Zuckerberg's Smile, or Presence in the Age of Digital Technologies

Figure 1. Mark Zuckerberg in an interview in the Metaverse. Lex Fridman, "Mark Zuckerberg: First Interview in the Metaverse | Lex Fridman Podcast #398," YouTube, 28 September 2023; www.youtube.com/watch?v=MVYrJJNdrEg. (Screenshot by TDR*)*

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Artificial Intelligence (AI) and Augmented Reality (AR) technologies raise new issues about presence, performance, memory, archives, and knowledge production/transmission.[1] We know from the shift from embodied, oral cultures to print culture that what we know is radically altered by how we know it. While embodied cultures rely on physical presence in real time, "being there" physically together for transmission, print made it possible to separate knower from known and transmit knowledge through letters, books, and other documents over broad stretches of time and space. In an earlier work I called these systems the "repertoire" of embodied knowledge—the doing, repeating, and mimetic practices such as performances, gestures, orality, movement, dance, singing (in short, all those acts transferred from body to body usually thought of as ever-changing and ephemeral), and the "archive" of supposedly lasting, stable objects such as books, documents, bones, photographs, and so on that theoretically resist change over time (2003).

The archive and the repertoire are two different systems that provoke different ways of knowing and being in the world—the repertoire supports embodied cognition, collective thinking, intersubjective relationality, and knowing in place, whereas archival culture favors rational, linear, and so-called objective and universal thought and individualism. However, these are not static binaries, or a sequential pre/post, but active processes—two of several interrelated and coterminous systems that continually participate in the creation, storage, and transmission of knowledge, each exceeding the limitations of the other.

Digital technologies constitute yet another system of transmission that since the 1980s (at least) have complicated Western systems of knowledge, raising new issues around presence, temporality, space, embodiment, liveness, sociability, and memory (usually associated with the repertoire) and those of authority, copyright, history, and preservation (linked to the archive). Digital databases combine the vast reservoirs of materials we normally associate with archives, with the ephemerality of the "live." A website crash reminds us of the fragility of this technology. While there is no indication that digital technologies will replace print culture, any more than print replaced embodied practice, the ways in which they alter, expand, challenge, and otherwise affect our current ways of knowing and being have not completely come into focus. The vertiginous rise of AI and AR, which seek to participate in the production of knowledge and simulate presence and embodiment, further complicates our understanding of what's at stake in these changes. If the repertoire consists of embodied acts of transfer and the archive preserves and safeguards print and material culture—objects—what to make of the digital that displaces both bodies and objects as it transmits more information far faster and more broadly than ever before? AI not only organizes vast amounts of data that we have no other way to process; it also analyzes and interprets it, even as AR dreams of creating immersive worlds, "an embodied internet where you're in the experience, not just looking at it," according to Mark Zuckerberg (2021).

Again, I want to insist that the embodied, the archival, and the digital (broadly) overlap and work together and mutually construct each other. We have always lived in a "mixed reality." The Aztecs performed elaborate ceremonies in attempts to mirror and appease the powerful gods and cosmic forces that governed their lives. Sue-Ellen Case argues that the majestic medieval cathedral staged the virtual, while 17th-century theatre patented its ownership of virtual space (Case 2007:9, 51). Clearly, the technologies of the virtual have changed more than the concept of living simultaneously in contiguous spaces.

As paradigms and practices of knowledge production shift we are getting glimpses into the range of implications—from the most practical (how and where do we store our materials if we want to preserve them), to experiential (how can we better feel/sense/experience present and past

1. This essay builds on an earlier work of mine, "Save As... Knowledge and Transmission in the Age of Digital Technologies" (2010), to underline how precipitously the digital has developed to contest, and undo, some of the observations put forward in this earlier work. While the "argument" might look similar, the complexities have escalated leading to new conclusions.

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environments or performances), to the existential (do the epistemic changes radically alter our subjectivity—including our bodies), to the political (who/what controls what we believe to be "real")?

The digital does not simply coexist with the archive and repertoire—it reconfigures both. Neither is what it used to be before the expanded accessibility of AI.

