

Printing the Network: AIDS Activism and Online Access in the 1980s

Cait McKinney

Abstract

HIV/AIDS activists in the 1980s made up a significant cohort of early computer network users, who used Bulletin Board Systems (BBS) to create and circulate health information amongst PWA (People living with AIDS) communities. This article explores how these early adopters extended access to new computer networks by printing online information in newsletters. Their work bridged the sharing of text files over BBS—a novel networked practice—with more traditional activist media tools familiar to readers trained in civil rights, homophile, and feminist organizing. The article focuses on the Philadelphia-based organization Critical Path, led by Kiyoshi Kuromiya, who applied systems theories drawn from Buckminster Fuller’s work to the problem of HIV/AIDS. Critical Path’s print newsletter drew on BBS to put information in the hands of a wide constituency of PWAs and their allies. They targeted, in particular, PWA communities excluded from access to medical research trials based on race, gender, drug use, or carceral status, and did so through a multimedia practice that recognized how access to emerging computer networks was similarly stratified. Through analyzing Critical Path’s digital-to-print practice, I argue that HIV/AIDS activists approached new online networks as a fundamental equity issue shaped by their broader understandings of the structural violence performed by exclusion from good, up-to-date information.

Citation

McKinney, Cait. 2018. “Printing the Network: AIDS Activists and Online Access in the 1980s.” *Continuum: Journal of Media and Cultural Studies* 32(1): 7–17.
<https://doi.org/10.1080/10304312.2018.1404670>.

Funding Details

This research was supported by the Social Sciences and Humanities Research Council of Canada, and by the Beaverbrook Foundation, through Media@McGill.

Keywords

BBS, HIV/AIDS, AIDS Activism, Critical Path, Kiyoshi Kuromiya, Computer Networks, Internet History, Buckminster Fuller, Prison Abolition

The first issue of *The Critical Path AIDS Project Newsletter*, launched in 1989, ends with a small SILENCE = DEATH graphic made famous by Gran Fury and ACT UP (Critical Path AIDS Project 1989a, 27). The tiny icon appears at the end of a long ‘Directory of PWA Services’, and takes up just an inch on the printed page. It could easily be missed by a reader casually flipping through these listings. The graphic, ubiquitous within late 1980s HIV/AIDS-activist circles and contemporary memorialization projects, takes on a different valence here: this SILENCE = DEATH describes Critical Path’s work to connect “PWAs” (people living with AIDS) with treatment information using computer network technologies.¹ Silence marked the consequences of exclusion from new online communication infrastructures, used by treatment activists to create and share up-to-the-minute, collaborative health information. Silence, in this case, might mean never hearing a modem’s dial tone.

To break this silence, Critical Path set out to ‘provide up-to-the-minute computer-networked information on support groups, organizational schedules, experimental AIDS medications and protocols, alternative therapies, the best of the AIDS computer bulletin board items, [and] direct services available to PWAs’ (Kuromiya 1989, 2). Critical Path provided focused outreach to ‘women, IV drug-using communities, and to PWAs of color, the physically challenged, the imprisoned, and the homeless’ (Ibid). The organization was one of many HIV/AIDS activist groups that worked online over the course of the 1980s, gathering, synthesizing, and most importantly *printing* vital information that was otherwise unavailable through mainstream media and public-health agencies. Critical Path’s online work presents a significant yet marginal internet history, and another way 1980s activism set the stage for HIV/AIDS’s entry into wider public-health dialogs in the 1990s (Brier 2009; Patton 1996).

Kiyoshi Kuromiya (1943–2000) founded the Philadelphia-based Critical Path Project and edited its newsletter. The first issue was a 28-page long, desktop published, letter-sized, black-and-white document. Heavy with text, each issue included about a dozen articles, most of which were researched and written by Kuromiya, though generally unattributed. These articles were supplemented by listings for support groups, a phone directory and events calendar for PWA services in the tri-state area, and classified ads from supportive businesses and services. Kuromiya wanted to offer wider access to the text-based online Bulletin Board Systems (or ‘BBS’) he began using in the mid-1980s. To do this, he republished BBS information for those without computer access using two widely accessible and familiar formats: the newsletter, and a telephone hotline he operated out of his home.

A reader consulting the masthead of Critical Path’s first issue encountered a contributor list made up of many curious acronyms: AIDS Info BBS, AIDS Info Exchange BBS, AIDS FORUM, and HRCF BSS. These ‘authors’ represented geographically dispersed collectives of amateurs working together in networked computing spaces to research, write, annotate, and revise text files about new treatments, clinical trials, and drug-access. The newsletter served, in part, to explain online communication to PWAs and build their trust in computer networks. Kuromiya believed online communication could fix the information-scarcity characteristic of the 1980s HIV/AIDS media landscape. He was in many ways a typical early adopter, eager to share new technologies with the community he cared about.²

