Edited by Shannon Mattern

IN FOCUS

Media Study beyond Media Studies

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In Focus Introduction: Media Study beyond Media Studies: Pandemic Lessons for an Evolving Field

When the world went into lockdown in March 2020, we compressed and uploaded much of our lives onto screens and into networked technologies. Mediated modes of interaction once regarded as exceptions—from telehealth to online learning to mail-in voting—became the rule. Teachers suddenly became production designers, cinematographers, and video editors.¹ Chefs learned to style their culinary creations for social media and cultivated new Instagram-based networks of local distribution.² Dancers, comedians, and musicians adapted their performances for bedroom audiences engaged

- Donatella Della Ratta, "Teaching into the Void," Institute of Network Cultures, January 6, 2021, https://networkcultures.org/longform/2021/01/06/teaching-into-the-void/; and "Field Notes: Pandemic Teaching," Places Journal (April 2020), https://placesjournal.org/series/field-notes-on-pandemic-teaching.
- 2 Brooke Jackson-Glidden, "No Restaurant? No Problem: Chefs Have Found a Certain Freedom in Selling Meals on Instagram," Eater, March 4, 2021, https://pdx.eater.com/2021/3/4/22310225/chefs-selling-food-meals-on-instagram-covid-19; and Tejal Rao, "Cooks Turned Instagram into the World's Greatest Takeout Menu," New York Times, January 26, 2021, https://www.nytimes.com/2021/01/26/dining/instagram-chefs-takeout-menus.html.

Shannon Mattern, In Focus Introduction: "Media Study beyond Media Studies: Pandemic Lessons for an Evolving Field," *JCMS* 62, no. 4 (Summer 2023): 156–160.

through tiny screens and headphones.³ Sex workers turned to OnlyFans and other platforms for virtual intimacy, or for means of discreetly sustaining in-person encounters; simultaneously, they strengthened existing solidarity networks to ensure their digital privacy.⁴ Community organizers co-opted the managerial milieu of collaborative digital spreadsheets to coordinate mutual aid efforts. Families without reliable home internet connections mapped out secret geographies of leaky signals, where Wi-Fi radiated onto library steps and McDonald's parking lots. Whether we liked it or not, the pandemic made us all media producers, data archivists, and system administrators.

In my own work as a media and design scholar serving as the pandemicera director of two anthropology programs, I saw countless social scientists suddenly embrace digital ethnography and other media-centric methods.⁵ Researchers in a range of disciplines, now disconnected from their field sites, quickly came to the realization that life on the screen constitutes a vibrant culture no less legitimate and authentic than life in the flesh. (Unfortunately, this revelation wasn't always accompanied by a recognition of the decades of relevant research in media studies!) Simultaneously, in my work as the board president of the Metropolitan New York Library Council, I watched information professionals and their patrons put into practice myriad critical concepts long examined by media scholars. Every month, as the leaders of various local libraries and archives gathered on Zoom, we heard about how these institutions embraced their many roles: as service providers, loaning gadgets and hotspots to those without reliable connectivity; as sources of trusted information and entertainment in an age of misinformation and domestic isolation; and as advocates for critical media consumption and creation. The New York Public Library for the Performing Arts even loaned tech kits with ring lights, tripods, and microphones for performing artists auditioning online—and perhaps for academics, too, who developed a new appreciation for pedagogy as performance. Across academic and civic realms, many indi-

- 3 Harmony Bench and Alexandra Harlig, "This Is Where We Dance Now," special issue, International Journal of Screendance 12 (2021), https://screendancejournal.org /issue/view/279; James Rendell, "Staying In, Rocking Out: Online Live Music Portal Shows during the Coronavirus Pandemic," Convergence: The International Journal of Research into New Media Technologies 27, no. 4 (2021): 1092–1111, https://doi.org/10.1177/1354856520976451; Nkululeko Sibanda and Cletus Moyo, "Theatricality in the Midst of a Pandemic: An Assessment of Artistic Responses to COVID-19 Pandemic in Zimbabwe," Journal of African Media Studies 14, no. 2 (2022), https://doi.org/10.1386/jams_00079_1; and Zoom Obscura, https://zoomobscura.wordpress.com.
- 4 Danielle Blunt, Emily Coombes, Shanelle Mullin, and Ariel Wolf, Posting into the Void: Studying the Impact of Shadowbanning on Sex Workers and Activists, Hacking//Hustling report, 2020, https://hackinghustling.org/posting-into-the-void-content-moderation/; and Lauren Rouse and Anastasia Salter, "Cosplay on Demand? Instagram, OnlyFans, and the Gendered Fantrepreneur," Social Media + Society 7, no. 3 (2021), https://doi.org/10.1177/20563051211042397. See also the work of Decoding Stigma, https://decodingstigma.tech; and Hacking//Hustling, https://hackinghustling.org.
- Magdalena Góralska, "Anthropology from Home: Advice on Digital Ethnography for the Pandemic Times," Anthropology in Action 27, no. 1 (2020), https://doi.org /10.3167/aia.2020.270105; and Jaymelee J. Kim, Sierra Williams, Erin R. Eldridge, and Amanda J. Reinke, "Digitally Shaped Ethnographic Relationships during a Global Pandemic and Beyond," Qualitative Research (2021), https://doi.org/10.1177 /14687941211052275.

viduals and communities were engaged in media study and praxis, even if they had no connection to the academic field of study.

Of course, previous periods of crisis have precipitated similar revelations and amateur innovations: oppressive regimes have inspired underground publications, wars have given rise to shadow communication networks and citizen journalists, and persistent poverty and marginalization have necessitated technological hacks and other forms of communicative improvisation—all of which require deep, critical understanding of how media do, and could, work. More recently, the past few pandemic years of media saturation and distanced connectivity have cultivated widespread, intimate familiarity, frustration, exhaustion, adaptation, and experimentation with quotidian media technologies—from Zoom and networked calendars to smartphone cameras, short-wave radios, and postcards. We ascertained these technologies' affordances and limitations, learned their logics, identified their appropriate contexts of use, and sometimes even purposefully and creatively misused them—or refused their intrusion into our lives.

This capacity for critical engagement emerged partly as a response to the dystopian dimensions of our emergent metaverse. Our always-online-all-the-time mode of existence precipitated many unwelcome transformations and yielded troubling revelations about digital divides and digital exhaustion. Work now spans multiple time zones and offers no serendipitous reprieves; sick days and snow days seem to have disappeared. We've also observed the inability of egregiously under-resourced postal systems, news networks, and social media platforms to handle a remote election, a remote census, rampant misinformation, and a fracturing political landscape. These transformations have evidenced the failure of traditional approaches to "media literacy": knowing how to interpret media texts and evaluate their sources does little to prepare us to grapple with fundamental infrastructural, epistemological, and ethical ruptures.⁶

At the same time, pandemic-era media, like those we addressed above, offer much to admire and emulate—and much for media scholars and makers to learn from. Broad segments of the population and various communities of practice have engaged not merely in exhaustive, obligatory media *use* but also in quotidian media critique. Their hacks and kludges, détournement and parody, subversion and refusal—from Zoom dance parties, to elaborate out-of-office messages, to the myriad other examples presented in this dossier—often constitute forms of implicit, applied theorization and activism. And their occasional, intentional embrace of particular analog modes of communication—from mail art to collaborative herbaria, or scrapbooks of dried plants, collected on pandemic hikes—exemplifies a capacity to choose media forms to serve particular social and affective needs and to allow for aesthetic experimentation.⁷

- 6 danah boyd, "Did Media Literacy Backfire?," Data & Society: Points, January 5, 2017, https://points.datasociety.net/did-media-literacy-backfire-7418c084d88d; and Jutta Haider and Olof Sundin, Paradoxes of Media and Information Literacy: The Crisis of Information (London: Routledge, 2022).
- 7 Jessica Leigh Hester, "Preserve Your Quarantine Nature Walks with a DIY Herbarium," *Atlas Obscura*, April 28, 2020, https://www.atlasobscura.com/articles/coronavirus-herbarium; and Matthew Taub, "'Mail Art' Makes a Comeback during

This In Focus dossier examines how, throughout the pandemic, media study has gone mainstream and mundane, cultivating productive appropriations, transforming bureaucratic commercial platforms into spaces for radical organization and experimental performance, and prompting individuals to cultivate bespoke mediatic assemblages to manage their own increasingly hyper-mediated existences. Our contributors address how various communities of practice have used this anomalous epoch to ask questions central to the academic field of Media Studies—What are media? How do we use them? How can we remake them?—through media *study*, or what Fred Moten describes as "what you do with other people," through a "common intellectual practice" separate from that required by educational institutions. We consider how such *study* complements and challenges Media Studies.

We also acknowledge that the past few years of compounding crises surely didn't cause these adaptive practices. In many cases, the pandemic merely shone a light on long-standing improvisations and inequities and community-based means of redress. Internet access has long been uneven. The postal service has long been underfunded. Our primary social media platforms have long been inadequate to fostering a public sphere. Consider the inter-institutional Critical Design Lab's work to create a Remote Access Archive, a collection of stories and documents attesting to "how disabled people have used technology to interact remotely"—through newsletters, message boards, phone trees, and online interpreters—and have often been denied accessibility accommodations both during the pandemic and for decades prior.9 Critical disability scholars Kelsie Acton and Aimi Hamraie propose that "the relative ease and creativity with which disability communities shifted online was possible because many were already participating through remote, digital tools, such as livestreaming events with real-time captioning and American Sign Language interpretation."10 Out of necessity, disability communities have long been engaged in critical media study and praxis.

Attesting to the spread of pandemic "media study" beyond Media Studies proper, we have assembled brief commentaries from seven scholars and practitioners representing Media Studies and allied fields and disciplines. The first two pieces in the dossier examine how media have created contexts for pandemic-era interpersonal communication and self-definition; the following three pieces then consider how media have structured and represented communities; and the final piece focuses on the infrastructures that made pandemic mediation possible.

First, Hannah Zeavin examines the technologies of pandemic teletherapy and how they cultivate a "medium inside." Zeavin explains how therapy's new, mediated working conditions—its glitches, bad signals, and errors—can

Quarantine," *Atlas Obscura*, May 6, 2020, https://www.atlasobscura.com/articles/mail-art-from-guarantine.

⁸ Stefano Harney and Fred Moten, *The Undercommons: Fugitive Planning & Black Study* (Brooklyn, NY: Autonomedia/Minor Compositions, 2013), 110.

⁹ Critical Design Lab, "The Remote Access Archive," https://www.mapping-access.com/the-remote-access-archive.

¹⁰ Kelsie Acton and Aimi Hamraie, "Life at a Distance: Archiving Disability Cultures of Remote Participation," *Just Tech*, June 2022, https://just-tech.ssrc.org/articles/life-at-a-distance-archiving-disability-cultures-of-remote-participation/

offer new models for understanding the psyche. Next, Christine H. Tran addresses how critical, self-reflexive, and playful uses of Zoom compel us to ask how the platform accommodates or undermines the conventions of knowledge work, and to recognize how much of our work as scholars, teachers, and students is a matter of embodied performance. Jing Zeng turns our attention to another video-based platform, TikTok; she examines how young people and educators, barred from their classrooms and from in-person engagement with one another, have used TikTok to teach and to learn, perhaps cultivating new obligations and opportunities for faculty to experiment with these emerging pedagogical forms.

Paul Soulellis then describes how crises elicit "urgent" modes of communication—flyers, newsletters, protest signs, spreadsheets—and how their collection into "bad archives" offers queer and other marginalized communities vital means of understanding their pasts, imagining their futures, and establishing protocols of care. Yet community knowledge comes in myriad forms, and the uses to which it is put depend on who collects it and in what mediated forms. In an era chronicled in infection dashboards, election maps, and crime charts, we've seen ample evidence that data have the power to reveal demographic disparities and shape policy. As Lucy Pei and Roderic Crooks show, community organizers recognize the power of marshaling those public data to serve their communities' interests while prioritizing the epistemological, ethical, and aesthetic virtues of public *narratives*.

Finally, Greta Byrum, a longtime activist and organizer for digital equity, directs us to the infrastructures making possible all this data collection, TikToking, and teletherapy. The past few years have revealed the persistence and profound implications of inequitable access to the internet, as well as the presumption that access provision is a solution to myriad socioeconomic and cultural problems. Yet, as all the contributors to this dossier show, the mere provision of platforms, tools, and data can't solve a crisis or heal a community. Byrum's experience shows that how we design our media tools and create policies that govern their use should be informed by the aspirations and principles fundamental to the communities they serve—many of which have engaged in the critical study and thoughtful design of media ecosystems that serve their local needs and embody their values. As all of our contributors demonstrate, the pandemic has given us an opportunity to learn from our losses, failures, and occasional bright spots to imagine more equitable, inclusive, responsible, convivial futures for the media that interconnect us.

