Title
Choreography in the Digital Era: Dancing the Cultural Differences of Technology

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Publication Date
2016

Peer reviewed|Thesis/dissertation

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by

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A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Performance Studies

and the Designated Emphasis

in

New Media

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Shannon Jackson, Chair
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Professor Greg Niemeyer
Professor Mark Franko

Spring 2016

Abstract

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In this dissertation I argue that body movement can produce new and transgressive physical relationships to ordinary media. To do so, I analyze artworks that foreground the historical, cultural, and ethnic patterns of choreographic movement. Important to this exploration is how the design, production, and dissemination of different media can foster or suppress specificity and identity from feminist, queer, disability, and postcolonial perspectives. Focusing on artists who appropriate technological production to articulate specific kinesthetic relationships to media, I identify minoritarian perspectives on technology in specific historical and cultural circumstances to complicate the universalizing tendencies of digital culture discourses.

Building on the tradition of phenomenological analysis of performance and technology experimentation, *Choreography in the Digital Era: Dancing the Cultural Differences of Technology* expands aesthetic inquiries in the field of dance and technology to examine historical and cultural contexts. The project resides at the intersection of performance and new media, and brings history to bear on the present in order to imagine more culture- and identity-specific digital futures. International artists who make space for political and cultural perspectives at the core of this dissertation include: Lucinda Childs, John Bernd, Rachid Ouramdane, and the Electronic Disturbance Theater. These artists employ varying styles of somatic and kinesthetic engagement, which illustrates how performers and viewers interact with media devices on several levels. I examine these differences to reveal how "mediation" is in constant flux. By challenging the idea of a universal user in digital culture, this dissertation argues that mediation and its socio-cultural contexts impact the way performers move. In foregrounding this movement, my research brings forth the individual identities and cultural stories that universalist conceptions of digitality otherwise overlook.

Table of Contents

For my family: Lydia and Scooch, Tim and Renate, Erin, and my Joey

Acknowledgements:

There are many more thanks to convey than there is space in these acknowledgements, but some people had a direct hand in shaping and supporting this dissertation. My dissertation chair Shannon Jackson asked the most rigorous and intuitive questions. My conversations with Shannon from coursework on helped to push this project in the right direction, and helped in developing an intervention that I am extremely proud of. Her care in editing at the end helped make this dissertation as rigorous as it is. Mark Franko has been an incredible mentor from independent studies reading Henri Bergson, to publishing my very first book review and being an extremely close and careful reader. His knowledge of the field of dance, its histories and philosophies helped shape the specificity and voice of this project. Abigail DeKosnik and I began our time at Berkeley the same year, and it has been a pleasure to have her by my side every step of the way. She has supported my thinking and making, and has served as the most steadfast mentor. Greg Niemeyer has provided new lenses through which to consider my work. He encouraged me to explore opportunities that helped me see my dissertation in new ways, and take my argument in new directions. Together, my committee always left space for my voice and their varied expertise allowed for the interdisciplinarity of this project. I am forever thankful for their patience and support.

My colleagues have inspired this work. The entire Department of Theater, Dance, and Performance Studies and Berkeley Center for New Media have supported my personal and professional endeavors and project would not have been possible without the intellectual, fiscal, and personal support of those communities. They challenged my thinking and pushed me to grow in ways that have greatly served this project. They also consistently supported my efforts to practically explore my theoretical ideas through my own choreography. In particular, Mary Ajideh, Susan Miller, Robin Davidson, Marni Davidson, and Grace Leach provided personal and administrative support. Lisa Wymore, SanSan Kwan, Yvonne Hardt, Kaja Silverman, Ken Goldberg, David Bates, Reggie Royston, Kris Fallon, Alenda Chang, Jen Schradie, Kris Trujillo, Margaret Rhee, David Humphrey, Shane Boyle, Brandon Wolff, April Sizemore-Barber, VK Preston, Godfrey Plata, Heather Rastovac, Karin Shankar, Hentyle Yapp, Ivan Ramos, Paige Johnson, and Sean McKeithan all provided personal and professional companionship, guidance, and feedback. Artistic mentorship and friendship from Erin Colleen Johnson, Zach Blas, David Coll, Rama Gottfried, Joe Goode, Jack Gray, Petra Kuppers, Kate Mattson, and Brian Fugelsang has been crucial to thinking through artistic concepts that are central to this work. Wendy Selkin, thank you for your philosophical companionship and friendship in Miami. Special thanks to Byron Suber, Jumay Chu, Jim Self, and Nick Salvato for teaching me how to critically combine practice with theory—some of you since my childhood.

Huge thanks to participants of CNMAT 2009, School for Criticism and Theory 2010, the Mellon Summer Dance Seminar 2014, HASTAC fellows, Cal Writers, writing group partners Ariel Osterweis, Raquel Monroe, and Bina Gogeni, and the editorial support of Reya Sehgal. Support from the Macarthur Foundation and HASTAC's Digital Media and Learning Dissertation Research Grant made researching this project possible. Thanks also to the librarians at the Getty Research Institute, the Harvard Theater Collection, and the Jerome Robbins Dance Division of the New York Public Library.

There are some friends and colleagues who have taken special care with my writing and my life. The food chain provided sustenance when I needed it most. Dr. Rajesh Behl, the nurses and staff of 4 northeast and the cancer center helped get me to where I am today. The Skinners, McAree/DeLorenzos, and Fergusons opened their homes during research trips to New York, Boston, and Los Angeles. I wouldn't be who I am without family friends like Neil Saccamono, Anette Schwarz, Patty Zimmerman, Stewart Auyash, Kris Corda, Brian, Kelly, and Tommy McAree, Fred, Marlene, Joanne, Stephanie, Jeffrey, Avi, and Mika Barken, Tim Corrigan and Marcia Ferguson. Katelyn McAree, Sarah Fitzpatrick, Meghan Bangs, Libby Marks, and Brett Rubin you have given me the courage to be who I am. You have kept me honest and cared for throughout this entire process, and I love you all very much. Rebecca Macmillan, our intellectual connection and your feedback on my writing spans back to age fourteen. Thank you for never giving up on my words and for continuing to help me grow as a sensitive human and scholar. Mary Armentrout, my deepest thanks for your wisdom, artistic mentorship, and for your Felkdenkrais hands. You took me seriously from my first days in Berkeley and helped sustain my body through its darkest times. Marc Boucai, you have shaken things up, held me accountable, and made much happen. In many ways I owe it all to you. Andrew Godbehere, it's your fault! Who knows if any of this would have ever happened without your sensors nine years ago. In addition to your artistic and engineering genius, thank you for being such a caring friend and for so generously letting me into your life. Azalea Godshall you inspire me from all the way across the country. Antonio, Lucia, and Milena Cappezuto your food, hugs, laughs, and love sustain me. Looch, you taught me much about the balance of life during those early years of graduate school and I am so proud that we got to grow up together over the past eight years.

Sima Vera Belmar and Caitlin Marshall, where ever would I be without you both? This journey was a collective one, and your influences are peppered throughout this document. Your feminist intellectualism, collegiality, and academic generosity will never be topped. You've taught me much about work and life, and everything across and in between. You let me into your families and your hearts and it is for this that I am most grateful. Thank you for picking me up every single time I fell down. You are both so different, and I have an incredible individual relationship with each of you. And then somehow together the three of us are unstoppable. I am emotional and nostalgic remembering our time together, but am comforted to know that this is only beginning.

The support and energy of my grandparents, Lydia and Scooch, and the entire Ferro and Skinner clans is sustaining. The Spadolas have adopted me as one of their own. Joyce and Bill Spadola, thank you for loving me like you do and giving encouragement and perspective to my work.

It is no secret where I get my artistic and scholarly genes. My parents, Tim Murray and Renate Ferro, have encouraged me from the beginning with their own passion and dedication. No one loves this work like they do and this project really couldn't have happened without them. I may not cite Lyotard and Deleuze directly, or discuss the influence of growing up tiptoeing around drying monotypes and triptychs, but those ways of life have seeped into my every thought, action, and reaction—each fragment, loop, layer, and repetition. Most importantly however, my parents showed me how to be a caring and compassionate human. They taught me that being an academic, artist, and curator is about being a good person, and I hope that this is a lesson that I carry

with me always. They also gave me my brother, Erin Ferro-Murray, who is one of a kind. His sensitivity and reality are grounding. When the rest of us are taking things far too seriously, Erin is the voice of reason. He doesn't let me get away with too much, makes me laugh, supports my art, and loves me palpably. Thanks for being the best baby brother a girl could ask for and for helping me with this project in more ways that you know.

Finally, my husband and my partner in everything Joey Spadola supported me through every step, question, revelation, and tear. We met during the final months of my qualifying exams and so this dissertation process spans our entire relationship. His influence on my writing and my thinking is extensive, and his interest in pragmatism only depended my dedication to the relationship between theory and praxis. Joey listened patiently as I mapped out my argument on long and winding walks through the hills of Oakland, on the beaches of Miami, and along the East River in Long Island City. He somehow always knows when to listen quietly and when to ask probing questions that catapult my thoughts to the next level. Most importantly, his unconditional love has given me the confidence to take risks where I may not have otherwise. Writing a dissertation is never easy and always requires the support of others and the patience of a partner, but doing so while also fighting Leukemia demands special care both for the dissertator and for her work. Joey, thank you for believing in me and in this project when I did not have the energy to believe myself – I love you.

May 9, 2016
Long Island City, New York

Introduction: **Mechanical Bodies and Precursors to Digital Dance**

Choreography in the Digital Era: Dancing the Cultural Differences of Technology places body movement at the center of a minoritarian critique of digital culture. When contemporary technology is developed primarily for a universal Western user, it in turn produces normative Western relationships to subjectivity. This universality limits technology's capacity to respond expansively to the global reach of new media. Each chapter looks at a different choreography whose bodily movement exposes and critiques this normativity. Lucinda Childs' *9 Evenings: Theater and Engineering* performance *Vehicle* tacitly becomes a feminist critique of masculine dominance in the engineering industry; John Bernd's *Surviving Love and Death* performs a queer intervention into the heteronormativity of biomedicine and biotechnology; Rachid Ouramdane stages a postcolonial critique of global networks; and Electronic Disturbance Theater's Transborder Immigrant Tool intervenes in the technological surveillance of bodies around Mexican-US borderlands. These works each illustrate how body movement is integral to understanding subjectivity in digital culture. Choreography has the capacity to destabilize the centrality of a universal subject with embodied non-normative historical and cultural contexts that inform the usage of specific devices in different contexts.

The prominence of the body in dance is fundamental to this work. Early understandings of virtual realities and Internet networks separate information from bodies, thus creating a cyborg and post-human realm in which it is possible—from a utopian standpoint—to transcend material differences between people. Feminist new media activists, artists, and scholars initially lauded the cyborgian capacity of digital technology for its ability to liberate bodies from the culturally restrictive confines of race, gender, and disability, a model for subjectivity that reifies the Cartesian *cogito* and privileges the mind over the body.[1] As dance studies has illustrated, however, kinesthetic history and experience is integral to notions of subjecthood.[2] The specificity of this subjectivity is particularly important now that digital media are fully incorporated into neoliberal systems of power, and digitality is no longer just a space for generative meaning-making. As Eugene Thacker and Alex Galloway forcefully argue, digital networks constitute the complex realm of sovereign power and capitalist markets.[3] Choreographic staging of bodies and technology illustrate how bodies and media are mutually constitutive in the digital era.

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[1] Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 149-181; N. Katherine Hayles, *How We Became Posthuman* (Chicago: University of Chicago Press, 1999); VNS Matrix, "A Cyberfeminist Manifesto for the 21st Century" (unpublished, 1991).

[2] Susan Leigh Foster, *Choreographing Empathy: Kinesthesia in Performance* (New York: Routledge, 2010); Carrie Noland, *Agency and Embodiment: Performing Gestures/Producing Culture* (Cambridge, MA: Harvard University Press, 2009).

[3] Alexander Galloway and Eugene Thacker, *The Exploit: A Theory of Networks* (Minneapolis: University of Minnesota Press, 2007).

Dance and technology as a genre typically foregrounds the body in experiments with technology to challenge the notion that bodies are not integral to digital culture. Artworks by Troika Ranch, Susan Broadhaust, Susan Kozel, and Konic Thtr illustrate how choreographic experiments with digital technology in dance provide a better phenomenological understanding of digital culture.[4] They typically ask, how does new media impact the experience of movement—in physical and digital reality? Dance Studies, a discipline founded on phenomenological readings of movement, can complement these experiential explorations of media.[5] However, I seek to complicate phenomological readings of dance and technology that too often rely on normative and universal notions of the subject. Past uses of phenomenological readings ask how new media impact the experience of movement toward the constitution of contemporary subjectivity, but they do not ask who is moving and how that person has access to the technology. They do not consider the cultural context of the technology and the wider social implications that such media are being developed. These are the questions at stake in this dissertation.

Recent art scholarship has begun to take a broader view of new media to provide more critical accounts of the cultural and political content of new media and digital culture.[6] Shannon Jackson argues that theatrical productions that do *not* call themselves 'new media' are as affected by these technologies as those that do.[7] This statement opens the conversation about performance and technology to works that interrogate other social problems and situations. It acknowledges that technology is necessarily implicated in these circumstances. Similarly, Claire Bishop suggests that mainstream contemporary art depends on the digital revolution "even—especially—when this art declines to speak overtly about the conditions of living in and through new media."[8] Both Jackson and Bishop imply that the effects of digital culture go beyond the use value of a device on stage to impact the structures of moving and performing in contemporary society.

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[4] Susan Broadhurst, *Digital Practices: Aesthetic and Neurosthetic Approaches to Performance and Technology* (New York: Palgrave Macmillan, 2007); Susan Kozel, *Closer: Performance, Technologies, Phenomenology* (Cambridge, MA: MIT Press, 2008); Erin Manning, *Relationscapes: Movement, Art, Philosophy* (Cambridge, MA: MIT Press, 2009).

[5] Maxine Sheets Johnstone, *The Phenomenology of Dance* (Philadelphia: Temple University Press, 2015).

[6] Wendy Chun, *Control and Freedom: Power and Paranoia in the Age of Fiber Optics* (Cambridge, MA: MIT Press, 2008); Julia Bryan-Wilson, *Art Workers: Radical Practice in the Vietnam War Era* (Berkeley: University of California Press, 2011); Abigail De Kosnik, "Disrupting Technological Privilege," *Performance Research* 19, no. 6 (2014): 99-107; Shannon Jackson and Marianne Weems, *The Builders Association: Performance and Media in Contemporary Theater* (Cambridge, MA: MIT Press, 2015); Shannon Jackson, *Social Works: Performing Art, Supporting Publics* (New York: Routledge, 2011); Lisa Nakamura, *Digitizing Race: Visual Cultures of the Internet* (Minneapolis: University of Minnesota Press, 2007).

[7] Jackson, *Social Works*, 179.

[8] Claire Bishop, "Digital Divide: Contemporary Art and New Media," *Artforum*, September 2012.

As new media scholars recognize, for example, digital networks structure contemporary globalism.[9] In the context of conversations about dance, however, new media as a genre remains markedly separate from the established analysis of world dance, or dance and globalism and transnationalism.[10] To counter this separation, *Choreography in the Digital Era* contends that, in some way, all dances are dances with technology. Where there is no access to technology for economic or cultural reasons, dances "without" technology implicitly illustrate inequities in access to new media.. This is not to further this domination and suggest that Western technology should define all ways of moving. Instead, it proposes that there are ways of relating to digital culture other than by deploying the most cutting edge devices. It explores too how some choreographies critique the model of the universal user that these devices were intended to serve. Throughout, I seek to foreground a culturally situated kinesthesia.

Historicizing Technological Productions of Movement

The digital era is not the first time that 'new' machines have directly affected the cultural production of bodies and movement. The advent of the Industrial Revolution, the Machine Age, and eventually the extreme popularity of cinema effected modern notions of humans, their bodies, and their emotions. A brief review of twentieth century industrial body-machine dynamics in culture and in performance helps to illustrate how contemporary choreography might have a similar impact on the digital era.

Early twentieth-century Taylorist work-life models profoundly impacted both industrial and artistic life. Taylorism is a philosophy of economic efficiency and labor productivity that prompted assembly line work models and promoted an aesthetic of mechanization, efficiency, and uniformism. In the aftermath of the Industrial Revolution, the everyday human actor became harmonized with the industrial machine and equated with motorization. Anson Rabinbach chronicles principles of Taylorism whereby the human body is to "conserve, deploy, and expand the energies of the laboring body" in order to eliminate the final obstacle of efficient progress: "the stubborn resistance to perpetual work that distinguished the human body from the machine."[11] The movements of assembly line workers, for example, aesthetically mimicked the movements of the machines on which they worked. Each worker had a distinct job that required repetitive physical performance, and each body became yet another gear in the factory machine, completing one task so the entire machine could run smoothly and, most importantly, efficiently. The incorporation of bodies into mechanical rhythm and uniformity stripped individual workers of their identity and equated them with disembodied parts of a machine. Their labor energies were thus equivalent to the motorized energy driving production.

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[9] Chun, *Control and Freedom*; Nakamura, *Digitizing Race*; Galloway and Thacker, *The Exploit.*

[10] Foster, *Choreographing Empathy*; André Lepecki and Jenn Joy, *Planes of Composition: Dance, Theory and The Global* (New York: Seagull Books, 2010); Priya Srinivasan, *Sweating Saris: Indian Dance as Transnational Labor* (Philadelphia: Temple University Press, 2012).

[11] Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (Berkeley: University of California Press, 1990), 2.

One of the most famous popular culture performances of uniform machine aesthetic was the chorus line dance performed by the Tiller Girls. The Tiller Girls dance group was established in England by John Tiller who felt that a lack of discipline diminished the effect of the chorus line in theater. Tiller extracted the chorus line from the theatrical performance, and isolated it in order to perfect the precision of the girls' movements. The Tiller Girls would perform mass chorus line numbers anticipating the Rockets of the twentieth and now twenty-first century; the dancers hooked arms and rotated en masse all while performing kick-line movements with the utmost precession. Together, the performers' movements resembled patterns that one might see in a kaleidoscope. In his famous 1923 essay, *The Mass Ornament,* Sigfried Kracauer associates the precise Tiller performance with machine aesthetics, labeling the Tiller girl the agent of industrial capitalism. Kracauer argues that Tiller's chorus line is no longer made up of individual girls, but "indissoluble girl clusters" that are "composed of thousands of bodies, sexless bodies in bathing suits."[12] He explains, "The bearer of the ornaments is the mass and not the people [Volk]" as it exhibits only "remnants of the complex of man that enter into the mass ornament."[13] Participants of the ornament, "The Tiller Girls can no longer be reassembled into human beings after the fact."[14] Instead, the performers' ability to fade into the ornament as an abstracted element of a group demonstrates a mastery over human motor efficiency, a technical virtuosity that parallels industrial projection. As Kracauer poetically puts it, "The hands in the factory correspond to the legs of the Tiller Girls."[15]

While such dance was a product of machine aesthetics, dance was also used and redeployed to respond to and even critique the politics of Taylorism. Isadora Duncan turned to modern dance to re-assert the presence of the body, since it had been lost to the gear and the group in machine culture. Duncan distinguished her artwork from anonymous mass spectacle by performing solos "without song, skit, or recitation."[16] The dance was purely about Duncan, her natural body and expressive improvised movement. Ann Daly describes Duncan's choreography, *Mother*,

> Her whole upper body begins to circle out horizontally from deep in her torso, but gradually the torso stills. Her arms keep making their rhythmic motion, however, still seeming to contain the space between them, gradually changing in rhythm, intensity, and the spatial design until they become a pair of mother's arms rocking her baby…And the sense of full-body support gives the gesture emotional gravity…"[17]

The "full-body" emotional effort and changing rhythms that characterized Duncan's dance differed from the efficiency of movement that characterized industrial

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[12] Siegfried Kracauer, "The Mass Ornament," in *The Mass Ornament: Weimar Essays*, ed. and trans. Thomas Y. Levin (Cambridge, MA: Harvard University Press, 1995), 76.
[13] Ibid., 76, 83.
[14] Ibid., 78.
[15] Ibid., 79.
[16] Ann Daly, *Done into Dance: Isadora Duncan in America* (Middletown, CT: Wesleyan University Press, 2002), 62.
[17] Ibid., 153-154.

organization. Duncan aligned with the industrial principle that with more "efficient" movements you get a more abstracted, less emotional, and less personal product. She choreographed dances that created signs and metaphorically meant something, a symbolic structure that again differed from the abstraction of machine aesthetics.[18]

Despite Duncan's self-promotion as a dancing woman in opposition to mechanization and its subsequent abstraction, her politics ultimately perpetuated a exclusionary body politic. As Mark Franko has recounted in *Dancing Modernism/Performing Politics,* Duncan founded a dance school to develop a chorus to demonstrate disindividuation in community.[19] Franko aligns Duncan's interest in community with her Hellenistic tendencies, which distanced Duncan from a working class audience in very specific ways. First, Duncan renounced the primitive to distinguish herself from any low to working class or minority audiences. Daly recounts how Duncan's definition of the primitive as "vulgar" worked within a racist politics that "produced and re-produced social divisions along the lines of race and class."[20] Duncan found supporters "among the wealthy, educated class of Americans who could afford tickets to see her at the opera house or concert hall and who could 'read' her Hellenistic allusions as meaningful."[21] In this case, Duncan's turn to the expressive body signified a white upper-class body. Thus, while the body was ideologically opposed to notions of machines, Duncan's practice of distancing herself from the mechanical also symbolized a turn away from lower class or minority identities. Duncan's case illustrates the risk of using dance to stage a universal bodily opposition to machines; a generalizing binary between "body and technology" ends up privileging certain types of bodies over others.

Using the body as a mechanism to resist machine culture is complicated; while a return to the body can privilege certain types of bodies over others, as is the case of Duncan's dances, the same practice can promote oppressive politics under different circumstances. Like Duncan's dances, for example, Josephine Baker performed solo dances in the 1920s. Unlike Duncan's anti-primitivist dance, however, Baker occupied the place of the other on stage. Ramsay Burt explains how French utopian socialist audiences received Baker's performances as primitive, natural, and, therefore, an in touch with an organic essence "with which over-civilized Westerners believed they had lost touch."[22] In other words, Baker's embodied practice provided the natural outlet from abstracted machine culture. Felicia McCarren recognizes that "dancing staged resistance to such modernization, erasure, and exploitation of individual bodies and insisted on the reality of real bodies giving in to time, weight, and the loss of energy."[23] With her attention the work of Josephine Baker though, McCarren also recognizes the potential

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[18] Ibid., 137.
[19] Mark Franko, *Dancing Modernism/Performing Politics* (Bloomington, IN: Indiana University Press, 1995), 17.
[20] Ann Daly, *Critical Gestures: Writings on Dance and Culture* (Middletown, CT: Wesleyan University Press, 2002), 113-114.
[21] Daly, *Done into Dance*, 111.
[22] Ramsay Burt, *Alien Bodies: Representations of modernity, 'race' and nation in early modern dance* (New York: Routledge, 1998), 63.
[23] Felicia McCarren, *Dancing Machines: Choreographies of the Age of Mechanical Reproduction* (Stanford, CA: Stanford University Press, 2003), 20.

complexities inherent in this duality. She situates Baker's work as both organic and mechanical in a discussion about the relationship between savagery and civilization, or the primitive (associated with the organic body and embodiment) and machine. As Burt acknowledges, the "African-ness" of Baker's movement and her identified place as an "American Negro" contributed to both the raced commodification of Baker as star and audience associations between Baker and primitivism.[24] Baker was relegated to the space of the primitive and not given access to the modernized machine. She was objectified as primitive so that white privileged audiences could use her body toward their own liberation from the mechanical. While the mechanical was perceived to be oppressive and have a distancing effect from the body and emotion, it was also a sign of modern privilege. The ability to navigate between the realms of the primitive and the mechanical was one left to predominantly white middle to upper class audiences.

The association between the dancing body and the machine is a historically dichotomized and complicated one. One consequential effect of the dancer's relative effacement in machine aesthetics is a corollary indifference to issues pertaining to what we appreciate today as the politics of performer identity. This does not mean that machine culture lacked identity politics per se. The incorporation of technology in performance did not guarantee the eradication of the gendered body under the regime of theatrical futures. While certain dance history narratives suggest that it was necessary to return to the body over technology to regain a sense of identity individuality, I ask, at what cost? The exclusionary politics of Duncan's dance? Or the oppressive regimes of Baker's fame? Instead, in this dissertation I seek to propose a different method for re-inserting the body into technology both during the machine age and, consequently, in the digital era. In the machine age, for example, Loïe Fuller, an American pioneer in stage lighting and modern dance working in France, developed a performance style relying on a large silk skirt that she twirled and swirled around her body as she danced. Fuller implanted her body and feminist perspective back into a technological culture, but without rejecting that technology altogether. Fuller worked wooden dowels to extend the reach of her arm, and thereby turned her body into a literal machine that would propel fabric into space. Performed most famously in her serpentine dance, Fuller illuminated the silk fabric with revolutionary multi-colored lights, creating the illusion that the movements of her body and skirt propelled the movement of color. While some argue that Fuller's performance technique turned the body into an anthropomorphic figure of fabric and lighting, Fuller's technologized stage performance can be appreciated, on the contrary, for its foregrounding of the performer herself.[25] Fuller's physically strenuous movements enabled her to explore the impact of her moving body in time and space. Even more, the artist's scientific development of lighting technologies coupled with her choreography and gesture perform an early feminist appropriation of performance technologies. As a woman manipulating the power positions of choreographer and lighting designer, Fuller turned modern dance – a naturalist performance of femininity that historically dichotomized the primitive body and machines – into a performative

[24] Ibid., 64.
[25] Ann Cooper Albright, *Traces of Light: Absence and Presence in the Work of Loïe Fuller* (Middletown, CT: Wesleyan University Press, 2007), 2.

exploration of how female bodies and technologies could powerfully interface with one another.

The historical review of technological production in early twentieth-century performance practice illustrates how a technology-body relationship is not distinct to the digital era. From the Tiller Girls to Duncan and Baker, it is clear how a technological impact on movement can produce a shift in subjectivity and opportunities for alternative use of new inventions. Fuller's early technology dances illustrate how dance has the capacity to choreographically shift the agential relationship between subject and device; a delicate mixture of movement, the body, and technology produces a critical approach to the cultural production subjectivity.

Most interesting to this dynamic history is the different ways in which technology impacted the modern age dance. Similarly, digital technology is incorporated into late twentieth and early twenty-first century performance in extremely varied ways. Dance and technology is a sub-field of dance devoted expressly to work with emerging media. These experiments, typically collaborations between engineers and artists, incorporate or even design emerging media for stage performance. Most famously, Merce Cunningham collaborated with engineer Paul Kaiser on animations for *Biped.* Kaiser and engineer Shelly Eshkar produced motion capture animation for Bill T. Jones's *Ghostcatching.* William Forsythe has used digital media as an information tool as opposed to an aesthetic element. His Improvisation Technologies DVD, Synchronous Objects website, and now Motion Bank Project all seek to produce digital media that help dancers and audiences understand the mechanics of dance technique and performance structures like cuing. In other words, there are many ways to respond to media on stage. Just like there is no universal user of digital media, there is no universal effect of digital media on body movement or on performance.

Taking its cue from Fuller, this dissertation seeks out choreography that recognizes digital culture as a co-producer of diverse subjectivities.

Literature Review: Subjectivity in the Digital Era

Choreography in the Digital Era will first acknowledge the complexities of subjectivity situated in contemporary digital culture. This project seeks to suggest how a critical engagement with digital media from a specific cultural and social situation can be used to critique digital narrative of universal Western progress. There have been recent moves in new media scholarship to problematize utopian and techno-romanticist notions of the digital world, or to address contexts in which digitality is not utopian. Scholars including Wendy Chun and Lisa Nakamura look at power and race online.[26] Timothy Murray and Mark Hansen analyze race, gender, and cultural politics in aesthetics and digital installation.[27] Artist Mary Flanagan considers gender in the context of new media artwork and game design. Performance scholars Brenda Dixon Gottschild and Sue Ellen Case theorize virtuality in digital performance contexts as they relate to cultural identity

[26] Chun, *Control and Freedom*; Nakamura, *Digitizing Race.*

[27] Mark Hansen, *Bodies in Code: Interfaces with Digital Media* (New York: Routledge, 2006); Timothy Murray, *Digital Baroque: New Media Art and Cinematic Folds* (Minneapolis: University of Minnesota Press, 2008).

and race.[28] Also important to this study are postcolonial perspectives that resist Western "progress" as it is represented by digital technology, such as Arjun Appadurai's work on *mediascapes*.[29] Many of these approaches come out of a cultural studies history to either imagine the future of new media, or to consider work by one specific artist. Chun, Nakamura, and Flanagan focus primarily on the "new" of new media.[30] Murray, Hansen, Appardurai, Case, and Dixon Gottschild are grounded in a specific history but do not always focus on how media specifically relate to cultural and social circumstance.

This project uses dance to forward this critique; scholarship on modern dance provides a framework to consider the formal qualities of movement and choreography as political. Mark Franko's *The Work of Dance: Labor, Movement, and Identity in the 1930s* and *Dancing Modernism/Performing Politics,* Randy Martin's *Performance as Political Act,* Ramsay Burt's *Alien Bodies* all look at the politics of modern dance.[31] This field tracks significant moments in dance history such as radical dance of the 1930s; the political content of more "aesthetic" modern dance; identity politics in modern, postmodern, and contemporary dance; and institutional politics and critique by movement and within the dance world. Franko's *The Work of Dance* accounts for how aesthetic form is deeply connected to political, cultural, and social context. Felicia McCarren suggests similar connections that are specific to technology in her book *Dancing Machines: Choreographies of the Age of Mechanical Reproduction.*[32] This dissertation picks up where McCarren leaves off. She notices how the digital age introduces new politics of movement and mechanics as they relate to the body.

> From the fascination with automata and their imitation in dance through the history of robotics, artificial intelligence, and artificial life, virtuality, and cybernetics, it remains to chart the intersection of dance and dancers with information machines in a world thought to have ended work and reconceived life in bodies. It remains also to consider how the more omnipresent network of technology, casting a wider net as it becomes ever more invisible, mechanizes bodies, ironically, even as it frees them.[33]

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[28] Brenda Dixon Gottschild, *The Black Dancing Body: A Geography from Coon to Cool* (New York: Palgrave Macmillan, 2003); Sue-Ellen Case, *Performing Science and the Virtual,* (New York: Routledge, 2007).
[29] Arjun Appadurai, "Disjuncture and Difference in the Global Cultural Economy," *Theory, Culture & Society*, 7 (1990): 295-310.
[30] Chun, *Control and Freedom*; Nakamura, *Digitizing Race*; Mary Flanagan, *Critical Play* (Cambridge, MA: MIT Press, 2009).
[31] Mark Franko, *The Work of Dance: Labor, Movement, and Identity in the 1930s* (Middletown, CT: Wesleyan University Press, 2002); Franko, *Dancing Modernism/Performing Politics*; Burt, *Alien Bodies*; Randy Martin, *Performance as Political Act: The Embodied Self* (New York: Bergin & Garvey Publishers, 1990).
[32] McCarren, *Dancing Machines*.
[33] Ibid, 197.

While this project does not explicitly interrogate the mechanization of bodies in a digital culture, the research provides a methodological framework for considering these and other questions.

