Technoqueer: Re/Con/Figuring Posthuman Narratives

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ABSTRACT

Technoqueer: Re/Con/Figuring Posthuman Narratives

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This dissertation addresses the intersections of queer *and* technology to rethink the posthuman as raced, gendered, and queered as co-constituted through and by technology. Given technoculture's appropriation of queerness as yet another identity category subject to individualist manipulation and the near invisibility or silence of technology in queer theory, this dissertation theorizes the "technoqueer," building on the pioneering work of Donna Haraway's cyborg, Roseanne Allucquere Stone definition of the technosocial subject, Nina Wakeford's cyberqueer, Lisa Nakamura's cybertype, and N. Katherine Hayles on the posthuman. This project looks at cyberspace and bodyhacking technologies—real or imagined—to show how technology is never neutral or simply a tool. On the one hand, the metaphor of cyberspace and the reality of online "synthetic worlds" rely on ideologies of configurable identities, disembodiment, and freedom of exploration and expression. On the other hand, bodyhacking or the ability to shape, manipulate, enhance, and transform the body offers similar promises of escaping biological destiny, of self-improvement and self-fashioning, and possessive individuality. Given the popular narratives of technologies like the Internet, bionics, and gamification as liberating humanity from the prison of the "meat,"

this dissertation deploys a comparative study of literature, video games, and body modification technologies in order to articulate alternative readings of technologically-mediated race, gender, and sexuality foreclosed or overlooked by contemporary posthumanism. Looking to figures like Alan Turing or the *Bionic Woman* and looking at texts like William Gibson's *Neuromancer*, George Schuyler's *Black No More*, Blizzard's *World of Warcraft*, Irrational Games's *Bioshock*, and Zynga's Facebook game *Frontierville*, this project demonstrates the ways technology is imbricated with race, gender, and sexuality and how liberation from one set of embodiments or identities often means the stabilization or policing of others. The technoqueer then reveals and challenges the structures of the near ubiquity of technological mediation and penetration into twenty-first century life—the technonormative matrix—in order to theorize alternative futurities and embrace technoqueer worldmaking. It is through these technoqueer utopias that both queer theory and technoculture theory can continue to revitalize the intersectional formation of sex, gender, sexuality, race, and technology.

DEDICATION

To my mother, father, and sister

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Chapter One

The Technoqueer Manifesto

On September 10, 2009, the then British Prime Minister Gordon Brown issued a public apology[1] on behalf of the British government for the conviction and "horrifying" and "inhumane" treatment of Alan Turing, the now famed mathematician, code breaker, and first generation computer scientist. Turing is most known for his work on breaking the German Enigma codes during World War II. He is also well known as a forefather of modern computer science, particularly with his essay "Computing Machinery and Intelligence," where he posits the *universal machine* digital computer, the oft-cited Turing Test, and the provocation that machines can think. Unfortunately, all of Turing's brilliance, achievements, and technohistorical importance are overshadowed by another thing for which he is known: his homosexuality. In 1952, Turing was convicted of committing acts of "gross indecency" with a man and sentenced to chemical castration (rather than prison). Two years later, in

[1] Full text of the apology is archived here: http://webarchive.nationalarchives.gov.uk/+/number10.gov.uk/news/latest-news/2009/09/treatment-of-alan-turing-was-appalling-pm-20571.

1954, Turing committed suicide leaving behind an enigmatic syllogism in his suicide letter: "Turing believes machines think / Turing lies with men / Therefore machines do not think" (as qtd. in Leavitt 269). His belief in computer intelligence and his homosexuality made unlikely bedfellows, resulting in the fact that "most popular accounts of his work either fail to mention his homosexuality altogether or present it as a distasteful and ultimately tragic blot on an otherwise stellar career" (Leavitt 6). But it is this uncomfortable tension, this conflation of historical moment, technological innovation, and subversive sexuality that makes Turing emblematic of the *technoqueer*.

Alan Turing is emblematic of the technoqueer because the very intersections of his work on artificial intelligence and computer programming, his "public" life as a hero of the war effort and ostensibly respectable man, and his "private" life as a homosexual reveal the circuits of heteronormative power running through the dominant attitudes about sexuality and technology and the conservative politics of the time, both in England and the United States. His life, his work, and his embodiment—lived and performed, actual and perceived—are a mangle[2] of the ways that technology is both conceived of as a neutral tool and a inscrutable threat, particularly when confounded by and conflated with other threats like racial, gendered, and sexual difference. Turing's untimely entanglement in all things technoqueer can be read in the above syllogism of a poem. Biographer David Leavitt says, "His fear seems to have been that his homosexuality would be used not just against him but against his ideas. Nor was his choice of the rather antiquated biblical location 'to lie with' accidental: Turing was fully aware of the degree to which both his homosexuality and his belief in computer intelligence was a threat to religion" (5), to the status quo, and to normative definitions of what it means to be human. Another way to read the second line "Turing lies

[2] See Constance Steinkuehler's "The Mangle of Play."

with men," beyond the obvious sexual euphemism, is to use the alternative definition of "lies," meaning to not tell the truth, to hide the truth about his sexuality and his intellectual and technical beliefs. Both close readings evoke the erotic and discursive double-bind of the closet and reveal how language, bodies, desires, and technology are intimately intertwined. The irony here is that Turing did not take all of this lying down. Leavitt says, "For Turing—remarkably, given the era in which he came of age—seems to have taken it as a given that there was nothing at all *wrong* with being homosexual; more remarkably, this conviction came to inform even some of his most arcane mathematical writings" (5-6). In fact, as I will show, his essay "Computing Machinery and Intelligence" reveals Turing's meditations on gender, sexuality, even race; the essay's call for 'fair play' to machines "encoded a subtle critique of social norms that denied to another population—that of homosexual men and women—the right to a legitimate and legal existence" (Leavitt 5). Given Turing's gift for wordplay, might we reread the above three lines as encoded like a computer program with his sense of critique and irony? The first line states Turing's belief that machines can think. The second says, if taken in one literal sense, Turing lies *to* the men around him. Then, if the second line is true, the third line might be read as a lie, not a negation of the first line, but a rhetorical cloak and pointed dagger. It is this play, this sense of irreverence, this critical irony that is the hallmarks of the technoqueer.

The technoqueer is a powerful, polyvalent, and productively ambivalent[3] term. The technoqueer is critical, recombinative, replicative, resistant, and restructuring. It is intersectional and parallel, co-constitutive and sedimented. Like its antecedents—the radical,

[3] See Homi Bhabha's "The Other Question: Stereotype, Discrimination, and the Discourse of Colonialism."

the monster, the cyborg, the queer, the posthuman[4]—the technoqueer is a problematization of racial, gender, and sexual categories, a "conceptualization of sexuality which sees sexual power embodied in different areas of life" (Miyake 54), particularly in the area of computer, cybernetic, and post- and transhuman technologies. As Sara Ahmed offers in *Queer Phenomenology*, this intersectional approach draws on the ways "[f]eminist, queer, and critical race philosophers have shown us how social differences are the effects of how bodies inhabit spaces with others, and they have emphasized the intercorporeal aspects of bodily dwelling" (5). The technoqueer then extends this to include the intercorporeality and intersubjectivities and inter(dis)embodiments of dwelling in cyberspace and in the integrated circuits of technology. The technoqueer renders and articulates the ways technology mediates these identities, subjectivities, and embodiments, the ways ideas, selves, and bodies mediate technology, and our discourses and understandings of these formations. By queering technology and moving queer theory toward technoculture, the technoqueer hopes to show how bodies, identities, and subjectivities are gendered, sexualized, raced, and technologized by how they are extended, transformed, even contained by various technology. The technoqueer unpacks the intersections and incommensurabilities of what Michel Foucault identifies as "technologies" or the "specific techniques that human beings use to understand themselves" (*Technologies* 18). He describes in "Technologies of the Self" four types of technologies, calling them each "a matrix of practical reason":

> (1) technologies of production, which permit us to produce, transform, or manipulate things; (2) technologies of sign systems, which permit us to use signs, meanings, symbols, or signification; (3) technologies of power, which determine the conduct of

[4] See in particular: Cathy J. Cohen's "Punks, Bulldaggers, and Welfare Queens: The Radical Potential of Queer Politics," Donna Haraway's "A Cyborg Manifesto: Science Technology, and Socialist-Feminism in the Late Twentieth Century" and "The Promises of Monsters," Shane Phelan's *Sexual Strangers*, Judith Butler's "Critically Queer," Eve Kosofsky Sedgwick's *Tendencies*, and N. Katherine Hayles's *How We Became Posthuman*.

> individuals and submit them to certain ends or domination, an objectivizing of the subject; (4) technologies of the self, which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality. (*Technologies* 18)

What is important about Foucault's breakdown of technologies is not to see them as distinct or separate. Rather, it is important to see the larger technocultural matrix made up of these matrices. Moreover, I wish to thicken Foucault's definition of technology to make certain that the material and digital technologies, the stuff of technology itself, is included as an important part of these "techniques" of subjectification. All of these technologies do not operate independently or exclusively and "each one of them is associated with a certain type of domination" (*Technologies* 18). Foucault understands the system, the ecology of technologies at work in the world, each acting upon one another while simultaneously acting and being acted upon by people, by subjects. And although Foucault was not speaking of specific technological inventions and innovations and although Foucault sees domination as the assumed endgame of these technologies, it is possible—and necessary—to imagine ways of resisting and reconfiguring these technologies for change and potential liberation. The technoqueer then is an intervention into this larger matrix, what I will later coin as the technonormative matrix.

In other words, the technoqueer is a transformative intervention into technocultural and queer epistemologies and subjectivities, particularly, as this chapter and my larger project unfolds, in attending to the white washes and blind spots in both technoculture and queer studies. In doing so, the technoqueer provides avenues for imagining and hopefully realizing the material, embodied, and political power and potential of posthuman queerness and queer technologies while simultaneously addressing what Thomas Foster calls the "key

antimony or unbridgeable gap" (*Souls* xxvii) in posthumanism and its ostensibly liberatory technologies, which I will extend to include and intersect with queer theory's interventions and worldmakings, in that both projects' productive ambivalences can result in both domination *and* resistance.[5] It is in this very ambivalence that the technoqueer must negotiate.

The genealogy of the technoqueer opens (though not begins in a teleological sense) with Turing and the Turing Test as a way to frame the latter sections on the figure and promise of the cyborg and the cyberqueer, on the definitions and configurations of the queer, and finally on how all of these formations come together to constellate the ways and means to queer the posthuman and technologize the queer.

Turing, My Automated Lover

> Your wish is my command, I'm a teacher, not a man
> Cuz I got everything it takes to be your everlasting friend.
> You know I'm someone very special, a brand new love attraction
> And if you dial my number I will give you satisfaction
> —Real McCoy, "Automatic Lover"

The start of "Computing Machinery and Intelligence" opens with Turing's "imitation game," famously called the Turing Test, a philosophical thought experiment in how we might think of a machine, a computer as "thinking," as "intelligent. Turing, like many other great math and science writers, depended on analogy as a rhetorical and philosophical strategy. In fact, his first paper "Computable Numbers" imagined a "Turing machine," which he used as a literary device. "Analogy is an important tool in making mathematics comprehensible to the nonmathmatician; Turing was unusual in that he built the analogy into his proof," says Leavitt. As I will show, the power of analogy, the permutations of Turing's

[5] See also Haraway's "Informatics of Domination" section in "A Cyborg Manifesto."

game work to do more than communicate computing principles. Rather, they communicate much more, what Alan Clinton calls "a truly queer form of encoding, a programming designed to produce lush and unforeseeable results" (219). A technoqueer reading of the "imitation game" then allows for a decoding of Turing's critique of and anxiety over gender, sexuality, and race. But, first things first—the imitation game reads,

> The new form of the problem can be described in terms of a game which we call the 'imitation game'. It is played with three people, a man (A), a woman (B), and an interrogator (C) who may be of either sex. The interrogator stays in a room apart from the other two. The object of the game for the interrogator is to determine which of the other two is the man and which is the woman. He knows them by labels X and Y, and at the end of the game he says either 'X is A and Y is B' or "X is B and Y is A'.
>
> The interrogator is allowed to put questions to A and B thus:
>
> C: Will X please tell me the length of his or her hair?
>
> Now suppose X is actually A, then A must answer. It is A's object in the game to try to cause C to make the wrong identification. His answer might therefore be
>
> 'My hair is shingled, and the longest strands are about nine inches long.'
>
> (433-4)

First and foremost, the "imitation game" begins not with a competition between man and machine but between a "man" and "woman." Depending on the questions posed to players and their answers—truthful or not, purposefully misleading or not—the interrogator must determine the gender of each. If the interrogator is unable to make such a distinction, then the equation here is that there is no essential, reducible difference between a man or woman, that gender is discursive and performative a la Judith Butler's formulation. Butler says in *Gender Trouble* that gender "is the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, of a natural sort of being" (43-44). It could be said that Turing's "imitation game" is both a regulatory frame and a critique of that frame. It simultaneously requires that the players inhabit gender norms—this "natural" horizon of being—and to confound, confuse

these norms in order to dupe the interrogator. Note that the example question depends on a physical and conventional marker of gender—hairstyle. In other words, the logic deployed by the imagined interrogator is that only a proper woman would have long hair.

The passage continues by complicating how gender is performed and how gender is read by routing both through technology. Gender here then becomes technogender as the typewriter and teleprinter mediates (though not necessarily obscures) what is said, done, and asked:

> In order that the tones of voice may not help the interrogator the answers should be written, or better still, typewritten. The ideal arrangement is to have a teleprinter communicating between the two rooms. Alternatively, the question and answers can be repeated by an intermediary. The object of the game is for the third player (B) is to help the interrogator. The best strategy for her is probably to give truthful answers. She can add such things as 'I am the woman, don't listen to him!' to her answers, but it will avail nothing as the man can make similar remarks. (434)

Given that the interrogator can be a man or a woman, it would be interesting to pose how the gender of C might impact how the "imitation game" is played. Turing's playing of the game is unidirectional where A and B corroborate or confound their gender and C identification is passive or inconsequential. However, the richness of the game is thickened to imagine that if A and B are also unaware of C's gender, what might they assume, how might they address C, and what tactics might they deploy: Logic? Aggression? Flirtation? Confession? Commiseration? Inasmuch as the "imitation game" requires players to be complicit with gender stereotypes, the game's ambivalence does allow for flexible meanings and configurations. On the one hand, Turing's description produces a game state where gendered power falls along expected and heteronormative lines. It is A, the man, who gets to genderbend, gets to flex his universalized subjectivity, and that B, the woman, must defend,

insist on the reality of her sex and gender and be relegated to a more fixed position.[6] On the other hand, the game can be technoqueered, hacked and repurposed, to challenge any single reading or result. As Butler argues, "If the regulatory fictions of sex and gender are themselves multiply contested sites of meaning, then the very multiplicity of their construction holds out the possibility of a disruption of their univocal posturing" (*Gender* 43).

The final section of the "imitation game" flips the script, turns away from the gender analogy to the machine analogy, the famed Turing Test:

> We now as the question, 'What will happen when a machine takes the part of A in the game?' Will the interrogator decide wrongly as often when the game is played like this as he does when the game is played between a man and a woman? These questions replace our original, 'Can machines think?' (434)

For too long the analysis of "imitation game" has focused on the end of Turing's famous provocation, on the final paragraph's the technological consequences of imagining a computer interlocutor in the game. Indeed, the contribution of "Computing Machinery and Intelligence" to cybernetics, computing, philosophical, and cognitive research is monumental. However, the opportunities to examine the setup of the "imitation game" and the rest of the essay's preoccupation with gender performance and gender passing cannot be

---

[6] Judith Genova in "Turing's Sexual Guessing Game," which appeared in *Social Epistemology* in 1994, attributes the designation of the woman as necessarily truthful as indicative of Turing's sexism and what she calls "Turing's Pygmalion complex." She argues, "The most direct expression of his sexism occurs in his limiting women to truthtelling. Honest and sincerity may be the best policies morally, but they are bankrupt metaphysically…Prohibited from lying, women could not instantiate a universal machine; their potential for evolution was therefore limited. They could not count, could not compute" (322). I agree with the setup of Genova's argument here and recognize that the "imitation game" as described does relegate the woman to a secondary position. However, Genova's claim of misogyny is overdetermined for me. First, the claim misses the contingency of the woman player's truthfulness: "The best strategy for her is *probably* to give truthful answers" (my emphasis, Turing 434). Second, given Turing's own preoccupation with his gender performance, his sexuality, the replacement of player A, the man, with the machine befits the overall analogy at work and not necessarily because he could not imagine the universal machine as "woman." Finally, albeit a stretch, given the gender and sexual politics of the time, where sexual inversion theories often equated homosexual men with women, might then player B, the woman, serve as a metonym for the closeted homosexual man's desire to tell the truth?

dismissed. For example, fourth section on "Digital Computers," Turing explains how a computer would store, access, and manipulate information—the rudiments of algorithmic instructions or program. In order to explain how a computer might "make it possible for a sequence of operations to be repeated over and over again until some condition is fulfilled" (438), Turing relies on a gendered, domestic analogy. He says, "Suppose Mother wants Tommy to call the cobbler's every morning on his way to school to see if her shoes are done, she can ask him afresh every morning" (438). Biographer David Leavitt believes since Turing "longed to produce a child of his own—a computer child" (246), he relies on the above "domestic analogy" and "the metaphor of child rearing and education" (246). Or for example, in the sixth section on "Contrary Views," Turing addresses counterarguments and technophobia, in particular theological objections and the belief that thinking "is a function of man's immortal soul" (443). His argument is to attempt to detach thinking and intelligence from the religious abstract. He again turns to a gendered analogy saying, "How do Christians regard the Moslem view that women have no souls?" (443). In other words, he presses, just because the "orthodox view" cannot conceive of a thinking machine does not mean that a machine cannot think. The above analogy once again calls into question the assumptions about gender, the subordination of women in both Christian and Muslim cosmology, and connects gender trouble to racial trouble. However, Turing does not dwell on the analogy long for the very next sentence deflects, "But let us leave this point aside and return to the main argument" (443).

Much of the contemporary re-readings of the "imitation game" rightly refocus the attention on the logics of gender of the Turing Test. Gender, for Turing, raises questions about performance, about passing, and about the power relations between women and men

and ultimately between machines and humans. And though gender is indeed performative, the consequences of this performativity is not lost to the fantasy of disembodiment. Just because the Turing test reveals the "game" of gender does not mean the game is not a serious one. As Butler says, the bodies that play (or do not get to play) the game do matter. The asymmetry of power seen above in Turing's walkthrough of the "imitation game" foregrounds the challenges for the woman player, which a half-century later, as I will discuss in my second chapter, will continue to haunt the mediation of gender in the virtual spaces of the Internet.[7] However, thinking back, few accounts the "imitation game" take the game to the next logical step, to the analogy of sexuality.[8] It seems unlikely that Turing himself was unaware of the ramifications of his "imitation game" for subjects of difference, for those that do not meet the normative criteria of what counts as a person, a human being, a citizen. The Turing Test can be configured for sexuality, race, class, and ability. The very language of mathematical variables demands that A, B, and C can be substituted with querents other than "man" and "woman." Therefore, we must queer the Turing Test, which seems obvious and redundant, and see how the game is also about the performance, passing, and power relations between queer and normative bodies and sexualities. It is impossible to "ignore the subtext that Turing's ambiguity exposes…[and] the palpable tone of sexuality anxiety that runs all through the paper" (Leavitt 244). How then might we reread statements like: "My hair is shingled, and the longest strands are about nine inches long" (434) or "I am the woman, don't listen to him!" (434) or Turing's own direction that "the best strategy is to try to provide answers that would naturally be given by a man" (435). In other words, what discursive and

[7] See also Julian Dibbell's "A Rape in Cyberspace," Lisa Nakamura's "Head-Hunting on the Internet," and Sadie Plant's *Zeroes + Ones*.

[8] For a fuller account of Turing, the Turing Test, and sexuality see David Leavitt's *The Man Who Knew Too Much*, Judith Halberstam's "Automating Gender," and Tyler Stevens's "'Sinister Fruitiness'": *Neuromancer*, Internet Sexuality, and the Turing Test."

performative strategies might a homosexual, which homophobic and gender-normative stereotypes would demand particular responses, convince an interrogator of his or her straightness?

Moreover, part of the technoqueering of the "imitation game" is to address the ways the Turing Test reconfigures other social formations. The "imitation game" can also be extended to theorize race. Like gender, Turing's essay demonstrates a preoccupation, albeit oblique, with race. The above example that invokes both women and Muslims is one instance. In the same section, section six, Turing attempts to address "arguments from various disabilities" (447), which he restates as responses to the form "I grant you that you can make machines do all the things you have mentioned but you will never be able to make one do X" (447). To respond to questions about whether an intelligence machine can or cannot do something, specifically whether a machine can be made to like and enjoy strawberries, Turing turns to an analogy about race. He says, "What is important about this disability is that it contributes to some of the other disabilities, *e.g.* to the difficulty of the same kind of friendliness occurring between man and machine as between a white man and a white man, or between a black man and black man" (448). Again, the ambivalent handling of race, as with gender, reveals a conservative, segregated attitude toward race but also the possibilities of upending the racial equations and formulations. What is between the lines here moves beyond Turing's concession that his readers and the general culture will find it difficult to imagine a "friendly" relationship between man and machine as between men of the same race.[9] What is between the lines here is the realization that breaching the color line

[9] Turing's notion of the friendship between races, the friendship between humans and machines resonates with the ideals about friendship espoused by the Cambridge Apostles (Turing attended King's College, though did not traffic in the circle) and the Bloomsbury Group, whose most well-known members included E.M. Forster, Virginia Woolf, Leonard Woolf, John Maynard Keynes, and Lytton Strachey. Drawing on the writings of G.E.

to imagine a "friendly" relationship between a white man and a black man might just be as distant and difficult. Therefore, the Turing Test can be deployed to challenge the constructions of race. The players in the game can be differently racialized subjects requiring the interrogator to determine the "race" of A or B. Again, the discursivity and performativity of race is laid bare pointing up ideological and stereotypical constructions of "white," "black," or other configurations of color, which is reminiscent of Michael Omi and Harold Winant's racial formation or Lisa Nakamura's technologized variation *digital racial formation*. But the test is also meditation on race relations. It is interesting to note the homoraciality of Turing's analogy—white on white and black on black, both men—that might be a further wordplay to include homosexuality as part of the game's contestations.

Both the Turing Test and the technoqueer allow us to triangulate the resonances and dissonances of technologically mediated gender, sexuality, and race. In other words, the technoqueer is about understanding how techno plus sexuality might help illuminate techno plus gender or techno plus race, or how technorace might help illuminate technogender and technosexuality, and so on. From the examples from Turing's essay, the gender play of the passage becomes a way to unpack the sexual play of the passage; homoraciality becomes a way to encode and decode homosexuality. What gets foregrounded functions as a way to analyze how, why, what gets backgrounded or ignored. The technoqueer sees these logics and formulations as ways to route one through the other, to read and analyze them in

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Moore, in particular his *Principia Ethica* (1903), the group believed that friendship, intimacy, and desire (erotic or platonic) was liberatory, egalitarian, and a cure for the world's social ills, particularly around race, gender, and sexuality. Friendship would bring people together as characterized by Freud in *Civilization and Its Discontents*; it is "a process in the service of Eros, whose purpose is to combine single human individuals, and after that families, then races, peoples and nations, into one great unity, the unity of mankind" (as qtd. in Carroll 210). For more on this utopian desire, see Chapter Two of David Leavitt's *The Man Who Knew Too Much*, Barbara Caine's "Bloomsbury Friendship and its Victorian Antecedents" in *Literature & History* (Spring 2008), and Llana Carroll's *Notions of Friendship in the Bloomsbury Group: G. E. Moore, D. H. Lawrence, E. M. Forster, and Virginia Woolf* (Dissertation, 2009, University of Pittsburgh).

intersection, and to see what use might come of seeing them in contrast or in parallel. The technoqueer opens ways to think about and reconfigure posthuman interventions into gender, sexuality, and race and ways to imagine and realize the embodied and political possibilities of these technological mediations.

Ultimately, Turing's anxieties over his *universal machine*, his homosexuality, and his "proper" place in the world are puzzle pieces that fit into a larger concern with and interrogation of the anxieties over changing landscape of industry, war, capitalism, technology, and the "proper" place of humans in all of this—what would now be called posthumanism or transhumanism. Turing did not use these exact terms[10] but his "Computing" essay is dedicated to addressing the period's posthuman and post-human questions, scenarios, and fears. Turing does touch on and backpedals away from the posthuman when he says in the second section, "No engineer or chemist claims to be able to produce a material which is indistinguishable from the human skin. It is possible that at some time this might be done, but even supposing this invention available we would feel there was little point in trying to make a 'thinking machine' more human by dressing it up in such artificial flesh" (434). He is wary of suggesting some sort of Frankensteinian creation of life and attempts to distance his project by seating it in the digital, the machinic, and the inorganic. Intelligence for Turing is a measure of information storage, programming, and processing power and not about the human life, mind, or soul. But the overlaps and possibilities of the posthuman haunts his essay. In the third section, he attempts to define what he means by "machine" to limit it to an "electronic computer" or "digital computer"

[10] According to the OED, the term "post-human," referring to "a hypothetical species that might evolve from human beings, as by means of genetic or bionic augmentation," first appears in 1916 in M. Parmelee's *Poverty and Social Progress*, then in *The Times* in 1934, and then in a more recognizable form in H.G. Wells's *Babes in Darkling Wood* in 1940. The unhyphenated version first appears most notably in Bruce Sterling's *Schismatrix* in 1985 and Douglas Coupland's *Microserfs* in 1995.

(436) and not a biological, sapient computer, those "men born in the usual manner" (435). However, his definition drifts into the strange, the posthuman, the queer. Turing says, "One might for instance insist that the team of engineers should be all of one sex, but this would not really be satisfactory, for it is probably possible to rear a complete individual from a single cell of the skin (say) of a man" (436). David Leavitt wonders at the homophobia (intersected with my wonder at the technophobia of the passage) when he asks, "Is the point here that the team of engineers…might be able to join together and in a sort of orgy of cloning create a human child? The fantasy is peculiar, using science as a framework for imagining a means by which men without women could generate progeny" (245-46). In the end, clothing a thinking machine in skin or cloning a thinking machine from a human being are possible for Turing but strictly off limits, out of bounds much like gender parity, racial harmony, and sexual liberation.

These are the very questions, scenarios, and fears that Thomas Foster connects to broader social and cultural battles. He says, "The point of intersection between posthumanism and new social movements like feminism, gay and lesbian liberation, civil rights, and black nationalism resides in the claim that the inability to imagine the possibility of truly intelligent machines…demonstrates the same narrow concept of personhood used to legitimate racism, sexism, and homophobia" (xxvi). It is this "inability to imagine" the possibilities and potentials of biological, technological, and cultural variance that led to Turing's arrest, discommendation, and treatment. Turing was sentenced to hormone treatments, in particular estrogen injections, which the medical, psychological, and sexological paradigm of the time felt would "cure" Turing of his homosexuality. The irony of Turing's "cure" lies in its biological and physiological determination of gender and

sexuality, which the hormone treatment hoped to "invert"[11] in Turing and which is the very thing that his "imitation game" subverts. Although hedged, it is this subversion, this playful potential that does allow Turing to imagine a wider concept of intelligence, machine, and personhood (which has been taken up by cyberpunk fiction, new media and new technologies, and posthuman and transhuman scholarship, which I will unpack in later sections and chapters). Turing says, "These are possibilities of the near future, rather than Utopian dreams" (449). And it is these possibilities that paved the way for the development of the cyborg, the queer, and the posthuman.

Cyborgs are Technoqueers

> "If being human is not simply a matter of being born flesh and blood, if it is instead a way of thinking, acting and feeling, then I am hopeful that one day I will discover my own humanity."
>
> —Lt. Commander Data, "Data's Day," *Star Trek: The Next Generation*

Scientist, musician, and inventor Manfred Clynes describes with simple examples the "cyborg," a term he coined in 1960 in an essay he wrote with fellow scientist Nathan Klines called "Cyborgs and Space:"

> *Homo sapiens*, when he puts on a pair of glasses, *has* already changed. When he rides a bicycle he virtually has become a cyborg. When *homo sapiens* walks he doesn't pay much attention to how he walks, it's natural. In the same way, when he is on his bicycle it feels natural to a person who knows how to ride a bike. You can call that, if you want, a simple cyborg right there." (Gray "Interview" 49)

Clynes believed that the cyborg was a "natural" state, that humanity and technology would achieve a self-regulating, symbiotic relationship. Clynes's quotidian examples of wearing glasses and riding a bicycle is important because it stresses that the cyborg is no longer a

[11] See twentieth century sexologists like Havelock Ellis's *Sexual Inversion*.

construct of scientific theory or science fiction and no longer simply a metaphor. The cyborg as an embodiment of the technological human and the humanist technology is real. However, like Alan Turing, Clynes is unable or unwilling to fully imagine the radical consequences of the cyborg as real, as embodied, and as everyday. Perhaps out of a desire to temper irrational and deterministic fears about the loss of some unitary sense of the body, the human, and the soul, Clynes wanted to naturalize, domesticate, neutralize, and neuter the technology. In fact, Clynes was horrified by popular culture and popular literature taking up of the cyborg a la James Cameron's 1984 film *The Terminator*. He says, "I was horrified because it was a total distortion…with Schwarzenegger playing this thing—dehumanized the concept completely. This is a travesty of the real scientific concept that we had. It is not even a caricature. It's worse, creating a monster out of something that wasn't a monster" (Gray "Interview" 47). Clynes believed in the essential nature of man, of humans, and of humanity and the cyborg was merely an enhancement, a supplement, an edification of this essence. Though he believed in the power of science and technology as a guide and catalyst for human progress and development—what he would call "participant evolution"—he also believed that science and technology made it "possible to exist, *qua* man, as man, not changing his nature, his human nature that evolved here. Not to change that but to simply allow him to make use of his faculties" (Gray "Interview" 47). He believed, as Gill Kirkup says, that "cyborgs would remain human beings in a Cartesian sense, their bodies (like machines) would be modified so that their minds (which would remain unchanged) could continue the work of rational technoscience" (8). This belief drastically limited the horizon of possibility for the cyborg as a technology and as a figure, a horizon that would be later exploded and expanded by speculative fiction, feminism, queer theory, and posthumanism.

Unlike Turing's ambivalence and coded ambiguity, Clynes's instrumentalization of the cyborg preserved the normal, the normative logics of sex, gender, and embodiment, refusing to see how the technology changed "nature" and "human."

Clynes goes on to say, "[T]he cyborg, per se—talking now of men or women who have altered themselves in various cyborgian ways—in no way has that altered their sexuality. In no way has that altered their ability to experience emotions, no more than riding a bicycle does. And even more importantly, it hasn't altered their essential identity" (Gray "Interview" 49). He is wedded to a foundational, fixed, and persistent self, an "essential identity," which technology no matter how "cyborgian" can alter or manipulate, something which even "participatory evolution" could not radically alter. This interior, this core self extends to sexuality and desire as well. He says, "What excites on sexually is determined by the kind of sexual person you are. If you are a man certain shapes would tend to excite you and if a woman, other ones. Or if you are a homosexual it is a different matter, but I'm talking right now of heterosexual persons. Those are not arbitrary things. You cannot change them easily" (Gray "Interview" 49). It is important that Clynes includes homosexuality as potentially part of human variation, glossing the notion that sexuality, queer or straight, is inherent, individual, and genetic. Alas, Clynes quickly disengages from theorizing the queer and resituates the cyborg firmly back into he and she, man and woman, and hetero. To be fair, Clynes was optimistic about cyborg technologies and did espouse that the cyborg "was to help liberate what is best in humans" (Gray "Manfred" par. 12). In "Cyborgs and Space," Clynes and Kline say, "The purpose of the Cyborg…is to provide an organizational system in which such robot-like problems are taken care of automatically and unconsciously, leaving man free to explore, to create, to think, and to feel" (as qtd. in Gray

"Manfred" par. 13). However, Clynes's cyborg would remain still gendered, sexed, raced, and still human and humanized in normative ways, ways which subsequent artists, writers, theorists, and actual, living, breathing cyborgs and technoqueers would challenge.

The foremost and perhaps most famous of these challenges comes a quarter of a century later in Donna Haraway's paradigm-shifting piece, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." No longer just an idea, no longer or ever a child, no longer an instrument or product, the cyborg according to Haraway (and those that followed, riffed, and critiqued her manifesto) rejects its naturalness, its scientificness, its essentialness and embraces its distortion, its monsterness, its ambivalence, and its queerness. These are the very rhizomatic roots of the technoqueer—the cyborg is a figurative and fleshy bridge between embodiment and technology. As Clynes predicted, the cyborg would be everywhere and everyday, proliferating across social and material spheres, but unanticipated by Clynes, the cyborg took on radical lives of its own. As with many technologies, the cyborg as metaphor, embodiment, and process changes, amalgamates, replicates, and mutates, often very quickly and in surprising ways. N. Katherine Hayles in *How We Became Posthuman* writes, "As Donna Haraway has pointed out, cyborgs are simultaneously entities and metaphors, living beings and narrative constructions. The conjunction of technology and discourse are crucial. Were the cyborg only a product of discourse, it could perhaps be relegated to science fiction…Were it only a technological practice, it could be confined to such technical fields as bionics, medical prostheses, and virtual reality. Manifesting itself as both technological object and discursive formation, it partakes of the power of the imagination as well as the actuality of the technology" (*How* 114-15). The technoqueer attempts to investigate and intervene in these

simultaneities, these conjunctions, and in the overlapping dualities of the cyborg, reorienting Haraway's initial desire for a figure and a configuration of power in order to update and elaborate the limits of the cyborg and its yet undiscovered possibilities. How might the cyborg more fully account for the intersections of and interpenetrations by technology and gender, race, and sexuality? How might the questions and provocations raised by Haraway and the cyborg be re-posed, reconfigured to challenge their own technonormativity?

When Haraway set pen to paper, hands to keyboard to compose "A Cyborg Manifesto" in 1985, she set out "to build an ironic political myth faithful to feminism, socialism, and materialism" (149). The manifesto is a rally cry, a call to disarm, a political poetic full of energeia, metaphor, resistance, and recombinative rhetoric. For Haraway, unlike Clynes, the cyborg is "resolutely committed to partiality, irony, intimacy, and perversity. It is oppositional, utopian, and completely without innocence" (151). Cyborgs are whimsical, wise, impenetrable, vulnerable, elastic, erotic, full of hope, and full of hunger. Cyborgs have tasted of the fruit of the tree of knowledge but do "not recognize the Garden of Eden" (151). Even in the mid-1980s, at the advent of personal computing, the birth of the Internet, and what would be later dubbed the Information Revolution, Haraway understood that the world was "living through a movement from an organic, industrial society to a polymorphous, information system—from all work to all play, a deadly game" (161). Technology was increasingly intersecting and intertwingling with biology, physiology, psychology, philosophy, geography, and ideology. Bodies of information became as important, perhaps more important, than physical bodies, a disembodying logic that Hayles refers to in *How We Became Posthuman* as a crucial technocultural moment when "information lost its body" (2). These watershed changes occurred not only in technological

invention and development but in the very ways bodies and technology were represented, talked about, and even fought over. The very discourses of better living through chemistry, shock therapy, the space race, personal computing, credit cards and ATMs, cyberspace, Star Wars, drug wars, GRID (now better known as HIV/AIDS), and transnational globalization index how fully integrated and mediated the human lifeworld has been by technologies of every shape and stripe. And it is out of and into this fray that the cyborg materializes. In the case of Haraway, the cyborg is a response to and refusal of the "deadly game" that threatens annihilation and what she calls the "informatics of domination" (161).

For Allucquère Rosanne Stone, whose work invokes a different monstrous figure, the vampire, "cyborgs are boundary creatures, not only human/machine but creatures of cultural interstice as well" (178). The cyborg must inhabit, navigate, and at times alienate "a society, a lifestyle, a language, a culture, an epistemology, even…a species, that is not one's own" (Stone 178). In other words, as Haraway defines, "A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (149). It is because the cyborg exists on the edges, within the slippages, at the margins that make it such a potent and disruptive figure. Because of the cyborg, Haraway goes on to say, "The dichotomies between mind and body, animal and human, organism and machine, public and private, nature and culture, men and women, primitive and civilized are all in question ideologically" (163). The cyborg is "a kind of disassembled and reassembled, postmodern collective and personal self" (163). The cyborg's identity is "contradictory, partial, and strategic" (155) and "signal disturbingly and pleasurably tight couplings" (152). The cyborg is an outsider, a transgressor, a wanderer, a storyteller. Cyborgs revel in the "leaky" play between flesh and data, between dreaming dark and screens of light, between speaking and

writing, between animal and machine. Because of its very ambivalent productivity and its bridging incommensurabilities, the cyborg is the "natural" ancestor and avatar for the technoqueer.

For both Haraway and Stone, the cyborg is gendered. Technology changes bodies. Technology impacts embodiment and our understandings of sex, gender, and desire, a direct refutation of Manfred Clynes's technoconservative view. "The Cyborg Manifesto" intimates a world and a world-making where the cyborg is "a creature in a post-gender world" (150), though not that gender is done, decommissioned, or inconsequential, and where sexuality is no longer fixed into simple binaries or neatly bounded continuums but rather complicated and multi-dimensioned. Cyborg gender and sexuality are fluid and messy as well as a modal, modular, and at times a biomechanized. Even the most benign forms of technological mediation—the wearing of glasses or the riding of a bicycle—are coded and constructed with values, ideals, politics, and erotics—glasses can be read as smart, bookish, or "librarian sexy" and bicycle frames are still today designed differently for men and women.[12] The cyborg reveals the naturalized pathways that technologies have been gendered and eroticized. Sex, gender, and sexuality as natural and inherent qualities are called into question by the cyborg. Rather, the cyborg disrupts and reconfigures such categories and formations not as a way to do away with them (as the common reading of the prefix "post-" as meaning "after" or "without") but to recognize them as contingent and emergent. It is out of this mingling and this questioning that the cyborg and the technoqueer are born and praised. However, the technoqueer extends what Haraway initiated by critically addressing the ways that cyborg

[12] See Nicholas Oddy's "Bicycles" in *The Gendered Object*: "In 1896, Lillias Davidson, president of the Lady Cyclists' Association, wrote, 'It is the skirt which rules the destinies of women on the cycle.' Almost since their invention bicycles have been gendered by the existence of machines aimed specifically at women which accommodated riders wearing long skirts" (60).

subjectivity is not just biology plus technology or a body transformed by technology, rather that the technology itself is defined and nuanced in normative and radical ways that changes our understanding of technologized subjects. Rather than take for granted the Clynesian paradigm of an assimilated, unobtrusive, and normalized technology, the technoqueer revels in Turing's game, understanding that the technology is an integral part of the formation of the subject, that for example, technogender is not a simple end sum but an operation of organism, machine, discourse, and power. Moreover, technosexuality, which remains unexplored in Haraway's account of the cyborg, is not a simple conflation of sex, gender, and desire but like technogender requires particular attention to the ways that technology itself is sexualized and that sexuality has become a technology.[13]

The cyborg is also raced, classed, and spatialized but not in any predetermined or stereotyped way. Haraway challenges, "I do not know of any other time in history where there was greater need for political unity to confront effectively the domination of 'race', 'gender', 'sexuality', and 'class'…None of 'us' have any longer the symbolic or material capability of dictating the shape of reality to any of 'them'" (157). She reminds us that "we are now accustomed to remembering that as objects of knowledge and as historical actors, 'race' did not always exist, 'class' has a historical genesis, and 'homosexuals' are quite junior" (160). She continues, "The home, workplace, market, public arena, the body itself—all can be dispersed and interfaced in nearly infinite, polymorphous ways, with large consequences for women and others" (163). In other words, the very vertices and indices of cultural and political intervention are under fire in order to resist the description of, cataloguing of, requirement of any "official" experience of sex, gender, race, class, or place.

[13] See Foucault's "technology of sex" in *The History of Sexuality* and conception of "technē" in *The Care of the Self*.

Haraway tries to imagine and "craft a poetic/political unity without relying on a logic of appropriation, incorporation, and taxonomic identification" (157). The cyborg is then the fruitful and fraught body, mechanism, mind, and algorithm to interrogate such identities and politics and more specifically technoqueer identities and politics. She continues arguing that the cyborg is crucial to the unlinking and undoing of "certain dualisms [which] have been persistent in Western traditions; they have all been systemic to the logics and practices of domination of women, people of colour, nature, workers, animals—in short, domination of all constituted as others"[14] (177). Here the technoqueer asks what do these cyborg identities look like? What do these cyborg politics perform like?

Mary Ann Doane rightly asks, "How can the collapse of oppositions represented by the cyborg be liberating or potentially productive if oppression is no longer organized through dualism?" (213). In other words, if the cyborg as conceived of by Haraway exists, revels outside of history, outside of the usual circuits of power, outside of any stable sense of identity and location, then where do those bodies and subjectivities act, maneuver, and fight from and more importantly where do those bodies and subjectivities already vulnerable, captured, and oppressed find purchase to locate safety, find escape, and leverage resistance? Doane admits, "Haraway certainly has a sense of the consequences of such a reorganization of power…The seductiveness of these previous dualisms lies in our ability to isolate the enemy—to figure out where domination is located" (213). However, she says, "The cyborg will not be enough. And it will be even more necessary to understand how technology is made complicit with the dispersal of power, its invisibility. The sheer complexity of the reorganization of technologically maintained powers will require new modes of analysis and

[14] Haraway lists, "Chief among these troubling dualisms are self/other, mind/body, culture/nature, male/female, civilized/primitive, reality/appearance, whole/part, agent/resources, maker/made, active/passive, right/wrong, truth/illusion, total/partial, God/man" (177).

images of something other than transgression" (213). Doane's concern, even fear here is that the cyborg itself has fallen into the matrix of the Informatics of Domination, that it too "will be the norm" (213). The technologies that Haraway imagined would undo the age old dualisms and oppressions would be the very technologies that would recuperate the radical potential of the cyborg.