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¹¹ See Daniel Greene, The Promise of Access: Technology, Inequality, and the Political Economy of Hope (Cambridge, MA: MIT Press, 2021).

Hannah Zeavin

The Medium Inside: Psychoanalysts' Media Theory of Everyday Life

IN MEMORY OF KEN LEWES

In February and March 2021, as psychoanalysts and their patients shifted from consulting rooms and couches to Zoom invites, Doxy meetings, and calls taken in small private corners of the home or outdoors, many clinicians felt as if their entire playbook had evaporated into thin air. Traditionally, forms of distance treatment have been met with suspicion, seen as contaminative in their mediation or technologization of the therapeutic speech that has been figured as pure when in person. Distance treatment has often been derided as a lesser form of therapy because it robs the analyst of non-verbal clues as to the state of their patients while deritualizing or unframing the psychoanalytic encounter. Yet teletherapy during the COVID-19 pandemic was (and remains) a lifeline for the continuation of the practice in a time of crisis—and not for the first time. From the London Blitz to a suicide epidemic in San Francisco, from the war for liberation in Algeria to the generation of new institutes where previously psychoanalysis was suppressed, teletherapy has served this function many times throughout the twentieth century. Suddenly, this supposedly denigrated shadow form of care became the dominant way patients and their analysts could continue their work.

But this shock and demand to move to *tele*-was partially so difficult for analysts because, while many of them had done the occasional phone session, very few had previously run full tele-clinics. Many analysts felt that they

Hannah Zeavin, "The Medium Inside: Psychoanalysts' Media Theory of Everyday Life," *JCMS* 62, no. 4 (Summer 2023): 161–166.

¹ For examples of this relationship to screen-mediated psychotherapy, see Sherry Turkle, "Bodies in the Room," Medium, May 29, 2018, https://medium.com/@sturkle/bodies-in -the-room-ca07d196e0d9. See also Gillian Isaacs Russell, Screen Relations: The Limits of Computer-Mediated Psychoanalysis and Psychotherapy (New York: Routledge, 2015).

lacked examples, rules, directives, and assistance in navigating the conversion of their practices. Despite the fact that using media for treatment has long been part of psychoanalytic research and practice (in the consulting room, the clinic, the hospital, the prison, the school, and with families) across the twentieth century, the specific use of media for distance treatment—teletherapy—has been routinely suppressed, degraded, or seen as belonging only to small ad hoc, feeless, and typically radical projects.² And yet teletherapy is as old as psychoanalysis. If only we look, psychoanalysts have long been practicing everyday media theory in the consulting room and beyond its walls.

In 1887, Sigmund Freud took a walk. More accurately, he likely took many, each time with an envelope to post. If he went for the walk with the intent of posting a letter, he later wrote, "it is not at all necessary that I, as a normal not nervous individual, should carry it in my hand and continually look for a letter-box. As a matter of fact I am accustomed to put it in my pocket and give my thoughts free rein on my way, feeling confident that the first letter-box will attract my attention and cause me to put my hand in my pocket and draw out the letter." Suffice it to say, it did not. Ernest Jones, Freud's most devoted British disciple, too, would forget to post letters for days, miswrite their addresses, fail to stamp them, in an unconscious effort to communicate via the post—perhaps especially in failing to use it.

Freud was charmed by the psychical meaning behind this repeated failure, what he classified as a forgetting, a motivated one, in his book *The Psychopathology of Everyday Life* (1901). In investigating his failure to post letters, Freud gave us his understanding of what it would mean to psychoanalytically read this kind of quotidian media interaction. In failing to post the letter, he uncovered that, more generally speaking, errors made with media—not just un-posted letters but missed telephone calls, strange writing mistakes, shifts in handwriting—might mean something. Media matter to psychoanalysis—they can be symptoms—and the discipline must engage quotidian media usage for all its expressive affordances. Freud, not so inadvertently, gave us a theory of media and media in the unconscious.

While Freud did indeed love a media metaphor (from the mystic writing pad to the telephone call), he also, as I have argued elsewhere, made material use of media to *perform* analysis. We might even say that the first psychoanalytic encounter—Freud's own analysis—was performed at a distance, contained in the envelope rather than housed in the consulting room with a patient recumbent on a couch. Media are the originary psychoanalytic space.

During the COVID-19 pandemic, faced with a digital (or telephonic) practice, psychoanalysts (as well as their patients) began to turn their herme-

- For a historical study of this conception of media in psychotherapy, starting with Freud to the present, see Hannah Zeavin, The Distance Cure: A History of Teletherapy (Cambridge, MA: MIT Press, 2021).
- 3 Sigmund Freud, "Forgetting of Impressions and Resolutions," in the Standard Edition of The Psychopathology of Everyday Life, vol. 6 (1901), 152.
- 4 Freud.
- Freud, Psychopathology of Everyday Life, xii, fn1. Here Freud discusses needing to use a multiplicity of media to see his patients; he might be called on the telephone to come consult, negotiate by letter, follow up after a session via mail, and so on. Freud's own analysis—with Wilhelm Fliess—is typically understood as a "selfanalysis" rather than a proper teleanalysis.

neutics of suspicion to their newly mediated conditions. First, analysts formed process groups via national and local professional organizations to navigate the change. These weekly meetings offered support in treating full caseloads that were ever expanding and discussion of the particular pains that many patients were facing due to ongoing crisis conditions in both the pandemic and the uprisings of 2020.6 Experts who had earlier written about teletherapy from a clinical perspective, despite its relative rarity before the pandemic, were called in to issue new guidelines. These guidelines centered on patients' behaviors: refraining from eating and drinking, supplying one's own tissues, taking time before and after a session (going for a walk was suggested), securing privacy within the home, and so on.⁷ All of these recommendations make significant assumptions about who the patient is: their labor and its location, their subject positions, their age, their body, their home, and their cohabitants. Whereas, in the consulting room, the physical space might largely be controlled by the analyst and remain homogenous across patients, pandemic conditions for treatment were as diversely material and individuated as they were homogenously technological (reflecting a presupposition that all patients have access to decent internet, particular software, video cameras, and data, which, of course, is not the case). At the same time, analysts were put in the position of working from their own homes, sometimes revealing more about themselves via revealed markers of class (a second home in the country) or of a life lived (evidence of children not fully hidden) than the practice typically brackets in the consulting room.8 As new frames were negotiated, it was under these conditions that many analysts got a crash course in thinking about infrastructure, media access, and mediated intimacy.

The practice of psychoanalysis raises the unconscious from beyond the pale of repression. When its medium changes, new experiences, long submerged, necessarily come to the fore for both patient and analyst. In my own work on pandemic teletherapy during the uprisings of 2020, I called this genre of interpretation—and of experience—the activation of "the medium inside." "The medium inside" follows Melanie Klein's formulation of "the Hitler inside"; Klein was writing during World War II and was interested in patients' identification with the abhorred fascist leader. What about one's early internal objects (a father, say) were revived in the presence of the Hitler outside, whose armies were ever encroaching on Britain from the skies and seas? In June 2020, I asked what it might mean to think of a medium inside activated by the shifts in mediated therapy, from the medium of the

⁶ The American Psychoanalytic Association hosted town halls for the first eighteen months of the pandemic (2020–2021) as well as peer supervision.

⁷ See Todd Essig and Gillian Isaacs Russell, *American Psychoanalytic Association Teletherapy Guidelines* (New York: American Psychoanalytic Association, 2020).

⁸ For more on the shifting history of the frame, see Sigmund Freud, "On Beginning Treatment (Further Recommendations on the Technique of Psychoanalysis)," in Psychopathology of Everyday Life, vol. 12. For more on the status of the frame, see Isaac Tylim and Adrienne Harris, eds., Reconsidering the Moveable Frame in Psychoanalysis (New York: Routledge, 2017).

⁹ Zeavin, Distance Cure.

¹⁰ Melanie Klein, Narrative of a Child Analysis (London: Hogarth Press, 1961). See also Michal Shapira, The War Inside: Psychoanalysis, Total War, and the Making of the Democratic Self in Postwar Britain (Cambridge: Cambridge University Press, 2013).

consulting room and its proximities to the distance (but not absence) of care in regimes of teletherapy.

In the two years (at the time of writing) since the start of the COVID-19 pandemic, psychoanalysts have begun to do just that. As clinicians turned to quotidian media studies of the digital consulting room, a new genre of related writings appeared in professional journals. One subgenre focused on the video medium itself and what it recalled: bad signal, glitch, error, and its corresponding psychical states such as dropping, abandonment, and annihilation anxiety. 11 Although clinicians had worked on teletherapy previous to the pandemic, thinking psychoanalytically about media in mediated analytic contexts had been quite rare in the years since Freud himself reflected on these topics. At first blush, this new focus on problems like the glitch rather than how teletherapy increased access seems faithful to the pre-pandemic understanding of teletherapy as a hopeless non-replacement for the inperson encounter. But the papers most frequently published in professional journals understood teletherapy as non-replacement in a medium-specific manner: the digital presents new working conditions—and, under those conditions, the psyche was working differently too.

If the frame—which psychoanalysts call the setting, composed of the location, hour, fee, and ritual of the analytic encounter—matters in psychoanalysis (and it does), then a digital frame would elicit new elements of conscious and unconscious experience. What were psychoanalysts to do with the old-new experiences as they arise in these conditions? How are they to make interpretations of the mediated encounter? If a patient hates teletherapy, is that hatred born of a material allergy to sitting in front of the screen because they see all screens as bad? Is the pandemic itself a screen for some patients? Is Zoom merely a digital manifestation of that screen? Analysts had to rethink how, where, and why medium interpretations flow and how they function. They began to attend to problems like a dropped call in the same way that they might attend to the accident of terminating a session a few minutes early: not in terms of intentionality (one is infrastructural, the other counter-transferential), but in terms of how they generated material and impacted the analytic relationship.¹²

"Can you hear me now?" came to be explored not just as material signal—is my voice literally reaching you?—but as anxiety about being heard or held in histories of patients whose parents could not attune to them. Attunement—itself a media and music term turned psychical metaphor—

¹¹ See Jason A. Wheeler Vega, "Resistance and Revolution: Authority and the Analytic Situation during COVID-19," Psychoanalytic Quarterly 91, no. 2 (2022): 239–271; and Norman Straker, "Vicissitudes of Death Anxiety during the COVID-19 Pandemic," Psychodynamic Psychiatry 49, no. 3 (2021): 384–387.

¹² As just a few examples: Irene Agnello and Chiara Giubellini, "Clinical Experiences during the COVID-19 Pandemic," *Journal of Analytical Psychology* 66, no. 3 (2021): 379–398; Neal Vorus and Steven J. Ellman, "Notes from a Pandemic: A Year of COVID-19," *Psychoanalytic Psychology* 38, no. 2 (2021): 97–98; Todd Essig and Gillian Isaacs Russell, "A Report from the Field: Providing Psychoanalytic Care during the Pandemic," *Psychoanalytic Perspectives* 18, no. 2 (2021): 157–177; and Kylie Svenson, "Teleanalytic Therapy in the Era of Covid-19: Dissociation in the Countertransference," *Journal of the American Psychoanalytic Association* 68, no. 3 (2020): 447–454.

¹³ Lynne Zeavin, "Can You See Me?," Journal of the American Psychoanalytic Association 68, no. 3 (2020): 467–470.

came to be seen in its fuller double meaning. The notion that only a so-called perfect medium—that is, one that disappeared from conscious experience—could allow for the work was gently unseated. Noise became understood as psychoactive—it could raise early unconscious phenomenon in its irritation. The medium outside could ring the medium inside in a way previously left underfeatured in the highly controlled clinical setting of the therapist's office.

Others turned to the absent media of that same lost consulting room: What were the analyst's fantasies of mediatic contagion, or infiltration, in the context of the pandemic? In the early days of COVID-19, as analysts and patients got sick, each had to wonder if their analyst or their analysand was the cause of illness—both a fantasy and a material possibility. Noticing this new version of the always-mediated frame of psychoanalysis—precisely because it became dominant overnight and was undeniable, irrepressible—also offered a new impetus for rethinking the supposedly non-mediatized, naturalized frame of the in-person meeting. Dislocation (and not disembodiment) from the consulting room into a digital encounter only heightened the fantastical elements of contagion, for those who were able to control their exposures in lockdown.¹⁴

Indeed, in New York City, one of the earliest cases of COVID-19 infection was traced through an analytic institute, which then, in response, shuttered before others did. ¹⁵ Around the world, analysts and patients alike did die, of course—like my friend Ken Lewes, to whom this essay is dedicated. The loss of the analyst is something that is just coming into theoretical focus, pandemic notwithstanding, and we can expect more work on this painful topic to come.