In popular accounts of networked computing, the early adoption of online

communication is most often understood as a story about nerds, tinkerers, and hobbyists ‘dialing-up’ using their modems in growing numbers throughout the 1980s and early 1990s. In this version of the story, an undifferentiated ‘wider public’ incrementally become ‘users’ as technology gets cheaper and easier to use. Critical media history is skeptical of narratives like this one. Many scholars have offered more complicated pictures of the early decades of computer networks, situating adoption in specific counterpublics and a longer *durée* (Driscoll 2014; Friedman 2017; Turner 2006; Medina 2014). Building on this turn, this article explores how early adopters who ‘printed the net,’ sought to build the capacities of non-users without particular designs upon getting these non-users online. Printing online information in a newsletter bridged the sharing of text files over BBS—a novel networked practice—with the more traditional activist media tool of the newsletter, familiar to readers trained in civil rights, homophile, and feminist organizing (Jordan 2011; Meeker 2006; Meagher 2014; Beins 2017). This practice built what Elisabeth Jay Friedman (2017) calls ‘chains of access’; a strategy for extending encounters with online media to those without access through remediation with established forms, like print or the telephone (98, 116, 125). This practice was common within queer and feminist activist networks as they moved online in the late twentieth century and brought their investments in equity to bear on new technologies.

HIV/AIDS activists in the 1980s made up a significant cohort of early computer network users.³ Their printing practices reveal how activist computer networks embedded new forms of information exchange within ‘older’ information practices in order to build equity and interdependency in multi-media systems. Similarly, computer networks repurposed and re-imagined document genres from print culture; the text file format popular on BBS drew on styles from hobbyist and activist newsletters in length, mode of address, and in the way documents were designed to be printable. In other words, HIV/AIDS activist use of networked computers in the 1980s moved purposefully between ‘old’ and ‘new’ media. Media historians such as Carolyn Marvin (1988) and Lisa Gitelman (2006) emphasize this kind of movement in order to trouble linear technological histories. Building on their approach, this article focuses on the tactical adjustments and translation practices activists performed during amateur network computing’s most ‘plastic’ period.⁴

This article examines these activist practices through a close analysis of Critical Path’s newsletter, situated within the organization’s broader, networked information practices. Analysis is focused on the newsletter’s first four years of publication (1989–1993), particularly the first three issues published between November 1989 and January 1990. I contextualize this analysis of the newsletter through documentary research in Critical Path and Kuromiya’s organizational records, held at an LGBTQ community archives in Philadelphia. Part one of the article explores Kuromiya’s long association with technotopian architect and systems theorist Buckminster Fuller, which informed Critical Path’s approach to HIV/AIDS as a problem of information, media, and technology. Part two turns to a close analysis of how the newsletter used BBS in conjunction with ‘analog’ technologies. Here I argue that Critical Path extended access to good, up-to-date information about HIV using print proxies for online communication, performing remediation as a political practice. Part three examines the broader information economy of treatment activism, arguing that Critical Path’s print-to-digital practice sought a collaborative, anti-carceral social-justice model to interpret information

produced by medical industries. Overall, I argue that Critical Path's unique understandings of information and social justice approached access to emerging communication infrastructure as stratified (Mattern 2017, 41–43) in ways that reflected the unequal distribution of vulnerability to HIV/AIDS itself. Doing internet history through the lens of HIV/AIDS activism emphasizes access to new online networks as a fundamental and biopolitical equity issue for early, queer digital cultures.

Kiyoshi Kuromiya and Critical Path

Kuromiya founded Critical Path in 1989 to formalize the HIV/AIDS activist work he had been doing out of his apartment for several years, independently and as a founding member of ACT UP Philadelphia. Before starting the newsletter, Kuromiya ran a 24-hour telephone hotline for PWAs. He offered treatment advice and emotional support to callers in the tri-state area. To answer calls, he drew on his deep knowledge of drug trials, new research, diagnostic techniques, alternative therapies, and pain management. Kuromiya gathered this information from print medical journals and other newsletters, and from online BBS, organizing all these documents in his own print files.

Today, Kuromiya's archived files document how this multimedia system worked. Kuromiya designed his working 'Data Files' to order and make possible his information activism on the phone and in the newsletter. Media archives scholar Kate Eichhorn (2013) argues that the ordering of archival collections can reflect how social movements imagine their labor. Similarly, Cornelia Vismann (2008) has argued that files are constitutive media technologies that do not just administrate but rather shape the systems of which they are part. Kuromiya's collection contains twenty-five banker's boxes, each crammed to capacity with an alphabetized filing system he organized.⁵ The data files were designed for quick reference on every aspect of treatment, much like an online database. Pages from BBS textfiles, and later webpages, are printed and filed within these boxes, alongside clippings from more traditional print sources. The materials are organized by subjects that run the gamut from 'AIDS 101' and 'Antifungals,' to 'Zinc.'

The subject files' wide scope reflects the holistic ways Kuromiya thought about the politics of HIV prevention and treatment through a social-justice framework grounded in anti-racism and prison abolition. Kuromiya's Data Files feature folders on the ACLU, African Americans, the AIDS Law Project, Asian needs-assessment, the Gay and Lesbian Latino AIDS Education Initiative, housing, immigration, injection drug use, Native Americans, prisoners with HIV, harm reduction, [the] sex industry, and women (Ibid). For Kuromiya, justice for PWAs meant understanding the illness within a broader political economy oriented to the differential distribution of vulnerability and resources for coping with illness and disability.