However, it is important not to forget that Haraway's "ironic myth" is keenly aware of its contradictoriness and complicitness. Haraway's "informatics of domination" outlines the intensification and concomitant invisibilization of control, communication, design, and processing technologies, the "integration/exploitation into a world system of production/reproduction and communication" (163). If everything can be "dispersed and interfaced," as quoted above, then the cyborg itself can been caught in and used by the informatics of domination, as per Foster's key antimony of posthumanism. Haraway is careful to qualify her own location[15] and her recommendations recognizing that the consequences of the informatics of domination are very different for her as a white, US-educated, ostensibly "straight" woman than for someone else. Or, as she says, "[C]onsequences that themselves are very different for different people and which make potent oppositional international movements difficult to imagine and essential for survival" (163). Haraway's cyborg myth is "about transgressed boundaries, potent fusions, and dangerous possibilities which progressive people might explore as one part of needed political work" (154); the cyborg politic recognizes that "the need for unity of people trying to resist world-wide intensification of domination has never been more acute" (154).

[15] Haraway says, "I am conscious of the odd perspective provided by my historical position—a PhD in biology for an Irish Catholic girl was made possible by Sputnik's impact on US national science-education policy. I have a body and mind as much constructed by the post-Second World War arms race and cold war as by the women's movements" (173).

Haraway continues offering a "slightly perverse shift of perspective" (154) that will allow people—persons, families, communities of color, of non-heteronormative design, of complicated and overlapping citizen identities—to "contest for meanings, as well as for other forms of power and pleasure in technologically mediated societies" (154). She says, "One important route for reconstructing socialist-feminist politics is through theory and practice addressed to the social relations of science and technology, including crucially the systems of myth and meanings structuring our imaginations. The cyborg is a kind of disassembled and reassembled, postmodern collective and personal self. This is the self feminists must code" (163). What is vital here is also the fact that Haraway draws attention to the ways that feminism and other political movements must attend to technology and technocultures to recognize that science and technology are never objective and neutral and are often deployed in the service of sexism, racism, nationalism, and homophobia.

Haraway argues not for a single, unitary, and fully apprehensible cyborg but for cyborgs that employ and embody heterogeneity and "powerful infidel heteroglossia" (181) to imagine, contextualize, and code politics and practices. Doane recognizes this in part saying that the "cyborg does have a limited efficacy—in relation to the extent to which we are still haunted by the old dualisms. These dualisms have not simply disappeared, much as theories of postmodernism would like them to…It would be more appropriate to speak of the overlap and strategies which might be appropriate to such an overlap. There is no clean break" (213-14). But Haraway and the cyborg do not argue for a clean break[16] just as there is no clean

[16] Rather than characterize postmodernism as a rupture, a break, a wholesale antagonism with modernism, attributed to theorists like Frederick Jameson, David Harvey, or Brian McHale, how might the boundary between modernism and postmodernism be just as slippery, leaky, and messy? The oscillation in the language between break and shift, between rupture and change, between transformation and reconfiguration reveals an uncertainty in the rhetoric of postmodernism as distinct, easily marked off from modernism, which in itself is contested, and earlier cultural and political formations. In fact, Chandan Reddy's dexterous definition of "modern" and by extension "postmodern" in the *Keywords for American Cultural Studies*, challenges this

break between the slippery, leaky, messy boundaries between human and animal, between human and machine, between the physical and the non-physical, between science fact and science fiction. Here the linkages and analogues to the definitions and characterizations of the cyborg help resist "the monism of *one* comfortable and secure feminism, dispersing it into partial views" (Doane 209) as interference and interruption and a "coming into consciousness of a subject no longer modeled upon the Western white male" (Halberstam "Automating" 446). I would add here heteronormative, affluent, and able. The rescuing of Haraway's cyborg comes in the imagining and theorizing of the technoqueer. The technoqueer, as I will argue later in the chapter, reorients and restructures the cyborg as both technologically queer and queerly technological. The technoqueer re-centers the issues and analyses of cyborg sexuality, which remains understated in Haraway's and Doane's accounts, without being exclusionary of other cultural logics.

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mythologizing desire to carve away the postmodern from historical, artistic, and global contexts. Reddy says, "For some researchers and scholars today, the category of the 'postmodern' names a break with the modern occasioned by the emergence of finance capital; a global division of labor across transnational communities; a decline of liberal freedom; the expansion of the prison-military-industrial complex; a loss of 'nature'; an explosion of digital technologies and other simulacra; and an increasingly racialized, gendered, and sexualized cultural politics" (162). However, he continues, "[T]hey repeat a modernist impulse, namely, the desire for a knowable social totality graspable by a unitary epistemological subject" (162), which presupposes linearity, Western knowledge and cultural regimes, and a stress on crisis. In fact, as Reddy argues, there is a needed and increasing attention from interdisciplinary perspectives that "indexes an attempt to understand the *multiple* modernities…that cannot be reduced to or understood through a universal norm" (163), that "no single perspective or location can survey the social totality…each paradigm of thought must be critically scrutinized for what it encourages us to let go, forget, or disperse" (164). For Reddy, there is no "postmodern" rather an extended or "late modern" (164). Here the play of semantics is not as important as the crucial understanding that the prefix "post" (like the discussion of "post-gender" above) need not claim a distinct "after" or "anti" modernism. Rather the theorization and periodization is one of local connections, divergences, shuttlings, overlaps, and overwrites, perhaps a kind of *moderner* modern and *unmodern* modern. David Harvey, who also proposes a teleology based on his models of flexible-accumulation and time-space compression, is careful to realize that "we should not read postmodernism as some autonomous artistic current" (63) and that "there is much more continuity than difference between the broad history of modernism and the movement called postmodernism. It seems more sensible to me to see the latter as a particular kind of crisis within the former, one that emphasizes the fragmentary, the ephemeral, and the chaotic" (116). Linda Hutcheon in *The Politics of Postmodernism* wants to rescue a historicized accounts of postmodernism, which questions the slippage between postmodernity and postmodernism, and does not "forget the lesson of postmodernism's complex relation to modernism: its retention of modernism's initial oppositional impulses, both ideological and aesthetic, and its equally strong rejection of its founding notion of formalist autonomy" (25-26). Hutcheon wants to productively use the oscillations and strategic oppositions but not to buy too strongly into any "structure that implicitly denies the mixed, plural, and contradictory nature of the postmodern enterprise" (*Poetics* 20).

In other words, "doing away with" dualisms is not a return to some prior state of ignorant bliss or some post state of fully resolved blindness. Rather, the technoqueered cyborg inhabits and activates a state of confusion, flexibility, and refusal navigating and incorporating tricks, tracks, traces, even traps. To borrow from Elizabeth Grosz's *Volatile Bodies*, "[t]his indeterminable position enables it to be used as a particularly powerful strategic term to upset the frameworks by which these binary pairs are considered. In dissolving oppositional categories we cannot simply ignore them, vowing never to speak in their terms again. This is neither historically possible nor even desirable insofar as these categories must be engaged with in order to be superseded. But new terms and different conceptual frameworks must also be devised" (24). The cyborg and the technoqueer both as neologisms and new logics strive to attend to these new terms and frameworks.

Haraway imagines, "[W]e are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs. The cyborg is our ontology; it gives us our politics" (150). Haraway recognizes that the mapping and redistribution of power, be it intellectual, erotic, social, national, or technological, must take the shape of cyborg bodies, cyborg collectives, and cyborg affinities. "The Cyborg Manifesto" then offers potential examples of the cyborg in action. First, Haraway suggests that writing as a practice, art, and technology makes people into cyborgs—the taking up of a pen or the circuit of body, keyboard, and screen—that writing is "pre-eminently the technology of cyborgs, etched surfaces of the late twentieth century" (176). As she says, the struggle against the informatics of domination, of the informatization and reduction of all things to code is waged by "the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly" (176). Writing, after all, is a technology of

imagining, of making meanings, and of description, definition, and codification. Therefore, the cyborg insists on languages, on multiple channels and frequencies, on harmonies and noise. Haraways says that "[c]yborg writing is about the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them [cyborgs] as other." The very genre of the manifesto then is putting cyborg writing where her mouth and hands are. Many of the critiques of Haraway are frustrated by the manifesto's impossible possibilities of the genre conventions and rhetorical glosses but recognize "its ringing, declarative phrases, its brilliant formulations, its incredibly comprehensive scope and its optimism" (Scott 215) is not a how-to manual or political program. Though a manifesto should not be immune to analysis and criticism, it is important that part of its power and its project is to demonstrate cyborg writing, which is simultaneously utopian and on the verge of self-referential collapse. There are no easy answers for a "utopian manifesto is meant always to be as much a critical take on current politics as a blueprint for the future new society. A post-structuralist utopian manifesto is even more unsettling for it sets us loose to improvise temporary affinities, strategically aimed at targets who shape constantly changes and which also change our shapes" (Scott 217).

The second example Haraway uses to exemplify the need for and the consequences of cyborg politics is through women of color. Haraway suggests that "women of color" might be "understood as a cyborg identity, a potent subjectivity synthesized from fusions of outsider identities" (174). Granted, Haraway is rightly critiqued for potentially deploying orientalizing and colonizing logics. Here the technoqueer would attend to the cyborg's oversimplified reading of technorace. Joan W. Scott, responding to the invocation of Southeast Asian women workers, asks, "What is the difference between Haraway's looking

to these groups for the politics of the future and…the romantic attribution by white liberal or socialist women to minority or working-class women of the appropriate (if not authentic) socialist or feminist politics?...Why are Southeast Asian women 'real-life' cyborgs? How have 'women of color' been able to claim affinity without evoking a 'natural' identity?" (216-17). Or as Chela Sandoval writes, "Haraway recognizes these problematics, and how by gathering up the category 'women of color' and identifying it as a 'cyborg identity, a potent subjectivity synthesized from fusions of outsider identities'…her work inadvertently contributes to the elision of differential U.S. third world feminism by turning its approaches, methods, forms, and skills into examples of cyborg feminism" (*Methodology* 172). In other words, it is important to posit what happens when the cyborg is raced or read through racial formation? To see Southeast Asian women workers as somehow inherently or invested as cyborgs is to "skin" (to use contemporary computer parlance) the metaphor rather than to fully apprehend how race is mediated by technology. Technorace, like technogender, must actively recognize and reconfigure how race cannot simply be appropriated rather it must be rendered as intersectional or oppositional or coalitional to technology.

In 1991, Haraway responds, "I would be much more careful about describing who counts as a 'we' in the statement 'we are all cyborgs'" (as qtd. in Sandoval *Methodology* 172). Also in 1991, Haraway publishes an article called "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others" where she addresses this very theoretical move. Haraway invokes Trinh Minh-ha, a Vietnamese-American filmmaker and feminist theorist, whose definition of "inappropriate/d others" refers to "the historical positioning of those who cannot adopt the mask of either 'self' or 'other' offered by previously, dominant, modern Western narratives of identity and politics" ("Promises" 299). The "inappropriate/d

other" does not mean "not to be in relation with," marked off, but rather it means to be "in critical, deconstructive relationality…to be neither modern nor postmodern, but to insist on the *a*modern" ("Promises" 299). To be "inappropriate/d" does not mean "to be dislocated from the available maps specifying kinds of actors and kinds of narratives, not to be originally fixed by difference" ("Promises" 299). In other words, the figures of cyborgs and women of color are not rendered as essentialized, appropriable bodies and identities. Therefore, the relation between cyborgs and women of color might be read as strategically problematic and that Haraway does not intend to speak for women of color's experiences per se. Haraway says, "Trinh Minh-ha's metaphors suggest another geometry and optics for considering the relations of difference among people and among humans, other organisms, and machines…Her metaphors also suggest the hard intellectual, cultural, and political work these new geometries require" ("Promises" 300). Haraway extends the cyborg metaphor and figure to that of the promises of monsters, "the interpenetration of boundaries between problematic selves and unexpected others and with the exploration of possible worlds in a context structured by transnational technoscience. The emerging social subjects called "inappropriate/d others' inhabit such worlds" ("Promises" 300).

Haraways' cyborg "ironic myth" is necessarily imperfect and impinged. The cyborg cannot be all things to all people at all times and all places. The cyborg must be "a local possibility taking a global vengeance" (181). By connecting the cyborg myth—knowledge and practice that is true but may not be real or factual—to everyday lives, to science "facts," to necessary fictions, Haraway expresses more than just empty, utopian desire. Rather the cyborg opens fields and frissons of critical and political possibility requires reinvention and reconfiguration or to use Haraway's terms "regeneration" and "reconstitution" (181) of the

raced, gendered, and sexualized past, present, and future. Identity here may be fractured but not forgotten. Embodiment here may be technologically mediated but not technologically determined. She says in her conclusion,

> Cyborg imagery can help express two critical arguments in this essay: first, the production of universal, totalizing theory is a major mistake that misses most of reality, probably always, but certainly now; and second, taking responsibility for the social relations of science and technology means refusing an anti-science metaphysics, a demonology of technology, and so means embracing the skillful task of reconstructing the boundaries of daily life, in partial connection with others, in communication with all of our parts…Cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves…It means both building and destroying machines, identities, categories, relationships, space stories. (181)

The cyborg then must continue to grow, change, adjust, and maneuver. Cyborg subjectivity and politics must continue to embrace intersectionality, productive ambivalence, and queerness. The cyborg must be reconfigured as technoqueer, and as Sandoval writes in her *Methodology of the Oppressed*, "insist on new kinds of human and social exchange that have the power to forge a dissident transnational coalitional consciousness" (175) that according to Haraway allows people to "translate knowledges among very different—and power-differentiated—communities" (as qtd. in Sandoval 175).

Queer Cyborgs

The cyborg *does* give us the ability to imagine, allows for the reconfiguring and reinvention of what it means to be a body, what it means to be a person, and what it means to be posthuman. The cyborg provides entrance into other epistemologies and ontologies of being, of difference that address what Haraway calls living in the "integrated circuit," the "social relations of science and technology" (165) or what Allucquère Rosanne Stone calls the "technosocial," which is inhabited by "social beings for which technology *is* nature, for

whom elsewhere *is* geography, for whom the problematic tie between unitary awareness and unitary physical body has *political* consequences" (39). The cyborg leaves no stone or leaf or page or switch unturned. The cyborg is a stranger in a land that tries its best to not to be strange, to be standard, to be "normal." The cyborg is at its most mundane a curious, benign, and beneficial citizen—a writer, a programmer, a doctor, a patient with transplanted heart—and at its most groundshaking a progressive, transgressive, angry, and empowered countercitizen—an artist, a hacker, a clone, a bionic laborer, a queer. They are ludic, secular, profane, monstrous, bioelectric signifiers, "a potent subjectivity synthesized from fusions of outsider identities" (Haraway 174). Cyborgs revel as *other* incorporating and invoking its marked body as a means for subversion and empowerment. Cyborgs use their digitized voices, their telematic bodies, their e-presences and essences to do the work and play of social and ideological change. They commandeer and realign the very discursive and material technologies that enforce and encode authoritative or "authentic" representations and embodiments of sex, gender, race, and sexuality. The cyborg paves the way for the cyberqueer and then the technoqueer. The cyborg functions in alliance with, as an ally to the queer; it establishes, like the case of Alan Turing, the connections and co-constitutions between technology and desire. Or, as Judith Halberstam argues in "Automating Gender,"

> The imperfect matches between gender and desire, sex and gender, and the body and technology can be accommodated within the automated cyborg, because it is always partial, part machine and part human; it is always becoming human or "becoming woman." (451)

By extension, then, it is always becoming queer. Cyborgs *are* queer. In a deep sense, cyborgs have always been queer, a notion that has been left unsaid, unarticulated, but finally has come to light and come to pass (though not necessarily "come out") much like technoqueer biography of Alan Turing. But what does it mean to queer a cyborg? Like the

cyborg, queer and queerness is a transgressed boundary. Queerness is a potent fusion. Queerness and its utopian expression, acknowledgement, and inclusion are dangerous and titillating possibilities. Halberstam notes, "Turing's experience of gender instability suggests that the body may in fact be, both materially and libidinally, a product of technology…desire provides the random element necessary to a technology's definition as intelligent…desire remains as interference running across a binary technologic" ("Automating" 444). It is this desire, this libidinal interference that transfigures and transforms the cyborg to the queer cyborg, to the technoqueer.

Ironically, the queering of the cyborg since Haraway has been slow, uphill, and obscure. This is due in part perhaps because of the already built-in logics of queerness of the cyborg, whose figuration and formulation as "post-gender" might be seen as including "post-sexuality." This might be due in part because of the preeminence of theorizing gender over some sense of a biologically driven or determined sex and sexuality, a kind of tension between talking about embodiment and talking about discursivity. Moreover, the lack of a theorization of the queer cyborg might be due to the part and parcel problem of the broader popular and political undertheorization of technology as gendered and sexualized, keeping in line with Haraway's call for feminism to take into account the role and deployment of science and technology.

In 2000, Nina Lykke in "Are Cyborgs Queer? Biological Determinism and Feminist Theory in the Age of New Reproductive Technologies and Reprogenetics" attempts to outline the discontinuities and uncomfortable unities between the cyborg and the queer. Lykke holds up "two feminist figurations" and two feminist scholars, Haraway and Butler, as representative of the cyborg and the queer. The queer "disturbs the smooth running

machinery, exposing dissonances and making it visible that there is no essentially 'natural', universally 'normal' and a priori given link between the sex of the body, desires, gender identity and gender performance" (section 3, par. 4). The queer according to Lykke reading Butler is anti-biologistic and only discursive. The cyborg, on the other hand, is still anti-biological determinist but located in embodiment. She says, "Contrary to the queer, who first of all seems to be bent on diversity in the sexual performances of bodies, and who fight biological determinism because it limits sexual interactions along the lines of gender norms derived from reproductive capacities, the feminist cyborg on her part is not primarily interested in the bodily performances of existing bodies. On the contrary, her passion is the production of new bodies via fusions of organism and machine" (sec. 3, par. 5). This curious separation of what might be characterized as information technologies versus bioengineering technologies seems oddly at odds and a recapitulation of dualisms, no matter how denaturalized by science and feminism, both queer and cyborg theory seeks to unpack. Lykke sees the cyborg as eminently more useful and critical, which is based on the notion that new biotechnologies, particularly those that decommission "natural" or heternormative reproduction, automatically "outdate" the links between sexuality and subjectivities. In other words, in her words, the "queer" seems "too fixated on the deconstruction of [these] links…Why bother...?" (sec. 6, par. 1).

Lykke does come to some compromise saying, "The cultural imaginary construction of contiguities between the 'queer' and the 'cyborg' suggest a feminist strategy that undertakes a kind of re-appropriation, adopting the 'queer cyborg' as a point of identification and as a site for critique and resistance" (sec. 6, par. 2). She continues, "The 'queer cyborg' may draw upon the critical strength and transformative potentials of both the involved

feminist figurations. While the cyborg deconstructs the dichotomies and hierarchies between organism/machine, nature/culture, sex/gender, etc., the queer breaks down dichotomies between different kinds of sexual orientation as well as the link between reproduction and sexual desires and identities" (sec. 6, par. 3). What is missed here is the understanding that Butler's theorization of gender performativity is not solely abstraction and citation, but rather it is "a process of materialization that stabilizes over time to produce the effect of boundary, fixity, and surface" (*Bodies* 9). In other words, gender matters and bodies matter; what is performed as gender is "the *sign* of gender, a sign that is not the same as the body that it figures, but cannot be read without it" (*Bodies* 237). Moreover, Lykke's summation of Haraway crucially misses the very connections the cyborg makes between writing and bodies, between informatics and embodiment, between the ideologies and technologies of domination. Most importantly, the opportunity is missed to take away the scare quotes from the "queer cyborg," to generate and regenerate both terms, and to articulate the ways that both cyborgs and queers are technological, sexual, reproductive, and discursive productions (in normative and non-normative ways).

In 2004, in attempt to more fully render the queer cyborg, Esperanza Miyake's whimsical essay, "My, Is that Cyborg a Little Bit Queer?" is still tentative about the alliance between the terms. Miyake does attempt to further play with the provocations set forth by Haraway, Lykke, and others to further queer the cyborg, to put into words what many have recognized but not found the words or the images to fully articulate. For Miyake, Haraway's cyborg continues to unsettle, to repopulate, and to infect the world's texts, screens, streets, schools, and imaginary even decades and many reproductions and recuperations later. And though technology and the human organism seem to be more congenial and aligned, a radical

cyborg citizenship and politics, because it is so potentially and wonderfully queer, remains problematic and contended. It is perhaps because the acceptance and day-to-day integration of the posthuman, which seemed far more troubling and "corrupting" (to return to Manfred Clynes's description of Hollywood's cyborgs) even during the technological booms of the World War II and subsequent Reagan eras, that the twenty-first century cyborg and queer have been spin doctored, sold out, tamed, and domesticated. However, the promise of the cyborg, the promise of the queer, like Haraway's promise of the monster, still remains.

For Miyake, the cyborg is a citizen of "Cyb(que)erland," a difficult and unflattering mouthful. In Cyb(que)erland, there are two, fused, twin cities: Cyberia (which unfortunately evokes post-Cold War notions of isolation, of imprisonment, of Russia's Siberia) and Queerdonia (which seems too saccharin to swallow). The queer cyborg citizen of Cyb(que)erland enjoys the fruits of Cyberia and Queerdonia: a "conceptualization of sexuality which sees sexual power embodied in different areas of life" (Miyake 54), a "problematization of sexual and gender categories" (Miyake 55) and of identities in general since they are "always on uncertain grounds, entailing displacement of identification and knowing" (Miyake 55), and finally, a "rejection of civil-rights strategies in favor of a politics of carnival, transgression, and parody which leads to deconstruction, decentering, revisionist readings, and anti-assimilationist politics" (Miyake 57). The queer cyborg here is fully aware and attentive to the ways that they are constructed, embodied, powerful, and policed. The queer cyborg understands that the power of production, sexuality, knowledge, and discourse are "all energies that come from the *body*" (Miyake 54). Miyake proudly asserts, "My body, the space it occupies and the power it transmits within the institutional and

cultural practices will liberate me; my body will be the battleground and the conqueror. My body will become subject to and of cyborgian cultural construction" (54).

However, Miyake's cyborg politics and aesthetics, though earnest and queering, is not as satisfying as Haraway's lucid and lyric manifesto and there is a failed attention to the consequences of submitting oneself to cyborg manipulation and the threat of cyborg domination. Haraway says, as if in response to Lykke above and to the problem of the "productive" queer cyborg, "I would, however, like to displace the terminology of reproduction with that of generation. Very rarely does anything really get *reproduced*; what's going on is much more polymorphous than that…Even technoscience must be made into the paradigmatic model not of closure, but of that which is contestable and contested...Actors, as well as actants, come in many and wonderful forms" ("Promises" 299). The queer cyborg must be one of those actors, one of those wonderful forms. Unfortunately, Miyake's queer cyborg is certainly more colorful and more in your face about "the dominant assumption of the normality of heterosexuality, whiteness and maleness" (Miyake 55) than Haraway's older model. Miyake does reiterate and trumpet the cyborg as a marked maker of meanings, as its own champion, and as a site for reidentification. Miyake's queer cyborg is a bit flashier, sassier, and messier. She says, "The queer cyborg loves noise, pollution, excessive cybersynthetic make-up, walking and teleporting itself down the catwalks of society" (57). Miyake's descriptions are lurid, flowering, graphic, and (at times too) dramatic. They queer cyborg is sexy and proud and libidinous. The queer cyborg "celebrates and relishes its transgressions and acknowledgement of its bestial origins" (Miyake 57); the queer cyborg "sucks the fruits of perversion and licks the juices of transgression upon its lips, glittery to the eye and wet with purpose" (Miyake 57). Miyake waxes, "Since Haraway's

Cyborg Manifesto in 1985, technology has advanced to the point where we can now literally, *really*, and physically change our bodies with a fluidity unknown before. Not only am I talking about artists incorporating bits of plastic in their bodies, or genetic engineering that clones sheep, but I am also talking about the graphical world of virtual reality, a land that exists beyond the screen" (55).

What is right in Cyb(que)erland, though, is the recognition that queer cyborg citizenship and politics are based on struggle against certainty, troubling normality, greasing embodiment, and flickering identity. Miyake echoes and enunciates Haraway's words that cyborgs "do not seek unitary identity and so generate antagonistic dualisms without end (or until the world ends); it takes irony for granted" (Haraway 180). Miyake continues, "[A] queer cyborg hates being embodied into anything. A queer cyborg wants to remain free, unleashed, and left to roam, run wild and leap from one body into another. Be it racial, ethnic, class, gendered or sexual body, you are sure to see the queer cyborg running away from it" (56). For Miyake, queer cyborgs are all promise and not enough praxis. What is wrong about Miyake's queer cyborg is in its technological determinism, that cyborgs are always already more free, and in its failure to see the perils of the fantasy of disembodiment. Here the same critiques that Mary Ann Doane leveled against Haraway's cyborg also apply. As I will discuss more fully in the next chapter, the notion that "racial, ethnic, class, gendered or sexual" embodiment are categorically leashes to some liberal, liberated subjectivity is problematic. Ultimately, Miyake turns the material cyborg into the immaterial cyberqueer, who as a figure and metaphor conjures even further ambivalences about the technological mediation of bodies and subjects.

Send in the Cyberqueers

Though not as "old" as the cyborg, the notion and identity the cyberqueer has been equally contested. The cyberqueer first appears ten years after "The Cyborg Manifesto" in Donald Morton's essay "Birth of the Cyberqueer" in 1995, which tracks a postmodern ideological and political economic shift from the gay and lesbian identities of the 1970s and 1980s to the ostensibly more inclusive and radical queer affinities of the 1990s. Morton's "Birth" is perhaps the first codification, at least in academic circles, of the term cyberqueer. Morton begins with a short narrative of the reappropriation of the term queer. He believes that the semantic and ideological shift from "gay and lesbian studies" to "queer theory" is a result of what he calls "ludic (post)modernism" and is a result of a shift away from historical materialism to fetishized desire and idealism. Morton, like other critics of postmodernism, derides the critical potential of queer theory as merely "style," "surface," "simulation," and "signification." Morton's essay (near vituperation) is a close reading of the disciplinary and cultural conditions that gave rise to queer theory and a cautionary tale that queerness (in opposition to lesbian and gayness) may not be able to escape the very cultural, historical, and economic ligatures of late capitalism it wants to jettison. Morton connects this institutional and political shift to the technological and technocultural shifts of the decades nearing the millennium. He says, "[T]he return of the queer is historicized as part of a systemic development connected to the appearance of late capitalism of such notions as virtual realities, cyberpunk, cybersex, teletheory. The return of the queer today is actually the (techno)birth of the cyberqueer" (369). It is important to note the similarities and conflations (and demonizations) of the essay's critique of postmodernity, of the loss of identity politics,

of queer theory, of a younger generation of scholars, artists, and activists, and of computer and digital technologies.

Morton describes, "In the domain of sexuality, the new space of queer theory is a postgay, postlesbian space. Ludic (post)modernism, which promotes the localizing of cultural phenomena, discourages any effort to render these developments systematically coherent and intelligible" (369). In the least, the word queer and the identity of queer is a reappropriation of a pejorative. He writes, "[T]he reappearance of *queer* today is given a local 'explanation'...as an oppressed minority's positive reunderstanding of a once negative word, as the adoption of an umbrella to encompass the concerns of both female and male homosexuals and bisexuals, or as the embracing of the latest fashion over an older, square style by the hip youth generation" (369). At the most, queer is a transforming, ratifying, often perverse, and "teledildonic" (a word coined by Howard Rheingold) marker and meaning-maker. "Birth of the Cyberqueer," which can be argued firmly situates itself in a kind of normative, reproductive, patrilineal frame with the birth metaphor, exhibits a technophobia and technoparanoia of the technoqueer. Morton says, "Cheerleading queer subjects, existing in dimensionless dimension and an immaterial materiality, devote themselves to the intensification of pure intensities" (373). Later he says, "To be gay is to have a mere identity; to be queer is to enter and celebrate the ludic space of textual indeterminacy" (373). Granted, Morton's critiques about the seeming insubstantiality of postmodernist, posthumanist claims about fluid subjectivities, infinitely modifiable selves, and liberatory cyberspaces do contain a useful thread of caution and commitment to how "play" must not turn into "a deadly game" (to return to Haraway's formulation). These critiques in some ways resonate with Mary Ann Doane's critique of the cyborg and cyborgian politics.

However, Morton's argument overdetermines the postmodernist break and emptiness of the cyberqueer and overprivileges "predeconstructive" (374) feminism, lesbian and gay studies, and Marxism.

For Morton, cyberqueers and queer theory hopes to build not "a differently ordered utopia" but "a nonconditioned and nonordered atopia" (375). Morton critiques contemporary queer theory as attempting to situate queers in non-space, in lack of space; it is a paradox that must be attended to and resolved in order for queer theory to be intelligible and useful. Morton further describes the paradox, the atopic queer space, as "an ever-expanding region of sensuous pleasure" that ignores "the historical constraints need places on pleasure" (375). He is deeply concerned that the cyberqueer is ahistorical, atavistic, too anti-assimilationist, amaterial, too local, and too disconnected. He says, "Cybercized queer theory…envisions a decentered, Interneted, normless society (if that is not a contradiction in terms)" (375), which is oppositional and perhaps counterproductive to the previous, golden-yeared gay movement that had "a social idealism tied to conceptual understandings of material and historical conditions and…a politics that was theoretically grounded" (375). According to Morton, the cyberqueer here is an expansion of the bourgeois subject, of exchange value over use value, of desire over need, where the "virtual body is the commodified, ahistorical body fetishized by the imaginary and promoted for profit" (376). It is important that Morton reminds queers and cyberqueers alike, as above, of Haraway's "all work to all play, a deadly game" (161). Both Morton and Haraway raise questions and red flags about the egalitarianism of technology, about issues of access, about the resources required to be part of the circuit, and about to whom and where access is granted. Morton forcefully challenges cyberqueers, their theory, and their technology to ground themselves in the material but assumes too much their

dematerialization and disembodiment. He declaims, "Cyberspace is a bourgeois designer space in which privileged Western or Westernized subjects fantasize that instead of being chosen by history, they choose their own histories. By manipulating the machines, the user-subjects write virtual histories according to their desires and seek to evade present historical conditions" (375). In fact, he continues, "The association with cyberspace (entry to which is literally not open to all) allies queer idealism with the self-interested individualistic idealism of the bourgeois subject" (375). In this model, cybersex then is a total evacuation of body, sex, act, and action; it is a mourning for some impossible "human subject [that] no longer has an 'interiority'" (379). Morton wishes cyberqueers to let go of their atopic idealism for materialist critique that "investigates how associations themselves (positive or negative) are produced and connects questions of sexual practices not to morality but to the politics of class and other grounds of oppression and to ideology, of which morality is one expression" (378). But as scholars and studies in the years after "Birth of the Cyberqueer" show, cyberspace and cyberqueers cannot be so categorically dismissed, and like Haraway's cyborg, both exist in ambivalence often simultaneously challenging and reifying social, bodily, and political orders. The cyberqueer, like the cyborg, can be careful and conscientious and complicated in ways, as this project will later explore, that address the essay's political and pragmatic concerns.

However, Morton's worldview and world-making are decidedly disenchanted and dystopic (clearly a product of early cyberculture). He sees a Boolean either/or between immaterial queer idealism and materialist, leftist, social idealism rather than a more collaborative both/and. Morton fails to entertain the possibility and potential that play need not be without purpose, that the cyborg's slipperiness or fracturedness need not be chaotic

and meaningless, that desire and need are not mutually exclusive, that the cyberqueer can be more than just a trendy word. And given that today's technologies (mobile phones, personal data assistants, hearing aids, onboard navigation, MP3 players, wireless internet) insert, implant, intervene nearly continuously and simultaneously working as part of, extensions of, or in concert with minds and bodies, is it really possible to "evade present historical conditions?"

Though not a direct response to "The Birth of the Cyberqueer," Nina Wakeford's simply titled essay "Cyberqueer" inaugurates the millennium with a more hopeful turn of the term. In 2000, Wakeford further elucidates and cultivates the optimism of the cyborg and the potential of cyberspace. For her, the message of cyberspace is that "anyone who has not yet encountered the worlds of cyberspace cannot know the wonders which await them: the realization of global community! the remaking of queer identity! the discovery of whichever subculture of a subculture you inhabit, there will be a Web page, or discussion group, or real-time chat room just for your kind!" (403-404). Granted, Wakeford, like others, is careful not to proscribe cyberspace as a panacea for all queer issues; she is fully aware and conscientiously requires cyberqueers to remain "broadly sympathetic" and collectively optimistic, but to not forget "one key proviso: access" (404). She further cautions that cyberqueer studies must continue to recognize the "economic and political conditions which are inevitably intertwined with the social and cultural features" (413) of cyberqueerness and cyberqueer representations as well as the dangers of queer radicalism being subsumed by commercialism and consumerism. Again, it is important to remember the key antimony of posthumanism, the key warning of Haraway's informatics of domination. But hope memes eternal. Cyberspace can be a queer space, though not necessarily unique to queers, that

draws many lifelines between the material queer world and the online queer world. Adding her lines to the queer web, Wakeford weaves, "[E]ntering cyberspace can be compared to arriving in an existing place where not only will we feel at home, but we are even the 'natural' majority" (404).

It is no accident that cyborgs, cyberqueers, and cyberspace share in common a predilection for difference, multiplication, amalgamation, and punctuated stability in the midst of protean instability. Cyborgs and cyberqueers are made up of overlapping identities and representations. Cyberspace is also made up of overlapping online spaces crisscrossed with information highways and data streams, discussion forums and message boards, peer-to-peer sharing and shared databases, not to mention sites, sights, voices, and sounds. The popular understanding and imagining of cyberspace is monolithic, "a singular, dense and impenetrable space—a huge world populated by hackers and the like" (Wakeford 404) when it actually is "a multifaceted, multilayered, and very segmented place" (Wakeford 405). Cyborgs defy perfect unities. Cyberqueers laugh at fixed identities. Cyberspace is no different—"cyberspaces, whether queered or not, resist an orderly cartography" (Wakeford 405). A common analogy for cyberspaces is still the near-infinite web: full of connections, nodes, all of which shift and reconnect, some of which dead-end, but save for the glittering pattern of silk the rest is emptiness, nothingness, oddly shaped stained-glass-like negative space. It is this connectedness and connectiveness that is the strength of cyberspaces. After all, silk pound for pound is stronger and more tensile than steel. It is in this strength that cyberqueer "netizens" and cyberqueer spaces are useful, malleable, and resourceful for the mobilization of queer activity and politics. Wakeford says, "Cyberqueer spaces are constantly reconstituted as points of resistance against the dominant assumption of the

normality of heterosexuality" (408); cyberqueer spaces are also "necessarily embedded within both institutional and cultural practices, and are a means by which the lesbian/gay/transgendered/queer self can be read into the politics of representation and activism confronting homophobia" (408). In other words, the cyberqueer is not only a figure of contestation but one of protest, of unrest, of social conscience, community, and coalition. The cyberqueer must be reborn from the ashes of Morton's epistemology and rise like a multitude of starry phoenixes out of the cybernatural darkness of cyberspaces to brighten the phosphor or plasma or LEDs of computer, mobile phone, and video screens across the world. Cyberqueer must be acknowledged as an activist identity. According to Wakeford, in the face of suppression, oppression, misrepresentation, disrepresentation, and silence, "the term 'cyberqueer' is itself an act of resistance" (410).

Again, as with Miyake's queer cyborg, how might we imagine and practice this activism, these politics? What is the self that we must code, create, and reconfigure? How do we navigate between the Scylla and Charybdis of the fantasy of cyberliberation and technodeterminism? Like the best possibilities of the cyborg, the queer cyborg, and the cyberqueer, the term technoqueer then is itself an act of resistance; it is an act of regeneration and reconfiguration of technocultural and queer theory, of the posthuman and the queer.

Queering Technoculture and Technoqueer Theory

Cybergirl, droid control
Get away now they trying
    to steal your soul
Microphone, one stage
Tomboy, outrage
Street fight, bloody war
Instigators, third floor
Promiscuous child, broken dream
STD, quarantine
Heroin user, coke head
Final chapter, death bed
Plastic sweat, metal skin
Metallic tears, mannequin
Carefree, night club
Closet drunk, bathtub
White house, Jim Crow
Dirty lies, my regards
        —Janelle Monae, "Many Moons"

What does it mean to queer technology and to technologically-orient queer theory? As articulated above, the technoqueer refashions, reconfigures, and resituates the lines of inquiry opened by the cyborg and the cyberqueer. The technoqueer also must emerge as a different formulation, a new frequency or resonance beyond its genealogy, becoming more than just an addition of "techno" and "queer." Unlike the prefix "cyber," which means "to steer," I chose "techno" or its root "techne" to refer to more than just action, orientation, and control but also arts, practices, assemblages, and lifeways. The technoqueer is mu

The technoqueer renders and articulates the ways technology mediates these identities, subjectivities, and embodiments, the ways ideas, selves, and bodies mediate technology, and our discourses and understandings of these formations. By queering technology and moving queer theory toward technoculture, the technoqueer hopes to show how bodies, identities, and subjectivities are gendered, sexualized, raced, and technologized by how they are extended, transformed, even contained by technologies.

Siobhan B. Somerville in her entry in the *Keywords for American Cultural Studies* provides a latticework definition of "queer" that resolutely remains unresolved: queer remains "an open question" (191), though scholars (and activists and artists and queers themselves) "continue to carefully interrogate the shortcomings and the untapped possibilities of 'queer'" (191) as noun, adjective, and verb. Somerville is clear about queer's burry (lack of) origins, fuzzy and shifty boundaries, and horny and ornery disposition: "Whatever the future uses and contradictions of 'queer,' it seems likely that the word will productively refuse to settle down, demanding critical reflection…in its varied and specific cultural, political, and historical contexts" (191). To define queer—much like the definition of the cyborg—is to read and articulate a pattern, a constellation across and through a suspension of perspectives, disciplines, theories, and experiences, and like the play of light on dust or the march of the stars, the patterns and constellations change over time and point of view. The history of the term is indeed troubled and requires accounts of its usages, erasures, silences, appropriations, and reconfigurations (a project much too large for this particular project), particularly as it is defined and deployed or denied by various discourses, disciplines, and institutions. Somerville opens her *Keywords* entry, "'Queer' causes confusion, perhaps because two of its current meanings seem to be at odds" (187). On the one hand, queer functions as shorthand for nonnormative, nonheterosexual sexuality and desire, as in "to be queer." On the other hand, queer is a critique, a theorization, a politicization that interrogates, challenges, denaturalizes, and reconfigures sexuality and desire, as in "to queer" or "queer theory" or "queer studies." As it is taken up by language, psychology, literary studies, women studies, feminism, history, geography, law, science,

popular culture, and lived lives, queer as self, study, and style continues to confuse, contradict, and resist easy categorization.

Queer raises important questions outlined by Judith Butler's 1993 "Critically Queer." She asks, "Who is represented by *which* use of the term, and who is excluded? For whom does the term present an impossible conflict between racial, ethnic, or religious affiliation and sexual politics? What kinds of policies are enabled by what kind of usages, and which are backgrounded or erased from view?" (*Bodies* 227). For Butler, "the genealogical critique of the queer subject will be central to queer politics" (*Bodies* 227). Since the initial upswing of the term queer in academic and activist demesnes was a reaction to, critique of, and radicalization of then gay and lesbian studies, theories, and politics, which was indexed as predominantly white, male, affluent, metropolitan, and US-centric, queer has grown and flourished as an attempt to express and activate a wider and deeper range of identities, subjectivities, bodies, practices, and desires. Queer served, as Butler argues, "as a site of collective contestation, the point of departure for a set of historical reflections and futural imaginings" (*Bodies* 227). She continues that queer must "remain that which is…never fully owned, but always and only redeployed, twisted, queered from a prior usage and in the direction of urgent and expanding political purposes" (*Bodies* 227).

Eve Kosofsky Sedgwick defines queer as "a continuing moment, movement, motive—recurrent, eddying, *troublant*. The word 'queer' itself means *across*—it comes from the Indo-European root –*twerkw*" (*Tendencies* xii). Sedgwick positions queer as across formulations—"across genders, across sexualities, across genres, across 'perversions'"—it is transitive, relational, multiple, and "strange" (xii). In her 1993 essay "Queer and Now," Sedgwick identifies queer as "sites where meanings didn't line up tidily with each other,"

sites invested with "fascination and love" (3). Queer is the "open mesh of possibilities, gaps, overlaps, dissonances and resonances, lapses and excesses of meanings when elements of anyone's gender, of anyone's sexuality aren't made (or *can't* be made) to signify monolithically" (8).

Queer (and queer theory) "represented an attempt to reclaim this stigmatizing word and to defy those who have wielded it as a weapon" (Somerville *Keywords* 188). Queer theory challenged the "underlying assumptions of identity politics and its tendency to locate stable sexual subjects…[and] has focused on the very process of sexual subject formation" (Somerville *Keywords* 189). Rather than focus on the early work in lesbian and gay studies on the opposition of homosexuality and heterosexuality, the "primary axis of queer studies shifted toward the distinction between normative and non-normative sexualities" (Somerville *Keywords* 189). As these theories and formations wrangled in the weeds over identity, subjectivity, minds, bodies, normal, abnormal, sexual, nonsexual, desires, and fears, queer would get a makeover in the 1997 special issue of *Social Text* on "Queer Transexions of Race, Nation, and Gender." In the introduction, queer is refitted as "a means of traversing and creatively transforming conceptual boundaries, thereby harnessing the critical potential of queer theory while deploying it beyond the realms of sexuality and sexual identity. This deployment not only illuminates how various dimensions of social experience—race, sexuality, ethnicity, diaspora, gender—can cut across or transect one another, resulting in their potential mutual transformation; it also 'queers' the status of sexual orientation itself as the authentic and centrally governing category of queer practice, thus freeing up queer theory as a way of reconceiving not just the sexual, but the social in general" (Harper et al 1).

Queer and queer studies further opened its questions and engagements to embrace Kimberle William Crenshaw's *intersectional strategy*. The *Social Text* editors "posits queer as a point of departure for a broad critique that is calibrated to account for the social antagonisms of nationality, race, gender, and class as well as sexuality" (*Queer Transexions* 3). Sex and sexuality per se no longer reigns center court; other ways of being, horizons of experience, and how these dimensions come together, cross, and complicate one another are necessary for thick and rich analyses and accounts of queer life and queer politics. The theme and calculus of intersectionality is further elaborated in writings and theorizations like 1998's *Q&A: Queer in Asian America*, edited by David L. Eng and Alice Y. Hom, who argue, "…the intersection of racial and (homo)sexual difference produces a set of unsettling representations and curious misreadings notably divergent from those normally associated with mainstream lesbian and gays. And perhaps there is always something curiously queer—something curiously divergent, contradictory, or anomalous—that arises from the crossing of homosexuality and race" (1). The continue, "Here we use 'queer' to refer to a political practice based on transgressions of the normal and normativity rather than a straight/gay binary of heterosexual/homosexual identity" (1-2).