This reconsideration of the former analytic experience (in chair and on couch) in light of a new analytic experience (on Zoom) became evermore prevalent as hybrid practice emerged post-vaccination in the United States and Europe. While the financialized world has demanded that we enact a deadly wish fulfillment by acting as if the pandemic is over, and repressing the fact that it is not, analysts have debated, both privately and in this growing body of literature, what it means for patients to wish to stay online or, conversely, return to the consulting room.

Generally, it is the former wish that generates a hermeneutic of suspicion, not the latter. This is for a few specific reasons (including the fact that psychoanalysts are themselves susceptible to deciding the pandemic is more or less over). The pandemic, as well as the racial reckonings of 2020, have given new energy to a long-standing professional worry that psychoanalysis is without a future. The media turn in psychoanalysis was, in this moment, linked with other concerns about the perforation of the consulting room and its ideal of neutrality through questions about what psychoanalysts refer to as *the social* and the accompanying social turn. Both media and contemporary debates about race and other identity categories threatened the purity

¹⁴ Giuseppe Civitarese, "Tales of COVID-19: Fear of Contagion and Need for Infection," Psychoanalytic Quarterly 91, no. 1 (2022): 89–118. For a different understanding about holding and contagion in the treatment of children, see also Robert Tyminski, "Back to the Future: When Children and Adolescents Return to Office Sessions following Episodes of Teletherapy," Journal of Analytical Psychology 67, no. 4 (2022): 1070–1090.

¹⁵ New York Psychoanalytic Institute and Society, private communication to membership, March 5, 2021.

politic of institutional American psychoanalysis (as routed through ego psychology).¹⁶

Choosing teletherapy—that is, choosing to leave the traditional consulting room—is still largely read by clinicians as an abandonment, a rupture, if the furnished room presents itself as an option. The quiet fear is that if we leave the consulting room for the Zoom room, something intrinsic to the practice—for both clinicians and their patients—will be lost for good. Tele-psychoanalysis will abandon psychoanalysis as we've come to know it across the long twentieth century. This is more or less true. Teletherapy, as I argue in my first book, The Distance Cure: A History of Teletherapy, has long been therapy's shadow form—if we know to look for it.¹⁷ There is a whole host of reasons someone might prefer to default to a distance modality (from geographical ease to access needs). None of these reasons necessarily point to the abandonment of psychoanalysis. Yet, today, those who wish to remain online or on the phone might be questioned by their analysts: Is the patient's commitment waning? Are they merely expressing a preference? Some analysts who prefer to remain online have turned these questions on themselves as well. Others venture that choosing teletherapy might also be an example of psychopathology—a way of regulating therapeutic contact, or having therapy without entering the world, and so on.¹⁸

Even if these fears are misplaced, or are themselves screens for the ways that psychoanalysis has historically been expensive to purchase, paying attention to media in analysis—not only as a material tool, but also how it operates on the psyche—was left largely, although not totally, abandoned from 1901, with the publication of Freud's *The Psychopathology of Everyday Life*, until early 2020. Many analysts felt—perhaps correctly—that to affirm teletherapy as not inherently lesser, but *different*, required a whole new training. We are just now extending the literature—and the practice—that tries to account for the medium inside or something like it. Learning to read in this way will allow psychoanalysts a deeper capacity to do everyday media studies in and beyond the consulting room, in this pandemic and beyond.

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¹⁶ For one example of an analyst taking up the virtuality of teletherapy to think about the social turn in psychoanalysis, see Carlos Padrón, "Pandemic Diary: 19 Fragments," Psychoanalytic Psychology 38, no. 2 (2021): 125–127.

¹⁷ Zeavin, Distance Cure.

¹⁸ I have conducted formal and informal interviews with practitioners since the start of the COVID-19 pandemic, some of which have been published in *The Distance Cure* and in the popular press.

¹⁹ The American Psychological Association is now shifting standards for psychoeducation to include mandated telehealth modules. Lara Sheehi, personal communication with the author. October 16, 2022.

Making up over Zoom: An Autoethnography of Streaming in/as Media Scholarship

What is contour? A PhD candidate in robotics and an assistant professor of queer information studies each asked me this question over Zoom; the first in February 2021 and the second in May 2021. Across two universities, four months apart, two scholars cut into my performance of what I had presumed were commonsense literacies in beauty applicators—namely those related to the use of contour sticks. On both occasions, I looked up from my mirror and into the web browser, where guests were voting on how to paint my cheekbones. I paused. In IRL circumstances, it might be considered rude for another scholar to interrupt my performance. Yet on Zoom—the video conference application that dominated imaginaries of pandemic teaching—interruption is infrastructure. Look at any university calendar from 2020. Look at any Zoom bomb.

These parallel pauses were my *felix culpa* into what Donna Haraway terms "the god trick": the perilous belief in universal truths passively waiting to be uncovered in our given research fields. To Haraway, philosophical approaches to the faculty of vision have been especially culpable in flattening

Christine H. Tran, "Making up over Zoom: An Autoethnography of Streaming in/as Media Scholarship," *ICMS* 62, no. 4 (Summer 2023): 167–173.

See Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," Feminist Studies 14, no. 3 (1988): 575–599, https://doi.org/10.2307/3178066.

the face of knowledge into essentialized truth claims. On Zoom—a platform that demands much *looking*—the perils of the god trick are ever more heightened. Backgrounds, filters, motion-capture animal avatars, and other ever-updating affordances invite Zoom users to revisualize themselves as objects of media study. The "stop video" button, for instance, performs—like my contour sticks—to calibrate the opacity between our scholarly bodies and our audiences. As geographies of work and home collapse in the workspace of Zoom teaching and dissertation defenses, we scholars of media—from robots to queer information—must likewise revise our relationship to the buttons, features, and updates that both conceal and reveal us to surveillances not fully understood in "post"-pandemic teaching.

From February 2020 to June 2022, I documented my own showcasing of Zoom's affordances through "Inverse Beauty Tutorials" (IBTs), an ongoing digital research-creation performance series that took place across several virtual and academic conferences. I designed IBTs around two primary performance outcomes: (1) to highlight the collapse of boundaries between home/office, self/other, and work/play in the mobile research lab (my face itself, magnified on-screen, became the sight of experiment) and (2) to playfully coach academics on Zoom's ever-updating affordances. Each step of the "makeover" is pre-programmed from the "host" side as a Zoom poll, which pairs a cosmetic and disciplinary query: Where do platforms belong? In political economy? Cultural theory? The kitchen? Each answer corresponds to a color of lipstick, which the audience is black boxed from knowing they are choosing. For instance, political economy corresponds to blue lipstick. The results might look like Figure 1.

One poll at a time, audience members answer these questions in the poll browser launched by Zoom. The popular result is then tabulated and read aloud to me. Spectators watch as I apply a specific piece of makeup that corresponds to an answer in a key, hosted in Google Docs, that is invisible to the audience. Layer by layer, poll by poll, the Zoom room assembles the face of collective e-collaboration upon my eyes, cheeks, lips, and jaw. Physically staring down these contradictions of seeing and knowing myself in Zoom University, I find autoethnography useful as a mode of retelling my relationship IBTs and synchronous communication: it legitimates the explanatory value of performance and other expressive forms as sources of knowledge that connect the autobiographical with larger political experiences.² Practiced poorly, autoethnography can license white and otherwise privileged scholars to practice their own god tricks. The temptation to take insights generated through the particularity of your own social privilege, and to refashion them as universal insights, has formed the basis of popular criticism against autoethnography's rigor. Practiced carefully, the self-reflexive turn of autoethnography challenges the constrained distance between scholar and scholarship that is too valorized by traditional research. By sharing screengrabs of my IBTs as autoethnographic objects, I illustrate my

² See Carolyn Ellis and Tony E. Adams, "The Purposes, Practices, and Principles of Autoethnographic Research," in *The Oxford Handbook of Qualitative Research*, ed. Patricia Leavy (New York: Oxford University Press, 2014), 254–276.



Figure 1. The author at the beginning (top) and end (bottom) of the two separate Inverse Beauty Tutorials over Zoom. Courtesy of Christine H. Tran, 2021.

subjective experience in relation to the power structures of academic self-performance on Zoom.

Why makeup? IBTs originate from my aspiration to cultivate a unique position between a formal network (the university) and an informal one (my Twitter mutuals with a shared interest in cosmetic art). In 2020, colleagues began posting Book Looks on Twitter and Instagram: eyeshadow and lipstick arrangements inspired by the color arrangements of popular books. As I prepared for my PhD qualifying exams in the first COVID summer, I also wished to experiment with this process using some monographs on my reading list. When the graduate fellowship at Massey College's virtual coffeehouse talent show released a call for performers in February 2021, I decided to see if Zoom—by then made ubiquitous as a formal gathering space in academia—could be beautified into a gaming space as well. IBTs are live dress-up games where I am at once the board, the pieces, and a co-player. Together, IBT voters and I ironically embrace—*literally*—the cosmetic solutions to the structural challenges of communicating together online.

Even before Zoom, I was well acquainted with the labor of self-surveillance demanded from scholars on campus. I have adjusted my necklines inside

many mirror-lined elevators and detangled my hair in the reflection of many a classroom window. As scholars witnessed how Zoom transformed from a video conference tool into the ad hoc academic streaming platform of the pandemic, I witnessed how the ways that I looked at myself transformed too. These days, such grooming more often occurs in the lens of a waiting room, counting down the seconds before I am dropped into a pit of front-facing cameras. Zoom tutorials, not just IBTs, underscored the preexisting importance of self-observation as a component of academic performance. As I stressed in my IBT showcase at the 2021 Society for Social Studies of Science (4S) annual meeting, "Viewers are welcome to simply spectate, but they are strongly encouraged to submit their ballots in real time to strive for a new, prettier mode of authorship in the platformed web."3 Looking—even at yourself—is never a passive position in collegial spaces. By reviewing images from these workshops, I can explore how the self-referentiality of a front-facing camera is a call to collaborate between—rather than isolate us from—the disciplines and diverse practitioners encompassed by media studies.

Literally facing myself each day on Zoom for a year has informed my autoethnographic approach. I am a second-generation Vietnamese scholar who is undertaking doctoral studies at a university in the settler state of Canada. The webcammed PhD experience brings into sharp relief Sara Ahmed's positioning of female scholars of color as always-already ethnographers of the university: "participating, yes, but . . . also observing, often because we are assumed not to belong or reside in the places we end up." The platform defaults to a front-facing camera view, which renders the Zoom-bound scholar an always-already object of self-study. Made over or not, the video platform makes me complicit in my own observation as socially other among boxed and often white faces.

Not all university workers during the COVID-19 pandemic had the privilege of relocating to the safety of a Zoom room. Yet, as many still lurched over kitchen tables and laptop bed trays the world over, I confronted the physical affinities between teaching and digital presentation with other forms of cultural work, such as beauty vlogging and game streaming. This streaming, like scholarly presentation, depends on connection with others that register on- and off-screen. During both IBTs and leading formal undergraduate tutorials, I have become self-conscious about what radio professionals call dead air, or the awkward absence of content. Lulls in the conversation compel me to reach into either the mental or cosmetic kit for prompts, quips, or glitter bombs to sustain the attention of the unseen. Music and dance series such as Club Quarantine have likewise showcased the capacity of real-time video interaction on Zoom to be a source of jouissance as well as a venue for

³ Christine H. Tran and Nelanthi Hewa, "Know Up, Glow Up: A Peer-Reviewed Beauty Tutorial" (presentation, 4S Conference, Toronto, Canada, October 6, 2021), https:// www.eventbrite.ca/e/know-up-glow-up-a-peer-reviewed-beauty-tutorial-tickets 1917E062307

⁴ Sara Ahmed, Living α Feminist Life (Durham, NC: Duke University Press, 2017), 91.

⁵ See Mark R. Johnson, "Behind the Streams: The Off-Camera Labour of Game Live Streaming," Games and Culture 16, no. 8 (2021): 1001–1020, https://doi.org/10. 1177/15554120211005239.

jouissance-less faculty meetings.⁶ Unfortunately, Zoom tutorial leaders and academics have also found themselves called on to be on-demand infotainers and electronic bouncers to the virtualized university. From creating passwords and virtual backgrounds to manifesting privacy, the media-making that is ubiquitous to Zoom tutorials—both of beauty and of conventional teaching—reflects a culture of physical risk and self-surveillance that has been offshored onto individual academic laborers.