Scholarship on performance and digital technology has articulated many key concepts on which I will draw to discuss somatics and kinesthetics. Susan Leigh Foster discusses kinesthetics in the context of digital culture and choreographies of digital media.[34] Carrie Noland provides an extensive theoretical history to the relationship between technology and somatics.[35] There are extensive debates on the definition, importance, and role of liveness and presence associated with new media performance.[36] These conversations also look at the role of the performer and audience as they are affected by technologies that boast interactivity and participation. Scholars including Johannes Birringer, Susan Broadhaust, Scott de Lahunta, Steve Dixon, Susan Kozel, and David Saltz address this trend.[37] Rather than think of the socio-cultural ramifications of these practices, however, scholars such as Broadhaust fail to place technology in any cultural context. While scholars including Birringer and de Lahunta take a less romantic stance and look beyond the work of one artist to consider the larger ramifications of digital technology on dance performance in a traditional proscenium theater, they too think of experiments with technology to explore the device itself and fail to question its production of a normative subject. Foster and Noland's recent work on kinesthetic and somatic relationships to technology provide important context for my articulation of a dancing subject, but I use new media theory to complicate their articulations of the device, user-interface, and digital culture.

Contemporary new media theory about cyborgs and posthumanism incorporates the body and embodiment into feminist theories of the body.[38] They are in line with certain aspects of early new media feminist arguments such as cyborg theory[39] and are integral to my reading of bodies in digital era choreography. These theories complicate

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[34] Foster 2010.

[35] Noland, *Agency and Embodiment*.

[36] Philip Auslander, *Liveness: Performance in a Mediatized Culture* (New York: Routledge, 1999); Anne Dils, "The Ghost in the Machine: Merce Cunningham and Bill T. Jones," *PAJ* 24, no. 1 (January 2002): 94-104; Peggy Phelan, *Unmarked: The Politics of Performance* (New York: Routledge, 1996).

[37] Johannes Birringer, "Digital Performance: Dance and Media Technologies," *PAJ* 24, no. 1 (January 2002): 84-93; Maria Chatzichristodoulou, Janis Jefferies, and Rachel Zerihan, *Interfaces of Performance* (Burlington, VT: Ashgate, 2009); Johannes Birringer, "Dance and Interactivity," *Dance Research Journal* 36, no. 1 (Summer 2004): 88-111; Scott deLahunta, "Virtual Reality and Performance," *PAJ* 24, no. 1 (January 2002): 105-114; Steve Dixon, *Digital Performance: A History of New Media in Theater, Dance, Performance Art, and Installation* (Cambridge, MA: MIT Press, 2007); Kozel, *Closer*; Chris Salter, *Entangled: Technology and the Transformation of Performance* (Cambridge, MA: MIT Press, 2010).

[38] Vivian Sobchack, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton, NJ: Princeton University Press, 1991; Elizabeth Grosz, *Volatile Bodies: Toward a Corporeal Feminism* (Bloomington, IN: Indiana University Press, 1994).

[39] Haraway, "A Cyborg Manifesto"; Hayles, *How We Became Posthuman*.

the assumption that the body is a whole and single entity, even if they do not turn to choreographed dance as a resource. Notably, a post-humanist perspective is compatible with and advanced by feminist and critical race analysis that specifies the particular histories and subject positions of technologically-engaged bodies.

Choreography in the Digital Era asks how contemporary technologies further complicate conceptions of subjectivity and the body in digital culture for minoritarian and political aims. Is information technology a clean break from industrial constructions of the body as efficient and mechanical, as it was conceived in the early twentieth century? If so, what is the contemporary digital and/or informatics shift in ontologies of the body?

Chapter Breakdown and Methodology

This dissertation begins just prior to the digital era. In chapter one, I look at the 1966 collaboration *9 Evenings: Theater and Engineering* and in chapter three I analyze John Bernd's 1981 *Surviving Love and Death.* While these works predate the Information Age, they both anticipate the future effects that a growing presence of media will have on the arts, culture, and subjecthood. Both of these performances propose the inclusion of historical, cultural, and physical specificity in what they anticipate will be a move toward information and biopower in the future.

9 Evenings: Theater and Engineering was a collaborative project between a team of Bell Labs engineers and avant-garde New York based artists. The teams, led by Billy Kluver and Robert Rauschenberg, intended to use the arts to humanize the effects that advancements in engineering would have on culture. Bell Labs was at the center of technical development for American military production during a time when the Cuban Missile Crisis and the Vietnam War brought scientific development to the forefront of political discourse and national security. The inclusion of avant-garde artists whose politics either directly or indirectly challenged such government initiatives was radical for its time. Interestingly, the highly anticipated project was seen as a failure. Audiences were unimpressed by the aesthetic content of the art, and much of the technology included in the project failed in performance. In effect, art failed to humanize the technology.

Regardless of its aesthetic and technical failures, the *9 Evenings* model for collaboration between artists and engineers had a lasting impact that continues to define dance and technology work today. This chapter closely reads Lucinda Childs' *9 Evenings* performance *Vehicle* to consider how this failure was in fact a product of the dissonance between the engineering apparatus and avant-garde art, especially avant-garde choreography. This chapter foregrounds the social and political context of *9 Evenings* that is often left out of histories of the project in favor of the newness of *9 Evenings* as a collaborative model between artists and engineers. The chapter proposes that the socio-political context is in fact essential to fully understanding the artistic impact that the *9 Evenings* artists and engineers intended their new collaborative method for making art to have. The chapter also suggests that the choreographers involved in *9 Evenings* actually challenged the humanist motive driving these transformative intentions. The chapter looks at how the purported 'failure' of *Vehicle* embodies a feminist intervention in engineering, one that presciently performed a culturally specific, posthuman relationship to new media.

While Childs used body movement to propose digital futures, Rachid Ouramdane focuses on familial histories. I examine how Ouramdane's performance *Far…* (2008) recalls his family history with French colonialism in Algeria to re-wire contemporary digital networks from a postcolonial perspective. *Far…* is well known for its first person video accounts of the aftermath of war and torture, but, alongside these powerful videos, Ouramdane performs an equally compelling response to French colonialism, to the diasporic experience of his Algerian family, and to the experience of other people affected by war. Ouramdane importantly insists that embodied connection to historical context is integral to understanding contemporary engagements with new media networks Ouramdane's choreography illustrates how somatic relationships to history, time, and space are already wired in a new media network that he simultaneously lauds and critiques for its perceived body-less-ness. This perspective problematizes historical universalist relationships to digital communications networks to propose methods for thinking postcolonial new media futures.

Chapter three is a close reading of John Bernd's *Surviving Love and Death,* which was a solo about the artist's battle with HIV/AIDS during a time when treatment for this virus was unavailable. Bernd's piece recognizes the heteronormative biopolitics inherent in the biomedical complex, which develops technologies to treat his ailing body and has the power to make Bernd live or let him die. Bernd turns to choreography to regain power over his body and take matters into his own hands. He presents a do-it-yourself holistic approach to his health that foregrounds the importance of kinesthesia to his wellbeing. This work has never been read in terms of biopower or biotechnology because it never set out to address the impending digital culture explicitly. *Surviving Love and Death* illustrates the deep separation between avant-garde experiments like *9 Evenings* and experimental performances of the nineteen eighties and nineties. The former remained in a realm of postmodern performance, where the latter diverged from postmodern Judson Dance Theater aesthetics to incorporate autobiography and identity politics into choreography. This disciplinary split is not necessarily indicative of trends at the time. AIDS activism used advancements in popular technology like film and media to promote AIDS awareness. The artistic separation between trends in AIDS choreography and the acknowledgement of AIDS treatment as a cultural technology reflects a cultural distinction between bodies and media. Where the AIDS movement wanted to advance a cause with information, AIDS dance explored the kinesthetic impacts that AIDS had on bodies. Thus, media was appropriate for the cognitive activist project but not for the corporeal artistic one. This chapter proposes that Bernd's *Surviving Love and Death* transcends this distinction to reveal how the body and technology are necessarily linked in the politics of health and medicine in the contemporary age. In so doing he reveals the heteronormative universals at play in the production and distribution of medical technology. *Surviving Love and Death* performs a queer intervention into these politics that extends the political reach of AIDS choreography and that impacts the way we read bodies and biopower in the contemporary moment.

Extending the discussion about global information and borders raised in Ouramdane's *Far…*, the final chapter investigates The Electronic Disturbance Theater's *Transborder Immigrant Tool* (*TBT*) for which bodies map digital information onto physical spaces. This radical street practice does not self-identify as choreographic, but its focus on movement and the body as a means for intervening in hegemonic power

place it within the scope of this project. *TBT* is an artistic safety technology designed to use GPS in inexpensive Motorola i455 cell phones to assist border crossings from Mexico into the United States. The tool is a compass-like navigation system that guides users toward water sources to prevent dehydration – one of the leading causes of death among those attempting to cross the border. In addition to this practical use, the tool also plays poetry and encourages an artistic encounter with the land as "a sublime object." Facilitating "geo-poetic disturbance," the theatrical project is well known for receiving negative press from popular Republican news outlets for facilitating "terrorism" and for being the target of government investigation for the alleged violation of the Immigration and Nationality Act of 1965. *TBT* is the source of heated art/politics debates over the Mexican-US border, but critiques of the project overlook the digital stakes of the project for theater and performance: experiencing a theatrical shift in the embodiment of border crossing. Important to the *TBT* technology is that the theatrical *TBT* intervention would remain incomplete without a person's individual embodied experience moving through space, listening to poetry, drinking water, and being with the land. *TBT* brings embodiment and connection to the land—natural elements often incorrectly polarized from digital devices—together with mobile and GPS technology in order to effect a performance of political disturbance across the Mexican-US border.

Movement analysis is the theoretical basis for this dissertation. It is body movement that generates a minoritarian critique of digital culture across *9 Evenings, Surviving Love and Death, Far…,* and interactions with the Transborder Immigrant Tool. The analysis of technology is important to this movement analysis. I look at technical mappings of *9 Evenings* and the computer code for the Transborder Immigrant Tool. I also incorporate interviews with engineers into my research just as I would an interview with the choreographer, to consider how integral technology is to the recombinant potential of the choreography.

I focus primarily on contemporary new media, but archival work is also integral to tracking the historical circumstances surrounding the production, dissemination, and application of media. I use archival research to construct historical accounts of *Nine Evenings* and *Surviving Love and Death*. Primary source documents such as artists' personal notes and correspondence inform my movement analysis of the choreography. Archival cataloguing of performance documentation such as technical diagrams, compositional sketches, rehearsal photographs, performance videos and photographs, programs, newspaper clippings of reviews, and audio recordings and films of interviews with artists and engineers all inform my analysis of the work.

As a whole, this dissertation is something of a theoretical exploration of the politics and aesthetics undergirding both the history and futures of experiments between dance and technology. The two chapters on *9 Evenings* and *Surviving Love and Death* seek to transform the ways that contemporary scholars are relating to the histories of the field, and the two chapters on *Far…* and the Transborder Immigrant Tool are a response to that re-reading of history. The dissertation as a whole pushes on the boundaries of "technology" and "choreography" to make space for the radical actions and visionary explorations that I track across the project's four chapters.

Chapter 1: **Technical Failure as Embodied Feminist Posthumanism**

The landmark 1966 performance and engineering collaboration *9 Evenings: Theatre and Engineering* set an early precedent for collaborations between art and technology. The collaboration began on January 14, 1966, when engineer Billy Klüver arranged a meeting between ten world-renowned artists and a group of thirty engineers from the American institution for technical and military innovation, Bell Labs.[1] Klüver was a veteran of experiments on art and technology and had previously collaborated with artists Jean Tinguely, Jasper Johns, John Cage, Andy Warhol, and Robert Rauschenberg.[2] The larger scale collaboration with Bell Labs for *9 Evenings* introduced a new institutional element to Klüver's existing oeuvre. Distinct from both early twentieth century machine performance and contemporaneous art and technology, like Tinguely's famous 1960 *Hommage to New York*, *9 Evenings: Theatre and Engineering* introduced the idea of direct collaboration between engineering institutions and artists.

Led by Robert Rauschenberg, artists John Cage, David Tudor, Alex Hay, Oyvind Fahlstrom, Robert Whitman, Yvonne Rainer, Deborah Hay, Steve Paxton, and Lucinda Childs all agreed to collaborate on the project. The *9 Evenings* artists each paired with engineers who were to construct technical systems and devices meant to realize the artists' individual creative ideas. The collaborations took place over nine months, culminating in a performance festival that lasted nine evenings. *9 Evenings* was presented in October 1966 at the 69th Regiment Armory in the heart of the New York art scene, the same venue as the well-known 1913 Armory Show—where modern art was famously first presented in the Americas and Marcel Duchamp exhibited his famous *Nude Descending a Staircase.*

Two individual performances were featured on each of the nine evenings of events. Each of the artworks featured live performers in front of a live audience, along with live interactive technologies. John Cage made sound art from a table full of everyday devices such as a blender and a radio. David Tudor played an electronic Bandoneon. Robert Rauschenberg staged a tennis match that controlled Armory the lights. Alex Hay sat still to amplified sounds of his own biological functions. Oyvind

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[1] Harriet De Long, "9 Evenings MS Copy," Box, 1 Folder 24, Experiments in Art and Technology Records 1966-1993 (bulk 1966-1973), Getty Research Institute. The Getty Research Institute in Los Angeles that houses the entire institutional legacy of E.A.T. and includes *9 Evenings* as the inaugural E.A.T. event. The archive includes exhaustive documentation pertaining to the development, performances, and reception of *9 Evenings*. The archive also includes Harriet De Long's complete unpublished book manuscript about *9 Evenings* in which she details artist and engineer accounts of *9 Evenings*, retrospective statements about their experiences, and archived diagrams, receipts, and correspondences related to *9 Evenings*. Experiments in Art and Technology Records 1966-1993 (bulk 1966-1973) at the Getty Research Institute.

[2] Simone Whitman, "A View of 9 Evenings: Theatre and Engineering," Box 2, Folder 16. Experiments in Art and Technology Records 1966-1993 (bulk 1966-1973), Getty Research Institute. Billy Klüver had worked on individual collaborations with Jean Tinguely, Jasper Johns, John Cage, Andy Warhol, and Robert Rauschenberg prior to the *9 Evenings* collaboration.

Fahlstrom staged a nine-part production in which he stitched together film, audio, and video to tell non-narrative tales about computing and humanity. Robert Whitman staged a sci-fi theater piece equipped with state-of-the-art effects. Yvonne Rainer led her dancers from a walkie-talkie as they danced with various objects like mattresses and moved around to accompany video footage. Deborah Hay had performers move remote controlled boxes around the stage to cue her dancers. Steve Paxton led audience members through an inflated plastic tube filled with popular news and television media sounds. And Lucinda Childs danced to the sounds of an interactive Doppler radar. Each of the ten pieces looked drastically distinct from the next.

9 Evenings, which has been revered as a groundbreaking model for collaboration between art and technology, was also seen by many artists and critics as having produced failed or underwhelming artistic content. I closely read aesthetic critiques of *9 Evenings* by artists, engineers, and art critics to suggest that the work did not fail; on the contrary, it produced new models for art that incorporated technical futures into new artistic approaches. Art and technology were so deeply intertwined in *9 Evenings* that the pieces became something else entirely, and did not easily fit into the existing aesthetic frameworks through which *9 Evenings* was reviewed and remembered. I focus my analysis on Lucinda Childs' *9 Evenings* choreography *Vehicle* to propose that Childs' purportedly failed work within the *9 Evenings* collaborative model produced a feminist intervention into body-technology relationships. Childs moved between fitting her choreography to technical limitations, and inspiring technical design with her choreography. This loop between bodies and technologies led to a delicate embodied posthumanism that informs the *9 Evenings* failures with a feminist technological futurism.

By rearticulating *Vehicle* as aesthetic innovation with feminist outcomes, I begin my project of reimaging how we relate to dance and technology experiments more generally. *Vehicle* was not merely about engineering and art collaboration, or the relationship between bodies and technologies. More specifically, in the historical context of *9 Evenings,* that collaborative cross-disciplinary work becomes about a female choreographer creating space within the context of the male-dominated discipline of engineering. This happened at a time when Bell Labs, as an engineering institution, was in the privileged place of determining technical futures and their social impact globally so Childs' feminist work had a potentially radical social impact.

The Popularity of a Humanist Project

From the beginning, *9 Evenings* linked two distinct fields: art and engineering. Scientist C.P. Snow famously proclaimed that the two fields were "unlinkable societies," a quote that several *9 Evenings* engineers refer to in their post-mortem surveys.[3] The *9 Evenings* project contested Snow's proclaimed unlinkability, but the differences between the fields were nonetheless stark. A close reading of the relationship between the two fields in *9 Evenings* sets the stage for the ways that *Vehicle* negotiates this claim of unlinkability.

[3] E.A.T. Archive at the Getty Research Institute in Los Angeles. CP Snow. "The Two Cultures," in *The Two Cultures*. (Cambridge: Cambridge UP, 1998).

Engineering research at Bell Labs was at the center of technical development for American military production during a time when the Cuban Missile Crisis and the Vietnam War brought scientific development to the forefront of political discourse and national security. In the 1940s and 1950s, Bell Labs engineers worked on Project Nike, a U.S. army project to develop a line-of-sight anti-aircraft missile system, and in the 1960s Bell Labs was involved in the arms race through the government's Apollo program. With technology rapidly changing military warfare, the introduction of related technology into the sixties cultural mainstream foreshadowed similar technical advancements in American popular culture. Military funded inventor Douglas Engelbart created the computer mouse prototype in 1963, for example, and made a public demonstration in 1968. This was the first public introduction to now ubiquitous personal computers that have revolutionized society in the Information Age.

Meanwhile, the artists involved in *9 Evenings* were collaborating in the downtown dance scene. *9 Evenings* artists Robert Rauschenberg, John Cage, Alex Hay, Deborah Hay, Yvonne Rainer, Steve Paxton, and Lucinda Childs had all worked at the Judson Dance Workshop in the early 1960s where they often made collaborative and experimental work in dance and performance. In an interview with dance historian Sally Banes, Alex Hay characterizes *9 Evenings* as one of the last offshoot performances marking the end of the Judson Dance Theater.[4] Banes agreed, having elsewhere referenced *9 Evenings* in the context of the Judson era.[5] While the dances of the Judson Church era were not explicitly political, some participants including Yvonne Rainer partook in more political actions in the years following *9 Evenings.* In 1967, for example, Rainer performed *Convalescent Dance* as a part of a series of events protesting against the Vietnam War, and in 1970 Rainer and Steve Paxton performed *The Desecration of the Flag* in support of anti-war efforts.[6] While the *9 Evenings* artists may not have been explicitly involved in political anti-war efforts at the time of the experiment, we can retrospectively imagine that their avant-garde art community may have been more aligned with the politics of anti-war protest than they were of military-funded research coming out of Bell Labs.

Bell Labs as an institution did not sponsor *9 Evenings* and the engineers who collaborated on the artistic project were not necessarily directly involved in military projects. Still, since all *9 Evenings* engineers worked at Bell Labs it comes as no surprise that the military culture of the institution carried over into the content of *9 Evenings* projects. For example, Oyvind Fahlstrom requested a homing missle for *Kisses Sweeter than Wine*.[7] Perhaps more subtle was Rauschenberg's use of infrared camera technology

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[4] Alex Hay in Meg Cottam and Amanda Degener, *The Judson Project: Group Shoot: Trisha Brown, Alex Hay and Robert Rauschenberg* (Bennington, VT: Bennington College, 1983), videocassette.

[5] Sally Banes, *Democracy's Body: Judson Dance Theatre, 1962-1964* (Durham: Duke University Press, 1993), 213.

[6] Ramsay Burt, *Judson Dance Theater: Performative Traces* (New York: Routledge, 2006), 17, 136.

[7] Harold Hodges, "Letter from Harold Hodges," Box 2, Folder 15, Document IIE, E.A.T. Records.

that was being designed for the military in *Open Score*.[8] A group of people stood on stage in the dark and were filmed using an infrared camera. Abstractly, this is a cinematic experiment using high tech media, but tracking people in the dark with a camera creates a film image that has surveillance undertones characteristic of military culture.[9]

Participants from Bell Labs and the New York City avant-garde arts scene both participated in *9 Evenings* to critically address the growing, yet still undetermined, impact that technology would have on concurrent politics and culture. The intensifying political climate around both the Cold War and Vietnam would have certainly informed the cultural climate surrounding the *9 Evenings* events. Correctly sensing that revolutionary technological advancement was inevitable not only in government and the military, but eventually in popular culture, Rauschenberg expressed urgency in the need for a relationship between art and engineering.

> It is no longer possible to by-pass the whole area of technology. We have no assurance, for example, that buildings will have walls for much longer…. Artists should be the first to sense this sort of climate…. We can't afford to wait. We must force a relationship with technology in order to continue, and we must move quickly.[10]

Rauschenberg's comments support the climate that Snow introduced with his "two unlinkable societies." Rauschenberg believed that there was a link to be made between the arts and technology, but acknowledged that it was not natural and must be forced. Stating that artists must "sense this sort of climate" also implies that the technological climate is happening to, rather than with, artists. This indicates that, rather than being on the inside and determining how technological futures will be implemented, artists were working on the outside. His sense that "in order to continue," the field must engage with technological advancement suggests that without technology art will become obsolete or lose its relevance. Rauschenberg was speaking to an everyday social climate, but it is important to remember that the way technology was being developed even for popular media was heavily determined by the extreme militarism driving technological development at institutions like Bell Labs.

Billy Klüver intended for *9 Evenings* to go even further than securing a place for the arts in technical futures, as Rauschenberg hoped to accomplish. Klüver proposed that artistic experimentation in the context of engineering research and development could

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[8] Billy Klüver and Julie Martin, *E.A.T. and ARTPIX: Open Score by Robert Rauschenberg*, dir. Barbro Schultz Lunderstam (New York: Microcinema International, 2007), DVD.

[9] The military influence of technology is something that many media scholars have analyzed. See Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006); Chun, *Control and Freedom;* Galloway and Thacker, *The Exploit*.

[10] John Gruen, "Art Meets Technology," *New York Magazine World Journal Tribune,* October 1966, in *EAT Clippings* (Experiments in Art and Technology, Inc: New York, 1968), Box 3, E.A.T. Records.

better the "human and social consequences resulting from technology."[11] The *9 Evenings* convener's technological determinist perspective carried through the group of collaborators. Engineer Herbert Schneider also celebrated the attempt to place engineering "into a broader perspective of human activity."[12] Artist Walter K. Gutman showed excitement over the ability of the arts to humanize technology. "Perhaps the most significant thing about the *9 Evenings*," he once explained, "is that it shows an enthusiasm to get back to the human."[13] Along similar lines, Robert Whitman remembered *9 Evenings* as an optimal opportunity for social engagement. "Those ideas we were talking about—I think it is an interesting way to be socially involved with art, getting at the social involvement through the back door."[14] In 1972, Steve Paxton remembered the experiments as "a political gesture in the cold war of humanity versus its new toys."[15] Paxton's description of the experiments as a "political gesture" suggests that they were nothing more than a symbolic effort to illustrate cooperation between militarized engineering and humanist arts. Nonetheless, the participants' acknowledgement of a connection between the experiments and social humanism is largely consistent.

Whether the humanist undertones of *9 Evenings* were real or symbolic, the project's collaborators were vague about their definition of the "human," which they imbued with universalist qualities, suggesting that the New York avant-garde arts scene could humanize the social implications of technology for all. Setting these universal undertones aside for a moment, the one human characteristic that *9 Evenings* participants were careful to articulate was the perceived distinction between the human and technology—a distinction that the collaborators hoped they could trouble by fusing the two realms in the context of art. Of course, *9 Evenings* artists were not staging a panic room for the arts in the face of the end of the world. These collaborators' concerns were focused and immediately actual. Given the ways in which technologies at Bell Labs were being developed to track, survey, and kill, the inhumanity of war certainly infiltrated the aesthetics of the contemporary media. The *9 Evenings* project demonstrated the role of artists in redirecting this impact to imagine possible futures that even technologists had not conceived. Rauschenberg imagined of a world without walls. This architectural image invoked an extreme shift in human relationships and social structures. Considering the wall-less worlds of virtual reality and the open floor plan offices that were born of tech start-up culture, Rauschenberg was in many ways prescient and retained an interest in the future. He commented, "the most positive thing I can say is that technology does not lead

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[11] Billy Klüver, "Remarks by Billy Klüver, President, Experiments in Art and Technology," Experiments in Art and Technology, Inc., Jerome Robbins Dance Division, New York Public Library.
[12] Herbert Schneider, "Personal Letter to Harriet De Long," August 10, 1972, Box 2, Folder 13, E.A.T. Records.
[13] Walter K. Gutman, "Personal Letter to Billy Klüver," February 27, 1967, Box 1, Folder 16, E.A.T. Records.
[14] Robert Whitman quoted in Harriet De Long, "9 Evenings MS Copy: The 10th Evening," Box 2, Folder 1, E.A.T. Records.
[15] Steve Paxton, "Addition to the disctiption [sic] of Physical Things," 1972, Box 2, Folder 14, E.A.T. Records.

us back into history—but advances us into the unknown."[16] If the collaborators were embracing technology to explore and have a hand in shaping the unknown, the most vocal participants like co-organizers Rauschenberg and Klüver, along with many engineers and some artists, seemed to think that an artistic presence would shape it for the better.

The humanization project garnered extreme fascination and attention from the New York City avant-garde arts-going crowds at the time. Previews of *9 Evenings* anticipated the most spectacular results from the loaded pairing of art and engineering. In the program for *9 Evenings*, Klüver wrote:

> Their aim is to start a revolution, to overthrow old concepts, to reach into the unknown and to produce art works that will combine the most advanced technological discoveries with the most daring, the most outrageous creative ideas an artist may be capable of dreaming up.[17]

This language of "revolution" here might align the project with the anti-militarist actions of the era, underscoring the sense that technology must be moved away from the engineering institution and toward the arts. But the mystique around the events was closer to what Yvonne Rainer has called the fanfare of a Ringling Brother's Circus[18]—quite different from the deadpan interventions characteristic of avant-garde postmodern performance and its potential radicalism.

A highly anticipated series, *9 Evenings* became enormously popular. Images and accounts of *9 Evenings* reveal that the "who's who" of the New York art-going crowd were present at the events and roughly 10,000 people attended *9 Evenings* during its run.[19] The excited energy that surrounded *9 Evenings* is palpable in a photograph of crowds herding through the Armory entrance on the opening night of the series.

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[16] Gruen, "Art Meets Technology."
[17] Billy Klüver, "9 Evenings: Theatre and Engineering (Souvenir Program)," Jerome Robbins Dance Division.
[18] Yvonne Rainer, *Feelings are Facts: A Life (Writing Art)* (Cambridge, MA: MIT Press, 2013), 276.
[19] Billy Klüver, "9 Evenings," Box 2, Folder 16, Doc IIIA, E.A.T. Records.

Figure 1. McElroy, Robert L. *9 Evenings Opening*, October 13, 1966. Jerome Robbins Dance Division, New York Public Library.

Bodies were squeezed together in a mass of people that collectively moved through the Armory archway, illustrating the event's massive appeal (see figure 1). Responding to the crowd's interest, well-known critics including Clive Barnes, Lucy Lippard, and Jill Johnston gave the experiment their attention, and reviews of the evenings were published across popular presses, such as the New York Times and the Village Voice, and in niche engineering publications who also lauded the experiment's intentions.[20]

Immediately following the *9 Evenings* events, several participating artists and engineers convened with other community members for a "tenth evening" of discussion, during which participants made plans to continue the relationship between technology and art beyond a one-time performance collaboration.[21] The continuation was institutionalized as Experiments in Art and Technology (E.A.T.), a non-profit organization that would pair artists with tech industry engineers and corporations. The aim of the organization was to provide artists with technical support to realize their creative and artistic innovations. E.A.T. successfully matched collaborators for four decades following *9 Evenings*.[22] The organization's tenure helped to further define and

[20] *E.A.T. Clippings* (Experiments in Art and Technology, Inc: New York, 1968), Box 3, E.A.T. Records.
[21] De Long, "9 Evenings MS Copy: The 10th Evening."
[22] E.A.T. archive.

solidify the relationship between engineering and the arts in America and the impact of these collaborations internationally. The most famous example is the E.A.T.-sponsored Pepsi Pavilion at the 1970 World's Fair in Japan, where E.A.T. artists and engineers collaborated on an immersive dome.[23] In addition to E.A.T., the *9 Evenings* model for pairing artists with engineers has since been replicated with organizations like ZKM in Germany, "where guest artists are invited to collaborate with technologists and software designers."[24]

It is this institutional legacy that continues to support the critical claim by contemporary art institutions and historians that *9 Evenings* was a landmark event. Touting *9 Evenings* as the moment many artists became aware of the impact that "advancements in technology" had on their work, the MIT List Visual Arts Center commissioned a retrospective exhibition of *9 Evenings* in 2006. [25] Curator Catherine Morris celebrated *9 Evenings* for having "presaged the many hybrid art/technology efforts that followed."[26] The Museum of Modern Art is currently planning a ten-year anniversary celebration for 2016 to commemorate *9 Evenings* and the role that it played in the establishment of E.A.T. Performance historians Chris Salter and Steve Dixon both reference *9 Evenings* as an inaugural event in the relationship between performance and technology. Salter carefully situates *9 Evenings* in his exhaustive history of the relationship between technology and performance, explaining how *9 Evenings* "ranks as one of the earliest postwar experiments to combine military industrial research culture with the avant-garde performing arts community."[27]

Technological Experimentation as Artwork

In the wake of *9 Evenings* and excitement surrounding the project*,* artists and engineers alike conceded that their collaborations failed on many levels. A post-mortem survey of *9 Evenings* participants addressed the widely accepted failures associated with the participants' artworks. Citing insufficient time in the Armory and a lack of communication between engineers and artists, among other factors, engineers and artists alike agreed that their artworks did not live up to their own expectations.[28] During the live performances that make up *9 Evenings,* innovative and emergent technologies did not work the way they were designed to. For example, the first evening began forty minutes behind schedule, because engineers experienced "difficulties with the general complexity of the situation at the Armory." Again on the second evening, the show began thirty minutes late because of more "technical difficulties."[29] In addition to these delays, pre-planned thirty-minute intermissions were necessary on each of the nine nights to switch between the works and to account for technical breakdown and set up. Individual pieces experienced technical failures throughout the processes and performances. *Vehicle*

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[23] Salter, *Entangled*, 314.
[24] Dixon, *Digital Performance,* 98.
[25] Catherine Morris and Jane Farver, ed., *9 Evenings Reconsidered: Art, Theater, and Engineering, 1966* (Cambridge, MA: MIT List Visual Arts Center, 2006).
[26] Morris and Farver, *9 Evenings* Reconsidered, 6.
[27] Salter, *Entangled*, 312.
[28] Harriet De Long "9 Evenings MS Copy: Q+A," Box 1, Folder 38, E.A.T. Records.
[29] Klüver, "9 Evenings."

featured a floating box that was supposed to carry a performer and move with air pressure. The technology was not powerful enough to act on its own, so dancers had to manually maneuver the box themselves. One night, Yvonne Rainer's walkie-talkies did not work because the electronics had been programmed backwards.[30] In Deborah Hay's *Solo*, which consisted of remote control carts to carry performers, most of these carts failed on the night of the performance. Finally, there is an image of Alex Hay sitting on stage in the middle of his performance *Grass Field* with engineers attending to the failed technology that sits in a pack on his back (see figure 2).