Increasingly, the framing of queer epistemologies required and articulated the need to identify and include other modalities and formations of identity and subjectivity alongside, even against earlier privilegings of sex and sexuality as key interventions. This is the queer work of Butler's "urgent and expanding political purposes" (*Bodies* 227) and Sedgwick's "possibilities, gaps, overlaps, dissonances and resonances" (*Tendencies* 8). Queer no longer is (has never been) able to signify any monolithic understanding of being and experience. Eng and Hom in *Q&A* propose, "We might also extend the question of the 'subject' of

feminism to the field of lesbian/gay studies to suggest that one does not become queer merely through sex or sexuality—that one becomes queer in ways more complex than through simple oppositions to a compulsory heterosexual matrix or the repressive machinations of the straight mind" (12). Queer and queer studies can only "come into existence" as ratios, relationships, simultaneously cooperative and antagonistic, as additions, subtractions, multiplications, and divisions, as logics and desires rendered out of comparison, contrast, and the gliding and grinding edges of difference.

Here then is the initial and perhaps most vital intervention that the concept of queer and its arsenal of theories, critiques, and worldmakings can make for technocultural studies: to identify, articulate, and require robust, interconnected approaches—strategically intersectional, parallel, or comparative—to understanding technology's imbrications and interconnections with culture, space, time, bodies, desires, and identities. At the heart of technocultural debates is the construction, the subjectivity, the body of the "posthuman," which like queer is productively ambivalent. However, N. Katherine Hayles offers a succinct and working definition: "First, the posthuman view privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life. Second, the posthuman view considers consciousness, regarded as the seat of human identity in the Western tradition long before Descartes thought he was a mind thinking, as an epiphenomenon, as an evolutionary upstart trying to claim that it is the whole show when in actuality it is only a minor sideshow. Third, the posthuman view things of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born. Fourth, and most important, by these and other

means, the posthuman view configures human being so that it can be seamlessly articulated with intelligent machines" (2-3). Thomas Foster further thickens and complicates the posthuman with, first, a call to *reremember* (to cite Morrison) women of color feminism and, second, to require that no definition of the posthuman is complete without attending to gender, sexuality, and race; he says, "As my citation of Judith Butler might suggest, it has been easier to define posthumanism as a form of gender trouble than to define if or how race still maters under highly mediated, technocultural conditions of existence" (xxi). A goodly amount of technocultural scholarship and attention is focused primarily on accounts of gender (as seen above) and sexuality as routed primarily through gender difference. Therefore, accounts of the posthuman, of technomediated conditions of existence must be complemented and supplemented by queer theory, a formulation I have been calling the technoqueer.

One of the dominant promises and mythologies of technology, of technoculture is that of liberation, whether it be liberation from human frailty, singular identities or subjectivities, oppression, even mortality or the "meat" itself. This is neatly framed John Perry Barlow's "A Declaration of the Independence of Cyberspace," which invokes: "We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth…Our identities have no bodies, so, unlike you, we cannot obtain order by physical coercion…Our identities may be distributed across many of your jurisdictions. The only law that all our constituent cultures would generally recognize is the Golden Rule." However, as writers like Hayles or Foster or Lisa Nakamura cautions that "only too often does one person's 'liberation' constitute another's recontainment" (*Cybertypes* xv). Queer theory (itself often accused of this same gloss) can antidote these

disembodying rhetorics and uncritiqued liberations. For example, to magnify a more specific issue, the social, medical, political, and technological promises of transhumanism requires a careful queer intervention. The World Transhumanist Association (WTA) website acclaims, "We support the development of and access to new technologies that enable everyone to enjoy better minds, better bodies and better lives. In other words, we want people to be better than well." In fact, the WTA website has a specific page dedicated to "LGBTQIA" issues and claims that "[g]ays, lesbians and bisexuals are also natural allies of transhumanism since the right to control one's own body means being able to share it with other consenting adults," which echoes Stone's claim, "In cyberspace, the transgendered body is the natural body" (180). Here the technocultural must be met with critical and guarded optimism, focused through queer approaches to ensure that technology and queerness itself is not simply "repurposed and remastered, made to do new [stereotypical] work" (Nakamura 21).

Recently, in 2005, a subsequent special issue of *Social Text* asking the loaded question "What's Queer about Queer Studies Now?," once again attempts to revitalize the definitions and dimensions of the term queer. The editors David L. Eng, Judith Halberstam, and José Esteban Muñoz situate, "Around 1990 queer emerged into public consciousness. It was a term that challenged the normalizing mechanisms of state power to name its sexual subjects: male or female, married or single, heterosexual or homosexual, natural or perverse…the political promise of the term resided specifically in its broad critique of multiple social antagonisms, including race, gender, class, nationality, and religion, in addition to sexuality" (1). However, as queerness makes gains in the culture, in albeit tentative and turbulent visibility and tolerance, the functions and formations of queer require a critical attention to the ways queer is absorbed, manipulated, and potentially naturalized by

social and governmental mechanisms. Eng, Halberstam, and Muñoz argue, "The contemporary mainstreaming of gay and lesbian identity—as a mass-mediated consumer lifestyle and embattled legal category—demands a renewed queer studies ever vigilant to the fact that sexuality is intersectional, not extraneous to other modes of difference, and calibrated to a firm understanding of queer as a political metaphor without a fixed referent" (1). Even more recently, in 2007, *South Atlantic Quarterly* addends and responds the *Social Text* issue with its collection "After Sex?: On Writing Since Queer Theory," which was "interested in posing questions about simultaneity, multiple temporalities, and overlapping regimes of social practice, thought, and analysis" (424). The editors Janet Halley and Andrew Parker go on to argue, "The problem is less that queer theory makes 'everything about sex' than that it lodges the 'nonsexual' firmly within the 'sexual'" (425) and that the term queer must have "an understanding of the 'larger social matrices' within which sexuality studies and queer theory have emerged can't be extracted solely from the materials of sexuality studies and queer theory" (426-427).

Central to both collections is a concern for expanding the critical rigor and widening the intersectional foci of queer to include a panoply of issues, ways of being, lifeworlds, violences, and pleasures; this widening and expansion seems to track a shift from a queer interiority to a queer exteriority, from identitarian individuality to intersectional community, from private to public, from local experience to global experiences. For example, "queer studies now more than ever needs to refocus its critical attentions to public debates about the meaning of democracy and freedom, citizenship and immigration, family and community, and the alien and the human in all their national and global manifestations" (Halley and Parker 2). Queer revels in its interdisciplinarity and concomitant interventions. According to

both journals, queer gains further purchase in its meanings and politics when set against, alongside, and through other keywords beyond the holy trinity of race, gender, and sexuality; these broadened considerations include class, nationality, religion, political economy, war, terror, activism, kinship, belonging, historical emergencies, civil rights, citizenship, migration, immigration, freedom, tradition, neoliberalism, neoconservatism, prisons, welfare, mourning, intimacy, marriage, family, desire, domesticity, reproduction, geography, subaltern communities, globalization, and time. Curiously missing, assumed, ignored, or disappeared by this litany is any account or attendance to queer *and* technology, queer *as* technology, and queer technologies (though there is potential in the phrase "alien and human").

Here, technocultural theories can inform and intervene in queer and queer studies, particularly since the development of queer as an analytic runs concurrent with the development and intensification of computer, communication and media, biomedical, military, and planetary and interplanetary technologies. It is a project (again too large for this particular meditation) of similar trajectories to that of Siobhan B. Somerville's important and regarded *Queering the Color Line: Race and the Invention of Homosexuality in American Culture*, which tracks the historico-medical and socio-political discourses and mechanisms that gird and interconnect the constitution of the homosexual as a species, to borrow from Foucault, and the rendering and reification of the color line, the racial and racist projects, to borrow from Omi and Winant, in the US. Somerville smartly articulates that "it was not merely a historical coincidence that the classification of bodies as either 'homosexual' or 'heterosexual' emerged at the same time that the United States was aggressively constructing and policing the boundary between 'black' and 'white' bodies"

(*Queering* 3). Somerville's astute formulation is muse then to understanding the historical coincidence of the definitions and redefinitions of queer, both mainstream and radical, that coalesce at the same time as technologies encourage and threaten notions of embodiment, subjectivity, humanity, sex, and desire.

The technocultural offers additional interventions into the queer, since the technocultural is also in the business of trying to understand and formulate critiques of ways of being, bodies and embodiments and desires in flux, and moreover, to read "the history of technology is as a series of complexifications, knots, and loosenings of the bonds and tensions between bodies and selves, mediated by technologies of communication, within a force field of power relationships" (Stone 86). I return to Stone's definition of the technocultural, the technosocial as "the social forms within technology-viewed-as-nature—those social forms to whom technology has become invisible, in no more and no less the same way that the workings of our bodies have become invisible in the face of a burgeoning medical imaging industry whose premise is to make the body thoroughly visible—social beings for whom technology is nature, for whom elsewhere is geography, for whom the problematic tie between unitary awareness and unitary physical body has political consequences" (38-39). In other words, the technocultural invites a redefinition of what it means to be differently human, a subject under and in technology, and the necessary consideration of "what opportunities such redefinitions might offer, to consider what is lost and what is gained, to use Octavia Butler's formulation" (Foster *Souls* xx).

This is the very function and figure of the technoqueer. The technoqueer provides circuits, alliances, and antagonisms to more fully address race, gender, and sexuality in technoculture and to more fully account for technology in queer theory. In a sense, the

technoqueer serves as a bridge figure, an ambivalent circuit to connect even in temporary and contingent ways queer theory and technoculture. The technoqueer attempts to resolve the "antimony" between these disciplinary, philosophical, and political domains, between what I earlier called posthuman queerness and queer technologies. By thinking more about the ways technology configures and reconfigures understandings and formations of identity and subjectivity—particularly in the combinations of technogender, technosexuality, and technorace—the technoqueer reveals the structures and scaffolds of the near ubiquity of technological mediation and penetration into every cell and corner of twenty-first century life. This inter- and intrapenetration form the technonormative matrix, the technologically enhanced and informatically infected version of Butler's heteronormative matrix, "the matrix of power and discursive relations that effectively produce and regulate the intelligibility of [person, sex, or sexuality] for us" (*Bodies* 42). The technoqueer makes visible the technonormative, what is imaginable and legible, and more importantly what is *not* for a subject under technology. In doing so, the technoqueer also works to reconfigure and imperfectly cross the key antimony in posthumanism and posthuman technologies, as also mentioned above, which Thomas Foster says at length,

> The key antimony or unbridgeable gap that posthumanism has trouble thinking through is not just the relation between technicity and ethnicity or posthumanism and civil rights, but the relation between the argument that posthumanism has critical potential, that it is or can be part of struggles for freedom and justice, and the argument that posthumanism dismisses such struggles or even makes them obsolete, just as in some accounts of new technologies of body modification and human-computer interfaces are understood as making bodies obsolete. (*Souls* xxvii)

The technoqueer then seeks to extend the work of the cyborg, the cyberqueer, the queer, and the posthuman as the collaboration and condensation of the promises and tensions of

queering technology and technologizing queerness. It is the antidote to the antimonies of queer posthumanism.

For example, I want to cite two contemporary examples pulled from the headlines in recent mainstream and technological news: the much-debated case of Pfc. Bradley Manning, an US Army intelligence analyst accused of leaking classified information in 2010, and the amazing story of Sergeant First Class Leroy A. Petry, also from the US Army, who in 2011 became the second living recipient of the US Medal of Honor since the Vietnam War. Both serve as foils, counterpoints in my discussion of the technonormative and the ways that technology is taken up in consequential but often uninterrogated and unintentional ways with race, gender, and sexuality.

Figure 1: Bradley Manning and "Equality" poster. From: http://www.bradleymanning.org/wp-content/uploads/2011/04/Bradley-Manning-with-Equality-Poster.jpg

On the one hand, Bradley Manning, now 23, was arrested in May 2010 in Iraq after being suspected of leaking sensitive videos and documents to unauthorized third parties. Manning was charged with violating the US Espionage Act and for abusing access to military secret-level networks. According to a wired.com report at the time, Manning "allegedly passed more than 50 classified diplomatic cables to an unauthorized party, but downloaded at

least 150,000 unclassified State Department documents" (Zetter and Poulsen) as well as two classified combat videos which showed civilians killed by US forces. Manning's actions, arrest, connection to the infamous whistleblower website Wikileaks, subsequent detainment awaiting trial has sparked heated debates in the culture at large, notably around issues of freedom of information, war, democracy, and human and civil rights. Manning is considered a hero, a patriot, and a revolutionary by some; he is judged coward, traitor, spy, and criminal by others. What is remarkable about Manning's case, for the purposes of this chapter, is the way speculation about his sexuality and gender identity have surfaced in recent months and how his confusion, exploration, and persecution over these identities are inexorably linked to his use of cybertechnologies and his alleged cybercrimes. According to reports, Manning sought refuge online, chatting via AOL's instant messenger service under the nickname "Bradass87," searching out like-minded and like-identified others. According to Steve Fishman's *New York* magazine profile, Manning used the Internet "to transform himself. On the web, he could be whomever he chose." Fishman continues, "Among fellow soldiers, Manning had to conceal the basic facts of his sexual orientation. On the web, he was proudly out and joined a 'Repeal Don't Ask Don't Tell' group. He'd even begun to explore switching his gender, chatting with a counselor about the steps a person takes to transition from male to female." In the world of computers and hacking, Manning could live and imagine the possibilities of selfhood and self-fashioning that transcended his limits and limitations, both personal and societal. Fishman identifies Manning's embodied tensions saying, "In the gravityless world of the web, Manning could be all he wanted to be—gay, patriotic, and powerful, too…When his computer was turned off and his Army comrades returned, his superpowers disappeared. The members of his platoon didn't consider Manning

a warrior, not like them. He's five foot two and 105 pounds, as 'tiny as a child,' one former soldier said."

Figure 2: Webcam photo of Bradley Manning. From: http://www.worldupdatednews.com/wp-content/uploads/2011/07/bradley-manning-007.jpg

Manning's continuing story and media representation—both as hacktivist darling and cyberterrorist pariah—reveal the varied and often conflated layers of a technologically mediated subject. Manning's body, mind, and motivations complicate any discrete and unitary definition of man, soldier, homosexual, son, hacker, transgender, patriot, criminal, and victim. His struggles with his own identifications and his place in the military are complicated by his proficiency with computers and the cultural narratives, both positive and negative, told about cyberspace. Even as the United States is on the eve of repealing "Don't Ask Don't Tell," Manning's case underscores a long legacy of institutionalized homophobia and transphobia most dramatically and colorfully set into motion by the "Lavender Scare"[17]

[17] For a broader and detailed account, see David K. Johnson's *The Lavender Scare*. In the introduction "Panic on the Potomac," Johnson articulates the conflation of perversion and homosexuality and "security risk," saying, "In the troika of sinners routinely listed as security risks—the alcoholic, the loquacious, and the pervert—only the pervert was always a security risk. The other two categories involved qualifications—not all those who talk, but those who talk too much; not all those who drink, but those who drink too much. But even one homosexual encounter qualified someone as a security risk, making it perhaps the easiest such offense to prove. It was the only one of the three to be illegal, thereby automatically enlisting every police force in the nation in its enforcement. It was the only one that warranted a full-scale congressional investigation, the only one requiring specialized security officers, the only category which government departments kept specific

of the 1940s and 50s, which dovetailed with McCarthyism in the rooting out of "Communists and queers" from the government and military and the pathologization of homosexuality as "perversion" and "sickness" by medicine and psychiatry. Moreover, the longstanding ban on and criminalization of homosexuality in the US military reinforces the idea that homosexuality and the armed forces are incompatible as outlined by the U.S. Code Title 10 Subtitle A Part II Chapter 37 Section 654 entitled "Policy Concerning Homosexuality in the Armed Forces," what is now referred to as "Don't Ask, Don't Tell." The section reads, "The armed forces must maintain personnel policies that exclude persons whose presence in the armed forces would create an unacceptable risk to the armed forces' high standards of morale, good order and discipline, and unit cohesion that are the essence of military capability" (a.14) and "The presence in the armed forces of persons who demonstrate a propensity or intent to engage in homosexual acts would create an unacceptable risk to the high standards of morale, good order and discipline, and unit cohesion that are the essence of military capability" (a.15). In other words, homosexuality is read as incommensurate with the good of the nation and queerness is equated with corruption, failure, and risk.

Like Alan Turing, who succumbed to Britain's version of the "Lavender Scare," Bradley Manning's sexuality cannot be decoupled from his masculinity or perceived lack thereof, his expertise, his role in the war effort, and his arrest as a traitor. Like Turing, Manning's sexuality and difference are seen as security risks. And like Turing, Manning's ability with and affinity for technology, particularly computer technology, made him an even greater risk and danger to the safety of the nation and the technologies of war. It is these circuits, these practices, these technologies that the technoqueer must unpack and understand.

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records. In most statistics about security risks, homosexuals composed the single largest contingent. Althought 'security risk' covered a variety of offenses, it often functioned as a euphemism for homosexual" (8).

It is not surprising that Manning is currently awaiting a "706 board" inquiry. Manning's attorney says, a Rule for Court-Martial 706 board "is comprised of three Army mental health professionals. Their task will be to conduct a thorough mental examination of PFC Manning to determine if at the time of the alleged conduct he suffered from a severe mental disease or defect, whether he was able to appreciate the nature and quality of his conduct, and whether he is presently suffering from a mental disease or defect" ("PFC Manning"). It is not difficult to make the interpretative leaps here to connect Manning's struggle with his sexuality and gender identification to his liability and security risk to his confidence in cybertechnologies. If Manning is found to be mentally "defective," a term historically used to describe those queer, the very system he sought to escape through cyberspace and the very technologies of war he sought to disrupt will both condemn and recuperate him.

On the other hand, Staff Sergeant Leroy A. Petry, also a member of the US Army, makes a telling comparison to Pfc Bradley Manning. Petry, a Latino-American soldier, was awarded the Medal of Honor by President Barack Obama on July 12, 2011 for "acts of gallantry and intrepidity at the risk of his life above and beyond the call of duty in action with an armed enemy in the vicinity of Paktya Province, Afghanistan, on May 26, 2008," according to the medal's official citation. The official citation continues with Petry's amazing story:

> As a Weapons Squad Leader with D Company, 2nd Battalion, 75th Ranger Regiment, Staff Sergeant Petry moved to clear the courtyard of a house that potentially contained high-value combatants. While crossing the courtyard, Staff Sergeant Petry and another Ranger were engaged and wounded by automatic weapons fire from enemy fighters. Still under enemy fire, and wounded in both legs, Staff Sergeant Petry led the other Ranger to cover. He then reported the situation and engaged the enemy with a hand grenade, providing suppression as another Ranger moved to his position. The enemy quickly responded by maneuvering closer and throwing grenades. The first grenade explosion knocked his two fellow Rangers to the ground and wounded both with shrapnel. A second grenade then landed only a few feet away

> from them. Instantly realizing the danger, Staff Sergeant Petry, unhesitatingly and with complete disregard for his safety, deliberately and selflessly moved forward, picked up the grenade, and in an effort to clear the immediate threat, threw the grenade away from his fellow Rangers. As he was releasing the grenade it detonated, amputating his right hand at the wrist and further injuring him with multiple shrapnel wounds. Although picking up and throwing the live grenade grievously wounded Staff Sergeant Petry, his gallant act undeniably saved his fellow Rangers from being severely wounded or killed. Despite the severity of his wounds, Staff Sergeant Petry continued to maintain the presence of mind to place a tourniquet on his right wrist before communicating the situation by radio in order to coordinate support for himself and his fellow wounded Rangers.

However, Petry's inspiring and incredible story does not end there. Within a week of the above events, Petry would return to the United States and would eventually be placed in the care of Brooke Army Center in San Antonio, Texas under the care of the Department of Orthopedics and Rehabilitation. There, Petry would receive a new prosthetic right hand called the i-LIMB Hand developed by Touch Bionics. According to the corporation's website, the i-LIMB Hand "is controlled by a unique, highly intuitive control system that uses a traditional two-input myoelectric (muscle signal) to open and close the hand's life-like fingers. Myoelectric controls utilize the electrical signal generated by the muscles in the remaining portion of the patient's limb. This signal is picked up by electrodes that sit on the surface of the skin."

Figure 3: President Barack Obama and Army Sgt. 1st Class Leroy Petry make their way into the East Room for a Medal of Honor presentation ceremony at the White House. July 12, 2011. Army photo by D. Myles Cullen. From: http://www.facebook.com/media/set/comments/?set=a.10150243645408558.331462.44053938557

Just as Bradley Manning's embodiment and subjectivity cannot be removed from the technology he uses and the consequences of that technology that ultimately indicts him, Leroy Petry's embodiment and subjectivity are also inexorably connected to and informed by his prosthetic hand. Both Manning and Petry are subjects under the technologies of war, both are held to the dominant expectations for a man and a soldier and a patriot, and both are judged by how well they keep to the technonormative matrix. While Manning is characterized as small, childlike, feminized by his queerness and by the very cybertechnologies that he thought gave him power, Petry is valorized, heroified, and masculinized by his status as an elite Army Ranger, his fearlessness and self-sacrifice in the face of danger, and his bionic hand. Whereas Manning's technical expertise made him vital to the army as an intelligence officer, it was Petry's field experience, physical prowess, and leadership ability that make him medal-worthy. In other words, Petry's normative masculinity—he is tall, barrel-chested, and broad-shouldered— is assured when coupled with

a technology that restores and augments that masculinity—down to the *Terminator*-like silver-gray skin.

Figure 4: President Obama shakes Petry's prosthetic hand. (AP Photo/Charles Dharapak). From: http://militarytimes.com/blogs/line-of-sight/files/2011/07/petry2.jpg

Moreover, Petry has embraced his prosthesis and is described as unafraid to draw attention to it, to use it to shake hands (as seen in the above): "Petry even shakes hands with new people using his prosthetic—something others might be uncomfortable with, but something he said he is proud of" (Lopez). Like the Medal of Honor around his neck, the bionic hand has become another marker of normative masculinity, of normative capability. In fact, as reported in a profile for the US Army's website by C. Todd Lopez, Petry was eager to recover, rehabilitate, and return to active duty: "Despite his injuries, Petry recently re-upped in the Army for eight more years, which will take him to a full 20 years of service." As per Judith Butler's formulation of the performativity of gender, corporeality maps onto gender and sexual identities, and the injured or incomplete body is often read as lacking, weak, unstable, passive, even asexual. Normative masculinity requires the ideal corporeal male body to be fit, able, active, penetrative, and dominating. Petry's attitude toward his amputation and his prosthesis reveal what Lenore Manderson and Susan Peake in "Men in

Motion: Disability and the Performance of Masculinity" call the oxymoron of disabled masculinity, which they even liken to a "third gender." They say, "Since masculinity is defined as able-bodied and active, the disabled man is an oxymoron. Becoming disabled for a man means to 'cross the fence' and take on the stigmatizing constructs of the masculine body made feminine and soft" (233). Therefore, according to Manderson and Peak, men with non-normative embodiments, particularly those with visible disabilities or injuries, must "seek to reestablish what they understand to be their former relationship with their bodies, while also distinguishing their bodies from other sexless, feminine bodies" (231), that more of often than not, "men reconcile gender and disablement by embracing conservative masculinity" (233) via sport, competition, and combat.

Both examples of Bradley Manning and Leroy Petry reveal the productive ambivalences around the questions of what it means to be a man, what it means to be masculine, what it means to be a cyborg, and what it means to choose or not to choose the ways technology mediates your body, mind, and self. For Manning, who is already read as queer and non-normative, his engagement with and mediation by technology negatively enhanced his queerness, his otherness. For Petry, who is championed as a hero, father, and ideal citizen, his loss and repair by technology positively enhanced his masculinity, his normativity. However, there are opportunities here, fissures, in both cases that might allow for reparative readings of Manning and radical and resistant readings of Petry. It is through these openings and complexities that this project hopes to track the ways queer, queer theory, technology, and technocultural theory might grow, learn, and revitalize and reconfigure one another.

The curious cases of Manning and Petry represent and embody the intersectional strategies that the openness of queer and the potentialities of technology together might envision. How might the figure and form of the lithe Manning and the stalwart Petry reveal and revel in these promises and tensions? These men, as queered cyborgs and technoqueers, as instantiations of the intersection of technology and identities and identifications, reveals the very work of queer theory and technopolitics; the cyborg can assemble and reassemble any combination of the interventions and categories listed above. However, as both cases reveal and trouble, the technoqueer like the cyborg is not a panacea and can reinscribe and perpetuate the very problems, dangers, essentialisms, and oppressions it seeks to challenge. Both men are subjects of and subject to Haraway's "informatics of domination," where the definitions and technologies, discourses and strategies that make the cyborg possible are also the very tools and structures to enforce dominant meanings, police difference, and disappear or destroy lives. This is the same warning Butler makes that queer must never be "fully owned, but always and only redeployed, twisted, queered from a prior usage" (*Bodies* 227). This is also Sedgwick's crucial caveat in *The Epistemology of the Closet*: "[M]y fear is that there currently exists no framework in which to ask about the origins or development of individual gay identity that is not already structured by an implicit, trans-individual Western project or fantasy of eradicating that identity" (41). She continues, "Increasingly it is the conjecture that a particular trait is genetically or biologically based, not that it is 'only cultural,' that seems to trigger an estrus of manipulative fantasy in the technological institutions of the culture" (43). In other words, Sedgwick is suspicious of these origin stories and of discourses of change and identifies the dangers of both, of the often tacit

moves that make manipulable one range of categories, identities, and discourses while shoring up or disabling others.

The cases of Manning and Petry dramatize this tension between liberation and domination in a technological trope common to science fiction and cyberpunk narratives: the desire to escape into cyberspace, to become someone else, to change the world via technology, as in the demonization of Bradley Manning, or, the potent potential to restore, repair, and ultimately reinscribe highly technologized versions and visions of normativity, as in the heroification of Leroy Petry. By attending to and analyzing stories like those above, the technoqueer challenges not only what is spoken, shown, made, or changed but how these discourses, practices, bodies, and technologies are always mediated, always political, and always subjected to configurations of power. To do this, my analysis and advancement of the technoqueer is routed through popular accounts of post- and transhuman technologies, through narratives about technologically mediated bodies and subjectivities, and through new media texts like websites, virtual worlds, and massively-multiplayer online role-playing games. These texts, these literatures (defined broadly) dramatize and theorize the technoqueer. As cultural productions, they provide descriptions, examples, and interrogations into what it means to be a subject under technology. To draw on N. Katherine Hayles, whose work straddles both scientific history and literary analysis, she says, "Here the literary texts play a central role, for they display the passageways that enabled stories coming out of narrowly focused scientific theories to circulate more widely through the body politic" (*How* 21). She continues, "Literary texts are not, of course, merely passive conduits. They actively shape what the technologies mean and what the scientific theories signify in cultural contexts" (*How* 21). Hayles is interested in the interrelations between different kinds of

cultural productions, particularly the narratives about and within technology and culture, as "a way of understanding ourselves as embodied creatures living within and through embodied worlds and embodied words" (*How* 24). Like Haraway's championing of writing as a cyborg politics, the close reading and deploying of literatures and narratives is a technoqueer politics.

For example, here is an opportunity for the technoqueer to intervene in similar questions troubling queer theory, namely the critique of possessive individualism and neoliberalism. In other words, how might technologies of self-transformation and self-fulfillment challenge normative ideas about the individual and at the same time hook into the dominant processes and proscriptions of what the ideal individual or citizen-subject should be? How might we parse the popular (mis)understandings of "cyberspace" as both technolibertarian final frontier and bureaucratic, corporate, protocological wasteland? How might we unpack the technosocial tensions between body modification and body mutilation, between augmentation and alienation, between enhancing the human and decommissioning the human? As seen in the examples above, the theme of technological possessive individualism is still fraught and contingent (a theme picked up by many other technocultural narratives from William Gibson's *Neuromancer* to the film *The Matrix* to the short stories by Cory Doctorow and Geoff Ryman). Even the notion that queer itself could be implicated, complicit in a kind of neoliberal project must be addressed; Judith Halberstam in "What's Queer About Queer Studies Now?" recognizes "the political and intellectual promise of queer studies as yet unfulfilled to the extent that queer too quickly collapses back into 'gay and lesbian' and, more often than not, a 'possessive individualism' that simply connotes 'gay,' 'white,' and 'male'" (12). (Here interventions in to recent debates about hetero- and

homonormative time by Halberstam, Munoz, and Lee Edelman are also up for interrogation.) How might queer, like the cyborg, become an index of a kind of mainstreamed, acceptable, tolerated, even commodified difference? What strategies and radical theories of queerness and technology can be identified and refined to challenge this cooperation and cooptation?

Another significant way technoqueer imaginaries (narrative or otherwise) can intervene in queer and technoculture theory in order to preserve openness and rearticulation, a necessary feedback loop, is in the challenge of normativity (or the normal) as the privileged object of analysis, critique, and opposition. The grounding and central preoccupation of most of the theories above is the perpetuation of the (hetero)normative and nonnormative binary. Almost every definition of queer requires the flagging of normativity as that which must be dispelled, denounced, and destabilized. Even with the work of critics like Michael Warner, whose book *The Trouble With Normal* confronts this troubling tunnel vision, the binary remains firmly entrenched in scholarship, politics, and the culture-at-large. Warner says this fact is not surprising given that in America "normal probably outranks all other social aspirations" (*Trouble* 53). Philip Brian Harper in "Gay Male Identities…Notes on Directions for Queer Studies" echoes Warner's analysis saying, "Inasmuch as queer practice entails a challenge rather than a capitulation to operative categories of social-subjective discipline, it's object is not…'the redefinition of what is normal,' but the deconstructive interrogation of the concept itself. In order to achieve this, queer analysis must allow for all the disparate factors comprised in the registration of various social identities and in their adjudication against the standard of social normativity—an openness that I would argue defines queer engagement in the first place" (24). He continues, "The great promise of queerness, after all, lies in its potential to conceive and mobilize modes of social subjectivity not accounted for in advance

by the structures entailed in ideological narratives—that is, to render effectively negotiable the 'open' of the public arena, not by simply conceiving the latter as a site for the free play of multiplicitous subjectivities, but by consciously deploying it as a constitutive element within subjective identification itself" (25). Granted, the opportunity here is not to do away with the normative/nonnormative dualism, but rather to think through the naturalization of the dualism in a cyborgian, technoqueer way. In other words, it is not the challenging of normativity that is the problem per se, but the (near hegemonic) privileging of this critical intervention and strategy as the only and best way to imagine and build technoqueer lifeworlds.

Finally, the technoqueer must continue the intersectional and polyvalent work of feminism and queer of color critique. As I have traced in the preceding sections, the radical and progressive work of the cyborg, the cyberqueer, and the queer must be further unpacked and reconfigured to account for what Roderick Ferguson calls "social heterogeneity" and how technology itself functions in and mediates "race, gender, and sexuality's mutually formative role in political and economic relations" (*Aberrations* 3). Ferguson in *Aberrations in Black: Toward a Queer of Color Critique* calls for an intersectional approach to the study of race, gender, and sexuality, arguing, "We need a study of racial formations that will not oblige heteropatriarchy, an analysis of sexuality not severed from race and material relations" (29). In this same vein, then, the technoqueer aims to provide a language and a formulation of race, gender, and sexuality not severed from an account of technology. The technoqueer reminds us of the co-constitutive nature of these structures and formations and that self-making and technology-making and world-making can both highlight and obscure asymmetries in power, privilege, and the consequences of a technologically-mediated life.

Like Bradley Manning's longing to find a place, a community, an identity to "fit in" and like Leroy Petry's desire to return to a "normal life," their narratives of belonging and normalcy are fraught with posthuman and technoqueer anxieties and potentialities. However, although both Manning and Petry's stories are certainly about the conscription, policing, and recuperation of the cyborg body, it is possible to read a disidentificatory (to reference José Estaban Muñoz) thread running through both and mark the ways and the ruptures to the dominant definitions of "normal," technologically-mediated or not. Both reveal the "shuttlings and displacements…that intersectional subjects, subjects who are caught and live between different minoritarian communities, must practice frequently if they are to keep their residences in different subcultural spheres" (156). Both must find a way to imagine and create a world in which they can live, walk, speak, and act in all of their intersecting identities and subjectivities, as cyborg, as potential technoqueer. After all, this is the hopeful work of queer and technocultural studies, to imagine and realize a kind of productive and attainable futurity. This futurity can be positive, progressive, pleasurable, and utopian and still unsettle and reconfigure and resist oppression, control, danger, and fear. Muñoz says in *Disidentifications,* "Although utopianism has become the bad object of much contemporary political thinking, we nonetheless need to hold on to and even *risk* utopianism if we are to engage in the labor of making a queerworld" (25). Unlike the privileged disregard and abandonment for futurity as per Lee Edelman's *No Future*, to which Muñoz has choice words, the technoqueer cannot sacrifice the past or the present or the future in the name of critique. Muñoz says the world must find a "utopian blueprint for a possible future while, at the same time, staging a new political formation in the present" (200). It is this *technoqueerworld*, this queer worldmaking that both the queer and the technocultural can co-

realize. Michael Warner and Lauren Berlant say, "[M]aking a queer world has required the development of kinds of intimacy that bear no necessary relation to domestic space, to kinship, to the couple form, to property, or to the nation" (199).

In other words, to arc back to our emblematic Alan Turing, the "first" technoqueer, we must think more, do more, be more than the prescribed and proscribed limits of some phobic, conservative, and unwilling culture. If the central failure of a more democratic, more liberatory, more techno- and queer positive world is, as Foster says, a failure to imagine the possibilities, then Turing emphatically argues and endorses the opposite. He says in 1950 as a hope for the new millennium, "Nevertheless I believe that at the end of the century the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted. I believe further that no useful purpose is served by concealing these beliefs" (442). It is about revealing and reveling in these nascent and sometimes blasphemous beliefs. It is about imagining what cannot be and is refused to be imagined. It is about reflection, regeneration, and reconfiguration. The technoqueer is now. The technoqueer is here.

> It can keep a foot in silicon and a foot in carbon; it can run on blood and electricity. It can walk any street in the hope that it will be protected by its ambiguity. It may be wrong, and the risks are great, but it is an agent for fusing embodied, situated knowledge, and powerful fantasy. (Hovenden 260)

Chapter Two
Queering Cyberspace

Cyberspace is queer. Something about the dance of electrons, the hyper- and intertextuality of meaning, the flickering of identities like a screen or a cursor suggests queerness. To invoke common parlance, cyberspace is one of the greatest of undiscovered countries (if it can be called a country at all) full of metaphor, illusion, allusion, mazes, mythology, and monsters. It is a place, an electromagnetic state, a variable field where ostensibly everyone is citizen and where an individual can be multiple, simultaneous citizens and many people can act as a collective *netizen*. Cyberspace must be queer. It is a place, space, and site of such contention, differing definition, rich and revolving identities, fear and desire, loathing and luminescence. It is most definitely raw and unbounded possibility. Cyberspace seems to be the queerest of publics and privates, full of towers of data, archival abysses, tripped and untapped connections, alluring strangers, cyborgs, cyberqueers, and technoqueers.

Given all of the radical and queer possibility of cyberspace, both as concept metaphor and constellation of material, albeit digital technologies and practices, what is important in this chapter's intervention is the tracking of the ways that cyberspace is simultaneously invoked as a space and site of liberation from the limitations and perils of embodiment (which most often get routed through the rhetoric of colorblindness, genderblindness, and floating desire) and yet also as a system of constraints and controls (which limit access to freedom, power, and liberty to certain bodies and identities). Analogous to Thomas Foster's key antimony of posthumanism, referenced in the previous chapter, the key antimony of cyberspace is revealed in its promises of radical self-fashioning, belonging, and disembodiment even as the very same technologies perpetuate and police normative, hierarchical, and narrow logics of self, community, and body. In other words, what makes cyberspace queer concomitantly produces the very structures and protocols, to borrow from Alexander Galloway, that recuperate that queernesss back into technonormativity. In fact, as will be revealed through the following texts and narratives, the queerness of cyberspace, like the queerness of the cyborg, is often too subversive or monstrous to sustain under the dominant protocols of racism, heterosexism, and homophobia. But, through the technoqueer, alternative and resistant narratives can be recovered and reconfigured.

First, what frames the arguments that follow is an exploration of this double consciousness of cyberspace—on the one hand, the heterotopic fantasy or the "seductions of cyberspace" as N. Katherine Hayles puts it, and on the other hand, the guarded optimism that animates my hope and desire to envision and reimagine cyberspace as queer. The recent scholarly collection *Queer Online: Media Technology and Sexuality* exemplifies these hopes and fears, saying, "What is there about the Internet that makes it somehow, queer? Well, for

one thing, there's the disembodied, performativity of cyberspace, the place where no one knows you're a dog, or whatever you choose to present yourself as. Queer folk are past masters of this game…either by masquerading and passing, or living on the margins" (Gross vii). The collection also recognizes, "The Internet is not utopia, however…It may offer us opportunities to escape into an alternate universe…but we often discover that most travelers have brought along the biases and prejudices they carry in the rest of their lives" (Gross x). Since the first narrative imaginings of cyberspace by Bruce Bethke, Vernor Vinge, and William Gibson, as well as John Perry Barlow's manifesto "A Declaration of the Independence of Cyberspace," the articulation of cyberspace has been troubled and trapped by this double bind. Many of these imaginings replicate Barlow's manifesto, which "claims to articulate a new and radical politics" yet it "asserts and enacts systems of meaning that ultimately legitimate certain identities, behaviors, and realities *at the expense of others*" (Morrison 55, my emphasis). Or as outlined in my previous chapter, in Lisa Nakamura very simple formulation, "only too often does one person's 'liberation' constitute another's recontainment" (*Cybertypes* xv).

Second, rather than replicate and further shore up the oppositional binary above, this chapter hopes to identify slippages, overlaps, and productive ambivalences in the potentiality of cyberspace. Rather than giving into the fantasies of disembodiment that so often characterizes cyberspatial narratives and subjectivities, the technoqueer intervention here is to consider the ways that identities and embodiments mediated by virtual and communication technologies are always in process and "simultaneously material and immaterial" (O'Riordan 20). Rather than assume that cyberqueer subjects "have been produced through a queer frame of subjectlessness" (O'Riordan 20) or otherness, the goal here is to rectify the fact that

"they have often been dislocated from intersections with race, class, gender, and sexuality" (O'Riordan 20). Moreover, rather than figure the radical potential of cyberspace as solely in opposition to some stable notion of a normative center and relegation to "living at the margins," how might we recover cyberspace as metaphor and model that encourages and embraces intersectionality, interconnectivity, and intertextuality. We must, as Wendy Chun argues, "displace this disembodying binary by highlighting the ways that the self is always compromised, even within itself" ("Orienting" 5). We must reclaim the queerness of cyberspace as a fluid, flexible, and flickering rule rather than a state of exception or exclusion. Chun continues, "The point, then, is to see the ways in which this challenge of disorientation in the face of the foreign can disrupt everyday locations and understandings rather than being reserved for those *other* spaces. The point is to see the ways in which heterotopias disrupt 'normal' spaces, rather than lie neatly outside them" ("Orienting" 29).

Third, to take up Galloway's ideas about protocol more fully, the revisiting and analysis of cyberspace theories and texts below reveal how the dominant narratives of cyberspace foreground the virtues and powers of the Internet and like technologies, which are "robustness, contingency, interoperability, flexibility, heterogeneity, pantheism" (Galloway *Protocol* 42), while obscuring the structures, controls, and hierarchies that undergird them. In fact, Galloway's central argument in *Protocol: How Control Exists after Decentralization* is that cyberspace, particularly World Wide Web technologies, is highly organized, highly structured even as commonsense and commonplace definitions and representations of cyberspace describe it as a "free, structureless network" (61). Though the Internet maybe decentralized, rhizomatic, and distributed, it is still governed by protocol. He says, "I attempt to show that protocol is not by nature horizontal or vertical, but that protocol is an

algorithm, *a proscription for structure* whose form and appearance may be any number of different diagrams or shapes" (30, his emphasis). In different words, protocol is "a language that regulates flow, directs netspace, codes relationships, and connects life-forms" (74). What is useful here is to think about the ways that narratives, metaphors, and the rhetoric of cyberspace eschews regulation, categorization, mapping, and conformation—particularly when it comes to identity, individuality, and personal agency—yet the fantasy of cyberspace is still haunted by stereotypical and conservative cultural protocols of race, gender, sexuality, and embodiment. In a deep sense, then, the intelligibility and comprehensibility of cyberspace is predicated on the unacknowledgable possibility of queerness[18] while resorting to the safety and stability of normative formations, which are recognized by also unstated.

Here the technoqueer takes up the key antimony of cyberspace, the dissonant gap between liberation and domination, the collapsing binary of body versus mind, material versus immaterial, embodied versus disembodied. As outlined by the first chapter, the technoqueer provides a way to close read and challenge the ways that the tropes and technologies of cyberspace continue to be repeated, repackaged, and recuperated in the present contemporary moment. Looking at twenty-first century accounts of cyberspace—from the network technologies giant Cisco's "Welcome to the Human Network" advertising campaign to the Arab Spring and the Twitter revolution to the multibillion dollar video game industry—it seems that little has changed in the discourse and representation of cyberspace as welcoming, humanizing, revolutionary, and edifying. Therefore, it is important to discover different interventions and missed opportunities in these accounts of cyberspace, past and present, to locate and elaborate the "positive seduction of cyberspace [that] leads us

[18] This argument is a riff on Wendy Chun's critique of the orientalizing of cyberspace. She says, "Thus, cyberspace—or more properly *narratives* of cyberspace—rely on the incomprehensibility of the Orient for their comprehensibility" ("Orienting" 28).

to an appreciation of the larger ecosystems of which we are a part, connected through feedback loops that entangle our destinies with their fates" (Hayles "Seductions" 188). This chapter then takes these above three threads and proceeds to revisit and revise the now commonsense dichotomy between embodiment and disembodiment that pervades the study of cyberspace technology and to offer particular close readings of cyberpunk literature that offers different spaces and understandings of the relationship between body, mind, and self that intersectionally accounts for race, gender, and sexuality.