Recent updates to Zoom, like the inclusion of motion-capture animal avatars, further enable us to obscure the work of strategic self-concealment as playful self-presentation. Streaming scholar Daniel Lark has argued that, for such reasons, video conference services such as Zoom and Microsoft Teams should be viewed as akin to game streaming services such as Twitch.⁷ Lark goes so far as to argue that Zoom users should be considered streamers themselves. From hiding personal affects in the background when presenting to moderating chats, the media managing habits of the average Zoom user map neatly over those associated with personalities on live streaming platforms. With the flick of a webcam cap, the boundaries between bed and boardroom collapse, rendering both the telecommuter and the entertainer vulnerable to the homeward-looking gazes of others. Looking to game studies as a community for examples, we can see that repurposing a video conference platform as a public gameboard is not without its precarities. The long harassment campaign of 2014's GamerGate violently unconcealed the identities and addresses of feminist game critics using information technologies and social media platforms such as Reddit and Twitter.⁸ A passcode slipup is all that is required for bad actors to infiltrate, harass, and dox. The ascent of "Zoom bombs," defined as the swarming of a meeting for the purpose of harassment and often involving trolls who overtake a meeting's screensharing controls to bombard the viewers with (often offensive) images, extends these fraught legacies of interruption into our pandemic era.9

At Simon Fraser University's 2021 Proxy Festival, where I performed an IBT, I was vulnerable to these gazes *alone* for the first and last time. Previously, during my IBT performances, I relied upon a colleague to read aloud the Zoom polls for me. Here, instead of relying on direct Zoom polls, I uploaded the cosmetic queries onto a third-party polling platform, named Direct Poll, to intake votes. As a result, my eyeline bounced between the audience, the Direct Poll browser, the Zoom screen, my brushes, and my

- 6 Stefanie Duguay, Anne-Marie Trépanier, and Alex Chartrand, "The Hottest New Queer Club: Investigating Club Quarantine's Off-Label Queer Use of Zoom during the COVID-19 Pandemic," *Information, Communication & Society* (2022): 1–17, https://doi.org/10.1080/1369118X.2022.2077655.
- 7 Daniel Lark, "How Not to Be Seen: Notes on the Gendered Intimacy of Livestreaming the Covid-19 Pandemic," *Television & New Media* 23, no. 5 (2022): 462–474, https://doi.org/10.1177/15274764221080917.
- 8 Katherine Cross, "Press F to Revolt: On the Gamification of Online Activism," in Diversifying Barbie and Mortal Kombat: Intersectional Perspectives and Inclusive Designs in Gaming, ed. Yasmin B. Kafai, Gabriela T. Richard, and Brendesha M. Tynes (Pittsburgh: Carnegie Mellon: ETC Press, 2017), 23–34.
- 9 Greg Elmer, Anthony Glyn Burton, and Stephen J. Neville, "Zoom-Bombings Disrupt Online Events with Racist and Misogynist Attacks," The Conversation, June 9, 2020, http://theconversation.com/zoom-bombings-disrupt-online-events-with-racist -and-misogynist-attacks-138389.



Figure 2. The author bears the face of cosmetic results (top), as does their work desk (bottom). Courtesy of Christine H. Tran, 2021.

mirror. These surfaces created a perimeter of work too wide for my own management. My motivation for pursuing this performance solo was to replicate the dominant image of the lone streamer, a singular body in a gamer chair before a camera, doing it all themselves. This image elides the reality of both streaming and scholarship: cross-platform work of editing, moderating, and networking that goes on well after the camera goes live. The bottom of Figure 2 showcases the messy aftermath of my only solo-authored IBT.

Afterward, I would always rely upon another co-author for the backstage operations of my cosmetic production. For instance, Nelanthi Hewa and

Elisha Lim have both helped administer polls as I put the results in practice. Hewa's persona evolved into more than a magician's assistant. Hewa's gaze ensured my physical safety; I am prone to fumble with brushes and video buttons alike while blindfolded to lampoon our institutional equivalency of "blind review" with "rigor." We also masked our dependency with role-play. Hewa or Lim would refer to themselves as "Platform" and I refer to myself as "Creator" to jeer, likewise, at the growing affinity between platform creators such as streamers and influencers and the platform-bound academics in the networked academy. Like entertainment streamers, my practice as a tutorial leader relies upon the trust that I share with scholars in networks not seen on-screen. Our role-play lays plain how the Zoom host (me) was no trickster god. I am physically and mentally fumbling with the opacities placed between my professional and playful lives. Hewa and Lim allow me to outsource my moderation labor and overcome the challenges of dead air on Zoom.

As my face is rebuilt from a distance, IBTs remind me that I am a body behind a keyboard with much to learn. Without fail, every IBT has linked me with at least one scholar who admits they did not know Zoom even had polling features. I learned that *more* of our colleagues, rather than fewer, are improvising on Zoom, pushing beyond the platform's hyper-normalized uses in various institutions. Relooking at my own dependency on onlookers as I stumbled my way through IBTs, I also understand our non-competencies with streaming in relation to Bo Ruberg's argument that the intimate staging afforded by video game streaming platforms such as Twitch has now placed all contemporary digital labor into genealogical relation to "camming" culture. 10 The full impact of the intimacies imposed by Zoom on media researchers and practitioners has yet to be realized, especially as hybrid models of teaching and conference delivery shuffle scholars back and forth between the chaotic waves of pandemic scheduling. Streaming and scholarly work, in the end, have become our sites of struggle to both collaborate upon and collect against. Within the Zoom-determined position of self-looking, I invite media scholars to develop a healthy irreverence toward their professions and their platforms.

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¹⁰ Bo Ruberg, "Live Play, Live Sex: The Parallel Labors of Video Game Live Streaming and Webcam Modeling," Sexualities 25, no. 8 (2022): 1021–1039, https://doi.org/10 .1177/13634607221103204.

#LearnOnTikTok Serendipitously, #LearnOnTikTok Seriously

Show me the life hack that you randomly saw one day that is now an unconscious standard practice in your life. I'll go first ...

If you are on TikTok, chances are high that you have come across videos featuring this audio template originally created by Kelly Hurst (@thelifebath), a TikToker from Newcastle, United Kingdom.¹ Hurst's video led to a life hack sensation on TikTok during the pandemic and has inspired the creation of hundreds of thousands of life hack meme videos, which range from tips on how to effortlessly separate egg yolks using garlic to threading needles with a toothbrush.² The #LifeHacks memes are just one example of the increasingly popular trend of casual and playful knowledge sharing on TikTok that proliferated during the pandemic. Lockdowns worldwide resulted in a surge in the use of social media to share learning materials, especially on TikTok. Sports and food influencers have used TikTok to demonstrate workouts and cooking tutorials, helping people stay fit and fed, and #MomsOnTikTok and #DadsOfTikTok have relied on the platform to collect and share tips on how to keep kids busy during the lockdown. Science educators are also important contributors to the trend of teaching through TikTok. With the closure of schools due to COVID-19, they turned to TikTok to deliver educational

Jing Zeng, "#LearnOnTikTok Serendipitously, #LearnOnTikTok Seriously," *JCMS* 62, no. 4 (Summer 2023): 174–180.

¹ Kelly Hurst (@thelifebath), TikTok, https://www.tiktok.com/@thelifebath.

² Callum (@callum0g), "#fyp," TikTok video, January 23, 2021, https://www.tiktok.com/@callum0g/video/6920971270834130177; and Tommy (@viajante_mundo), "The easiest way to thread the needle," TikTok video, March 28, 2021, https://www.tiktok.com/@viajante_mundo/video/6944756830614605062.

materials. Public health practitioners followed suit, creating short videos to disseminate health information.³

Aside from these individual-level initiatives, TikTok itself has played a crucial role in amplifying and incentivizing the creation of learning materials on its platform. The pandemic fostered the rapid explosion of TikTok's popularity.⁴ Furthermore, it provided an opportunity for TikTok to showcase its potential as a learning platform, as opposed to merely a place for jokes and triviality, as many perceived it to be. For instance, TikTok introduced #LearnOnTikTok, a campaign aimed at promoting educational materials on the platform. Through this campaign, TikTok partnered with hundreds of media and educational institutions, as well as individual influencers and experts, to produce professional learning materials.⁵ Curated content included home improvement tutorials, meditation and yoga tips, lessons from psychologists on how to alleviate stress and anxiety during the lockdowns, and science classes given by celebrity scientists (e.g., Bill Nye) or leading institutions (e.g., Cambridge University). Although the practice of using short videos for educational purposes existed prior to the COVID-19 pandemic. TikTok's #LearnOnTikTok campaign catalyzed the professionalization of knowledge creation on TikTok.

As life gradually returned to normal in most parts of the world, the hype of the official #LearnOnTikTok campaign may have faded away, but in general educational content on the platform continues to become more prevalent and diverse. When I first started to research learning materials on TikTok in 2018 and 2019, educational content was predominantly STEM related. Examples of popular content included fun science facts; entertaining chemical reactions (e.g., elephant paste demonstrations); and biologists introducing rare animals, plants, or fungi. During the pandemic, some emerging educational video topics caught my attention. For instance, female and queer creator-led sex education communities emerged, with a focus on sex positivity and women's health. Another favorite of mine was the #BookTok community, wherein (mostly female Gen Z) booklovers recreated video memes in which they shared and joked about books they had read.⁷ Since the pandemic, this community has grown into one of the most popular sub-Toks, with related videos amassing almost eighty billion accumulated views at the time of this article's writing. Recommendations made by this TikTok community have become so influential that some book retailers now

³ Clare Southerton, "Lip-Syncing and Saving Lives: Healthcare Workers on TikTok," International Journal of Communication 15 (2021): 3248–3268.

⁴ Jing Zeng, Crystal Abidin, and Mike S. Schäfer, "Research Perspectives on TikTok and Its Legacy Apps—Introduction," *International Journal of Communication* 15 (2021): 3164–3172.

⁵ Bryan Thoensen, "Investing to help our community #LearnOnTikTok," TikTok Newsroom, May 28, 2020, https://newsroom.tiktok.com/en-us/investing-to-help-our-community-learn-on-tiktok.

⁶ Jing Zeng, Mike S. Schäfer, and Joachim Allgaier, "Reposting 'Till Albert Eistein Is TikTok Famous': The Memetic Construction of Science on TikTok," *International Journal of Communication* 15 (2021): 3216–3247.

⁷ TikTok, "TikTok made me read it: #BookTok," TikTok Newsroom, November 11, 2021, https://newsroom.tiktok.com/en-us/tiktok-made-me-read-it-booktok.

even have a designated section for #BookTok recommendations.⁸ Furthermore, subjects from the humanities, especially history, are now receiving more attention and even viral status on the platform. For instance, Mary McGillivray (@theiconoclass) and Evan Pridmore (@evan.hart) are popular #ArtHistoriansOfTikTok with hundreds of thousands of followers.⁹ In their fifteen- to sixty-second-long micro lectures, the two creators share fun facts about artists and behind-the-scenes histories of their works, garnering millions of likes.

While the platform is known for lighthearted, humorous videos, historical education on TikTok does not always take on a lighthearted edutainment format. There are increasing numbers of educational videos that constitute what Tobias Ebbrecht-Hartmann and Tom Divon describe as "serious Tik-Tok," summarizing, unpacking, and contextualizing complex sociopolitical affairs. 10 Some TikTokers have created video memes to address the history and legacy of the Holocaust. Other examples include the #BlackHistory and #AAPIHistory challenges, in which TikTokers produced bite-sized anti-racism lectures that recounted the histories behind influential figures and events. The popularity of history-related content on TikTok is not incidental. Visual texts are an effective conduit for storytelling. As Ebbrecht-Hartmann and Divon point out, the memetic and communicative features of TikTok permit "the experience of (hi)story-telling to be much more autodidactic, intuitive, and engaging than on any other visual platform." For instance, affective history education is delivered by combining first-person narratives, emotionally charged narration, music, images, and text captions. From a pedagogy perspective, such multimodality reflects the potential of short videos in promoting multiliteracy learning.¹² Moreover, thanks to the platform's easy-to-(re)use visual and sound templates, TikTokers can imitate, develop, and react to one another's stories. Such synchronized yet personalized (hi)story narration forms TikTok's unique potential for memeified collective history learning.

Although "bring[ing] joy" is at the center of TikTok's official mission, the rise of serious TikTok also raises the possibility that grief and anger could also be parts of the platform's sentimentality. As we have seen in recent years, video memes are now an important weapon in Gen Z's discursive activism arsenal when fighting for different causes that are close to their

⁸ Stephanie Merry, "Six TikTok Stars Share Their Favorite Books of 2022," Washington Post, November 17, 2022, https://www.washingtonpost.com/books/2022/11/17/booktok-tiktok-books-bestsellers/.

⁹ Mary McGillivray (@_theiconoclass), TikTok, https://www.tiktok.com/@ _theiconoclass; and Evan Pridmore (@evan.hart), TikTok, https://www.tiktok.com/@evan.hart.

¹⁰ Tobias Ebbrecht-Hartmann and Tom Divon, "Serious TikTok: Can You Learn about the Holocaust in 60 Seconds?," *Digital Holocaust Memory*, March 24, 2022, https://reframe.sussex.ac.uk/digitalholocaustmemory/2022/03/24/can-you-learn -about-the-holocaust-in-60-seconds-on-tiktok/.

¹¹ Ebbrecht-Hartmann and Divon, 13.