These commitments developed out of early experiences doing civil rights and anti-war activism. As a queer person of color born in a Wyoming Japanese internment camp, Kuromiya was especially committed to understanding treatment activism through a framework that centered anti-carceral consciousness about information. The Critical Path newsletter featured regular articles about, for, and by incarcerated PWAs, and the project was invested in bringing information gathered from nascent computer networks into prisons where access to good information was precarious.⁶ A 'PWA Prisoner Resources' listing specifically targeted incarcerated subscribers with links to other information resources they could access for free, including prisoner correspondence projects and other

newsletters and booklets (*Critical Path AIDS Project Newsletter* 1990). Critical Path also published many letters to the editor sent in by incarcerated PWAs, some of whom were also callers to the phone line. Robert Edmonson (1996) at Oklahoma State Penitentiary wrote to Kuromiya that “having AIDS in prison in hell,” and thanked him for talking on the phone. These letters share details of what life was like surviving with HIV in conditions where stigma was suffocating and often violent, and where emotional and physical forms of support were sparse.

For Kuromiya, publishing these letters was part of doing treatment activism across prison walls by using various forms of media. He wrote (1996), ‘It is not my intention to put words in prisoners’ mouths. Since prisoners are *not* present in the usual venues where treatment activists advocate and give testimonial, I would like to stop here and share some letters from prisoners—I would also like to share the collect phone calls I get each day from inmates—the only kind of calls they are allowed to make. You may not know them or have heard their voices over the phone, but please listen to their words.’ As Che Gossett (2014) has argued, a focus on ‘inside/outside’ organizing by queer and/or trans activists of color, including Kuromiya, allows for better understanding of the carceral conditions of HIV/AIDS prevention and treatment, past and present (31–32). Kuromiya worked within a framework deeply informed by prison abolition and understood information and differential access to new communications media as an everyday field of struggle in which justice for PWAs was possible.

Kuromiya, in other words, thought about the entwinement of HIV, information, and social justice and believed new communication technologies had particular affordances. While these investments in computer networks and HIV were likely shared by other treatment activists involved in online networks, Kuromiya’s ideas about information technology present a unique case. His data files include a series of more curious headings about technology and philosophy that reflect his particular approach. Kuromiya kept several Data Files on Buckminster Fuller, the technotopian philosopher and architect best known for designing the geodesic dome structure that would captivate the minds of early counterculture movements such as the Whole Earth network (Turner 2006, 56–57).⁷ According to media historian Fred Turner, during the 1960s, Fuller’s wide appeal to Bay-area counter-culture leaders—who would go on to become significant influencers of early computer-network infrastructure—lay in his theory of comprehensive information systems as a basis for solving the world’s problems (56-57). Kuromiya adapted this investment in information and its smooth, networked circulation to the problem of HIV; information systems could be used to improve PWAs’ lives and ultimately find a cure by bridging community knowledge with medical research.

Kuromiya knew Fuller personally, as a mentor; the activist spent the last five years of Fuller’s life, from 1977–1983, working as the philosopher’s assistant, travelling with Fuller and helping him research and write his books. Kuromiya is credited as ‘Adjuvant’ for Fuller’s last four books, including *Critical Path* (1981), one of his best-known works.⁸ In this text, Fuller outlines a problem-solving philosophy that has since become the standard method project managers across industries use to organize and schedule workflows.⁹ In the *Critical Path Newsletter’s* first issue, Kuromiya (1989a) explained the connection between critical path methodology and the organization’s strategy for fighting HIV/AIDS:

In the discipline of project management, the term ‘critical path’ refers to the strategy that recognizes in any complex task many smaller tasks that must be performed in an orchestrated manner—some tasks must precede others, some can be implemented at the same time.... Critical Path AIDS Project was established to implement such a program in Philadelphia. Through information gathering and problem-solving, we intend to render state-of-the-art, PWA-considerate services for our peers as a demonstration of self-empowerment within the PWA community. (1–2)

Here, Kuromiya explicitly connects information, computer networks, and Fuller’s systems theories to a community-based health model.

Fuller died in 1983, and Kuromiya developed into an HIV/AIDS activist while carrying on his mentor’s legacy via BBS boards.¹⁰ Kuromiya’s introduction to BBS seems to have come from communicating online with other Fuller devotees, as a founder and Sysop (systems operator) for ‘Fix BBS’ (the Fuller Information Exchange) (Fuller Information Exchange 1992). This Fuller-focused board was dedicated to ‘the application of his [Fuller’s] thinking to solving everyday problems’ (4). Critical Path-related files were shared on the FIX BBS until Critical Path started its own dedicated message board in 1991. Kuromiya’s devotion to Fuller facilitated the activist’s entry into 1980s computer networks, shaping Critical Path’s approach to HIV as a media problem.

Fullerian systems-thinking was not only a method for imagining how information technologies could solve ‘everyday problems’ like health care; the Critical Path approach also explored the connections and interdependencies central to Kuromiya’s anti-carceral approach to information. In other words, Critical Path’s version of activism was fundamentally bound up with Kuromiya’s status as an early adopter who thought deeply about the relationship between vulnerability to HIV/AIDS and access to technological systems. Critical Path’s work in the late 1980s facilitating access to BBS using print and the telephone informed the organization’s later work to extend online access in the 1990s. This progression challenges how these decades are often periodized separately in both Internet and HIV histories. By the mid-1990s, Critical Path had become a free Internet Service Provider (ISP). Kuromiya and his collaborators supplied free or low-cost dial-up access and training for PWAs and AIDS Service Organizations (ASOs) using a community-based infrastructure model. Kuromiya also became a vocal advocate against Internet censorship, including as a plaintiff in the U.S. Supreme Court’s 1997 decision against the Communications Decency Act. Printing BBS for those without access marked the beginning of the organization’s broader approach to imagining and building unique computer network infrastructures to address HIV/AIDS.