Figure 2. Alex Hay, *Grass Field*. Still from the factual footage shot in 16 mm by Alfons Schilling. The Daniel Langlois Foundation for Art, Science, and Technology, 9 Evenings: Theatre and Engineering fonds.

Because of the technical failures, the project was a disappointment for anyone who attended *9 Evenings* with the hope that art would transform technology and, therefore, society. Ironically, rather than use art to humanize technology, the *9 Evenings* events performed the very reality that they anticipated and had hoped to intercept. Though the projects did not seamlessly integrate technology into the humanist realm of art and performatively enact an artistic technical future, technology and, more specifically, technological failure, took center stage in a very real circumstance that reflected the glitches inherent in technological innovation. Clive Barnes feared the negative effect that they imagined *9 Evenings* would have on the future of the art world.[31] Grace Gluek remembers,

> I was enthusiastic about the prospect of art becoming expressive of technology but you need a lot of art to transform technology into something and those evenings proved the artists could not cope well enough with technology to control

[30] Rainer, *Feelings are Facts,* 276.
[31] Clive Barnes, "Dance or Something at the Armory," *The New York Times,* October 15, 1966, Box 3, E.A.T. Records.

> it to their purpose… I remember feeling great disappointment that it didn't work and the artists were very disappointed and defensive.[32]

Again foregrounding a natural dissonance between art and technology, Gluek mourns the outcome of *9 Evenings* that did not live up to the promise of perfect technical productions. Billy Klüver conceded defeat and explained that the glitchy outcomes that Gluek and others experienced were not anticipated.

> Randomness, errors and failure were never planned elements in the performances. Every effort was made to make everything run as smoothly as possible without compromising the artists' wishes. From the technical side the artists were assured that everything would work until otherwise known.[33]

Klüver's remarks underscore the humanist intentions of the project, in that the organizers were looking for a "smooth" technical product to support art—a successfully humanized technology that would work seamlessly with instead of against or in tension with the body-based artworks.

The glitches were as much a product of the artistic framework of the piece as they were a product of the technical content. Failure and error are characteristic of the liveness that defines performance, theater, and dance. As Peggy Phelan explains, representation in performance "fails to reproduce the real exactly."[34] Sarah Jane Bailes, in her book *Performance Theatre and the Poetics of Failure,* discusses how it is not surprising that failure haunts the artist who seeks to "make the restaging of the world more meaningful, more vivid, more authenticating, and more present than 'the' present," just as the *9 Evenings* collaborators had tried to do.[35] This failure is intensified by the fact that *9 Evenings* is a media performance. The reason for this intensification, in Benjaminian terms, is that media introduces an aura—a distancing from the real that thus further complicates the representational capacity of performance. The Armory was a theatrical stage for the *9 Evenings* collaborators to performatively propose a preferable and more human technical future than the reality of militaristic engineering that was the existing model. By connecting the project to live performing bodies the hope may have been to literally connect technology to the human, but in doing so they also connected it to the failures of liveness: both the failure of representation in live performance, as well as the possibility for inevitable failure in live events.

It is at this moment of purported failure, however, that the reality of collaboration between art and engineering complicates the lofty goals and expectations, as well as the complicated politics surrounding the project. Not all of the *9 Evenings* participants were disappointed by the artistic content of the experiments. Some of these participants recognized the inevitability of failure in the projects. *9 Evenings* engineers Seymour Schweber and Herbert Schneider appreciated how the success of the evenings was in the importance of experimentation. Schweber even acknowledged a pleasure in the purported failures of the project.

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[32] Grace Glueck telephone conversation with Harriet De Long, March 19, 1973, Box 1, Folder 16, E.A.T. Records.
[33] Klüver, "9 Evenings."
[34] Phelan, *Unmarked,* 2.
[35] Sara Jane Bailes *Performance Theater and the Poetics of Failure* (New York: Routledge, 2010), 12.

> I liked the fact that not everything worked. It related to the feeling that it was really a happening for the first performance. At every performance something was being created. Half of the audience was completely bewildered because not knowing what was happening they were in a state of shock."[36]

Schweber's remarks celebrate the inability for the evenings to performatively enact a future, by acknowledging how failure illustrates the imperfect presence of reality. Similarly, the point of *9 Evenings* for Seymour Schweber was not just about getting technology to work, nor did it seem to matter that artwork successfully corral technology. Instead, he felt that the experiments were focused on the process of making something—not of obtaining a product-oriented goal, but of seeing what would happen—an experiment.

Considering where the collaborations started, the artists and engineers did make a great deal of progress. Billy Klüver describes the first meeting between artists and engineers in which the two parties did not know how to talk to each other.[37] To bridge the gap between art and technology the collaborators had to work slowly, beginning with the artists' ideas. The engineers would take impossible proposals for artworks such as the desire to defy gravity and make them into more probable devices like Alex Hay's flying machine. The artists would then use these devices as conceptual and artistic material to frame their pieces. Schweber's emphasis on experimentation itself as the product of the *9 Evenings* acknowledged the initial complexity of the engineering-art collaboration as an artistic method, let alone a method for shaping society. Howard Schneider expressed sentiments similar to Schweber's.

> The daring decision to invite the public to an experiment whose outcome was unpredictable was a calculated and correct one. It made the public the third and necessary partner in this enterprise. In effect it invited the outsider's participation. It was a challenge to the press, to industry, to business, to foundations.[38]

As Schneider's remarks make clear, the final phase of *9 Evenings* could not begin until the larger public was involved. Given the liveness of these results the project couldn't have been about presenting a seamless product or proposing successful solutions to problems. The liveness meant that there was no time to rehearse to the point of relative perfection, but instead that everything was a real-time experiment

Critics like Gluek and Lippard did not appreciate the creative experimental aspect of *9 Evenings* that Schweber and Schneider underscored in their reflections. This could have been because press for the evenings focused so explicitly on the results of the evenings and the humanist impact that they could have on society, rather than on a process-based performance experiment. This focus would have misdirected the public's attention from the experimental heart of the project. Walter K. Gutman's distinction between the project as a failed achievement but interesting experiment underscores Paxton's observation about media expectation and intent, and demonstrates how a focus on "achievement" detracted from the inherent importance of collaboration.

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[36] Seymour Schweber telephone conversation with Harriet De Long, February 1973, Box 2, Folder 13, E.A.T. Records.
[37] Klüver, "9 Evenings: Theatre and Engineering (Souvenir Program)."
[38] Ibid. Howard Schneider, "A View From Central," Box 2, Folder 10, E.A.T. Records..

> My feeling about the *9 Evenings* was that it was an interesting experiment not a particularly interesting achievement. When you took us to Bell Labs you told the group that 'at Bell Labs we don't consider an experimental effort worthwhile unless 90% of the experiments fail.' I thought that this was an astute and worthy point of view and it is in that context that I make the above remark. It failed to be an exceptional achievement because all of the artists involved had distinguished themselves for some years beforehand and the addition of more elaborate technique did not—in my opinion—add significantly to the expressiveness they had already achieved. In fact I can think of quite a few times when Rainer and Childs achieved a great deal more with simpler means. Childs I thought was quite swamped by the sonar set.[39]

Gutman, like Schweber and Schneider, proposes that in *9 Evenings* collaboration as an experiment took precedence over artistic expressiveness. As I have discussed, however, many *9 Evenings* participants hoped that this artistic expressiveness could stand up to the collaboration and the technology that was introduced. That the artistic aspects of *Vehicle* were "swamped" by the sonar set is to suggest that the work was aesthetically less successful than Childs' other work and, therefore, not capable of standing up to the technology—or exuding artistic power over it.

While Gutman argues that the collaborative model of *9 Evenings* alone was an achievement, audience expectations were not set up to appreciate that goal. Klüver himself insisted that the engineers were striving for a successful and seamless technical product. The industry, press, businesses, and foundations were disappointed in the results of *9 Evenings* because, as Schweber and Schneider acknowledge, the project was not about presenting something to the public. Instead, the experience was about the participants, individuals who made things, fixed things, interacted with things, and experienced things. As Steve Paxton remarked, "Publicity led audiences to expect technological miracles. The nature of the press or the press agents employed resulted in this distortion of intent. The quality of inflation in our media renders the aims of artists unintelligible to a general public."[40] In his analysis of *9 Evenings* Brian O'Doherty proposes that "high expectations by publicity promising ttechnological miracles of the 'see-the-man-walk-on-the-wire' variety" put incorrect emphasis on "technological aids rather than the clarification of a relatively new art form."[41] Schneider himself further explores this idea in his essay "A Glimpse or More At Some Technical Aspects Not Seen By The Third Partner of Nine Evenings—The Public," in which he emphasizes the experience of the artists and engineers involved in the project as central to its feasibility. Schneider's observations foreshadow Philip Auslander's reading of late-twentieth and early twenty-first century media performance as necessarily weakening the connection between audience and performer in media theater—a connection that he suggests is expected in live performance.[42] While this may be the case, a phenomenological perspective that emphasizes the experience of the *9 Evenings* participants reveals an

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[39] Gutman, "Personal letter to Billy Klüver."
[40] Paxton, "Addition to the disctiption [sic] of Physical Things."
[41] Brian O'Doherty, "New York: 9 Armored Nights," in *9 Evenings Reconsidered: Art, Theater, and Engineering, 1966,* Catherine Morris and Jane Farver, ed., 76.
[42] Auslander, *Liveness*, 64.

intense connection between participant and technology that produces interesting results—regardless of technological or humanist failures.

Many of the *9 Evenings* participants and public may not have been ready for the perceived failure that they experienced with the performances that stood as the culmination of collaborative experimentation. As Jack Halberstam has argued, however, "under certain circumstances failing, losing, forgetting, unmaking, undoing, unbecoming, not knowing may in fact offer more creative, more cooperative, more surprising ways of being in the world."[43] In the next half of this chapter, I will illustrate how a more creative, cooperative, and surprising way of being in the world is precisely the effect of the *9 Evenings* collaboration.

Vehicle by Lucinda Childs

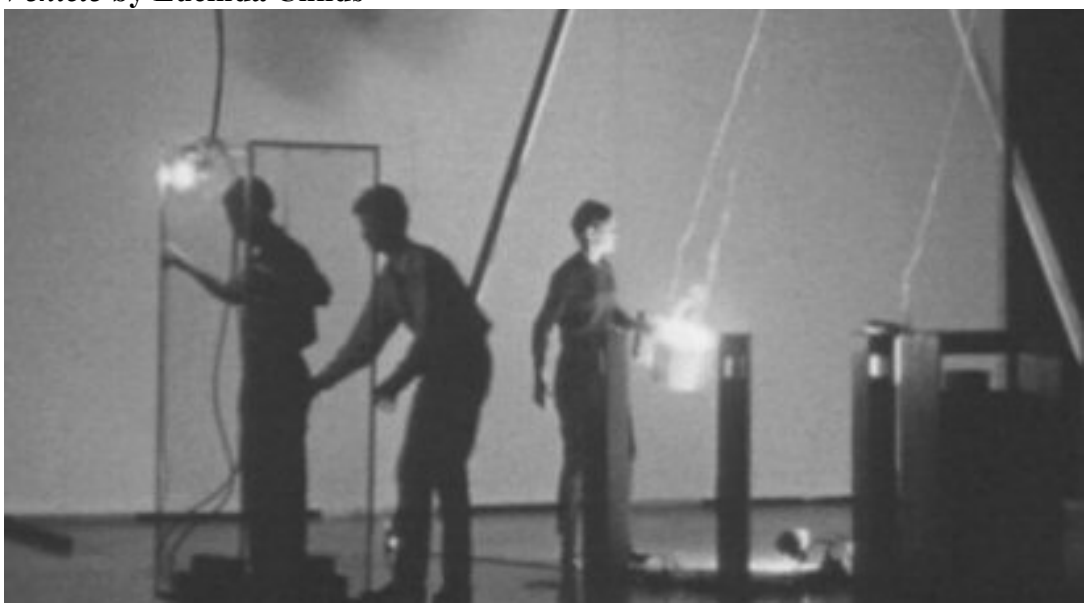

Figure 3. Lucinda Childs, *Vehicle*. Still from the factual footage shot in 16 mm by Alfons Schilling. The Daniel Langlois Foundation for Art, Science, and Technology, 9 Evenings: Theatre and Engineering fonds.

Vacuous sounds echoed inside of the dark New York City 69th Regiment Armory on October 16, 1966. Each sound was an electronic "whoop," a low, drawn out and morphing tone that sounded localized even as it filled the 130 foot high hall that spanned between 168 and 200 feet on either side.[44] The electronic sounds came from Doppler sonar equipment brought in for choreographer Lucinda Childs' twenty-minute dance *Vehicle*. Doppler detects the presence of a moving object within its field of view and produces a noise whose pitch vacillates based on the speed of movement that it detects.[45] Childs choreographed movement to trigger the Doppler and create an interactive dance (see figure 3).

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[43] Judith Halberstam, *The Queer Art of Failure* (Durham: Duke University Press, 2011), 2.

[44] "69th Regiment," http://www.sixtyninth.net/armory.html.

[45] Peter Hirsch, "The Doppler Sonar," Box 1, Folder 12, E.A.T. Records.

Childs staged both dancers and objects to trigger the sonar, recognizing that the technology detects movement regardless of whether that movement comes from animate or inanimate objects. In addition to the work's three performers, which included Childs, Alex Hay, and William Davis, the choreographer hung red pails from string attached to a large wooden frame, vaguely reminiscent of a children's swing set (see figure 4). When the pails swung on the string they triggered the sonar. A "Ground Effects Machine" moved alongside and around the swinging pails. This contraption, specifically designed for *Vehicle,* was a large Plexiglas box meant to carry and move a passenger. A dancer would step inside of the box and shift her weight forward, for example, to trigger the vacuum motors underneath the machine that would propel the machine and its passenger in that direction. Responding directly to shifts in weight, the box would move to the right if the passenger shifted her weight to the right, to the left if she shifted her weight left, and so on (see figure 5).

Figure 4. Lucinda Childs, *Vehicle.* Still from the factual footage shot in 16 mm by Alfons Schilling. The Daniel Langlois Foundation for Art, Science, and Technology, 9 Evenings: Theatre and Engineering fonds.

Figure 5. Lucinda Childs, *Vehicle.* Still from the factual footage shot in 16 mm by Alfons Schilling. The Daniel Langlois Foundation for Art, Science, and Technology, 9 Evenings: Theatre and Engineering fonds.

Vehicle was the product of a ten-month collaboration between engineer Peter Hirsch and Lucinda Childs, with support from engineer Per Biorn. Childs entered into this collaboration with an open mind and the intention to make a piece for which technology was a central element.

> Since I was interested in creating a dance which utilized technology as an integral part, it was evident at the outset that the dance would have to accommodate itself to the limitations of the specific equipment that I chose to have designed.[46]

In order to incorporate technology into *Vehicle* effectively, Childs noticed from the very beginning that she had to restrict the scope of her dance to the limits of technology. Limits, of course, are different from unexpected failures—though, as I have discussed, there were those too—but they demonstrate technical restrictions. By structuring her dance around the technical limitations of technology, Childs illustrated a central element to experimentation between technology and art. There is an extent to which art and technology experiments must necessarily begin on the terms of the engineer and the capabilities of his devices. For example, in *Vehicle,* the Doppler sonar beam that defined the choreography was only equipped to detect movements within a fifteen to twenty-foot range. If Childs wanted the movements of bodies, pails, and machines to be reflected in and amplified by the sonar sound output, she had to restrict her choreography to these limited dimensions. This meant that the technology determined a central element to the choreography and, one could argue, held it back. When watching video documentation of *Vehicle,* it does appear that the dancers were focused on an extremely small space relative to the expanse of their venue. Other choreographies in *9 Evenings,* such as Yvonne Rainer's *Carriage of Discreteness* and Debora Hay's *Solo,* choreographically took advantage of the large space, filling it with lots of bodies and large projections. As is

[46] Lucinda Childs, "Vehicle," Box 1, Folder 12, E.A.T. Records.

typical of choreographic form, the dances acknowledged and responded to the stage on which they were performed. Since *Vehicle* was unable to take advantage of the large Armory space, the scale of the choreography seems disproportionate to its venue—especially when compared with other performances that were also a part of the *9 Evenings* events.

In addition to spatial limitations, the dance component of *Vehicle* was choreographically insular and did not project out to an audience. Instead, all of the movement was focused inward on the capabilities of the devices at hand. For example, Childs remained in relatively close proximity to the buckets so that she could touch them and keep them in constant swinging motion as their momentum died. Additionally, the Ground Effects passenger was necessarily confined to the space inside of the glass box, which did not appear to have the capability to move quickly, seamlessly, or across large distances. The movement of this machine was delicate. It looked almost like the box would fail if it were not handled carefully and slowly.

While the physical choreography of *Vehicle* was very much based on and limited to the capabilities of devices—both experimental and ordinary—Childs somewhat ironically turned to technology to try and compensate for scale restrictions. For one, the sonar sound extended the presence of moving bodies and objects out into the space. While the piece might appear visually constricted and insular, the sonic aesthetics of the piece were expansive. The Doppler constricted bodies to a certain dimension, but took information from that movement and sonically extended it much further than any physical body could manage on its own. Childs also used projection to visually amplify her spatially limited dance. She further used technology, in this case a television projector, to project a visualization of the Doppler data with what was called an oscillograph image. The oscillograph was a line graph that visualized the changes in Doppler data, and projected them large for the audience to see (see figure 7). These images represented Childs' choreography and similarly extended it beyond the space of the dance and the range of the Doppler. Childs also used light to produce shadows of the moving bodies and objects on stage, and projected these shadow images onto another two projection screens (see figure 6). All four devices—the Doppler, the oscillograph, the projectors, and the light—extended the presence of material objects and amplified the sensorial effects of their movements. This way, the audience could better perceive relatively small moving objects via the other media.

Figure 6. Moore, Peter. *9 Evenings: Theater and Engineering.* (New York: Armory, 1966). http://www.medienkunstnetz.de/exhibitions/9evenings/images/13/

Figure 7. Lucinda Childs, *Vehicle.* Still from the factual footage shot in 16 mm by Alfons Schilling. The Daniel Langlois Foundation for Art, Science, and Technology, 9 Evenings: Theatre and Engineering fonds.

In order for the audience to be able to see the oscillograph images and shadows, Childs had to eliminate all other light sources on the stage. She used intermittent, sporadic, and localized lighting to illuminate the moving objects caught in the Doppler path—the pails and Childs' moving body—and these lighting restrictions would have again inevitably reinforced any movement restrictions in the piece. The dancers had to stay within the lit areas of the stage in order to be perceptible to the audience eye.

To account for foreseeable technical limitations and circumstances, Childs established a feedback loop in which choreography formed to technology and then technology in turn responded to that choreography. She also used the same method to adjust for unplanned technical failure, which is clear in the case of the design, development, and implementation of the Ground Effects Machine. The design of the machine used vacuum cleaner motors to propel the movement of the attached plexiglass box according to shifts in weight, but these mechanical effects turned out to be unfeasible. The motor worked, but the machine would not move on its own. To account for this, in performance the box was placed on a platform that a second performer would physically move around the space. Childs still had to put a performer inside of the box, only because the vacuum motors that still helped the box move through space would not work unless there was at least one hundred pounds of weight on the Ground Effects Machine platform. Childs consequently kept one body inside of the box for purely technical reasons, and introduced a second body on the outside to direct the machine's movements. The limitations of the Ground Effects Machine thus determined how many performers participated in *Vehicle* and the choreographic roles that they played.

As I get deeper into a description of which technical limitations dictated which choreographic structures in *Vehicle,* and which structures necessitated technical involvement, the distinction between the two becomes more muddled and, perhaps, less necessary. The more technology impacted the choreography and the more the choreography produced technical necessities, the more the two elements of *Vehicle* were bound to one another. *Vehicle* did not bring technology into the realm of art, nor, do I think, did the technology necessarily "swamp" Childs as Walter Gutman proposed it did. The two moved together to become their own distinct category—dance *with* technology rather than experiments *between* art and engineering.

Though critics and audience members perceived *Vehicle* as an artistic failure, this is because it was being read in terms of traditional artistic criteria. Gutman's remarks make this clear: "I can think of quite a few times when Rainer and Childs achieved a great deal more with simpler means."[47] But those simpler means would not have produced a closer inquiry into the relationship between engineering and art—which was precisely the experimental point of *9 Evenings.* Because the artistic product became so deeply connected to the engineering process, it must be read in different terms from a traditional aesthetic analysis.

Feminist Human-Machine Interventions

The choreographic and the technical are in a delicate interplay in *Vehicle.* The collaboration between engineering and dance is one that produced an experimental study of the complex and intertwined relationship between female body and technology. The bodies in *Vehicle*, regardless of gender identification, were embodied physical instruments that enabled technical ones. In large part, Childs choreographed performer bodies to serve utilitarian purposes. Alex Hay used his body as the physical instrument that moved the Ground Effects Machine, and William Davis was the physical instrument who weighted it down. Childs was the physical instrument who cast light across objects to make shadows. She was also the physical instrument who set pails into motion. Childs

[47] Gutman, "Personal letter to Billy Klüver."

did not just shove the pails in *Vehicle* as if she were pushing a child in a swing. She moved with the pails in an intricate choreography; she fluidly stepped around the pails with her body tilted at an angle and in rhythm with the movement of the objects; she moved to avoid hitting the pails, but without waiting for them to come to her. This was a rehearsed dance in which Childs and her performers embodied instrumental mechanical precision. The humans were nuts and bolts or, more appropriately in the case of *9 Evenings,* solder and wires in the electronic performance apparatus. Reinforcing this aesthetic of utilitarianism, Childs' performers moved with a postmodern stoicism on their faces and measured physical precision.

It is difficult to say whether the objectification of the body as instrument next to ordinary devices and experimental technology was a direct meditation on technology and its role in society. Many of her colleagues commented on the social impact and stakes of *9 Evenings*, but Childs never explicitly described the experiments in those terms. Regardless, Childs' choreographic focus on the body as instrument in interaction with inanimate objects and experimental technologies was an important one in the *9 Evenings* social frame. For one, it resisted the humanization project that so many participants glorified, and instead illustrated the opposite, with bodies in *Vehicle* adopting a more mechanical aesthetic.

Childs began her choreographic study of the body and its relationship to inanimate objects two years prior to her *Vehicle* performance. In 1964, Childs performed a now famous piece *Carnation* at the Judson Dance Theater. In *Carnation*, Childs used objects such as foam rollers, a garbage bag, and a colander as ordinary household objects amidst staged body movement. These objects all held specifically domestic and female connotations. At one moment in the piece Childs tried to eat the foam rollers and then, failing at her task, spits them out. Sally Banes recalled how it was as if "all of those objects [were] being contained in her body and spit out."[48] In *Carnation,* Childs staged a pointed study of the physical limitations of her body as material object and as compared to inanimate objects. Symbolically, she asked, do objects come from the body? Can they be digested by the body, or are they rejected by human embodiment altogether? Banes found the *Carnation* performance to be a dramatic statement and proclaimed that it was as if the objects in *Carnation* "attack the housewife in a nightmare embodiment of the metaphor 'enslaved by objects.'"[49] This vivid and violent description might as well be a description of the relationship between technology and art in *9 Evenings,* where so many of the participants and viewers felt that *9 Evenings* embodied the technological enslavement of humanity. When Childs spits the rollers out of her mouth in *Carnation*, she actively rejects the domestic enslavement of the female.

Unlike *Carnation*'s radical rejection, however, *9 Evenings* participants and audience members were looking not for a rejection, but instead for a revolution in technology—and Childs delivered. Childs' interest in technological limitations on body movement was a continuation of *Carnation*. *Vehicle* is a dance that makes technology integral to its choreography and that stands in accordance with the feeling that technology—objects—can take over or consume the human. In *Vehicle,* she takes this exploration one step further than she did in *Carnation* to consider what happens after the

[48] Banes, *Democracy's Body,* 204.
[49] Ibid., 205.

moment of what Banes described as enslavement. In *Vehicle,* Childs entertains the moment of revolt. Her staging of bodies and objects performs a nuanced movement back and forth between technology and bodies—never allowing the one to fully dominate the other. She does not reject technology altogether, but eclipses it into the realm of art.

Childs did not lose her feminist focus in *Vehicle*—even through her rigorous incorporation of technology and technological collaboration. Ramsay Burt provides another perspective on *Carnation* that helps to understand the stakes of *Vehicle*. Burt details what he calls a "disturbing disjunction between [Childs'] intense concentration and the triviality of the objects towards which it was directed."[50] In other words, she is focused and specific and almost meditative in her approach to the foam rollers and colander, performing with a serious, technical tone at an emotional remove that symbolized a move away from what Sally Banes called "'over-emotional female roles.'"[51] Burt and Anna C. Chave also read Childs as distancing herself from "'expressive roles and orientations' by adopting 'instrumental' ones.'"[52] The use of the term "instrumental" is especially important in the context of *9 Evenings.* It illustrates how event before *9 Evenings,* Childs was using the idea of an instrument, or machine, to perform a feminist embodiment. What would it mean, then, for Childs to participate in an experiment that intended to bring the human back to the machine, when her feminist project had been to accomplish the opposite, to use a mechanical precision to enact a feminist emotional remove—to in fact perform an embodiment closer to technical objectification than to human emotionalism? This feminist reading of Childs' work reveals the universalist assumptions embedded in the *9 Evenings* efforts to "humanize" technology. *Carnation* instead illustrates that this humanism has different effects on differently gendered bodies, including the female body of a choreographer or the hyper-masculinized bodies of male engineers. As I have explained, the performing body was included in *9 Evenings* to correct for the non-human qualities of the machine in *9 Evenings*. Even more, the female body was asked to do the labor of humanizing because she was the new addition to the already all male engineering environment.

By giving into the machine in *9 Evenings,* by fully incorporating it into *Vehicle* rather than trying to change or humanize it per se, Childs performs a feminist intervention into the project. She resists her role as the humanizer, and instead situates herself more in line with the mechanical, the engineering realm where women were, and still are, vastly underrepresented.

What is interesting about Childs' choreography is the way that she managed to perform a mechanical and instrumental role without leaving the realm of the "human" altogether. In addition to Childs' performance of an embodied mechanical aesthetic*,* the way she used light and movement sensors in *Vehicle* gave a sense of life and liveness to all moving objects in the performance—human and inanimate alike. The electronic tones of the Doppler radar were not just technical sounding, but changed with swoops of movement through time and space. Each time a moving object changed speed the Doppler would move with it. It responded reciprocally as if the machine were working with and for the moving agent. The Doppler was not simply instrumental, but it seemed

[50] Burt, *Judson Dance Theater,* 109.
[51] Sally Banes quoted in Burt, *Judson Dance Theater*, 56.
[52] Ibid., 110.

to move, feel, and breath with Childs' movements. Childs also used soft hand-held light to illuminate objects and to produce shadows. The delicate human movements of Childs' hands holding the lights affected the shadows of the buckets. Childs' staging of technology lent a human-like affect to the technological objects in *Vehicle*, but not in the binary humanist sense of infusing inanimate objects with the liveness and presence of the human body. Machines exhibited human qualities while Childs and her performers embodied a mechanical precision. Childs staged interactions between her body and machines in a way that illustrated how the human is neither simply mechanical nor simply alive and embodied.

Indeed, more importantly, the machine-like qualities in Childs' human choreography and the human-like qualities of the machines in *Vehicle* anticipated a kind of embodied posthumanism, or what Katherine Hayles has described as "extending embodied awareness in highly specific, local, and material ways that would be impossible without electronic prosthesis."[53] Childs demonstrated a mastery over her own embodied awareness with specific, local, and material movements—both through and outside of her physical body. She used technology to amplify her embodied awareness and make visible this experience with sensors and projections, a visualization and materialization that would not have been possible without what Hayles calls "electronic prosthesis"—the mechanical extension of embodiment in *Vehicle.* Indeed, humans and machines danced in a posthumanist interaction in *Vehicle*. To invoke Donna Harraway's feminist cyborgian fantasies, Childs navigated the "spiral dance" between cyborg and goddess. Childs, like Haraway, chose the cyborg identity over that of the goddess in that she distanced herself from the emotional and instead incorporated her body as an instrument in a mechanical system. Importantly, Childs demonstrated how the material physicality and the specificity of her human body were not left out of an individual's cyborg identity.

Her movement training as a dancer shaped the aesthetic tone in *9 Evenings.* The blank expressions on Childs' and her performers' faces, characteristic of postmodern dance performance, and the mechanical precision that Childs exhibited in her choreography were neither new to her work nor characteristic of the technical structures of *9 Evenings.* Childs' choreography and her movement were trained, rehearsed, and specifically embodied practices that can be seen in choreography both prior to and after *9 Evenings*. Childs' unique embodied presence permeated the quality of the light, shadows, and Doppler noises that moved around her in *Vehicle*. She further demonstrated her particularly trained embodiment when she let her posthuman affect effect the devices in *Vehicle*, through lighting and Doppler data.

Childs' embodied cyborg is what I refer to here as the posthuman, and it is what technological devices and their live failures and limitations enabled in *9 Evenings*. Without technical glitch and limitation, which led to the purported artistic failures of *9 Evenings*, the project's artists and engineers would not have reached the posthuman reality Childs so wondrously evoked in *Vehicle*.

Historical Impact

I see the failures of the "finished" *9 Evenings* performances as going even further than what the artists and critics intended or realized. As I have explained, failures were

[53] Hayles, *How We Became Posthuman,* 291.

built on processes of experimentation and collaboration that re-contextualized otherwise product- and goal-oriented devices—and artwork—in a creative realm of process. The artists worked within the institutional context of engineering and product development, but pushed these devices to their limit and explored them in ways that hacked and broke from their intended use. The *9 Evenings* artists asked more questions, made realities more complex, and produced generative failures with performance. As it happens, *9 Evenings* also enacted the making of time, space, and movement with technology in order to reveal ordinary and normative movements written into the cultural understanding of that technology. This was particularly apparent in Lucinda Childs' *Vehicle.*

Interestingly, historical accounts of the events omit failures in favor of highlighting the institutional model for collaboration that would go on to successfully produce many artistic collaborations under the auspices of E.A.T. While retrospectives of *9 Evenings* include negative reviews of the events and historical accounts of *9 Evenings* do not credit *9 Evenings* artwork with aesthetic success or innovation*,* the structural success of *9 Evenings* as a model for pairing artists with engineers takes precedent over purportedly failed art.

This reception of *9 Evenings* has had troubling consequences for experiments in performance and technology. Given the political and militaristic agenda of the engineering institution, artwork within this context is confined by politics that privilege success and efficiency over process and creativity.[54] While I do not mean to suggest that art-making within the context of the engineering institution is necessarily rigid and uncreative—quite the contrary, I am incredibly interested in the ways that artistic practice can inform the development of new technology, a practice that happens within the context of engineering institutions—it is important to remember the content of the artwork that comes from experiments in this context. As I have illustrated with *Vehicle,* it is precisely what has historically been written off as aesthetically failed that can illustrate a feminist intervention into the *9 Evenings* structure.