¹² Jennifer Rowsell and Maureen Walsh, "Rethinking Literacy Education in New Times: Multimodality, Multiliteracies, & New Literacies," *Brock Education: A Journal of Educational Research and Practice* 21, no. 1 (2011): 53–62.

¹³ TikTok, "Our Mission." November 1, 2022, https://www.tiktok.com/about.

hearts, such as climate justice and racial equality. Hollowing the recent developments in the abortion debate in the United States, TikTokers also initiated several campaigns to educate others about reproductive justice. Videos related to #RoeVWade, which mostly feature young women sharing information, commentary, and touching personal stories about reproductive rights, have amassed over five billion views. For example, a Tennessee-based TikToker tearfully told her own stories about her chronic disease, due to which she relies on special birth control. However, she could no longer access this birth control because of the tightened abortion restrictions in her state. This video has been liked more than 1.2 million times, and among its 38,000 comments, many more women have shared similar experiences to educate others about the vital role played by birth control in maintaining many women's health. Other users have shown support for this TikToker by offering company and accommodation in case she needs to travel to other regions to get the needed medication.

One important characteristic of TikTok as a learning platform is what Samantha Hautea and colleagues describe as "algorithmic serendipity." ¹⁵ Most users' encounters with knowledge on TikTok are not intentional but occur while they are aimlessly scrolling through their For You Page (FYP) the app's landing page where algorithmically curated videos are shown. The algorithm behind the FYP does not only recommend videos based on a user's interests; it also appeals to users' demand for novelty by exposing them to unfamiliar content. 16 Educational videos on the FYP are also organized following the same algorithmic logic. Research has shown that serendipitous learning is triggered by unexpected internal or external stimuli and can be highly effective in boosting critical thinking and transforming previous assumptions. 17 When taking place on TikTok, serendipitous learning can also be an act of sociality, as afforded by the platform's engagement and responding features (e.g., Stitch, duet, share, like, and comment). In particular, the meme-creating culture of TikTok may turn passive learning into creative peer teaching.

Despite TikTok's potential as a serendipitous learning platform, producing TikTok-famous content can be challenging. Although there is no singular template for viral educational short videos, creativity and platform-specific knowledge are key. Creating popular educational videos for TikTok takes

¹⁴ Jing Zeng and Crystal Abidin, "'#Okboomer, Time to Meet the Zoomers': Studying the Memeification of Intergenerational Politics on TikTok," *Information, Communication & Society* 24, no. 16 (2021): 2459–2481, https://doi.org/10.1080/1369118X.2021.1961007; and Moa Eriksson Krutrök and Mathilda Åkerlund, "Through a White Lens: Black Victimhood, Visibility, and Whiteness in the Black Lives Matter Movement on TikTok," *Information, Communication & Society* (2022): 1–19, https://doi.org/10.1080/1369118X.2022.2065211.

¹⁵ Samantha Hautea et al., "Showing They Care (Or Don't): Affective Publics and Ambivalent Climate Activism on TikTok," *Social Media + Society* 7, no. 2 (2021), https://doi.org/10.1177%2F20563051211012344.

¹⁶ Min Zhang and Yiqun Liu, "A Commentary of TikTok Recommendation Algorithms in MIT Technology Review 2021," Fundamental Research 1, no. 6 (2021): 846–847, https://doi.org/10.1016/j.fmre.2021.11.015.

¹⁷ Ilona Buchem, "Serendipitous Learning: Recognizing and Fostering the Potential of Microblogging," Form@ re-Open Journal per la formazione in rete 11, no. 74 (2011): 7–16. https://doi.org/10.13128/formare-12559.

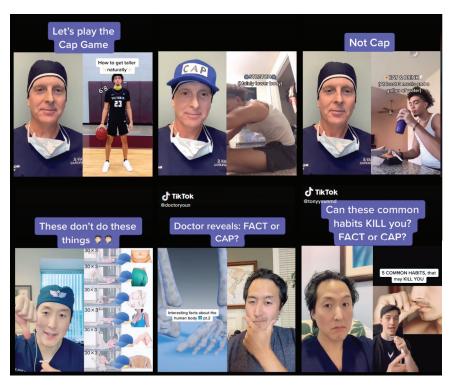


Figure 1. Screenshots of examples of Anthony Youn's (@doctoryoun) and Brian Boxer Wachler's (@brianboxerwachlermd) #FactOrCap videos. Screenshots by author.

more than simply extracting a sixty-second clip from TED Talks or splicing together excerpts from the History Channel. It requires the content creator to be well versed in meme trends and the fast-evolving features and functions of the platform. For instance, viral fact-checking videos made by two doctor influencers on the platform—Anthony Youn (@doctoryoun) and Brian Boxer Wachler (@brianboxerwachlermd)—can be a positive case in point. Followed by over ten million people collectively, the two doctors are mostly known for their #FactOrCap meme videos. As a (US) Gen Z slang term, *cap* refers to lies, and on TikTok, the blue cap emoji has been used to symbolize falsehood. #FactOrCap is a memetic trend wherein TikTokers refute fake life hacks and supposed facts posted by others. Employing this meme format, @doctoryoun and @brianboxerwachlermd have directly debunked viral TikTok videos containing pseudoscientific claims using a cap emoji or an emoji-like cap (see Figure 1).

To a large extent, to be a *TikTok educator*, one's professional credentials come second to one's knowledge of the platform's culture and vernacular; for those who know how to do (hi)story-telling on TikTok, it does not matter if they are history professors or teenagers reciting from Wikipedia. There is no lack of TikTokers who have relevant educational credentials but can produce highly successful videos. For example, some of the most viral and interesting science videos I have come across recently were made by Adrian







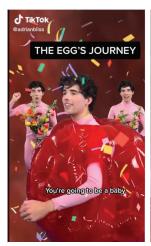






Figure 2. Screenshots of Adrian Bliss's (@adrianbliss) videos about the white blood cell encountering a virus and the female monthly ovulation cycle. Screenshots by author.

Bliss (@adrianbliss), a YouTuber-turned-TikToker from the United Kingdom. Bliss has garnered TikTok fame by creating funny sketches in which he wears various costumes and reenacts historical events or demonstrates scientific phenomena. Figure 2 shows two examples: in the first, Bliss acts out a scene in which a white blood cell is encountering a virus that is attempting to enter the human mouth; in the second sketch, the monthly ovulation cycle of a female is explained. With the help of the flamboyant costumes, Bliss's original acting style, and plot design, these two videos have received over seventy million views. Blurring the border between jokes and education,

¹⁸ Adrian Bliss (@adrianbliss), "Welcome to the mouth," TikTok video, January 5, 2022, https://www.tiktok.com/@adrianbliss/video/7049825833531477253; and Adrian Bliss (@adrianbliss), "The Egg's journey," TikTok video, August 27, 2022, https://www.tiktok.com/@adrianbliss/video/7136592235092512005.

and therefore comedy and science, these videos' success has useful implications for how to enhance seemingly mundane subjects through the short video format.

As the examples mentioned above illustrate, knowledge sharing and building on TikTok come in many forms. For most educators and academics, engaging with the younger generation on TikTok requires a lot of learning about the platform and its specific culture, and one should not assume that a traditional lecture format will result in receptivity. Without the correct visual and audio grammar, even an educational video with a high production value can be fifteen seconds too long. It is important to note that, despite the expanding user base, which has extended to include older generations (i.e., millennials, Gen X, and even boomers), TikTok is still largely a Gen Z app. in a cultural sense. The youth, as the early adapters and initial target group of the platform, are the creativity engine and the standard setters regarding the norms, practices, and culture of TikTok. This may change one day, just as the older generation turned Facebook into a "Boomerbook." However, for now, we thirty-something users are the *guests*, and we can be a bit too shy to post videos, are sometimes lost amid all the functions, or are occasionally confused by the language (e.g., TikTok slang of the youth). Before we formulate plans to harness TikTok for education, it may be worth "wasting" some time scrolling our own FYPs to discern the platform's stylistic conventions, to see how TikTok influencers (re)create video memes, and to reverse-engineer viral content to imagine how we might produce such work. Who knows? We may subliminally start to #LearnOnTikTok about how knowledge can be creatively shared through short videos.

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¹⁹ Helen Lewis, "What Happened When Facebook Became Boomerbook," The Atlantic, October 5, 2021, https://www.theatlantic.com/ideas/archive/2021/10/facebook -midlife-crisis-boomerbook/620307/.

Paul Soulellis

Bad Archives

How do marginalized communities archive media forms in crisis, and what can we learn from their critical practices? In particular, how does evidence of queer life persist in pandemic times? Queer culture is always at risk of illegibility, invisibility, and erasure. Within traumatic conditions such as the HIV/AIDS crisis in the 1980s and 1990s, and again during the COVID-19 pandemic, evidence of queer life persists in the *urgent artifacts* that emerge in crisis—artifacts that arise expediently as part of efforts to advocate for slowness, care, mutuality, queer joy, pleasure, refusal, and community. Media made by queer, Black, and Indigenous people, people of color, disabled people, immigrants, and others out of dire necessity "spread the word" to those who are otherwise unable to access services or support. Ephemeral in nature, urgent artifacts are distributed cheaply and quickly in real time, creating visibility within a community and recording experiences that might otherwise be lost. Examples include flyers, newsletters, readers, zines, buttons, meeting minutes, bulletin board posts, protest signs, video clips, spreadsheets, and other grey media that help these communities to organize in isolation. In urgent artifacts, we can see communities alive and in action, using print and digital material as connective, healing tissue; they help us reconnect and repair incomplete histories. Their circulation depends upon alternative networks that form in marginalized communities as a matter of survival. To learn from these networks, we need to look to the informal, independent, improper archives where queer life accumulates.

These "bad archives" take form lovingly and messily in private homes, in basements, in closets, in storerooms, and during protest, resulting in dead-end hand-coded web pages, unorganized folders and boxes, YouTube playlists, and other media collections that live beyond the sanitized logic of the institution. These are sometimes unsearchable archives that are cared for

Paul Soulellis, "Bad Archives," JCMS 62, no. 4 (Summer 2023): 181–187.

by stewards who personally invest time and energy in the survival of queer life, desperately protecting their collections under precarious conditions while maintaining access for the communities they serve.

I'm in search of bad archives, but I'm also the proprietor of one. Queer. Archive.Work (OAW), which is a project based in Providence, Rhode Island, enables me to bring together different facets of my practice as an educator, artist, and community organizer, within a physical space where queer life gathers in real time. The history of QAW runs parallel to COVID-19's timeline. It was incorporated as a non-profit organization on March 2, 2020, just days before the United States went into its first lockdown. For the next two and a half years, the project expanded, and it now involves a growing library of more than one thousand urgent artifacts (see Figure 1). The library is located within a two-thousand-square-foot print production studio, which also contains risograph printers, screen printing equipment, and a letterpress printer. The entire project, including the library and all of the print resources, is collectively cared for by dozens of people, none of whom are archivists. It's a loving community that shares responsibilities, works together, and occasionally opens the studio to the public for programming, including open library hours.

QAW is a space for labor, play, and storage, and there is so much joy and collaboration in the active mixing of these modalities. But how do we engage? Our answer to this question continues to be directly shaped by the wild contours of the COVID-19 pandemic and the challenges we encounter around access and safety. From issues involving masking and consent, to how equipment is shared, to the digital spaces that extend our community and allow us to connect in isolation, QAW is a product of the pandemic.

At QAW, we maintain a focus on print media as a crucial aspect of our mission, which manifests both in how we work and in what we collect in the archive. Our members include queer, trans, BIPOC, disabled, and immigrant folks. The print work we produce at QAW circulates through queer time and space, traveling non-linearly in multiple directions: out of our machines, into our library, into the Providence community, and onto digital platforms. At QAW, members have access to resources to print their own urgent artifacts and add them to the archive. This material commingles with the work of queer ancestors (such as Audre Lorde, Barbara Smith, Leslie Feinberg, José Esteban Muñoz, and others) and allows us to imagine other futures with artists and writers who can't be with us as well as futures with one another. We are not alone in this work; we are joined in energy by contemporary projects such as GenderFail, Wendy's Subway, Many Folds Press, Interference Archive, Brown Recluse Zine Distro, Digital Transgender Archive, and others who practice *archival justice*—"telling the truth about people who are alive today and about people who are already dead."1

1 This is just a small sample of the many small, independent presses, archives, and zine distribution collectives that have inspired QAW: the GenderFail Archive Project, https://genderfailpress.com/genderfail-archive-project.html; Wendy's Subway, https://www.wendyssubway.com; Many Folds Press, https://printingfortunes.info; Interference Archive, https://interferencearchive.org; Brown Recluse Zine Distro, https://www.brownreclusezinedistro.com; and Digital Transgender Archive, https://www.digitaltransgenderarchive.net. K. J. Rawson, "Archival Justice:



Figure 1. The library at Queer.Archive.Work (QAW), Providence, Rhode Island. Photograph by Paul Soulellis.