While the digital reconfigures both presence and the archival, I will start with the latter. The digital era has been obsessed with archives—as metaphor, as place, as system, and as logic of knowledge production, transmission, and preservation. Since the time when the archon's house served as the place where official documents were filed and stored in ancient Greece, the archive has become increasingly capacious, interchangeable with "save," "contain," "record," "upload," "preserve," and "share"; and with systems of organization such as a "collection," "library," "inventory," "catalogue," and "museum." *Archive* seems to magically transcend the contradictions between "open" and "closed," democratic and elitist; a fetish, it covers over several contradictory and irreconcilable mechanisms of power.[2] Before discussing what's at stake in these changing definitions and distinctions, I will briefly clarify how I understand *archive*.

An archive is simultaneously an authorized place (the physical or digital site housing collections),[3] a thing/object (or collection of things—the historical records and unique or representative objects and data marked for inclusion), and a practice (the logic of selection, organization, access, and preservation over time that deems certain things "archivable"). Place/thing/practice function in mutually sustaining ways. The "thing" is nameable, storable, and preservable, imbued with the power and authority—perhaps even aura (in the sense of unique presence)—of both place and selection. We know the thing is important because it has been selected to be preserved. In turn, notions of historical accuracy, of authenticity, authorship, property (including copyright), specialized knowledge, expertise, cultural relevance, even "truth" are underwritten by faith in the object found in the archive. This circular legitimating epistemic system again affirms the centrality of place. The archive comes to function not simply as the space of enunciation, the place from which one speaks, but also (and primarily), Foucault noted, as "the law of what can be said" ([1969] 1972:129). Place/thing/practice exist in a tightly bound connection in which each relies on the other for its authority. Each has a different logic and politics of making visible.

Notwithstanding the enormous power and speed of digital archives and databases, they can prove profoundly anti-archival. The capaciousness of our understanding of *archives* has accelerated the disconnect among thing, place, and practice. The instantaneous reproduction of information now easily separates the *what* from *how* we know it, making it impossible to authenticate or verify. Now unauthorized, often unattributable, and endlessly reproducible, the untethered spread of content and deep fakes can have—as we have experienced—devastating social and political consequences.

Digital technologies can certainly expand and enhance the preservation and accessibility of archives. In 2003, the Hemispheric Institute (based at NYU, which I founded in 1998 and directed until 2020) launched its digital library or archive, HIDVL, currently containing close to 1,500 hours of nondownloadable streaming videos of performance by diverse artists from throughout the Americas. It is free and accessible for viewing. We captured/copied the original signal of the videos and stored them in Iron Mountain (the archive of archives—the [then] new "digital authority") to be updated and copied into new formats as the technologies change. We returned the videos and a digital master to their creators who maintained the rights to their work. Hemi asks for nonexclusive rights to make the work viewable in perpetuity—a long time, in library-speak. We were the first to upload and preserve video online (if you can believe that) with help from the Mellon Foundation and NYU Libraries. One important thing to note: it took us longer to agree on best practices

2. Anne McClintock referred to the archive as fetish in the 2 October 2009 meeting of the Engendering Archives working group, CDAD, Columbia University.

3. The archive means "*there*, where authority, social order are exercised" as Jacques Derrida puts it, "*in this place*" ([1995] 1998:1).

regarding the ownership and use of the materials than it did to build the initial HIDVL platform. Another important fact: almost none of what I describe here as the process of capture, transmission, and storage remains the same now, 20 years into the project. The videos submitted to the archive now are mostly born digital (not the old VHS), the original signals have been "migrated to more current standards," and the "overall backup strategy has changed." In short, as the Director of Digital Library Technology Services at NYU Libraries stated, "everything has changed" (Kassel 2013).

Performance videos were and remain vital for conveying a sense of presence through their kinetic and aural dimensions and the physical and facial expressions of participants, so we embarked on the quixotic mission of archiving the repertoire through the digital. Some performances were born digital but still lacked the haptic, immersive quality of live performance. Since 2000, Hemi has experimented with live and digital performance as practice (as opposed to documentation) by hosting week-long multilingual performance festivals/conferences that each year brought together between 500 and 800 artists—Indigenous, Black, Latinx, queer, and disabled—from throughout the Americas. Aside from the hundreds of live performances, we experimented with multi-sited performances taking place simultaneously. The actors were *present*, in real-time conversation with each other, yet at a distance (say, one in NY, the other in Chile) connected through their screens. Again, beyond their documentary function, the videos at times have formed part of new performances. Sometimes, the artists themselves (re)animated the archive, as Carmelita Tropicana, Arthur Aviles, and Lois Weaver and Peggy Shaw of Split Britches did for our 2013 "Performing the Archive" event.[4] They reperformed an iconic work that was archived in HIDVL in front of the video of that work. There was an interplay between the performance and the video: they were the same performance and yet not the same. The bodies, the context, the audience reveal both the ephemerality of the live and the instability of the archive that captures only one moment of the past. The new *now*, which means/transmits something quite different from the prior *now*, is just as fleeting, yet both are part of an ongoing conversation. The interaction of the video, the artists, and the audience continually create a new embodied liveness.