This reading of *9 Evenings* helps to illustrate how choreographers might mobilize embodied knowledge toward developing critical social theories about media and contemporary digital culture. I apply this embodied model for thinking about dance and technology in the following chapters to integrate gender, sex, race, and nationality into a discourse that has previously been focused on how technology affects the body, rather than on how embodiment elucidates technological cultures.

[54] Maria Fernandez, Faith Wilding, and Michelle Wright, *Domain Errors!*: *Cyberfeminist Practices* (Brooklyn, NY: Autonomedia, 2002).

Chapter 2: **Wiring a Postcolonial Network**

The solo *Far…* (2008), choreographed and performed by Rachid Ouramdane, is a performance about how "people cope in the aftermath of war."[55] Initially inspired by Ouramdane's own family, who lived through the colonization of Algeria and eventually fled to France, *Far…* is a personal and a global tale that incorporates the perspectives of Ouramdane's family and also of others who have been affected by war. The performance has been revered for Ouramdane's use of video and sound clips to document first person anecdotes about the aftermath of war, torture, and violence.[56] Beginning with stories by his mother, Ouramdane presents a video collage that features abstracted fragments from narrators discussing their experiences with war. Accompanying the interviews about the aftermath of war is an equally compelling and personal dance by Ouramdane, who presents a kinesthetic response to the cinematic narratives. Ouramdane, alone on a blackbox stage, dances around and manipulates a network of electrical wires that are systematically placed and coiled across the black box stage. The theatricalization of the media content—the large size of video projections, loud surround sound of the audio, and focal centrality of the stage wire—successfully places the important and conflicted subject matter of *Far…* at the forefront of the performance.

In this chapter, I focus on the moments in *Far…* when Ouramdane dances with the wire, activating this stretch of coil as a metaphor within various postwar scenarios. Sometimes the wire signifies a scene of torture; other times it becomes a border mapped by war. By layering a postwar context onto the hardware of the wire, I argue that Ouramdane explores the material effects of war in a contemporary "wired," or networked, culture. With his somatic interrogation of the network, the performer insists on the role of the body as situated body, contextualized in the stories of his family, in his own cultural, social, and national experiences, and in global diaspora and exchange. To be clear, Ouramdane does not privilege the body over networks in this piece. Rather, I suggest that his performance proposes incorporating the body into theories of the network that typically elides physicality. As the choreographer performs his dance and literally touches, grips, lays, and releases the actual/metaphoric wire, he places the body at the center of what I read as a postcolonial critique of the network.

The Network

Before I turn to Ouramdane's movement with the wire and its metaphoric content, it is important to begin an analysis of *Far…* with a description of the stage as it is pre-set. Prior to the audience entering the house, a complex system of wires carefully adorns the black box marley (see figure 8). The way that the wires loop and coil across the stage draws the eye to their presence as something more than a ubiquitous connector.

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[55] Valerie Gladstone. "Dancing with the dark," *The Boston Globe,* May 15, 2008, http://archive.boston.com/ae/theater_arts/articles/2008/05/15/dancing_with_the_dark/.
[56] Rachid Ouramdane, *Far…*, 2008, http://www.rachidouramdane.com/index.php?id=520&lg=en.

Figure 8. Loin… (Far…), 2008, Rachid Ouramdane, Performance, © Patrick Imbert.

Typically, the wire as an omnipresent stage technology is taken for granted as a means to an end in live performance. In *Far…,* for example, wires connect stomp boxes (pedals that trigger cues), a microphone, and black speakers that recall the image of government propaganda speakers. Some of these wires also frame dark reflective puddles that invoke water spilled across the stage. Each of these objects is an actor onstage. The megaphones are staged to stand tall, ready to project up and out into the space as if broadcasting something important. The stompboxes are small black metal pedals that blend into the floor, but ultimately trigger and control dramatic stage effects like sound and lighting. The purpose of the puddles remains unclear, but they are distinctive to *Far*... and help characterize a minimal set. In the context of stage performance, the function of the wire is simply that which binds the technical stage system. The intentional placement of the wire strewn across the dance floor in such a conspicuous manner, however, is a Brechtian reminder of the theatrical apparatus and foregrounds a technical presence in *Far*.... This early privileging of technological media anticipates in part the performance's exploration of the networked aftermath of war.

Indeed, Ouramdane's coiled and connected wires invoke one moniker for new media culture: the network. The network as we understand it today was initially

developed in 1964 by engineer Paul Baran as an early digital system for the government to better protect military intelligence against attack. Baran's distributed system was a very specific application of digital communication theory for a military defense strategy.[57] As digital communication systems grew beyond the government to encompass quotidian uses of the Internet, Baran's distributed network became a prominent organizational structure for communication in the late twentieth and twenty-first centuries. In addition to literally applying Baran's distributed network structure to systems such as the Internet, early proponents of cybernetics also joined network theory to structures outside of digital systems. By the 1990s, the "computer metaphor," or the use of computer terminology and theory to describe things outside of information technology, came to define many facets of society.[58] Today, the idea of the network can describe almost any system of complex relationality.[59] "Network" can encompass everything from digital and computer networks like Baran's to biological networks, in the case of DNA, social networks like Facebook, business "networking," or political networks like the United Nations and terrorist networks. Regardless of the type of network, the imagery of the network invokes the culture of new media that grew from the history of projects like Baran's. By literally foregrounding the networked wiring as a preamble to his dance, Ouramdane invites his audience to notice the centrality of new media culture to his story. Indeed, Baran developed his network just after Ouramdane's father was made to fight on behalf of France, so the rise of the network was contemporary with his father's own experience in the military. We can thus imagine that Ouramdane might like us to remember the wire's networked form as one example of the inextricable link between the militarized history of networking and the production of culture, thereby demonstrating how any instance of militarization can become a ubiquitous cultural force.[60]

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[57] Paul Baran, *On Distributed Communications: Introduction to Distributed Communications Networks* (RAND Corporation, 1964). Baran's proposal for the network consists of various nodes that communicate with one another. Rather than a hierarchical system whereby all communication is linked to and therefore dependent upon a centralized node, the decentralized system gives equal access to each individual node. The decentralization of power in the system means that an attack on a single node does not derail an entire system.

[58] Turner, *From Counterculture to Cyberculture*, 15.

[59] Galloway and Thacker, *The Exploit.* In their book *The Exploit: A Theory of Networks*, media theorists Alexander Galloway and Eugene Thacker present a particularly open definition of the network. "So by 'networks' we mean any system of interrelationality, whether biological or informatics, organic or inorganic, technical or natural—with the ultimate goal of undoing the polar restrictiveness of these pairings." (28) In a more pragmatic text on the term "network," Galloway, following a similar perspective on the topic, provides a comprehensive history of the term as it has developed in media studies. Alexander Galloway, "Networks," in *Critical Terms for Media Studies*, W.J.T. Mitchell and Mark B. N. Hansen, eds. (Chicago: The University of Chicago Press, 2010), 283.

[60] Rachid Ouramdane*, ou – là,* 2002, http://www.rachidouramdane.com/index.php?id=81&step=4. Ouramdane's staging of the wire is thus an index of a broader commentary on new media culture. Indeed, new media

The narrative content of *Far…* focuses on war and torture and never explicitly addresses technology, new media, or the network, but the continuous presence of the wire onstage allows for these subtexts to nonetheless haunt Ouramdane's composition. The metaphorical meaning of the wire shifts from war-related stories to ubiquitous new media and back again to result in a choreographic critique.

Colonialism: from Algeria to the Network

When *Far…* begins, Ouramdane stands still, surrounded by his stage network. He listens intently to a recording of his Algerian mother describing death and torture in the French colonial war. In her story, the elderly woman solemnly explains to her son how his father's body was bound and shocked by electricity:

> They'd force him to fill up with water and then they'd flatten him. They'd shock him with electricity to make him talk. They'd tie down his foot…his big toe…and then hook him up with electrical wires to make him talk.[61]

Ouramdane's mother's difficult and personal story of electric shock torture consumes the stage and is powerfully apparent in Ouramdane's physicality.[62] The dancer listens to his

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culture was central to Ouramdane's earlier work. He interrogates contemporary technology as a means for considering contemporary identity in projects such as *ou – là* (2002) and *Les morts pudiques (Discrete Deaths)* (2004). For example, *ou – là* plays with dramatic television conventions that Ouramdane suggests privilegespeech over embodied experience. Ouramdane choreographs live bodies who stand behind television screens, which are staged at shoulder height to hide the heads of each dancer. Talking TV heads accentuate what Ouramdane proposes to be televisual verbal dominance over kinesthetic communication. Ouramdane tactically uses televisions alongside live dancing bodies in *ou – là* to restore forms of non-verbal communication such as gesture, the gaze, and silence, which he argues have been left out of television culture and, therefore, "our collective imaginary." *Les morts pudiques* features stories culled from Internet searches to examine the contemporary narrative of suicide and death. This work is one of the choreographer's first compositions on the individual life stories of survivors of war in *Far….* The stories range from the death penalty being used against teenagers in The United States to Muslim suicide bombings in the Middle East. In his performance, tubes with flowing fluids and a vile of blood surround Ouramdane who dances alongside a film of himself. Ouramdane triples his presence with cinematic and biomedical material to participate in a physical mediation that takes place while deaths are disseminated online, but the presence of his physical body and its very aliveness on stage as well as the materiality of the blood and fluids that surround him overpower any kind of mediated violence that can be perpetuated online. *Les morts pudiques* stages a kind of biopolitical intervention into the collective understanding of death online. Both *ou – là* and *Les morts pudiques* portray how contemporary media and the information that it conveys shape contemporary discourse on bodies and their identities, even when physical bodies are absent in mediated form. Rather than reproducing a prevailing metaphor of digital systems infiltrating culture, Ouramdane's early work reveals the ways that new media actually make contemporary meaning.

[61] Ouramdane, *Far…*

mother with a physically active stance and her words ultimately consume him. His physicality matches that of his mother's voice; he stands calm, solemn, and concentrated. After Ouramdane's mother finishes her story, Ouramdane, still performing in the wake of his mother's words, lifts his foot and presses down on a stompbox with his big toe. His toe brings his father's story to the stage. Its contact with the pedal and proximity to the wire poignantly parallels the way his father's big toe was connected to electrical wires in torture. This scene in *Far…* also includes dark projections of water and reflective puddles on the stage, which underscore and make visible the water that tortured Ouramdane's father. The wires that swirl around Ouramdane are now hot with electricity. The new reference to the torture wire renders Ouramdane's pre-set image of a ubiquitous and nondescript network distressingly more specific.

To be "wired" is now not simply a metaphor for new media culture. The wire is recast as torture wire, and this metaphor opens the stage to myriad potential networks. The network might, for example, symbolize Ouramdane's own connection to his familial network. When the dancer touches the wired network, he physically connects his body to the metaphor of his father's torture, his mother's account of the torture, and, therefore, his family network and the history that effects it. The network might also signify a national network: an Algerian network to which Ouramdane's parents belonged, or the French network for which Ouramdane's father was made to fight. Given how Ouramdane speaks about his own sense of dislocation or foreignness, his physical contact with the pedal in this case might convey an exploration of his relationship not only to the nationalities, but also to the cultures that his parents' history invokes.[63] The touch, too, embodies the artist's movement between his Algerian heritage and his French citizenship.

The network is an apt image for the familial, national, and cultural systems that I read as possible in this first scene of *Far*…. If the intent of Baran's network was to decentralize multiple nodes in a system of relation, then the notion of a network allows for the plurality of identities that Ouramdane references in an account of *Far…*: "those we have inherited, those we embody in the eyes of others and those we project to ourselves, that we try to emancipate."[64] Conceptually, it privileges a plethora or system of identities.

Ouramdane's use of the network structure to explore identities affected by colonialism has significant implications for contemporary understandings of the network in new media culture. While the new media network signified the military industrial complex in the 1960s, it had been rhetorically liberated from these beginnings to signify freedom of thought and movement by the 1990s. As the new media network became popularized with more widespread use of the Internet, communications companies defined the network in democratizing terms, suggesting that anyone can go anywhere.

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[62] Ranjana Khanna, *Algeria Cuts: Women & Representation, 1830 to the Present* (Stanford: Stanford University Press, 2008). Khanna's important book explores and theorizes the representation of woman in cultural production, including film, under conditions informed by colonialism and its aftermath.

[63] Jennifer Dunning, "'Discrete Deaths' Presents Rachid Ouramdane Alone with Theatrical Artifacts," *The New York Times*, May 13, 2006, http://www.nytimes.com/2006/05/13/arts/dance/13rach.html?_r=0. Ouramdane, *Far…*

[64] Ouramdane, *Far…*

Lisa Nakamura's critique of early advertisements for communication networks reveals how consumers were enticed to use the Internet to "travel" globally; however, this invitation assumed a mobility for a Western digital tourist, one unwittingly dependent upon the immobility of those in other parts of the globe. For instance, Nakamura analyzes one advertisement for IBM that presents an image of an Arab man on a camel, surrounded by desert and pyramids. The implication in this advertisement is that IBM's networks enable virtual travel to this non-Western place. The exotic image of the desert implores its reader to understand that, whether the man in the advertisement is networked or not, the traveler's ability to objectify him as the exotic other remains constant.[65]

Interestingly, in the context of my analysis of Ouramdane, Nakamura adapts Frantz Fanon's analysis of French colonialism in Algeria to contemporary global networks of exchange. Fanon defines a colonist as someone who, like the communications companies, derives his wealth from an asymmetrical system of power.[66] Even more resonant with Nakamura's critique is Fanon's description of the colonial world as "motionless," whereby the colonized are literally unable to move.[67] While the mode of colonial movement shifts from a physical immobility in Algeria to a virtual one imposed by digital tourism, the othered body is rendered immobile in both instances and excluded from networked exchange. Without diminishing the important distinction between the physical violence of colonialism and the virtual violence of online networks, the relative resonance between the two circumstances haunt Ouramdane's performance.

In making this link, Ouramdane offers an alternative to the popular colonialist renderings of the network. He uses the body to illustrate how, for his family, the network is not an inherently a democratic form. By surrounding the stage network with an electrical wire to metaphorically enliven his father's torture, Ouramdane accounts for the immobile physical history of colonial pasts implicated in wired connections.[68] He participates in Western networks while making physical space for colonial narratives. This postcolonial perspective on contemporary networks foregrounds kinesthesia to illustrate how networks are steeped in personal and national histories.

Dancing Along a Postcolonial History

While Ouramdane initiates a postcolonial critique of the new media network by wiring a stage network from the perspective of his Algerian family, he choreographs body movement to develop and add dimension to this postcolonial perspective. Recall the artist's toe pressing down on and releasing the wired stomp box, enacting a physical relationship between Ouramdane and his familial, national, and cultural networks.

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[65] Lisa Nakamura*, Cybertypes: Race, Ethnicity, and Identity on the Internet* (New York: Routledge, 2002), 90.

[66] Frantz Fanon, *The Wretched of the Earth* (New York: Grove Press, 2004), 2.

[67] Ibid., 15.

[68] Of course, the relationship between colonizer/colonized is not necessarily so dichotomous. Ouramdane's father himself occupied both positions in his lifetime, first as an Algerian man being colonized by France, and second as a soldier, fighting on behalf of France in the former Indochina. Regardless, I locate his narrative on the side of colonized because his position as an Algerian man colonized by France produced his othered positionality.

Beyond the moment of contact, the impulse to connect the toe to the stomp box also performs Ouradmane's agency over his family's history. He is able to approach (with the touch of the pedal) and retreat from (with its release) the metaphorical symbol for his colonial past and the gruesome torture of his father. This agential movement toward and away stands in stark contrast to the apparently immobile colonial situation. This is a choreographic approach that talks back to the colonialist fabrication of immobility. His movement toward and away from the pedal performs a postcolonial relationship to the network; while the network is imbued with the history of colonialism and its violence, a choreographic focus on the agential body in *Far*... ensures the potential for movement.

After Ouramdane establishes his physical connection to/disconnection from the wired stage network with his toe, he retrieves a small flashlight and holds the light to his face as he listens to his mother's narration. The lamp resembles an interrogation spotlight and transfers the gravity of the father's interrogation onto Ouramdane's face. With the light blinding him, the dancer moves his face in and out of the flashlight's beam, slowly turning his head to shield his eyes from the intensity of the light. Like his contact with the stompbox, Ouramdane's movement with the light connects him again to his father's experience—but only figuratively. Ouramdane's ability to move his head from side to side and to freely avoid the beam of light physicalizes his actual separation from the colonialism, war, and torture in his family's history—a separation both generational and geographical. This distinction recalls the general feeling of "dislocation" that Ouramdane experiences.[69] He is neither here, nor there. He is neither in consistent contact with, nor necessarily disconnected from the pedal or the light. In a word, the choreographer remains "far" from both his familial identity as an Algerian and his present position as a French citizen.

Nevertheless, Ouramdane persists in the effort to restore a relation to his past, devising a form of movement rife with postcolonial implications that straddles debates around postcolonial relationships to history. Frantz Fanon argues for an eradication of colonial histories in favor of what he calls revolutionary action: "the immobility to which the native is condemned can only be called into question if the native decides to put an end to the history of colonialism."[70] Fanon concerns himself with the history of colonialism as continued immobility; any continuation of or connection to this immobility hinders Fanon's call for revolutionary action. Fanon's approach has been criticized as anti-historicist since a complete disregard of history ignores its reverberations on the present. Hortense Spillers has argued, for example, that certain narratives choose their subject whether or not the subject chooses them, and that it is neither possible nor favorable to disassociate from, or "put an end to," these histories.[71] This central topic of *Far*... aligns Ouramdane with Spillers' critique, since coping with the past is necessarily a reminder of and a contending with the effects that history has on the present. Rather than put an end to his history with colonialism, Ouramdane chooses to

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[69] Dunning. "'Discreet Deaths' Presents Rachid Ouramdane."
[70] Fanon, *The Wretched of the Earth*.
[71] Darieck Scott, *Extravagant Abjection: Blackness, Power, and Sexuality in the African American Literary Imagination* (New York: NYU Press, 2010), 43-44. Scott writes a comprehensive literature review of critiques of Fanon's anti-historicism, including a synopsis of Spillers' perspective.

reconstitute his father's story with the symbolism of the wire and to explore his personal relationship to that history. *Far…* is an ode to Ouramdane's embodied relation to his family's history, one that delicately places his dancing body in the context of his parents' narrative. On stage, Ouramdane cannot lift his foot from the pedal without first placing it on top. Metaphorically speaking, Ouramdane cannot enact a distance from his parents' narrative without first acknowledging a connection to it. In a kind of circular relationality to history, any embodied disconnection from Ouramdane's parents' past (the reproach from the pedal, or the turn of the head from the light) is dependent upon the original acknowledgement of connection (the touch of the toe to the pedal, or the shine of the light on the face).

Before fully accepting a simplistic choice between Fanon's apparent desire to eradicate historical connection and Spillers' belief in reinforcing it, we might also note that Ouramdane finds a way to reconcile both perspectives. Despite the fact that Ouramdane does not "put an end to the history of colonialism," his careful navigation of his physical relationship to history indirectly responds to Fanon's project and opens up more expansive readings of Fanon's goals. The reason that Fanon warns against history seems to be that he does not want representations of history to reproduce the violence of that history. Patrick Anderson and Jisha Menon's recent critique of violence and performance warns that the "future-history of trauma" initiated by violence "does not merely *describe*, but performatively *produces* power relations."[72] They cite representations of this violence in contemporary media, for example, as reproducing the embodied sensationalism inherent in images of violence, and, thus, as performatively reasserting the power relations therein. The traumatic moment then supersedes the initial act of trauma itself and lives on in its future-history. This way of treating violence is perhaps more specific than a reductive reading of Fanon might suggest. Anderson and Menon's focus on violence speaks to Fanon's point by illustrating how it is possible for a connection to history to impede any revolutionary efforts. If the act of performing colonial violence of the past re-constitutes the performative politics of that violence, then the colonial system is perpetuated. In a way, we could say that Ouramdane responds to Fanon's framework by means of a distanced connection, one that is both inside and outside the event recalled.

Ouramdane's practice of witnessing and the resultant disruption of future-history propose a different relationship to the history of trauma, understood as traumatic history. In this new relationship, Ouramdane's practice of witnessing is an ephemeral movement-based practice. He moves in the present, but as each moment of the performance passes, his actions are rendered historical. As Mark Franko and Anette Richards have argued, live performances "are immediate yet quickly become historical."[73] The artist, then, acts in the temporality of the passing present; he acts in the present that is becoming the past.

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[72] Patrick Anderson and Jisha Menon, "Introduction: Violence Performed," in *Violence Performed: Local Roots and Global Routes of Conflict*, Patrick Anderson and Jisha Menon, eds. (New York: Palgrave Macmillan, 2009), 5.

[73] Mark Franko and Annette Richards. "Actualizing Absence: The Pastness of Performance," in *Acting on the Past: Historical Performance Across the Disciplines*, Mark Franko and Annette Richards, eds. (Hanover, NH: Wesleyan University Press, 2000), 1.

Ouramdane thus presents two histories on his stage. The artist witnesses the history of his family's experience with colonialism, but he also creates a new history with each moment of his live performance. Darieck Scott proposes an argument about the temporality of Fanon's postcolonial scholarship that might elucidate my reading of Ouramdane. According to Scott, Fanon's argument should be read as counterlinear rather than antihistorical. Fanon's relationship to the past can be counterlinear "insofar as the linear as a key component of temporality too often helps buttress the overly determinative powers of a miserable 'burning past' of conquest and enslavement.'"[74] Scott explains that, for Fanon, there are two pasts; Fanon references not only the enslaved traumatic past, but also the past "being made (and ever receding) in the now," which Scott suggests has the capacity to reconfigure the traumatic past.[75] The ephemerality of movement perfectly illustrates this "being made (and ever receding) in the now." In *Far…*, the ephemerality of movement elicits a passing through the present whereby the present is always already past, the touch is always already the release. By freeing Ouramdane from stilled capture in the narrative of colonial pasts, *Far…* thus opens the way to a distinctly different future and, therefore, a different history. Each step to a future is a reconfiguring of a past.

Somatically Approaching a Horizontal Network

Widening my frame of analysis from the punctum of the toe and the head nod to movements that follow, I focus on how Ouramdane further deepens his postcolonial somatic relationship to his mother's story and to the colonial history that it invokes. Ouramdane begins *Far…* by standing in a common upright stance that that conveys power. The fairly gestural beginning to Ouramdane's dance occupies the hegemonic space of verticality. Barbara Browning and André Lepecki have both analyzed upright verticality as a normative space of dominance that can be explored and deconstructed by choreography and dance.[76] While Ouramdane's dance begins in the dominant zone of verticality, the wired network, which signifies the story of being colonized (as represented by the metaphor of the torture wire), occupies and thus defines the horizontal sphere in a non-dominant and colonized position. The horizontality of Ouramdane's stage network thus critiques Western utopic visions of networks that gloss over histories like those of colonialism in order to equate democracy with networked movement. After his mother's story about colonial domination ends, Ouramdane responds to the content of her narrative by removing himself from the upright vertical position and exploring the horizontal plane—the space of the wired stage network. Ouramdane cycles through loops of choreography that bring him from his initial position standing to a new perspective laying on the ground (See figure 9 and figure 10). First, Ouramdane's knees hit the floor. From kneeling, the dancer splays his body on its side and presses his arms and feet into the floor to drag the anchor of his hip across the stage. He feels the floor as he imprints his weight into the marley to explore the horizontal plane. Ouramdane's choreography

[74] Scott, *Extravagant Abjection,* 52.
[75] Ibid., 2.
[76] André Lepecki, *Exhausting Dance: Performance and the Politics of Movement* (New York: Routledge, 2006), 101. André Lepecki, "Dancing with Feet, Walking on Hands: Robin Rhode's *Frequency,*" in Lepecki and Joy, eds., *Planes of Composition,* 237.

places pressure on the trace of his body from the verticality of standing to the horizontality of the floor. He moves very slowly from the vertical to horizontal, such that if he were a brush and the space around him a canvas he would be drawing a slow and steady line in space. The dancer's slowness makes the physical trace of ephemeral movement all the more deliberate, as if to say: this is where I was, and that is where I am going in order to accentuate the *here* and the *there* of dance. Once he eventually reaches the marley, Ouramdane does not actually touch the network, but his movements mimic the horizontality of the networked sphere, sharing in the same spatial orientation.

Figure 9. Loin… (Far…), 2008, Rachid Ouramdane, Performance, © Patrick Imbert.


Figure 10. Loin… (Far…), 2008, Rachid Ouramdane, Performance, © Patrick Imbert.

André Lepecki argues that a somatic exploration of the horizontal plane reveals "unmarked presumptions of citizenship" perpetuated by dominant relations to space, such as verticality.[77] Lepecki recalls, for example, how Fanon's response to interpellation initiates a somatic relationship to the horizontal plane. A child shouts from across the street, "Look, a Negro!" Fanon recalls, "I stumbled… I burst apart." Finally, he explains, "I progress by crawling…"[78] Ouramdane does not crawl in an urban space, but his direct encounter with the horizontal plane reveals similar presumptions. We might read Ouramdane's mother's story as his own moment of interpellation. After hearing the story, I watch Ouramdane's body in terms of the colonial histories that it signifies. Just as Lepecki explains, within what he calls the colonial field of racism, the question of movement is a question of "what is made to fall and of what must remain upright."[79] Within the gaze of his presumably white Western audience (*Far…* tours primarily in Europe and North America), Ouramdane is made to fall by his parent's experience of colonialism and the way that this effects Ouramdane. Like Fanon, Ouramdane copes with the aftermath of war and trauma by somatically exploring the horizontal plane. This exploration in turn directs his audience's gaze toward this non-dominant sphere. Similar to Lepecki's reading of Fanon's interpellation experience, Ouramdane's dance might be read as a kind of kinetics of subjectivity. Ouramdane's choreography toward the ground initiates a spatial privileging of a non-dominant, postcolonial relationship to space. The horizontality of Ouramdane's stage network thus spatializes the critique of Western

[77] Lepecki, *Exhausting Dance,* 97.
[78] Ibid., 96-97.
[79] Ibid., 101.

utopic visions of networks that gloss over histories like those of colonialism in order to equate "democracy" with networked "movement."

What is particularly radical about Ouramdane's performance is that he does not stop at the horizontal. The artist takes the somatic experience of the horizontal plane and uses it to re-approach, or re-configure, the vertical from a new, inverted perspective. The dancer goes from a side scootch on the horizontal plane, to bracing his head with his arms and using his muscles to propel his body into an inverted suspension. His body thus re-claims the sovereign vertical sphere from a new perspective—that of standing upside down. Cycling through different physical orientations to the stage space—kneeling, balancing sideways, laying down, and suspending his body in inversion—Ouramdane reconfigures his kinesthetic relationship to a dominant perspective; he actively shifts his own space of interpellation. Where traversing the horizontal signifies a postcolonial relationship to space that brings the sovereignty of verticality into focus, Ouramdane's upside down performance proposes the postcolonial re-appropriation of that vertical sphere. The audience now sees the artist differently - his face looks different because it is upside down and his feet are where his head was. The audience must in turn shift its relationship to space and to Ouramdane's body. Leading his audience to see his body anew, from a different orientation, Ouramdane's choreography thus proposes distinctive postcolonial futures through his choreography—those of re-appropriated verticality as seen from a new angle.

Ouramdane no longer engages with the external hardware that surrounds him but, with his eyes closed, turns his focus inward to explore his own movement. This dance places somatics at the center of Ouramdane's postcolonial critique of colonial immobility, both historical (French colonization of Algeria) and contemporaneous (contemporary global politics and the new media network). There are many media that could juxtapose mobility and immobility. Film and even writing have the capacity to convey motion, but body movement in particular directly addresses the somatic nature of the colonial immobility.[80] Carrie Noland recognizes how Fanon "sets out to recuperate the most intimate and inarticulate variety of knowledge about himself, attempting thereby to reverse the process of subjectivation that a colonial situation has imposed."[81] Similarly, Ouramdane performs moments of introspection when his focus turns inward on movement to approach what Noland calls "kinesthetic-proprioceptive-tactile self-

[80] Fanon's writing is perhaps the most famous postcolonial account of the somatics of colonization. In addition to physical immobility, Fanon has described the somatic experience of women in Algeria and, in his bedrock essay, recounts his own somatic experience and response to the aftermath of war. In her discussion of resistive choreographies, Ananya Chatterjea cites Fanon within the context of dance as one of the few postcolonial scholars who directly addresses the embodied aspects of colonialism. Carrie Noland, André Lepecki, and Darriek Scott also read Fanon's work from the perspective of movement analysis. Ananya Chatterjea, *Butting Out: Reading Resistive Choreographies Through Works by Jawole Willa Jo Zollar and Chandralekha* (Middletown, CT: Wesleyan University Press, 2004), 80-81; Lepecki, *Exhausting Dance*, 101; Scott, *Extravagant Abjection*, 52; Carrie Noland, *Agency and Embodiment,* 196-205.
[81] Noland, *Agency and Embodiment*, 202.

awareness." [82] The centrality of Ouramdane's body and the importance of its movement to the narrative of *Far…* foreground somatics as central to both the aftermath of colonialism and war and also as central to the network.

Laying the Contemporary Wire: Im/materiality in the New Media Network

While Ouramdane clearly intends to present the wire in the context of torture and the history of colonialism, he also remains acutely aware of the contemporaneous meaning that wires bring to the stage. As a Western dance artist performing on a traditional Western stage in the twenty-first century, Ouramdane imbues the wire with a double value as performance apparatus and as a symbol of connectivity in a digital global era. When the video of Ouramdane's mother fades to black, he again presses his foot against a stompbox. This time he holds a microphone in one hand and its coiled cord in the other (see figure 11). Ouramdane lays the wire across the stage as he recites a poem about his own travels to Cambodia—where Ouramdane's father was forced to fight after having been a colonized subject in Algeria. In context notes for *Far…*, Ouramdane explains, "I realized that I was considered the son of a colonialist, even though what linked my father to Indochina was the legacy of another colonization, that to his country, Algeria."[83]

Figure 11. Loin… (Far…), 2008, Rachid Ouramdane, Performance, © Patrick Imbert.

Ouramdane takes slow steps across the stage as he recites his poem. His language mixes metaphors of contemporary global exchange (imports and tourism) with the local (shoeshine man and sweeper) and the personal (family and the amputation of a leg) to weave disparate networks into one web of connectivity, all held together by Ouramdane's

[82] Ibid., 202.
[83] Ouramdane, *Far…*.

physical laying of the electrical wire. The electrical cord that first signified shock torture now shifts associations as he speaks about borders mapped by war and the French division of land. With each step he places another segment of the wire on the ground. The additional wire extends the familial/national/cultural systems of networks that his mother calls into being at the beginning of *Far…* Ouramdane now presents his relationship to family history from his own contemporary perspective as an international networked traveler in the shadow of his mother's memories.