Searching for practitioners of archival justice recently brought me to the Sexual Minorities Archive, a twenty-thousand-item collection that has grown for over fifty years in a large, pink Victorian house in Holyoke, Massachusetts. Its archivist Ben Powers is a trans man who lives in the archive and collects

An Interview with Ben Power Alwin," *Radical History Review* 122 (2015): 185, https://doi.org/10.1215/01636545-2849603.

LGBTQIA media that might otherwise be discarded, including match-books, postcards, buttons, cassette tapes, posters, and pulp fiction novels. There's even a portion of a graffiti-covered wall from a queer bookstore in the collection; it was destined for the trash before it was saved by Ben, who now stores it in his garage. Because Ben finds materials in his everyday life to bring back to the house, he notes in an interview, "the collection is then almost an extension of my body and where my body goes." As he describes, the only safe place for such a collection is a space where queer folks live and work—what Ben refers to in his interview as "queer materials in queer hands." Says Ben, "Also, it's a matter of control and being in my hands, which are transgender hands."

Providing safety and care is central to bad archives, even as collections are sometimes stored in less than desirable conditions. PDFs, badly scanned images, and haunted listservs exist precariously, untethered to institutional servers, but give us permission to time travel, searching for lost voices, like those found in the Queer Zine Archive Project (QZAP), the Computer History Museum, and the ACT UP Capsule History, which are full of media that have somehow survived, now preserved as digitized files and spread out in many locations. Searching for evidence of ourselves, of them, of whom we lost, we find improper archives that hold traces of community organizing, artistic projects, activism, and life. These are messy spaces of possibility and action.

During the HIV/AIDS crisis, in some of the same places where intense suffering was happening—New York City and San Francisco, among others the early internet was blooming. New kinds of relations were forming on community bulletin board systems, between connected terminals, and, later on, in web browsers. Modern network culture emerged within a national context of enormous crisis, and they seem to contradict each other in spirit and outcome, one being a disaster (a failure of old systems) and the other a dream (a construction of new systems). While the HIV/AIDS pandemic and the early internet haven't previously been considered together, new work is emerging. Building upon the scholarship of Marika Cifor and Cait McKinney, we can trace the tangled evolution of new networks and radical alternatives to failed institutions through HIV/AIDS activism. Cifor and McKinney write, "Reframing what we know about HIV/AIDS through digital media places different people, groups, and technologies of response at the center of our Internet histories. Focusing on digital media can help to shift historical attention towards care and maintenance work, such as building and maintaining networks, circulating information, and keeping Web archives operational."5

Kathryn Brewster and Bonnie Ruberg map the early history of the internet with the HIV/AIDS crisis by examining a paper printout of the

- 2 Rawson, 182.
- 3 Rawson, 180, 185.
- 4 QZAP—Zine Archive, accessed January 10, 2023, https://archive.qzap.org; Computer History Museum, accessed January 10, 2023, https://computerhistory.org; and ACT UP Capsule History, accessed January 10, 2023, https://actupny.org/documents /capsule-home.html.
- 5 Marika Cifor and Cait McKinney, "Reclaiming HIV/AIDS in Digital Media Studies," First Monday 25, no. 10 (2020), https://doi.org/10.5210/fm.v25i10.10517.

Subject: First Time News Date: Jul 25 1985 38 lines FIRST TIME NEWS You have reached the first free nationwide Bulletin Board tell!)

System that is exclusively for AIDS. (If you know of another,

AIDS Information is the name of this BBS which is dedicated to the purpose of exchanging AIDS Information and referrals. The telephone number is (415) 626-1246, and operation is 24-hours-a-day.

Bulletins are displayed and messages will be received and hardcopy by mail will be shown on screen. This limitation is to displayed, and for longer documents, information how to obtain

Figure 2. AIDS Info BBS "Open Forum," 1985. Screenshot by Paul Soulellis.

SURVIVORS bulletin board system (BBS), an "electronic support group" for members living with HIV/AIDS from 1982 to 1990. Brewster and Ruberg argue "that it is not only the content but indeed the precarious, shifting media format of the SURVIVORS printout, born digital and now preserved on paper, that gives it its meaning" and that the SURVIVORS printout "keeps a critical piece of the interrelated histories of HIV/AIDS and the Internet alive, while also raising valuable questions about the archiving of these histories."6

And so I go back to those early years of the network, to what's referred to as the digital dark age—just before connectivity was ubiquitous—to better understand what it felt like to search for others beyond the limits of physical isolation: to yearn for connection while the floor was dropping away. When normative systems fail during crises, alternatives are built as a matter of survival, though they are often less visible in the shadow of monumental failure. I see it right there in the very first AIDS Info BBS "Open Forum" in 1985 (see Figure 2), in messages posted in 1995 to the AIDS Info BBS's "Caregivers Mailing List," and in the digital trans newsletters that circulated in the early 1990s. This media is difficult to find, but many of these examples and others live on in the Queer Digital History Project, a remarkable initiative curated and maintained by Avery Dame-Griff.8 Included within the material on the project's website is Dame-Griff's Transgender Usenet Archive (TUA), which "offers access to over 400,000 posts (from 1994 to 2013) collected from six

⁶ Kathryn Brewster and Bonnie Ruberg, "SURVIVORS: Archiving the History of Bulletin Board Systems and the AIDS Crisis," First Monday 25, no. 10 (2020), https://doi.org /10.5210/fm.v25i10.10290.

⁷ Terry Kuny, "A Digital Dark Ages? Challenges in the Preservation of Electronic Information" (paper presentation, 63RD IFLA Council and General Conference, Copenhagen, Denmark, September 4, 1997), https://archive.ifla.org/IV/ifla63/63kuny1.pdf.

⁸ Queer Digital History Project, https://queerdigital.com.

English language transgender-themed Usenet newsgroups." Surfacing these survival networks gives us an important perspective on the hybridized nature of network culture, both then and now, based in both tech-utopian ideals and localized activism.

Within early digital forms, decentralized analog media such as community bulletin boards and telephone chains—along with the circulation of zines and artists' books, public space interventions, early video activism, record keeping, and community centers—are the connective tissue that we're looking for, where we'll find evidence of queer life and lost stories in pandemic crisis. But new forms have also emerged in response to the isolation and loss experienced now during COVID-19, including collaborative documents, mutual aid spreadsheets, Zoom meetings, Discord servers, and other tools for collective organizing. This hybrid mix of analog and digital media is necessary for survival. It reflects a powerful drive to use whatever is at hand to make connections and build networks that transcend the limits of geography and linear time, extending care and access to information in crisis.

We're using many of these tools and modalities at OAW, and this keeps us pliable as the pandemic continues to unfold. QAW is very much a "community memory terminal," a creative, social portal both inward and out.¹⁰ Our name is also a way to open up dialogue about how we work. Queer both welcomes and limits whom the project serves. For those who share studio space at OAW, queerness is an expansive idea that resists definition. We use words like archive and library interchangeably and non-cooperatively, refusing to organize or classify the materials and ideas that exist in our collection, bringing what Kate Eichhorn has termed an "anarcho-punk-influenced philosophy" to our collective librarianship practice. 11 Eichhorn writes that this "is not about disregarding the necessity of order in either the library or the archive; rather, it is an attempt to alter the hierarchies that these spaces reify through their established practices of collecting and categorization."12 Our library changes daily as different people and activities occupy the space, altering the collection, adding to it, and reorganizing it, keeping its structure fluid.

And we use the word *work* in our name to acknowledge the ongoing labor involved in these alternative practices and how communal care, cooperation, and collective organizing in a space of production and storage require hard work that is rarely seen. As the burden of that work is often put upon the same people who are most oppressed by racism and heteropatriarchy, much of what we do is about prioritizing equity and the fair distribution of labor, through collaboration and cooperativism.

⁹ Avery Dame-Griff, "Transgender Usenet Archive Project," Queer Digital History Project, accessed January 10, 2023, http://queerdigital.com/tuarchive.

¹⁰ A reference to "Community Memory" (1973), one of the earliest public computerized bulletin board systems, with its first terminal located inside Leopold's, a record store in Berkeley, California. For more information, see Bo Doub, "Community Memory: Precedents in Social Media and Movements, CHM Blog, February 23, 2016, https://computerhistory.org/blog/community-memory-precedents-in-social-media-and-movements/.

¹¹ Kate Eichhorn, *The Archival Turn in Feminism: Outrage in Order* (Philadelphia: Temple University Press, 2013), 126.

¹² Eichhorn, 126.

On one of the library shelves at QAW is a treasured copy of *Cruising Utopia*, by José Esteban Muñoz, written shortly before his untimely death in 2013. Queer theory emerged from the necropolitics of the Reagan-Bush HIV/AIDS pandemic years, and it gives us a way to look beyond chaos and crisis toward other futures. Queer theory directs our gaze not just to cables, clouds, and terminals but also to queer kinship, solidarity networks, and speculative imagining, away from heteronormativity. Muñoz wrote about the "then and there" of queer futurity, an idea that gives us permission to use history to move beyond the present. This is an approach that helps us go beyond the limits of the historical archive by granting permission to travel in non-linear ways, navigating queer time through messy and radical ideas about printing, publishing, networks, theory, collectivity, queerness, erasure, and futurity.

Not everyone has survived. More than six million people are dead from COVID-19 worldwide. What are we doing? What are we learning, in this extended moment? We do what we can: sharing skills, using publishing as an empowering force, and making zines and collaborative docs and other urgent artifacts to self-organize and self-educate. We collect, protect, and give access. We build bad archives with messy, queer, non-cooperative logics. We invent new ways to gather and create new kinds of hybrid network cultures, to make change, and to prepare for whatever's next. These impulses travel through time and connect to larger trajectories, allowing us to speak with ancestors, always emerging below and within crisis. We survive by sharing and communicating in community, with the garage door to the bad archive left open by us, to us.

¹³ José Esteban Muñoz, *Cruising Utopia: The Then and There of Queer Futurity* (New York: New York University Press, 2009).

¹⁴ Muñoz, 1.

Ensheng Dong, Hongru Du, and Lauren Gardner, "An Interactive Web-Based Dashboard to Track COVID-19 in Real Time," The Lancet 20, no. 5 (2020): 533-534, https://doi.org/10.1016/S1473-3099(20)30120-1.

Lucy Pei and Roderic Crooks

Grassroots Data Activism

M, a professional community organizer in the midwestern United States who works with undocumented youth, talks us through a typical day at work. Her role focuses on the creation, aggregation, and analysis of data using a commercial platform called EveryAction, but she chafes at questions about the procedures, formats, or outputs of data work. Our research team asks a series of questions that prompt respondents such as M to describe the qualities of the data they work with and what they do with it—questions we have used to study other kinds of data professionals, at city offices and in public school districts. After several prodding questions that turn again and again to the particulars of data in her work, M finally tells our interviewers bluntly, "What I've learned from many years, now at this point over ten years of organizing, mostly around immigrant rights, is that yes, maybe numbers and facts do cause a shock factor. But people are motivated and persuaded to change because of their feelings and how they feel about something. And you can use that data to help them feel in a particular way, but that's where the storytelling comes in."1

The ongoing public crises of the 2020s illustrate the accelerating datafication of contemporary government bodies at all levels. Public life is increasingly organized around engagements with data, especially data in visual form.² Dashboards produced by national, county, state, and city bureaucracies displayed the grim, unrelenting number of COVID-19 deaths nation-

Lucy Pei and Roderic Crooks, "Grassroots Data Activism," *JCMS* 62, no. 4 (Summer 2023): 188–192.

¹ M (community organizer), in discussion with author, June 2022. Names have been changed to protect participants' privacy, and quotations have been edited for clarity.

² Helen Kennedy and Rosemary Lucy Hill, "The Feeling of Numbers: Emotions in Everyday Engagements with Data and Their Visualisation," Sociology 52, no. 4 (2018): 830–848, https://doi.org/10.1177/0038038516674675.

wide, but they also provided quick readouts of laws restricting movement (or restoring it), local hospital capacity, or color-coded masking rules. If, as Michele Murphy writes, dashboards are phantasmagrams, graphical objects charged with affective power, then visual artifacts produced by the state in all of their various instantiations are likewise inhabited by some palpable affective charge in excess of the dry quantitative practices for which they stand as proxy.³ It is this excess that grassroots organizers like M are after: a way to evoke feeling, inspire action, and ultimately build power in the communities in which they work. In particular, the way community organizers in workingclass communities of color in the United States use data and data visualization shows us that critical information study and media study are happening outside the bureaucratic halls of the state and out of the purview of our academic disciplines. M's caution demands that when we consider political uses of data—including those oppositional or activist projects that seek to build grassroots power through community organizing—we take more seriously the role of narrative, particularly of public narrative.

