Digital Age,* ed. Daarin Barney et al. (Minneapolis: University of Minnesota Press, 2016), 207–28, here: 212.

enable the higher-level thinking celebrated in Constructivist and Active Learning educational thought. Both these pedagogies argue for a student-centred approach, which encourages learners to make connections across different ideas through *doing* rather than being passive receptors of knowledge in the traditional (arguably outdated) approaches to teaching which Paolo Friere refers to as being based on a "banking" model, where students are just receivers of information.[13] Such interactivity should be something to celebrate in Holocaust memorialization; for surely, we want future generations increasingly temporally distant from this past to engage with the Holocaust as autonomous, critical individuals.

Historical "role-play" – the playful form most heavily criticised in both pre- and digital Holocaust education contexts – does not have to be a feature of Holocaust games as it so heavily features in Khrzhanovsky's leaked proposal. Playing the computer game *Attentat 1942,* I take on the role of a young Czech man trying to find out what his grandparents did during the war. Whilst I am role-playing by assuming the character in a fictional story, the role does not give me agency to change the historical narrative of the Holocaust itself. *Attentat 1942* of course still has limited endings and, as with all computer games, there are only a few outcomes which feel satisfactory, so the player is enculturalized to replay until they get the "right" outcome. How interactive then is this experience? How much agency does it really give the player? What might be the benefits of giving up more control over the memory narrative to non-experts, and how can we mitigate the challenges? I should emphasise here, I am not proposing that we encourage players to re-write history, but rather recognise their agency in defining the most meaningful way to remember this past for themselves.

3 Afterword

I avoid a "conclusion" here for this might suggest a sense that this discussion is coming to a close. Instead, I want to reiterate that digitalization is neither inherently a blessing nor a curse for Holocaust memorialization. If we want to look back on the early decades of digitalized Holocaust memory in ten or twenty years and see it as a "blessing", then we need to apply digital media in ways that augment the visitor/user/viewer's criticality, so as to encourage them to take responsibility personally for memorialization. The relationality between humans (both creators and users) and computer systems needs to be at the foreground of design plans.

Phenomenologist Vivian Sobchack and post-humanist Karen Barad explore the idea of *response-ability*: when our bodies and minds are activated through an ethical

13 Paolo Freire, *Pedagogy of the Oppressed* (London & New York: Continuum, 1970).

relationship with the world. In different contexts, they think about humans' relationships with the world with (rather than through) media.[14] We have a *response-ability* to the human and non-human actants in our networks: we must acknowledge and accept the possibilities of the roles we can play in the "teaching" of machine learning training sets (from what we publish on social media to interventions we can make in AI development work more broadly as academics, educators and heritage professionals with expert knowledge and experience of working with sensitive material and difficult histories), and we must understand interactivity as a "kinship" with not only machines, but ever-evolving networks of other users and players, who have agency, ideas, and experiences we can learn from as much as we can share our own knowledge with them.[15]

The conversation about how we produce meaningful, ethical, critical engagements with Holocaust memory with digital media is still in its infancy and I hope you will join me and others in continuing to evaluate how best to achieve this goal of *user response-ability*.

14 Vivian Sobchack, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton: Princeton University Press, 1992); Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham NC and London: Duke University Press, 2007).

15 J.E. Lewis, N. Arista, A. Pechawis and S. Kite, "Making Kind with the Machines", *Journal of Design and Science* (2018), https://doi.org/10.21428/bfafd97b, accessed on February 8, 2023.