When Ouramdane lays physical wiring across the stage, he reminds his audience that the networks he describes are grounded in material hardware. In addition to mapping a physical border, for example, Ouramdane mentions a visa, the physical protocol for traveling between places. While he gestures toward global networked exchange and connectivity—a contemporary reality based in the virtuality of the Internet—the types of exchange that Ouramdane lists are material ones. Ironically, he routes contemporary connectivity via the material wire and makes the relevance of the virtual network obvious by the paradoxical virtue of its very omission– the absence of a virtual network on stage in *Far…*

Ouramdane's focus on the materiality of global exchange is sensitive to potential inequities in online cultures similar to those inequities that Nakamura refers to in her reading of early communications networks. Nakamura's illuminating work on the network is an intervention into existing scholarship that insists on the utopian potentials of an immaterial media network. Some media scholars such as Mark Poster position new media as a kind of antidote for colonial oppression and immobility. Poster suggests that networked societies and the digital era result in a globalization and diaspora of digital selves—selves without bodies. The Internet, Poster argues, liberates the so-called digital self from colonial boundaries, and enables one to make or refashion the self in relation to what Poster refers to as "post-postcoloniality."[84] In other words, because a user is not tied to his or her physical body or geographic place when online, he or she can—assuming ample access to the Internet— move freely without the constraints of oppressive and restrictive systems such as colonialism. While Poster fashions his analysis of the digital self as aligned with postcoloniality, this perspective is all too similar to the problematically colonial utopias of IBM's networks. Nakamura's analysis of early advertisements for networks reveals how democratic ideas about contemporary global networks were born of utopian dreams for which race, gender, disability, and age do not limit the body.[85] In this case of what Nakamura terms a "postcorporeal subjectivity," there is no room for the type of contextualized embodied mobility that Ouramdane offers at the beginning of *Far…* with his delicate manipulation of postcolonial temporalities and spatial planes. As we have seen in Spillers' perspective on postcolonial histories, this context is important to acknowledge precisely because it is not always the subject who chooses it for himself. By illustrating the importance of and power in a historically contextualized body—a body that can literally enact postcolonial futures—within the context of a network, *Far…* thus illustrates a critique of disembodied ideas of the digital network that would otherwise rely on notions of the "postcorporeal."

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[84] Mark Poster, *Information Please: Culture and Politics in the Age of Digital Mechanics* (Durham: Duke University Press, 2006).
[85] Ibid, 88.

Not all scholars have conceived of the new media network without the body. Mark Hansen includes the body in the new media network with his concept of "bodies in code." The body in code is "a body whose embodiment is realized, *and can only be realized,* in conjunction with technics."[86] Distinct from Ouramdane's presentation of the body in the context of the new media network, the body in code is necessarily digitized and is typically produced as an immaterial image. Hansen analyzes what happens when the racialized body, for example, is digitized. He suggests that the Internet can suspend the "automatic ascription of racial signifiers according to visible traits" and subject everyone to racial difference.[87] Hansen's argument figures race into the new media network, but does so by performing a kind of reverse of Poster's post-postcolonialism. Rather than proposing that everyone can escape race online, à la Poster, Hansen argues that an experience of disembodiment on the Internet mimics the experience of raced abjection. In other words, the experience of ontological erasure is theoretically open to every disembodied human online.

It is important to appreciate how Ouramdane imagines a postcolonial future not only distinct from his family history with colonialism, but also one distinct from a new media network that perpetuates disembodiment and immateriality. As Nakamura explains, contrary to Poster and Hansen's ideas of bodies online, "the Internet is a place where race happens."[88] Ouramdane performs this reality by connecting his physical body to the wire as metaphor for the materiality of globalism *and,* I would argue, for the new media network. As he continues to lay the wiring along the floor, for example, Ouramdane recites, "I felt like a brother despite my fair skin which makes me white here and assimilated over there…" Ouramdane acknowledges how he is interpellated differently based on the color of his skin and the physical place that his body inhabits in a way that vastly undercuts any utopian or universalizing discourse of a strictly digital self. It is precisely for this reason that the embodied interrogation of networked globalism is integral to Ouramdane's exploration. Instead of furthering a narrative of victimization and relying on the Internet to liberate Ouramdane from the material conditions of his skin, as Poster's proposition for "post-postcoloniality" would encourage, *Far…* acknowledges the colonial histories that produced the inequities inherent in borders, tourism, and globalism. Ouramdane touches these inequities as he touches the wire, and he acknowledges his familial and personal participation in globalism as he lays the wire to the floor—literally participating in the laying of a network. The centrality of Ouramdane's body to this scene highlights the specificity of his individual situation—it is this body that continues to navigate, to witness, the ramifications of the colonialist situation. The dancer works against the disembodied democracy that Nakamura critiques and instead embodies his story to lend it the physical specificity of a raced, gendered, classed, and aged body in motion.

Global Networks of Bodies, or Contextualized Disembodiment

While Ouramdane does not directly invoke Internet connectivity in *Far…*, he also chooses not to reject contemporary media altogether or propose his physical body as an

[86] Hansen, *Bodies in Code,* 20.
[87] Ibid, 141.
[88] Nakamura, *Cybertypes*, xi.

antidote to the problematic and potentially colonizing effect of the global network. Retreating from media might counteract disembodied universalisms, but remaining offline entirely would only perpetuate the image of the immobile Other. *Far…* addresses this precarious balance directly in the third scene when Ouramdane initiates another extension of his wired network.

After Ouramdane uses his mother's memory and his own poetry to tell his personal story, the choreographer introduces stories by other children of diaspora to accompany his narrative. Again, Ouramdane's foot taps on the stompbox. The pedal triggers audio of stories by narrators born to immigrant families, and others who moved to a Western country as a baby. These stories are different from his mother's story, which is full of historical and political context, personal experience, and familial reaction. Instead, they are short snippets of decontextualized memories and anecdotes. Ouramdane calls the reflections in all of the interviews "private-life-fragments," or "each person's attitude regarding their own past, and the way that History affects each person's identity formation." [89] While they might not stand on their own to give a full image of events, together the fragments make up a networked story about the aftermath of war. One narrator is Asian American, another speaks in French about a family history in the Vietnam War, and another in English about the same war. While distinct from Ouramdane's cultural heritage, the narrators reflect on their feelings that identity is fragmented across generation and place. Their stories are ultimately bound by a connection to the former Indochina.

Ouramdane uses his interview archives to foreground personal histories in several other works. In addition to *Far…*, *Superstars* (2004), *Surface de Réparation* (2007), *Ordinary Witnesses* (2009), and *Sfumato* (2012) each feature interview material. In *Superstars*, a commission for the Opéra National de Lyon, video interviews tell the autobiographical stories of each dancer who performs on stage. Similarly, *Surface de Réparation* includes interviews with child athletes as they perform their mastered sport techniques in a boxing ring. Following *Far…, Ordinary Witnesses* delves deeper into torture with individuals who live in its post-trauma. For *Sfumato*, Ouramdane travels to China where he collects testimonials of the refugee experience.

A survey of Ouramdane's work with interviews suggests that, in addition to the content of the interview, the medium is also central to his choreographic message. Video, just one of many media on which Ouradmane relies in his choreography, consistently displays images of interviewees. The choreographer employs film to solicit the gaze of the audience. He will withhold full images of interviewees and instead share close-ups of an interviewee's hands, eye, or a half of a face. This editing method saves the vulnerable interview subject from complete objectification in the performative gaze. It also guides the viewer's eye to the specific emotiveness of body parts—the brow sweats and furrows, hands gesture nervously. He also plays with experiments in media scale. Small televisions screens in *Superstars* and larger-than-life projections in work such as *Far…* and *Ordinary Witnesses* display the images of interview subjects. The scale and quality of the images on various devices means that the images hold different weight in relation to

[89] Rachid Ouramdane, *Ordinary Witnesses (Des Témoins Ordinaire),* 2009, http://www.rachidouramdane.com/index.php?id=460&lg=en.

the bodies that dance around it. The interview film becomes a digital dance that moves with live bodies on stage.

The cinematic medium is particularly central to the way that Ouramdane presents the interview in *Far...* The choreographic focus of the performance shifts from the hardware on the stage to the stories that the artist plays. While the emphasis in the beginning of the choreography is overwhelmingly geared toward the palpability of the wire as an actualization of Ouramdane's mother's mediated presence, that emphasis now recedes into the background of the composition in favor of the cinematic presence of a plethora of anonymous narrators. The narrative emphasis can be likened to the release of the stompbox, as opposed to the initial touch. In this section, Ouramdane asks, what happens when we let go of materiality? The wire recedes into the black marley flooring as a purely technical means, and remains present on stage only as the trace of Ouramdane's counter-approach to the global network via the performance alongside his father's story of torture and of the material apparatus in global exchange. Now, Ouramdane invites his audience to enter the virtual world of telecommunication and film imagery. The potentially counter-intuitive disappearance of the wire as central to Ouramdane's choreography highlights the immateriality of contemporary exchange between several narrators who have been affected by war and diaspora.

I propose that the staged exchange of information between narrators in *Far...* reads as a global diasporic new media network. With the recession of the wire, each distinct diasporic narrative is stripped of the meticulous specificity we experienced at the beginning of *Far...* The audience does not see, let alone share a space with the other narrators, so their stories remain disembodied. Together, they make up what Alessandra Nicifero has called a "virtual conversation on stage."[90] Ouramdane has explained that the anonymity of his interviewees is important to his project in so far as it helps to avoid the sensationalism inherent in representations of violence.[91] Using virtuality and anonymity to avoid the sensational, however, these narrated tales might approach Poster's post-postcolonialism. The stories become a decontextualized and collective narrative of global diaspora, and exhibit a defining characteristic of networks: the network form "bent on eradicating the importance of any distinct or isolated node."[92] Together, the stories make up one cohesive, yet still complex, system of disembodied relationality.

Despite disembodiment, each story presents specific and individual circumstances as they relate to more global situations. The French-speaking man tells how his father was killed in the Vietnam War. He recalls how, when he was a child, his family referred to the war that took his father's life as "the events." This narrator describes a feeling of shock when he learned how "the events," which he had identified as an extremely personal occurrence, signify a larger transnational event. He reflects, "your little family story really connects to History." This narrator acknowledges how, despite the seeming enormity of history, his "little family story" is still one very specific node in a larger historical narrative network. He describes how he "remembers" the Vietnam War through

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[90] Alessandra Nicifero. "Questioning/Choreographing: the use of interviews in Bill T. Jones's and Rachid Ouramdane's performances." Dance Studies Colloquium, Boyer College of Music and Dance, Temple University. October 21, 2014.
[91] Ibid.
[92] Galloway and Thacker, *The Exploit,* 55.

others' pictures and how he imagines these events as those you would have seen on TV. The collective memory of a global narrative remains personal. "So at the end of the day," he explains, "all of [the media images] were also part of my memory. Really really close I mean. It was our family's story, not just the history of a country."

The next voice speaks in English about his experience growing up as a Vietnamese refugee to America. He tries to make sense of who he is, where he lives, and why he has to be there. This narrator focuses on his own memory, and alludes to the immateriality of his stories. He recalls stories about refugee camps and a boat ride to the United States, but he explains how he cannot "trust" these memories. The memories might come from dreams that resemble stories the narrator heard, but the dreams, he asserts, were not real. The narrator tells of how he eventually returns to visit Vietnam, and how, after having claimed a Vietnamese identity during his youth growing up in America, he comes to a liberating realization that he is not Vietnamese. He explains, "I wasn't tied to any kind of identity. My home was nowhere and everywhere at the same time." He recognizes this as amnesia. His generation does not remember the war, but is being taught these experiences.

Each of these two narrators acknowledge mediation and media cultures as inherently linked to their senses of self, but, unlike Poster's post-postcolonial body or Hansen's body in code, each narrator grapples with the specificity of his identity. Not all narrators featured in *Far…* reveal such specific information as the two I highlight here, but each person tells a specific and personal fragment. Thus, while he chooses anonymity to avoid the sensational, Ouramdane still finds a way to maintain the specificity of a situation, avoiding sweeping universalisms within the realm of the immaterial.

One minute into the second narrative, Ouramdane presses his foot against the stopmbox and loud electronic music begins to play. The music competes with the narrator's voice as lights flash dramatically. His movements become fast paced and frenetic; his musculature conveys physical tension from one position to the next as he freezes one joint before jerking his body to the next position. Ouramdane throws himself off balance only to catch his body in another place as it lands a foot or two to the side, in front of or behind his previous position. The performer plays with his center as his body moves around it with flaring movements of the head, hands, arms, legs, and feet. Just as he falls off of his center, Ouramdane catches it again. It looks as if someone else is bouncing his body around like a puppet. The sharp turn away from the slow and controlled movement that Ouramdane performed at the beginning of *Far…* complements the complexity that comes with a global diasporic network.

The faster paced and jerkier nature of Ouramdane's relationship to verticality as he frantically moves to the other narrators' stories marks a shift in his kinesthetic experience. The slow and plotted explorations around the wires and carefully materialized stories at the beginning of *Far…*, which accompany a slow and plotted relationality to kinetic orientation, falls away in the face of a raucous, immaterial network of stories. Ouramdane maintains control of his embodied performance, but his grasp on this control is more slippery in the face of variety and multipiclity. On the one hand, perhaps, disconnection from the wire allows greater access to his experience navigating contemporary systems. Perhaps his release of physical contact from the wire enables more access to postcolonial mobility. On the other hand, Ouramdane remains in a position of exploring the same planes and the same body, but without the grounding

presence of the wire connecting him to the horizontal space. Ouramdane's relationship to the network is neither static, nor predictable. He is simultaneously in pursuit of the body and kinesthetically exploring disembodiment.

It is within the context of the first two scenes of *Far…* that this last scene is most significant. Ouramdane's physicality and the materiality of his dance at the beginning of *Far…* contextualizes the disembodied global network. The network of narratives joins Ouramdane's passing past—his family history that has direct connection to the other narratives in their associations with Vietnam—to his passing present as a child of diaspora who navigates his own identities. If we read Ouramdane's own embodied relationship to the global network next to the other narrators, we imagine how the other narrators also have kinesthetic experiences that shape their identities.

While disembodied, this scene actually helps to reinforce Ouramdane's recuperation of the body schema from the first scene of *Far….* While he relies on the materiality of the wire to have a phenomenological experience with a symbol of his family past, Ouramdane's actual connection to this history is through immaterial memories that are passed down by his mother. The immateriality of the global network and its subsequent disembodiment, then, paradoxically reinforce Ouramdane's experience as a child born to the history of diaspora from colonized Algeria to Western France. Ouramdane must, to some extent, remain connected to a disembodied reality in order to gain access to his family's history. This disembodiment, however, is one that is produced in response to colonization, found in a global network of individual stories of diasporic history, and might also involve embodiment insofar as Ouramdane entertains a relationship to the body. What I consider to be a contexualized disembodiment remains distinct from Poster's universalism because its connection to the individual and a focus on its body schema "exploit" what Alexander Galloway and Eugene Thacker have termed the problematic symmetry of contemporary immaterial systems.[93]

The fact that Ouramdane presents and participates in a new media network of global diaspora in *Far…* without succumbing to utopianist rhetoric is crucial to understanding the postcolonial implications of the work. Ouradmane does not stop at the material, but moves the materiality of his exploration into the virtual realm of the new media network. He works delicately amongst these sensibilities that are tied closely to political positions—materiality to a postcolonial perspective and immateriality to utopian digitality . *Far…* remains neither in the realm of one nor of the other. Rather, his choreography of the body and of media onstage approaches the new media network only after he has done the work of addressing the wire, its histories, and the materiality of the global. It is only then that Ouramdane carefully weaves his own somatic exploration into a new media network of people. This is important not only for incorporating a postcolonial perspective into new media discourse, but also because instrumentalizing the postcolonial network as solely material mires that perspective in disconnection. Thus, *Far…* proposes one method for approaching the new media network from a postcolonial perspective whereby postcoloniality straddles materiality and immateriality, embodiment and disembodiment, in contextualized connectivity.

[93] Galloway and Thacker, *The Exploit*.

The stark contrast between Western military and consumerist politics that defined early meanings of the network and Ouramdane's exploratory, personal, and somatic performance of network culture in 2008 is striking. *Far…* is not necessarily a solution to problematics of contemporary networks as they were historically defined, nor is *Far…* a model for approaching new media networked culture. On the contrary, Ouramdane's choreography problematizes any universalist relationship to the network. Still, by entertaining the aftermath of war within the context of network culture, Ouramdane's choreography illustrates how somatic relationships to history, time, and space are already wired in a new media network that is simultaneously lauded and critiqued for its bodiless-ness. Regardless of the position, it is taken for granted that the network is indeed bodiless, disembodied, and immaterial. *Far…* complicates this assumption. Ouramdane shows his audience that there have been actual, material bodies implicated in networks all along and that, while these bodies have been left out of discourse on new media culture, they do not stand in opposition to immaterial futures. In fact, Ouramdane's identity as a child of French-Algerian diaspora necessitates the global network of those affected by war. The choreographer's new media critique lies in the dissonance between his network and those universal networks that came to define early Internet communication and travel, where bodies were left out of rather than incorporated into mediated exchange.

Chapter 3: **Corporeal Queer Critique: Biotechnology in the AIDS Epidemic**

Twenty-eight year old John Jeffrey Bernd premiered his AIDS choreography *Surviving Love and Death* at P.S. 122 in New York City on December 25, 1981.[94] Bernd choreographed the solo in response to two major events in his life: his recent breakup from his lover and artistic collaborator Tim Miller, and his battle with what doctors called an unknown virus. While it would be another three years before scientists would name the human immuneodeficiency virus (HIV) and auto immune deficiency syndrome (AIDS), doctors diagnosed the first cases in 1981 under the early categorization Gay-Related Immune Deficiency (GRID). It became known as the "new gay cancer." Though Bernd was not medically diagnosed with GRID because he did not have Karposi's sarcoma, the main diagnostic characteristics of the syndrome, because he was a gay man facing a blood virus, the doctors first looked to GRID in diagnosing Bernd's condition.[95]

During the early days of HIV/AIDS, the government and biomedical institutions incorrectly stigmatized homosexuality as a lifestyle choice associated with the contraction and spread of the virus. Because of this association, Bernd's identity as a publicly gay artist led both doctors and those outside of the medical institution to assume that Bernd was living with GRID. One review of *Surviving Love and Death*, for example, found it necessary to specify that Bernd lost his platelet count not to Karposi's sarcoma, but to another virus.[96] The review thus re-performed Bernd's medical non-diagnosis, linking his sexuality to the epidemic regardless of whether or not he had GRID. In *Surviving Love and Death*, Bernd folds the social experience of being diagnosed based on his sexuality into the medical experience of being improperly diagnosed with an abject and misunderstood disease; his medical categorization rippled into his social identity. In both cases, the artist experienced abjection within the medical community that rippled into his social identity.

In light of his abject patient position, Bernd positioned himself in a delicate relationship with the medical institution. *Surviving Love and Death* is a dance that critically addressed the fields of science and technology, but without sponsorship from a government funded engineering institution like Bell Labs. Like many forms of AIDS choreography, this piece addressed medical technology precisely to challenge the institutions that stigmatized patients based on sexuality. Where Childs used her body knowledge to perform a feminist critique from a position working *with* Bell Labs, Bernd's *Surviving Love and Death* demonstrated how the same embodied approach to technical problems can, and sometimes must be, performed in opposition to the fiscal and

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[94] The performance ran December 25-28, 1981 and January 22-25, 1982.

[95] David Gere, *how to make dances in an epidemic: tracking choreography in the age of AIDS* (Madison, WI: The University of Wisconsin Press, 2004), 31. In his reading of *Surviving Love and Death*, David Gere explains how Bernd's doctors at New York's Bellevue Hospital initially wondered whether or not Bernd was suffering from GRID, but that they ruled this out as a possibility most likely because Bernd did not have the characteristic Kaposi's sarcoma lesions or *Pneumocystis*.

[96] Marcia Pally, "A Dance of Death," in *New York Native*, 1–14 March 1982, Series 1 Choreographic Works Folder bms Thr 417 39, Surviving Love and Death Reviews: 1981-1982, John Bernd Papers, Houghton Library, Harvard Theater Collection.

technical support of the institution.

Bernd used the subject matter of his performance to direct his institutional critique. Bernd's choreographic response to his virus poignantly foreshadowed prominent themes that emerged during the fight against AIDS and that scholars and critics have used to classify the work. AIDS and dance historian David Gere, who identifies Bernd's solo as the first "formal choreographic performance of the AIDS era,"[97] explains how *Surviving Love and Death* "fulfills the terms of the AIDS dance paradigm—depicting abjection, homoeroticism, and mourning."[98] Gere's reading considers how Bernd integrated his experience of his virus with his love affair with Miller. The connection that Bernd's piece made between these two seemingly separate elements of his life illustrates the socio-cultural connection between GRID and homosexuality; Bernd even foregrounded this link in the composition's title. The words "*Love and Death"* imply connectivity between gay male eros, loss, and, ultimately, mourning.

Against the social backdrop of the early HIV/AIDS era, *Surviving Love and Death* also explicitly addressed the medical components in the fight against HIV/AIDS. Bernd performed autobiographical monologues throughout his performance to detail his hospital experience, the scientific basis of his diagnosis and prognosis, and possible treatment. He detailed the numerical values of his blood counts, and by the end of *Surviving Love and Death,* he even took control of the medical discourse itself with a DIY approach to medicine. Medical science and biotechnology have been applied to artistic discourse in the tradition of bioart, particularly in amateur approaches to science where artists take control of scientific experimentation without the same expertise as a professional scientist. Like Bernd, these bioartists use scientific media to respond directly to the politics and social impact of scientific advancement.[99] Interestingly, however, Bernd's choreography has not been read in terms of its biotechnological components; furthermore, it has not been framed within the genealogy of bioart. Instead, Bernd's work is discussed in the realm of postmodern art and AIDS choreography—a categorization that highlights the social content of *Surviving Love and Death,* but minimizes the scientific.[100] In this chapter, I argue that identifying the biomedical content of Bernd's

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[97] Gere, *how to make dances in an epidemic,* 31-32.

[98] Ibid., 32.

[99] See Eduardo Kac, ed., *Signs of Life: Bio Art and Beyond* (Cambridge, MA: MIT Press, 2006) and Beatriz da Costa and Kavita Philip, eds. *Tactical Biopolitics: Art, Activism, and Technoscience* (Cambridge, MA: MIT Press, 2008).

[100] Bernd was known as an experimental choreographer who transcended genre boundaries. Reviews labeled the solo as everything from performance to art and theater to dance. Critics consistently placed Bernd within experimental, multidisciplinary Judson Dance Theater and postmodern dance lineages. The artist's earlier work, such as his well-known multi-media duet *Live Boys* (1980)—a collaboration with then partner Tim Miller—featured spoken word, body painting, and little to no "dance," as it is traditionally characterized. Even the performance venues that Bernd frequented such as P.S.122 and St. Mark's Church are known for avant garde dance and performance experimentation. Bernd trained with the Merce Cunningham studio and spent early years of his career touring and performing with second wave Judson artist Meredith Monk. *Surviving Love and Death* has even been likened to one of Monks' operas. As a whole,

embodied articulation of the socio-political aspects of his patient diagnostic experience provides a unique look into the patient-provider politics that so profoundly marked Bernd's experience as a patient.

Bernd's artistic and embodied approach to science not only informs an understanding of early eighties HIV/AIDS politics, but has important ramifications for understanding the politics of biomedicine today. In today's digital era, it is common to associate biomedicine with new media because of the tendency to treat DNA as code, thus establishing a common vocabulary between digitality (computer code) and genetics (DNA code). In doing so, however, the experience of embodiment is left out of the medical frame. Maria Fernandez explains,

> As with other live entities, humans are viewed primarily as patterns of information transferrable to various media, such as computers. In this scheme of things, embodiment is secondary; the organism has been replaced by its code …. Although a small number of theorists have cautioned against "forgetting the body" they are a minority.[101]

The treatment and understanding of HIV/AIDS require many types of biomedical information that replace the person living with AIDS with patterns of information. Platelet counts, vital signs, and the types and amounts of medical dosage, for example, are all codes that are maintained using biotechnology. As performance artist and scholar Kelly Rafferty recognizes, this focus on code and the digital, while prominent in readings of bioart and biotechnology, "does not always help us get at what is most important in a work of biological art."[102] Specifically, Rafferty suggests that a preoccupation with code distracts from under-recognized power dynamics within biotechnology as they relate to embodied issues of race, gender, and class—all of which are invaluable to advocating for people living with AIDS.[103] A biomedical reading of *Surviving Love and Death* asserts the centrality of the body in conversations about biotechnology and reveals a queer futurist counter-narrative to the history of the relationship between bodies and technology, one that informs understandings of the AIDS crisis and the relationship between subjectivity and biotechnology from the 1980s to the present moment.

Surviving Love and Death fit postmodern dance trends; it deployed what have now become signature postmodern techniques in autobiographical content, confessional speech, and direct address. See Barry Laine, "The Post-modern Faggots" in *The New York Native* 6–19 April 1981, Series 3. Subject Files, Folder bms Thr 417 124, John Bernd Papers; "Gender Benders: Barbara Baracks on Gay and Lesbian Performance Artists," *Village Voice* Vol. XXVI No. 21 May 20–26 1981, p 38, Series 1. Choreographic Works, Folder 33, John Bernd Papers; Jeff Weinstein, "Loves Labor Lost," *Voice* 27 January–2 February 1982, Series 1. Choreographic Works, Folder bms Thr 417 39, John Bernd Papers; Gere.

[101] Maria Fernandez, "Postcolonial Media Theory," in *The Feminism and Visual Culture Reader*, ed. Amelia Jones (London: Routledge, 2003), 520, 527.

[102] Kelly Rafferty, "Regeneration: Tissue Engineering, Maintenance, and the Time of Performance," in *TDR* 56, No. 3 (Fall 2012), p 90. See also Robert Mitchell, *Bioart and The Vitality of Media* (Seattle: University of Washington Press, 2010) and Kac, *Signs of Life*.

Re-appropriating Heteronormative Power in the Biomedical Complex

Bernd introduced the conflicting spaces of the biomedical complex and the body in the very first moments of *Surviving Love and Death*. In his personal notes, Bernd described *Surviving Love and Death* as "3 movements with a prologue and a coda using movement, gesture, text, vocal work, and visual images."[104] The prologue began with Bernd in the dark, hiding behind a projection screen that displayed slides of perspectival drawings. He sang in chant-like cadence: "Hy, hy, hy, yah hah. Hy, hy, hy yom."[105] At the same time, he clapped to an apparently random rhythm that accompanied recorded audio of a siren wailing over the sound system. The siren referenced an ambulance, imposing the urgent and chaotic tone of the medical complex on the performance space. Bernd's tranquil chant and his relaxed physicality overpowered the frenetic quality of the siren and he appeared at peace within an otherwise cacophonous sonic environment.

Eventually, the stage lights ascended to a warm glow, revealing a youthful Bernd, whose svelte figure and lean sculpted body matched the vibrancy and calm focus of his voice. Bernd stood on a wooden floor framed by the L-shaped PS 122 theater space with its white walls, thin support pillars, and high arched ceiling. The dancer was dressed in a red sweatshirt and black sweatpants that hung loose to frame his figure as his full head of wavy hair hung loose to frame his face.

He walked barefoot with a confident, yet casual gait to approach his audience from upstage; his body was deeply grounded in his step and his clap had a virtuosic quality. It was carefully timed and calmly performed with a sense of mastery over the relatively simple and quotidian act. This was a dancer who came across as a skilled performer with a powerful command over his stage. Reminiscent of Bernd's training with ballet instructor Maggie Black, the Merce Cunningham studio, and modern dance choreographer Dan Wagoner, Bernd carried his frame with a dynamic physicality and strength.[106] He used this frame to exhibit physical mastery over the precise phrasing of his first sequence—the rhythm of his clap, the way he walked toward his audience, and the tone of his chant. He appeared calmly and coolly in control of his body, the stage, and even his audience as he approached them. The cyclical chant and walk provided a complete, composed, and mastered movement phrase.

Aspects of Bernd's opening chant scene such as the visual acknowledgement of his audience, their close proximity to the performer, and Bernd's casual dress fit in with Bernd's typically experimental oeuvre. Beyond this, however, the opening scene exhibited an unusually classical aesthetic as compared to the postmodern dance traditions that typically characterized Bernd's work.

Bernd's personal notes cite descriptions of his performance work as "angelic" and

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[104] Series 1. Choreographic Works, Folder bms Thr 417 (35), John Bernd Papers.

[105] Ishmael Houston-Jones, "lost and found, memories of john bernd at st. mark's church," *Movement Research Performance Journal* 17 (September 1998). p 9.This is how Bernd's friend, dancer, and collaborator Ishmael Houston-Jones chooses to transcribe the sounds into text.

[106] Merce Cunningham is by no means a traditional choreographer and has been theorized as having used his choreography to challenge normativity, but the technique that he imparts on dancers nonetheless promotes traditional notions of mastery and control.

his presence as "delicate and powerful."[107] One review described Bernd as "Italianate beauty. Italian masters of the seventeenth century might have enjoyed painting such a face…"[108] Another cited Bernd's "physical and personal charm."[109] Such focus on these qualities of Bernd's body and affect might traditionally be read in terms of femininity, but Bernd withheld all purportedly "feminine" qualities—uncontrolled emotional expression, madness, or divergence from form—from his opening scene and thus maintained a traditionally "masculine" air. David Gere recognizes how, rather than emotionalism, "the male dancer's body may be invoked as a symbol of the ideal society—his perfect bodily proportion and muscular development viewed as a metaphor for order and virtue."[110] Indeed, the ritualistic tone of Bernd's chant imbued his accompanying walk with a virtuosity that highlighted his bodily "perfection" in the most normative sense. The artist capitalized on bodily and dancerly mastery, but remained squarely within his choreographic form, and, therefore, within a (hetero)normatively masculine idiom of control, mastery, precision, and order.

The opening elements of *Surviving Love and Death* distinguished the work from Gere's definition of gayness, one of his defining features of AIDS choreography. Gere defines gayness in terms of Judith Butler's "abjection factor" and uses abjection to explain how the gay male is marginalized in mainstream culture "insofar as he cannot be a subject (that would be the heterosexual man) or an object (the heterosexual woman)."[111] This marginalization is particularly palpable during the AIDS era when gay men were made abject on the basis of sexuality and the related association to HIV/AIDS.