Public narratives are central to certain strains of contemporary community organizing. These public narratives are organizing tools that express a coherent worldview and articulate an actionable map of power: who has it, who needs it, and how it can be gained. Public narratives link individual, community, and action by illustrating why the individual is called to act, why others must join in that action, and why such action must be immediate.4 Community organizing is a technique and philosophy of political action, but it is also, increasingly, a job—one undertaken by skilled and educated workers dedicated to movement goals and employed by overtly political organizations, including many not-for-profit organizations in the public sector. As community organizers train, they practice creating public narratives: personal and compelling stories that inspire the listener to see a problem, to invest emotionally in the redress of that problem, and to join collective actions. Like so many other forms of work, community organizing has become datafied, executed via the commercial tools and platforms used for all kinds of professional work. But for community organizers, data work is not just about data: it is a multifaceted form of knowledge production and, simultaneously, a strategy aimed at changing the world, largely through crafting public narratives that will motivate others to action.

In our research with community organizers based in working-class communities of color, we have found that much of the day-in and day-out work of grassroots organizing involves reusing, recontextualizing, or excerpting data produced by the state. For these organizers, numbers are merely one kind of knowledge, a resource that can be used in service of crafting meaningful, material change. As one organizer expressed in explaining this approach, knowledge that doesn't change the material conditions of the community is

³ Michelle Murphy, The Economization of Life (Durham, NC: Duke University Press, 2017)

⁴ Marshall Ganz, "Public Narrative, Collective Action, and Power," in Accountability through Public Opinion: From Inertia to Public Action, ed. Sina Odugbemi and Taeku Lee (Washington, DC: World Bank, 2011), 273–289.

merely intellectual masturbation.⁵ These organizers warn that assumptions about the ability of data to stand in for reality can jeopardize authentic community action and divert energy and resources from larger movement goals to clerical work—that is, to the creation, maintenance, or consultation of electronic records. As our community partners and allies insist, belief in the power of data can turn into fetishism and superstition. Data can be a useful strategy for making a point or for getting an institution to move, but data is not the point of anything: the point is to get free.

Minoritized communities, perennially differentiated from a "phobic majoritarian public sphere" by race, gender, class, disability, citizenship, and other interlocking forms of socially consequential difference, are formed, shaped, and sustained through the exercise of state power as much as they are by individual acts of discrimination. 6 Their greater vulnerabilities to crisis are zoned, redlined, redistricted, taxed, subsidized, policed, and gentrified into existence by the very same processes, policies, and (dis)investments captured in public data.⁷ Minoritized communities "remain both dependent upon and vulnerable to *state power*," to the continual atrophy and sabotage of social welfare and the expanding of the carceral apparatus.8 Organizers on the ground—that is, those who live or work in such communities—face tremendous pressure to demonstrate via numbers what their work is about, whether that means counting the numbers of unarmed people killed by police, the concentration of known carcinogens floating in their air, or the average commute time to a job that pays a living wage. And while, with great skill, creativity, and moral power, organizers have incorporated data in various forms in their ongoing freedom struggles, this time-tested strategy has always carried risks. When it comes to minoritized peoples, the state has not always shown itself to be subject to suasion based on numbers. In other words, city, county, state, and federal bodies might care a lot about numbers, but only when those numbers tell a story that directs resources and authorized violence to where elites and privileged groups want them to go. 10

The organizers we work with and alongside are certainly aware of the potential for data to sway policymakers and other kinds of authorities, perhaps painfully so. And while it is tempting to think of data as a tool for speaking back to power, a *weapon of the geek* that might be used for authentic liberatory purposes, Gabriella Coleman reminds us that the sensibilities and strategies of computationally mediated political activity are most often "exer-

- 5 R (community organizer), in discussion with author, March 2021.
- 6 José Esteban Muñoz, *Disidentifications*: Queers of Color and the Performance of Politics (Minneapolis: University of Minnesota Press, 1999).
- 7 Kelly Lytle Hernández, Khalil Gibran Muhammad, and Heather Ann Thompson, "Introduction: Constructing the Carceral State," *Journal of American History* 102, no. 1 (June 2015): 18–24, https://doi.org/10.1093/jahist/jav259.
- 8 Jafari S. Allen, *There's a Disco Ball between Us: A Theory of Black Gay Life* (Durham, NC: Duke University Press, 2022), x.
- 9 Roderic Crooks and Morgan Currie, "Numbers Will Not Save Us: Agonistic Data Practices," *Information Society* 37, no. 4 (2021): 201–213, https://doi.org/10.1080/01972243.2021.1920081.
- 10 Stop LAPD Spying Coalition and Free Radicals, "The Algorithmic Ecology: An Abolitionist Tool for Organizing against Algorithms," Medium, March 2, 2020, https://medium.com/@stoplapdspying/the-algorithmic-ecology-an-abolitionist-tool-for-organizing-against-algorithms-14fcbd0e64d0.

cised by a class of privileged and visible actors who often lie at the center of economic life." As P, a housing justice and anti-eviction organizer, put it in our interview, giving data work a privileged role in the making of public decisions displaces many forms of needed expertise. The act of centering data presumes that, by speaking with and through data, white-collar professionals (and other experts such as academics), rather than the people living with the consequences of social problems (such as housing justice, in the case of P's work), are telling the right kinds of stories. P describes this deference to data-speak as related to white supremacy, given that the institutions that confer such expertise are themselves riven by the same oppressions and stratifications that structure the public: "Because it's like you need that white guy academic in the room for them to all of a sudden care about evictions. But if you put a black trans person in front of them talking about how they got evicted, they'd be like, 'Well, you didn't pull yourself up by the bootstraps,' right? Like your story doesn't matter. Your story isn't representative of data or whatever."12

There are certainly sophisticated, far-reaching projects that show how data produced by the state can be used by experts and community members to scrutinize the state's unequal treatment of minoritized communities via racist lending practices, mass incarceration, and police violence.¹³ But the organizers we talk to most frequently are not interested in raising awareness: they are interested in raising power, in forms of radical mutual aid and community education, in unlearning the rules of a game that has long been rigged. These organizers assert again and again that data is an important tool, but data alone cannot tell the story they want to tell. The vibe is definitely one of deep, studied, careful ambivalence with respect to data. For example, H shared his deep misgivings about the need to be counted. His previous organizing work around AIDS in the 1990s demonstrated that showing more cases could force the state to produce more resources for treatment of affected persons and communities. At the same time, his more recent organizing around food security for undocumented residents has sharpened his critique of relying on data to get other resources, given that state violence against immigrants is aided by the collection of data about their existence.

Community organizers are more dedicated to narrative than they are to data. Data can be a resource for a compelling story, but narrative, especially public narrative, is central to the philosophy and practice of community organizing. As some of our community partners put it in a shared writing, "Data can be used to tell stories, but our stories are not data." What data can never quite capture is a sense of the explicit reckoning with where power

¹¹ Gabriella Coleman, "From Internet Farming to Weapons of the Geek," Current Anthropology 58, no. 15 (2017), https://doi.org/10.1086/688697.

¹² P (Community organizer), in discussion with author, September 2021.

¹³ Ruha Benjamin, Race after Technology: Abolitionist Tools for the New Jim Code (Medford, MA: Polity, 2019); Hernández, Muhammad, and Thompson, "Introduction"; and Sasha Costanza-Chock, Design Justice: Community-Led Practices to Build the Worlds We Need (Cambridge, MA: MIT Press, 2020).

¹⁴ Roderic Crooks, "What We Mean When We Say #AbolishBigData2019," Medium, March 22, 2019, https://medium.com/@rncrooks/what-we-mean-when-we-say -abolishbigdata2019-d030799ab22e.

resides and how it can be wielded. This is the excess that animates much of the grassroots data activism we are interested in: a desire to tap the affective and narrative capacities of data for the advancement of movement and community goals. The organizers we know are telling stories with and through data, but the stories they are telling, crafted to inspire community members to inspect public conditions, carry within them a critique of state power and a clear moral: we get free through collective action and through collective action only.

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Opening the Broadband Access Paradox

Amid all its other shocks and stresses, the COVID-19 pandemic surfaced a largely forgotten, complex debate that lurks in the background of our public conversation about big tech. Access to reliable broadband internet service became *the* factor determining who could work from home—and who could learn, see a doctor, visit with friends and family, go to church, or shop from home. It became clear that basic access to education relied on this one weird problem: the so-called *digital divide* between internet *haves* and *have-nots* that decades of advocacy and investment had failed to fix.

Suddenly, the world was reminded that lots and lots of people—about half of those in developing countries and up to a quarter in some developed countries—do not have access to, or cannot afford, reliable broadband service and internet-enabled devices.¹ Moreover, the 25 percent of US residents without broadband access are already experiencing other kinds of structural inequity. These are racialized, minoritized, and low-income groups, the same who were disproportionately exposed to the deprivations of COVID-19.²

During the pandemic, policymakers began to zero in on broadband internet as a critical component of stimulus relief. The CARES Act, the Infrastructure Investment and Jobs Act, and various unnamed stimulus packages contained targeted spending allocations for broadband infrastructure

Greta Byrum, "Opening the Broadband Access Paradox," *JCMS* 62, no. 4 (Summer 2023): 193–200.

¹ John Roese, "COVID-19 Exposed the Digital Divide. Here's How We Can Close It," Davos Agenda, World Economic Forum, January 27, 2021, https://www.weforum.org/agenda/2021/01/covid-digital-divide-learning-education.

² Pew Research Center, "Internet/Broadband Fact Sheet," Pew Research Center, April 7, 2021, https://www.pewresearch.org/internet/fact-sheet/internet-broadband/.

expansion, access assistance subsidies, and digital equity grants. As a stimulus measure, investment in broadband garnered enthusiasm from many quarters: policymakers seeking to look like they are doing *something*, social welfare advocates, low-income communities struggling to bring services to residents, large and influential telecommunications and media industry lobbies, and, of course, Silicon Valley companies with platforms and products to sell. But how do all of these interests align, once the dollars hit the ground? We're about to find out, as US states roll out their digital equity and broadband plans for the next five years starting in the fall of 2022.

As someone who has worked in the digital equity field for over a decade, this all feels very familiar: a sudden outpouring of government investment in connectivity with a short timeline and attached political and economic expectations meeting (or failing to meet) the complex equation of hopes, needs, and capacities of local communities and their advocates. Usually, this kind of cycle ends with the telecom industry undermining efforts to create local control while expanding its territory of capture, despite a few standout gains for those working to build local media ecosystems. Even the most creative and innovative community-driven projects find their greatest impact in correcting industry oversights—for example, by testing proofs-of-concept in new telecom markets—rather than being sustained on their own terms.

I started working in this field in 2011 as an urban planner interested in local radio for community resiliency. I was fascinated by hyperlocal low-power FM radio stations that had saved lives in disasters—by broadcasting in different languages and by putting trusted local voices on the air, the same voices that refereed radio discussions of sidewalk repairs, town incorporation, and local elections.³ I was studying and building hyperlocal media ecosystems and working with advocates to advance the bill that would become the Local Radio Act, ultimately signed into law by President Obama in 2010 and enacted in 2012. I learned how to set up low-power FM radio transmitters and held community events in which people discovered the joy of broadcasting, the simple electrical magic of connecting across distance.

This pursuit led me to Washington, DC to work at a think tank with a focus on media ecosystems, just as the last big spending bill on internet connectivity hit banks. After the US economy crashed in 2008, President Obama had signed a stimulus package including an eleven-billion-dollar broadband internet fund for public computer centers, internet adoption programs, and infrastructure (the 2010 Broadband Technology Opportunities Program, or BTOP). The internet economy was going through growing pains, experiencing both the potential and the scammy frailty of online commerce. People had bet big on dot-com dreams and ended up losing homes, jobs, and other tangible assets. Justification for broadband spending relied on a hypothesis that investment in connectivity would bolster the economy by stimulating demand.

For digital equity advocates, though, the BTOP presented a chance to tackle the obstinate problem of the internet access gap experienced predom-

³ Greta Byrum, "Building the People's Internet," Urban Omnibus, October 2, 2019, https://urbanomnibus.net/2019/10/building-the-peoples-internet/.

inately by Black, Brown, Latinx, and low-income communities at a time when private and government services were moving online at alarming speed. A wave of innovation had seen online services grow as a value proposition in convenience and cost savings while the availability of in-person service at government offices, social services, and other civic institutions dwindled.

The BTOP stimulus spending also opened other ideological pathways. At the time, many tech and media optimists—including at New America's Open Technology Institute, the think tank where I was working—were advancing a digital human rights agenda, framed as offering freedom of expression and open access to the means of communication. We were hopeful that a free and wild internet—unlike the already-captured traditional broadcast media—could evolve as a kind of digital zine fest, weirdo meetup space, and arena for protest in authoritarian or autocratic places where other forms of political speech were outlawed and criminalized. We saw hyperlocal internet as a space where communities, including racialized, minoritized, and low-income groups, could find equal opportunity to tell stories, build incomes, and find common cause.