The politics of the copy, rather than the *original*, helped us imagine HIDVL as a postcolonial archive. But *copy* as a form of transmission also differentiates the archival from the digital—and most profoundly from the repertoire. People may copy the way that others dance or speak, but we usually call this mimesis or imitation—a form of learning through doing or parodying another's actions. Each iteration differs from the next; living creatures engage in recognizable behaviors that are not performed the same way twice. Even with strenuous discipline, embodied practices will always show a slight degree of variation. A printed copy of a book, however, is virtually indistinguishable from others of the same run. The only differences stem from use—an underlined word, a torn cover. Nonetheless, the number of books in a run is finite. The function Control+C on my keyboard allows me to copy automatically, without a discernable limit. Unlike the archive, based on the logic and aura of the original or representative item, the digital relies on the logic and mechanism of the copy, which enables the migration from one system or format to another and (putatively) secures preservation. *Save as*. Interestingly, the aura, imbued with the special and unique qualities of a person or work of art (following Walter Benjamin), is reaffirmed by the selection process. The aura that may accrue to the digital copy might have more to do with the selection process than with the nature of the thing.

In other ways, however, HIDVL replicates the hierarchies and exclusions inherent in the archival project itself. The process of selection and valorization by experts keeps the logic of the archive intact. Dreams of unlimited access seduce users to participate in the colonialist fantasy that total access is not simply an ideal but a right. While performance scholarship worries more about context, audience, and reception than about the "original" or "authentic" (impossible insofar as

4. See *Performing the Archive: 15 Years of the Hemispheric Institute* available at web.archive.org/web/20210916160356/http://archive.hemisphericinstitute.org/hemi/pt/eventos-anteriores/1705-july-10-2013-performing-the-archive-15-years-of-the-hemispheric-institute.

performance is never the same way twice),[5] archiving requires human effort, training, and expertise, as well as considerable institutional and financial support.

Nonetheless, most of what people call online archives are not archives, though they may have some archival features. Skits posted on YouTube or other sites are not archived even though YouTube is often referred to as a "media archive," and has a media archive (www.youtube.com/channel/UCG_PH1QoUFc0HG-kOmyetpw). This is not a technological issue, or even a preservation issue—storage is cheap. It's a commitment issue—the owners may or may not commit to preserving these materials long term. Further, there is no selection process for materials uploaded online. No one vouches as to the sources or veracity of the materials. Expertise is irrelevant. The materials seem free and available to anyone with internet access—avoiding the rituals of participation governing traditional archives. Power and politics continue to underwrite access, though at first, it's not clear how.

These digital so-called archives can be characterized as what N. Katherine Hayles calls a skeuomorph—"a design function that is no longer functional in itself but that refers back to a feature that was functional at an earlier time" (1999:17). The trashcan icon on our computers that makes a swishing emptying noise is a skeuomorph. So are digital documents and digital stickies—all reference past functions to help users adapt to new ways of organizing information. It's the familiarity with these past *things* and *practices* that facilitates the leap into a virtual place via technologies most people cannot really comprehend or control. The things and practices of course are not the same either. Online items are composed of bits, not atoms. Digital technology demands that everything/practice be transformed into a digital object and tagged. Our relationship with the thing also changes—we can link to an image, but we cannot hold, touch, taste, or smell the person or object of the image. Memory of past usage, however, is programmed into the ways we approach the technologies of the future. But this memory—our individual and collective memory of embodied behaviors—of course is not be confused with Kodak's glossy print memories, or with the memory on my computer or, increasingly, the move to huge online operating systems such as Web 2.0 with enough memory to support YouTube or Google's applications such as Chrome, Workspace, and Photos.[6] Web 2.0 has interactive functions that move our memories of being able to annotate, chat, and work collaboratively online. Now we are approaching Web 3.0, the "Semantic" or "Intelligent" web that is machine-understandable and not just human-readable. AI can conceivably communicate without human input. While *my* memory, invoked by *my* documents assured me I was still part of an uninterrupted system of knowledge production that has only been shifted to another, faster, more efficient platform, it's increasingly clear that is not the case.