Cyberspace, A Primer

> Technology governs change in human affairs while culture guards continuity. Hence technology is always disruptive and creates a crisis for culture.
> —Daniel Bell (as qtd. in Bukatman 3)

On February 8, 1996 John Perry Barlow, one of the founding members of the Electronic Frontier Foundation, wrote "A Declaration of the Independence of Cyberspace" in direct response to the passage of the Telecommunications Reform Act of 1996. Barlow believed the US government's attempt to regulate the then nascent Internet was an encroachment on cyber-life, -liberty, and -pursuit of happiness. He proclaims, "Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of the Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather" (par. 1). From the start, Barlow's call for cyberlibertarianism invokes the technocultural tropes and oppositions of body and mind, past and future, government and self-governance, them and us. He says, "We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth. We are creating a world where anyone,

anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity" (par. 7 and 8). In this cyberutopian fantasy, the limitations, restrictions, and disadvantages of the body, of the flesh-and-blood subject no longer apply: bodies do not matter. Matter, materiality, embodiments are seemingly evaporated by communication and telepresence technologies. "Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here," (par. 9) continues Barlow. "We are forming our own Social Contract. This governance will arise according to the conditions of our world, not yours. Our world is different" (par. 5).

These declarations of how cyberspace is different, freer, more inclusive are echoed in the writings of the time, the heralding of the "age of information"—from Howard Rheingold's *The Virtual Community* to Sherry Turkle's *Life on the Screen* to Nicholas Negroponte's *Being Digital*. Though all of these mid-1990s discourses about cyberspace and computer-mediated communication technologies provided gentle cautions and watered-down warnings about the loss of face-to-face "humanity" and the potential for informatic panoptica, they all echo Barlow's declaration of celebratory and liberatory potential and possibilities of cyberspace. Rheingold says, "People in virtual communities use words on screens to exchange pleasantries and argue, engage in intellectual discourse, conduct commerce, exchange knowledge, share emotional support, make plans, brainstorm, gossip, feud, fall in love, find friends and lose them, play games, flirt, create a little high art and a lot of idle talk. People in virtual communities do just about everything people do in real life, but we leave our bodies behind" (*Virtual* 3). In other words, he argues that all of these people, these "selves are liberated by technology" (*Virtual* 170). Rheingold's message about the

medium is carried by Negroponte, who waxes on the very last page of *Being Digital*, "[M]y optimism comes from the empowering nature of being digital. The access, the mobility, and the ability to effect change are what will make the future so different from the present. The information superhighway may be mostly hype today, but it is an understatement about tomorrow…we are bound to find new hope and dignity in places where very little existed before" (231). Cybertechnologies certainly have and continue to provoke incredible intellectual, cultural, and political change and possibility—which later sections and chapters will not give up on but will take up and address more fully—however who gets included in this "new frontier" and what bodies and selves are afforded access, mobility, and freedom? More importantly, in the broad strokes of these declarations of independence of cyberspace, who gets excluded, policed, violenced, even made invisible? How might privilege and prejudice already-always structure all of the above?

Sherry Turkle attempts to address these questions saying, "Today many are looking to computers and virtual reality to counter social fragmentation and atomization; to extend democracy; to break down divisions of gender, race, and class; and to lead to a renaissance of learning" (244-45). However, she provides little engagement in her own provocations with the too-neutral response, "Others are convinced that these technologies will have negative effects. Dramatic stories supporting both points of view are always enticing, but most people who have tried to use computer-mediated communication to change their conditions of life and work have found things more complex. They have found themselves both tantalized and frustrated" (245). It is the complexity of cyberspace that needs analysis and articulation, particularly paying attention to the logics and formations such as race, gender, and sexuality play out in simultaneously normative and resistant ways. Here the technoqueer can help to

navigate the resonant and dissonant gap between all work and all play, between the cyberutopian and cyberdystopian, particularly by a careful but contingent attentiveness to how these technologies mediate subjectivity and embodiment. In other words, the technoqueer can reveal how technorace, technogender, and technosexuality function in parallel and in intersection and how liberation for one might spell containment or obliteration for another.

However, is the world of cyberspace really different? Might Barlow's later concession in his "Declaration" reveal just how imbricated both worlds are? He says, "We must declare our virtual selves immune to your sovereignty, even as we continue to consent to your rule over our bodies" (par. 15). In the insistence that cyberspace is *different* and bodies do *not matter*, Barlow's manifesto highlights the insistent ways that the two overlap and constitute the other.

Barlow follows up his "Declaration" with "Coming into the Country" in 1991 for the Electronic Frontier column in *Communications of the ACM*. "Coming into the Country" continues the technolibertarian mode of the "Declaration" by creating a kind of origin myth for cyberspace, a narrative of exploration and discovery and conquest. Again the tension between materiality and immateriality, between embodiment and disembodiment continue to trouble and haunt Barlow's narrative:

> Imagine discovering a continent so vast that it may have no other side. Imagine a new world with more resources than all our future greed might exhaust, more opportunities than there will ever be entrepreneurs enough to exploit, and a peculiar kind of real estate which expands with development.
>
> Imagine a place where trespassers leave no footprints, where goods can be stone an infinite number of times and yet remain in the possession of their original owners, where business you never heard of can own the history of your personal affairs, where only children feel fully at home, where the physics is psychology, and where everyone is as virtual as shadows in Plato's cave.

> Such a place actually exists, if "place" is the right word for it. It consists of electron states, microwaves, magnetic fields, light pulses and thought itself, arrayed like a standing wave in the web of our electronic processing and communication systems. I used to call it the Datasphere until I read William Gibson's *Neuromancer* and discovered that he had already given it the perfectly evocative name of Cyberspace.

Here the language of personal liberty and individual choice and freedom gives way to metaphors of commerce, capitalism, colonization, and geography. He continues, "Cyberspace is the homeland of the Information Age, the place where the citizens of the future are destined to dwell. We will all go there whether we want to or not and we should do better to approach the place with a settler's determination to civilize it as rapidly as possible." Of course, Barlow's extended metaphors of cyberspace continue to neglect what subjects have access to this newfound territory and what agents will be able to reap its rewards. Wendy Chun, in "Orienting Orientalism, or How to Map Cyberspace," confronts this imperialist techno-manifest destiny, saying, "When understood as an electronic frontier, cyberspace manages global fiber-optic networks by transforming nodes, wires, cables, and computers into an infinite enterprise/discovery zone. Like all explorations, charting cyberspace entails uncovering what was always already there and declaring it 'new'" (7). The consequences of charting the ostensibly uncharted and settling what Rheingold has called the virtual homestead is analogous to the historical and geographical settling of the Americas by European explorers and colonists.[19] Chun says, "Like the New World and the frontier, settlers claim this 'new' space and declare themselves its citizens (this frontier is relatively guilt free, since there are no natives—or so it seems)" (7).

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[19] Sadie Plant, in *Zeroes + Ones*, invokes a similar, albeit ironic, characterization of cyberspace as frontier: "Cyberspace emerged as a disembodied zone wilder than the wildest West, racier than the space race, sexier than sex, even better than walking on the moon. This was the final of final frontiers, the purest of virgin islands, the newest of new territories, a reality designed to human specifications, an artificial zone ripe for an infinite process of colonization, able to satisfy every last desire, especially that to escape from 'the meat'" (180).

As we can see the imagining and theorizing about cyberspace—as a constellation of various technologies and as a working metaphor—emerge out of long traditions, narratives, and practices that try to understand the conundrums of identity, embodiment, and agency in a highly technologized, technologically mediated world. These conundrums, which can result in technoqueer possibilities or in technonormative recontainment and recuperation, stem from the key tension between "the hard and the soft" (to borrow a phrase from William Gibson's *Count Zero*), between the technological and the biological, between the mind and the body, between the posthuman and the merely human. However, this tension cannot be taken as an easy opposition, an uncomplicated dualism, as the previous chapter's discussion of the Turing Test, the cyborg, and the technoqueer argued. Even Gibson's account of the "the hard and the soft" across his cyberspace narratives, stories set in the same *Neuromancer* universe, recognize that both are necessary, both are complementary, even as both are antagonistic and mutually transformative of the very definitions and materializations of self, psyche, and machine. Turing's "imitation game" is itself a kind of cyberspace, a virtual world that challenges the naturalized assumptions about gender, race, and sexuality via discursive and digital technologies. The productive ambivalence of the "hard and the soft," of human mediated technologies and technology mediated humans reveal what is critical about cyberspace, about posthuman embodiment and subjectivity.

N. Katherine Hayles, one of the premiere scholars to define the posthuman and their relationship to cybertechnologies, picks up on the cyberspaciness of Turing's "imitation game," saying, "One way to frame these mysteries is to see them as attempts to transgress and reinforce the boundaries of the subject, respectively…It [the test] would also necessarily bring into question other characteristics of the liberal subject, for it made the crucial move of

distinguishing between the enacted body, produced through verbal and semiotic markers constituting it in an electronic environment" (*How* xiii). The cyberspatial subject, the posthuman subject is always a test, a border crossing, and a horizon of possibility. Hayles continues, "This construction necessarily makes the subject into a cyborg, for the enacted and represented bodies are brought into conjunction through the technology that connects them" (*How* xiii). Again, "the hard and the soft" are not discrete things, discrete states. The negotiation of cyberspace and its concomitant technologies is about the negotiation of this "conjunction," this cyborg circuit, and about the overarching questions posed by the technoqueer. For Hayles specifically, this is about embodiment and disembodiment, about the rhetorical and even technological move to disappear the body, to render it obsolete and incommensurate with techno-utopian progress. But what she and others argue is that disappearing trick is ultimately impossible, serving only to perpetuate the status quo, to intensify neoliberalist possessive individualism, and obscures (even forgets), albeit purposefully, the ways that the body can never be separated from identity, liberation, subjectivity, technology, and politics, much less the mind. Even something as simple as the "imitation game" sets these concerns into sharp relief. Hayles says, "Thus the test functions to create the possibility of a disjunction between the enacted and the represented bodies, regardless which choice you make. What the Turing test 'proves' is that the overlay between the enacted and the represented bodies is no longer a natural inevitability but a contingent production, mediated by a technology that has become so entwined with the production of identity that it can no longer meaningfully be separated from the human subject" (xiii).

The *Oxford English Dictionary*[20] defines "cyberspace" as the "space of virtual reality; the notional environment within which electronic communication (esp. via the Internet) occurs." Its etymology is a portmanteau of cybernetics[21] and space, a science fictional blending evocative of cyborg assemblages, artificial intelligences, and the final frontier. It is a term, a metaphor, and a narrative trope that has come to represent, even stand in for more than the sum of its computer and networked technologies. At its heart beats the ideals of direction, control, navigation, movement, and power. After all, the root of both cybernetics and cyberspace is the ancient Greek word (κυβερνήτης or *kybernētēs*) meaning steersman, pilot, rudder, or governor.[22] It is the evocation of power and control that makes cyberspace so alluring, so wonderful, so promising. And it is the promise and potential of cyberspace that must be unpacked, critically examined, and technoqueered. What are the affordances, consequences, and perhaps recovered narratives of cyberspace if we imagine its first denizens as queers, women, the disabled, and other users of difference (co-partners and cohabitants alongside military scientists, engineers, and technolibertarians)? What if cyberspace had been populated by these cyberqueer natives (to refer to Chun's earlier provocation), who had been displaced, evicted, or conformed by wave after wave of digital colonizers?

Part of the answers to these questions lie in the fact that computers and other digital and information technologies are now near ubiquitous in everyday life and that the culture at large has embraced, even naturalized the ideas and ideals of cyberspace—from the identity tourism of virtual worlds to the spread of democracy through mobile and social media—in

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[20] "cyberspace, n.". OED Online. March 2011. Oxford University Press. 24 March 2011 <http://www.oed.com.offcampus.lib.washington.edu/view/Entry/240849?redirectedFrom=cyberspace>.
[21] As popularized by Norbert Weiner in 1950 in *The Human Use of Human Beings: Cybernetics and Society*.
[22] "cybernetics, n.". OED Online. March 2011. Oxford University Press. 11 May 2011 <http://www.oed.com.offcampus.lib.washington.edu/view/Entry/46486?redirectedFrom=cybernetics>.

liberatory and regulatory ways. Cyberspace has become one of the domains, even battlegrounds in the ongoing negotiation of subjectivity and identity to the point where metaphor melts away into manifest destiny. I am reminded here and want to return to what Allucquère Rosanne Stone calls the "technosocial," which is inhabited by "social beings for which technology *is* nature, for whom elsewhere *is* geography, for whom the problematic tie between unitary awareness and unitary physical body has *political* consequences" (*War* 39). Cyberspace is the technocultural, the technosocial as "the social forms within technology-viewed-as-nature—those social forms to whom technology has become invisible, in no more and no less the same way that the workings of our bodies have become invisible in the face of a burgeoning medical imaging industry whose premise is to make the body thoroughly visible—social beings for whom technology is nature, for whom elsewhere is geography, for whom the problematic tie between unitary awareness and unitary physical body has political consequences" (*War* 38-39). Cyberspace has become an inexorable part of the social, political, and media ecology. Technoqueering cyberspace is about denaturalizing the acceptance and assumptions about cyberspace, about making visible (again) how technology norms and transforms our understanding of bodies and minds.

What is important here is the way subjects, bodies, and identities are constructed and mediated by the concepts and computer technologies of cyberspace. Commonplace understanding of cyberspace is that subjects are given free reign (as long as they have access) to be whatever they want to be, to imagine themselves as whatever they want to imagine, and that bodies can be represented and perfected and idealized leaving behind the messiness and fleshiness of matter. However, as the following will illustrate and argue, cyberspace's

promise is unevenly fulfilled and the logics of power and control over self and subject continues to replicate the limits and norms of the real world.

The earliest imaginings of computers, computer networks, and computer environments—what would come to be called cyberspace—was decidedly hopeful, productive, and liberatory and laid the rhetorical and technocultural framework for celebrating cyberspace. Technology was in the service of society and culture and would (as later Transhumanists would pick up) propel humanity into the next century and beyond. From Vannevar Bush's "memex" machine[23], which is credited as prognosticating the Internet and hypertextual links, to Alan Turing's "universal machine" to present day personal computers, mobile devices, and video games, cyberspace epitomized how the minds and bodies of humanity would be assisted, augmented, and coevolved by technology. Vannevar Bush's 1945 essay "As We May Think" meditates on the role of technology and the scientist in the development and use of new discoveries and inventions. He waxes, "Of what lasting benefit has man's use of science and of the new instruments which his research brought into existence? First, they have increased his control of his material environment…They have given him increased knowledge in his own biological processes so that he has had a progressive freedom from disease and an increased span of life…Science has provided the swiftest communication between individuals…so that knowledge evolves and endures throughout the life of a race than that of individual" (sec.1). Bush imagines a world where technology (and its scientists, physicists, and mathematicians) will be leveraged for good and not violence: "The applications of science have built man a well-supplied house, and are teaching him to live healthily therein. They have enabled him to throw masses of people against one another with cruel weapons. They may yet allow him truly to encompass the

[23] See Vannevar Bush's "As We May Think," published in *The Atlantic Monthly* on July 1945.

great record and to grow in the wisdom of race experience" (sec. 8). Even Alan Turing, Bush's British contemporary, believed these experimental, communication, and computational technologies would be of benefit, saying in 1950, "These are the possibilities of the near future, rather than Utopian dreams" (449).

From the earliest computers of the 1940s and 50s to the experimentation and development of ARPANET in the 1960s and 70s to the launch of the public Internet of the 1980s, the discourse about computers and computer networks picked up steam and the concept metaphor of cyberspace became firmly entrenched in the cultural milieu.[24] Only a few years after the coining of the term "cyberspace" by William Gibson in "Burning Chrome" and a year after the publication of *Neuromancer* in 1984, Howard Rheingold's *Tools for Thought: The History and Future of Mind-Expanding Technology* is published and presages much of the cyberutopian rhetoric that would follow into the 1990s and the 21st Century. In the mid-80s, computer technologies were finally leaving the laboratories and military bases and corporate bunkers and making their way into homes and the everyday. Digital technologies and automation began changing the way people worked, communicated, shopped, learned, and even thought. Rheingold notes in 1985, "Word processors, video games, educational software, and computer graphics were unknown terms to most people only ten years ago, but today they are the names for billion-dollar industries. And the experts agree that the most startling developments are yet to come" (*Tools* 14). Rheingold's *Tools* is decidedly hopeful and optimistic about the technological revolution—reminiscent of the earlier mid-century boom of futurist automobiles, washing machines, and television sets—what would later be called the digital or information revolution. He says, "As we shall see,

[24] For a more detailed account of the history and development of the Internet, see Howard Rheingold's *Tools for Thought: The History and Future of Mind-Expanding Technology* (1985) and Katie Hafner and Matthew Lyon's *Where Wizards Stay Up Late: The Origins of the Internet* (1996).

the further limits of this technology are not in the hardware, but in our minds. The digital computer is based on a theoretical discovery known as 'the universal machine,' which is not actually a tangible device but a mathematical description of a machine capable of simulating the actions of any other machine. Once you have created a general-purpose machine that can imitate any other machine, the future development of the tool depends only on what tasks you can think to do with it. For the immediate future, the issue of whether machines can become intelligent is less important than learning to deal with a device that can become whatever we clearly imagine it to be" (*Tools* 15). Rheingold's extends the metaphor of Turing's "universal machine" to the ideal that technology itself will become universally available and embraced by all and the means to solve the world's problems and limitations. He believes that computers and communication networks will be paradigmatically transformative but cannot predict the nature of the changes to come, only that change is for the obvious better. Rheingold says, "The dispersal of power computer technology to large segments of the world's population, and the phasing-in of the comprehensive information-processing global nervous system that seems to be abuilding, are already propelling us toward a social transformation that we know very little about, except that it will be far different from previous transformations because the tool that will trigger the change is so different from previous tools" (Rheingold *Tools* 318).

A decade later, the taking up of cyberspace as an ideology is nearly complete, penetrating almost every corner of the culture and becoming part of everyday vernacular. However, its definition and theorization what cyberspace is, represents, and what cyberspace might "look" like remained abstract and idealized. Michael Benedikt in the introduction to

the collection *Cyberspace: First Steps* attempted to define cyberspace more formally, critically, offering a loose constellation of ideas and intersections:

> A new universe, a parallel universe created and sustained by the world's computers and communication lines. A world in which the global traffic of knowledge, secrets, measurements, indicators, entertainments, and alter-human agency takes on form: sights, sounds, presences never seen on the surface of the earth blossoming in a vast electronic night…
>
> A common mental geography, built, in turn, by consensus and revolution, canon and experiment; a territory swarming with data and lies, with mind stuff and memories of nature, with a million voices and two million eyes in a silent, invisible concert to enquiry, deal-making, dream sharing, and simple beholding…
>
> From simple economic survival through the establishment of security and legitimacy, from trade in tokens of approval and confidence and liberty to the pursuit of influence, knowledge and entertainment for their own sakes, everything informational and important to the life of individuals—and organizations—will be found for sale, or for the taking in cyberspace. (29-30)

What is important here is that the beginnings of cyberspace continue to get reinvented and reinvigorated by Benedikt's threads. The language of another space, a different dimension is mixed with metaphors of geography, territory, and colonization and bounded by the recognition that there are informal and formal, consensual and coercive rules, limits, and controls in cyberspace. Already, cyberspace is only intelligible by comparisons to and connections with and appropriations of logics and values and institutions borrowed wholesale from the "real world." The infinite abstraction of cyberspace could not remain unknown, indeterminate, and unfilled. The response to this technological horror vacui was to fill it with possibilities: lines, shapes, stars, images, sounds, voices, data, knowledge, secrets, spaces, places, territories, individuals, communities, businesses, hopes, dreams, power. Benedikt says, "Like Shangri-la, like mathematics, like every story ever told or sung, a mental geography of sorts has existed in the living mind of every culture, a collective memory or hallucination, an agreed-upon territory of mythical figures, symbols, rules, and truths, owned

and traversable by all who learned its ways, and yet free of the bounds of physical space and time" (3). But how did this agreement, this consensus come to be? Who gets to learn its ways much less own and traverse it? And who might get left out, left behind, trampled upon, or destroyed by its myths, rules, and truths? Benedikt continues, "What is so galvanizing today is that technologically advanced culture—such as those of Japan, Western Europe, and North America—stand at the threshold of making that ancient space both uniquely visible and the object of interactive democracy" (3).

Much in the same way that the advent of print was seen as making information and knowledge more available to the masses, cyberspace gets linked up to the notion that technology, particularly what would be called mass media now, was democratizing. Cyberspace, in particular, because of its fiction as abstract possibility, was open, without borders, crossed lines of nation, creed, and color, and belonged to none and all. Extending the provocations of the first chapter, this chapter hopes to outline and extend the many conversations on and critiques of cyberspace recognizing, as scholars like Lisa Nakamura and Wendy Chun do, that even as studies, discourses, and analyses of cyberspace continue to proliferate, the usual suspects of cyberutopian or cyberparanoid tropes, narratives, and representations remain largely unchanged and uncritical. Cyberspace, particularly in the popular imagination, continues to rely on and flaunt fictions of technological libertarian liberation and concomitant panoptic, invasive, predatory threat. What I am most interested in here is how the disembodying logic of cyberspace gets dramatized and theorized and how bodies and identities are mediated and ultimately recontained by cybertechnologies. In other words, the promise of cyberspace requires the fiction of disembodiment, the threat of

reembodiment, yet as with most technologies of power and control, there are opportunities and openings for disruption, transformation, and queering.

Queering Cyberpunk: *Neuromancer* and *Bad Voltage*

21st century schizoid boy
21st century video boy
21st century digital boy
—Bad Religion, "(21st Century) Digital Boy"

I want to open this section with a brief reading of William Gibson's *Neuromancer*. Though many have written about the novel, its importance and influence, and its problematic technological and cultural politics, a return to Gibson's 1984 cyberpunk novel offers me the opportunity to locate the emergence of a discursive, rhetorical, and technocultural moment that near-hegemonically determined the vision, depiction, and vernacular understanding of cyberspace. Though notions of cyberspace, before Gibson's coining of the word, existed more generally as part of the rhetorical and discursive universe surrounding early computers and digital technologies, the cyberspace of the here and today really took shape in the 1980s. The transhumanist and posthumanist desire for and appropriation of cyberspace as a space of liberation and technopossibility has been challenge and reconfigured in the last few decades, but this chapter argues that underlying logics of cyberspace as established in early technoculture have been recuperated and repurposed and reimagined porting into the new century the same problems with race, gender, and sexuality. In other words, how the body and mind are mediated by cyberspace technologies have largely continued to replicate ideologies of posthuman disembodiment and transhuman escape from the prison of the "meat." As I opened at the start of this chapter, cyberspace is queer but its technoqueer potential requires further and careful attention to its narratives of configurable identities,

disembodiment (as a trope of escaping oppression), and technocolonization. A rereading of Gibson (and other cyberspace and cyberpunk narratives) hopes to offer resistant, reimagined, and reconfiguring readings that highlight the need for a technoqueer understanding of cybertechnologies.

Neuromancer's longstanding popularity and canonization as cyberpunk par excellance is in part because of its innovation, its rekindling of science fiction as a popular genre, and its timing with burgeoning computer and engineering technologies. Before the publication of *Neuromancer*, Gibson published several short stories set in the same narrative universe. "I put the shotgun in an Adidas bag and padded it out with four pairs of tennis socks, not my style at all, but that was what I was aiming for: If they think you're crude, go technical; if they think you're technical, go crude. I'm a very technical boy. So I decided to get as crude as possible." So opens William Gibson's short story "Johnny Mnemonic," first published in *Omni* in 1981, part of the oeuvre that would indelibly define cyberpunk and cyberspace fiction. "Johnny Mnemonic" and the subsequent "Burning Chrome," published in 1982 also in *Omni*, offer a more complete and nuanced glimpse into the Gibson's technologically-mediated universe; both stories are overshadowed by Gibson's "seminal" novel *Neuromancer*, whose extended development and dramatization of the world of the "matrix" and the "console cowboy" forever canonized, codified certain tropes and stereotypes of cyberpunk and eclipsed some of the uncertainty, the ambivalent richness of his earlier stories. What the opening of "Johnny Mnemonic" sets up is the central antimony of cyberpunk imaginings and cyberspace technologies: the binary opposition of technology versus the body, between the digital and the analog, between the disembodied and the embodied, between the mind and the "meat." These dualism get collapsed into the contrast

between the "technical" and the "crude." Both stories were prolific in their conceptualization and description of the near-future where technology, particularly computer, communication, and nanotechnology, has become ubiquitous and has changed the face—sometimes literally—of corporations, politics, and humanity itself.

"Burning Chrome," credited with the coinage of "cyberspace,"[25] provides the nascent imagery of cyberspace: "The matrix is an abstract representation of the relationships between data systems. Legitimate programmers jack into their employers' sector of the matrix and find themselves surrounded by bright geometries representing the corporate data" (180-181). Already, cyberspace is imagined as contingent, both abstract and material, open and constrained, legitimate and illegitimate. Gibson must depend on spatial metaphors and perceptions of order, volume, light, and geography in order to make sense of the nonspace of the electronic communication environment. He continues, "Towers and fields of it ranged in the colorless nonspace of the simulation matrix, the electronic consensus-hallucination that

[25] A year before William Gibson coined the term "cyberspace," Vernor Vinge published the novella *True Names*, which is often credited as the first fully developed account of navigating through, interfacing with, and communicating via computer and telepresence networks. Vinge called this online domain the "Other World" or the "Other Plane." Vinge's version of cyberspace is replete with the techno-jargon, metaphors of traveling, disembodied, networked consciousness, and corporate and governmental conspiracies common to early cyberpunk fiction. The main character Pollack (also known online as Mr. Slippery) "jacks in" via the Other World Portal: "He powered up his processors, settled back into his favorite chair, and carefully attached the Portal's five sucker electrodes to his scalp…And just as a daydreamer forgets his actual surroundings and sees other realities, so Pollack drifted, detached, his subconscious interpreting the status of the West Coast communication and data services as a vague thicket for his conscious mind to inspect, interrogate for the safest path" (250). But Vinge's "Other Plane" is decidedly anachronistic, even archaic in style and representation hearkening back to sword and sorcery fantasy, adventure games, and medieval romance. Pollack's consciousness seeks out the Coven, a group of hackers, vandals, and online ne'er-do-wells, which is hidden in a massive fortress surrounded by a dangerous swamp—a cyberspace environment coded to represent such things. Vinge's account of cyberspace is clothed in the generic conventions of magic and fantasy. Though technical ideas behind *True Names* resonates with *Neuromancer* and other stories, Vinge's description of how people access the "Other Plane" is simultaneously embodied and disembodied. Users do not jack in but rather they "ascend," a kind of digital transubstantiation. Mr. Slippery's navigation of the Coven's environment is like that of a video game. Programs and subroutines and security measures represented as casting spells, engaging non-player characters, and armor. Here I read these tropes of sword and sorcery fantasy, allusions to the first video game *Adventure*, as developing a different relationship to cyberspace, one which seats action in both mind and gesture, thought and body. See also Scott Bukatman's *Terminal Identity*: "The recourse to magic is, of course, quite clever, in that it preserves the invisible manipulations of cybernetic power while grounding that invisibility in the familiar guise of individual power" (202).

facilitates the handling and exchange of massive quantities of data" (181). The privileging of visuality here will also become codified as the primary sense through which cyberspace is imagined and rendered, a dependence and domination by vision that will tie neatly into humanist ideals about observation, rationality, and symbolism.

This vision and visioning of cyberspace would mature in *Neuromancer*, whose publication would forever change the popular definition of "the matrix." The metaphor grows up, growing in scale, scope, and possibility: "Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts…A graphic representation of data abstracted from the bans of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding…" (Gibson *Neuromancer* 51). There is the sense in *Neuromancer* that cyberspace has outstripped human comprehension, a universe unto itself, to be explored and controlled, accessed by a technological elite. For Case, the hero-protagonist, cyberspace takes on the additional meanings of home, self, and freedom: "[Cyberspace] flowed, flowered for him, fluid neon origami trick, the unfolding of his distanceless home, his country, transparent 3D chessboard extending to infinity. Inner eye opening to the stepped scarlet pyramid of the Eastern Seaboard Fission Authority burning beyond the green cubes of Mitsubishi Bank of America, and high and very far away he saw the spiral arms of military systems, forever beyond his reach" (52).

It is important to being with the early imaginings of cyberspace, from Vannevar Bush's "As We may Think" to Alan Turing's "universal machine" to William Gibson's *Neuromancer*. These foundational texts, particularly what has been periodized as

cyberpunk[26] of the 1980s and 1990s, and these seminal moments in technocultural development and history provide the mise en scene for how we as a culture conceptualize, describe, navigate, and produce cyberspace. Gibson is often credited with the advent of cyberpunk science fiction, what co-conspirator Bruce Sterling defined as a "new alliance…an integration of technology and the Eighties counterculture" (as qtd. in Wolmark "Cyberpunk" 109). At first glance, the incredible potential of cyberpunk narratives was based on its dramatization of "the destabilizing impact of new technology on traditional social and cultural spaces: in so doing they provide a peculiarly appropriate response to the complex conditions of postmodernity, particularly the collapse of traditional cultural and critical hierarchies, and the erosion of the distinction between experience and knowledge which has provoked the decentering and fragmentation of the subject" (Wolmark "Cyberpunk" 110). Cyberpunk and cyberspace then shared a common and concomitant epistemology and ontology. Jenny Wolmark, writing on cyberpunk and feminist science fiction, argues, "The most striking aspect of cyberpunk, however, is its knowing and ironic extrapolation from present trends to produce 'credible' futures, fictional landscapes that are ironic and playful, both in their simulation of surface reality and in their apparent effacement of the boundaries between inner and outer worlds" ("Cyberpunk" 112). Like cyberspace, cyberpunk narratives revel in cyborg play, in the leaky messiness of flesh, mind, and machine, and depend on the working tropes of technologically-mediated identity, agency, and freedom.

Neuromancer's central plot and conceit is that of a heist. Case and others are conscripted by a mysterious man named Armitage to perform a series of "jobs" that

[26] The neologism "cyberpunk" is credited to Bruce Bethke, who wrote a short story of the same name in 1980. For the full text of Bethke's "Cyberpunk," see: http://www.infinityplus.co.uk/stories/cpunk.html. See also his online article "The Etymology of Cyberpunk" on his personal website: http://www.brucebethke.com/articles/re_cp.html.

culminate in the discovery that the real mastermind behind the action of the novel is an artificial intelligence called Wintermute, who is trying to merge with another AI named Neuromancer. Case—a "console cowboy," a hacker-thief, a cyberspace pioneer and pirate—begins the novel without the ability to "jack in" to the matrix. However, he had stolen from one of his "employers," who rather than kill him stripped him of his ability to interface with cyberspace: "They damaged his nervous system with a wartime Russian mycotoxin. Strapped to a bed in Memphis, his talent burning out micron by micron, he hallucinated for thirty hours. The damage was minute, subtle, and utterly effective" (6). Ironically, as the novel unsuccessfully tries to negotiate, the ability to jack into the matrix, to transcend the body into a dimension of pure thought and information is inexorably grounded in the very body that Case wants to leave behind. He has not lost his life. His body continues to live on, but Case feels handicapped, paralyzed, destroyed: "For Case, who'd lived for the bodiless exultation of cyberspace, it was the Fall. In the bars he'd frequented as a cowboy hotshot, the elite stance involved a certain relaxed contempt for the flesh. The body was meat. Case fell into the prison of his own flesh" (6). Case at the start of *Neuromancer* dreams of and pines for cyberspace, substituting what he feels he has lost with drugs and mirages: "[S]till he'd see the matrix in his sleep, bright lattices of logic unfolding across that colorless void" (4-5). As we can see, the promise of cyberspace is linked up to desires for and fantasies of belonging, escape, and liberation.

But the debilitation does not set Case back for long. As soon as he is hired by Armitage, he is miraculously cured. His skills as a console cowboy are needed by Armitage and his employer to crack the security protocols, called I.C.E. or Intrusion Countermeasures Electronics, of an incredibly powerful and wealthy corporation-family, the Tessier-Ashpools.

Case, desperate to leave behind his limited embodiment, trades his skill, his talent, and his life to be cured, fixed of the damage to his nervous system. The analogy here between mind and body, thought and neurons, and software and hardware cannot be lost. Of course, it is important to recognize in these narratives what bodies are curable, fixable, manipulable and what bodies are too damaged or too low on the corporeal hierarchy to be helped. Case, as an ostensibly white, white-collar classed, and heterosexual male, is valuable and can transcend his "meat" in ways that the other characters cannot, like Molly, the only woman main character, or Maelcum, one of the only characters of color in the novel. Accessing the matrix and feeling the bodiless exultation of cyberspace then is a recapitulation of traditional liberal humanist ideals of individuality, rationality, and the power to abstract the self as more than just flesh and blood but as self, citizen, and agent:

> Like fantasies played out in contemporary discourses about the internet and virtual reality, Gibson's cyberspace allows for the disavowal of bodily differences in a fantasy that privileges the white male body. The democratizing rhetoric that surrounds the new technology of the internet tells us that gender and race are not fixed in space, and argues that what is transcended in the technology-human relation are prejudices associated with the body. But just because bodily markers are indeterminate in cyberspace or on the internet does not mean that hierarchies and established patterns of oppression pertaining to bodily difference are about to disappear. The notion that online personas transcend social and cultural hierarchies remains a utopian myth. This conservative dynamic is, to some extent, repeated within the fetishistic fantasy of Gibson's cyberpunk. Although masculinity is highlighted as lacking, the space of the matrix promises the disavowal of this lack and of embodied differences; in this space, the white male heterosexual body, surrounded by imploding differences and full of self-loathing, is nevertheless still privileged and still very much at the center of the action. The fantasized free-floating subjectivity is able to reclaim the universal gaze of traditional masculinity by disavowing bodily differences—indeed, the body itself—within the matrix. (Fernbach 248)

Cyberspace as a liberatory space and liberating technology functions as a way to understand how subjects are formed, routed through computer and communication networks and how these subjects and their bodies are disassembled and reassembled. Cyberspace maps almost

too neatly onto the logics of disembodied information, free from the constraints of flesh and bone and the messiness of matter. This is what N. Katherine Hayles writes of in "The Seductions of Cyberspace," saying, "Our sense of our physical bodies, their capabilities and limitations, boundaries and extensions, deeply informs both the objects and the codes of representation. Less clear are the implications of these mappings. In the last decade of the twentieth century, elisions between physical and textual bodies are entangled with complex mediations that merge actual and virtual realities, ideological and technological constructions" (173-4)

The messiness, the ambivalence, much like Haraway's cyborg or the collision of the technological and the queer, arises out of the technological fantasy of disembodiment, of leaving the mortal and imperfect flesh behind. And by leaving the flesh behind, like Case's dreams of the matrix, we can leave the problems of the body behind. Hayles asks, "To the extent that cyberspace plays into this fantasy, it contributes to a continuing unwillingness to face problems that are not going to go away. In some contexts, leaving the body behind equates to the belief that if the problems won't go away from us, perhaps we can go away from the problems. Is it necessary to insist that nothing could be farther from the truth?" (183). This fantasy is inexorably tied to the intensification and proliferation of varying technologies and the idea that technologies will mean the obsolescence of modalities of being like race, gender, and sexuality. Hayles says, "The conjunction with technology is crucial. In its contemporary formulation, the point is not merely to leave the body but to reconstitute it as a technical object under human control. The essential transformation is from biomorphism to technomorphism" ("Seductions" 173). In other words, Hayles at the beginning of the critical engagement with and critique of cyberspace, argues that we must

pay close attention to the logics of cyberspace, to the fantasies of cyberspace for they often obscure the ways that real bodies and real lives are excluded, oppressed, even violence by technology. "The Seductions of Cyberspace," which heralds the more fully developed arguments of *How We Became Posthuman*, insists that unlike Case in *Neuromancer* we cannot eschew the "meat" and like Molly, who can never truly leave her gendered and sexualized body, our "sense of our physical bodies, their capabilities and limitations, boundaries and extensions, deeply informs both the objects and the codes of representations" ("Seductions" 173). Cyberspace and cyberspace technologies are part of these objects and codes of representations in that they mediate our sense and definitions of ourselves. The technological body or the technologized body becomes weighted, more real, more substantiated even as ironically the very technologies work to virtualize, informatize, and abstract them.

Hayles says, "Gibson's *Neuromancer* illustrates how the technologies of informatics and body management come together to create a world where the virtual body is the 'real thing,' the physical body a mere substitute…*Neuromancer* enunciates a new axis along which wealth and power will operate, as they already operate along the axes of gender, race, and class. Behold the axis of physicality. The privileged end is the virtual, the stigmatized end the physical. Having an unmodified body will be like having a working-class accent; it will mark you as cannon fodder for the system" ("Seductions" 182). Embodiment or the problem of being defined or perceived as too embodied, which underlie historical and popular sexist, racist, classist, and homophobic understandings of othered bodies, is now extended and complicated by modern technological intervention. On an everyday level, Hayles's axis of physicality takes the form of style or cosmetics or weight loss or self-help;

those can afford in time and money and access to better themselves, pretty themselves, conform themselves to the cultural expectations and norms are read as good, successful, and right. But the axis of physicality can now be extended to more radical technological interventions, including those yet materialized but invented and imagined by cyberpunk and science fiction, like in *Neuromancer*: "Styles are, moreover, expressed not only through clothing, but also through designer drugs, facial and full-body surgery, cybernetic splices into the human neurosystem of computer chips, and various other kinds of sensory interfaces…The same impatience shown toward an outmoded computer is directed toward unreconstructed bodies" ("Seductions" 182). Cyberspace is one mediation that articulates the demands of the axis of physicality, and my later chapter on body modification technologies will show further technological interventions of subjects under technology.

In regards to Gibson's *Neuromancer*, Jenny Wolmark notes, "The electronically constituted virtual reality of cyberspace articulates the contradictory fear of and fascination with for technologies which actively participate in the breakdown of the boundaries between organic and inorganic, human and machine…a process which opens up radical possibilities for the breakdown of gender and other identities as part of a transformative social and political process" ("Cyberpunk" 118). Unfortunately, for Wolmark, many of these radical possibilities are rarely realized by these narratives "because the social and temporal experience of cyberspace is centrally concerned with individual transcendence rather than transformation, with escape from social reality rather than engagement with it…Interface with the computer fulfills the desire to escape from the confines of the body, which, in Gibson's novels, is largely a masculine concern" ("Cyberpunk" 118). But there are fissures, incommensurabilities, and ambivalences in *Neuromancer* and like cyberpunk literature that

provide windows and entrances, no matter how small, to ways to fulfill the radical imaginings of cyberspace and these posthuman worlds. Wolmark argues in "Space, Time, and Gender: The Impact of Cybernetics on the Feminist Utopias" that cyberpunk narratives and futures "do have a utopian dimension because they refuse to close down around a socially conservative vision of either the present or the future. The collapse of stable spatial and temporal boundaries means that options can be left open and this is equally true as far as the representation of gender is concerned. Despite the dominance of masculine heroes, the irony in cyberpunk narratives extends to the versions of masculinity with which we are presented in those narratives" (25). I would extend Wolmark's argument to include representations and negotiations of technorace and technosexuality. She sums, "The appropriation of information technology and cybernetic systems by science fiction narratives can be seen as part of this challenge since it creates possibilities for the expression of alternative and oppositional representation" (25).

There are queer moments, queer readings of *Neuromancer* that have not been picked up by most analyses of the novel. One reading is by Tyler Stevens in his essay "'Sinister Fruitiness': *Neuromancer,* Internet Sexuality and the Turing Test,"[27] which articulates that the character of Julius Deane, a black market dealer, "is a *queer* figure, indeed a *gay* one" (418, his emphasis). Deane is a hundred and thirty-five year old man who spends "a weekly fortune in serums and hormones," yearly modifications to his DNA, and "esoteric forms of tailor-worship" as "hedge[s] against aging" (Gibson 12). Deane is described as "sexless and inhumanly patient" (Gibson 12) with a "seamless pink face" (Gibson 13) and who surrounds himself with a horde of antiques, bric-a-brac, and fine things. Deane evokes the stereotype of

[27] This essay is reprinted under the name Tyler Curtain in *Novel Gazing: Queer Readings in Fiction*, edited by Eve Kosofsky Sedgwick, published by Duke University Press, 1997.

the "vanity queen" (Stevens 419), whose queer affectations and sensibilities serve as one end, the fey and limp-wristed one, of a range of masculinity and manhood which Case must negotiate. On the other end of the masculine spectrum is Armitage, who is described as having a "broad chest, hairless and muscular, the stomach flat and hard. Blue eyes so pale they made Case think of bleach" (Gibson 27). Armitage's hypermasculinity, which Stevens likens to a "stock-figure of both '80s gay porn, military recruiting posters, and 'straight' bodybuilding culture" (419), is also too queer and Case must learn to occupy a proper masculinity.

But I would offer a queer reading of the relationship between Case and Wintermute, the AI who appears to Case as both Deane and Armitage. Given that Case's relationship to cyberspace and technology is often eroticized in the novel (what Foster has called the "sex appeal of the inorganic"), for example, when Case has sex with Molly, his orgasm[28] "blue in a timeless space, a vastness like the matrix" (Gibson 33). Molly is even described in technological terms as having "the sweep of a flank defined with the functional elegance of a war plane's fuselage" (Gibson 44). And, finally, when Case finally gets his ability to jack into the matrix again via his state-of-the-art Ono-Sendai Cyberspace 7 deck, Molly says to him, "I saw you stroking that Sendai; man, it was pornographic" (Gibson 47). It is not a far stretch to see Wintermute, the pinnacle of these cyberspace technologies, as wooing Case and Case resisting, then falling for the AI's seduction. Finally, I would suggest the desire of the two AIs Wintermute and Neuromancer, who is figured as a young Brazilian boy of color, to join (although they are characterized as brothers) is a technoqueer desire, one which ends in

[28] Where Case gets to enjoy his orgasm (as analogous to jacking into the matrix), Molly is never described as having much sexual pleasure. Her description of the "cut out switch," a neural implant that renders her a "meat puppet" for other people's sexual use, is reminiscent of Case's erotic metaphor without any of the agency or joy: "I wasn't conscious. It's like cyberspace, but blank. Silver. It smells like rain…You can see yourself orgasm, it's like a little nova right out on the rim of space" (Gibson 143).

the evocation and "in the memory of Turing" (Gibson 254). Unfortunately, these queer possibilities are recuperated by the end of the novel in the "re-constituted nuclear family as a way to secure the 'humanness' of technology and the future of the matrix" (Stevens 422). The novel's coda describes a heteronormative happy ending as Case surfs through cyberspace he sees, "three figures, tiny, impossible, who stood at the very edge of one of the vast steps of data. Small as they were, he could make out the boy's grin, his pink gums, the glitter of the long gray eyes that had been Riviera's. Linda still wore his jacket; she waved, as he passed. But the third figure, close behind her, arm across her shoulders, was himself" (Gibson 260).