Newsletters, BBS, and Remediation as Accessibility

Critical Path’s print newsletter extended access to community-generated treatment information that Kuromiya was finding, and making, online during the mid- to late 1980s. In the 1990s, Critical Path devoted greater resources toward programs aimed at getting PWAs online so that they could contribute to this body of information, shape research, and participate first-hand in online support communities; however, the print newsletter reflected a stop-gap measure during the organization’s first years. In the 1980s and 90s, access to personal computers, modems, and long-distance calling were prohibitively

expensive for most PWAs, and entirely unavailable to those living in prisons. Printing BBS-based treatment information for those in need points to a less celebratory history of the ‘cyberqueer’ revolution computer networks promised for marginalized user groups critiqued by some media studies scholars (O’Riordan and Phillips 2007; Bryson et al. 2006; Gray 2009). By centering disability, anti-racism, and prison abolitionist understandings of information and infrastructure, Kuromiya’s politics-of-access complicates queer internet histories by placing differentially positioned and differentially vulnerable bodies on the verge (or not) of dialing up (Brophy 2010). Attention to amateur ‘early adopter’ labor like his contributes to a growing internet history focused on interpretations of computer networks made from below (Friedman 2017; Driscoll 2014, 35–38).

Making the newsletter was a DIY-affair. Kuromiya printed masters on his ‘aging daisy wheel printer’ (Critical Path AIDS Project 1989b) and then sent the issue out for offset-printing in New Jersey. Circulation is unknown for the newsletter’s first issues, published in 1989, but by 1993, Critical Path was printing 8,500 copies at a cost of nearly \$3,000 for printing alone (‘Prompt Printing Press Invoices’ 1992). The newsletter’s first few issues were generated using borrowed equipment. Each issue’s last page was dedicated to fundraising for specific technologies the organization needed to improve their work, including ‘an AT-equivalent computer (\$2000) and peripherals to enable us to begin operation of a PWA computer bulletin board system’ along with a new printer to replace the finicky daisy wheel (\$2000-\$4000) (Critical Path AIDS Project 1989b). Kuromiya distributed the newsletter himself, free to PWAs and those in prisons, and \$15 for others. Subscription costs quickly rose to \$50/issue to meet demand from PWAs who could not pay, along with growing printing costs as the newsletter doubled in size within its first three years of publication.

For content, the newsletter drew on Bulletin Board Systems, which imagined documents in ways that mirrored print genres. Media historian Lisa Gitelman’s (2014) ‘document genre’ concept explains that print to digital portability often depends on re-creating the kinds of practices around documents that users already know and trust within digital environments. For example, PDFs mirror many established clerical practices that maintain authenticity with paper documents, like attaching an electronic signature (Gitelman 2014, 9–11, 114–118). As BBS historian Kevin Driscoll (2014) has explored, the ‘analog’ community bulletin board, covered haphazardly with print flyers, wanted ads, and event listings, provided a conceptual model for how BBS were designed, including the file-sharing functions that dominated HIV/AIDS BBS communities (172). When BBS users dialed into FIX, they could read a text-based listing of new files uploaded or edited by other users. Critical Path materials were sectioned off within a separate folder. Users could also upload new files, or message other registered users, who each had their own ‘mailboxes,’ which were really just folders labeled with each user’s name, into which others could ‘drop’ files. This was typical functionality for BBS, which focused on the de-centralized sharing of text files between groups and individuals (Driscoll 2014, 172–74).

Analog Bulletin Boards are not neutral community-based media technologies—they appear most often in spaces oriented to providing social services—counterpublic spaces with political stakes in making and communicating information. Bulletin boards circulate the information communities develop in a shared space that is commonly

maintained. Posting materials on a bulletin board, whether at the offices of an ASO, or online, depends upon a deep understanding of community interests, norms, and needs; a sense of what kind of information is of value to others, and might potentially fulfill the queries they bring to the bulletin board. HIV/AIDS-related BBS connected activists and PWAs with shared investments in politicizing access to treatment information, even as they did not physically share space.

BBS documents repurposed for the Critical Path newsletter required limited revision because they already reflected the document genres common to community-based HIV/AIDS activist media production. When the newsletter re-printed articles from BBS boards, they were introduced with headlines and preambles that marked their origin. Issue one included a lengthy ‘TREATMENT AND DATA DIGEST’ created by ACT UP New York’s Treatment and Data committee (FidoNet and dave_ 1989, 10), which became a regular feature of the monthly newsletter.¹¹ The digest is introduced with the headline ‘FIDO-NET TEXT POST,’ indicating to readers that the text was pulled from FidoNet’s sci.med.aids group, a network-of-networks that gathered textfiles from dozens of HIV/AIDS BBS groups in one place.¹² The newsletter headline preserved the all-caps style commonly used for headings in BBS text files. The article is also introduced and concluded by a column-length banner of ampersands: &&&&&&&. This graphic practice reproduced the common BBS technique of using ASCII characters for visual interest and typographic effect. Beyond these formal qualities adopted from BBS, the treatment digest reads like any other newsletter article; it provides information about new treatments and trials contextualized for PWAs, foregrounding cost, potential side-effects, and activist-informed critiques of medical research protocols and the pharmaceutical industry. Individual listings in the digest often concluded with phone numbers and mailing addresses readers could use to learn more. Like the feminist and gay liberation publications it followed, the Critical Path newsletter provided readers with ongoing ways to connect with a community beyond its pages (Meeker 2006; McKinney 2015; Beins 2017).