The abjection of the gay man was intensified in the realm of dance where the form's characteristic bodylines, which Gere defines as "sweating, strong blood flow, and the likelihood of bodily contact," subsequently became a marker for HIV/AIDS contagion.[112] Spit and sweat do not transmit HIV, but early biomedical imaginations of GRID and HIV/AIDS were unclear about whether these bodily fluids were vectors. In her article on AIDS "Keywords," Jan Zita Grover explains how the public press, politicians, and physicians used terms of contagion to describe AIDS: "from this semantic error flows many consequences, not the least of which is widespread public terror about 'catching' AIDS through casual contact."[113] Dance critic Paul Parish remembers the visceral effect of the dancing body during an era "when sharing bodily fluids, even saliva, or even touching a person with HIV brought on hysterical fears."[114] In light of the early

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[107] Series 1. Choreogaphic Works, bms Thr 417 (35), John Bernd Papers.
[108] Nancy Goldner, "John Bernd," *The Soho News* 16 February 1982, Series 1, Choreographic Works, Folder bms Thr 417 39, John Bernd Papers.
[109] Weinstein, "Loves Labor Lost."
[110] Gere, *how to make dances in an epidemic,* 44.
[111] Ibid, 12. I am wary of promoting the problematic connection between HIV/AIDS and gayness, especially given my explanation of early biomedical stigma. Nonetheless, I follow Gere's framing here to proceed with this connection since its social presence permeated trends in AIDS choreography.
[112] Gere, *how to make dances in an epidemic,* 45.
[113] Jan Zita Grover, "AIDS: Keywords," in *AIDS: Cultural Analysis/Cultural Activism*, Douglas Crimp, ed. (Cambridge, MA: MIT Press, 1999), 19–20.
[114] Paul Parish, "Bringing the body electric," *Bay Area Reporter*, December 10, 2009,

biomedical association between the virus and homosexuality, the gay dancing body in particular was targeted with this stigma as the materiality of his body—his blood, sweat, snot, and spit moving in relation to other bodies in rehearsal, on stage, and in the spaces between—brought AIDS into full relief. In the face of AIDS, then, the same male dancer that is traditionally a beacon for masculine order became "tantamount to death itself."[115]

By beginning *Surviving Love and Death* with a normative and healthy looking male dancer devoid of any visible bodily fluids, Bernd's choreography upended the unnecessary and inaccurate conflation between dancing and contagious bodies. Bernd presented his dancing body in angelic and controlled, seemingly fluidless form.[116] He tactically used his choreography and dance to sidestep the very stigma that these media came to signify. In so doing, Bernd's performance of masculinity through the wholeness, control, mastery, and physical strength of his opening scene did not just perform, but performatively re-appropriated the ideal heteronormative male body—the phallic body that was associated with health as opposed to the gay body associated with HIV/AIDS.[117]

Eventually, Bernd broke the calculated control of his chant and the normativity that it conveyed to scream, "So get out!" In a severe tone, Bernd exclaimed, "You have something in you…we don't know how," presumably referring to the illness that his audience was aware had invaded his body. In this emotionally intense moment, Bernd revealed the physical tension that his illness imposed upon his body and himself. Bernd was distraught and frustrated, and his physicality reflected these feelings. His muscles were tense and his body stiff as he screamed. The dancing body expelled things when the artist erratically yelled, "So get out, so get out, SO GET OUT"; it was as if Bernd's shaking head prompted words to fall from his mouth. In contrast to the angelic chanting Bernd, this shaking body could have flicked sweat and spit into the audience. Bernd's performance was still that of a trained dancer—even his scream was clearly choreographed—but this shift in tone signified a physical discontent with his situation that exploded any stable performance of the phallic body and linked the choreographer's performance back to his abject identity as a gay man facing a blood virus.

In addition to the introduction of bodily fluids, Bernd's anger also triggered a shift

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http://ebar.com/arts/art_article.php?sec=dance&article=150.

[115] Gere, *how to make dances in an epidemic, 49.*

[116] Bernd was able to performatively employ the image of a non-contagious and powerful body in part because he was dancing before widespread understanding and fear of HIV/AIDS. In fact, he was in part able to differentiate himself from the epidemic because, despite his initial false diagnosis of GRID, doctors ultimately diagnosed him with a different virus.

[117] Catherine Waldby, *AIDS and the Body Politic: Biomedicine and Sexual Difference* (New York: Routledge, 1996), 13. AIDS scholar Catherine Waldby proposes the phallic body as an unattainable norm that the biomedical complex used to take any hope of wellness away from the gay man during the AIDS era : "… certain key scientific understandings about the nature of the HIV virus, of the disease and of its transmissions rely upon an unconscious idealisation of the phallic body, against which the infectious threat of other bodies is measured. The biomedical understanding of HIV transmission is focused around bodily boundaries and bodily permeability, whereas the idealized phallic body is effectively a prophylactic device."

in his relationship to his audience. While Bernd projected all of his energy out toward his audience in the beginning of the dance, he projected his physicality inward as his anger grew. Eventually a recording of Bernd's voice played over the sound system to contextualize the performer's shift in tone and address. "You have something in you…We don't know how," the recording played. This exploration made clear that when Bernd addressed his insides he moved in the context of his virus, but his use of the term "you" in the context of his stage performance also drew his audience into his story. "You" invoked the doctors speaking to Bernd, but the address also brought the audience into his story.

From the initial erratic shake of the head, the presence of bodily fluid on stage only grew. The slow increase in bodylines of Bernd's performance made his shift to the sweaty, spitting body feel all the more palpable. From this moment onward, *Surviving Love and Death* revolved around a narrative arc, beginning when Bernd was first admitted to the hospital for his virus, and continuing through his diagnosis, release from the hospital, and ongoing recovery. The end of his romantic relationship coincided with his recognition of the fragility of human life as he confronted an unknown virus, which was the ultimate focus of *Surviving Love and Death*.

Bernd moved back and forth between dancing and verbal narration to perform his story. When he narrated, Bernd sat in a chair that was pre-set downstage left and facing the audience. In a curious resemblance to the *Mr. Rogers' Neighborhood* opening titles, Bernd put on shoes and socks while he gazed into the eyes of his audience and explained his experience in a calm and informative tone. He recalled exchanges with his hospital roommate and the importance of securing a bed by the window. He explained how you don't get fresh fruit in the hospital, but then remembered how a friend brought a banana. He exclaimed a lighthearted, joyous, "OOOOoooo, a banana, sure!" Along with these mundane details that seemed to ground Bernd during his tumultuous time at the hospital, he was explicit about his medical situation and shared his doctors' prognosis, his lab results, and his own response to the hospital experience.

> So I was in the hospital. I was in there for a week. My guts had stopped bleeding… that's when they decided it wasn't the new gay cancer, that's when they decided it wasn't a form of hemophilia, that's when they decided it wasn't leukemia. They narrowed it down to a virus which they know nothing about.

From the point of diagnosis the inconclusiveness and unpredictability of Bernd's medical situation continued. "10,000, 100,000, 65,000," he chanted, recalling his platelet counts. "Up and then they went down." Bernd shared with his audience his doctor's inconclusive prognosis that "anything could happen." The platelet counts "could go up, they could go down, or they could stay the same." It was at that point that he left the hospital, resolved to "take control of this illness" and to return to work—to dance.

Dispersed throughout his verbal narration, Bernd's dance brought the disparate aspects of his journey together in an embodied practice. The pace was steady—not too slow and not too fast. He balanced in arabesque on his right leg while making a windmill shape with his arms. Bernd stepped out of the arabesque and made a presentational motion with his left arm that was reminiscent of a balletic gesture, but quickly moved through that moment and released his torso forward. He ran from downstage left to downstage right where he began a series leaps from one leg to the other that progressed into a modern dance release of the torso. Deep in a plié with his body hinged at the hips,

Bernd's head, neck, back, and arms hung buoyantly over his thighs. Sometimes, a release would rebound into a swirl around, with a step-ball-pivot to move his body around and around. One rotation led to another leap from one foot to the next, or Bernd would catch himself in a cycle of thirteen rotations before releasing out into another leap. From here, the dancer would start a variation on the same pattern again. Beginning stage right, moving stage left, and back again, Bernd traced the entire L-shaped stage, moving back and forth, releasing up and down, swirling around and around, and leaping from one foot to the next. As Bernd's dance sequence progressed, he began to take his body to the floor. A leap moved through a release, but rather than rebounding up into another leap or a turn, the dancer followed gravity down to the wooden stage and laid his body flat on its back. For a split second, Bernd stopped his motion and rested in prone position, but he quickly used his hands to propel his body to glide across the floor and back up to standing. The second time the dancer approached the floor he continued momentum through the prone position and into an inversion that carried him through to standing. Finally, toward the end of his sequence, Bernd's inversion completed a circle with a backward roll, a horizontal turn that again moved the dancer's body back to a vertical position.

Bernd's modern dance performance dialogued with the classicality of the first scene of *Surviving Love and Death*. For example, his release phrase included a classical arabesque and balletic presentational gesture. Rather than hold a steady arabesque with still arms, as a trained dancer like Bernd could do without much effort, however, he made a windmill motion with his arms that signaled precarity and lack of balance—as if the dancer had to use his arms and make a concerted effort to maintain centrality. Whenever he reached a classical gesture, however, he moved through it and into a modern release.

As a choreographer, Bernd diagnosed what would happen to his body in performance. His dance moved to the rhythm and fluctuation of his platelet counts. "Up and then they went down," Bernd explained of the counts before he leapt up and landed down, suspended up and released down, fell to the floor and lifted himself up. In the hospital, a dip in platelet counts produced more fear, anxiety, and uncertainty. Bernd used the embodied buoyancy of his dance technique to re-choreograph the medical ups and downs, highs and lows that determined his patient experience. Each choreographic release, or gravitational drop gained momentum for the next suspension. These drops were not tense or anxious. On the contrary, Bernd had to maintain a physical relaxation in order to allow his body to follow its momentum into the upswing. The ultimate release of physical tension into swoops and pliés cradled the distraught Bernd, swaying him back and forth and catching him before his body fell to the ground. The embrace of his moving body and the minimalist calm and order of the performance space seemed to protect him.

When Bernd's physical release did not upswing into suspension and instead fell to the floor, the ultimate drop to the lowest possible point did not result in stillness or metaphorical death, as it would have in the biomedical context. Instead, Bernd maintained physical relaxation and scooted across the floor, a place of focus for a dancer and dance practice that challenges the compulsory virtuosity of perpetual verticality. Later, he took his contact with the floor into inversion, turning the vertical rigidity of medical data on its head. Rather than giving into the inconclusive medical diagnosis and the power that data had over his well-being, Bernd pushed his body to figure creative approaches to his physical situation. His choreography illustrated how ups and downs in health can lead to sideways swirls and inverted suspensions. Just as Ouramdane's

inversions proposed a postcolonial relationship to hegemonic verticality, Bernd's dance transcribed queer biomedical spaces.

Unlike other AIDS choreographies, Bernd's *Surviving Love and Death* took on biomedical problems, explicitly naming doctors, his platelet counts, the hospital, and biotechnology, including his doses of specific medicine like Prednisone.[118] Bernd's phrasing around his relationship to his diagnosis underscored the power and politics of the biomedical institution over his body as doctors made decisions about his health: "they decided…they decided…they decided." This is a familiar scene to anyone who has spent extended time as a patient in the hospital. All of a sudden, the body becomes a test case, and the patient's agency is tabled for the sake of medical analysis and diagnosis. Of course, this shift in agency can and is designed to be life saving. But what happens when the responsible institution irresponsibly handles the ailing body? What happens when that institution fails to help make the body live, and instead stands idly by to let the body die? This was the case in the United States, where president Ronald Reagan did not even publically mention the virus until fall of 1985 and did not make his first public speech on the topic until spring of 1987—six years after Bernd's diagnosis. The body that is

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[118] Biomedicine and its technologies were of course implicated across AIDS choreography. Gere's analysis of body fluids in AIDS choreography is one good example of how HIV/AIDS is necessarily a biotechnological problem—whether or not it is explicitly named as such. For example, Gere analyses Keith Hennessey's *Saliva* (1989) and Jim Self's *Sanctuary: Ramona and Wolfgang Work for a Cure* (1993). These two dances in no way named or explicitly addressed technology or the biomedical complex, but both seminal (pun intended) performances dealt explicitly with bodily fluid as a marker for contagion. As I will discuss later, contagion is at its core a biotechnological issue since the biomedical response to HIV/AIDS identified contagion as one central concern of the AIDS era that greatly influenced the cultural understanding of the virus and any stigma associated with certain bodies.

Another way that biotech was implicated in AIDS choreography was the impact that treatment or a lack thereof had on the body. Many choreographers and dancers used dance to understand the progressive physical impact of the AIDS virus. Most notably Ellen Bromberg and Douglas Rosenberg collaborated with dancer and choreographer John Henry, who was living with AIDS when they made the evening-length work *Signing Myself a Lullaby* from 1995–1996. Henry re-performs the piece live throughout his battle with AIDS, and video and slide documentation of the earlier work supplement his live performance as he grows unable to perform different sections of the choreography. This performance is a comparative documentation of Henry throughout the different stages of his journey with AIDS. Bernd's oeuvre fits into this tradition of AIDS choreography that explores the toll the illness takes on the body. Bernd continued to make work throughout his battle with AIDS and was much weaker in his later work, the illness having taken a toll on his youthfulness. The physical toll of AIDS was especially apparent in Bernd's final performance, a 1988 duet with Jennifer Monson titled "Two On the Lose." Bernd was visibly frail in the duet, his hair thin, and his movement severely restricted compared to the strong and nimble Monson. *Two on the Loose* (New York: PS 122, 1988), videocassette. Series 5. Video Recordings, Folder 238, John Bernd Papers, Houghton Library Theatre Collection.

deprived of treatment is left to die, thus illustrating Foucault's conception of biopolitics. As Foucault explains, "For a long time, one of the characteristic privileges of sovereign power was the right to decide life and death…. One might say that the nascent right to *take* life or *let* live was replaced by a power to *foster* life or *disallow* it to the point of death."[119]

In the first six years of the epidemic in New York City alone there were over ten thousand cases of HIV/AIDS and half of those cases had already resulted in death.[120] The politics of these stakes can be understood through a central demand of the activist organization working on to fight for the rights of People Living With AIDS (PWAs), ACT UP.[121] Their demand was: "drugs into bodies."[122] This slogan diagnosed a lack of access to HIV/AIDS treatment and medical information as one central problem with the AIDS epidemic. Further, activists fighting for the rights of PWAs identified the United States Food and Drug Administration (FDA) and the biomedical complex as primary obstacles. These were the institutions that held power and control over the scientific development of biotechnology to diagnose and treat HIV/AIDS.[123] Science theorist and

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[119] Michel Foucault, *The History of Sexuality: Vol. 1 An Introduction* (New York: Vintage Books, 1978), 135, 138.

[120] Mark Harrington, "AIDS Activists and People with AIDS: A Movement to Revolutionize Research and for Universal Access to Treatment," in *Tactical Biopolitics*, 325.

[121] In 1987, playwright Larry Kramer called for direct action to agitate politically on behalf of people with AIDS. His famous speech inspired activists to form the grassroots direct-action organization ACT UP (the AIDS Coalition To Unleash Power) in order to "accept responsibility" for HIV/AIDS and to actively "do something" about its outcome. Using the phrase: "All power is the willingness to accept responsibility," ACT UP jumpstarted start the AIDS movement and made strides for national action around HIV/AIDS as an epidemic. Larry Kramer quoted in in Mark Harrington, "AIDS Activists and People with AIDS," 325.

[122] David France, "Pictures From a Battlefield," *New York Magazine,* March 25, 2012, http://nymag.com/news/features/act-up-2012-4/; Harrington, "AIDS Activists and People with AIDS," 325–326. "Drugs into bodies" slogan takes hold as a bedrock goal of the AIDS movement. In 1987 the first anti-HIV drug, AZT (azidothymidine, zidovudine), was developed, but the prohibitive price of the drug—$10,000 per year—and limited supply incited public outrage and initiated what would be one bedrock focus of the AIDS movement: treatment. Rather than leaving their fate in the hands of the government and most specifically the Food and Drug Administration, PWAs and allied AIDS activists followed Kramer's call to mobilize and gain control of the virus. Harrington acknowledges that this approach did not satisfy everyone, as other issues including "collapsing health care systems, explosive epidemics among drug users, safer sex campaigns, rising numbers of homeless people with AIDS, and the gamut of federal, state, and local politics." Mark Harrington, "AIDS Activists and People with AIDS," 326.The fact that "drugs into bodies" rose to the top of this list illustrates how most people identified the biomedical complex as the central concern of the epidemic.

[123] Broadly defined, a biotechnology is a technology that has been developed using biological processes and/or components like cells and organisms. Since medicine as a

AIDS activist Paula Treichler explains how the biomedical establishment was not interested in AIDS when it was labeled a battle of the gay male. [124] This social stigma delayed biotechnological responses to this fast-moving epidemic. "Once the virus is no longer seen as symptomatic of a certain lifestyle," Treichler elucidates, "treatment plans progress more rapidly and gain legitimacy and prestige—characteristics related to funding and government support."[125] The FDA's slow pace and opaque process in the advancement of HIV/AIDS treatment—that same slow pace that leaves Bernd questioning the state of his health in 1981—was a negative biopolitical action, exercising the government's right to disallow life by impeding access to treatment.

Bernd's release choreography of moving up and down, swirling around and upside down corporeally reclaimed his agency over the limited up-down movement capacity of medical charting and tracking. The choreography itself was thus a biotechnology wherein Bernd produced an embodied biological approach to his virus. He used it to re-figure the biopolitics of the patient-provider relationship at a time when the provider had insufficient answers and treatment options for the patient. Bernd used the dancing body to address his illness in the same way that doctors would use biotechnology. Where there was a lack of existing biotechnology to address Bernd's physical predicament, he used dance to fill the gap left by the medical institution's failure to produce appropriate technology to keep his body alive. Bernd's choreography was not just a way to explore and present a queer perspective. Instead, it proposed and acted as an embodied queer biotechnology.[126]

Bernd's early 1981 impulse to use dance to combat the biopolitics of his virus was only the beginning. He performed a solo a mere two days after leaving the hospital in 1985; he used dance to thank his support staff inside of the hospital, and he even snuck out of his residence at New York University Hospital's Co-op Care Unit to perform a solo show at Parish Hall. Friend and dancer Ishmael Houston-Jones remembers Bernd taking a taxi from the hospital down Second Avenue and then getting a cab back up to the hospital where he successfully snuck back in.[127] One can imagine how Bernd must have staged an entire interventionist choreography just to avoid the institutional gaze of the hospital. In each of these circumstances, Bernd tactically staged dance to combat the effects of hospitalization, of being cooped up, and of losing his sense of identity as a trained male dancer.[128]

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field is directly connected to biology, medical technologies including drug therapies are biotechnological. Thus, the drug therapies at the center of the AIDS movement are biotechnological therapies developed and administered by the biomedical complex.

[124] Paula A. Treichler, "AIDS, Homophobia, and Biomedical Discourse: An Epidemic of Signification," in *AIDS: Cultural Analysis/Cultural Activism,* Douglas Crimp, ed. (Cambridge, MA: MIT Press, 1899), 60–62.

[125] Ibid., 50–51.

[126] For more on queer technology, see Zach Blas, "What is Queer Technology?" http://www.zachblas.info/publications_materials/whatisqueertechnology_zachblas_2006.pdf.

[127] Houston-Jones, "lost and found," 9.

[128] Bernd is clearly all consumed by the dance world in his early career. It permeates his living situations, eating habits, friendships, and love life. Dance and being a

Thus, while Bernd began *Surviving Love and Death* with normative masculinity to maintain access to his health, the artist's choreography eventually dismantled several assumptions. *Surviving Love and Death* punctured the assumption that the biomedical complex has the power—by way of biotechnology—to maintain that infected body. Bernd chose to reveal this side of the story only after presenting an angelic and steady physicality as if to acknowledge the powerful presence that the construct of the phallic body had on his situation and the social fabric of the time. Once he introduced that normative ideal into the narrative of *Surviving Love and Death,* Bernd's moment of frustration and distress then acknowledged that while the dance would try to performatively gain access to health, this control was not natural to the politics of the medical situation that Bernd was living. It was ultimately unstable and unattainable. Bernd's performance of emotional exasperation introduced the nuanced acknowledgement that a normative healthy body is "impossible to attain at the level of lived corporeality,"[129] issuing an evolving disability critique that would question bodily stability that exudes order and perfection. At the same time, the infected and contagious body is not devoid of order and perfection. Bernd performed this ambiguity with the choreographically controlled precarity of his release-based dance—his first gesture toward the queer biotechnology that he developed during the remainder of his dance.

A Danced Approach to the Biopolitical Stakes of HIV/AIDS

Bernd expressed an explicit desire to "take control" over his own health and find ways to get "stronger every step of the way" quite early on in *Surviving Love and Death.* I have already discussed how he achieved a sense of control first using his dance to physically access the phallic body and, therefore, health. Next, Bernd used his performance of release-based dance to choreographically refigure and, in a sense, control the directional capacity of his biology. It was this embodied movement between and around the aesthetic of stability, centrality, and control that Bernd's choreographic efforts directly prefigured a key premise of the AIDS movement and activism surrounding the AIDS crisis during the 1980s and 1990s. At the second AIDS Forum in Denver in 1983, a group of people with AIDS from around the United States met to establish an Advisory Committee and to outline the Denver Principles. The Denver Principles rejected the labels "victims" and "patients" that connote defeat and passivity in favor of the more simply descriptive label People With Aids (PWA).[130] Similar to Bernd's initial desire to choreographically manage his virus and patient identity, the Denver Principles recommended that PWAs be active participants in the diagnosis and treatment of AIDS and proposed that PWAs be involved "at every level of decision-making," serve on boards of provider organizations, and "be included in all AIDS forums with equal

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choreographer are all that Bernd talks about throughout his personal notes and correspondence and his identity is clearly deeply routed in his career as a dancer and choreographer. Section 3. Subject Files. Folder bms Thr 417 (38). Letters in Progress, 1977-1988, John Bernd Papers, Houghton Library Theatre Collection.

[129] Waldby, *AIDS and the Body Politic*, 13.

[130] Grover, "AIDS: Keywords," 26; Advisory committee of People With AIDS, "The Denver Principles," 1983, http://www.actupny.org/documents/Denver.html.

credibility as other participants, to share their own experiences and knowledge."[131] Similarly, while ACT UP used the "drugs into bodies" campaign to jumpstart government focus on HIV/AIDS and to combat any social stigma unfairly applied to the epidemic, the campaign was also a way to influence and regain control over the biomedical advancement of HIV/AIDS treatment and, ultimately, the bodies of PWAs.

While gaining control was a trend among activist communities, it is important to note that such action was not always the approach of AIDS art. Art historian and AIDS activist Douglas Crimp has critiqued the arts for taking "the scientific explanation and management of AIDS" for granted and for assuming "that cultural producers can respond to the epidemic in only two ways: by raising money for scientific research and service organizations or by creating works that express the human suffering and loss."[132] While Crimp was largely writing from a visual art world perspective, these two approaches to AIDS era art are consistent with trends in the dance world, a community directly effected by HIV/AIDS.[133] The uptown approach to the AIDS epidemic was to host benefits where companies such as the New York City Ballet would perform from their repertoire so that their wealthy patrons would donate to the cause. Meanwhile, downtown dancers, including Bernd, were creating new artistic forms to represent the virus, its physical and emotional impact, and its social stigma.[134] *Surviving Love and Death* thus preemptively responded to Crimp's critique.

Bernd's "focus on control over his body and his virus" only intensified as *Surviving Love and Death* came to a close. At a final turning point in the composition,

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[131] Grover provides an analysis of the term "victim" as it relates to PWAs in "AIDS: Keywords." Grover, "AIDS: Keywords," 28-30; "The Denver Principles."

[132] Douglas Crimp, "AIDS: Cultural Analysis/Cultural Activism," in *Melancholia and Moralism: Essays on AIDS and Queer Politics* (Cambridge, MA: MIT Press, 2002), 28.

[133] "The Estate Project for Artists with AIDS," http://www.artistswithaids.org/artforms../dance/index.html. The Estate Project for Artists with AIDS has a comprehensive dance archive that identifies "choreographers with AIDS, living and deceased, in the dance centers of New York, Los Angeles and San Francisco. The catalogue also identifies dance works created in response to the AIDS crisis, documents work created by choreographers with AIDS and makes recommendations for preservation. Biographical and contact information for these choreographers is included."

[134] Gere, *how to make dances in an epidemic,* 83. Gere gives an in-depth look at how the dance world dealt with HIV/AIDS in the 1980s. He contrasts ACT UP with the uptown dance community and explains, "In the late 1980s ACT UP's call to action existed in stark contrast to the rampant homophobia of mainstream dance artists, for whom the stigma of gayness and AIDS loomed large…" Downtown ACT UP was very well regarded, but the downtown dance scene was not necessarily participating in activism as a community. Bradley Ball made this point extremely clear in a press release from Dance Theater Workshop, who hosted the 1988 New York Dance and Performance Award, or "Bessie," that recognized ACT UP. Ball stated, "We've seen in the past few years very lovely benefits and very lovely memorials and very lovely mourning. Now it's time to get on…with focusing our rage and demanding some action." Bradley Ball quoted in Gere, *how to make dances in an epidemic*, 83.

Bernd echoed his earlier proclamation and repeated, "So, I've decided to take control of this illness. I've decided to take control of my life." At this point, Bernd walked downstage right to approach a table covered in cloth. Distinct from his first Romantic walk, this walk was more pedestrian; Bernd walked to get somewhere, not to perform walking. When he arrived at the table, Bernd removed the cloth to reveal a blender surrounded by several objects such as pill bottles and bananas. Standing behind what looked like a test kitchen, he began a lesson in an exaggerated yet serious instructional tone: "Now your health is a combination of three basic factors. Stress, your immediate environment, and what you eat. I decided to work on my diet." This statement garnered chuckles from the audience as Bernd plugged in a blender. He presented a silly scene, with the fast pace of a television infomercial and a dry response to absurdities that invoke a grammar school health lesson. The idea of using diet to cure a life-threatening virus seemed laughable—certainly before the contemporary era of organics and the wellness craze)—but Bernd was left with few options. He was not kidding.

Bernd's persona proceeded with life or death sternness, tinged with bracing humor. He presented a diet-based treatment concoction and the rationale for each of its ingredients. "Prednisone. Drugs. 60 mg a day. Starting with that. Quite a bit." Bernd counted his pills and added them to the blender. "Now these drugs have been known to create psychotic effects," he explained like a clinician routinely rehearsing the side effects of a drug. Bernd's emotional remove starkly contrasted his initial embodied and emotional overwhelm. The shift in tone signaled to the audience that Bernd was now wearing his scientist hat. "Mylanta," Bernd continued as he poured the medicine into the blender, "didn't know what it was until I took Prednisone, which dissolves stomach lining so you have to take something to protect stomach lining. If Mylanta coats the stomach, how do you assimilate minerals/vitamins? You have to reintroduce bacteria into your system." With exaggerated physicality Bernd picked up and taste tested a cup of yogurt. "Yogurt!" he exclaimed. "Now I use Brown Cow Yogurt. You can use any yogurt you want. It's alright, you know." The list continued with 5,000 Mg of Vitamin C three times a day. He explained, "I can't afford time release so I have to carry them around with me." Vitamin E, leafy greens, potassium, B vitamins—Bernd had a shtick and commentary for each of these ingredients. Finally, he concluded, "And never underestimate the power of the written word." The soloist tore paper from a pad and added that to the blender, too.

Rather than waiting for the medical institution to respond with further information about the state of his health or better treatment for his illness, John Bernd adopted a personal and holistic approach to his health—or what more recent language would call wellness. This amateur approach to medicine—his own treatment plan for his virus—supplemented the biomedical institution's ambiguous and inadequate care.

Bernd's DIY approach again foreshadowed future trends in AIDS activism. Crimp explains: "As anyone involved in the struggle against AIDS knows, we cannot afford to leave anything up to the 'experts.'"[135] By the late-nineteen eighties, medical researchers knew more about HIV/AIDS than they did when Bernd was diagnosed. The problem during these early moments of the HIV/AIDS epidemic was that bureaucratic red tape at the FDA delayed access to newly developed drug therapies and treatments.

[135] Crimp, "AIDS: Cultural Analysis/Cultural Activism," 32.

AIDS activist Mark Harrington remembers how names of drugs were "like numinous entities to us, remote and powerful, held back only by nameless bureaucratic forces which we were trying to name, summon, and defeat."[136] AIDS activists used medical research to empower PWAs and their friends and family to know more about drug trials and treatment options. This way, PWAs could better advocate for themselves when the medical institution did not offer adequate treatment options. By 1988, a sub-committee of ACT UP focused on "Treatment and Data." This committee compiled information about AIDS treatment and published a glossary of AIDS-related terms as a comprehensive document titled "A Glossary of AIDS Drug Trials, Testing and Treatment Issues."[137] As a result, Crimp notes, "Some of us have learned as much or more than most doctors about the complex medicine of AIDS."[138] This amateur approach to medical research and expertise provided the resources that PWAs could not find within the context of the medical institution.

At the time of Bernd's diagnosis, HIV/AIDS had not even been named let alone become treatable. Bernd did not have access to a support network or activist community, especially since he was not even initially diagnosed with GRID. The extreme dearth of information about his virus and its potential treatment forced Bernd to take a different approach to amateurism than those that were characteristic of ACT UP. ACT UP members were researching existing medical trials and drug options to increase awareness. Bernd preceded even the moment when there were multiple options to research. Faced with a lack of medical and scientific information, Bernd choreographed and performed what we can read as amateur pharmaceutical research. He mixed different ingredients together for a blended medicine meant to treat his virus. Bernd's amateurism was an extension of medical biotechnological development since his drink supplemented whatever drug therapy the medical institution prescribed. Bernd used Mylanta for his stomach lining and bacteria to replenish vitamins and minerals—all treatments that were developed from biotechnological research. Even his use of fruits and vegetables scientifically supplemented technologically-designed drugs like Prednisone.

Beyond scientific treatment, another part of Bernd's holistic plan relied on his own experience as a person living with a virus. AIDS activist Mark Harrington remembers how PWAs "deployed an expertise based on real-world lived experience with the disease against that of formal professional networks and institutions which were resisting changes."[139] Likewise, Bernd applied real-world advice to his holistic treatment. He commented on the price of Vitamin C, for example, taking into account the socioeconomic strain of drug therapies. In another moment of real-world savvy, Bernd encouraged his audience to use whatever brand of yogurt they wanted. His most extreme holistic ingestible was the piece of paper that he crumpled to represent the written word. The paper itself had no medical value, but it represented a personal and spiritual component to Bernd's treatment plan. Importantly, the paper was no more or less important to Bernd's concoction than the scientifically justified Mylanta.

Bernd's nonchalant and everyday delivery of his holistic approach, complete with

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[136] Harrington, "AIDS Activists and People with AIDS," 323.
[137] Ibid., 327.
[138] Douglas Crimp, "Mourning and Militancy," in *Melancholia and Moralism*, 145.
[139] Harrington, "AIDS Activists and People with AIDS," 323.

a casual and almost indulgent finger taste test, made clear that he was sharing actual real-world information. Bernd was wearing his scientist cap and spoke in an instructional tone throughout the blender sequence, but this was no doctor in a doctor's office. Instead, it was grassroots instruction that complemented the tenor of the experimental arts world. Bernd's pragmatism and instructional mode of address was similar to ACT UP's "Glossary of AIDS" publication. He was learning information about how to treat his virus and sharing his knowledge with his community, the downtown dance community.

After his moment with the blender, Bernd surprised his audience with one final cheeky nod to real-world expertise. He pulled out a can of beer to hoots and hollers from around his excited audience. "And then sometimes you gotta have it," Bernd casually conceded, buoyed by the crowd's clamor. He broke his instructional tone for this final public service announcement: "You have to follow your intuition; this whole thing is about intuition. And if it says that's what you want then don't fight it. Don't fight it. Go ahead. Alright!" The artist pled with his audience, "…don't fight it. Don't fight it. Go ahead. Alright!" That fighting spirit has been carried into the discourse of patient care.

Waldby argues that the biomedical complex used technology to work upon, intervene in, and transform bodies in a "fight against AIDS" that disempowered PWAs. She recognizes how even the biomedical complex's naming of the epidemic as a "fight" displaced any need or room for political opposition to biomedicine. It placed biomedicine at one end of the fight and the virus at the other.[140] This is the reason that, as science theorist Paula Treichler explains, any challenge of biomedicine or re-working of the "fight" to incorporate PWAs "required considerable tenacity and courage from people dependent in the AIDS crisis upon science and medicine for protection, care, and the possibility of cure."[141] While Bernd's plea "don't fight it, don't fight it" came before the "fight against AIDS" phrase was coined, it acted as a precursor and prophecy of future movements of biopolitical resistance to the medical complex. Despite the high stakes of challenging the biomedical institution, Bernd's blended concoction promoted a non-traditional approach to medicine. In this approach, Bernd reconfigured and re-routed the proverbial "fight."