Therefore, I want to take an even closer look at Gibson's *Neuromancer* and attempt to rearticulate the tensions of the novel by reading against the grain of the novel's formulation of cyberspace with Gibson's earlier short stories and with contemporary and later cyberpunk fiction that attempted to widen and reconfigure cyberspace as a raced, gendered, classed, and sexualized space. In *Neuromancer*, the freedom of cyberspace is set up as a necessary binary opposition to the prison of the "meat." This binary opposition, which has become part of technonormativity, is what Thomas Foster calls "the oscillation in cyberpunk texts between a biologically-determinist view of the body and a turn to technological and cybernetic means in order to escape such embodied particularities" (*Souls* 49) such as race, gender, and sexuality. Race, gender, and sexuality function as "semiotic ghosts" (Wolmark "Cyberpunk" 120) in Gibson's cyberpunk narratives. However, in Gibson's earlier stories, this opposition does not read so totalizing. *Neuromancer* introduces us to a world where bodies are manipulable, transformable, a world of "affordable beauty" (3), where people can change, graft, and augment their bodies through chemistry, implants, cloning, and surgery. The ultimate

change, though, in *Neuromancer* is still jacking in, the projecting of a person's "disembodied consciousness into the consensual hallucination [of] the matrix" (5). However, I argue that the prison of the "meat" is less pronounced in "Johnny Mnemonic," that embodied and cyberspace technologies coexist in a varied posthuman and transhuman ecology. As mentioned above, the world of the earlier stories understands the ambivalent and sometimes antagonistic multiplicity of the "technical" and the "crude," the "hard" and the "soft."

In "Johnny Mnemonic," the main character describes himself after undergoing cosmetic surgery at a walk-in shop called "Under the Knife" (which is mentioned with lackadaisically as no different than going to a beauty salon or auto mechanic) as "your basic sharp-faced Caucasoid with a ruff of stiff, dark hair" (1). Johnny refuses the addition of "the chic suggestion of epicanthic folds" to his new face. Here the idea of race being biologically determined by birth or genetics is challenged by the technological ease of which signifiers of racial certainty can be done and undone. In fact, much of the story focuses on the technological mediation and manipulation of the body. Johnny must confront his fence Ralfi Face, who wore "the once-famous face of Christian White for twenty years—Christian White of the Aryan Reggae Band…and final champion of race rock…Christian White: classic pop face with a singer's high-definition muscles, chiseled cheekbones. Angelic in one light, handsomely depraved in another" (3). Even the doormen of the bar where Johnny goes to meet Ralfi are examples of the fluidity of bodies: "The Magnetic Dog Sisters were on the door that night…They were two meters tall and thin as greyhounds. One was black and the other white, but aside from that they were as nearly identical as cosmetic surgery could make them. They'd been lovers for years and were bad news in a tussle. I was never quite sure which one had originally been male" (1-2). What is highlighted in the above passages is that

the body has become less unitary, unique, and that the freedom to choose your appearance and persona is no longer limited to the conditions of birth. Though the story imagines this freedom primarily through the trope of race—here technorace is seen as both flexible and fascistic depending on how the technology is leverage—but it also applies to gender and sexuality.

Unfortunately, by the publication of "Burning Chrome," Gibson's universe has matured conservatively and the codification of the binary between cyberspace and meatspace comes into focus. However, the notion of the body and the mind being necessary co-constructs, necessary collaborators has not yet phased out of the world. The narrator of "Burning Chrome" is Automatic Jack, who traverses the matrix but is not a console cowboy. He is the partner to Bobby Quine, the actual hacker, who is mentioned as the teacher of and guru for Case in *Neuromancer*. Jack rides shotgun to Bobby serving as his technical support. The story describes, "Bobby was a cowboy. Bobby was a cracksman, a burglar, casing mankind's extended electronic nervous system, rustling data and credit in the crowded matrix" (181). Together they complemented each other, needed each other, and took on supplementary roles: "Bobby Quine and Automatic Jack. Bobby's the thin, pale dude with the dark glasses, and Jack's the mean-looking guy with the myoelectric arm. Bobby's software and Jack's hard; Bobby punches console and Jack runs down all the little things that can give you an edge" (181). Here the body and the mind, the software and the hardware are two sides of the same coin. To succeed in hacking the matrix requires both. Bobby is the dreamer, the romantic, always hoping for the next big score and the next passionate romance. Jack is the engineer, the grunt, and the pragmatist; his artificial arm resonates with his embodied status. Both players are necessary in order to hack the matrix, to circumvent I.C.E

and though the story is critical of the "meat," it does not abandon it entirely. In fact, the consequences for failing in cyberspace is death of both mind and body. By the time *Neuromancer* is published, the tag team configuration is dumped and the lone console cowboy emerges as the heroic individual and the hardware is now secondary, the flesh is worse. (Molly takes on the figure of embodiment and her role in the heist of Villa Straylight is important but no longer directly connected to Case's cruising of cyberspace; Molly[29] functions in the real world, the world of the "meat," which she cannot escape, though Case can jack in and out of his own body and even hers.) In fact, the trope of the cybernetic arm is lifted from Jack and grafted on to the character of the cyborg bartender Ratz in the opening of *Neuromancer*. Ratz is meant to be read as an antique, a leftover from a prior technocultural era where the focus was on the body itself. However, as Foster reads in "Meat Puppets or Robopaths," Ratz's "choice to remain 'ugly' in an 'age of affordable beauty' suggests the possibility of negotiating the dichotomy between two ideas of embodiment: bodies as irreducibly particular and intransigent material, on the one hand, and bodies as malleable constructions and revisable inscriptions, on the other" (*Souls* 65).

Unlike *Neuromancer*, cyberpunk fictions contemporaneous with Gibson reveal that the embodiment/disembodiment binary plays out differently depending on the bodies and subjectivities being mediated by technology. Whereas Gibson attempts to stabilize the binary in traditional formulations of white masculine individuality, other fictions challenge and trouble the assumption that cyberspace must necessarily divide the subject and vilify the

[29] See Ann Balsamo's "The Virtual Body in Cyberspace," where she describes, "For example, Gibson's main female character in *Neuromancer*, Molly, has been technologically modified with implanted weaponry that on the one hand makes her a powerful embodiment of female identity, no longer constrained by norms of passivity and proper femininity. On the other hand, Molly's bod implants more fully literalize the characteristically threatening nature of her female body" (129). See also the moment in *Neuromance* when Molly is told by a man named Terzibashjian, "In Turkey there is disapproval of women who sport such modifications" (Gibson 85).

"meat." Foster outlines in his essay "'Trapped by the Body,'" that both "text-based and graphic virtual interfaces make possible the decoupling of public persona from the physical space of the body. This detachment certainly lends itself to a traditional Cartesian dualism between mind and body, and therefore can also reproduce the gendered hierarchy that equates masculinity with universal rationality and femininity with embodied particularity" (440). However, routed through Judith Butler's account of performativity, Foster continues, virtual systems like cyberspace an reveal that "sex and gender are not related as cause and effect and that sex and gender do not necessarily exist as a one-to-one expressive relation to one another" (440). Foster extends this formulation to include technologized race or transraciality.

Jonathan Littell's neglected[30] 1989 pulp novel *Bad Voltage* is about a group of street kids living in Paris of the future. Like the future of *Neuromancer*, Littell's universe is replete with cyberpunk tropes of sex, drugs, anarchism, and corporate control, all technologically enhanced and mediated. Littell's novel pays subtle homage to Gibson's Sprawl novels and universe; in fact, one could imagine *Bad Voltage* as set in the same universe just on a different continent, in a different city. In the first pages of the opening chapter, the main character makes reference to wanting to get off world, to leave the dregs of Earth: "To climb the well…Out of the shit, the mud, the sisterfuckin Street…" (5). On the same page, a man by the name of Case is mentioned, who managed to escape the Street: "I got it from a gadjo jockey, oldman name of Case. He pulled a hardcore zap job, intercepted a data squirt on the Net" (5). *Bad Voltage* establishes itself as both sequel to and literary descendant of

[30] Littell himself has minimized the value of his own novel, saying, "I have sometimes wished *Bad Voltage* was never published, but I was trapped in a contract and didn't have any money to break it. I was 21 years old; it was a youthful folly. I have never tried to hide that novel, but I don't shout about it either" (http://www.omnivoracious.com/2009/03/before-the-kindly-ones-littells-bad-voltage.html).

Neuromancer.[31] Both novels are preoccupied with the conventions of cyberpunk; both novels feature main characters that are "hackers transformed into street-wise rock 'n' roll heroes who wear mirrorshades and do 'biz' in the urban sprawl, dealing in designer drugs, information technology and stolen data, jacking into the matrix of cyberspace by means of implanted cranial sockets" (Wolmark "Cyberpunk" 114). *Bad Voltage* follows and focuses on Lynx and his gang of "street drek" called the Livewires, who are described by the novel's synopsis as "high-tech lowlifes, bio-enhanced delinquents, or doped-out street kids." Littell's novel does not stray from the cyberpunk formula much and is replete with adolescent hijinks, plenty of sex, narcotics, alcohol, heavy metal and dubstep, "skate or die" runs and street fights, and of course, technological intrigue. The central plot of the novel is not necessarily breaking new ground: boy meets boy, boy falls in love with boy, boy loses boy in an accident, boy hooks up with the heiress to one of the world's most powerful technology companies, boy is betrayed by heiress, boy discovers the heiress's dead brother has been downloaded into a computer, the consciousness of the dead brother seeks revenge against his sister, boy helps the dead brother's electronic ghost as a means to avenge his lover's death, boy sacrifices himself and dies in the process.

What does makes *Bad Voltage* different than *Neuromancer* is the fact that the world is more diversely populated, attentive to race, ethnicity, language, and the main character himself is not only queer but a queer of color. Lynx refers to himself and is referred to as "breed," short for "halfbreed"—his mother is Cheyenne and his father is black—and descriptions make note of his brown skin and dreadlocks. At the start of the novel, Lynx is dating, sleeping with another street drek named Mara (whose introduction, at first, is

[31] In another allusion to *Neuromancer*, halfway through the novel, a character by the name of "The Baron," an aristocratic man who throws hedonistic and perverse parties, is described as "short, stocky, and unattractive, a remarkable physique in an age of affordable beauty" (Littell 105).

ambiguously gendered). Whereas Lynx is brown skinned, Mara is white: "Mara, sometimes called the Dreamer. Tall as I am, though bonier. Blue hair cut in a spiked shag, blue lips, and white skin, bone white, stark in the black clothes" (Littell 13). The same-sex, interracial relationship is treated as unremarkable by the other characters and the narrative's world, and although Lynx reveals an equal opportunity libido, his relationship to Mara bookends and frames the action of the novel. What is remarkable for not only a novel of the early 1980s but also of the genre is that inclusion and imagining of a non-heteronormative relationship, much less one centered on the main protagonist.

Moreover, what is also markedly different than that of Gibson's world is Littell's characterization and range of technology in the novel, one which demonstrates a very different relationship between cyberspace and the body. Given the identifications and given embodiments of Lynx, the novel articulates a more embodied and integrated relationship to technology. Cyberspace exists, the matrix is part of the technological vernacular, but *Bad Voltage's* technological philosophy and milieu does not separate and segregate the mind from the body. In one of the first descriptions of Lynx's cybernetic implants, which he uses to listen to "dub," the integration of tech and meat is revealed: "I keyed my armdeck and turned up the dub that was beating through my implants. It echoed through my skull, hardbeat bass and madness" (Littell 4) and later, "I turned down the dub before I spoke, letting it fade into the backbrain. Subliminal riddim pulsing down the reggae wire deep into the blood and bone…I rarely shut it down entirely. It's part of me, just like my blood, my bones, my silicon implants" (Littell 5). In fact, the function and act of jacking into computer systems is rarely described fully as leaving the body; the "bodiless exultation" of *Neuromancer* is forsworn in lieu of a *body-ful exultation*. For example, Lynx specializes in the programming

and creation of "soundscapes," the integration of music, 3D holographic technology, and mapping technology. In the beginning of the novel, Lynx is preparing a "musical map of the Champs Elysées…I had scored a perfect scale holo map of the champs and was painting the soundscape over it: strips of melody over the various sidewalks and surfaces, columns of instrumental drones over the obstacles, hardbeats following the lines of trees and dropping at each side street" (Littell 28). The soundscape is designed so that when Lynx and the other Livewires skate through the real space, real geography of the Champs Elysées, they will hear the music programmed to play as they cross certain spaces, places, or landmarks. The process of programming the soundscape bears the hallmarks of *Neuromancer's* console cowboying:

> I turned around and keyed the Sony, calling up the holo map of the Champs Elysées. It grew slowly, tendrils of colored light meshing together, forming sidewalks, trees, obstacles, building facades.
>
> Everything looked ready. I picked up the co-axial cable beside the deck and rammed it into the jack behind my ear. Strings of numerals appeared over parts of the holo in contrasting colors, fed simultaneously into my optic and auditory centers via the jack; each string representing a given set of pitches, amplitude, and timbre. I could now "hear" each part of the still unfinished soundscape as well as "see" it, the data processed multisensorially. In stereo, so to speak. (Littell 27)

The process does become engrossing but the physicality, the embodied nature of data and code are never left behind: "Hardfast work, fingers like lightning over the controls, *electric*, better'n most drugs. I could hear the numbers inside my head as I painted them over the holo, testing, checking, modifying. I got lost in the scape, brainwalk, the rest of the world blindspotted…The alarm I'd set in the Ashanti pinged three hours later, pulling me back into spacetime reality…I was exhausted, and my back ached" (Littell 28). Here the experience of cyberspace is multisensory, engages Lynx's entire sensorium, induces a kind of technological synesthesia, and produces both elation and exhaustion. *Bad Voltage's* engagement with both

visual and auditory cyberspace technologies engages Alexander G. Weheliye's reconfiguration of the critique of posthuman technologies in his essay "'Feenin': Posthuman Voices in Contemporary Black Popular Music." Weheliye addresses the "literal and virtual whiteness of cybertheory" by shifting and realigning "the hegemony of visual media in academic considerations of virtuality by shifting the emphasis to the aural, allowing us to conjecture some of the manifold ways in which black cultural production engages with information technologies" (21). In the same way that Lynx appropriates and manipulates the soundscape technology, Weheliye argues "black popular musical genres make their own virtuality central to the musical texts" (31). *Bad Voltage's* attention to the embodied nature of virtuality recovers and asserts a different experience of and relationship to cyberspace, one which can complicate and rearticulate the limited narratives popularized by Gibson and other canonical cyberpunk writers. *Bad Voltage* imagines what Scott Bukatman in *Terminal Identity* articulates, "Thus, the duality between mind and body is superseded in a new formation that presents the mind as itself *embodied*" (208).

Whether it is listening to music or hacking code or skating on anti-gravity skimboots or having sex or taking drugs, Littell's novel seats these experiences in both the material and immaterial, as embodied and disembodied. When Lynx skates his Champ Elysées soundscape, sets his body and mind into motion, the description mixes different altered states of consciousness and physicality:

> …I became immersed in a world of motion and insane geometry, aware of nothing except the obstacles in front of me and the feel of the ground under my feet and the music inside my head…Vectors of silvered movement, angles of electric attack… (56)
>
> The ultimate marriage of geometry and meat; trajectories and music, angles and muscular response, more precise than a deck, flawless. Speed and music, wildcore;

> an unholy interface of music and body, the dance creating the music, the music driving the dance; high-speed symphony, wild, berserk… (59)

Bad Voltage pays special attention to the markers and performances of difference and how they intersect with or are mediated by technology. It is interesting to note that this embodied relationship to cyberspace is generally the purview of the streetdrek characters, characters who are raced, classed, and marked by subcultural difference. In comparison, the conventional logic of disembodiment is reserved for white, upper class, aristocratic character, in particular the downloaded mind and personality of Xavier de Seingalt, brother to Angelique de Seingalt, whom Lynx dallied with after Mara's death. Angelique killed Xavier in order to ensure her inheritance and control of their family's multibillion dollar corporation, and out of a cruel sense of spite, she had Xavier "recorded" and preserved in an "electronic schismatrix"[32] (Littell 217). Xavier describes, "The bitch locked me in her medallion, silicon prison, far worse than any cage of metal or stone, oh yes. Torture of eternity, bodiless mind matrix…" (Littell 217). On the one hand, the fact that Xavier has transcended his body, his meat aligns with traditional understandings of cyberspace. On the other hand, the novel clearly negatively characterizes that transcendence. The racialized and classed articulation of cyberspace recalls for me Melissa Scott's 1994 novel *Trouble and Her Friends* and the idea that certain bodies, certain identities, and certain subjectivities maintain a fraught and dependent relationship to these technologies:

> Maybe that was why the serious netwalkers, the original inhabitants of the nets, hated the brainworm: not so much because it gave a different value, a new meaning, to the skills of the body, but because it meant taking that risk, over and above the risk of the worm itself. Maybe that was why it was almost the underclasses, the women, the people of color, the gay people, the ones who were already stigmatized as being vulnerable, available, trapped by the body, who took the risk of the wire. (127-8)

[32] Reference to Bruce Sterling's 1985 novel *Schismatrix*.

Thomas Foster reads this passage as particularly vital in understanding the power and potential of cyberspace. He says, "On the one hand, this technology holds the promise of giving 'a different value, a new meaning' to the experience of embodiment, a refiguring of embodiment that is especially attractive to people who have been historically 'stigmatized as…trapped' by bodies that mark them as marginal. In other words, these peoples are presented as having reasons to want to intervene in the construction of embodiment that straight white men do not" (449).

Bad Voltage attempts to imagine a technoqueer world but it does have its narrative and imaginative limitations. Though it stretches certain cyberpunk conventions, as seen above, the novel in the end recuperates many of its departures from the genre. Not only does the queer relationship not survive the novel—Mara's death is the necessary sacrifice needed to propel the rest of the plot's intrigue—Lynx's avenging the memory of Mara is successful but also comes at the cost of his own life. He, too, sacrifices what queer possibility set up by the novel. And finally, though Xavier de Seingalt suffered at the hands of his sister and no longer has a body, he has escaped his digital prison by merging with the world-wide nets and successfully takes over his family's corporation. Where the queer of color character must be recuperated by death, the novel's critique of the excesses and perversions of the megawealthy is abandoned for a Hollywood ending.

Video Games, Cyberspace, and Queering *Bioshock*

All the modern things
Have always existed
They've just been waiting
To come out
And multiply
And take over
It's their turn now
—Björk, "Modern Things"

I want to close this chapter with a brief meditation on video games as the quintessential cyberspace technology and potential of queer game play. Let me start with a quote from the 2008 film *Second Skin*, a nerdcore documentary that follows the lives of three groups of video gamers that play massively multiplayer online role-playing games or MMORPGs. In the documentary, a *World of Warcraft* player says, "...an MMO is a world within a world. It's a completely different set of rules, you're a completely different person while you're there, just to have that kind of freedom, to be able to get away with it and not have anybody question you makes it a world unto itself." It is this notion that video games offer gamers control, power, and worth that once again recapitulates the standard narratives of cyberspace. For many gamers, playing games like *World of Warcraft* is part escape, part adventure, and part self-actualization where players and their avatars feel empowered and important and resource full. Nick Yee, online game researcher and founder of The Daedalus Project, says in the documentary, "A lot of players have what they perceive as dead end jobs...and they log on to these worlds and suddenly they're someone with power." Video games, then, advertise and facilitate the desire for, the thrill of being someone different, someone important, someone powerful deploying common sense definitions of control and power as the ability to affect, change, and better yourself and the world around you, the right to life, liberty, and the pursuit of happiness, and the liberal humanist virtues of choice, free will, and success.

A quick cross section of game play, packaging, and promotion highlights an incredible array of rhetoric about both game content and game design that exhort openness, flexibility, freedom of action, movement, and choice, all overlaid by calls to be the hero, the star, the rich, the famous, the best of the best. But is all of this hype and hoopla just fantasy?

Do players really exert control and have power? Might all of this playing and pretending reveal the ways that control and power "work" in the "real" world? As Alexander Galloway, media scholar and author of *Gaming: Essays on Algorithmic Culture*, says, **"**Video games render social realities into playable form" (17). After all, video games are about actions and interactions, activity and interactivity. Julian Stallabrass in his essay "Just Gaming: Allegory and Economy in Computer Games" says, "The distinctiveness of computer games lies in interaction...[it is] an environment in which the player's actions have a direct, immediate consequence on the world depicted" (83). This all certainly sounds like control; this all certainly sounds like power. With the push of a button or a tilt of a joystick, something happens, things change, the world responds. Video games enact and invite interaction with the logics of cyberspace convincing players to suspend disbelief, to consent to the rules and limits of the game, to turn a blind eye to those rules and limits, and to give in to what Salen and Zimmerman call the "immersive fallacy," the notion that "the pleasure of a media experience lies in its ability to sensually transport the participant into an illusory, simulated reality" (450-451).

It is this mainstream belief that video games empower players with choice, control, exploration, even escape. Given recent rhetorics of interactivity and immersion, of sandbox synthetic worlds, of democratization through gamification (which I will discuss more fully in Chapter Four), I want to situate video games as a vernacular posthuman technology using Irrational Games's *Bioshock* as my example. The game dramatizes the posthuman fantasy of self-fashioning and body modification (which I take up in the next chapter), and on a meta level, critiques the player's belief that they are in control, are making substantive choices, and are driving the narrative. I want to use *Bioshock* as emblematic of the critique of this

cyberspatial fantasy, as Galloway further warns: "the more emancipating games seem to be as a medium…they more they are in fact hiding the fundamental social transformation into informatics" (106). In other words, even as a video game evinces a player's power and agency, it naturalizes and obscures its algorithmic and protocological control. Salen and Zimmerman argue, "The immersive fallacy is symptomatic of contradictory ideas about technology. On the one hand, there is a technological fetishism that sees the evolutionary development of new technology as the saving grace of experience design. On the other hand, there is a desire to erase the technology, to make it invisible so that all frames around the experience fall away and disappear" (451). The immersive fallacy is the fallacy of freedom and control in cyberspace.[33]

Figure 5: Statue of Andrew Ryan and banner: "No gods or kings. Only Man." *Bioshock*. Irrational Games, 2007. Game still. From: http://www.rockpapershotgun.com/images/august07/levine9.jpg

[33] Sadie Plant describes, "Cyberspace presented itself as the highest level of a game which had always been determined to win control, a haven waiting to welcome its users to a safe computer-generated world in which they could finally be free as their finest fantasies. It promised a zone of absolute autonomy in which one could be anything, even God: a space without bodies and material constraints, a digital land fit for heroes and a new generation of pioneers" (180).

Bioshock itself and its rich game world. *Bioshock* is set in 1960 and takes place in Rapture, an underwater utopian city-state modeled on Ayn Randian objectivist philosophy.[34] However, when the player-protagonist, Jack, arrives in Rapture after his plane crashes in the ocean, the city is near collapse after the introduction of bodyhacking technology called "splicing," which results in civil war between the "humans" and the posthuman "splicers." In the opening cinematic, we are introduced to the mastermind behind Rapture, an entrepreneur and visionary named Andrew Ryan (clearly rhyming Ayn Rand) who proclaims the city's manifesto and the central dilemmas of the game:

> A man has choices, I chose the impossible. I built a city where the artists would not fear the censor, where the great would not be constrained by the small, where the scientist would not be bound by petty morality. I chose to build Rapture. But my city was betrayed by the weak. So I ask you my friend, if you live with pride, would you kill the innocent? Would you sacrifice your humanity? We all make choices, but in the end, our choices make us.

The goal here is not to do a "straight" (pardon the pun) technoqueer reading of the game, meaning I don't want to just go bird watching for queer characters. Rather, because *Bioshock* dramatizes the posthumanist dream of self-fashioning via splicing and because the game relies on the interactive fallacy of video game freedom and control, I want to argue that the game invites queer possibilities that might be leveraged to critique normative gender,

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[34] According to http://www.aynrand.org/site/PageServer?pagename=objectivism_intro: Rand defined Objectivism as that which holds: 1) Reality exists as an objective absolute—facts are facts, independent of man's feelings, wishes, hopes or fears; 2) Reason (the faculty which identifies and integrates the material provided by man's senses) is man's only means of perceiving reality, his only source of knowledge, his only guide to action, and his basic means of survival; 3) Man—every man—is an end in himself, not the means to the ends of others. He must exist for his own sake, neither sacrificing himself to others nor sacrificing others to himself. The pursuit of his own rational self-interest and of his own happiness is the highest moral purpose of his life; and 4) The ideal political-economic system is laissez-faire capitalism. It is a system where men deal with one another, not as victims and executioners, nor as masters and slaves, but as traders, by free, voluntary exchange to mutual benefit. It is a system where no man may obtain any values from others by resorting to physical force, and no man may initiate the use of physical force against others. The government acts only as a policeman that protects man's rights; it uses physical force only in retaliation and only against those who initiate its use, such as criminals or foreign invaders. In a system of full capitalism, there should be (but, historically, has not yet been) a complete separation of state and economics, in the same way and for the same reasons as the separation of state and church.

sexuality, even race. But, as we will see, the game forecloses on these possibilities recuperating them back into hetero- and technonormativity. And ultimately, like the ambivalence of *Bad Voltage's* ending, *Bioshock's* challenge of the seductions of video games also falls short.

At the start of the game, the player-protagonist is thrust into Rapture, is introduced to splicing technology, and must navigate not only the crumbling city but also the political factions at war. In order to escape Rapture, Jack is led to believe he must help a resistance fighter named Atlas (another Randian reference) and overthrow Andrew Ryan. Aside from the usual first-person shooter arsenal of guns, ammo, and the ever-popular pipe wrench, the player-protagonist is enhanced by splicing technology (called plasmids) derived from a deep sea slug. Adam and Eve, derivatives of the sea slug, allow the player-protagonist to enhance health, strength, skills, and grants an array of superhuman powers like throwing lightning and telekinesis. Mapped on to these technologies are the libertarian and individualist mores of Rapture's society, which promises freedom for all to be beautiful, talented, rich, and powerful.

Figure 6: Sander Cohen. *Bioshock*. Irrational Games, 2007. Game still.

From: http://www.videogamesblogger.com/wp-content/uploads/2012/02/Sander-Cohen-646x325.jpg

It is in this setting that we find Sander Cohen. Though the game does not out Cohen, there is enough textual evidence to support reading him as the stereotypical Hollywood or Broadway fey fatale: he is the "boss" of the seventh level and pleasure zone Fort Frolic, which is full of bars, theaters, strip clubs, and boutiques; he is a suffering artist, musician, and director given to lavish melodramatics, composing in one audio diary "The Wild Bunny:"

> I want to take the ears off, but I can't.
> I hop, and when I hop, I never get off the ground.
> It's my curse, my eternal curse!
> I want to take the ears off but I can't!
> It's my curse! It's my fucking curse!
> I want to take the ears off!
> Please!
> Take them off!
> Please!

The undertext of the closet here are undeniable. However, what is more compelling is that Cohen vindictively requires Jack to kill the remaining three of four of his young, male protégés. In the confrontation with Silas Cobb, one of Cohen's favorites, Cobb reveals, "I used to love you, I used to think you were a musical genius. You know why? Because you paid my rent, you ancient hack!" He later spits at Jack, "It's all a game, errand boy! Cohen, Ryan! Two old birds pullin' on each other's milk sticks!" What is important here is that Cohen simultaneously perpetuates a stereotypical representation of the homo-homicidal aesthete, complete with dance numbers and bitchy repartee, and a game space and embodiment open to queerness where "artists would not fear the censor." Unfortunately, in order to proceed in the game, the player-protagonist must defeat Cohen. Cohen's descent into madness and death censors him, recuperates him.

According to VorpalBunny, a contributor to gaygamer.net, who extends the queer reading to include a possible connection between Cohen and Ryan himself, the developers wanted to make Cohen a fully-fledge character. According to the developers, the wanted to "create human beings, which meant that everyone was treated equally. Everyone also had the same capacity to fall and become depraved killers." Of course, all of this talk of equality obscures the problematic logics at work in Cohen's characterization and reveals a failure to recast the intersections of queerness, technology, and agency. I argue that it is this inevitability required by the game's programming and narrative and by the larger, cultural policing of queerness that reveal the ambivalent positioning of the player and protagonist in gaming's posthuman fantasies. In other words, in a game world and a cyborg medium that argues for a kind of techno-possessive individualism and liberation from the limits of the mind, body, and culture, *Bioshock* enacts its critique of Randian objectivism and posthuman choice via itself. It tries to, anyway.

In fact, central to the game is the showdown between Jack and Andrew Ryan. Until this aptly titled level "All Is Revealed," Jack believes himself to have discovered Rapture and become trapped in its civil war by chance and accident. What is revealed in the confrontation with father of Rapture, however, is that Jack was in fact born in Rapture, fathered by Ryan himself, and bioengineered to be the inheritor and defender of the utopia. Most importantly, what is revealed is that Jack's body modifications included mind-control implants, which are triggered by the polite request, "Would you kindly?" The player and protagonist overlappingly realize that they have been duped by the game and the game world.

As was said earlier, video games seduce their players with fantasies of power and control, the chance to play as super-human heroes battling injustice and oppression. Yet, I

argue that the one power gaming can never fully offer its player is choice. The player is always caught between gamic action and algorithmic control, much in the same way the so-called explorers and citizens of cyberspace are always caught in the tension between networked freedom and protocol. In the "All is Revealed" scene, *Bioshock* violates the player's trust that the game will reveal to him or her how to inhabit and navigate the game world. However, in that positioning, it is telling him or her "Would you kindly move forward?" "Would you kindly kill that boss?" "Would you kindly win the game by playing the game *this* way?" Even as Ryan screams, "A man chooses, a slave obeys," and commands the player-protagonist to kill him with the golf club, the game dramatizes the "key antimony" of posthumanism, the irony that these technologies can serve both liberation and domination. Or, again, in the words of Donna Haraway, "from all work to all play, a deadly game."

Alas, as with the example of Sander Cohen, *Bioshock* does not end the game at the defeat of Andrew Ryan. Instead, the game extends the narrative by forcing the player-protagonist to seek out and defeat the "true" end boss, Frank Fontaine, who is Ryan's rival and who has ultimately been manipulating Jack, too. Luckily, Jack is given the ability to overcome the "Would You Kindly" mind-control, and with the defeat of Fontaine, an end gambit with no more nuance than a tank-and-spank, Jack escapes Rapture and restores his status as hero in full possession of his individuality and free will. The player then is also recuperated and fed back into the interactive fallacy. The status quo of cyberspace is restored and the fantasy of video game agency is reassured.

But how might we imagine and develop a different understanding of the possibilities offered by these technologies? Given the examples from *Bioshock*, how might we resist the move to recuperation and open queer opportunities? How might we read against the desire to

restore Jack's normative masculinity, normative family, and normative humanity and reposition him as already challenging these categories precisely because of his mediation and penetration by technology? And via Jack and *Bioshock*, how might we extend the critique to find ways to resist the technonormative matrix and the perpetuation of Hayles's "seductions of cyberspace?" In other words, how might a critical approach to video games provide further critique of the pleasures and pitfalls of cyberspace, and how might player agency and games themselves be transformed: "Imagine the kind of games that could result: games that encourage players to constantly shift the frame of the game, questioning what is inside or outside the game; games that play with the lamination between player and character, pushing and pulling against the connection through inventive forms of narrative play; games that emphasize metagaming, or that connect the magic circle so closely with external contexts that the game appears synchronous with everyday life" (Salen and Zimmerman 455).

Chapter Three
Body Hacking Race, Gender, & Sexuality

"Humanity will be radically changed by technology in the future," begins "The Transhumanist Declaration" of the World Transhumanist Association (WTA), now repackaged as Humanity+. "We foresee the feasibility of redesigning the human condition, including such parameters as the inevitability of aging, limitations on human artificial intellects, unchosen psychology, suffering, and our confinement to the planet earth." Transhumanists embrace "the ethical use of technology to extend human capabilities" (WTA). They welcome a benign form of Donna Haraway's "cyborg politics." They hope and imagine and cautiously work to instantiate the inner- and outer-space traveling, multiply intelligent and differently sentient, biomechanically and cyberculturally diverse, body-modifying and self-hacking future imagined and articulated by much of science fiction, particularly cyberpunk fiction. However, what are the stakes of this transhumanist, posthuman future? What are the risks that come with the rewards? What "good" might be lost or denuded, what "bad" might be reconstituted or perpetuated in transhumanism's

sweeping claims? Here the technoqueer can offer interventions that would draw upon feminist, queer, and technocultural critiques to unpack the rhetorical and material claims of transhumanism, to articulate how the WTA (or Humanity+) attempts to resolve the key antimony of posthumanism and where these transhumanist narratives problematically reinforce normative understandings of body, mind, and agency. In other words, what are the specificities—the specific bodies, practices, and consequences—that abstract terms like "humanity" and "radically changed" and "redesigning the human condition" evoke, and how might transhumanism be raced (given its distinctive colorblind ideology)? How might transhumanism be queered (or is already queer)? Better yet does the project of radical change by technology not only include but also offer as a choice a horizon of queerness, desire, and differently configured and racialized bodies?

The radical future imagined by the WTA (or Humanity+) is already underway in practice and in the narratives of self-fashioning from body modification communities like bodymod.org to cutting edge implants, prosthetics, and surgeries to the posthuman predictions of speculative science and fiction. Interestingly, Humanity+ tries to draw a hard distinction between transhumans (those in the process of becoming posthumans) and "real" posthumans, saying, "Some authors write as though simply by changing our self-conception, we have become or could become posthuman. This is a confusion or a corruption of the original meaning of the term. The changes required to make us posthuman are too profound to be achievable by merely altering some aspect of psychological theory or the way we think about ourselves. Radical technological modifications to our brains and bodies are needed." I agree that definitions of the posthuman must include substantive technological mediation, imbrication, or transformation (though I would argue that this has already happened). And

the hedge here recognizes the importance of seeing these technologies and definitions as processes and practices, but the marking off of certain kinds of technological mediations and embodiments and of a certain futurity or modality of being as posthuman has two consequences. First, it forecloses on those identities and bodies in the present who already (or must) call into question definitions of human, of normativity, and second, it defers the radical potential of the posthuman to an romanticized, inaccessible future. How radical is radical? When is that threshold crossed? Who gets to cross it? The website says, "It is difficult for us to imagine what it would be like to be a posthuman person." It is in this difficulty and in these imaginings that the technoqueer inhabits and susses out alternative pathways and personhoods that are discarded, deemphasized, or destroyed by narrow accounts of these technologies.

For example, how might we understand the growing attention to and number of "grinders," a subculture of do-it-yourself body modifiers as evinced by websites like grinding.be, which began in 2008 inspired by Warren Ellis[35] and his comic series *Doktor Sleepless*, or biohack.me[36], an online forum dedicated "to promote talk in the self-biohacker community," and recent media coverage like Ben Popper's online article "Cyborg America: Inside the Strange New World of Basement Body Hackers," which was published this year by the technoculture site *The Verge*. How might popular accounts of transhumanism and

[35] The grinding.be website launched with a message from Warren Ellis, saying, "Imagine: you want to be a superconnected, modified, new kind of human, and you consider your own body to be a work in progress, so you're constantly looking for new things you can do to yourself (and others) while also keeping an eye on the collapsing planet around you because you want to have enough time to finish your body (or wish to use your many communications-technology devices to record it all as it collapses around your ears). That's what you're trawling for and gathering on grinding.be for others to keep up with" (http://grinding.be/2008/01/03/begin-grinding/).

[36] The biohack.me website describes its mission and community as "Grinders are passionate individuals who believe the tools and knowledge of science belong to everyone. Grinders practice functional extreme body modification in an effort to improve the human condition. We hack ourselves with electronic hardware to extend and improve human capacities. Grinders believe in action, our bodies the experiment" (http://collaborate.biohack.me/).

posthumanism dramatize the reconfiguration of the unitary body, self, and human and reveal the limited range of who or what gets reconfigured? Popper's article (and a short documentary on the same subject) profiles two Pittsburgh men: "The pair call themselves grinders—homebrew biohackers obsessed with the idea of human enhancement—who are looking for new ways to put machines into their bodies" (par. 8). Popper's grinders embody a decidedly self-professed "techno-libertarian" politics and pursue "technology for human enhancement, without any medical need" (par. 39). They express a disdain for the meat (much in the way *Neuromancer's* Case does), saying, "This is just a decaying lump of flesh that gets old, it's leaking fluid all the time, it's obscene to think this is me. I am my ideas and the sum of my experiences" (par. 43). The men in the story imagine "the possibilities for one's body" while simultaneously "willfully destroying it" (par. 42). One grinder says, "For me, the end game is my brain and spinal column in a jar, and a robot body out in the world doing my bidding…I would really prefer not to have to rely on an inefficient four-valve pump that sends liquid through these fragile hoses. Fuck cheetahs. I want to punch through walls" (par. 42). Here posthuman transformation falls hook, line, and implant into Hayles's nightmare of disembodiment and privileges narratives and ideologies of possessive individualism, mind over body, and fantasies of masculinist power and control over the self, over nature, and over the world at large. A search of grinding.be and biohack.me turns up nothing about race, gender, or sexuality (though grinding.be does have a keyword for "sex," which returns entries primarily having to do with sex toys, robots for sex, and teledildonics, to borrow Rheingold's word). It is no surprise, then, that the two men of Popper's profile are themselves privileged subjects and make no connection to the ways the technologies they seek might mean totally different horizons of liberation or domination for marked others.

The "Transhumanist FAQ" of the Humanity+ website attempts to address these questions about race, gender, and sexuality, albeit partially, and envisions technosocial solutions too firmly entrenched in a limited identity politics and conservative humanist ideals. Imagined frequently-asked-questions include: "How could I become a posthuman?" and "Will new technologies only benefit the rich and powerful?" and "What kind of society would posthumans live in?" The FAQ responds, "Transhumanism can be viewed as an extension of humanism…Humanists believe that humans matter, that individuals matter. We might not be perfect, but we can make things better by promoting rational thinking, freedom, tolerance, democracy, and concern for our fellow human beings." Granted, as the following chapter will address, the power not only to inhabit but to define the rubrics and matrices of "human," "rational," "freedom," "tolerance," and "democracy" is unevenly afforded and accessed by different bodies, people, even communities. As Cory Wolfe argues, this sense of posthumanism "derives directly from the ideals of human perfectability, rationality, and agency inherited from Renaissance humanism and the Enlightenment" (xiii). This intensification of humanism, as described by Wolfe, fits too neatly into the contemporary intensification of neoliberalism[37] and political libertarianism that privileges those already deemed high on the scale of perfection, thought, and power, which has traditionally always-already embodied by able, affluent, white, heteromasculine male bodies (cf. the two "grinder" men above). In fact, even as the FAQ argues that transhumanism does "inform us about new constraints, possibilities, and issues, and it highlights numerous important leverage points for intervention" and requires "fostering a climate of tolerance and

[37] For example, the FAQ responds to the question about the rich and powerful: "It is clear that everybody can benefit greatly from improved technology. Initially, however, the greatest advantages will go to those who have the resources, the skills, and the willingness to learn to use new tools…Technological progress does not solve the hard old political problem of what degree of income redistribution is desirable, but it can greatly increase the size of the pie that is to be divided."

acceptance toward those who are different from ourselves," the power and responsibility to do so is firmly seated in the individual[38], in personal choice, and in a model of political action predicated on the transhuman, the posthuman as a discriminated-against minority. The FAQ says, "Inequity, discrimination, and stigmatization—against or on behalf of modified people—could become serious issues." Granted, certain marked bodies—be they differently abled, gendered, or racialized—already experience these negative conditions and consequences. However, the Humanity+ discussion invokes the history and legacy of identity politics and civil rights but leaves behind, leaves out any real discussion of race, gender, and sexuality.[39]

Therefore, with the technoqueer in mind, how do we articulate alternative answers and narratives to those posed by Humanity+'s bland transhumanism and the empty Horatio Alger myths of would-be grinders? As Andrew Ross warns in *Strange Weather*, "[T]here is little to be gained from holding on to the traditional humanist faith in the sanctity of the unalienated, 'natural' self, nobly protected from the invasive reach of modern science and technology" (8). Ross would be highly suspect of both Humanity+ and grinder claims to techno-freedom and techno-choice given that "today's scientific countercultures share many of the methodological norms and claims about nature observed by establishment science. Indeed, some of the maverick libertarian values espoused by countercultures run parallel with those prized in the entrepreneurial vanguard of corporate research and development" (9). *Strange Weather* attempts to recast the relationships between technology and culture and to

[38] In fact, under the "What kind of society would posthumans live in?" question, the FAQ responds, "'You decide.' The outcome may be influenced by the choices we make now and over the coming decades."
[39] Moreover, how might grinding be read alongside other forms of everyday body modification? *Body Modification Ezine*, another online community and portal, defines as including "tattooing, piercing, cutting, branding, amputation" even plastic surgery. Practices that have been appropriated or borrowed from indigenous, non-white, and colonial cultures are particularly troublesome especially when cloaked under the logics of homage, hipster aesthetics, or colorblind ideology. Even from the perspective of cost and access, the elective nature of grinding reveals what bodies can afford to be modified and remain privileged and powerful.

be critical even of those technosocial movements that claim to be liberatory, resistant, even revolutionary. Rather, he says, "Living in the future involves living with differences—of race, gender, nationality, sexual preference, and class" (7-8), and moreover, "there is also a critical responsibility to renew the demand for fresh futures that will be more radically democratic than our own present. We therefore need a scientific culture that can learn from differences of class, gender, race, and biology, and that can transform notions like progress and objectivity in order to address these differences and the social inequities created in their name" (12). It is important to note that Ross's "fresh future" is technoqueer; it is mindful of specific embodiments, specific identities, and specific technological mediations and consequences routed through not only what we technologies we create, what we do with that technology, but also how talk about, think about, and structure our lives by and with technology.