Kuromiya drew on his technical skills, access to equipment, and vast treatment knowledge to address a public imagined partly through the organization’s telephone hotline. Critical Path received daily calls with specific questions Kuromiya could research through BBS and his data files, and then answer for a larger public in the newsletter. By placing himself at the center of this multimedia practice, Kuromiya was able to reach people using familiar media technologies. These practices also built non-users’ comfort with computer networks as tools for doing social justice work. To build this comfort, Kuromiya translated information across forms, reconfiguring BBS information for the newsletter while maintaining connections to the origins of this information through citation and typographic style. This work across print and digital formats was invested in access to information as a primary issue for HIV/AIDS activism.

BBS as Collaborative Treatment-Information Technology

Critical Path’s entwined BBS, newsletter, and telephone hotline activities improved access to quality treatment information through community-engaged media practices that held medical researchers, ASOs, government agencies, and pharmaceutical companies accountable to PWAs’ needs. Critical Path’s labor can be understood as treatment-based information activism, situated within the broader HIV/AIDS information economy of the

late 1980s. Driscoll (2014) argues that HIV/AIDS-related BBS boards required ‘the careful oversight of trusted figures’ to draw together the best information for users, within conditions of precarious access (345). As a printed resource limited in size by what Kuromiya could write himself, solicit from others, and afford to print and mail, the newsletter required choices about what treatment information was most hopeful, critical, innovative, or in need of activist energy.

The ways HIV/AIDS activists gathered, interpreted, and re-circulated information about sexuality and health through their networks has been well documented as critical movement labor. Cindy Patton (1996) has shown that queer activists worked on the fringes of, and in opposition to, an emerging ‘national pedagogy’ around safe sex that bought power and knowledge together toward biopolitical forms of state regulation (1999). Patton argues that during the 1980s, activist ‘non-scientists’ sorted through ‘confusing data on the new epidemic and divergent theories of the syndrome’s cause,’ by drawing on extensive knowledge of their own communities, practices, and ethics (11). Alexandra Juhasz’s (1995) research on community-made AIDS activist videotape illuminates the ways in which accessible media technologies were key to circulating health information as widely as possible through such forms as public-access television. This work shows how HIV/AIDS activist media practices informed community health models and their information politics.

HIV/AIDS activist influence on health information extended beyond producing independent materials to shaping knowledge that medical researchers were producing and mobilizing (Epstein 1998). Activist efforts to hold medical research accountable to the needs and experiences of people living with HIV and AIDS had a significant impact on how the illness was understood and treated (Ibid). The Critical Path newsletter documented many instances of activism aimed at holding scientists accountable. Kuromiya wrote a cover story for the newsletter’s second issue detailing ACT UP Philadelphia’s confrontational meeting with SmithKline about delays in bringing drugs to market, and their exclusion of some PWA populations from trials. As Kuromiya reported it, this process was tense and antagonistic, even as it produced accountabilities within the medical research community: ‘Dr. Hooks told the members of Philadelphia ACT UP, “We as scientists accept your criticism.” Not explained by Dr. Hooks, however, was the sizable contingent of plainclothes officers from the Civil Affairs Unit of the Philadelphia Police Department waiting as discretely as possible in the corridors outside the meeting’ (Critical Path AIDS Project 1989b, 4). By reporting on this action, The Critical Path newsletter informed readers that the work they were doing by reading, circulating, and responding to treatment information was politicized because it could have a significant effect on broader healthcare infrastructures.

Newsletters, BBS groups, telephone hotlines, and meetings in physical space were all opportunities to create information about health outside of, or adjacent to, institutional and scientific support for this work. Newsletter issues included articles by medical practitioners and PWAs, including ‘My Experience with Hypericin’ by ‘J’ (1989) and ‘One Couple’s Dietary Supplements’ by Bill Roberts (1989). This writing shared first-person, community-generated knowledge about healthcare. As historian Jennifer Brier (2009) has argued, HIV/AIDS activist communities sought ways that ‘Community members could talk about AIDS without being trumped by doctors and health professionals’ (14). The Critical Path newsletter provided opportunities to carry out this

‘talk’ and keep information resources current for readers who became participants in this information economy as they eagerly awaited new healthcare developments. An editor’s note inserted into a FIDO-NET BBS Treatment and Data post exemplifies the ways the newsletter made BBS treatment ‘talk’ accessible to those without modems:

As with any treatment decision, it is important to become aware of both the risks and possible benefits of using [Compound] Q before deciding to go ahead with the infusions. That could involve talking to people who have already used Q as well as reviewing the Project Inform data. (Getting hold of that data might not be too easy right at this moment.) [Editor: Critical Path AIDS Project can make this data available to you, what we have now, and as it comes in. By mail or via modem.] (FidoNet and dave_ 1989, 11)

Kuromiya inserted this aside into this newsletter article, reproduced from BBS, to promote Critical Path’s capacity for circulating online information via ‘analog’ channels. Critical Path could do this quickly, so that readers would feel as if they were participating online themselves.