Bernd's beer can dance proposed a nuanced approach to the biopolitics of medicine, one that advocated for a "giving in" alongside the quest for control of one's health; it required strength in the face of illness, fear of mortality, and the ambiguities of the biomedical complex. Rather than promote a binary approach to biopolitics in which there is life and death, strength and weakness, or victim and oppressor, Bernd instead proposed an approach that empowered the physical control and needs of a patient, sometimes giving in to personal intuition over medical recommendation.

At this point in his choreography, Bernd's physicality was incredibly relaxed. He effortlessly raised his arm to toast without any energetic punctuation. His hand did not reach too high, but instead stopped casually around the height of his brow. As he chanted, his arm swung calmly with his words. "Don't fight it…," his arm swung right, "…don't fight it…," his arm swung back left. The swinging of the arm mimicked the buoyant cradling of his early release-based dance, but this time was executed without any trained mastery. There was no rehearsed precision in this choreography. Instead, Bernd was

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[140] Waldby, *AIDS and the Body Politic,* 3, 5.

[141] Treichler, "AIDS, Homophobia, and Biomedical Discourse," 40.

going with the flow. Bernd's words also took a less authoritative tone. He concluded with an "Alright!" that felt less like a pat on the back in a "win fight" situation, and more like a participatory call that acknowledged camaraderie between himself and his audience.

Bernd's relaxed approach did not negate his carefully constructed control over his virus. His "don't fight it" comes only after an appropriation of heteronormative masculinity, physically demanding choreography that situated Bernd's dance as a queer biotechnology, and a foray into amateur pharmaceuticals. Bernd's laissez-faire concession situates his agency as an embrace of non-hierarchical control. His control was control over himself, and he encouraged his audience to take control over themselves, as well. He told them that they don't have to use Brown Cow yogurt, for example, they can use whatever brand they please.

Finally, working within this empowered but perpetually embedded model of agency, Bernd concluded *Surviving Love and Death* with a return to fluids. He looked down into the blender, purposefully grabbed it with both hands, and performatively drank his medicine. Bernd's drinking action foregrounded the materiality of HIV/AIDS biopolitics and biotechnology. This time, in addition to the materiality of the body, Bernd added material medicine to the mix. Bernd's pharmaceutical development became cellular as soon as it touched his lips; bodily fluids mixed with amateur medical fluids to complete Bernd's own biotechnological intervention.

At this point in Bernd's composition, he had complicated what it means to "take control," and this phrase had changed in meaning from his first angelic performance of the walk-clap sequence. Bernd's more contextualized expression of "control" went beyond the appropriation of masculinity and the eventual diversion from that subjectivity toward a queer expression of identity. Now, control signified a queer biotechnological relationship between body, technology, and institution. Bernd's performance reveals how the biotechnological problem at the center of the AIDS crisis has always been a corporeal one. When patients ingest pills, are connected to an IV drip and blood infusions, or undergo intravenous treatments, medical biotechnologies like new drug treatments materially and biologically affect the body. Bernd acknowledges the physicality of these technologies and brings the biopolitics of biotechnology onto his body and into the performance space.

Applying Bernd's Queer Biotechnology

While *Surviving Love and Death* represents an early moment in the AIDS era, HIV/AIDS is still a global epidemic requiring attention and advocacy. As Douglas Crimp laments, the AIDS epidemic is "merely a permanent disaster."[142] Today, adequate treatment for HIV exists and, given adequate resources, can be readily accessed. However, there are inequities in access to early detection and treatment based on income and geographical location. Thus, the biotechnological quest to lower the cost and increase distribution of HIV/AIDS treatment continues.[143] Progress in this arena is dependent upon advancements in pharmaceutical research, which remains an industry driven

[142] Douglas Crimp. "Right on, Girlfriend!" in *Melancholia and Moralism*, 175.
[143] Crimp addresses the contemporary stakes of HIV/AIDS activism in the introduction to *Melancholia and Moralism: Essays on AIDS and Queer Politics*, particularly in his Introduction and in the essay "Right on, Girlfriend!"

primarily by profit as opposed to patient advocacy.[144]

To recall my opening evocation of biomedical sciences in the contemporary era, it remains important to incorporate sexuality, race, gender identity, and class privilege in the quest for better treatment and easier access—especially since access to medicine remains a top concern of the global HIV/AIDS crisis. John Bernd's early articulation of an embodied queer biotechnology illustrates how bodies and their identities already are at the center of what Fernandez and Rafferty lament are bodiless scientific realities. A biotechnological reading of *Surviving Love and Death* illustrates a solution to their critique of bioart and bio-sciences. This chapter sought to illustrate how an expanded concept of "technology" can help us track experiments in biopolitical choreography. By joining choreography and AIDS activism to performativity gain access to health and biomedicine, we find a cocktail that corporeally address technical problems and proposes embodied approaches to technology, one that creates spaces for new technical futures.

[144] Crimp shares an in depth analysis of contemporary AIDS movement politics in the introduction to his collection of essays, *Melancholia and Moralism: Essays on AIDS and Queer Politics* (Cambridge: The MIT Press, 2002).

Chapter 4: **Embodying Electronic Disturbance Across the Mexican-US Border**

Artist collective Electronic Disturbance Theater's Transborder Immigrant Tool (TBT) is like an app for inexpensive Motorola i455 cell phones. The program is designed to aid those attempting to illegally cross the Mexico-US border by directing them toward water sources to prevent dehydration—one of the leading causes of death among those navigating the borderlands. To accomplish this, the TBT takes advantage of and interfaces with preexisting desert resources provided by activist and aid NGOs such as Water Station Inc. and Border Angels. These organizations place barrels of water throughout the desert surrounding the Mexico-US border. Since dehydration causes disorientation, it can be difficult for border crossers to locate resources when they are most crucial. The Transborder Immigrant Tool addresses this problem. When a user turns on the phone, the application provides a list of preexisting water sources. A user can then select the nearest location and, based on GPS data, the phone displays a compass icon that navigates users toward water (see figure 12). The phone vibrates to tactilely alert a user when their direction matches that of a blue water barrel. Unlike the mobile GPS unit that one would find in more contemporary smartphones, these Motorola phones are relatively inexpensive. They do not require cellular services and hence cannot be tracked by border patrol.

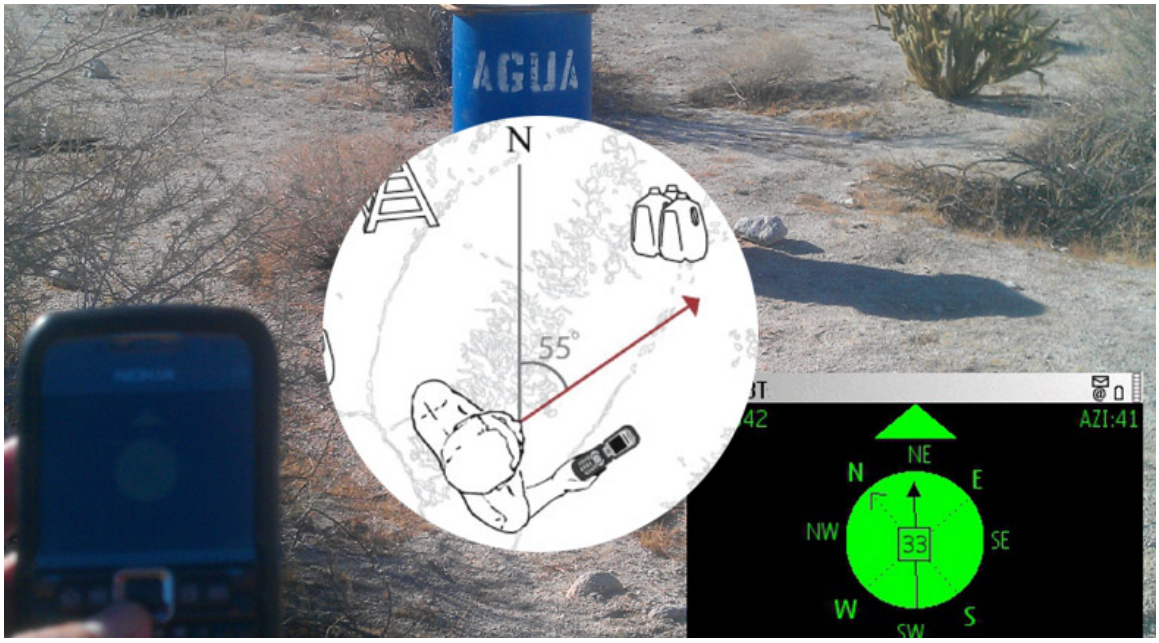

Figure 12. *Transborder Immigrant Tool.* LA.replay. http://www.lareplay.net/projects/the-transborder-immigrant-tool/

In this last chapter of *Choreography in the Digital Era*, I extend Ouramdane's discussion of borders and international networking to analyze The Electronic Disturbance Theater's Transborder Immigrant Tool. The TBT project proposes a prototype for new technology that addresses the choreographic call for embodied and movement-based digital futures issued by artists like Childs, Ouramdane, and Bernd. A person's individual embodied experience moving through space, drinking water, and being with the land is

integral to the TBT technology. TBT addresses the expanded notion of technology that Lucinda Childs performs with her posthuman feminism in *9 Evenings,* that Ouramdane creates with his physical interactions with the wire in *Far…,* and that John Bernd enacts with his amateur biomedicine in *Surviving Love and Death*. In addition to forging an expanded notion of technology that incorporates the body, TBT takes this project one step further to also expand notions of choreography. While TBT is typically read as a street theater project, I propose that a choreographic reading of the work clarifies TBT's use of embodied movement to disrupt government portrayals of dehumanized, impermeable, and immobile borderlands. It illustrates how the method that I have theorized through the work of Childs, Ouramdane, and Bernd can be applied to technical projects outside of "dance." This wider application extends the political efficacy of the embodied approach to digitality that I have argued for throughout this dissertation.

I read TBT choreography as intervening in two related domains. First, it aids those attempting to cross the border and brings international awareness to the plight of the border crosser. These interventions importantly humanize the border crosser's journey and advocate for their position. Second, the project proposes a method for embodied locative media, complicating ordinary uses for these technologies and providing a model for using technology that is better suited to account for minority perspective. While TBT's content is importantly specific to the Mexico-US border and cannot be applied to other spaces, the technological services at play could be transferred to other border contexts.

"Safety Devices as Artwork"

The Transborder Immigrant Tool simultaneously performs the function of safety device and artistic project. The Electronic Disturbance Theater (EDT) created the tool to be used when navigating the treacherous Sonoran desert—the largest North American desert at 100,000 square miles where temperatures can reach 118 degrees Fahrenheit. When safer and more developed areas in the borderlands are under heavy United States surveillance, border crossers will escape government capture by seeking refuge and approaching the border from this environmentally treacherous but less surveyed desert. The increasing number of fatalities around the Mexico-US border reflects the influx of migration patterns through the desert. This number is reflective of the severity of penalties that immigrants attempting to illegally cross the border face when captured by border control: immediate arrest and deportation.[145] While migrants who move through the surveyed regions of the borderlands risk capture, their diversion from this path forces them to face the more dangerous and deadly conditions of the desert.

While TBT incorporates the work of activist organizations and participates in their safety efforts to aid people in the desert, EDT places an artistic frame on this project. The group is an artist collective established by performance artist Ricardo Dominguez in 1997 and based at Dominguez's b.a.n.g. lab at the University of California, San Diego. The collective consists of cyber activists, performance artists, and critical theorists who "engage in the development of both the theory and practice of non-violent

[145] Nigel Duara, "Why border crossings are down but deaths are up in brutal Arizona desert," *Los Angeles Times,* October 27, 2015, http://www.latimes.com/nation/la-na-ff-immigrant-border-deaths-20151021-story.html.

acts of defiance across and between digital and non-digital spaces."[146] Current members of the collective, Brett Stalbaum, Amy Sara Carroll, Elle Mehrmand, Micha Cárdenas, and Ricardo Dominguez, refer to themselves as Electronic Disturbance Theater 2.0.

The artistic goals of the EDT collective directly interface with the Transborder Immigrant Tool's safety dimensions. EDT 2.0 member Micha Cárdenas describes the TBT project as "safety devices as artwork."[147] The Transborder Immigrant Tool is typically identified as a theater project with activist intentions. EDT works between traditions of radical street theater, recombinant theater, and theater of the oppressed; in this interdisciplinary formation, theater and politics take to the street as participatory and performative practices.[148] Sergio Delgado Moya recognizes how TBT conceives of place and space as "envisioned under the terms of the theatrical, of the stage, in a constant play on the various meanings of 'stage' (theater stage, stage of the political, battle stage, etc.)."[149] For example, EDT's coalescing of body, phone, and desert with through this choreographic technological tool enacts a performative place. These three elements work together to enable TBT users to participate in the project of personal sustenance. The user navigates the body, phone, and desert at different moments in their performance such that all are the stage for the theatrics of TBT. This ever-transforming place of performance is reminiscent of Critical Art Ensemble's suggestion that recombinant theater "consists of

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[146] "Electronic Disturbance Theater," *Wikipedia,* accessed December 19, 2015, https://en.wikipedia.org/wiki/Electronic_Disturbance_Theater. The Electronic Disturbance Theater is known for their work using the Internet for artistic activism. In 1998, the group developed a computer program that would allow users to automatically re-load a website, thereby slowing its server and ultimately crashing the site. The group directed this action toward the websites representing Mexican President Ernesto Zedillo and American President Bill Clinton. The aim of the action was to bring attention to the Zapatista Army of National Liberation, allowing their voices to be heard after an attack on the small village of Acteal in Chiapas, Mexico. The group again applied similar tactics in actions against the World Trade Organization, Medicaid cuts, and, most recently, the president of the University of California. EDT conceptualizes their virtual sit-ins as a type of virtual "street" theater, where virtual protest enacts performative activism.

[147] Micha Cárdenas, "The Transborder Immigrant Tool / L'outil transfrontière pour la migrant: la science d l'opprimè," YouTube video of talk delivered January 10, 2013, uploaded by "AntiAtlas of borders," May 7, 2014, https://www.youtube.com/watch?v=cL1uqN1tepk.

[148] See Augusto Boal, *Theatre of the Oppressed*, Charles A. and Maria-Odilia Leal McBride, trans (New York: Theatre Communications Group, 1979); Critical Art Ensemble, *Digital Resistance*: *Explorations in Tactical Media* (New York: Autonomedia, 2001); and Baz Kershaw, *The Politics of Performance: Radical Theatre as Cultural Intervention* (New York: Routledge, 1992).

[149] Sergio Delgado Moya, "A Theater of Displacement: Staging Activism, Poetry, and Migration through a Transborder Immigrant Tool," in *The Internet as Contestatory Medium,* ed. Hilda Chacón (Newcastle, U.K.: Cambridge Scholars Publishing, Forthcoming), 3.

interwoven performative environments through which participants may flow."[150] In the case of the TBT, these environments are phone, desert land, and body.

The theatrical and performance elements of EDT consist of satirical aesthetics. For example, Dominguez describes TBT as an exercise in American hospitality that he compares to the Statue of Liberty.[151] He suggests that the cell phone device mimics the Statue of Liberty's torch as a guide for immigrants entering the United States. The undertone of this comparison is satirically critical of the United States for their extreme lack of hospitality toward Mexican immigrants, despite the supposed national pride over the "melting pot" myth and immigrant histories.

To extend the "hospitality" of the Transborder Immigrant Tool beyond the mere biological sustenance of water—and to enact a more diverse aesthetics of care—TBT uses the phone GPS to guide users toward aesthetically rich landscapes and provides them with poetry played over the cell phone speakers. In a companion play to the TBT project titled *Sustenance: A Play for All Trans [ ] Borders*, the EDT collective asks, "What constitutes sustenance?" In answering this question, they pledge to acknowledge the dehydration, disorientation, and sun exposure obstacles of the desert, which they clearly address with the water navigation capability of the TBT software. But they also pledge to remember how "the aesthetic, too, sustains," hence their inclusion of landscape and poetry in their work.[152]

Directing users toward landscape in addition to water barrels is meant to facilitate artistic experiences with the land that is characteristic of American landscape paintings. This feature of the tool encourages the migrant to enjoy his or her journey. Again satirically drawing a parallel between the journey of the immigrant and American culture, Dominguez explains how he hopes that the border crosser can have a sublime experience with the land reminiscent of those experienced by the Hudson School painters. He imagines those using TBT as collectively participating in what he calls a "mass dessert painting" with their movement paths between water barrels and landscape destinations.[153] Characteristic of EDT's tone, this parallel is simultaneously ironic and earnest. It is ironic because the border crosser's journey is a life-threatening trip imposed by American values—the same values that Dominguez redirects as aesthetically enriching. Dominguez does make this point in earnest, however, seeing as EDT genuinely seeks to create a device that sustains and, therefore, improves the experience of the precarious, stigmatized border crosser.

While satirical aesthetics and safety infrastructures of the TBT are characteristic of EDT's practice, unique to this work are the choreographic scores embedded in the theatrical project. The first score is GPS-driven directional movement toward barrels and

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[150] Critical Art Ensemble, *Digital Resistance*, 96. This connection between the work of CAE and EDT is not surprising given Dominguez's own involvement with the Critical Art Ensemble.

[151] Ricardo Dominguez as quoted in Richard Marosi, "UC San Diego professor who studies disobedience gains followers—and investigators," *Los Angeles Times,* May 7, 2010. http://articles.latimes.com/2010/may/07/local/la-me-ucsd-professor-20100507-53.

[152] Electronic Disturbance Theater/b.a.n.g. lab, *Sustenance: A Play for All Trans [ ] Borders* (New York: Printed Matter, 2010).

[153] Richard Marosi," UC San Diego Professor."

landscapes. Following Susan Leigh Foster's definition of choreography as "the structuring of movement in highly diverse occasions, yet always where some kind of order is desired to regulate that movement,"[154] it is clear that EDT uses the GPS to guide, or choreograph, users' movement through the desert. This is where we can begin to see a choreographic application of embodied media in a space beyond what might typically be defined as "dance." This categorization becomes clear if we situate TBT alongside artists within the dance canon. TBT is reminiscent of distance dances by choreographers such as Deborah Hay and Remi Charlip, who write pictorial and linguistic instructions for moving and mail them to dancers to learn and perform without the physical presence of the choreographer. My own work using digital tools to compose a dance with distance technology interrogates similar questions about space, time, and choreography. These projects pose conceptual questions about the ability for movement to travel across space and time, and about whether the live presence of a choreographer is necessary for the creation of a dance. They also play with methods for notating dance to communicate movement. The GPS mapping used in TBT becomes a dance notation, directing movement toward water and landscape.

Dominguez's characterization of this movement as a "mass desert painting" illustrates how he thinks of the border crosser's choreography as an aesthetic practice. His description conjures images of bodies painting space, leaving artistic traces with their movement. This focus on movement trace is similar to work by choreographers such as Trisha Brown, William Forsythe, Shen Wei, and Leisa Trubat, who have experimented with similar ideas about bodies painting space. In *It's A Draw* (2002), Trisha Brown holds charcoal crayons between her fingers and toes as she improvises movement on top of a large swath of paper. William Forsythe dances on a large piece of paper in *Retranslation/Last Unfinished Portrait (Francis Bacon)* (2006); writing instruments are attached to Forsythe's body as he uses his movement and dance to recreate artist Francis Bacon's final unfinished self-portrait. The artist explores similar methods in his *Improvisation Technologies DVD* (1994) and his *Synchronous Objects* (2008) collaboration with Nora Zuniga Shaw and Ohio State University. In these two examples, the trace of movement is digitally rendered in postproduction where digital lines illustrate the trace of a dancer's movement in a digital platform. Shen Wei asked his dancers to dip their socks in black paint before performing in his choreography for the 2008 Beijing Olympics opening ceremony and in his related stage performance *Connect Transfer II* (2008). While the dancers perform, their movements leave traces of black paint across the stage floor. Lesia Trubat uses interactive sensors to create similar digital effects in *E-TRACES.* She sews accelerometers to a pair of point shoes that track a dancer's movements across the studio. Sensor data becomes brush strokes that paint the traces of the dancer's movement in a digital video rendition of the piece. Each of these works conceptualize traces of movement in distinct ways, but they all use the body to sustain the ephemeral effects of dance with drawn or painted marks on a physical or digital surface. Like these choreographic projects, TBT facilitates a similar kind of painting with movement across the desert. By focusing on the trace as an artistic product, Dominguez distills the border crosser's journey as one of lasting movements.

The second choreographic score in the TBT project consists of the movement

[154] Foster, *Choreographing Empathy*, 15.

directions embedded in the final aesthetic layer of the project: the desert poems that incarnate the hospitality goals of the work. As TBT users move through the desert toward water and landscape, they are accompanied by instructive poems by Amy Sara Carroll that play over the cell phone speaker. One poem reads,

> Climb or walk in the morning. Rest midday beneath creosote bush or mesquite, insulating yourself from the superheated ground. Remember—even the sidewinder hovercrafts, the bulk of its body above the scalding sand as it leaves its trademark J—shaped tracks across the desert dunes.

Carroll's poems provide potentially life-saving information about shielding the body from the sun, another cause of dehydration in the desert. Delivered within the structure of the poem, Carroll's words provide both safety instructions and aesthetic sustenance.

Like the GPS content of the TBT, Carroll's poems are choreographic in nature. The poems provide movement directives such as climbing and walking. Carroll's practical safety suggestion to move in the morning also sets temporal parameters for the dance. While the constant directional pull of GPS mapping would choreographically invoke a constant path of movement in a specific direction, the poem's advice to rest midday places a rhythmic pause in the movement painting of the TBT user. Finally, shielding the body from scalding sand is an instruction that gestures toward shifts in body weight and brings the materiality of the body to the fore of the TBT project. While the GPS determines the movement path from water to landscape, establishing the general shape of movement paintings, the poem adds dynamic choreographic information. The more delicate choreographic information embedded in Carroll's poems gesture toward a relationship between biological necessity and nature that brings the individuality of each user into the work. Each person's relationship to the sand, the heat, and the sun will vary, and her directives accordingly leave space for the individuality of movement. The GPS is the for mass, and the poem is for the individual.

The poetic choreography of TBT creates space in the project for EDT to regulate movement toward an artistic project, but not impose it. The power dynamics inherent in EDT's role as choreographer are tempered by the focus on hospitality. EDT helps to determine the movement paths of border crossers from afar, but user agency is also important to this work. The border crosser can use the drop down menu of water caches to choose which water source they want to go toward, and Carroll's poems provide situational movement instructions that users can then apply when necessary based in their own somatic experience of the desert. Thus, while EDT uses TBT as a choreographic tool, they also embed user agency into their choreography.

Enacting Embodied Locative Media

One could wonder if the use of digital media in the Transborder Immigrant Tool project introduces a mediated distancing from embodiment that scholars like Philip Auslander propose are characteristic of media theater. In this case, TBT might fall prey to Foster's critique of locative media. She is concerned by the ways users of locative media exist in what she identifies as digitally deterritorialized transnational spaces, and subsequently wonders if is possible to use a cell phone to "provide [a] non-disembodied period of contact" for the user.[155] Similarly, media studies scholar Sherry Turkle is

[155] Foster, *Choreographing Empathy*, 196.

concerned that dedication to our devices dampens human connection. "We'd rather text than talk," she warns, suggesting that texting is necessarily less intimate than talking face to face.[156] Turkle's study is not exclusive to locative media, but these media and the social practices that they encourage—such as everyone having a personal handheld device on their person at all times—shape the parameters of herconclusion. Turkle proposes that texting, because of its digital remove from the body, is a less sufficient medium for creating intimacy than, for example, the telephone.

Foster analyses two contemporary artworks that, like the Transborder Immigrant Tool, rely heavily on the use of a cell phone to guide the viewer's movement: Rimini Protokoll's *Call Cutta in a Box* and Headlong Dance Theater's *Cell*. In *Cell*, which takes place in Philadelphia, performers use cell phones to direct audience members' movement through public spaces like sidewalks and parks. The performer conveys specific details about the viewers' surroundings, where they should go, and what to look at as planted performers unsuspectingly pass by as if they were pedestrians. Breaking with ordinary pedestrian movement, however, the performers burst into danced phrases or spontaneous conversations with the audience participant. In the trailer video for *Cell*, the actor voice on the phone directs the viewer to close her eyes while sitting on a park bench. "Please trust that I am watching and that you are perfectly safe," reassures the disembodied voice on the other end of the line. While the viewer cannot see the person on the phone, and does not know the location of her voice, or even whether she is really keeping watch, the viewer puts their safety in the hands of the phone operator as they sit, eyes closed, in a public park. The voice over the phone performs the role of surveillance that has become ubiquitous in contemporary society.

Foster critiques *Cell* as having a lack of corporeal empathy and, implied in that critique, embodiment. Empathy, here, is the goal of embodiment. It is what brought Ouramdane's audience into the story of his family's history. It is how Bernd drew his audience into his quest for health in the face of illness. For Foster, the mere presence of the body does not constitute the empathetic capacity of the body. Ouramdane and Bernd situated their live embodied presence in specific cultural, social, and historical circumstances. Foster recognizes how contexts like these help to foster the empathetic qualities of kinesthetic performance and cultivate an awareness of the body between performer and audience member. For Foster, without these qualities, *Far…* and *Surviving Love and Death* would have remained purely technological or scientific and lacked the personal and cultural specificity that is so central to understanding difference in digital culture. In the case of *Cell,* for example, the voice on the phone does not connect enough to the embodied experience of walking and talking on the phone, and how this experience relates specifically to the surrounding environment. For Foster, the aura of the phone detracts from the body and counteracts any possibility for empathetic experience in performance.

Both of the works that Foster critiques, however, differ from EDT's choreographic project. *Call Cutta* and *Cell* reflect and emulate systems of government, capitalist control and surveillance for the sake of criticism. These works reveal the other side of EDT's border choreography that comes from the choreographic elements that the

[156] Sherry Turkle, *Alone Together: Why We Expect More From Technology and Less from Each Other* (New York: Basic Books, 2011), 1.

government has already set into place. Where TBT's border choreography uses body movement for safety and aesthetics, the American government choreographs Mexico-US borderland movements in terms of stillness—the stillness of capture and of death. In 2005, the George W. Bush administration initiated the "Secure Border Initiative Network," or SBI*net*. The aim of this program, operated by Boeing, was to use sensor and camera technology to establish a "virtual fence" securing the southernmost border of the United States. While this wall was ultimately unsuccessful, and efforts were canceled in 2011, the aim of the project was to use movement sensors to detect and ultimately stop border movement. The failure of the SBI*net* project stalled the immediate implementation of these technologies at the border, but did not change the government's interest in border technology as a strategy. Government agents continue to attend an annual Border Security Expo where technology companies pitch new ideas, and Homeland Security officials share upcoming initiatives. Most recently, in his 2016 presidential campaign, Donald Trump has continued the rhetoric of the wall, producing hysteria with inaccurate yet vivid imagery of immigrants "pouring across the southern border."[157] In response, Trump has radically proposed building a physical wall to seal off the United States.

Whether virtual or material, the technological aim of static borders is to regulate and stop northern-flowing movement by the time it arrives at the southernmost border of the United States. Border maps often visualize this idea of the border wall with vertical arrows signaling migration paths north and stopping at clear, horizontal and impermeable lines representing the border. Adapting Foster's definition of choreography, US border policy regulates movement by choreographically halting it. Leading up to the border, Ramón Rivera-Servera and Harvey Young explain how the divider "motivates bodies to climb over, burrow under, or float across; and threatens physical harm through the inherent dangers of falling, drowning, or, perhaps worse, being caught and/or killed after arriving safely on the other side."[158] Similar to what William Forsythe calls a choreographic object, or an object that generates autonomous expressions of choreography without the presence of a body, the border and its surveillance technology call bodies into movement in a way that opposes, and might ultimately still, those bodies.[159] Dangerous border-driven choreographies are designed by the state to ultimately capture the body and arrest its intended movement.

The structures of *Cell* and *Call Cutta* use technology to perform surveillance that exercises power over an individual. The TBT project is similar to Ramón Rivera-Servera and Harvey Young's choreographic description of the border in that it draws attention to the oppressive choreographies of the state. To read them as indicative of all experiences with locative media suggests that all media have a universal impact regardless of

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[157] Donald Trump as quoted in Team Fix, "5th Republican Debate Transcript, Who said what and what it meant," *The Washington Post*, December 15, 2015, https://www.washingtonpost.com/news/the-fix/wp/2015/12/15/who-said-what-and-what-it-meant-the-fifth-gop-debate-annotated//

[158] Ramón Rivera-Servera and Harvey Young, "Introduction: Border Moves," in *Performance in the Borderlands,* Ramón Rivera-Servera and Harvey Young, eds. (New York: Palgrave Macmillan, 2011), 2.

[159] William Forsythe in *William Forsythe and the Practice of Choreography: It Starts From Any Point,* Steven Spier, ed. (New York: Routledge, 2011), 90.

situation or surrounding. This assumption is precisely what concerns Foster, but the tones of *Cell* and *Call Cutta* reveal that they are in fact not universal. *Cell* and *Call Cutta* reveal the specific ways that government surveillance technology oppresses embodiment.

In the case of both *Cell* and TBT, the viewer is asked to place their safety in the hands of the voices and information that come from a phone.[160] The two pieces differ from each other in the way that digital media interface with bodies and their environment. Foster laments how the phone experience in *Cell* illustrates the deterritorialization of space in digital culture; she analyzes how the viewer's attention is so fixed on the voice on the other end of the cell phone that the spaces surrounding them are all "equivalent to one another."[161] The directions have nothing to do with the needs of their body or surroundings, but instead relate to the desires of the cell phone operator. To exaggerate this effect, the voice on the other end of the phone is authoritative in tone and conveys the sense that the viewer's body is being surveyed. This is typical not only of government technology but also of GPS functions on a cell phone. A standard GPS treats one pathway on the phone's map as equivalent to the next. The user just follows the blue bubble on the screen to achieve the fastest and most efficient route to their destination, regardless of where that path leads them. TBT, on the other hand, provides an extremely specific and local experience. It prompts users to look up at their surroundings, feel the temperature of the sand underneath their feet, and the sun above their heads. The program provides users with tools to make qualitative choices based on present environmental conditions and user experiences. As I have explained, Carroll's poems leave space for personal reflection about individual biological imperatives and environmental conditions. Significantly, the tone of her poems is not directive as in the tone of the voice on the other end of the telephone in *Cell* and *Call Cutta*. Caroll's poems provide safety information in the form of choreographic parameters, but they do not tell the user what to do, or when to do it in real time. The agential capacity of the TBT technology's users is therefore greater than one experiences with most uses of top-down government surveillance. I propose that this agential capacity allows for greater kinesthetic awareness and, therefore, embodied empathy. It encourages the practicing of embodiment that media scholar Jason Farman argues is possible with locative media. Farman suggests that media like FaceTime are developed with the misguided impression that "the more sensory information we are given about our connection with someone, the more intimate our connection will be."[162] On the contrary, Farman notices how embodiment and, therefore, a sense of physical intimacy is not something to be experienced but something to be practiced. Given this, he proposes that "when we engage the process of enacting embodiment across media

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[160] The stakes of *Cell* are also much different from TBT, since the environmental conditions of a park in central Philadelphia are presumably less harsh than that of the desert lands. Of course, this assumption about the safety of the park can be complicated by the gun violence that plagues the United States. I am making my assumption based on the environment that I have observed in the performance video of *Cell,* which shows a peaceful and non-violent environment without visible police surveillance. The bodies in the video did not seem under visible duress or to fear for their safety.