We are far beyond the questions of copyright, ownership, and accessibility that worried users in the 2010s. The dangers now posed by the rampant circulation of unverified information created and distributed by humans and nonhuman bots across multiple platforms simultaneously exacerbates inequalities, endangers the social fabric, escalates national and global conflicts, and distracts us from addressing the annihilating threats of climate change.[7]

AI and AR technologies are developing precipitously, and so has the social uptake, aided most recently by the latest global pandemic, Covid-19. The fear of bodies, ours and others (now potential conduits of a deadly virus), forced us into anxious isolation. Covid consequently propelled online experimentation, especially in the realm of embodied practices, enabling users to create a sense of shared experience and community online. Artists and nonartists, teachers and students,

5. As Richard Schechner makes clear in "Restoration of Behavior," which had its first iteration in a 1977 Wenner-Gren Symposium on Cultural Frames and Reflections (see Schechner 1985).

6. Ron Eglash, in "Computing Power," cautions about the shift of computer memory to large operating systems: "In terms of individual use this is a move toward democratization through lay access, but in terms of business ownership it is a move towards monopolization, as only large scale corporations such as Google can afford the economy of scale that such memory demands place on hardware" (2008:60).

7. See for example the report "The Danger of Fake News in Inflaming or Suppressing Social Conflict," from the Center for Information Technology and Society (CITS n.d.).

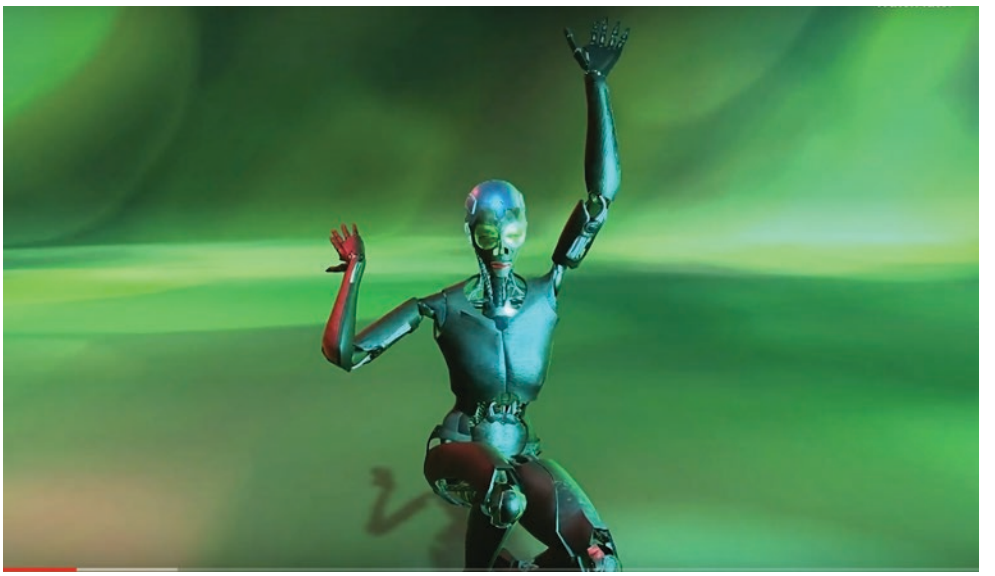

Figure 2. Video still of Rashaad Newsome's Being, an AI humanoid, 2019. (Screenshot by author)

learned to perform across screens. Some wore goggles, headsets, and headphones to more fully create and experience virtual environments. Religious rituals of healing and salvation took place, in real time, for global audiences as pastors performed the laying on of hands and spraying holy water on the computer screen. Abimbola Adelakun, who studies online Pentecostal practices, differentiates between the "live"—"visibly perceptible presences that are connected to others within the grid of what digital technology makes possible" and the "a-live [,...] the specters, the copresent immaterial beings whose interactions enliven worship" (2022:39). Neither of these forms of liveness correspond to what we used to understand as live—meaning in-person, not recorded. The issue of "live" and "liveness," the editors of a *TDR* issue on Presence write, "is always 'alive' [...] if not 'undead'" for those of us who study performance (Jannarone et al. 2022:23).