This returns me to Foucault's taxonomy of technology introduced in my introductory chapter: first, the ability to make material things; second, language and discourse; third, power and domination; and fourth, technologies of the self. What I want to suggest is that the transhumanist fantasies and bodyhacking practices above not only exemplify new "technologies of the self" but also represent an intensification of the conditions and apparatuses of power and control that discipline, redefine, and at times, dominate the self. By "technologies of the self," Foucault means technologies that "permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality" (*Technologies* 18). These ideas about the technologies of the self are further elaborated in

Foucault's third volume of *The History of Sexuality* called *The Care of the Self*. Foucault traces the development of the discourse and practices of maintaining, disciplining, and edifying the self, which he calls the "cultivation of the self" (43), which he begins in ancient Greece and carries up through medieval Christianity to the contemporary moment. What Foucault offers is an understanding of not only a cultural expectation that individuals monitor and manage themselves—particularly in terms of mental, physical, and sexual health—but that the "care of the self" promised and produced benefit for not only the individual but more importantly the body politic overall. Foucault points to the development of "*hygiene pragmateia* or *techne*—which constituted the permanent framework of everyday life" (*Care* 101), a set of technologies in all senses of the word that structured private, public, institutional, and cultural attitudes and expectations toward the self. Therefore, how might we understand body hacking technologies as twenty-first century *hygiene pragmateia*, and how might these digital and cyborg technologies enhance or resist normative programs of race, gender, and sexuality? If the popular and populist practices and imaginaries of grinders, body modders, and transhumanists cannot address the *techne* of race, gender, and queerness, I argue that we must turn to the alternative visions, spaces, and embodiments of more radical and progressive posthuman texts and projects—in this case speculative and science fiction. As I have previously quoted, N. Katherine Hayles reminds, "Literary texts are not, of course, merely passive conduits. They actively shape what the technologies mean and what the scientific theories signify in cultural contexts" (*How* 21). Andrew Ross, too, addresses the importance of thinking through literatures that can think through what other archives and knowledges cannot. Ross himself draws on a number of sources, archives, and public discourses, including New Age philosophy, hacking and information technologies,

and environmentalism, but uses science fiction "as a popular genre that has learned to ask very serious questions about possible, probable, and preferable futures" (135). Like the technoqueer, these texts function as a genealogy of what bodies, identities, and technologies get claimed as trans- or posthuman, what transformations or mediations are possible, and what categories get lost, missed, or remain unchallenged.

Here then is the opportunity to untwist and retwist and entwist the above theoretical questions about technology and the body and subjectivity to find productive, if ambivalent and imbricated, ways to challenge these logics of biological and technological determinism and to complexify the binary of dystopian annihilation of humanity on the one hand and the fantasies of transhuman transcendence on the other. Here then is the opportunity to use literature and literary texts as the lenses and the materials for performing this critical work; the "virtual bodies" (in all senses) of literary texts reveal the "passageways" (to cite Hayles) that enable stories about science, technology, and bodies to circulate (21) and how these different cultural productions, literature and technology, interact, constitute one another, and challenge one another. Hayles says, "It is a way of understanding ourselves as embodied creatures living within and through embodied worlds and embodied words" (24).

Black No More, Technorace, and the Color Line

> And I told about equality
> And it's true
> Either you're wrong
> Or you're right
> But, if
> You're thinkin'
> About my baby
> It don't matter if you're
> Black or white
> —Michael Jackson, "Black or White"

Rather than beginning with a close reading of contemporary science fiction and cyberpunk, which this chapter will come back to, I want to tackle the questions raised above about the intersections of race, gender, and sexuality in transhumanism and posthuman narratives by looking at a much earlier text—George S. Schuyler's first novel *Black No More*, which was first published in during the Harlem Renaissance in 1931 and reveals anxieties over the body, specifically the black sexualized body that has long troubled the modern social, political, and racial consciousness. Schuyler's "technological fantasy" (as both Harryette Mullen and Sonnet H. Retman call it) offers a critical starting point in my genealogy specifically because it is a novel that is rarely included in accounts of the heyday of American science fiction[40] (beginning in the same period with pulp publications like *Amazing Stories*) even given *Black No More*'s classification as one of the first African-American science fictional and proto-Afrofuturist texts.[41] Much in the ways that Thomas Foster wants to inject race into posthumanism or Alexander G. Weheliye wants to address "the literal and virtual whiteness of cybertheory" (21), this analysis of *Black No More* recovers an important text critical of transhumanist technological fixes (for the color line) and extends the intersectional work of both Foster and Weheliye to challenge the ways

[40] See Andrew Ross's third chapter in *Strange Weather* entitled "Getting Out of the Gernsback Continuum."
[41] For more information, see Lisa Yaszek's "Afrofuturism, Science Fiction, and the History of the Future" in *Socialism and Democracy* (November 2006) or Mark Bould's "The Ships Landed Long Ago: Afrofuturism and Black SF" in *Science Fiction Studies* (July 2007).

"posthuman frequently appears as little more than the white liberal subject in techno-informational disguise" (23). Moreover, Schuyler's novel not only dramatizes but troubles the transhumanist fantasy and "contemporary preoccupation with the eradication of race through biotechnology" (Retman 1448) as seen in arguments like Paul Gilroy's *Against Race* and sociologist Orlando Patterson's editorial "Race Over,"[42] both published in 2000.

The amazing and prescient irony of Schuyler's novel is that it reveals the anxieties over the technological fix for the black, sexualized body in ways that destabilize and critique Gilroy's one-sided call for a disappearing of race through technologies. *Black No More*'s premise (based on the pseudoscience of racial transformation of the period) is that a scientist by the name of Dr. Junius Crookman has developed a process, "accomplished by electrical nutrition and glandular control" (11), that can "change black to white in three days" (9). The biotechnological process is based on the disease vitiligo, a condition that causes the depigmentation of the skin. Crookman, himself a black man who does not undergo his own treatment, reveals that he researched and developed the technology (abroad in Germany no less) as a way to solve the "Negro problem in America," which enjoined blacks to "either get out, get white or get along" (11). Crookman's tongue-in-cheek name reveals not that the technological fix is a sham—it works and works wonders so that blacks line up with their fifty-dollar fee at Black No More "hospitals" across the country—but that the solution, the disappearing of the race line through the technological fix is not tenable given that it only serves to intensify racism, protection of whiteness, and fear of miscegenation and racial passing.

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[42] Orlando Patterson argues in "Race Over," which was published in January 2000 in the *New Republic*: "For the decline of race as a factor in American life will result not only from immigrantion, which can perhaps be halted, but also from biotechnology. More and more in the coming decades, Americans will gain the means to genetically manipulate human appearance. The foundations of genetic engineering are already in place….Once dramatically manipulable by human action, 'race' will lose its social significance, and the myth of racial purity will be laid to rest" (as qtd. in Retman 1448).

Much of the novel is concerned with the goings on and shenanigans of the main character Max Disher, a self-professed "high-yallah" lover, who becomes one of the first blacks to undergo Crookman's treatment in order to seek out the love and affection of a white woman he meets and is spurned by (because he's a Negro) at a night club. Max, who on the very first page of the novel is described as "tall, dapper and smooth coffee brown" (3) sees the Crookman fix as the solution to all of his problems—not only will he be able to woo and win the girl of his dreams but he will finally be able to live as a first class citizen. Max goes to the Crookman sanitarium in New York City and marvels at the technological wonder he is about to experience and at the machine that will solve all of his problems:

> He quailed as he saw the formidable apparatus of sparkling nickel. It resembled a cross between a dentist's chair and an electric chair. Wires and straps, bars and levers protruded from it and a great nickel headpiece, like the helmet of a knight, hung over it. The room had only a skylight and no sound entered it from outside. Around the walls were cases of instruments and shelves of bottles filled with strangely colored liquids. He gasped with fright and would have made for the door but the two husky attendants held him firmly, stripped off his robe and bound him in the chair. There was no retreat. It was either the beginning or the end (16-17).

After undergoing the three-day procedure, Max leaves the hospital overjoyed: "White at last! Gone was the smooth brown complexion. Gone were the slightly full lips and Ethiopian nose. Gone was the nappy hair that he had straightened so meticulously ever since the kink-no-more lotions first wrenched Aframericans from the tyranny and torture of the comb. There would be no more expenditures for skin whiteners; no more discrimination; no more obstacles in his path. He was free! The world was his oyster and he had the open sesame of pork-colored skin!" (18-19). The beauty of the passage above is that even before Crookman's technological fix, there were already products and practices engaged in the attempt to *unrace* blacks and to *rerace* them as whites. Granted the limited effectiveness of real world products like Kink-No-More and skin lighteners only served to heighten the desire

for whiteness, however improbable, and to reveal the "juridical, economic, and social structures of race. In particular, it reveals the function of whiteness as a kind of property" (Retman 1452). It is only with Crookman's newfound posthuman treatment that the process is total—or mostly total—the technology is ironically figured as the problematic savior of the black "race," a critical opportunity, an opening into the conflicted racial logics not only of the historical moment but of the technological one as well.

It is no accident that the apparatus described above that Max is strapped into evokes the medical and the juridical, literally Foucault's technologies of life and death, and importantly, the machinery of capitalism and the commodification of race. Sonnet H. Retman, in "*Black No More*: George Schuyler and Racial Capitalism," considers the way that the novel "pushes the plot of racial passing to its brutal extreme, asking what would happen to United States race relations if whiteness could be mechanized, packaged, and sold by black men" (1453). She goes on to ask, "Would blackness be lost altogether….Would race disappear as a site of conflict?" (1453). Of course, the novel's satire provides no easy answer to these questions. Dr. Crookman's technological solution to the problem of the color line at first seems obvious and promising—the "open sesame" that allows Max to declare, "At last he felt like an American citizen" (Schuyler 29)—but the reality of the transracial machine is that race is not simply a matter of biology or representation or perception. Though race functions as "a highly commercial, free-floating sign" (Retman 1449) in the novel, it is "too flexible a term to be eradicated with the elimination of heterogeneous phenotype…racial difference is too enmeshed in the markets, both financial and labor, to be easily effaced, whatever the promise of technology" (Retman 1456). Race is itself a technology that is intersectionally constituted by a range of cultural, historical, political, linguistic, and

economic logics and practices. In other words, even in the attempt to signify the end of race—"black no more"—still bears the word, the color, and the idea of the race to be negated. Retman continues, "Instead of supplanting race as a category, *Black No More* shows that technology augments its commercial viability, its fungible quality in the marketplace. In other words, if new technologies enable new forms of black agency in the market, they are inexorably tied to processes of commodification and hegemony" (1460).

The remainder of the novel concerns the proliferation of Black No More hospital franchises, the exodus of blacks out of second-class into first-class citizenship, and the ensuing political and cultural battle over the status of "whiteness," the anxieties over blacks now passing as white, and most importantly, the consequences of miscegenation. It seems Crookman's process, though more than simply cosmetic, cannot change the genetic certainty of black transformees. Therefore, the Black No More service offers a discounted and speedier fix for the children born of white and whitened couples. Here racist anxiety is once again routed through gender and sexuality, what Harryette Mullens calls "the sex-gender system in the mechanisms of passing" (79). Rather than solving the "Negro problem," the Black No More technological fix only further intensified racialized surveillance, violence, and oppression, particularly for those black bodies that did not undergo or who could not afford the change. The color line is largely shifted (definitely not erased) in the novel but the challenges of race and racism remain though also transformed by the intervening technology. *Black No More* reveals the ways the logics of race and racism largely persist even after technology has promised to erase and disembody the signifiers of difference, a move which Weheliye argues has been reserved only for white bodies. He says, racialized bodies and "cultural practices do not have the illusion of disembodiment, they stage *the body* of

information and technology as opposed to the lack thereof" (39). Max all to keenly feels and understands this even after his initial triumphant conversion to the white cad "Matthew Fisher." He realizes, "There was nothing left for him except the hard, materialistic, grasping, inbred society of the whites" and that "[b]eing white, he finally concluded, was no Open Sesame" (Schuyler 43). Whiteness itself is a technology, and Max realizes "he has greater geographic and financial mobility as a white man but also understand that one really profits from whiteness by producing and selling it, not simply owning it" (Retman 1456). He moves from the constraints of one technology of race to another. *Black No More*'s technological fantasy is not the disembodied, utopian fantasy of transhumanism because it recognizes the horror in Crookman's machine and Max's willingness to sell himself and "fifty million souls" (Schuyler 142) up the river. As Retman says, "Taking its cue from market culture, then, Black-No-More reproduces a black body that is able to pass for white on a massive scale, auguring the coercive genocide of blackness throughout the nation, an association driven home by Max's comparison of 'that horrible machine' to the 'electric chair'" (1453).

It is this intersection of race, gender, class, and sexual desire that makes *Black No More* more than just a satire of the racist, sexist, classist, and heteronormative logics of the United States. Rather Schuyler's novel imagines and articulates the resulting anxieties and problems of the myths of colorblind ideologies in intersection with technology; racism and its concomitant prejudices and violences do not miraculously vanish just because the color line has been technologically whitewashed and squeaky cleaned. *Black No More* leverages history and lived experience, both actual and imagined, to correct the technological fantasies of contemporary transhumanism. The Transhumanist Declaration requires that society must "be guided by responsible and inclusive moral vision, taking seriously both opportunities and

risks, respecting autonomy and individual rights, and showing solidarity with and concern for the interests and dignity of all people around the globe" as well as "allowing individuals wide personal choice over how they enable their lives" (Humanity+). Though the Declaration makes no specific claim to race, gender, or sexuality, the multicultural and the multipersonal underlie their "moral vision" and individual "dignity." What is missing from the narratives offered by transhumanists is a considered account of the "risks" that attend these ostensibly liberatory technologies. Schuyler's novel (and other later posthuman texts) reveals these risks, thinking through how the key debates of transhumanism and posthumanism must include inclusion of technologized race, gender, and sexuality.

Specifically, I want to return to Sonnet H. Retman's analysis of *Black No More* as challenging the "eradication of race through biotechnology" (1448) and of N. Katherine Hayles's critique of the posthumanist desire to render the body obsolete, disembodied, and solely informational. In *How We Became Posthuman*, Hayles argues that the body becomes so much window dressing to the self, or more specifically the informational patterns that make up the self, that as the mind becomes increasingly privileged and intelligence becomes materialized as data then body becomes increasingly deprivileged, decommissioned, and dematerialized.[43] This is nothing new, of course, but rather a logical progression, some transhumanists and posthumanists might argue evolution from the days of Descartes. Hayles

[43] Hayles offers a succinct definition useful here: "First, the posthuman view privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life. Second, the posthuman view considers consciousness, regarded as the seat of human identity in the Western tradition long before Descartes thought he was a mind thinking, as an epiphenomenon, as an evolutionary upstart trying to claim that it is the whole show when in actuality it is only a minor sideshow. Third, the posthuman view things of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born. Fourth, and most important, by these and other means, the posthuman view configures human being so that it can be seamlessly articulated with intelligent machines" (*How* 2-3).

says, “Indeed, one could argue that the erasure of embodiment is a feature common to *both* the liberal humanist subject and the cybernetic posthuman. Identified with the rational mind, the liberal subject *possessed* a body but was not usually represented as *being* a body” (4). The trouble of *being a body* is the rub here, and Hayles wants to find a way to *re-cognize* the body, to recapture and recontextualize the body, to dream “a version of the posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality” (5). The body can no longer be seen as and discarded as “fashion accessories rather than the ground of being” (Hayles 5).

However, Alexander G. Weheliye in his essay “‘Feenin’: Posthuman Voices in Contemporary Black Culture” calls into question Hayles’s formulation, saying that “this particular form of disembodiment extend the Cartesian mind/matter dichotomy” (22) and that “Hayles needs the hegemonic Western conception of humanity as a heuristic category against which to position her theory of posthumanism, in the process recapitulating the ways in which the Western liberal theory of the ‘human,’ instantiated in the eighteenth century, came to represent ‘humanity’ sui generis” (23). In other words, Weheliye wonders, where do racialized bodies fit into the debate about posthuman disembodiment given that these debates do not change the position of bodies of difference. The technologies that supposedly would disappear the body for white, liberal subjects in full possession of their selves require embodiments for which the transformation by technology is not possible, not practical, or simply not imagined. Weheliye’s reading of Toni Morrison’s *Beloved* is also applicable to a reading of Schuyler’s *Black No More*:

> …the novel insists that there can be no uncomplicated embrace of liberal humanist subject positions by black people after slaver. The literal dehumanization of black people through chattel slavery, as well as legal, political, anthropological, scientific,

> economic, and cultural forces supporting and enforcing the system, afforded black subjects no easy passage to the sign of the human. (24)

Black No More then posits what happens when technology ostensibly offers black subjects an "easy passage" to power, agency, acceptance, citizenship, and the category of "human." Where Weheliye pushes to look at alternative technologies (in his case aural and recording technologies) as ways to think about race and posthumanism, Schuyler's novel allows for a critique of technological fixes that depend on hegemonic understandings of the human and of humanity and that simply replicate the old ways of knowing and being. The Black No More machine and the cure offered by Dr. Crookman do not offer an escape from the racist structures post-slavery America because they are constructed from and dependent on those very structures. Schuyler's novel allows for a rereading of the biotechnological fantasy described by Paul Gilroy in *Against Race: Imagining Political Culture Beyond the Color Line*. Here the problem of the body recalls the DuBoisian opening question at the beginning of *The Souls of Black Folk*, "How does it feel to be a problem?" The "negro problem" DuBois actively critiques is in part a problem of the body, of embodied racialized difference. It is this "problem" that Gilroy hopes to unhinge through "nano-politics," his account of how technologies, particularly biomedical and virtual reality technologies, are literally and figuratively erasing the color line.

Gilroy posits a shift from the notions of biologized race—race as seated in the corporeal body—to identitarian constructions of race—which coincides with the discursivity of the body—to a genomic or digital conceptualization of "race," one which obliterates the logics of the color line of the skin. It is in this shift from eighteenth and nineteenth centuries meanings of racial difference to twenty-first century biomedicalized reconstructions of race that offer ways "to take possession of [this] profound transformation and somehow set it to

work against the tainted logic that produced it [raciology]" (Gilroy 15). Gilroy understands the push-pull of the problem of embodiment, of perception, of representation. He says, at length, "[W]e must be alert to circumstances in which the body is reinvested with the power to arbitrate in the assignment of cultures to peoples. The bodies of a culture's practitioners can be called upon to supply the proof of where that culture fits in the inevitable hierarchy of value. The body may also provide the preeminent basis on which that culture is to be ethnically assigned. The body circulates uneasily through contemporary discussions of how one knows the group to which one belongs and of what it takes to be recognized as belong to such a collectivity" (24). It is important to note that Gilroy argues for a "postracial humanism," one which "[s]creens rather than lenses [will] mediate the pursuit of bodily truths (37). The "old" race science produced discourses about physical morphology as more than epiphenomena but indexes and indicators of difference, including the physiological, psychological, and spiritual: "[b]ones, skulls, hair, lips, noses, eyes, feet, genitals, and other somatic markers of 'race' have a special place in the discursive regimes that produced the truth of 'race' and repeatedly discovered it lodged in and on the body" (Gilroy 35).

Gilroy, however, sees the "new" science of a far more contingent production of and knowledge of race that will do away with somatic indexes, bodily markers, and the purposed rationality of the "visual and aesthetic in both senses of that slippery word" (35). It is this slipperiness (which should be evocative of Donna Haraway's "messiness" and Butler's, DuBois's, and this argument's "trouble") that Gilroy hopes to capitalize on and repurpose to imagine a cultural and political trajectory to a deracinated, utopian "planetary humanism." This decommissioning of "race" is routed through a technological fix much in the way *Black No More* attempts to resolve the color line by simply privileging one color. Gilroy says,

"The old, modern representational economies that reproduced 'race' subdermally and epidermally are today being transformed on one side by the scientific and technological changes that have followed the revolution in molecular biology, and on the other by a profound transformation in the ways that bodies are imaged" (43). It is because of a change in the scale and scope of perceptual technologies like electron microscopy and DNA mapping, the invention and intervention of representational and communication technologies like digital photography, Photoshopping,[44] and the Internet, and the intensification of representations of racialized bodies in film, television, advertising, sports, and new media that "we have begun to let the old visual signatures of 'race' go" (43). Gilroy's project, ultimately, is to rationalize and institutionalize ways that "the cold, corporeal fact of 'race'" be theorized "out of sight" (42).

Here Gilroy invokes the very problem that Hayles contends with: "The use of computers as modeling and imaging technologies prosthetically extending sight onto nano-scales can be linked to the impact of digital processing and other allied approaches to the body that allow it to be seen and understood in new ways, principally as code and information" (44). It is through this very disembodiment of race that gives Gilroy's argument its power (and opens it to subsequent critique particularly concerning the impossibility of making racialized difference "out of sight"). His genealogy of raciology begins with the somatic and with Frantz Fanon's critical notion of "epidermalization." But Gilroy wants to do away with the somatic, reconfigure the scopic, and theoretically and literally digitize race into bits and bytes—so small and so universally shared since all matter,

[44] Consider the brouhaha over Michael Jackson's 1991 music video for "Black or White," which featured in the last minute of the song the computer image manipulation technology called "morphing" that allowed for the seamless shift from one talking head, one embodiment to another, a cascading series of differently racialized, gendered, and eroticized bodies. Following the video, in November 1993, *Time* magazine featured its headline story and cover "The New Face of America," which used a similar digital technology to produce the imagined composite of a young, multiracial woman.

including bodies, are made up of the same stuff that attention to skin and flesh and blood no longer matter. "Epidermalization" is a thing of the past for it "refers to a historically specific system for making bodies meaningful by endowing them with qualities of 'color.' It suggests a regime in which the racialized body is bounded and protected by its enclosing skin. The observer's gaze does not penetrate that membrane but rests upon it and, in doing so, receives the truths of racial difference" (46). He argues, "The skin has no independent life. It is not a piece or component of the body but its fateful wrapping. Dermo-politics succeeded biopolitics. Both preceeded nano-politics" (46).

It is interesting that Gilroy is so ready to do away with the skin,[45] to write it off as mere "wrapping," as "accessory"—somehow detached and detachable from the body. Here the body itself, all of its cellular and atomic works, is rendered as more important than its shell, its covering—a curious refiguring of the mind/body duality, a corporealizing of the "what you are is not on the outside but what you are on the inside." Here the interior of the body, like the mind, is privileged as a way to understand and embody a universal humanity. However, an opportunity here is missed to see the skin as more than just a surface, a place to rest the codes of "color," a physiological horizon of being and difference. How might the

[45] There is an opportunity here to think through "skin theory" a bit, recognizing that it may serve to re-epidermalize formations like race, gender, sexuality, but I think the notion of the skin as interface and as a horizon for reconfiguration of said formations is interesting and useful. It is a way to re-embody things that Gilroy wants to do away with. It is also a useful arc to later discussions about body modification, cosmetic surgery, transgender theory, the "cyberdermalization" of science fictional bodies, the rhetoric and programming "skinning" of avatars and other digital technologies. Gilroy actually makes mention of "intersubjectivity" in his chapter on "Identity and Belonging, " which resonates with Sara Ahmed and Jackie Stacey's edited collection *Thinking Through the Skin*. For Ahmed and Stacey, skin embodiment and subjectivity is lived and manifested through Didier Anzieu, a Freudian psychoanalyst who wrote *The Skin Ego*, and through Maurice Merlau-Ponty's phenomenological notion of inter-corporeality or inter-embodiment. Merlau-Ponty's *inter-corporeality* emphasizes "embodiment, not only as fleshy and material but also as 'worldly', as being in an intimate and living relationship to the world, which is a world made up of other bodies" (Ahmed and Stacey 5). Merlau-Ponty's model is all about experiences, about interconnected experiences, and how the self and the subject are located in, through, and between bodies. Merlau-Ponty's inter-corporeality is predicated the reversibility of touch, the skin-on-skinness of bodies: "The handshake too is reversible; I can feel myself touched as well and at the same time as touching" (as qtd. in Ahmed and Stacy 5).

skin serve as one way to reconfigure understandings of the body and of embodiment? Here Fanon's "epidermalization" can be extended in the work of Sara Ahmed and Jackie Stacey's edited collection *Thinking Through the Skin* that calls "for a skin-tight politics, a politics that takes at its orientation not the body as such, but the fleshy interface between bodies and worlds. 'Thinking through the skin' is a thinking that reflects not on the body as the lost object of thought, but on inter-embodiment, on the mode of being-with and being-for, where one touches and is touched by others" (1). Ahmed and Stacy ask how skin can become meaningful and how the largest bodily organ, which is always apparent for scrutiny, can not only be re-read but redeployed not as the arbiter of some embodied truth but as the very material to disrupt these logics. Theories of skin strive to take all skin in its many manifestations—whole, scarred, baby soft, wrinkled, pierced, tattooed, sewn, dark, light—and discover how skin is "lived, read, written, narrated, seen, touched, managed, worked, cut, remembered, produced and known" (2), how it is made intelligible and unintelligible, and how it is politicized, violenced, and desired.

Gilroy does not see the skin anymore. With a wave of a posthuman wand, he argues, "When the body becomes absolutely penetrable, and is refigured as the transient, epiphenomenon of coded invisible information, that aesthetic, that gaze, and that regime of power are irrecoverably over. The idea of epidermalization points toward one intermediate stage in a critical theory of body scales in the making of 'race.' Today skin is no longer privileged as the threshold of either identity or particularity" (47). But this massive and generalized claim must require in rebuttal the questions of for whom is the skin no longer privileged, which skins get to be absolutely penetrated or treated as epiphenomenon, and what aesthetics and gazes still get privileged and perpetuated in the long run? Even as Gilroy

argues that the "boundaries of 'race' have moved across the threshold of the skin" (47) and that they are "cellular and molecular, not dermal" (47), there is the nagging feeling that the skin has been made into a straw man, a body disappearable into the flames of nanoscience and computerized informatics. However, Gilroy insufficiently attends to the fact that the "body's dematerialization depends in complex and highly specific ways on the *embodied* circumstances that an ideology of dematerialization would obscure" (Hayles 193).

The rhetorical and theoretical effect of Gilroy's insistence that the micronization of perceptual scale and the opening up of the body to its innermost workings allows for a specificity of being that undoes the generalities and stereotypes needed by raciology (and other –isms) even as he says this attention to the nano-particular will provide ways to commence a planetary humanity. It is this move toward redefining the human as necessarily posthuman that leads this discussion to a curious line in *Against Race*. In a protracted discussion about identitarian politics and the specific work that identities can play in "national, 'racial,' ethnic, regional, and local" (98) politics, he says: "Nobody ever speaks of a human identity" (98). What he means, of course, is that the category of human is all too abstracted, impossible to pin down by law, and a playground of romanticized and idealized logics. However, what the above discussion of the posthuman illuminates in stark contrast is the formulation of and the revelation of a need for a "human identity" in the face of technologies and practices that call into question the very nature, the very boundaries, and the very materialities of what it means to be human.

In the very urge to render the body immaterial and unimportantly visible, to redact subjectivity and self to patterns and flows of information, and to highlight and champion the liberating possibilities of technology over body, mind, and life itself that requires the

formulation of a "human" identity, one that can be inexorably changed and transformed for the better or paranoically and conservatively preserved and protected as natural or normal. The "limits of humanity" (Gilroy 18) are being reconfigured, redistributed, and realigned. The body itself and the category of human itself have become a territory over which different sides of the posthuman, transhuman debates skirmish and battle. The "human identity" is a necessary stabilization, albeit contingent, in order to posit a super-, infra-, or ur-human. *Homo sapiens* cannot exist without a teleological, etymological, and morphological compare and contrast with *homo erectus* on one side and *homo futurus* on the other. But Gilroy's desire to designate a "human identity" brings back to mind Weheliye's warning about black bodies historical and technological distance—the "negative ontological placement of black subjects in Western modernity" (28)—from all things considered human. In fact, Weheliye cites black posthumanist Kodwo Eshun who posits "a specifically black constellation of the posthuman in which New World black subjects have privileged access to the posthuman because they were denied the status of human for so long" (28-29). Eshun argues that certain black subjectivities might be read as "bypassing the modality of the human in the process of moving from the subhuman to the posthuman" (Weheliye 29). In other words, in contrast to Gilroy's desire to preserve the human, how might different identities and subjectivities be rendered and enacted that do not privilege traditional or normative understandings of the body and the self.

Ultimately, Gilroy's technological fantasy might result in a switch in "emphasis from the visible to the invisible markers of difference, a discursive move that only crystallizes the crisis of the visible occasioned by standard conceptions of race" (Retman 1456). This is precisely what happens in *Black No More* when white workers, white businessmen, and

white politicians begin campaigns to discover the truth about "white Negroes" in their midst; given that skin and perception were no longer sufficient in securing white authenticity, the antagonist characters of the novel turn toward genealogies and genetic authenticity. Although Schuyler's novel upends the possibility of this racial purity, given the discovery by the novel's white supremacist leaders possess more than a drop of black blood in their lineages, the very technologies that Gilroy posits as decommissioning the color line are pressed into service to defend and delineate the color line—once again the key antimony of posthumanism rears its cyborg head. Retman concurs, "*Black No More* not only speaks to our lucrative fascinations with racial spectacle in the form of exportable entertainments but also anticipates the commodification of race as an invisible marker of difference made possible by recent advances in biotechnology, such as the DNA kits now available for popular consumption and the new fertility medicine created by assisted reproductive technologies" (1461). The move to commodifying DNA is well underway as represented by popular American television shows like NBC's *Who Do You Think You Are?* and PBS's *Finding Your Roots* and genetic ancestry websites like ancestry.com.[46] Retman continues, "As Schuyler's novel warns, the most advanced technologies may, in fact, lead to the 'geneticization of identity,' the biological conception of race so often used to naturalize persistent structural inequalities" (1462).

Schuyler's *Black No More* initiates a neat arc to Ralph Ellison's *Invisible Man*, both of which Harryette Mullen remarks "center on the black male in search of technological mastery" (77). Ellison's *Invisible Man* offers another vision of how race and technology intersect and how technology mediates race (and vice versa). Like *Black No More*, Ellison's

[46] For recent discussions about race and biotechnology, see Part IV of *Race After the Internet* (2012), edited by Lisa Nakamura and Peter A. Chow-White.

1952 novel imagines and ambivalent and often insecure relationship between technology and race, gender, and sexuality. The chapters in *Invisible Man* that deal with the Liberty Paint factory, the paint color "Optic White," and the mysterious white machine are particularly illustrative and resonant with Dr. Crookman's Black No More apparatus and sanitariums. The Liberty Paint factory where the main character gets a "temp" job allegorizes the ways capitalism, technology, history, race, slavery, and power have become co-constitutive. The Invisible Man learns that the factory produces "Optic White," "the purest white that can be found" (153), a white so white it is made specifically for the government and is used for national monuments. He is assigned to the Old Man (in a curious rendering of both men as rendered invisible by their banishment to the bowels of the factory yet momentarily visibility because it is their blackness that is a prerequisite for the job), who makes the super secret additive, a liquid "black like dope" (154), which is what makes Optic White "the Right White" (165). The ten drops of "black dope" added to each can of Optic White is clearly a metaphor for miscegenation and the irony that whiteness requires blackness (in spite of fears of the "one drop" rule) reveals what Harryette Mullen argues, "Racism reifies whiteness to the extent that it is known or presumed to be unmixed with blackness" (80) yet requires "whiteness produced from the resources and raw materials of blackness" (77). This is the devastating irony of Liberty Paints' slogan: "KEEP AMERICA PURE WITH LIBERTY PAINTS" (149). The Invisible Man in recognizing and speaking the rhyme "the Right White" and "white is right" realizes that he, like the Old Man and other blacks, are caught up in the machine of "a racist-sexist hierarchy of privilege and oppression" (Mullen 73), a technology not only of exploited labor but exploited representation logics (or lack thereof) as well. The exhortation by the Old Man of "*we the machines inside the machine*" (Ellison 161)

underscores the double bind, a kind of technological double-consciousness, that blacks must accept and endure; in fact, the "black dope," already racialized both in color and association with excess and counterculture, might be seen as the liquidation of blackness, black bodies, black raw materials to be distilled into the talented ten drops that continue to shore up white racism.

The technological horror of *Invisible Man* comes immediately after the main character purposefully "destroys" the delicate processes and machines that make the "black dope." He wakes in the factory hospital seated in "a cold, white rigid chair" (176). Everything and everyone in the hospital scene is white (also anachronistically reminiscent of scenes from much later texts like George Lucas's *THX-1138* or Stanley Kubrick's *A Clockwork Orange* or the Wachowskis' *Matrix* trilogy). He is cared for after the industrial accident and where he is subjected to "the machine," an enigmatic mind-altering, memory-erasing device. He describes, "I fell to plotting ways of short-circuiting the machine. Perhaps if I shifted my body about so that the two nodes would come together—No, not only was there no room but it might electrocute me. I shuddered. Whoever else I was, I was no Samson. I had no desire to destroy myself even if it destroyed the machine; I wanted freedom, not destruction" (184). It is the constant attempt to short-circuit the machine—of racism, of societal expectation, of the Brotherhood's "scientific" program for racial uplift, of his own complicities and invisibilities—that the Invisible Man finally embraces at the end of the novel. The last chapters of the novel are full of this talk of circuits, this imbrication in technology, a most postmodern preoccupation: he has burned all documents of his life (destroying what Roseanne Allucquere Stone calls the "fiduciary subject"); he turns to writing as a technology of resistance; and he holes himself up in an room, unknown to the

wider world, where he has installed on every wall, ceiling, and floor light bulbs, suckling away the resources of whiteness with every watt spent. He muses, "Whence all this passion toward conformity anyway?—diversity is the word. Let man keep his many parts and you'll have no tyrant states. Why, if they follow this conformity business they'll end up by forcing me, an invisible man, to become white, which is not a color but the lack of one. Must I strive toward colorlessness? But seriously, and without snobbery, think of what the world would lose if that should happen. America is woven of many strands; I would recognize them and let it so remain" (435). The very last line once again recalls the ambivalent power and danger of technologies, particularly representational technologies: "Who knows but that, on the lower frequencies, I speak for you?" (439).

Whereas Max Disher of *Black No More* remembers who he is and what he is on the inside even though he is something different on the outside, the narrator of *Invisible Man* understands what he is on the outside but not who he is or what he is on the inside. It is as if the Invisible Man has been whitened on the inside even as he understands by the end of the novel that the solution is not to become white on the outside but to find some way to take himself out of the racist circuits. The solutions offered by both *Black No More* and *Invisible Man* are partial and fraught by the key antimony of posthumanism. Mullen says, "[T]he idea that black men might control the machines of economic and cultural production, instead of remaining machines within the machine, lies behind such images of technical proficiency as a means of accomplishing the goals of assimilation or of racial self-determination" (76). Invisibility (of a sort) in *Invisible Man* becomes the only recourse and resistance for the main character. But this is not the same invisibility or colorblindness that Paul Gilroy hopes for. Rather the invisibility here is tactical deploying the fact that he is not seen, not recognized,

not identified as human, as mattering as a way to negotiate and navigate a racist world. It is this negotiation and navigation that both novels bring to the fore and that cannot be solved by technology alone. In fact, the technologies of both novels are eerily similar. However one ostensibly frees the patient from the color line and the other constrains and confines them to the color line.

The technological mediation and enhancement of the body, of the subject is as old as the notion of the body itself. In fact, the technologies deployed by writers like Schuyler and Ellison and theorists like Gilroy are part of a long history and genealogy of technologies about the body, about the self, ostensibly about improving and enhancing the body, about improving and enhancing the self. Technologies have been used in the service of preserving, protecting, developing, directing, and prolonging the body; of course these same technologies were often predicated on which bodies were deserving of health and help and which bodies were beyond such help. These technologies of the body simultaneously constructed the body as the temple of the time, as the house of the soul, as it also understood that the body must be attended to, managed, and developed because it was inexorably linked to the mind and soul. It is this technology of the body, the technology of the self that Michel Foucault provides an account of in the third volume of the *History of Sexuality* entitled *The Care of the Self*. The problem of the body for ancient Greeks and Roman philosophy, medicine, and government was no less difficult than for the philosophers, doctors, and politicians of the contemporary moment. Foucault provides a genealogy of "the sober law of the body" (*Care* 133), a set of prescriptions and practices that developed over time alongside other forms of power and management over bodies, desires, resources, spaces, ultimately populations—what Foucault calls biopower. (It is this biopower that Gilroy argues has intensified and reconfigured itself

through and by cellular and molecular perception and technologies.) The care of the self then is more than simply eating well, resting, fending off disease, and exercise. Rather the care of the self is about the relationships and ratios between the body, embodiment, and subjectivity (as couched in terms of the body/mind or body/soul duality) that require a constellation of attentions, limits, cures, and preventative measures that regulate holistically the body and mind in terms of physical, mental, spiritual, and sexual health; it was in part "a medical perception of the world…a medical perception of space and circumstances in which one lived" (Foucault *Care* 101). Moreover, this "care" must necessarily move from the domain of the bedroom, the home, the private and into the courtyard, the court, the polis, the state: "it constituted, not an exercise in solitude, but a true social practice. And it did so in several ways. It often took form within more or less institutionalized structures" (Foucault 51).

According to Foucault, during the classical period, the care of the self solidified and took on distinctive articulations and administrative structures; the language, discourses, and practices of the care of the body and mind became technologies of care, of "'cultivation of the self,' wherein the relations of oneself to oneself were intensified and valorized" (Foucault 41). It is important to note that during the classical period these prescriptions were "not a tightening of the code that defined prohibited acts, but of an intensification of the relation to oneself by which one constituted oneself as the subject of one's acts" (41). It would be later centuries, particularly routed through Christianity and other religions, that these prescriptions became strict prohibitions. These embodied frameworks were seen as necessary, a physical and spiritual imperative, to develop these technologies of the body and the self. Paraphrasing Epictetus, Foucault describes, "The animals find 'ready prepared' that which they need in order to live, for nature has so arranged things that animals are at our disposal without their

having to look after themselves, and without our having to look after them. Man, on the other hand, must attend to himself: not, however, as a consequence of some defect that would put him in a situation of need and make him in this respect inferior to the animals, but because the god [Zeus] deemed it right that he be able to make free use of himself; and it was for this purpose that he endowed him with reason" (47). Here the humanist tethering of reason to the body, of reason over the body is articulated but this articulation must be read as not linear, not strictly one over the other. In other words, "[e]mbodiment differs from the concept of the body in that the body is always normative relative to some set of criteria" (Hayles *How* 196).

Although the technologies of *Black No More*, *Invisible Man*, and even Gilroy's "nano-politics" is not precisely described as technologies of the self or technologies for the care of the self, all of them imply that the technology will somehow improve, enhance, or resolve the racial body. As mentioned at the beginning of this section, these technologies of the self are too often technologies of domination, control, and destruction. Interestingly, Gilroy in part attempts to resist the trap of the care of the body as meaning the same thing as the care of the self. He cites philosopher Zygmunt Bauman, who argues that "the primal scene of postmodern social life in the overdeveloped world is being staged in a distinctive private relation to one's own corporeality, through a disciplinary custodianship that can be specified as the idea of the body 'as task'" (22). Gilroy specifically references Bauman's *Life in Fragments: Essays in Postmodern Morality*; Bauman says in *Life in Fragments*, in the section entitled "The Body as Task," that the

> protection of 'normality,' of good health, has become everybody's concern and has turned into everyone's task. Health was not 'just there'—it had to be constructed and daily reproduced according to strict rules and with the help of the right equipment. The life choices—at least for the resourceful who could choose—were medicalized,

> pre-selected and monitored by medical expertise….The fulfillment of the duty took the form of a strictly observed bodily regime—of regular exercise, a balanced diet, a carefully structured daily and annual rhythm of activities, a consistently growing list of avoidances and self-denials. (169)

Bauman's observations clearly resonate with Foucault's theorizations of the ways the body, mind, self, and society have become organized, disciplined, and technologized. Gilroy's postracial humanism and nano-politics positions itself against Bauman's bodily "tasks" and Foucault "political anatomy" in that the body must no longer be the metric and master of racial being. Alas, not only is Gilroy's move toward disembodiment problematic, as outlined by Hayles, but doubly so since it also reinforces the very structures and horizons of being that Weheliye wants to dismantle. Rather, as Weheliye argues, as demonstrated by my readings of *Black No More* and *Invisible Man*, "the human and the posthuman are in constant dynamic tension" (30), and because of that, "black cultural practices do not have the illusion of disembodiment, they stage *the body* of information and technology as opposed to the lack thereof" (39). We must discover, develop, and recover different ways of thinking about technology and identity, technology and subjectivity, technology and embodiment—ways that consider Mullen's notion of the "media cyborg" or Weheliye's "composite identities" and "other humanities"—in order to "incorporate these ontological others…in order to better situate and analyze the porous perimeters of the 'human'" (Weheliye 27).

"Making Us All Queer"

> Because if it's not Love
> Then it's the bomb, the bomb, the bomb,
> the bomb, the bomb, the bomb, the bomb
> That will bring us together
> —"Ask," The Smiths[47]

As we have seen, the idea of technology "fixing" the limitations and problems of the body, mind, and culture has had a longstanding impact on the ways individuals and people conduct their lives. However, whether these technologies affirm or entail "happiness, purity, wisdom, perfection, or immortality" (Foucault *Technologies* 18) or intensify what Bauman calls the "protection of normality" is the key conundrum. Therefore, in the final section of this chapter, I want to turn to contemporary literature, particularly cyberpunk fiction, to continue to analyze the liberatory potential of technology. I want to go back to the World Transhumanist Association and consider further claims made by transhumanism to look at the ways gender and sexuality in particular get modified and manipulated in the name of technological freedom and advancement.