Whether online, in print, or over the phone, treatment ‘talk’ galvanized activists in efforts to collaborate with, critique, or otherwise hold accountable the medical research community (Epstein 1998). Critical Path’s newsletter connected these goals to new information technologies in its mission statement:

First and foremost, we need a cure. Community-based research protocols must be established—but not just any protocols. These programs must be PWA-sensitive, enroll people of color, women, and drug users, and involve a complete patient management program. Anything less than this uses humans as guinea pigs.... We need better medical care for prisoners with AIDS who die in shorter times and under much worse circumstances than other PWAS. (1989a, 3)

Critical Path knew that the kinds of populations invited into treatment trials materially shaped available supports in inequitable ways (Geary 2014; Epstein 1998). Adam Geary (2014) has described the uneven distribution of vulnerability to HIV as the “state intimacy” of the U.S. AIDS Crisis, in which the structures of anti-black racism, including mass incarceration, exceeded the capacity of individuals or communities to respond (2).

Critical Path saw this problem first and foremost as one of information scarcity; PWAs could work together across communities of struggle through communications infrastructures that extended access across digital networks, print genres, and the telephone. As Kuromiya (1989) explained it, ‘We need a clearing house to gather and disseminate vital information to PWAs. Dear reader, to make Critical Path AIDS Project truly responsive to PWA needs we need continual feedback and we need to nurture the channels of communication with you for this vehicle to work, and for us ultimately to achieve our goals. Let’s hear from you’ (3). Critical Path’s mission emphasized wide participation in the circulation of information about treatment as groundwork for building more just research methods oriented to equity and questions of social difference. Treatment activism required meaningful participation by multiple PWA constituencies, rapid dissemination of up-to-date information, and opportunities for dialog in which

participants could draw on shared knowledge to interpret and evaluate information produced by medical industries. BBS networks were especially suited to these tasks, and provided the additional promise of anonymity for PWAs living in conditions of deep stigma and serophobia.

Conclusion

Critical Path realized BBS's potential in the late 1980s, and went on to launch a dedicated Critical Path BBS, independent of the Fuller-focused board, in November 1991. A newsletter article by Richard Bauer, who joined Critical Path in the early 1990s as the organization's network administrator, announced the launch of this dedicated BBS and explained its suitability for treatment activism:

The state of the art in rapid information exchange is what Critical Path AIDS Project is about. We would like to enable PWAs, researchers, health care providers, and others to be able to conference or post questions or information on AIDS topics at any time of day or night. A computer Bulletin Board System (BBS) permits person-to-person (anonymous) networking based on common interest or questions targeted to individuals with expertise on topics despite not knowing how to locate such individuals. The 24-hour access provides the advantage of flexibility unknown in the conventional 9-to-5 world of 'business as usual.' (Bauer 1991, 7)

Bauer explained that the Magpie BBS software Critical Path chose for their system would also build an 'archival AIDS treatment information system,' through the platform's robust storage and semantic search capabilities, allowing the organization to create an online version of its Data Files (7). While Critical Path provided lengthy instructions on how potential users with means could dial in to the Critical Path BBS, the organization also stressed that it would continue to bring non-users into the fold of this growing information network: 'Resource, clinical trial, and calendar information will be updated daily, even hourly—with participating organizations providing new announcements via modem or by phoning the regular Critical Path [telephone hotline] number' (6). Providing non-users with accessible proxies for participating in computer networks remained a priority even as the organization's infrastructure matured.

The Critical Path newsletter's launch in 1989 promoted online communication for the rapid and effective dissemination of treatment information. Online communication with other treatment activists required equipment that was prohibitively expensive and technologically opaque. Critical Path put this information in the hands of a wide constituency of PWAs and their allies. They targeted communities excluded from access to medical research trials based on race, gender, drug use, or carceral status, through a multimedia practice that recognized access to computer networks as similarly stratified. By printing information drawn from digital networks, Critical Path practiced purposeful remediation that made digital networks 'more analog.' This work contributed to a more equitable HIV/AIDS treatment landscape, and framed new computer networks as social justice issues in their own rights.