This strange moment in the early 2010s brought together the anarchic, tech-utopian, libertarian, 1970s-era Silicon Valley ethos with the regulatory impulse of social progressivism—an uneasy alliance for the sake of the open internet and net neutrality, policy concepts that emerged simultaneously to solidify these aspirations into law.⁴ Conference rooms in Washington, DC became hot zones of debate about the Clinton State Department's response to Tahrir Square and how lessons learned there might help shape plans to build DIY grassroots internet infrastructure in both Arab Spring countries and American cities hard-hit by historical inequities deepened by recession.⁵

Meanwhile, alongside big dreams of a global peer-to-peer people's internet composed of autonomous zones giving voice to the underrepresented and unheard on the FM and Wi-Fi airwaves, the BTOP's eleven billion dollars in broadband stimulus were directed into 233 US broadband projects, parceled out in the form of grants to community coalitions and municipal governments. Many of these projects had a short lifespan of two to three years, not enough time to gauge the impact of social spending. And given the noise generated by wildly fluctuating indicators of social and economic health in the aftermath of the 2008 recession, it was almost impossible to measure the impact of these relatively small investments in cash-strapped communities. It was much easier to measure success in terms of gains in the number of people connected to the internet: the simple indicator of new home broadband

- 4 "Net neutrality" refers to the regulation of internet service providers (ISPs) by the Federal Communications Commission (FCC) to prevent prioritization of paid or otherwise promoted traffic and potential delays for non-promoted traffic, a practice that some experts believe could lead to full corporatization of the internet. Net neutrality and internet privacy laws were in effect from passage of the FCC's Open Internet Order in 2015 until 2017, when Congress approved the Trump-appointed FCC's move to repeal the order.
- 5 Allen McDuffee, "Internet in a Suitcase: New America's Role in 'Shadow' Internet and Mobile Phone Systems for Dissidents," Washington Post, June 13, 2011, https:// www.washingtonpost.com/blogs/think-tanked/post/internet-in-a-suitcase-new -americas-role-in-shadow-internet-and-mobile-phone-systems-for-dissidents /2011/06/13/AGf3F7SH_blog.html; and Byrum, "Building the People's Internet."

subscriptions. But what does an increase in home subscriptions really bring to communities?

As critics have pointed out, there is a dearth of empirical data confirming the assumption that internet access will produce social benefits. This hypothesis is usually framed in the deficit mode in terms of a *lack of internet access* among racialized and minoritized communities without a true reckoning with the structural injustices that produce that digital inequity in the first place. According to Roderic Crooks, the belief that internet access is both *problem* and *solution* produces a tautology in which society and policy repeatedly try to address the problem of low internet access rates by applying more internet access and then are surprised when it doesn't work to solve the original problem. As Crooks says, "our delusion and disappointment with one set of technocentric solutions fuels a search for another tool, another lever. In this way, the perpetual failure of access produces a demand for more access."

And, in fact, misfires in the BTOP's pursuit of universal connectivity were quickly apparent. In 2012, just as these broadband stimulus projects were starting to create broader access and uptake of networked technologies, media outlets sounded an alarm: poor people were wasting time on frivolous online engagement! A New York Times article quoted across platforms worried that "children in poorer families are spending considerably more time than children from more well-off families using their television and gadgets to watch shows and videos, play games and connect on social networking sites." This logic held that there are good and bad ways to use technology and that social investments meant to create educational and employment outcomes were, instead, wastefully and fraudulently being used for so-called pure entertainment—an accusation that has been leveled against every new form of information dissemination and consumption since Gutenberg's press (and probably before). This same logic also showed up in moral outrage over the Lifeline program (called Obamaphone by its critics), which provides assistance for low-income people to access cell phones and internet connectivity, and in the design of CARES Act-subsidized broadband services that purposefully limit bandwidth with the rationale that this will prevent people from streaming videos with public money: a video games for me, not for thee mindset.

Meanwhile, scholars such as Seeta Peña Gangadharan and David Barnard-Wills have also pointed out that well-intentioned digital inclusion and literacy programs often draw participants into a web of data extraction, surveillance, and policing, without providing protective guardrails or even online safety training.⁸ New internet users face risks of non-consensual data

- 6 Roderic Crooks, "Toward People's Community Control of Technology: Race, Access, and Education," Just Tech. Social Science Research Council, January 26, 2022, https://doi.org/10.35650/JT.3015.d.2022; and Daniel Greene, The Promise of Access: Technology, Inequality, and the Political Economy of Hope (Cambridge, MA: MIT Press. 2021).
- 7 Matt Richtel, "Wasting Time Is New Divide in Digital Era," New York Times, May 29, 2012, https://www.nytimes.com/2012/05/30/us/new-digital-divide-seen-in-wasting-time-online.html.
- 8 Seeta Peña Gangadharan, "The Downside of Digital Inclusion: Expectations and Experiences of Privacy and Surveillance among Marginal Internet Users," New Media and Society 19, no. 4 (2017): 597–615, https://doi.org/10.1177/1461444815614053; and

extraction on multiple levels: commercial surveillance by the very companies providing digital services, predation by third-party companies tracking online behaviors, and exposure to the everyday risks incurred by anyone participating in digital life. Scholars including Safiya Noble, Ruha Benjamin, Virginia Eubanks, and Wilneida Negrón have further analyzed the ways in which digital participation alienates and criminalizes Black, Brown, and low-income people: from biased online search results (Noble); to tech systems, tools, and platforms that reinforce and deepen power hierarchies and injustice (Benjamin); to digital workplace tools that surveil, track, and encumber low-wage workers (Eubanks, Negrón).

Digital inclusion can be viewed quite differently given these critiques: as a framework that invites vulnerable people to walk through a door where on the other side lurk scammers; extractive surveillance capitalists; racist criminalization engines; and policy moralists who accuse disempowered people of waste, fraud, and abuse when they use digital resources just like everyone else. What are we *including* new internet users into when they adopt the internet, besides the same web of extraction, predation, misinformation, alienation, and data-driven abuse that we are all tangled in?¹⁰ Is it possible that the internet is simply bad for our collective mental and cultural health, that inclusion in data-driven systems is potentially harmful, and that advocating for greater connectivity is, in fact, morally questionable?

Back in 2012, when the BTOP program was underway, Seeta Peña Gangadharan and I, building on the work of partners and colleagues, articulated an aspirational goal for broadband and digital equity investment. In our article "Defining and Measuring Meaningful Broadband Adoption," we described the need for "a systematic observation and analysis of the social layer of broadband access that depends upon an individual's interaction with their community." We argued that "meaningful broadband adoption . . . implies an ecology of support—institutions, organizations, and informal groups that serve to welcome new users into broadband worlds; share social norms, practices, and processes related to using these technologies; and help policy targets make sense of and exercise control over how broadband enters their lives." With this definition, we did our best to advocate for an understanding of digital equity investment whose success would be measured by the extent to which it created *meaningful* benefits for communities and

David Barnard-Wills, "E-Safety Education: Young People, Surveillance and Responsibility," *Criminology & Criminal Justice* 12, no. 3 (2012): 239–255, https://doi.org/10.1177/1748895811432957.

⁹ Safiya Umoja Noble, Algorithms of Oppression: How Search Engines Reinforce Racism (New York: New York University Press, 2018); Ruha Benjamin, Race after Technology: Abolitionist Tools for the New Jim Code (Cambridge: Polity, 2019); Virginia Eubanks, Digital Dead End: Fighting for Social Justice in the Information Age (Cambridge, MA: MIT Press, 2011); and Wilneida Negrón, Little Tech Is Coming for Workers: A Framework for Reclaiming and Building Worker Power (n.p.: CoWorker .org, 2021), https://home.coworker.org/wp-content/uploads/2021/11/Little-Tech-Is -Coming-for-Workers.pdf.

¹⁰ This critique echoes Sara Ahmed, On Being Included: Racism and Diversity in Institutional Life (Durham, NC: Duke University Press, 2012).

¹¹ Seeta Peña Gangadharan and Greta Byrum, "Introduction: Defining and Measuring Meaningful Broadband Adoption," *International Journal of Communication* 6 (2012): 8, https://ijoc.org/index.php/ijoc/article/view/1836.

individuals. Along with colleagues across the country, notably Colin Rhinesmith, we have worked to embed these core aspirations into meaningful broadband initiatives. Back in the 2010s, though, many communities were constrained by the need to carry out their BTOP projects within the Rube Goldberg machine of competing interests that structures both government spending and differential access to privately held broadband infrastructure resources like backbone fiber lines, peering points, and server farms. Many BTOP projects ended or got handed off to private or government entities without showing measurable impact.

Yet some projects generated the seeds of a new and different generation of internet and media infrastructure that brings a new vision of human-scale connectivity: efforts led by local media advocates, technologists, and local organizations. These include the Detroit Community Technology Project, the Free Hunts Point Community Wifi Mesh Network (now Hunts Point Community Network) in the South Bronx, the Southern Connected Communities Project in Appalachia, and many more—organizations that, over the last decade, have built community-governed mesh networks, local fiber-optic resources, and community-responsive programs. ¹² One such program is Digital Stewardship, which promotes "an alternative vision of technology in which communities and neighborhoods have direct control over their digital communications," led by Digital Stewards who "demystify technology for their communities and facilitate a healthy integration of technology into people's lives and communities." ¹³

In addition to these standout projects, digital justice coalitions have emerged in many cities and rural areas since 2011. These coalitions are learning how to build collective power and govern shared resources. The National Digital Inclusion Alliance built nationwide collective impact and advocacy infrastructure that has played a huge role in creating the current stimulus opportunity. There are many technological and governance models that offer demonstrations of how we might approach the process of building our digital future this time and many leaders who lived through the successes and failures of a decade ago. ¹⁴

Broadband infrastructure generally replicates the patterns of privation and exclusion that underlie many inequities: it excludes urban areas redlined by housing policy in the 1950s and rural areas that also lack water and sewer infrastructure. It is hard to imagine a public investment in the current political context that could truly take on the complex, underlying challenges of structural inequity on a timescale meaningful for people suffering its deprivations. Perhaps we are fated to eternally re-live the paradox of broadband

¹² See Detroit Community Technology Project, https://detroitcommunitytech.org; the Hunts Point Community Network, https://www.huntspoint.nyc/hunts-point-free-wifi; and Southern Connected Communities Project, https://www.southernconnectedcommunities.org.

¹³ Community Technology Collective, "Our Work," accessed January 16, 2023, https://www.ctcollective.org/our-work#communitytech.

¹⁴ Greta Byrum and Diana Nucera, "United States: Building Resilience with Community Technology," in Global Information Society Watch 2018: Community Networks (Melville, South Africa: Association for Progressive Communications, 2018).

investment, in which, per Crooks, the "perpetual failure of access produces a demand for more access." ¹⁵

Yet our collective experience of living and dying in the overlapping and growing crises of the last few years offers us a choice. We can learn from losses, failures, and the occasional bright spots of joy and accomplishment. We can face what happens when we bury failures and grief in an effort to move on too quickly, or to make the numbers look right for the sake of political wins. We can feed into the access-at-all-costs cycle all over again, creating universal access to data-driven systems that in their current form have at least even odds of destroying us.

However, a door is open right now to imagine future-connected technologies that fit not only who we are but also who we aspire to be—and to follow desire paths to create broadband and media infrastructure that meets our future needs. Ultimately, broadband is a social technology that mirrors humans and our relationships. To build the internet we want and need requires an honest examination of how humans are shaping the fabric of our interconnection and how it is shaping us. We must also seriously consider that sometimes the best or only choice is to refuse or opt out of technology and protect and reimagine offline structures of connectivity as part of the web.¹⁶

Every beautiful local internet project I have worked on—from storm-resilient mesh networks in New York City to portable networks and broadcast towers in Appalachia—has relied at its core on real live moments of care, trust, and generosity among participants. These projects are tiny in scale but huge in their potential. What would it take to build that invisible infrastructure of care at scale, embedded in the physical infrastructure that we use to talk to one another? The restructuring of power and inequity through public investment policies requires threading many needles, continually questioning, and failing, and learning, and failing, and celebrating the joy of small victories. Those of us working in community, building the systems and projects that will make up the next decade's and next century's systems, have a billion branching choices to get us there.

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¹⁵ Crooks, "Toward People's Community Control," 11.

¹⁶ Audra Simpson, "The Ruse of Consent and the Anatomy of 'Refusal': Cases from Indigenous North America and Australia," Postcolonial Studies 20, no. 1 (2017): 18–33, https://doi.org/10.1080/13688790.2017.1334283; and Ruha Benjamin, "Informed Refusal: Toward a Justice-Based Bioethics," Science, Technology, & Human Values 41, no. 6 (2016): 967–990, https://doi.org/10.1177/0162243916656059.