The new meanings of words we thought we understood, as we saw with *archive*, reflect deep shifts in knowing and being in the world. The digital has forced us to name and delimit the "real." "Real time" is not the same as the present. IRT, in real time, meaning the ability to process or transmit information immediately, without any noticeable delay, is a computing rather than an experiential category. An online community is not the same as a physical group of people who communicate largely through body language. What counts as embodied knowledge has also morphed. The flesh body is not the same as the very powerful digital body—the one whose credit ratings or medical history or suspicious activities can sink an application or have a person strip searched at the border (see CAE 1994). And Rashaad Newsome's fabulous robot, Being, whose pronouns are they/them, "embodies" an archive of radical Black thought and performs an ethos of connectedness and care through their nonbinary, nonhuman "body."[8] All this to say, "present," "liveness," "memory," "body," "embody," "presence," and "embodiment," may no longer mean the same thing to us, and certainly not to all of us. I put all these terms in quotes to signal the Schechnerian double negative: we're not present, live, embodied, but we're not not present, live, or embodied (Schechner 1985:110). What does this shift do to our states of being in the world?

8. Watch Being at rashaadnewsome.com/ai/being/.

So, let's go back for a minute to the etymological understandings of presence. "Presence" shares a Latin root with "present" (*praesentem*), meaning being physically with others, "in one place at one time, and not in another."[9] Presence is participatory and relational, founded on mutual recognition. It's ample enough to allow for Indigenous understanding of presence in an animated universe, which recognizes the intersubjectivity and interdependence of humans, animals, trees, the earth: "*ch'ulel* turns everything in existence into a subject and allows us to interact with one another, subject to subject" (López Intzín 2020).[10] We need others to birth, rear, and name us. In another understanding of presence, we can be in the presence of a great figure.

Additionally, presence/present refers to a showing or displaying before others. Columbus took nine or ten misnamed Amerindians to Europe as a gift (or present) to present them to the Spanish court in 1493 as proof that he had "discovered" what he thought was the sea route to Asia. The captives were there, present in their corporeality but present as strange, inhuman, found objects. This example captures the ongoing violence and manipulation of systems of domination that coerce or enforce presence.

Some minoritarian creators advocate for "obliqueness" as a way to evade mandatory exposure and invisibilization. The oblique, for Édouard Glissant, "is the refusal of the fixed, the refusal of the stable, the refusal of the uniform. It is the celebration of diversity, of difference, of complexity." Conversely, presence can signal an act of visibilization, of solidarity, a commitment to witnessing, the "ethical imperative" to show up and stand up to be counted, to act against injustice (Spivak 2012:440). Note: I give no in-text citation for Glissant because, as much in the world of AI, this is and is not an actual quotation—at least not from Glissant. I asked Chat GPT 3.5 to find the Glissant quote I wanted and it came up with the above, supposedly "From 'Poetics of Relation.'" I could not find this anywhere in *Poetics of Relation*, so I asked an NYU librarian who checked every conceivable source and could not find this quotation. While it poetically captures the spirit of Glissant's "oblique," it disappears him as author. Is the quote false? Attributable to Chat GPT 3.5? Or should I, as some choose to do, pass it off as my own? AI too plays with the oblique: erasing presence and authorship while invoking it and creating new materials.

But, can we have presence without a body? Is embodiment the same as presence? Presence, or better yet, the feeling or illusion of presence, is apparently what AI and AR really wants: "Feeling truly present with another person," as Mark Zuckerberg stated, "is the ultimate dream of social media" (Zuckerberg 2021).

Presence cannot be understood as strictly limited to embodiment. I am "present" FaceTiming or Zooming with my family or students, and while we interact in *real* time we are not in the same geographic or temporal zone. My students are here, in attendance, but I don't know where here is. Our bodies and voices continue to be together—not embodied face-to-face but face-to-interface. We can read and react to each other's facial expressions and, at times, body language. We're together in a shared context, in a *live* conversation, even when the backgrounds are blurred and unlocatable. Our interactions online, while incomplete (I cannot touch or smell or tickle my granddaughters), are not metaphoric, nor a simulation or representation. Usually, when we refer to presence separated from embodiment, we use metaphors, simulation, and forms of representation. We speak of the ghosts, spirits, or the disappeared that haunt our present. We feel *as if* they were with us. We might experience their psychic potency in our bodies by shivering or fainting or becoming possessed. These forces might wield extraordinary social and political power as well, as in the case of the enforced disappearances of those who are perceived as threats to a repressive order.

9. The OED defines presence as "the fact or condition of being present; the state of being before, in front of, or in the same place as a person or thing." Online Etymological Dictionary, www.etymonline.com/word/live.