Bibliography

- “Adjuvant.” 2017. *OED Online*. Oxford University Press. Accessed March 6.
<http://www.oed.com.proxy1.lib.uwo.ca/view/Entry/2502?redirectedFrom=adjuvant>.
- Bauer, Richard. 1991. “The Speed of Light: AIDS Information in the 1990s.” *Critical Path AIDS Project Newsletter*, October. John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Beins, Agatha. 2017. *Liberation in Print: Feminist Periodicals and Social Movement Identity*. Atlanta: University of Georgia Press.
- Brier, Jennifer. 2009. *Infectious Ideas : U.S. Political Responses to the AIDS Crisis*. Chapel Hill: University of North Carolina Press.
- Brophy, Jessica E. 2010. “Developing a Corporeal Cyberfeminism: Beyond Cyberutopia.” *New Media & Society* 12 (6): 929–45.
doi:10.1177/1461444809350901.
- Brown, Norman. 1993. “Norman Brown's Consolidated List of Aids/Hiv Bulletin Boards.” <http://textfiles.com/sex/abbs9302.txt>.
- Bryson, Mary, Lori MacIntosh, Sharalyn Jordan, and Hui-Ling Lin. 2006. “Virtually Queer? Homing Devices, Mobility, and Un/Belongings.” *Canadian Journal of Communication* 31 (4). doi:10.22230/cjc.2006v31n4a1795.
- Caust-Ellenbogen, Celia, and Faith Charlton. 2014. “Kiyoshi Kuromiya Papers on HIV/AIDS Research and Organizations.” John J. Wilcox GLBT Archives of Philadelphia.
- Critical Path AIDS Project. 1989a. “Directory of PWA Services.” *Critical Path AIDS Project Newsletter*, November. John J. Wilcox Jr. GLBT Archives of Philadelphia.
- . 1989b. “Wish List.” *Critical Path AIDS Project Newsletter*, November. John J. Wilcox Jr. GLBT Archives of Philadelphia.
- . 1989c. “Soluble CD4: A Drug Trial Fiasco.” *Critical Path AIDS Project Newsletter*, December. John J. Wilcox Jr. GLBT Archives of Philadelphia.
- . 1990. “Critical Path Project Logo.” *Critical Path AIDS Project Newsletter*, January. John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Critical Path AIDS Project Newsletter*. 1990. “PWA Prisoner Resources,” December.
- Dominguez, Ricardo, Benjamin Shepard, and Stephen Duncombe. 2002. “Mayan Technologies and the Theory of Electronic Civil Disobedience: Benjamin Shepard and Stephen Duncombe Interview Ricardo Dominguez.” In *From ACT UP to the WTO: Urban Protest and Community Building in the Era of Globalization*, edited by Benjamin Shepard and Ronald Hayduk, 274–89. London and New York: Verso.
- Driscoll, Kevin. 2014. “Hobbyist Inter-Networking and the Popular Internet Imaginary: Forgotten Histories of Networked Personal Computing, 1978-1998.” Los Angeles: University of Southern California.
<http://digitallibrary.usc.edu/cdm/ref/collection/p15799coll3/id/444362>.

- Edmondson, Robert. 1996. "Having AIDS in Prison Is Hell: Letter to Critical Path AIDS Project." *Critical Path AIDS Project Newsletter*.
- Eichhorn, Kate. 2013. *The Archival Turn in Feminism: Outrage in Order*. Philadelphia: Temple University Press.
- Epstein, Steven. 1998. *Impure Science: AIDS, Activism, and the Politics of Knowledge*. Reprint edition. Berkeley, Calif. u.a.: University of California Press.
- FidoNet, and dave_. 1989. "FIDO-NET TEXT POST: The Treatment and Data Digest." *Critical Path AIDS Project Newsletter*, November. Kiyoshi Kuromiya papers on HIV/ AIDS research and organizations, John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Forster, Evan. 1996. "Where There's Smoke There Must Be Fire." *POZ*. February 1. <https://www.poz.com/article/Where-There-s-Smoke-There-Must-Be-Fire-1777-1016>.
- Friedman, Elizabeth Jay. 2017. *Interpreting the Internet: Feminist and Queer Counterpublics in Latin America*. Oakland: University of California Press.
- Fuller Information Exchange. 1992. "FIX in Three and Half Lessons." Box 13, Folder "Internet Manual." Kiyoshi Kuromiya papers on HIV/ AIDS research and organizations, John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Geary, A. 2014. *Antiblack Racism and the AIDS Epidemic: State Intimacies*. 2014 edition. Palgrave Macmillan.
- Gitelman, Lisa. 2006. *Always Already New: Media, History and the Data of Culture*. Cambridge, Mass: MIT Press.
- . 2014. *Paper Knowledge: Toward a Media History of Documents*. Durham ; London: Duke Univ Pr.
- Gitelman, Lisa, and Virginia Jackson. 2013. "Introduction." In *"Raw Data" Is an Oxymoron*, edited by Lisa Gitelman, 1–14. Cambridge, Massachusetts ; London, England: The MIT Press.
- Gossett, Che. 2014. "We Will Not Rest in Peace: AIDS Activism, Black Radicalism, Queer And/Or Trans Resistance." In *Queer Necropolitics*, edited by Adi Kuntsman, Jin Haritaworn, and Silvia Posocoo, 31–50. New Brunswick N.J.: Routledge.
- Gray, Mary L. 2009. *Out in the Country*. NYU Press.
- J. 1989. "My Experience with Hypercin." *Critical Path AIDS Project Newsletter*, December. Kiyoshi Kuromiya papers on HIV/ AIDS research and organizations, John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Jordan, Tessa. 2011. "Branching Out: Second-Wave Feminist Periodicals and the Archive of Canadian Women's Writing." *ESC: English Studies in Canada* 36 (2): 63–90.
- Juhasz, Alexandra. 1995. *AIDS TV: Identity, Community, and Alternative Video*. Durham, N.C: Duke University Press.
- Kuromiya, Kiyoshi. 1989. "The Critical Path AIDS Project: "Mission Impossible."" *Critical Path AIDS Project Newsletter*, November. Kiyoshi Kuromiya papers on HIV/ AIDS research and organizations, John J. Wilcox Jr. GLBT Archives of Philadelphia.
- . 1996. "The Treatment in Prison: A Sheaf of Letters from Incarcerated PWAs." *Critical Path AIDS Project Newsletter*.