[161] Foster, *Choreographing Empathy*, 193.

[162] Jason Farman, *Mobile Interface Theory: Embodied Space and Locative Media* (New York: Routledge, 2012), 21.

interfaces, we understand the inherent link between our practice of embodiment and the spaces bodies create."[163] TBT is designed for users to practice and enact this link. This practicing of embodiment produces what I think of as the project's embodied posthumanism, to invoke N. Katherine Hayles, directed toward creating a body-technology synergy in the Mexico-US borderlands.

We might liken the distinction between engagement with locative media in a piece like *Cell* and a project like TBT to Michel de Certeau's distinction between strategies and tactics. De Certeau defines strategy as the "calculus of fore-relationships which becomes possible when a subject of will and power (a proprietor, an enterprise, a city, a scientific institution) can be isolated from an 'environment.'"[164] The movement in *Cell* performs what de Certeau calls the strategy. The performer giving directions to the audience member over the cell phone has ultimate power over the situation, whereas the focus of the Transborder Immigrant Tool lies in the tactic:

> a tactic is a calculus which cannot contain a 'proper' (a spatial or institutional localization), nor thus on a borderline distinguishing the other as a visible totality. The place of a tactic belongs to the other. A tactic insinuates itself into the others' place, fragmentarily, without taking it over in its entirety, without being able to keep it at a distance.[165]

TBT uses flexible, user-oriented tactics to intervene in government strategy—the heightened surveillance along the safer paths across the border. The tool accomplishes this by engaging with technology in an embodied way that differentiates it from how the government uses the technology. The choreographic capacity of TBT is unique in its ability to digitally heighten awareness of embodiment—by way of directing potentially life-saving movement composition—and connection to the land—by way of engaging the incredibly specific and local context of the desert borderlands.

The Electronic Disturbance Theater allows the phone to call movement into being, to set the parameters for the choreography of the border crosser. This radically shifts the movement space of the borderlands, which would otherwise reflect movement toward, over, under, and around, the border. EDT thus choreographically shifts the ordering of the borderlands away from the border as choreographic object, and toward the phone as choreographic object. Unlike the choreography of state-sanctioned borders, TBT's aesthetically inspired choreographic scores—dance as a distance-based practice and dance as movement trace—commit the project to a technologically administered choreography that is moored in motion across space and time. Considering the stilling effect of the state regulated border, TBT's connection to motion has deeply political implications in the Mexico-US borderlands. The project refigures the body-technology relationship of the borderland from adversarial to collaborative; rather than opposing bodies to the intrusions of technological surveillance, TBT allows bodies to work *with* technology in a shared movement. It is this movement *with* that constitutes a posthuman relationship between body and technology. By performing a tactics of embodied posthumanism, one that technologically re-maps the politics of the borderlands to

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[163] Ibid.
[164] Michel de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1984), xix.
[165] Ibid.

humanize the immigrant, the TBT project answers Susan Foster's concerns about the empathic failures of locative media.

Radical Dancing

As I began to explain earlier, user experience is central to the danced resistance of the TBT project. While TBT redirects choreographic power over the borderlands from the government to EDT, this power remains in the hands of an American entity. EDT's politics are allied with the border crosser, but they nonetheless work from the privileged position of relative safety within the US. For the collective to determine the terms of the border crosser's movement paths is still to place a Western choreographic power over the body of the crosser. The group is able to at least complicate this power relationship with a focus on the perspective and experience of the border crosser. The ideological shift toward movement and TBT as choreographic object is one that, as I have explained, foregrounds the TBT user and his or her experience moving as the focus of the borderland dance. In *Sustenance*, EDT explains how "TBT acknowledges that truths are in bodies and languages, in the movement and growth of flesh in transition."[166] The collective's characterization of their technical project in terms of moving bodies as a marker of truth foregrounds the importance of the subjectivity of the user. While EDT wrote the poetic content and mapped the water sources and landscapes, they take their authorial voice out of TBT interactions and instead foreground the body and—through poetry—the individual interpretation or imagination of the user.

EDT shares authorial power not only with user choice, but also by letting the device guide and administer poetry. The artistic safety connection that EDT creates between device, body, and land establishes a cyborgian presence in the desert. "Wound in a spiral dance," as Donna Haraway famously characterizes the relationship between cyborgian technologies and bodies, the TBT user and its body move together to navigate and transform the politics and poetics of stillness in the borderlands. Thus, the subjective experience of the border crosser's body is as much if not more important to the work than EDT generated content.

Placing authorial weight on the body and its experience is reminiscent of Kent A. Ono's argument for what he calls a figural border that follows migrant bodies. Ono focuses on the spaces after the border crossing and draws attention to the ways migrants continue to be tracked and discriminated against in their homes, public spaces, and workplaces after they have successfully crossed the border.[167] Ono argues that border surveillance and the border itself follow and, therefore, *are* the body of the migrant. TBT illustrates how this logic not only continues after the crossing, but also precedes the border encounter. The border meets the body in the desert where bodies and their movements are tracked before they reach the borderline. By changing the definition of border as static object to border as a moving and therefore living body, TBT redefines the borderland landscape in terms of liveness and survival.

Rivera-Servera and Young anticipate the political ramifications of movement-

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[166] Electronic Disturbance Theater/b.a.n.g. lab, *Sustenance*.

[167] Kent A. Ono, "Borders That Travel: Matters of a Figural Border," in *Border Rhetorics: Citizenship and Identity on the US-Mexico Frontier,* D. Robert DeChaine, ed. (Tuscaloosa, The University of Alabama Press, 2012).

based interpretations of borders. "If movement defines the logic of the border," they explain, "then contemporary political strategy conceived relative to the perceived static structures of the state might fall short in its efficacy."[168] The ephemeral passing present quality of live body movement establishes a hybrid relationship to time and space, or a neither-here-nor-there-ness. Ephemerality literally makes space for a hybridity that Rita Raley notes is antithetical to static borders. Raley reflects how "no articulation of a space in between, of a third term, of any spatial or geometric metaphors of hybridity, can overcome the material fact of the new Iron Curtain."[169] The static border as choreographic object defines the body as a surveillable relational object existing either on one side or on the other side of the border, but never sustainably living and moving through, around, inside of, or beyond borderlands. As I have discussed, to define the choreography of the borderlands in terms of a static object like a border wall is to enable the imagined choreographic stillness of that border, a stillness that halts the ephemerality of the bodies moving around it and denies the lived realities created by its spatial transcendence. By focusing on movement through the desert, the body is able to navigate the spatio-temporal terrain of the border in terms of the passing present, or an ephemeral act that is slippery, always passing—and therefore more difficult to capture—and still in one moment in time, similar to the work of Rachid Ouramdane. For this reason, the dancing TBT user at least rhetorically and aesthetically evades the political control of the state.

Tracing Choreographic Impacts

Responses to the Transborder Immigrant Tool project directly illustrate the political efficacy of the TBT user's ephemeral movement. In 2010, Republican news anchor Glenn Beck caught wind of TBT and deemed the project "madness as we know it." On national television, Beck very seriously and solemnly condemned the work for being just as dangerous as terror groups in Iran and North Korea. Beck was concerned that the Electronic Disturbance Theater used state funding from the university to support the development of the TBT prototype. He recognized how, under these circumstances, the project coopted state resources to tactically disrupt its own border patrol projects. Beck was not the only one concerned. Other news outlets, including Fox News, also gave the story airtime. After these public condemnations, EDT swiftly received explicit and violent threats from the public for encouraging illegal immigration. Even more, in a formal letter to the University of California, San Diego, congress members Brian P. Bilbray, Duncan Hunter, and Darrell Issa cited TBT for using tax dollars "in an effort to actively help people subvert federal law." They also accused TBT of violating the Immigration and Nationality Act of 1965 by "encouraging aliens to illegally enter the United States, which is a felony" (see figure 13).[170]

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[168] Rivera-Servera and Young, *Performance in the Borderlands,* 3.
[169] Rita Raley, *Tactical Media* (Minneapolis: University of Minnesota Press, 2009), 37.
[170] Electronic Disturbance Theater/b.a.n.g. lab, *Sustenance*.

Figure 13. *Transborder Immigrant Tool performance intervention, 2008.* In "Poetry, Immigration and the FBI: The Transborder Immigrant Tool." Hyperallergic. July 23, 2012. http://hyperallergic.com/54678/poetry-immigration-and-the-fbi-the-transborder-immigrant-tool/

While negative press and government investigation were not without personal hardship for the members of the Electronic Disturbance Theater, the group welcomed the criticism. They posted Beck's broadcast to their website with the note: "PS: EDT is very happy to know from so many folks around the nativist U.S. communities that poetry still has the power to move and disturb the arcs of realities. (But we already knew that)."[171] Typical of the EDT, the collective directed parodic humor toward their adversaries, and continued the satirical tone of the TBT project.

The Electronic Disturbance Theater may have owned the uproar surrounding their work, and even incorporated it into the aesthetics of the project, but the government response to the project is somewhat puzzling. EDT does not hide its activist politics and, of course, the rhetoric of TBT is designed to help sustain people who are attempting to illegally cross the Mexican-US border. But as the outcome of the government investigation showed, EDT was innocent in the accusation that they were "encouraging aliens to illegally enter the United States." The goal of TBT was never to move bodies across borders. Choreographically, the project might even be seen to *divert* bodies from the government-defined border. Dominguez's imagery of bodies moving to paint the landscapes that they transcribe directs movement attention toward landscape and water. This combined with the movement specificity in Carroll's poems diverts the attention of the border crosser from the static state imagined border to a borderland dance. It directs attention to the present, ephemeral movement of the body as it relates to its surroundings and to its biological and aesthetic needs. Akin to Ono, the project redefines the border in terms of the body, and seeks to lead this body in choreography of landscape, desert trace, and safety-induced pause.

[171] Ricardo Dominguez, "TBT vs. Glenn Beck: Poetry Can Destroy the Nation," https://post.thing.net/node/3156.

While the Electronic Disturbance Theater created a prototype for TBT and successfully tested this prototype in the borderlands, the group has yet to widely produce and implement the tool as a safety device for those attempting to illegally cross the Mexico-US border. TBT code is free and available to the public with the intention that anyone navigating any borderland could take advantage of the tool, but the code does not currently contain everything that one needs to run the program. EDT designed this limitation so as to protect the project from state hacks.[172] Thus, even if TBT were to theoretically aide in illegal immigration, the extreme anger surrounding the project and government resources dedicated to shutting it down are not related to any actual cases of illegal border crossing.

What is it about the Transborder Immigrant Tool, then, that so furiously riles and enrages the Right? Since TBT was never put into widespread use at the border, the project remains theatrical rhetoric. Public anger with the project responds to the idea of the tool, the notion that someone would intend to help sustain bodies attempting illegal acts, and the rhetoric that there is value in this practice. As Beck quoted Dominguez, TBT is meant to provide American hospitality in and around the borderlands.[173] It is this hospitality, care, and dedication to sustenance that truly enrages.

What is at stake in the rhetorical shift of this project, then, is the way that TBT uses movement and choreography to humanize the border crosser. The state rhetoric surrounding "aliens" dehumanizes those attempting to cross the border. The public conception of stilled bodies—the inhuman mass as in Trump's imagery, or a disembodied arrow on maps about migration patterns—only add to the alienation of the border crosser. A person might be worthy of hospitality, but the inhuman alien is not. Cardenas acknowledges how even some less radical feedback on the TBT project illustrates the extreme dehumanization of the Mexican immigrant in the United States. This criticism questions the need for aesthetics in the desert, classifying them as a superfluous resource and going so far as to suggest that "it's so insulting that immigrants would want to hear poetry."[174] Cardenas explains, however, that this response is precisely indicative of a certain image that the American public has of the border crosser: hat the border crosser is not interested in art and does not have access to modern technology and resources. This is an image that EDT hopes to change with the TBT project. EDT would like to "imagine that everyone crossing the border has a GPS or a really nice CamelBak," an expensive hydration pack.[175] While this goal could be critiqued from a neoliberal perspective in that it is materialistic and plays into the capitalist tendencies of American culture, it might also be read as politically effective for precisely that reason. EDT's aim is to acknowledge that there is not as much of a difference between the border crosser and the privileged materialism of American culture as one might think—and their proposal is not too far off. Conversations with border patrol agents confirm that many of those attempting to cross the border already take advantage of GPS enabled devices.[176] Cell

[172] Cardenas, "The Transborder Immigrant Tool."
[173] Glenn Beck in Ricardo Dominguez, "TBT vs. Glenn Beck: Poetry Can Destroy the Nation," https://post.thing.net/node/3156.
[174] Cardenas, "The Transborder Immigrant Tool."
[175] Ibid.
[176] Ibid.

phones are becoming more prevalent at the border, where crossers post selfies and live updates to family and friends over Facebook.[177]

By advocating for the actual needs and desires of the border crosser, TBT is aligned with other efforts to humanize border crossing. One organizer of the *Mexico: Immigration Through The Lens* exhibition at the Instituto Cervantes, Raul Ramon, explains how his show uses photojournalism to "bring light to the human side of immigration—a hot policy arena that tends to ignore the social, cultural and emotional dimensions of the phenomenon."[178] True accounts of journeys across the border in books such as *Dead in Their Tracks: Crossing America's Desert Borderlands* by John Annerino and *The Devil's Highway: A True Story* by Luis Alberto Urrea acknowledge this dehumanization. Urrea's book uses poetry to aestheticize the practice of walking and add value to the border crossers' journey. Like Dominguez's metaphor of the American painter, walking as a poetic act toward salvation and self-discovery fits into a long tradition of American folklore around walked pilgrimage. Both Annerino and Urrea recount the difficult conditions that Young and Rivera-Servera also call attention to in their writing. They vividly describe desert conditions and the toll they take on the bodies and psyches of those attempting to illegally cross the border. Similarly, John Stobbe created a mural, *The Things They Carried: A Memorial to Lives Lost on the Border*, that visualized belongings of border crossers who lost their lives in their journey north.[179] Religious paraphernalia, stuffed animals, eyeglasses, and toothbrushes all illustrate the various types of comforts and necessities that immigrants bring on the trip north. All of these projects all give human life to those crossing the border, which ultimately disrupts the dependence of US border rhetoric on alienation and inhumanity.

The EDT project takes a similar approach by bringing aesthetic focus toward the living, breathing, and feeling border crosser who needs basic amenities like water and is also deserving of other sustenance such as aesthetic enjoyment. Its poetic and qualitative instructions for moving on sand toward water—its attention to inspiring vistas and unexpected sounds—thus challenge the notion that border crossing is a disembodied path; indeed, it challenges the idea of the border as static and impermeable by orienting the crosser from the cartographic birds-eye view to the environmental poetics of the ground below. The project draws focus to the live dynamics of border crossers moving through space; its poetics has political implications by placing value on the lives of those who cross.

TBT in the Gallery

Since the TBT project is not actually performed in the desert, the Electronic Disturbance Theater relies on other performative means to communicate their work to the

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[177] Jasmine Garsd, "Crossing the Border in the Age of the Selfie," *Fusion,* May 28, 2014, http://fusion.net/story/5773/crossing-the-border-in-the-age-of-the-selfie/.
[178] Raul Ramon, "The Side of Mexican Immigration That You Need To See," *Huffpost Impact,* October 22, 2015, http://www.huffingtonpost.com/raul-roman/side-of-mexican-immigration-that-you-need-to-see_b_8361908.html.
[179] Rhina Guidos, "Poster aims to humanize border crossers," *Catholic Courier,* August 15, 2014, http://www.catholiccourier.com/news/world-nation/poster-aims-to-humanize-border-crossers/.

American public—the target audience for the TBT project beyond the practical safety function of the device. One way of doing this was to let the media and government officials catch wind of the work. Another way that the EDT has enacted the rhetorical shift of the TBT is through gallery installations. The group uses the gallery to bring its disruptive choreography of aestheticized border crossings to exhibition spaces where they introduce the cyborgian system to a more general audience. The TBT project has been shown at The Queens Museum (2014), 2010 California Biennial (OCMA), Toronto Free Gallery, Canada (2011), "Cultural Hijack" at the Architectural Association School of Architecture, London (2013), as well as a number of other venues. Bringing the work from the space of the borderlands to the space of the gallery exaggerates the tension between TBT as a tactical device and the voyeuristic position of the American perspective.

In the TBT gallery installation, phones are displayed on a white gallery wall as if they were art objects (see figure 14). Each phone cycles through imagery of the GPS navigation icon and the aestheticized desert landscapes. Carroll's poems accompany the phone imagery, giving the gallery viewer an awareness of desert conditions and what it might entail to attempt to cross the desert—again furthering the humanization efforts central to the TBT project.

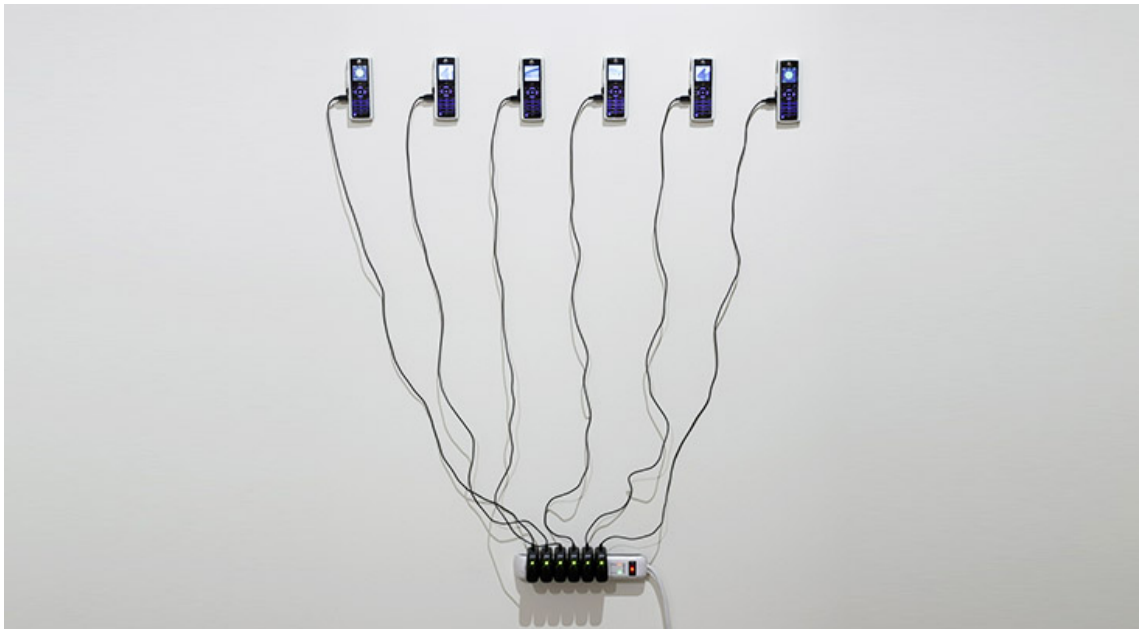

Figure 14. Transborder Immigrant Tool Installation. In "Border Art Research: Visible Borders, Invisible People, and the Transborder Immigrant Tool." http://blog.zkm.de/en/dialogue/border-art-research-visible-borders-invisible-people-transborder-immigrant-tool/

Placing their bodies in a similar relationship to the phone as the person crossing the border in the desert would, gallery viewers orient themselves to a border choreography distinct from that portrayed by mainstream media. While the use of the phone shifts from enabling disruptive movement in the desert to awareness of disruptive movement in the gallery, the aesthetic provocation of TBT remains the same. What is it to put your body in artistic contact with the idea of cell phone navigated border crossing?

What does it mean to approach a border from dynamic choreography rather than follow a straight path that ends at a static boundary?

It is important to note that while the TBT installation asks viewers to consider different ways of crossing the border, EDT set a clear distinction between the body of the person crossing the border and the body of the viewer. The TBT installation recognizes the stark difference between actually putting one's life in danger and considering the position of those who do from the safety of the white cube. For example, the TBT phone is fixed to the wall of the gallery. This means that while viewers might see the screen of of the device in a way that is similar to those who actually use the tool in the desert, they do not have the ability to pick it up, to feel the tactile feedback of a vibration when direction matches water, or to choose water sources. The viewer cannot follow the directions in the poetry because they are not in the desert. The inability to participate fully highlights the difference between the border crosser and the gallery viewer to reinforce the disparity in rights and resources between the two parties.

The gallery installation complicates the notion of empathetic embodiment by suggesting that, while embodied experience has a tactical capacity in the desert, it would distract from the particularity of the border crosser's experience in the gallery. For example, in *Border Crossing Beta 2.0* by Alfredo Salazar-Caro, the artist asks participants to use a gaming and augmented reality program to virtually navigate the borderlands as if they themselves were the border crosser. Salazar-Caro explains how, with his piece, he wanted to "communicate a feeling or an experience and maybe tell a sort of universal story."[180] Suggesting that the experience of crossing the border is a universal one that could be understood by an American audience with no actual experience crossing the border, however, is to forget the physical and psychic toll that the life-threatening conditions of the desert create. While users of Salazar-Caro's program might be virtually immersed in a simulated desert environment, they cannot feel the heat of the sun and the sand, or the thirst and disorientation of dehydration. The gallery viewer does not have the same agency in understanding the borderland experience, just as the border crosser does not have the same state-sanctioned agency as the typical American gallery viewer. This is a point that EDT makes clear in their fairly disembodied gallery experience.

Just as the TBT desert project shifts the border crosser's attention from moving toward the border sustaining the crosser's body and wellbeing, the gallery iteration of the project shifts the focus of the public from the border toward the crosser's body; it thus shifts focus from movement controlled by the state to movement controlled by the individual. This is an important shift because focus remains on the body of the border crosser and is never brought back to the body of the TBT gallery installation viewer. By placing emphasis on the movement experience of migrants, the project also humanizes them. We have seen how this use of choreographic focus to humanize has transgressive political implications in the context of the desert, and these implications are only extended in the gallery installation.

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[180] Alfredo Salazar-Caro quoted in Nathaniel Ainley, "Immersive Art Installation Makes You Cross the US-Mexico Border," *The Creators Project,* August 18, 2015, http://thecreatorsproject.vice.com/blog/immersive-art-installation-makes-you-cross-the-us-mexico-border.

Gallery audiences at these cosmopolitan venues likely consist of a certain privileged class of predominantly liberal viewers who are liable to be more sympathetic to the TBT project than Glenn Beck has been. Nonetheless, the majority of these viewers will have understandings of border crossing that have been mapped by American propaganda surrounding the topic. As I have discussed, this propaganda emphasizes the stilling of movement through surveillance, capture, and often death. Mapped visualizations of border crossings illustrate lines toward a border without humanizing the person enduring a life threatening a journey. Thus, at the most basic level, the simple fact that the TBT installation encourages viewers to bring their focus toward the experience of someone attempting to cross the border is radical.

While the installation seeks to humanize the borderland journey, it also plays with the politics of surveillance aesthetics. To stand and look at the TBT phone on a gallery wall is to watch and survey the borderland journey. The gallery visitor is thus simultaneously participating in a tactical approach to the border and re-inscribing the objectifying gaze of the American government on the project. EDT must be aware of this implication, after having thought so carefully about the implications of the impact that the technology and its surveillance capacity has on bodies and subjectivities. Moving the project to the gallery is necessary to keep the work going—it creates visibility by bringing the project to a wider audience and also helps raise funds for further development and implementation. By creating such a voyeuristic setup in the gallery, the Electronic Disturbance Theater acknowledges the difficult politics of the gallery situation and plays with the tension of surveillance and tactical movement.

Conclusion

The Electronic Disturbance Theater uses a choreographically informed model for street theater to analyze the socio-cultural implications of media production and surveillance at the Mexico-US border. They then use this analysis to shift the politics of the borderland with a new and transgressive theatrical technology. In so doing, they directly respond to tactical artist collective Critical Art Ensemble's critique of virtual theater for reinforcing "the worst elements of the disembodiment of the technocratic class for the sake of greater instrumentality."[181] The Critical Art Ensembles suggests that a focus on the body can redeem the possibility of a virtual theater:

> For the most part, virtual theater lacks all the redeeming characteristics of theatrical practice, whether they are resistant functions or just pleasurable social functions. The short answer to this problem is simply to argue that the body is still the key building block of theater, and that if performers are to drift into virtuality, they should find the means to develop feedback loops between the electronic and the organic.[182]

Adapting the techniques developed as part of the Critical Art Ensemble collective, Dominguez uses the body, its subjectivity, and its experience in the digital theatrical event toward the tactical resistance of state imposed borderland choreography. His model of posthumanism enacts the looping between the electronic (the phone) and the organic (the body, land, and water). While state surveillance projects a one-way communication system whereby the state imposes a politics and aesthetics upon the bodies of those

[181] Critical Art Ensemble, *Digital Resistance*, 104-105.
[182] Ibid.,108

crossing the border, TBT, on the other hand, creates a situation where the phone's instructions support the biological sustenance of the border crosser and enable that crosser to be able to carry out an aesthetic project of painting the land with movement. The body of the border crosser is a material necessity for the completion of the aesthetic project of EDT, just as EDT provides material for the biological project of being physically able to cross the border. The device and body are in a symbiotic relationship that loops back and forth until they create a desert painting that leads across the border. The Transborder Immigrant Tool thus illustrates a model for socially engaged digital theater that not only uses movement to recognize and analyze the impact that media have on bodies, liveness, and relationships, but also takes this model for digital theater one step further and uses it to enact social intervention.

While this is an incredibly effective tactic in the context of the Mexico-US border, it can also be applied to other borderland situations. An embodied practice of using locative media like the one that the Transborder Immigrant Tool promotes helps to articulate biological and affective identities in media contexts that combat the disembodying effect of surveillance technology.

Epilogue

Lucinda Childs, Rachid Ouramdane, John Bernd, and the Electronic Disturbance Theater all use choreography and dance to enact the digital existence that they desire; they each create a choreographic space in which to explore dynamic digital futures. While each project is distinct from the next, the four works together expand definitions of both technology and choreography such that each has more room for the other.

Lucinda Childs' physical performance of a mechanized aesthetic and John Bernd's material ingestion of amateur biomedicine both illustrate how technology can indeed be bodily. Childs and Bernd choreographed *Vehicle* and *Surviving Love and Death* before they could fully anticipate or understand the impact that engineering and biomedical communities would have on revolutionary digital technologies. Nonetheless, their early creative approaches to technologies were a prescient guide for re-thinking the relationship between dance and technology. Rather than remembering *Vehicle* solely for its collaborative model, or discounting Bernd from dance and technology histories altogether, my reading of these two choreographers situates their embodied practices at the center of conversations about this relationship. I hope that this opens the discussion to include more works like these in the canon, and to create more dialogue between the digital and critical theories of race, gender, and sexuality in dance.

The historical re-reading that I laid out for Childs and Bernd allows an entirely new perspective on works such as Rachid Ouramdane's *Far…,* one that incorporates a reading of the body and the wire as direct arbiters of a postcolonial critique of digital networks. And where Ouramdane uses his stage performance to propose postcolonial digital futures, the Electronic Disturbance Theater creates technology meant to produce the type of embodied resistance that Ouramdane dances.

The politics of EDT's work, which has never been read as a dance piece, are clarified through choreographic reading and close movement analysis. A choreographic analysis of the Transborder Immigrant Tool opens a dialogue for considering more rigorously the ways in which digital technology choreographs our movement. TBT, I argue, accounts for the choreographic capacity of media. In so doing, it also reveals the choreographies embedded in other technological structures. For example, in my reading of state-sanctioned surveillance technology, I discuss how borders and related surveillance technologies as cultural constructs are inherently choreographic in their investment in guiding—or halting—movement.

The cultural specificity that each artist brings to their respective projects challenges any universal sense of digital utopianism, and instead incorporates the digital into feminist critique, postcolonial critique, critical race theory, queer theory, and the politics of the border. Each of the choreographers that I analyze in this dissertation, including Loie Fuller and her early twentieth-century feminist Serpentine Dance, use movement as a method for process-based intervention into digital culture. Fuller and Childs both incorporated technologies into their dances to insert a female perspective within otherwise male engineering communities. Bernd used amateur medicine and his own dancing body to disrupt the power relations of patient-provider dynamics. Ouramdane used his choreography to assert a different spatial relation between his French-Algerian body and a wired world, thereby corporeally refiguring the dynamics of diasporic networks in the digital era. And EDT used the TBT to humanize the journey

north toward the Mexico-US border. The way that these artists have fused embodiment with culturally situated media carries the body into digital spaces and grounds the digital in bodily practice to advance a feedback loop of embodied posthumanism. The loop ensures that the digital cannot impose a universal effect, because it must be equipped to account for specific contextual information feeding back into the networked system.

As a scholar, I have a strong intellectual commitment to the relationship between theory and practice. This relationship has become central to *Choreography in the Digital Era.* In the midst of working on this dissertation, I was diagnosed with Acute Promeylocytic Leukemia. I underwent three years of intensive chemotherapy treatment and various other support therapies while researching and writing for this project. My experience fighting cancer directly impacted my thinking about the relationship between bodies and technology. Cancer treatment gave me a new perspective on my own embodied posthuman identity, which I had spent years exploring in my scholarship and choreography. My body became weak and too ill to work most days, but on those days I would experience an intense somatic relationship to myself. At certain points I could not distinguish between biotechnologically induced feelings and my own physical feelings. How is it that the technologies that were making me feel so sick, so close to death, led me to have the most acute awareness of my physicality and its relationship to the world? As a cancer patient, I lived the embodied posthumanism that I theorize in this dissertation.

Working on this project, I began to see shadows of my own experience of medicalized posthumanism in the work of my interlocutors. The evening after Yvonne Rainer performed in *9 Evenings* she was hospitalized for an illness. When she recalls *9 Evenings,* the deeply technological work is intimately tied to her own physical experience of illness and hospitalization. I wonder how the close proximity of these events impacted Rainer's experience of them. Frantz Fanon was fighting the very same leukemia as me when he was writing about the movement of colonialism that I cite in my chapter on Rachid Ouramdane. Fanon had to travel to the United States to gain access to medical treatment. I wonder if this impacted his thoughts on physicality and colonialism. ACT UP protested Memorial Sloan Kettering Cancer Center on 68th street in Manhattan for the hospital's discrimination of patients like John Bernd in the eighties. I attend this very same hospital for my own treatment and remember the politics of the institution each time I walk through the front door. Ricardo Dominguez and I have had therapeutic conversations about the relationship between my illness, my writing, and my own choreography. He has shared stories about his own ACT UP activism, and the connections that he, too, sees between the realms of illness, bioart, and tactical artistic activism.

Of course, it is dangerous to read too much into these connections. I would not want to perform the very universalism that I have tried to dismantle with this project. At the same time, the connections serve as a reminder that this work cannot be read without also looking outside of it. My own experience alongside the works that I analyze here suggests that, in addition to being read, this dissertation must also be practically applied and physically lived. One must look around and notice the varied impacts that technological design and dissemination have on the world around us.

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