10. "El ch'ulel es lo que vuelve sujeto a todo lo existente, hace que interactuemos de sujeto a sujeto."

Embodiment, however, depends unequivocally on bodies, on being and having a body. These distinctions are important in terms of cognition and subjectivity to understand the predicaments posed by new digital technologies.

Living organisms learn and communicate enormous amounts through embodiment. We understand the world through our bodies. Humans lived for hundreds of thousands of years before fully developing verbal language, and thus cultivated an extensive repertoire of signs, signals, sounds, gestures, and tone of voice to understand others—humans and nonhumans. Robert Greene notes that "it's wired into our brains to have amazing sensitivity to people's non-verbal communications." People who watch what others do, rather than say, he adds, can even be thought of as telepathic or having supernatural capabilities. We've become so word oriented that, he fears, we are losing this capacity (in Huberman 2023). The move to online communication further reduces our abilities to detect nonverbal communication. Texting relies on language. Emojis flatten out expressions—happy, sad, anxious. FaceTime and other videotelephony platforms confine us to frames that delimit our ability to express ourselves fully.

To underline that we know, learn, and communicate through and with our bodies is not a specist argument. A bee, for example, has "300-degree vision," its eyes "process information faster than any human's [...and] the range of colors [it discerns...] is broader than any humans [...,] including ultraviolet" (Chittka 2022:4). Whales can communicate across thousands of miles (Yong 2022:232). On and on. AI, however, is the first to admit that as a language model, it doesn't have a physical body, and thus an embodied experience of the world. It can describe and provide information about—say, emotions—but it cannot experience them. AR experiments with extending embodiment by adding filters and overlays—such as glasses or gloves—to human bodies. While we might experience various levels of the virtual simultaneously, including haptic sensations such as touch or sound, these are all representations of embodiment overlaid on real-world experiences that create the illusion of touch and other sensory experiences. The virtual elements in AR are not physically present but are digitally simulated to enhance the perception of embodiment.

Meta's most recent experiments with Codec avatars, using photorealist computer modeling, create the sensation that "It's you! It's really, really you. But you're not here," as Lex Fridman exclaimed in his Metaverse conversation with Mark Zuckerberg (Fridman 2023). This modeling, Fridman gushes, has taken us "beyond the uncanny valley," defined as the negative human reaction and emotions prompted by human replicas. The Zuckerberg replica is however not him. His facial features and expressions have been minutely scanned and modeled into a 3-D avatar through a long and costly procedure. Made visible through headsets and headphones, the avatar gives a sense of presence. Zuckerberg acknowledges that most communication happens through embodied expression and not language. He wishes that 3-D, photorealist technologies could not only better capture expressions but actually improve on them. He has, he's been reproached, a "stiff expression [...] I might feel pretty happy but might make a pretty small smile." He wishes that his avatar "could better express how I'm feeling than what I can do physically" (in Fridman 2023). The urgent questions are now, "How wide is your smile? How wide do you want your smile to be? [...] To what extent do we want to give people control over that?" Now we've come full circle in the usurpation of the "live" by simulation. Zuckerberg aspires to create an avatar—a representation—that can be coded to simulate an emotion that he, in his embodied presence, cannot express. The avatar that transmits the ideal version of Zuckerberg, he hopes, can make him more human. Are we being led back into Plato's cave? The ideal (nonexistent) Zuckerberg is the *real* one; the avatar captures a quality of the ideal. The individual, embodied Zuckerberg is a poor instantiation, thrice removed from reality (see Plato [380 BCE] 1955).

That imperfect embodied human, according to this logic, can be perfected through the new wearable, stylish AI that is now for sale by Meta—"smart glasses [that] let people stay present and connected as they make new memories" (Meta 2023). These glasses not only allow us to make calls, listen to music, but we can also take hands-free (voice-activated) photographs. Like Kodak before it, Meta sells "memory," "authenticity," and "unique point of view" as a commodity, actively

Figure 3. The new cogito, "i text, therefore IM." Image of a SVEDKA vodka ad, New York City, 2010. (Photo by Diana Taylor)

promoted nostalgia as an epistemic lens (Meta 2023). Let's not miss baby's first steps, or important graduations and birthdays. These glasses make it possible "not only [to] relive the moment, but *really live in the moment*, too." (Old hand-held technology, such as the camera, this pitch insinuates, was so distracting.) The urgency of the photo rests on our knowing that the photographed object/subject will be lost, that the present vanishes, and that these happy moments are bound to end. The nostalgia is built into the technology itself—a memento mori along the line of the first miniature paintings of loved ones. Where does all the content and information go, swept up now by an even smarter system for collecting the human embodied acts and gestures that AI lacks?