The WTA website offers a policy of queer inclusion that begins with: "transsexuals…were the first transhumanists. Transgendered people have been on the 'cutting edge' by asserting their right to use technology to modify their body" ("LGBTQIA"), which echoes Allucquere Rosanne Stone's famous declaration that "in cyberspace the transgendered body is the natural body" (as qtd. in Foster 709). The WTA website extends the inclusion further saying, "Gays, lesbians, and bisexuals are also natural

[47] I reference this because of artist and writer Zach Blas, who was interviewed for rhizome.org. Blas describes one of this Queer Technologies projects: "The third Queer Technologies project is Gay Bombs, which is designed as a technical manual. It is meant to be a manifesto of sorts, a guide on how to use Queer Technologies and why. Gay Bombs is a re-appropriation of the US Air Force proposal in the mid-90s of a chemical weapon that would make same-sex combatants of war sexually irresistible to each other. While the military 'gay bomb' relies on a public shaming for defeat, Queer Technologies uses this logic to construct networked activist tactics, conceptualizing the gay bomb as a queer bomb, that is, a bomb that has already existed in queer art and culture (see Derek Jarman's *Jubilee* or The Smiths music video for 'Ask'), a bomb that unites queer communities in a kind of political love under various threats of annihilation."

allies of transhumanism since the right to control one's own body means being able to share it with other consenting adults" ("LGBTQIA"). However, much of the language of the WTA's inclusiveness is limited to queerness as reduced to alliance, to consensual sex, to gay parenting and cloning as a gay reproductive right, to an uncomfortable conflation of transgender with the panoply of other queer identifications metonymized by the rainbow acronym LGBTQIA. Dale Carrico, author of "Technology's Making Queers of Us All" on the transhumanist BetterHumans.com, wants to take conventional gay and lesbian politics, which fixates on assimilation and accommodation, to "far more subversive places. Queerer places." Carrico argues, "Queer politics…is predicated on the assumption that what is not 'normal' should nevertheless often be valued and celebrated. Queer sensibilities tend to be supremely suspicious of the gay vision of equality and normality, and are drawn instead to vision of diversity and proliferation." He believes that transhumanist technologies and politics can provide queers this opportunity of "diversity and proliferation." However, both the WTA and Carrico's positions stabilize queerness and queer bodies as preexisting, presupposed and that technology will simply allow them to be fully expressed, realized, maybe even desired. The "cutting edge" for transgendered people and other queers is a one-way street (violent and invasive metaphor aside) that ignores the potential for multiply-directional change suggested by the word "making" in Carrico's title. How is technology making us queer? How is queerness making technology? Furthermore, who is this "us" he claims? Obviously, Carrico's pronoun is meant as an appeal to identity, to the LGBTQIA of the world, but what if "us" also included "them", those who do not (yet) identify as queer?

What differs from Carrico about Stone's affirmation about the technoqueer potential of cyberspace is that she recognizes the power of these technologies while mindful of their

(current) limits and dangers. She sees computer and communication technologies as "spaces of transformation, identity factories in which bodies are meaning machines, and transgender—identity as performance, as play, as wrench in the smooth gears of the social apparatus of vision—is the ground state," all the while cautious that "in physical space the transgendered body is the *unnatural* body" (180-181, my emphasis). The democratic and progressive potential of technology must come in understanding that things like race, gender, sexuality, and embodiment are situated knowledges, contextual, historical, material, and intersectional. Carrico's attempt to claim LGBTQIA identities and subjectivities misses the "questions of embodied difference" and "how such differences are transformed into social hierarchies…that 'difference' and 'hierarchy' are never mere abstractions; they are systems of power that operate on actual bodies, capable of producing pain and pleasure, health and sickness, punishment and reward, life and death" (Stryker 3). Carrico, transhumanism, and certain strands of posthumanism must attend to the ways that queer sexuality, gender expression, and embodied difference are silenced or elided in much the same what race has been in their discussions and theorizations. Here the holding up of transgender bodies not only as the "perfect" example of gender nonconformity, as in look how queer they are, but as the "perfect" technological fix is heteronormative, violent, and skirts the same kind of logic that body hacking narratives use to frame transgendered bodies in reductive and flattening ways. How might we correct Carrico's generalizations and imagine what Judith Halberstam describes in *In a Queer Time and Place*: "This utopian, technotopian, or spatially imaginative formulation of the body with new organs and expanded sensorium corresponds precisely with the new forms of embodiment that have come to be called transgender in certain queer communities" (101). In other words, how do we pay more precise attention to how

technology mediates and constitutes normative and alternative identity and embodiments in order to "demonstrate the extent to which *soma*, the body as a culturally intelligible construct, and *techne*, the techniques in and through which bodies are transformed and positioned, are in fact inextricably interpenetrated" (Stryker 12). Any reconfiguration of transhumanism and posthumanism must articulate what Halberstam calls "technotopia," saying, "I want to trace the collision of postmodern space and postmodern embodiment in a technotopic aesthetic, or one that tests technological potentialities against the limits of the human body anchored in time and space, and that powerfully reimagines the relations between the organic and the machinic, the toxic and the domestic, the surgical and the cosmetic" (*In a Queer* 103).

Here then is an extended opportunity to call upon the narrative and philosophical and potentially transhumanist imaginaries of cyberpunk writers to provide renderings for and articulations of a "far more subversive" and queer future. Cory Doctorow's "0wnz0red," as well as Geoff Ryman's "Birth Days" and David Gerrold's "In the Quake Zone," is here deployed as theory, as potential algorithms in which technological mediation and transformation of bodies, minds, identities, and most importantly desire seem to suggest "queerer places" and possibilities. Veronica Hollinger aptly connects feminist and queer theory and science fiction saying, "[T]he theories and the fictions [are] reciprocal echoes and restatements: They suggest information about each other and serve to defamiliarize each other…science fiction is a particularly useful discourse within which to represent, the through metaphors of narrative, the philosophical and political conceptualizations deployed within critical theory" (301-302). Doctorow's story about two Silicon Valley computer hackers turned body and self-hackers theorizes and dramatizes on the one hand the

transhumanist ideal that technology can and will radically change humanity for the better, but more provocatively on the other hand, Doctorow's "0wnz0red" brings into relief the consequences of and failure to imagine and deploy queerness as a viable variable of this radical change. Therefore, the narrative theories of Ryman and Gerrold are here offered as correctives and required elaborations to Doctorow's story's short shrift. "0wnz0red" offers the brink of what Michael Warner would call "queer world-making" but backs away from following through to show how technology might actually *make* "queers of us all."

To be fair, Doctorow's seems to be very conscious of the slippery queerness evoked by his story—from setting, to character, to technology. "0wnz0red" opens with an AIDS death, the death of the main character Murray Swain's friend Liam, who "had dwindled from a tubbaguts programmer-shaped potato to a living skeleton on his death-bed the year before, herpes blooms run riot over his skin and bones in the absence of any immunoresponse" (208). The opening of the story calls into question the friendship between Murray, the survivor, and Liam, the lost; the trope of the AIDS death, the overly and overtly effusiveness of Murray's mourning, and the repeated references to Murray's benign-almost-non-sexuality conjures at the least a Sedgewickian homoerotic, homosocial relationship between Murray and Liam. As the story reveals, "Liam's death really screwed things up for Murray. He'd gone into one of those clinical depression spirals…He'd get mist in the morning over his second cup of coffee and by the midafternoon blood-sugar crash he'd be weeping silently in his cubicle" (208). The story seems very aware of the queerness that haunts it, that shadows it much in the way Murray is haunted by Liam, in the way Silicon Valley, the story's setting, is in the shadow of San Francisco. The focus on Murray and Liam's *homopossible* or

heteroflexible relationship is central to the critique of Doctorow's transhumanist technology revealed in the latter half of the story.

Everything for Murray becomes articulated through Liam, even time: "Two months after Liam died… Three months after Liam died…" (209). Murray can be read as the queerer of the pair and potentially may be homosexual or in love with Liam, though the story never "comes out" with his sexuality and purposefully obfuscates it with heterosexist recuperations. For example, months after Murray stops counting, he joins a documentation project in his company allowing him to throw himself "balls-deep" into work: "…it was technically sweet and it kept him from misting over and bawling. And they had cute girls on the documentation floor, liberal arts/electrical engineering double-majors with abs you could bounce a quarter off of…" (212). Murray's mourning, a kind of queer longing for his friend, is reinscribed, safely contained by a masculinist work ethic and cute girls. However, Murray seems to care more about the work than the girls, often working late into the night long after the girls or anyone would matter. Then Liam comes back from the dead.

Murray's encounter with the restored Liam curiously locates and dramatizes Murray's queer longing in Liam's body: "Liam. Still Liam. Not the skeletal Liam he'd last seen rotted and intubated on a bed at San Jose General. Not the porcine Liam he'd laughed with over a million late-night El Torito burritos. A fit, healthy, *young* Liam, the Liam he'd met the day they both started at Global Semi at adjacent desks, Liam fresh out of Cal Tech and fit from his weekly lot-hockey game and his weekend dirtbike rides in the hills. Liam-prime, or maybe Liam's younger brother or something" (213). At first Murray tries to rationalize Liam's return as a product of his overworked, overwrought imagination or as a visitation by some ghost of programming past. But Liam assures his friend that he is real, corporeal,

saying, “I’m meat, dude, same as you. Not back from the dead, just back from the *mostly dead*” (214). It is the meat and attention to the meat that counts (both a cyberpunk and queer metaphor and euphemism). Murray’s gaze, his attention to Liam’s meat is telling: “He was ripped, bullish chest and cartoonish wasp-waist, rock-hard abs through a silvery clubshirt and bulging thighs” (213). And when Liam puts a comforting hand on Murray’s arm and “gave it a companiable squeeze” (214), Murrary describes that it “felt good and real and human” (214). Somehow the previous description of “cute girls” and their taught abs pales in emphasis, titillation, and comfort to that of Liam and his hard body.

Liam then tells Murray of the last six months after his “death”, after “his body was donated for medical science” (208). Liam reveals his outfitted microprocessor and concomitant software that allows him to manipulate his mind and body, in other words—to hack himself in a deep, robust way. He says to Murray, “Ever think about how all the really good shit in your body—metabolism, immunoresponse, cognition—it’s all Ring Minus One? Not user-accessible? I mean, why is it that something like wiggling your toes is under your volitional control, but your memory isn’t?” (219). Liam continues, “[A]ll the good stuff is 0wned by your autonomic systems…your meat, it’s not under your control” (220). Liam explains in detail how he had been taken to a government facility (curious that it is the government that is at the fore for transhuman tech), given an implant, gains surreptitious access to the programming and technology, cures himself of AIDS, rebuilds his body, escapes the feds, and now hopes to embark on a crusade to spread the technology and “sexually transmissible *wellness*” (231). He says, “[Y]ou should be a super-user in your own body. You should be leet as you want to be. Every cell in your body should be end-user modifiable” (221). Then Liam infects Murray with his “wellness.”

The relationship between Murray and Liam, which ostensibly started as brotherly love or camaraderie, becomes messy, more fluid, more queer as boundaries, both of trust and of body, are crossed and blurred. As the saying goes, it all begins with a kiss—in this case a cigarette. During his explanation of his return, Liam offers to share a cigarette with Murray. Via the cigarette, Liam transfers his viral "wellness" through saliva on the cigarette. Murray brings the cigarette to his lips: "The tip, he realized too late, was dripping with saliva. He made face and handed it back to Liam. 'Aagh! You juiced the filter!'" (221). (Note that the sharing of a cigarette is a longstanding trope for sex since Hayes Code Hollywood cinema, cf. *Now, Voyager, Rebel Without a Cause, Chinatown*.) The technology becomes a key vertex in a love triangle with Murray and Liam. The rhetoric of hacking the self, of hacking the body, of gaining super-user access to Ring Minus One and the rhetoric of sex, of penetration, of exchanging fluids is inexorably imbricated. Liam says to Murray, "You're soaking in it" (231). To which Murray replies incredulously, "You *raped me*, asshole. Used my body without my permission" (232).

That the particular bodies, the particular biological sexes, the particular sexualities in the current triangle are male, masculine, and heterosexual makes the triangulation all the more queer. However, as noted before, the story takes certain pains to contain and recuperate these possible queer ruptures. The story makes a point to secure that Liam contracted HIV and AIDS through drug abuse. Liam's spread of his "sexually transmissible wellness" is as a white heterosexual man "barebacking [his] way through the skankiest hoes in the Tenderloin, playing Patient Zero, infecting everyone with the Cure" (231), raising an uncomfortable, possibly ironic tension in the racialized term "hoes" and the AIDS history-specific "Patient Zero." What is at stake here is not Doctorow's gloss of how the technology of body-hacking

works or that the science and the programming are decidedly reductive and just "*not that complicated*" (231). What is stake then is whether or not the technology imagined by "0wnz0red" and used by the characters themselves fully materializes the queer possibilities and queer "making" outlined by transhumanism. For Liam and Murray (and the waiting world), the possibilities are seemingly endless: "There'll be apps for happiness, cures for every disease, hibernation, limb-regeneration, whatever. Anything any human body has ever done, ever, you'll be able to do at-will" (235). Unfortunately, the story and the characters fail to include mods for race or gender or sexuality in the list of applications, perhaps unwilling or unable to render the color line or the gender line or the desire line manipulable. If Murray can will a change in the melatonin levels in his brain to free him from the need to sleep, why absent the ability to change the melanin levels in the skin? If Liam can bareback his way through the skankiest hoes in the Tenderloin, why not program a slide in erotic object choice and bareback his way through the roughest hustlers in the Castro?

The hacking of sexuality (or race or gender) opens a critical can of worms—that of origins, the etiology of these categories, the question of is Ring Minus One nature or culture? "0wnz0red" and its characters defer answering this question perhaps recognizing the stakes in deciding whether or not sexuality and other perceived inherent qualities is in the body in some genetic or corporeal predisposition or activated and articulated as performativity or cultural construction. Eve Kosofsky Sedgwick in *The Epistemology of the Closet* takes up this tension between essentialism and constructivism, between ontogeny and phylogeny and identifies a crucial stake: "[M]y fear is that there currently exists no framework in which to ask about the origins or development of individual gay identity that is not already structured by an implicit, trans-individual Western project or fantasy of eradicating that identity" (41).

Moreover, according to Sedgwick, just as arguments attempt to locate identities in biology to insulate them from cultural attack, there is a curious reversal: "Increasingly it is the conjecture that a particular trait is genetically or biologically based, *not* that it is "only cultural," that seems to trigger an estrus of manipulative fantasy in the technological institutions of the culture" (43). Sedgwick is suspicious of these origin stories and of discourses of change. She identifies the dangers of both, of the often tacit moves that make manipulable one range of categories, identities, and discourses while shoring up or disabling others. If Ring Minus One is nature laid bare, might the consequences of making body and brain hackable be the stabilization of cultural categories like race or gender or sexuality? In the end, Sedgwick argues for multiplicity, for inclusion, for floating understanding: "We all have the more reason, then, to keep our understanding of gay origin, of gay culture and material reproduction, plural, multi-capillaried, argus-eyed, respectful, and endlessly cherished" (43-44).

With these things in mind, a generous reading of Doctorow's story is in the way it identifies is the risk, the tremulous horizon that sexuality is manipulable, is always liminal, a part of the triangle of mind, body, and technology. A generous reading excuses Murray and Liam's inability to hack their own desire, to make their own queerness because they do not yet see that ways of being, of knowing, of living, and of loving are not fixed and rationalized by particular bodies (and vice versa). In other words, if Murray and Liam could see past the normative limitations that they and their culture have placed on their bodies, minds, and desire, they could see as Judith Butler reveals that "sex and gender are not related as cause and effect and that sex and gender do not necessarily exist in a one-to-one expressive relation to one another" (Foster 710). The technology makes it "much more difficult…to impose a

one-to-one relationship between a single body and a single discursive identity…to guarantee or ground social identity in a physical body…to limit discursive identities to one per body, or by extension to limit genders and sexual orientations to one per sexed body" (Foster 718). The story points up then that the body, mind, and desire cannot and should not be "0wned" in a liberal humanist, possessive individualist, private way, that to "0wn" yourself means to be vulnerable to being "0wned" by someone else. It is that vulnerability that transhumanists want to open up and minimize its risks.

The body-hacking technology in "0wnz0red" does to sexuality what Internet technology does to gender as described by Tyler Stevens in his essay "'Sinister Fruitiness': *Neuromancer*, Internet Sexuality and the Turing Test;" he says, "It is my claim that such technology *does* disarticulate gender and diffuse claims for "authenticity"; but it is up to us to refuse to re-write, re-play, and culturally enforce the sexist and homophobic expectations that our interlocutors maintain a strict alignment between their "real"-life gender and sexual identities and their "virtual" ones. We must recognize that the identities we live and produce day-to-day are *not* rigid indicators of where we will find and take our pleasures" (431). Or, more generally, as Michelle Chilcoat in "Brain Sex, Cyberpunk Cinema, Feminism, and the Dis/Location of Heterosexuality" says, "If the body is reconceived in terms of perpetual transformation, resistance and disruption are no longer antithetical to the norms that dictate social behaviors, but characteristics of the norms themselves: it becomes normal…Instead, the 'deviant' body comes to stand for all bodies, bodies that constantly push back against the forces seeking to regulate them" (169-170). Technology then, in the esteem of transhumanism, is the way that bodies and minds and desires can resist, reinvent, and

rearticulate living and loving as difference and change; here the deviant body might be revised as the queered body.

Body-hacking technology as queering and queer-making is taken up by other cyberpunk writers, here Geoff Ryman in "Birth Days" and David Gerrold in "In the Quake Zone." In Ryman, the main character Ron is a genetic scientist working with a biotechnological display of the human body called "Flat Man"; he describes, "Flat Man is pretty horrible, to tell you the truth. He's a culture, only the organs are differentiated and the bones are wafer-thin and spread out in a support structure. He looks like a cross between a spider's web and somebody who's been hit by a truck. And he covers and entire wall" (38). Ron, openly gay, uses Flat Man as a way to track the genetic markers that causes homosexuality: "Today we lit up the proteins produced by the samesex markers. I'm tracking them in different parts of the brain. Then I'll track how genetic surgery affects the brain cells. How long it takes to stimulate growth of new structures. How long it takes to turn off the production of other proteins and churn the last of them out through the lysosomes" (39). In other words, "How long it takes to cure being homo" (39). Again, we are reminded of the key antimony of posthumanism: the nano-political technology vis a vis Paul Gilroy here is leveraged to find a way to flip off the genetic switches for homosexuality, to "cure" that which has been deemed not "normal."

However, in the turn of the story, Ron realizes that homosexuality does not need curing and that the same technology he discovered can be used to allow samesex partners to reproduce, to biologically contribute to children. The story reveals at the end samesex reproduction becomes naturalized, becomes a reproductive advantage over heterosexuals. Ryman's story reproduces the transhumanist declaration that technology will liberate

humanity, in this case homohumanity, and that with ethics and responsibility, it will not fall into the hands of those who would use it to limit or oppress or eradicate humanity. And like the queer transhumanist rhetoric, "Birth Days" focuses primarily on the trope of reproduction, on genetic engineering's proof positive of homosexuality, on establishing queerness as one of many natural strategies and ecologies. Though "out" about technology and queerness, Ryman's story still stabilizes the categories of straight and queer and fails to see the vulnerability, the flow in and between.

On the other hand, David Gerrold's time-travel novella "In the Quake Zone" offers up at first a very straight, borderline homophobically panicked character Mike, a kind of time-hopping detective, messenger, hit man, and bodyguard. Mike is assigned to a case to investigate the disappearance of a string of young, queer men in West Hollywood in the late 1960s. He is to identify the perpetrator of the disappearances and to intervene to save at least one of the young men. At first, the main character gruffly establishes his distance from the content of the case: "Didn't know much about queers. Didn't really want to" (281). However, during the course of the investigation, Mike realizes that the boundary between what he did not know about, what he did not want to know about, and what he discovers about himself, the time period, the young men, and the geography of West Hollywood[48] is unsettled and insecure. He helps and eventually befriends one of the victims, Matt. In a curious confession, he says about Matt, "He's cute in a funny kind of way. If I liked boys, he'd be the kind of boy I liked" (283), which is quickly recuperated in the very next sentence: "If this were the world I wanted to live in, he'd be my little brother. I'd make him hot chocolate. I'd read him bedtime stories and tuck him in at night. And I'd beat up anybody

[48] For more on the history of queer Los Angeles, see Lillian Faderman and Stuart Timmons's *Gay L.A.: A History of Sexual Outlaws, Power Politics, and Lipstick Lesbians.*

who made fun of him at school" (283). Mike and Matt's relationship deepens during the course of the story, and Mike finds what he assumed to be his fixed sexuality, his fixed desire to be distressingly mutable. In the climax and final epiphany of the story, after Mike has been transported into the future of 2032, he learns that he can save Matt only if he is willing to accept one thing: to becoming transhuman, to becoming queer. Mike and his boss Eakins discuss:

> "There was one word I didn't give you. Trans-human."
> "Trans-human."
> "Right."
> "What does it mean?"
> "It means—this week—the transitional stage between human and what comes next."
> "What comes next?"
> "We don't know. We're still inventing it. We won't know until afterwards."
> "And being queer is part of it?"
> "Yes. And so is being black. And female. And body-molded. And everything else." Eakins leaned forward intensely. "Your body is here in 2032, but your head is still stuck in 1967. If we're doing to do anything with you, we have to get your head unstuck. Listen to me. In this age of designer genders, liquid orientation, body-mods, and all the other experiments in human identity, nobody fucking care anymore about who's doing what and with which and to whom" (328).

Mike is offered his only chance of continuing his employment and of saving Matt (and of fully realizing the queer inklings he has already felt). In a scene reminiscent of a scene in the film *The Matrix*, Mike is offered two pills, pills that will allow him to *choose* to become queer, to hack his own sexual orientation, to establish a totally new connection. Gerrold's story takes us to the brink of profound change and sends us over. He offers us a proactive, a retroactive, an active queer world-making, a queerer place.

"In the Quake Zone" is the culmination of the queer transhumanist potential only hinted at in Doctorow's "0wnz0red" and partially realized in Ryman's "Birth Days." The technology to *make* oneself queer denies a single or stable queer origin and makes one

productively vulnerable to change. It allows for the fulfillment of Dale Carrico's call for queer communities and projects to embrace transhumanism, "which unites technological development with human self-creation in the hope of unleashing varieties of desire queers themselves have rarely (but sometimes) dreamt of." In other words, going back to Gerrold's story, the character Eakins says, "Life isn't about the lines we draw to separate ourselves from each other—it's about the lines we can draw that connect us…we're learning how to get into each other's experience so we can have common ground of being as a civilized society" (328).

Ultimately, it is this shared experience, this common ground, and this hope for a more civilized and creative world that "0wnz0red" and similar stories desire and scaffold. They are present manifestations of what transhumanism desires and scaffolds for the future. Both are projects that mark "a utopian space, which is, perhaps, also an ironic space, inhabited by subjects-in-process who are not bound by reifying definitions and expectations, and in which bodies, desires, and sex/gender behaviors are free-floating and in constant play" (Hollinger 312). Both ask vital questions about the convergence and interdependence of culture and technology. Both reveal, in the words of Allucquere Rosanne Stone in *The War of Technology and Desire*, "immense threat and immense promise" (183). Stone continues, "[W]e need to guide ourselves—remember *cyber* means steer—in all our assembled forms and multiple selves right between the two towers of promise and danger, of desire and technology" (183). In a deep way, queering cyberpunk and queering transhumanism is one way to find guidance, to draw lines to connect, to build a politics of irony and utopianism, to constantly play, and to make a better world.

Better. Stronger. Faster. Queerer.

> "I look forward eagerly to continuing this high adventure with you—uttering the vision and claiming it—the adventure that is our future, as we immerse ourselves ever more deeply into our technologies; as the boundaries between our technologies and ourselves continue to implode; as we inexorably become creatures that we cannot even now imagine."
>
> —Allucquere Rosanne Stone

It is the queer worldmaking of the above close readings that I want to extend, to further develop the relationship between technocultural and queer theory. The technoqueer here is expanded to think about body hacking and body modification technologies as more than exercises in possessive individualism, self-regulation, and normification. Rather, the technoqueer offers alternative and subversive readings to these narratives of "care of the self" and "technologies of the self." To do this, I close with a final example of gender and technologies of the self as seen in the recent rebooting of the television classic *The Bionic Woman*.

In the fall of 2007, NBC debut its remaking and reimagining of *The Bionic Woman* with the promise that the show (in homage and in breaking away from the 1970s show) will be "Better. Stronger. Faster." Starring Michelle Ryan in the title role as Jaime Sommers and including Katee Sackhoff as Sarah Corvus, the prototype bionic woman, the *Bionic Woman* provides an entrance into the following meditation on queer epistemologies and technocultural interventions and subjectivities. The bionic women, framed in a hard-to-miss femme-butch dynamic, are figures, embodied correspondences that allow for a queer reading of the radical potential of queerness and technology, of the technologically-mediated self and body. The show (part of a glut of current programs about the "posthuman" such as *Battlestar Galactica, Kyle XY, Chuck, Terminator: The Sarah Connor Chronicles*) depends on the

productive ambivalences around questions of what it means to be a woman, what it means to be a machine, what it means to desire, and what it means to choose (or not be able to choose) your identifications, mediations, and definitions. In the second episode of the first season, handler and trainer Jae Kim (Will Yun Lee) says to Jaime during their first training session, "You think that just because you have machines inside you, that's enough, that you're invincible. The machine is nothing without the woman. We're going beyond the demo…way beyond." The demo here is the baseline programming in Jaime's bionics (and perhaps her own "hardwired" flesh and mind) that allow her to already know how to use her body and fight, and what is implied is that Jaime must become more than just her programming, her bionics, her biology in order to grow, learn, and survive. It is through these narrative and material alliances and antagonisms that this project hopes to track the ways queer, queer theory, technology, and technocultural theory might grow, learn, and survive—to be *better, stronger, faster*.

The technocultural offers additional interventions into the queer, since the technocultural is also in the business of trying to understand and formulate critiques of ways of being, bodies and embodiments and desires in flux, and moreover, to read "the history of technology is as a series of complexifications, knots, and loosenings of the bonds and tensions between bodies and selves, mediated by technologies of communication, within a force field of power relationships" (Stone 86). Rosanne Allucquere Stone defines the technocultural, or in her case the technosocial, as "the social forms within technology-viewed-as-nature—those social forms to whom technology has become invisible, in no more and no less the same way that the workings of our bodies have become invisible in the face of a burgeoning medical imaging industry whose premise is to make the body thoroughly

visible—social beings for whom technology is nature, for whom elsewhere is geography, for whom the problematic tie between unitary awareness and unitary physical body has political consequences" (38-39). In other words, the technocultural invites a redefinition of what it means to be human (the posthuman), a subject under and in technology, and the necessary consideration of "what opportunities such redefinitions might offer, to consider what is lost and what is gained, to use Octavia Butler's formulation" (Foster xx).

Here a return to the *Bionic Woman* allows for an articulation of the promises and tensions of queering technology and technologizing queerness and queer theory. Jaime Sommers represents and embodies the intersectional strategies that the openness of queer and the potentialities of technology together might envision. How might the figure and form (the body of the character and the body of the actress, the identities and identifications mapped on to both) of Jaime Sommers reveal and revel in these promises and tensions? Technology and queerness is not a new formulation, though in the spirit of the remade *Bionic Woman*, how might technology and queerness be "better, stronger, faster?" Do we, in fact, have the technology? Of course, this discussion must begin with the theoretical, metaphorical feminist "legacy" of the cyborg, specifically Donna Haraway's cyborg. Haraway's 1985 "A Cyborg Manifesto" sets out to "build an ironic political myth faithful to feminism, socialism, and materialism" (149). For her, the cyborg is "a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (149) that, like queer analytics, question the "dichotomies between mind and body, animal and human, organism and machine, public and private, nature and culture, men and women, primitive and civilized" (163). Like queerness, the cyborg is "about transgressed boundaries, potent fusions, and dangerous possibilities…to resist world-wide intensification of domination"

(154). For Haraway, the cyborg is a "potent subjectivity synthesized from fusions of outsidered identities" (174), a *stranger* to borrow Shane Phelan's figure of sexual dissidence.

In the third episode, Sarah Corvus, the "first" bionic woman, appears in Jaime Sommer's dream saying, "We know what each other's thinking…if we want." Both possess the same baseline technology and programming, a fact that Sarah uses to her advantage since she can anticipate Jaime's every move. However, the further intimation here is that the technology in both of their bodies, their minds grants them a special connection, above and beyond a kind of wi-fi telepathy, that binds them in an "integrated circuit" of embodiment and experience. Sarah *knows* Jaime with an intimacy that shatters the usual boundaries of public and private, self and other, friend (lover) and stranger. The fact that Sarah appears in Jaime's dream and then in the flesh in Jaime's bedroom, hovering over her while she sleeps, eroticizes the situation as well as the developing relationship between hero and nemesis. Sarah's low, husky voice saying, "Wake up, Jaime" and desire for Jaime "to see everything" can be read as a queer call to awareness of the circuit both of them are caught in and the circuit they could forge if they "want." Here the technology provides avenues to these knowledges and wants, queer or otherwise.

Queer cyborgs (or "cyberqueers") extend Haraway's ironic myth of a political and sexual identity beyond women and women of color. Though not wholly analogous (as critics like Mary Ann Doane and Thomas Foster argue), cyborgs and queerness are "a kind of disassembled and reassembled, postmodern collective and personal self" (Haraway 163) that are already and always "contradictory, partial, and strategic" (Haraway 155). The cyborg, as an articulation of the intersection of technology and other identities and identifications, reveals the very work of queer theory and politics; the cyborg can assemble and reassemble

any combination of the interventions and categories listed above. However, the cyborg like the queer is not a panacea and can reinscribe and perpetuate the very problems, dangers, essentialisms, and oppressions it seeks to challenge. For Haraway, the cyborg is a figure of freedom but also a herald of the "informatics of domination" (161), where the definitions and technologies, discourses and strategies that make the cyborg possible are also the very tools and structures to enforce dominant meanings, police difference, and disappear or destroy lives. This is the same warning Butler makes that queer must never be "fully owned, but always and only redeployed, twisted, queered from a prior usage" (*Bodies* 227). This is also Sedgwick's crucial caveat in *The Epistemology of the Closet*: "[M]y fear is that there currently exists no framework in which to ask about the origins or development of individual gay identity that is not already structured by an implicit, trans-individual Western project or fantasy of eradicating that identity" (41). She continues, "Increasingly it is the conjecture that a particular trait is genetically or biologically based, not that it is 'only cultural,' that seems to trigger an estrus of manipulative fantasy in the technological institutions of the culture" (43). In other words, Sedgwick is suspicious of these origin stories and of discourses of change and identifies the dangers of both, of the often tacit moves that make manipulable one range of categories, identities, and discourses while shoring up or disabling others.

The *Bionic Woman* dramatizes this tension between liberation and domination in a technological trope common to science fiction and cyberpunk narratives: the ability to manipulate, alter, and enhance the self, the body through technology. In the same episode discussed above, Sarah Corvus reveals to Jaime that she is "lo-jacked," that her bionics include surveillance and informatic technology that allow the Berkut group, her "employers,"

to monitor her position and her vitals, to see through her bionic eye, and to hear through her bionic ear. This intrusion is couched in the discourse of invasion of privacy and Sarah brings the issue home saying, "[They] get you in the shower." To regain her "dignity," Sarah tells Jaime that all she has to do is to hack herself, to will a change in her body, in the technology; Sarah says, "It's like hacking into your own computer. You need to concentrate really hard and visualize." Jaime does manage to flip the off switch on the "lo-jack," getting a nosebleed in the process, a sign perhaps that the mind and body are not so distinct or that the mind indeed is the captain of the body.

Of course, all of rhetoric around privacy and self-control functions as part of the larger frame of Jaime's initial lack of choice, lack of free will in choosing to become bionic, a decision that was made for her by her boyfriend (and conveniently enough surgeon and bionic researcher) Will Anthros, whose surname means "man" in Greek nods to the heteropatriarchy of it all. Jaime then is set up to be a challenge to these sexist structures, to be an embodiment of "girl power." Sarah even says, tongue-in-cheek, "Don't get me started on how objectifying this bionic woman thing is." The bionics that make Jaime and Sarah able to combat stereotypes, to become active subjects are the very thing that also fetishizes them (technofetishizes them as Thomas Foster's argues can happen to cyborg identities and bodies) and renders them objects, pawns. These grinding edges are allegorized in the "war of desire and technology" by Stone, who warns of the "quiet death that comes when we have lost our presence in the discourses which shape our lives, when we no longer speak but are spoken—that is, when not we but our culture speaks through our mouths" (167).

Like the main character of Ellison's *Invisible Man*, who asks, "Who knows but that, on the lower frequencies, I speak for you?" (439), all of the above narratives answer back to

transhumanist arguments about what people desire, what technologies can (or cannot) accomplish, and who benefits and who is invisible in the "war of desire and technology." The power to revise the body, the capability to transform identity, and the technologies of self-fashioning must be met with imagination, cautious optimism, and care to recover what might get lost in the interstitial spaces between race, gender, sexuality, and technology, between embodiment and disembodiment, between human, transhuman, and posthuman. What Alexander G. Weheliye argues for in the closing of his essay on posthuman voices: "My final claim is modest, but I hope no less consequential: in proclaiming the historical moment of the posthuman, we might do well to interrogate 'other humanities….This way, we might actually begin to ameliorate the provinciality of 'humanity' in its various Western guises as opposed to simply rehashing the same old stories ad infinitum" (40). We must finesse the difficult yet critically expansive readings of texts like Schuyler's *Black No More*, Ellison's *Invisible Man*, Gerrold's "In the Quake Zone," and even NBC's *The Bionic Woman*. These technoqueer and posthuman narratives open up different horizons of being and nuanced understandings of the growing ubiquity of technologically-mediated and -enhanced life.

Chapter Four
The Seductions of Gamification

Gamification is not new. Nor is the idea that "life is a game" new. In fact, according to the *Oxford English Dictionary* (OED), the idiom and metaphor "game of life" appears in print as far back Charles Johnson's 1719 comedy *Masquerade*: "We two will play the rest of the Game of Life together with the utmost Success." In 1866, the US gamemaker Milton Bradley submitted his original patent application for a "social game," of which he describes, "The game, as here arranged, is called the 'checkered game of life,' and, in addition to the amusement and excitement of the game, it is intended to forcibly impress upon the minds of youth the great moral principles of virtue and vice" (US53561). *The Checkered Game of Life*, which is reinvented and repackaged in 1960 by Milton Bradley the game company, simulates players' progress through life beginning at "infancy" and hopefully ending at "happy old age," achieving "school" and "fame" and "wealth" and "matrimony" (as virtues) or navigating "poverty" or "disgrace" or "ruin" or "suicide" (as vices). Bradley describes,

"As the player, when in the center of the board, oftentimes has the choice of several different moves, the game becomes very interesting, the more so from the fact that the chance of the die is so connected with the frequent choice of moves involving the exercise of judgment that it is adapted to interest every class, from youth to age" (US53561). The simple checkerboard and teetotum (rather than "gambling" dice) reveals the common sense narrative of life as a path, a journey, and a confluence of fortune and failure. Though not gamification per se, Bradley's game and patent puts into play cultural and ideological values and institutions mapped on to game play and mechanics and vice versa. The technoqueer intervention here is to unpack the ways video game technologies and the fantasies of gamification mediate, manipulate, and perhaps even queer normative understandings of race, gender, and sexuality. A critical approach to games and gamification requires an analysis not only of game content, narrative, and representation but also the cyborg technologies in play, an analysis that must take into account the medium-specific qualities of video games.

Recently, the trope of life as game and game as life has been revivified and repacked under the umbrella neologism "gamification." To gamify, then, is to incorporate and infuse "game design techniques, game mechanics, and/or game style into anything" (gamification.org). The desire and move to describe, quantify, and design "anything" is problematic in its attempt to gloss injustice, insecurity, and inequality and in its perpetuation of a level playing field. Like the early ideologies of cyberspace, as covered in previous chapters, gamification attempts to perfect the conflation of play and life in ways that privilege the virtual over the real, the informational over the embodied. And like the fantasies of transhumanism and certain narratives of posthumanism, which I have already addressed, gamification perpetuates the fantasy that technology—particularly digital, mobile,

and social network technologies—can better lives, augment life itself, and save the world. Gamification deploys video game techniques and technologies as posthuman technologies of change and transformation. Unfortunately, its potential is overstated and often obscures the disparities between who gets to play, who does not, who defines the rules, costs, and rewards of the game, and whether or not playing the game itself becomes compulsory and technonormative. Gamification is a repackaging of what Hayles calls the "seductions of cyberspace" or what Haraway refers to as the move from "all work to all play, a deadly game."

In fact, McKenzie Wark in *Gamer Theory*, a text he composed, reviewed, and revised initially online (what gamifiers call crowdsourcing), connects the metaphor of life as a game to capitalism[49] as a game: "The real world appears as a video arcadia divided into many and varied games. Work is a rat race. Politics is a horse race. The economy is a casino. Even the utopian justice to come in the afterlife is foreclosed: *He who dies with the most toys wins*. Games are no longer a pastime, outside or alongside life. They are now the very form of life, and death, and time itself. These games are no joke. When the screen flashes the legend *Game over*, you are either dead, or defeated, or at best out of quarters" (006). A cursory search of headlines and articles concerning what is now commonly called the Global Financial Crisis reveals a troubling and recurring metaphor: "gaming the system." In fact, given the collapse of the U.S. housing bubble, the monetization of risk, and the dismantling of financial regulations here and abroad, the language and narratives of "gaming," "betting,"

[49] Marx does not use the metaphor of life or capitalism as a game per se, though the trope does appear in a footnote in Part II, Chapter Four: "The General Formula for Capital" in the first volume of *Capital*: "With much more naiveté, Pinto, the Pindar of the Amsterdam Stock Exchange, remarks, 'Le commerce est un jeu: (taken from Locke) et ce n'est pas avec des gueux qu'on peut gagner. Si l'on gagnait longtemps en tout avec tous, il faudrait rendre de bon accord les plus grandes parties du profit pour recommencer le jeu.' ['Trade is a game, and nothing can be won from beggars. If one won everything from everybody all the time, it would be necessary to give back the greater part of the profit voluntarily, in order to begin the game again'] (Pinto: 'Traité de la Circulation et du Crédit.' Amsterdam, 1771. p. 231)."

"rolling the dice," "house of cards," and "playing the market" reveal a common sense understanding of how capitalism and transnational finance is always-already a game. Wark continues, "Play is no longer a counter to work. Play becomes work; work becomes play. Play outside of work found itself captured by the rise of the digital game, which responds to the boredom of the player with endless rounds of repetition, level after level of difference as more of the same. Play no longer functions as a foil for critical theory. The utopian dream of liberating play from the game, of a pure play beyond the game, merely opened the way for the extension of gamespace into every aspect of life" (16). This is precisely the difficulty with gamification, which belies more the logics of instrumentalization, commodification, and objectification than the liberatory promises of play.

Moreover, gamification's shortsightedness can be seen in the way it imprecisely constructs its own etymology and history. According to gamification.org, a self-promotional website and wiki dedicated to all things gamification, the term itself originated as early as 2004 coined by Nick Pelling, a British-born computer program best known for a writing a series of computer games in the 1980s. In an online post entitled "The (Short) Prehistory of 'Gamification'…" written for his UK blog "Funding Startups (& Other Impossibilities)," Pelling self-professes that as early as late 2002 he "began to wonder whether the kind of games user-interface [he] had been developing for so long could be used to turbo-charge all manner of transactions and activities on commercial electronic devices—in-flight video, ATM machines, vending machines, mobile phones, etc." He continues, "Unsurprisingly, this was the point when I coined the deliberately ugly word '*gamification,*' by which I meant applying game-like accelerated user interface design to make electronic transactions both enjoyable and fast" (his emphasis). In spite of Pelling's desire (and lamentation) to claim the

neologism, the development of gamified mechanism predate his use of the term. And although the *OED* has yet to recognize "gamification" as a word, the impulse to "game" everyday life can be seen in airline frequent flyer programs, which started in 1979 and which gamification.org cites as one of the earliest examples of gamification, in lifestyle management programs like Weight Watchers, which began in 1963, and even in economic theory like John von Neumann and Oskar Morgenstern's 1944 book *Theory of Games and Economic Behavior*. Again, gamification is marked by the language of sales, marketing, advertising, and behavior management and reveals how this "next big thing" is ideologically and technologically fraught, particularly exemplified in industry article titles like "Gamify This…Using Game Mechanics for Good and Evil" or "Game Over: The Perils of Gamifying the Classroom."

Despite its storied yet obscure history, gamification has gained and continues to find purchase in the contemporary moment as buzzword and panacea, particularly as it is linked to and evinced by the video game industry. In 2010, at the Academy of Interactive Arts and Sciences's annual Design, Innovate, Communicate, Entertain (DICE) Summit, Jesse Schell, Assistant Professor of Entertainment Technology at the Entertainment Technology Center of Carnegie Mellon University, spoke[50] about game design and gamification. His DICE talk, entitled "Design Outside the Box," is credited as the watershed moment, at least for the gaming industry, when gamification gained purchase in the culture. Schell revels in the raw potentiality of gamifying everything and anything, "you can apply the basic elements that make games fun and engaging to things that typically aren't considered a game. In theory you can apply Game Design to almost anything including Education, Health, Work and more. Gamification at its core is about fun, rewards, and social connections. It has the

[50] For full video of Schell's DICE talk: http://gamification.org/wiki/Jesse_Schell_DICE

opportunity to connect people in ways never seen before" (gamification.org). Shell opens his talk with a meditation on the growing ubiquity of Facebook, social networking games like Zynga's *Farmville*, and the monetization of people's behaviors, of players' behaviors. Shell, who used to be a Disney Imagineer, asks, "So there's a lot of psychological cleverness going on with these things [Facebook games]. It's interesting to think about. We talk about fun and we find fun ideas and we thought of clever game ideas. But who does brainstorming for new psychological locks and keys?" For Schell, the answer is game designers. And though Schell does not invoke "gamification" per se, the crux of his argument is that the confluence of technologies like Facebook, video games, and the desire to capitalize on user experience and pleasure "is they are busting through to reality." He explains, "We're used to, in the old days of gaming, it being all about fantasy…So we have this strong belief that fantasy is the thing, but every single one of these is breaking through into reality in some interesting way." The lion's share of Schell's talk outlines the ways he sees how games or game design have interpenetrated everyday life, and for Schell, games are concomitant with technology:

> So beyond technology, there's all these other ways that games are creeping into places we didn't think about. Fantasy football has been around forever. It used to be a nerdly game for nerdly nerds. Now, everyone plays it. Your grandmother probably plays fantasy football. Like, everybody is playing it. It's just everywhere. It's a game that leeches off a game.