- Marvin, Carolyn. 1988. *When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century*. New York ; Toronto: Oxford University Press.
- Mattern, Shannon. 2017. *Deep Mapping the Media City*. Minneapolis MN: University of Minnesota Press.
- McKinney, Cait. 2015. "Newsletter Networks in the Feminist History and Archives Movement." *Feminist Theory* 16 (3): 309–28. doi:10.1177/1464700115604135.
- Meagher, Michelle. 2014. "'Difficult, Messy, Nasty, and Sensational': Feminist Collaboration on Heresies (1977–1993)" *Feminist Media Studies* 14 (4): 578–92. doi:10.1080/14680777.2013.826707.
- Medina, Eden. 2014. *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile*. Reprint edition. The MIT Press.
- Meeker, Martin. 2006. *Contacts Desired : Gay and Lesbian Communications and Community, 1940s-1970s*. Chicago: University of Chicago Press.
<http://www.loc.gov/catdir/toc/ecip0517/2005021934.html>.
- O’Riordan, Kate, and David J. Phillips. 2007. "Queer Theories and Cybersubjects: Intersecting Figures." In *Queer Online: Media Technology and Sexuality*, edited by Kate O’Riordan and David J. Phillips, 13–30. Digital Formations, v. 40. New York: Lang.
- Patton, Cindy. 1996. *Fatal Advice : How Safe-Sex Education Went Wrong*. Durham: Duke University Press.
- "Prompt Printing Press Invoices." 1992. Box 34, Folder "Critical Path Budget." Kiyoshi Kuromiya papers on HIV/ AIDS research and organizations, John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Roberts, Bill. 1989. "One Couple's Supplement and Alternative Therapy Program." *Critical Path AIDS Project Newsletter*, December. Kiyoshi Kuromiya papers on HIV/ AIDS research and organizations, John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Smith, Gregory. 1997. "Tales From Behind the Wall." *Critical Path AIDS Project Newsletter*. Kiyoshi Kuromiya papers on HIV/ AIDS research and organizations, John J. Wilcox Jr. GLBT Archives of Philadelphia.
- Sterne, Jonathan. 2003. *The Audible Past: Cultural Origins of Sound Reproduction*. Durham: Duke University Press.
- Turner, Fred. 2006. *From Counterculture to Cyberculture*. Chicago: University of Chicago Press..
- Vismann, Cornelia. 2008. *Files: Law and Media Technology*. Translated by Geoffrey Winthrop-Young. Stanford, Calif: Stanford University Press.

Notes

¹ 'PWA' was shorthand used by many activists in the 1980s to also encompass people living with HIV. The term is outdated but reflects Critical Path's language choices.

² AIDS activist Roberto Dominguez's account of learning BBS in the late 1980s and early 1990s towards his method of "electronic civil disobedience" presents another notable example (See Dominguez, Shepard, and Duncombe 2002).

³ Kevin Driscoll develops this argument in some detail in his study of early BBS users (Driscoll 2014). AIDS activist use of BBS is further documented through the BBS archives at <http://textfiles.com>, and in particular, Norman Brown's guide to AIDS BBS (1993).

⁴ On media history and plasticity see Sterne 2003.

⁵ In addition to Kuromiya's original order, his actual, well-worn original boxes and folders have been maintained (Caust-Ellenbogen and Charlton 2014, 9).

⁶ Kuromiya and Critical Path also published a regular newsletter column on treatment topics for incarcerated PWAs by Gregory Smith, prisoner #22043 at Trenton State Prison. Smith, an African-American AIDS activist from Philadelphia, was one of the earliest victims of HIV criminalization and Gossett (2014) has written about his activism in some detail. Smith also authored a webpage on Critical Path's server, which the newsletter described as 'the nation's first Internet website operated by an incarcerated PWA' (Smith 1997). Partial records from this site are available via the waybackmachine: <http://web.archive.org/web/20021224223521/http://www.critpath.org/actup/Project%20202.htm>

⁷ Originally from California (via his imprisonment in Wyoming), Kuromiya grew up enmeshed in this countercultural moment and locale.

⁸ Adjuvant describes 'a substance that enhances or modifies the immune response to an antigen with which it is administered' ('Adjuvant' 2017; Critical Path AIDS Project 1990, 3).

⁹ There is also an abundance of critical path project management software for doing this work.

¹⁰ Kuromiya sero-converted around 1989 (Forster 1996).

¹¹ Treatment activist use of the term 'data' might reflect understandings of their labor as parsing more useful health information out of more 'raw' sources (Gitelman and Jackson 2013).

¹² BBS aggregators like FidoNet shared information across many different BBS groups. Critical Path drew often on FidoNet. For a comprehensive list of AIDS BBS groups and the aggregators they each used see (Brown 1993).