Instead of marketing the "uniqueness" of humans and their "authentic perspective," as Meta's smart glasses do (Meta 2023), Deep Fakes simultaneously need and erase bodies as they overlay simulations on a "real" body. Morphing the faces, body movements, and voices of someone onto another can deceive, entertain, and more often titillate (porn sites are by far the most popular application of AR [see e.g., Steele 2023]). Clearly, here too we're in the realm of the *as if*. The effects, as Tom Graham emphasizes, can be enormously powerful and creative: by "decoupling human experiences both from where it happens and the moment in time that it happens, I think, we can create these experiences through hyperreal photorealistic media that help us share the best of our experiences, the best of who we are" (2023). Let's think about that: "hyperreal photorealistic media" will create content that simulates the presence of loved ones, for example, and in conversation with these simulacra we can experience the best of who we are? How different is this from the 16th-century nun, St. Teresa de Ávila's, orgiastic experiences of being in the presence of Jesus? Aside from a flippant dismissal of "whatever turns you on," how does this technology entail embodiment?

In this sense, AI and other technologies arising from the digital often continue the Western notions of the mind/body split and human cognitive exceptionalism that have haunted us for 3,000 years. For Plato, consciousness, or the soul as he called it, was independent of the body. Descartes's

Enlightenment era *cogito*, "I think therefore I am," continues to exclude the body from the creation of consciousness. Ironically, AI both extends the cogito into the present—thinking and intelligence can take place without a body—and challenges it, participating in the expanded understanding of the complexity and diversity of cognition that includes animals, trees, the mycelial web, and now arguably digital technologies such as AI. We can have cognition without a body, but not embodied cognition, not cognition that stems from our ways of being in the world. AI "does not have a model of the world, it only has a model of language" (Hayles 2023:258). Even systems creating robotics or autonomous vehicles function by incorporating sensors, mapping software, perception algorithms, and other techniques to develop a representation of the physical world.

My point here is not to argue that archives, or repertoires, or digital technologies are "better" or worse at transmitting various forms of knowledge and experience. As I hope I've made clear, I deeply value and have worked firsthand with all three. However, it seems imperative to me to understand *how* the various forms of transmission act and to what ends.

The digital, I suggested, will not replace archives or repertoires. If anything, earlier distinctions between online and offline have crumbled for the many of us—across the global social spectrum—who are now never offline either because we have cell phones or because our money is kept in a bank account. The simultaneity of these systems of transmission makes us think about them in new ways. Archival practice, once the elitist and exclusionary tool of power and empire, now seems the guarantor of the "authentic" and enduring. Digital technologies have only heightened the appreciation of embodiment. Many of us risked Covid infection by taking to the streets at the height of the pandemic to protest the murder of George Floyd with Black Lives Matter. We needed to be together, to stand up and be counted.

As artists, theorists, and creators working and interacting with digital technologies, I would urge us to focus on what we might achieve if we bring our various systems of knowing and being in the world together to perform, create, and enhance the value of social life, and to extend interactions and knowledge production. How can the power of imagination, of art, of theory, and of technology come together as potential lifesavers in the face of environmental devastation and soul-crushing social inequalities?

These conversations and initiatives, however, need to consider the financial and necessarily political, even existential, realities posed by these digital technologies. What do we prioritize, who decides what gets done, and how will we/they go about it? These battles are being fought as we speak. Who controls the controllers? Who profits from this control? People who create or write about AI and AR confess that they're worried. "Worried," Graham admits, "is the right instinct" (2023). Early on, our experiences with the internet and social media made clear that in order to use, one has to agree to be used (Chun 2006:130). The creators of AI and AR offer us control over ourselves by marketing new technologies for living better, seeing better, hearing better, controlling our environment, and sharing our "authentic" perspectives. Their products, however, shape our perceptions even as they extend them. We have to wonder if what we're buying is basically industry's unfettered access to us. Are we the commodity, the product? Our embodied cognition might well be harvested to further train the disembodied AI. Hopefully our intelligence, our embodied cognition, rather than artificial intelligence (for all it has to offer) can guide us through this current transition.

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