He provides an example of global positioning technologies previously developed for military purposes being used for gamified ones and an example of changing the relationship between a driver, their car, and their fuel consumption:

> Geo-caching. Because it's cooler to go for a walk in the woods when there's a treasure chest at the end…DARPA wanted to figure out what are people able to figure out through crowdsourcing, so they made a game. They put these red balloons all over the country and said, "Let's see who can find them first." Then everybody raced to find the red balloons and did DARPA's research for them. Weight Watchers. They have this whole point system, which is very much like a game. And if anybody

> has the new Ford hybrid car—okay, I got it—it's got a speedometer and it's got a gas gauge, and what are those leaves? What the hell is that? The more gas you save, the more the plant grows. They put a virtual pet in your car, and it changes the way people drive.

Finally, he describes how education can be modified in order to increase attention, engagement, and ostensibly fun. Ultimately, the long frenetic constellation of examples ends in a call to action:

> Games have crept out and they're going everywhere…Imagine if skilled game designers get ahold of these things. Lee Sheldon is a great example. He's teaching—he's a game designer I'm sure some of you know. He's teaching at the University of Indiana now. One of the first things he did was, you know what? This grading system kind of sucks. Because school is a game, right? You go, you get scores, you pay, you come out, there is a leader board, you know. And he said: I'm going to do this better. He doesn't give out grades for each assignment; he gives out experience points. And you level up through the class. And so class attendance is up, class participation is up, homework is turned in often better because it's a better structure; it's a better system. Imagine when the game designers get ahold of all this garbage, the gas points and the shopping points and your coffee points and your airline points. All these points and points and points. Imagine when they're all designed…

However, Schell does make a brief concession at the end of his talk, saying, "So it could be that these systems are all crass commercialization and it's terrible. But it's possible that they will inspire us to be better people, if the game systems are designed right." Unfortunately, as with all technologies, the power to inspire is often simultaneously the power to imperil and the definitions of who and what it means to be "better" or "right" come at the co-constitution of those whose bodies, minds, and lives must necessarily be "worse" and "wrong." Schell's gamified world view is decidedly top-down, what in many video games is vernacularly called "god mode." McKenzie Wark is critical of this conflation of game and life, gamespace and world, and tries to articulate ways to be critical of play and to be mindful of ways to play critically. He argues, "The game has not just colonized reality, it is also the sole remaining ideal. Gamespace proclaims its legitimacy through victory over all rivals. The reigning

ideology imagines the world as a *level playing field*, upon which all folks are equal before God, the great game designer. History, politics, culture—gamespace dynamites everything that is not in the game, like an outdated Vegas casino. Everything is evacuated from an empty space and time which now appears natural, neutral, and without qualities—a game space" (008). Wark's warning is mindful of Haraway's "informatics of domination" and the critical understanding that games promise play, freedom, and flexibility (which gamification will later condense, even cathect under the sign "fun") while requiring players to obey rules, boundaries, and algorithms of control.

For example, take Zynga's *FrontierVille* game, which is available for free to play via the social networking site Facebook. In the same family of simulation, role-playing games like *FarmVille*, which allows a single player to design, manipulate, and manage a cartoony farm, *FrontierVille* is "a wild west-themed social game that allows users to tame the wilderness, grow a family, and build a thriving frontier town" (Zynga). Players start with a covered wagon and a plot of wild land where they must clear debris, grow crops, manage livestock, build buildings and businesses, attract townspeople, and defend their land. At the center of the game's narrative, interestingly, is the metaphor and mechanic of the homestead, the family. According to Zynga's press release, "*FrontierVille* introduces a new western theme to the Zynga family and leads a new generation of social games by introducing new features including multiple avatars on a single screen under one player's control. For the first time, Zynga is introducing virtual families allowing players to customize a spouse and raise a virtual family." Though the game is free to play, to access premium content, to shortcut challenges, or to gain significant advantage in the game requires the spending of actual

money. Zynga's particular model of monetized play has been touted by gamificationists, like Schell, as revolutionary.

Figure 7: Loading screen splash page. *FrontierVille*. Zynga, 2010. Game still.

Zynga's gamified business model is built upon game design and mechanics that appeals to simplicity, predictability, familiarity, and iterability. The game promises a symphony of pointing-and-clicking. Like other Zynga games, "playing" the game amounts to dollhouse management, a kind of spreadsheet-skinned-as-video game sort of play. Each click then represents an action: plowing, planting, harvesting, petting, moving, deleting, and so on. The game capitalizes on the very kind of usability and user-interface literacy that has become naturalized by the web and by applications like *Microsoft Office*. It makes sense then why games like *FrontierVille* are so "user friendly" and popular among casual gamers, particularly those who spend a lot of facetime with a computer screen. What is crucial here is that games like *FrontierVille* not only replicates and capitalizes on certain kinds of

information economy habits of work—button pushing, multitasking, spreadsheet manipulation, resource management—the game is further framed and skinned with romanticized and normative narratives, images, and values. In other words, *FrontierVille* reveals why "[g]amification is easy. It offers simple, repeatable approaches in which benefit, honor, and aesthetics are less important than facility" (Bogost "Gamification" par. 8). The game produces a caricaturized and deeply flattened understanding of the "wild west" and simplifies history, politics, and culture as a series of point-and-click moves. Clearing the land requires only a click. Planting a square of corn requires only a click. Building a log cabin, ostensibly more difficult, requires multiple clicks. *FrontierVille*'s account of nineteenth-century US expansion across the northern hemisphere is decidedly whitewashed, palatable, and normative. Although players can manipulate their avatar's general appearance, gender, and name, what the player's character looks or performs like makes little impact on game play or success. Moreover, the game presents the American frontier as uninhabited virtually disappearing native populations (as well as slavery and other colonial presences). In line with Wark's qualification of gamespace, *FrontierVille* is natural, neutral, and without any troubling qualities that would disrupt the "fun" of a depoliticized and dehistoricized gameworld. In other words, the game repurposes the ideologies of hard work, exploration, perseverance, expansion, and individual success and reduces power and privilege to a click (or better yet, a credit card number).

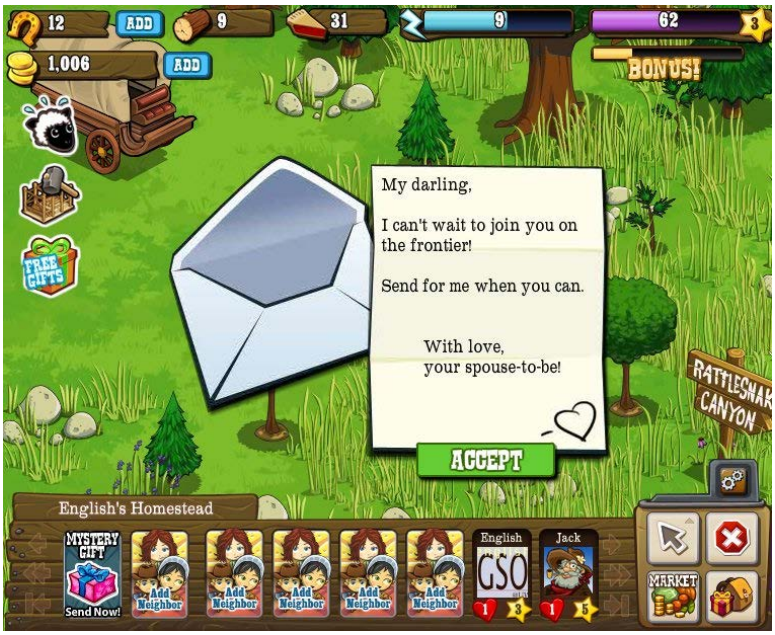

Figure 8: The start of the game opens with a letter from your spouse-to-be. *FrontierVille*. Zynga, 2010. Game still.

The normative but ostensibly "empty" gamespace of *Frontierville* decidedly links taming the wild with a different kind of domestication—marriage and the family. Early in the game, before your character has even unpacked their covered wagon, you are sent a letter from your "spouse-to-be," who will join you and marry you once you have completed a number of tasks including (in order of appearance):

Tend Your Homestead
Harvest Two Pumpkins
Tend Two Chicken

Clear The Land
Clear Three Grass
Chop Down Two Trees
Clear One Rock

Find Lost Sheep
Find Your Sheep and Feed it

Move Lost Sheep
Move Your Sheep
Own or Buy Four Fences (any type)

Start Building Your Own Cabin
Buy a Cabin at the Market
Whack the Framework Three Times

Visit Your Neighbors
Visit Two Neighbors
Have Ten Cloth

Prepare The Harvest
Buy One Fruit Tree at the Market
Buy One Pig at the Market
Plant Seven Crops

Prepare The Ground
Clear Seven Grass
Clear One Skull
Clear Two Rocks

Lay In Supplies
Have 25 Wood
Have 50 Food

Tame The Wilderness
Clear Ten Grass
Chop Down Three Trees

Finish The Cabin
Finish The Cabin

Customize Your Cabin
Customize Your Cabin

Spruce Things Up
Buy Two Hay Bales at the Market
Buy One Pitchfork at the Market
Buy Three Other Decorations (total of six)

Get Married – Step 1: Make Progress
Plant Twelve Crops
Have 2000 Coins
Buy Three Chickens at the Market

Players have little choice in whether or not they wish to complete the above quests, whether they wish to have a spouse, or whether they wish to get married and have children.

In order to progress in the game, the player must meet these requirements. Interestingly, *Frontierville* allows for a modest intervention into this heteronormative futurity—the game does not set any requirement as to the gender (or menu-driven race) of your imminent spouse. By refusing to assume the gender of the forthcoming spouse, the game opens a space for queer possibility. Granted, unless the player refuses to pursue the family quest lines, the game still assumes that you want, need, and have to have a (ostensibly monogamous) spouse. Once you begin the marriage line, you must complete several quests in order to prepare for the arrival of your spouse, including gathering money, resources, fancy clothes (for the wedding), and building a house. As soon as you can prove that you are a worthy suitor and a capable provider, your spouse arrives and the player is given the opportunity to design the avatar. The game does not differentiate between man or woman, same or different sex, or among a range of racialized appearances. Later in the game, after additional "hard" work and saving up, you and your spouse have a child (the first is mandatory), and it does not matter if you are same-sex or not. (Note, below, the realities of gender here are only imagined as male and female, man and woman, and encoded along gendered lines, masculine and feminine right down to the blue and pink icons.)

Figure 9: Spouse customization screen. *FrontierVille*. Zynga, 2010. Game still.

Figure 10: Spouse customization screen. *FrontierVille*. Zynga, 2010. Game still.

Unfortunately, the queer possibility of *Frontierville* does not remain open long. Foremost, the choice of your spouse's gender and appearance amount to window dressing (an idea that I will discuss at length concerning video games and race later in the chapter) and

have no impact on the game play. The addition of the spouse avatar, in terms of game mechanics, allows for the player to switch back and forth between the two characters to queue point-and-click tasks on screen. The only advantage (since there is no imagined disadvantage) is that both avatars can be employed to work the homestead. Moreover, the game recuperates the queer possibility by initiating a second marriage quest line, this time for a non-player character (NPC) Hank, the manager of your general store, who wants to get married. The game introduces a love triangle—Fanny, the town's homely schoolmarm, and Bess, the redhaired sharpshooter cowgirl, both want Hank, who you help "makeover" into a hunk. Hank's object of matrimony is only limited to either Fanny or Bess. You are conscripted into helping Hank, regardless of whether you wish to or not, and your only choice in the matter is deciding who will say yes (since the NPC women have no choice either).

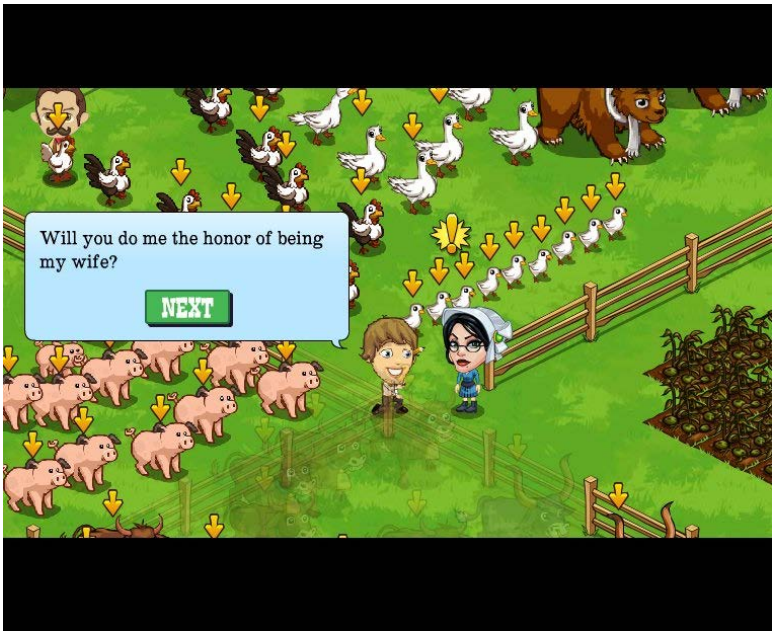

Figure 11: Hank proposes to Fanny. FrontierVille. Zynga, 2010. Game still.

What secures the second marriage quest in its heterosexism and normativity is the fact that it followed an earlier side quest initiated by *FrontierVille* developers for Valentine's Day. The Valentine's Day "Kissing Tree" quests allow you to explore the game's love triangle among Hank, Fanny, and Bess (see below). Interestingly, the quests allow for another queer possibility—love between Fanny and Bess, where Hank is written out of the triangle entirely. Granted the game is adamant about the monogamous couple, the "Kissing Tree" quests imagine the possibility of a differently-ordered desire and erotics. Of course, that erotics is imagined as between two women, a common heteromasculinist fantasy, and never imagined between Hank and another man. Alas, by the time the second marriage comes around, any relationship between Fanny and Bess is forgotten, erased, and the two must be secured as acceptable suitors for Hank.

Figure 12: The player must choose who will start a romance: Hank and Fanny? *FrontierVille*. Zynga, 2010. Game still.

Figure 13: The player must choose who will start a romance: Hank and Bess? *FrontierVille*. Zynga, 2010. Game still.

Figure 14: The player must choose who will start a romance: Fanny or Bess? *FrontierVille*. Zynga, 2010. Game still.

This digression into the *FrontierVille* example is important because it reveals the interconnectedness and interpenetration of game design, mechanics, narrative, aesthetics, marketing, and play. And because Zynga boasts 232 million monthly active users and 60

million daily active users and a net worth in billions of dollars, games like *FrontierVille* represent not only the limitations and frustrations of gamification but also the critical need to understand and challenge how games articulate, mediate, and perpetuate more than just "fun." It is important to address the fact that these games and game spaces are themselves embedded and mediated by hegemonic ideals and that they too have a cultural context and are a part of a larger media and technological ecology. To return to Wark, if games, digital or not, and gamespace are *not* "natural, neutral, and without qualities"—they are only imagined as so like William Gibson's matrix—then gamification is not either. Ian Bogost, game designer, professor of digital media, and author of *Persuasive Games* and *How to Do Things with Videogames*, lambasts gamification's rhetorical and commodification strategies, saying, "More specifically, gamification is marketing bullshit, invented by consultants as a means to capture the wild, coveted beast that is videogames and to domesticate it for use in the grey, hopeless wasteland of big business, where bullshit already reigns anyway" ("Gamification" par. 5). Bogost bluntly critiques the production and performance of gamification, particularly as something on the one hand new and novel, fully twenty-first century, and on the other hand, hearkens days of yore, of childhood innocence, and of nostalgic play. He continues, "Bullshitters are many things, but they are not stupid. The rhetorical power of the word 'gamification' is enormous, and it does precisely what the bullshitters want: it takes games—a mysterious, magical, powerful medium that has captured the attention of millions of people—and it makes them accessible in the context of contemporary business ("Gamification" par. 6).

He also critiques the way gamification is rarely about the "game" but about the "-ification." The move to "-ify" something is a move to abstract it while making it seem like it

is doing something, full of something. He argues, "In the modern marketing business, the best solutions are generic ones, ideas that can be repeated without much thought from brand to brand…Gamification offers this exactly. No thinking required, just simple, absentminded iteration and the promise of empty metrics to prove its value" ("Exploitationware" par. 40). In other words, for Bogost, gamification is actually "exploitationware." It is an exploitation of the ideals of play, of the radical potential of games, and the "value and trust" between players, people, and companies. He says, "Characterizing gamification as exploitationware gives games-as-systems advocates an opportunity to present alternatives. Doing real, meaningful things with games is hard and risky, but it offers considerable reward, reward that responds to the underlying shift away from the logic of industrialization that gamification takes for granted" ("Exploitationware" par. 62).

But is gamification all bad, all empty bells and whistles? Are there other opportunities in, alternative possibilities for, and different narratives to tell about gamification? What is terrible here, to recall Schell's passing concern above, is not necessarily the gamic imagination but rather its implementation and execution. Even Bogost, who has been a longstanding proponent of "serious games," imagines hope and consequence for developing, playing, and incorporating games into a wide range of cultural milieus for specific purposes. He says, "Efforts like Serious Games Initiative, the Serious Games Summits at GDC [Games Developers Conference], and the many efforts of research and design around games beyond entertainment beyond people like me, Jim Gee, Jane McGonigal, Katie Salen, Ben Sawyer, and others had already made the idea of using games for broader purposes more appealing. But serious games and their ilk had done a terrible job of making games seem viable to create, deploy, and use" ("Exploitationware" par. 24).

Moreover, Bogost argues that the canonization of "gamification" as both term and end product par excellence has rhetorically and politically stunted the growth and potential of critical games. He posits even, "Alternate terms aren't nearly as powerful. There's Ben Sawyer and Dave Rejeski's 'serious games,' of course, and McGonigal's notion of 'gameful design,' and my concept of 'persuasive games,' the loosely connected 'games for good' movement, among others. None of these have caught on like 'gamification' has done. We have to do better" ("Exploitationware" par. 48).

It is this gamic or gameful imagination that I want to develop more fully as a way to underscore the need for a critical approach to and understanding of video games but also as a way to articulate more radical games and gamespaces. The technological and posthuman imaginations of previous chapters are leverage here to investigate technoqueer interventions into games and gamification. What might the limitations and affordances of games as simple as *Frontierville* reveal about the critique of games and games as critique? In what ways do games, game spaces, and gamification mediate our culture and our understandings of race, gender, sexuality, and technology? On the one hand, Edward Castronova, author of *Exodus to the Virtual World: How Online Fun is Changing Reality*, believes, "In addition to economic activity, political, social, and cultural activity will migrate [to these gamespaces] as well. Emigrants will develop new ways of being that challenge the ways of the old world" (15). On the other, as we have already seen in the work of Lisa Nakamura, these gamified domains will simply replicate and even intensify the same old –isms of the real world. Castronova believes in the level playing field of virtual worlds—arguing that in massive multiplayer online games like *World of Warcraft* everyone starts a level one with the same in-game resources and opportunities, that "everyone can live out a true Horatio Alger story"

(*Exodus* 145). Therefore how might we avoid (even antidote) the seductions of gamification, the fantasies of gamespaces emptied of critique to imagine and play more critically and radically? What technoqueer interventions can be made into video games? In simpler and perhaps more affective terms, can games change and save the world?

Worldcrafting: Race, Gender, and Sexuality in *World of Warcraft*

> "Games are exceptionally tasty patterns to eat up."
> —Raph Koster, *A Theory of Fun for Game Design*

First released in 2004, Blizzard Entertainment's *World of Warcraft* or WoW is a massively multiplayer online role-playing game (MMORPG) with over 10 million[51] players worldwide. For a nominal fee to purchase the software and to subscribe to the game, WoW allows a player to create and control a player character (PC) represented by a fully-rendered avatar (also lovingly called a toon) in a high-fantasy game world where they can explore cities and landscape, participate in quests and battleground events, and fight and interact with computer-controlled non-player characters (NPCs) as well as other players. The WoW official website describes the game: "World of Warcraft enables thousands of players to come together online and battle against the world and each other. Players from across the globe can leave the real world behind and undertake grand quests and heroic exploits in a land of fantastic adventure." It is the coming together of "thousands of players" simultaneously in a vast, persistent game world framed by and filled with stories that makes an MMORPG like *World of Warcraft* different than other computer and console video games. Constance Steinkuehler describes games like WoW as "persistent social and material worlds loosely structured by open-ended (fantasy) narratives, where players are largely free

[51] Down from over 12 million in 2010.

to do as they please" ("Massive" 10) with surprisingly rich virtual social, political, historical, geographical, and material economies.

Given the incredible global popularity of WoW, there is still a dearth[52] of scholarship on and cultural critique of the game, particularly looking at race and sexuality. Lisa Nakamura[53], in *Cybertypes*, argues that race "happens" and race "matters" online—she says, "When users go online, race dwells in the mediating spaces between the virtual and the real, the visible and the invisible" (144). How might we identify and interrogate the "racial logics" of WoW, beyond a close-reading of fantasy race as allusion or allegory for real world race, to begin to theorize how race is visualized, articulated, and cued. In other words, in a game of fantasy race, how and where and why might offline race and racism be deployed, negotiated, disguised, and taken for granted. How then can we challenge and explore this mediating space between race *within* the game and race *outside* the game? Furthermore, in the imagining (perhaps intrusion) of real world race into the game in ways that fix it or to borrow Nakamura's construction *cybertype* it, how might other categories, such as sexuality, be left unsettled or open? Looking at character creation, game play, and game narratives, we might discover a productive opportunity in the play of, with, and play in race and sexuality to discover "disruptive moments of recognition and misrecognition" (Nakamura 144) that can offer "subversive potential in regard to oppressive notions of racial [and sexual] identity" (Nakamura 146).

World of Warcraft is set in the fantasy world of Azeroth, first introduced in Blizzard's 1994 real-time simulation computer game *Warcraft: Orcs and Humans*. The WoW website

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[52] Scholarship on *World of Warcraft* is still limited, generally to the social sciences, though several collections and projects are beginning to appear including *My Life as a Night Elf Priest: An Anthropological Account of World of Warcraft* by Bonnie A. Nardi, *Digital Culture, Play, and Identity: A World of Warcraft Reader* edited by Hilde G. Corneliussen and Jill Walker Rettberg, and Nick Yee's Daedalus Project, an online collection on the psychology of MMORPGs: http://www.nickyee.com/daedalus/

[53] See also Lisa Nakamura's *Digitizing Race: Visual Cultures of the Internet*.

says, "World of Warcraft draws heavily upon the lore of the Warcraft universe. Long-time fans of the Warcraft games are finally able to step into the world from a player's perspective, and experience the universe firsthand. People, places, and units from the strategy games are brought to life in World of Warcraft." Players can create a toon from one of twelve[54] playable races: Dwarves, Gnomes, Humans, Night Elves, Draenei, Wolven, Orcs, Tauren, Trolls, Undead, Blood Elves, or Goblins, whose antecedents come from mythology, Tolkien, pen-and-paper games like *Dungeons and Dragons*, as well as a whole host of film, animation, and television. According to the WoW website, "Each of these races has unique racial traits and certain playable classes available to them. These racial traits and class options help them to accomplish their goals in the world." Players can choose from nine playable classes: Druid, Hunter, Mage, Paladin, Priest, Rogue, Shaman, Warlock, or Warrior. Each class is differentiated by what skills, abilities, and spells they possess. Once a character has been created, named, and dropped into the game world, the player can take advantage of "multiple professions each with unique benefits, thousands of quests to undertake and complete, multiple modes of transportation, [and an] extensive and elaborate storyline."

A cursory look at the character creation screens for each race (see images below) reveals a host of stereotypical fantasy tropes, which I will later argue dovetails with limited and normative representations of race, gender, and sexuality. For example, humans are clearly modeled on traditional heroic masculinity and femininity—the men are tall and muscular, the women are pretty and hourglass-figured, both with Western European features. Even the backgrounds of the human character creation screens depict a Disney-esque

[54] The "classic" races (before the World of Warcraft expansions) were Dwarves, Gnomes, Humans, Night Elves, Orcs, Tauren, Trolls, and Undead. In 2007, *The Burning Crusade* expansion added Draenei and Blood Elves. In 2010, the *Cataclysm* expansion added Worgen and Goblins. The upcoming 2012 release of the fourth expansion set *Mists of Pandaria* will introduce the Pandaren, a race of humanoid giant pandas.

medieval town complete with half-timbered construction, cobblestone streets, and castle walls.

Figure 15: Human male warrior. *World of Warcraft.* Blizzard Entertainment, 2012. Game still.

Figure 16: Human female priest. *World of Warcraft.* Blizzard Entertainment, 2008. Game still.

Figure 17: Dwarf male paladin. *World of Warcraft*. Blizzard Entertainment, 2008. Game still.

Figure 18: Gnome female warlock. *World of Warcraft*. Blizzard Entertainment, 2008. Game still.

The night elf character creation screens (below) shows further gendering and racialization routed through fantasy phenotypes and settings. First, male night elves have often been treated by players as an inferior toon, in part because of their lithe musculature and feminized appearance. Online *World of Warcraft* forums often sport conversation threads titled "I Hate Night Elves" or "Why Do People Hate Elves So Much?" or "Male Night Elves = Gay?" with comments like "They look stupid" and "Because your males are

preening prancing prettyboys."[55] Because male night elf toons do not match up to the hypermasculinity of other character avatars, particularly humans, dwarves, and orcs, they are assumed to be feminine and queer (the conflation is often also extended to the player, whose prowess and heterosexuality are often questioned for desiring to play such a digital body). Curiously, the feminization of male night elf avatars might also be linked to their real world racialization as vaguely Asian—given the Shinto gate-like structure in the character creation screen's background as well as the pagoda-like buildings that fill their settlements—a racialization that is also stereotypically read as weak, "pretty," and feminine.

Figure 19: Night Elf male rogue. *World of Warcraft.* Blizzard Entertainment, 2008. Game still.

On the other hand, female night elves are one of the most played character toons, particularly by men, in part because they satisfy the heterosexual male gaze. Anthropologist and professor of informatics Bonnie Nardi, in *My Life as a Night Elf Priest*, says of female avatars played by men, "Not only did the female character serve its own player's desires, at the same time, it made provisioning for the gaze of other males. Male players came together

[55] See http://us.battle.net/wow/en/forum/topic/2522074243 and http://us.battle.net/wow/en/forum/topic/3967948553 for other examples.

for ‘girl watching,’ an activity stereotypically characteristic of all-male groups and consistent with the boys’ tree house” (158). The female night elf avatar’s clothing looks painted on accentuating a buxom cleavage that has been animated to jiggle whenever the character moves (the programming of such a detail has been called by the gaming community “jiggle physics” or “breast physics” with no equivalent for male avatars). Nardi further notes that “the male gaze was sustained in *WoW*, in particular through the design of Human, Night Elf, and Blood Elf racials, as well as some NPCs, and a few items of ‘kombat lingerie’” (159). Both male and female night elf avatars reify normative representations and understandings of gender and sexuality as mediated by the game’s design as well as players’ assumptions, perceptions, and prejudices ported from real world embodiments to the digital.

Figure 20: Night Elf female druid. *World of Warcraft*. Blizzard Entertainment, 2012. Game still.

Figure 21: Draenei female shaman. *World of Warcraft.* Blizzard Entertainment, 2008. Game still.

The examples above represent the Alliance races and below are the Horde races. The game's website describes, "In *Warcraft*, there are two large, opposing factions. On one side is the noble Alliance, which comprises the valiant humans, the stalwart dwarves, the ingenious gnomes, the spiritual night elves, the mystical draenei, and the bestial worgen; on the other side is the mighty Horde, made up of the battle-hardened orcs, the cunning trolls, the hulking tauren, the cursed Forsaken, the extravagant blood elves, and the devious goblins. Your character's race will determine whose side you are on, so choose carefully." The factions' antagonism is so ingrained in the game's mechanics that players on opposing sides cannot communicate with one another nor help one another in the game. What is important about the two factions is their characterization and the rhetorical and representational valuation of their positions, politics, and moralities in the game. The Alliance are "good" and their toons and settings are generally bright, light, clean, and green. The Horde are "evil" and their avatars and geographies are more often black, dark, burning, and barren. Already at the creation of a character the player is conformed by the game's moral logics mapped on to racial and embodied ones.

Figure 22: Troll male hunter. *World of Warcraft*. Blizzard Entertainment, 2008. Game still.

Figure 23: Blood Elf male hunter. *World of Warcraft*. Blizzard Entertainment, 2008. Game still.

Figure 24: Undead male mage. *World of Warcraft.* Blizzard Entertainment, 2008. Game still.

Figure 25: Tauren female druid. *World of Warcraft.* Blizzard Entertainment, 2008. Game still.

Race for WoW functions primarily as the representation of certain programmatic values, statistics, variables, and subroutines, and in this way is generically typical of other fantasy games, massively-multiplayer or not, online or not; each race is coded with a set of advantages and limitations that can affect game play and interactions much like the ways chess pieces can move or not move. In other words, according to Alexander Galloway, race for game designers "designates a set of representational proclivities—across both diegetic and nondiegetic representation—that are closely hewed to in matters of narrative, character

modeling and animation, gamic elements such as weapons and resources, *mise en scene*, algorithmic personalities, styles of gameplay, AI behaviors, and so on" ("Starcraft" 8). Race in-game can affect for lack of better terms "winning" and "losing" (though WoW and other MMORPGs usually measure success in terms of progress, accumulation of resources, and increased access to power), player-to-game interactions, and even player-to-player interactions. For example, gnomes possess an innate aptitude for engineering, night elves have the "racial" ability to shadowmeld (camouflage themselves in invisibility), and "the human spirit" grants a five percent bonus to a character's Spirit attribute. Race out-of-game can affect design choices, programming choices, as well player-to-game and player-to-player interactions.

In fact, race (and other identifications) as a category, both algorithmic and analogic, is so troubling to game designers that it is often ignored or glossed or neutralized. According to the logic of cyberspace and the Internet, offline race should not matter, the lived lives of players should not matter, and the online lives of avatars are at most suggestive or pale reflections of the real world. For example, *Online Game Interactivity Theory*, an industry text on the game design, argues: "[K]nowledge of [players] in online game design has nothing to do with knowing a person's real-life personality. We don't want to know anything about his real age, home country, religion, or whether he tends to react aggressively to insults—and other players don't either. The only things we are interested in are one's behavior in the game world, one's virtual personality, and one's gaming style. Doing otherwise would mean destroying three essential characteristics of online games (and games in general): possible anonymity, suspension of disbelief, and a boundary between the game world and real life" (Friedl 117). It is interesting to note that gamers default as masculine

and the want to unhinge real life from playing life, to preserve the game's story, and to define a player's virtual "behavior" and "personality" and "gaming style" as independent logics and formations from their actual lives. In order to ameliorate the tension between off- and online worlds, race (and other logics of identity) is dramatized, seemingly trivialized, reprogrammed, or as Nakamura observes, "[R]ace is far from elided in these narratives; instead it is repurposed and remastered, made to do new work" (21).

However, compared to other games, Galloway argues that race in WoW is more about window dressing for lines of code rather than the reverse: "[R]ace in a game like *World of Warcraft* is conditioned largely by the demands of aesthetic representation of certain 'ethnic' intangibles like voice, visage, and so on…and only secondarily intersects with informatic modeling of behavior in so-called racial traits" ("Starcraft" 8). In WoW, avatars—or "toons" as most players call them—are only superficially modifiable, allowing the player to customize, gender (male or female), skin tone (ten shades ranging from very light to dark), hair style, face style, and facial accessories (which offers the gendered choice of facial hair for males and jewelry for females). Body type, size, and height are not modifiable (every character of a particular race and gender has the same stock body) and begin with the same starting clothes and weapon (specific to race and class).

Figure 26: Character creation screen. Human male avatar with darkest skin tone. *World of Warcraft*. Blizzard Entertainment, 2007. Game still.

Perhaps one of the persistent critiques of WoW and similar games is a critique of the lack of customizable characters: "there is a tendency for players to write about their online appearance in terms of limits, boundaries, strangeness, disappointment, and, in many cases, a decreased ability to experience immersion and develop an in-game identity" (Martin 4). But there is something going on with all of this window dressing, all of this dependence on archetypal avatars, all of this playing with and sampling and intertexting of real world race. Race becomes limited, digitized on an incremental scale of hue, and strangely mix-and-matchable; it is, as Nakamura says, a kind of "menu-driven identity" that forcibly includes and more importantly excludes, requires hard-coded choice and reveals lack of choice for players and their real world bodies. It is this contamination of fantasy race with real world race that makes Galloway puzzle, "[T]he world is still waiting for an explanation for why *World of Warcraft's* troll race speaks with a Jamaican accent" ("Starcraft" 8). More accurately, the puzzle is not that the troll speaks with an accent (for the designers could have

invented a trollish accent, whatever that might be) but that a specific porting in of an offline, real world, non-diegetic accent is mapped onto the troll.

On the one hand, gamic race and all of its trappings may simply signal benign difference, fantastic otherness, not-the-real-worldness. They are tools for characterization, for establishing the setting of the game world and narrative, a signal of time, place, context, and distance away from the real world. Most designers (and even players and spectators) might want to believe such a rationalization to be true. *Online Game Interactivity Theory* devotes a third of the book to character creation, player interaction, and game community development. The text continues to attempt to disavow any attempt to mix and confuse a game with the real world (in reference to character or avatar design): "It communicates one's lifestyle within the game world—which is important to know in interpersonal interactivity. In real-life there are hippies, bankers, skaters, oldsters, and.…Often based on prejudices, the visual and auditory cues these groups provide—how they differentiate themselves from the rest of the world—convey a unique set of behaviors. In online game worlds, it is the same […] Similar to the genre of the game, character archetypes are the genre of the game's social game: effective and familiar ways to convey expectations of the experience to come" (Friedl 175). The text reveals the internal tension between game and real life, between online "lifestyle" and "behaviors" and offline "prejudices" and "expectations." Game design "theory" oscillates, vacillates between knowing that the "avatar serves as a link that can manifest the real world within the game" (Friedl 186) and wanting that the "game should remain a game—at least on a social level" (Friedl 202). A generous critique and approach might argue that gamic race points up the cultural constructedness, structures, arbitrary assignment of qualities or stereotypes to real world race and that these "racial formations" (to

borrow from Omi and Winant) or problematics of representation (to borrow from Galloway) or racial logics are naturalized, essentialized, yet potentially manipulable. Or, as Lisa Nakamura says, "A diversification of the roles that are permitted and played can enable a thought-provoking detachment of race from the body, and a questioning of the essentialness of race as a category" (49).

On the other hand, signaling benign difference, fantastic otherness, and this-is-another-worldness risks replicating or further shoring up real world racial and representational logics and formations. Even in fantasy games like WoW, real world race is incorporated and cited and often screened behind the game's narrative, programming, and logics of play. Though designers and players may intend to keep on- and offline domains separate, there are ways obvious and inobvious the two cleave together, intersect, and inform one another about race. In WoW, fantasy race belies real world race. Nakamura says, "Though it is true that users' physical bodies are hidden from other users, race has a way of asserting its presence in the language users employ, in the kinds of identities they construct, and in the ways they depict themselves online, both through language and graphic images" (31). The troll speaks with a Jamaican accent, the night elves build pagoda-like buildings, humans can be made to "look" black, and a player can name their character "Obama". Real world race is "ported" into the game, tesseracts of prejudices, signification, policing, and racism form player-to-game, player-to-player, and even within the game itself. Nakamura calls this porting in of offline race, this online racial logic "cybertyping"; she says, "I coined the term *cybertype* to describe the distinctive ways that the Internet propagates, disseminates, and commodifies images of race and racism…the means by which users are able to express

themselves online interacts with the 'cultural layer' or ideologies regarding race that they bring with them into cyberspace" (3).

In the words of Homi Bhabha, the exact danger and power of the racial logics, the racialized stereotypes in WoW is the problem and power of fixed representation, though always tentatively so. A *cybertype* is a kind of fixed representation, a digitized and Internetized stereotype. Bhabha says, "The stereotype is not a simplification because it is a false representation of a given reality. It is a simplification because it is an arrested, fixated form of representation that, in denying the play of difference (which the negation through the Other permits), constitutes a problem for the *representation* of the subject in significations of psychic and social relations" (75). He continues, "[T]he stereotype requires, for its successful signification, a continual and repetitive chain of other stereotypes" (77). Bhabha recognizes that the stereotype, or in the case here, the cybertype, requires simultaneous discourses and constructions: the official, the visible, the seemingly progressive (or at least apolitical) myth of fantasy race online as separate and un-racialized, and the secret, the screened, the fetishized and re-racialized subtext (or as Nakamura defines "afterimage") of real world race. Galloway also recognizes this simultaneous logic: "That the game pleads innocence by placing the narrative in a fantasy world of fantasy races (trolls, gnomes, elves) does not absolve it from foregrounding a systemic, 'cybertype' logic of naturalized group definition and division…The 'innocence' of [this logic] is in fact apropos for it illustrates the neoliberal, digirati notion that race must be liberated via an uncoupling from material detail, but also that the logic of race can never be more alive, can never be more *purely* actualized, than in a computer simulation" ("Starcraft" 10). But the cybertype is an "impossible object" (Bhabha 81); it is a construction of intense power and remarkable rigidity yet adaptability,

but it is also a "much more ambivalent text of projection and introjection, metaphoric and metonymic strategies, displacement, overdetermination, guilt, aggressivity" (Bhabha 81-82).

This is the crux, this is the curious ambivalence expressed by race on- and offline in *World of Warcraft*. It is this ambivalence, this tension that allows for Nakamura's "mediating spaces" and that allows for the potential to make intelligible and perhaps resignify racial logics. For example, non-human races aside, humans in WoW ostensibly represent a kind of ideal, perhaps abstracted humanity—one race out of a world of many different, distinctive, and typified races—representing in a toonish way the range of humans possible in the real world. Humans in WoW, the most obvious connection to the real world, are cybertyped as generally Western European (given the medieval castle architecture of human cities, monarchical feudal government), default white (the character creation screen starts with a pale-skinned avatar), and heroically proportioned (superhero-like musculature, knights-in-shining-armor models). However, humanity in-game is not further subspecied. Humans are just humans regardless of their class, occupation, equipment, appearance, or skin color. In fact, humans in WoW all share the same origin, start in the same city. However, just as "human" as race is simplified, codified, and blandly multiculturalized in game, it is the intrusion of real world race that breaks the illusion of WoW's "we're all just humans" logic.

For example, in the human capital city of Stormwind, there are non-player characters (NPCs) controlled by the computer, the program. NPCs function as merchants, quest givers, guards, friends, sometimes adversaries; they are the "extras" on the set of the gamic world. One such NPC is the Stormwind weaponsmaster, the person players go to see to learn how to use different armaments, named Woo Ping. In fact, this character is named after a real world

person: Yuen Woo-ping, well-known martial arts director and choreographer of such films as the *Matrix* trilogy, *Crouching Tiger and Hidden Dragon*, and *Kill Bill*. Here in a world of "just" humans is a specifically racialized human, a human that discursively and representationally signals Asianness in a fantasy world without Asians. Woo Ping has the body of every other "human" but is black-haired, black-eyed, bare-chested, and wearing tight black pants and slippers. He is the orientalized stereotype of the martial artist, the ninja, the stylized and racialized warrior that deals a "whooping."

Figure 27: Non-Player Character Weaponmaster Woo Ping in Stormwind.
***World of Warcraft*. Blizzard Entertainment, 2007. Game still.**

Here real world race intrudes into the gamic world, into the ostensibly raceless logic of humans in WoW, and reminds (as much as reasserts for) players that race is not disappeared by the game.

The world of WoW, the mythical land of Azeroth is populated by such puns, allusions, and intertextual, often pop cultural references—from literature, film, television,

music, history, and real life—called "Easter eggs" by gamers. These extra-diegetic tidbits, though often sutured into the narrative world, function as fun hand- and footholds in the game that layers additional meanings to story, play, and identification. These added meanings can be pleasantly disruptive, stereotypical, and yet form a useful account of how race and other markers infiltrate and unsettle gamic norms, practices, and logics. Many of these intertextualities are overtly racialized: the zone Stranglethorn Vale, an area of play in the game world, makes overt references to both *Apocalypse Now* and Hemingway's *Green Hills of Africa*; there is a dwarven NPC named Gubber Blump referencing *Forrest Gump* characters Forrest and his friend Bubba; in the orc capital city of Orgrimmar, there is a shop called Droffers and Son Salvage run by NPCs Dran Droffers and his son Malton, whose names are anagrams for African-American sitcom characters Fred Sanford and Lamont; there are many references to music lyrics by artists such as Jay-Z, Ice-T, MC Hammer, and Harry Belafonte, in fact the male orc dance (avatars are programmed with preset actions, also called emotes, that players can invoke with a command) mimes MC Hammer and the male elf dance mimes the moves of Michael Jackson.

Finally, as a last example, in the expansion to the *World of Warcraft,* the *Burning Crusade*, which adds a whole continent to the game world as well as two new playable races, there is a NPC named Ophera Windfury. She is an innkeeper from whom players can buy food and drink for and have a safe place to "rest" or logout their characters. Ophera Windfury is a Draenei female—a cuddly half-human, half-demon—with dark hair, lavender-pink skin, and buxom.

Figure 28: Non-Player Character Caregiver Ophera Windfury in Telmaat. *World of Warcraft*. Blizzard Entertainment, 2007. Game still.

Though the NPC is not human nor racialized as black, the character still cites difference, class, gender, and a real world racialized woman, Oprah Winfrey. In fact, Ophera Windfury represents the intersections and interactions that reveal that identities "are multivalent: race happens *with* gender, *with* class, *with* sexuality, *with* region" (Nakamura 132). It is interesting to note that Ophera is given a title "caregiver" that might comment on Winfrey's media-established role as a matron, a giver of "favorite things," a sympathetic ear and shoulder for her target audience's—mostly women—concerns and issues. Moreover, the NPC could be further read as a dig against Winfrey, whose surname becomes Windfury, signifying a woman with a lot to say, too much to say, too much to critique (considering the target audience of WoW tends to be heteronormative, white, middle-class adolescent and adult males who may feel threatened or impinged upon by what they perceive to be Winfrey's gendered, racialized, classed, and politicized "touchy-feely" agenda). Ophera Windfury, like the enigmatic troll or the moonwalking elf, render visually and linguistically

and referentially the ways in which race, gender, class, sexuality, and other categories played, played with, and played into in the game.

In fact, to begin to answer Galloway's question, the Jamaican-accented troll or Ophera Windfury provide a way to theorize a constellation of tactics of racialization (phenotyping, ethnic affiliation, legal or illegal citizenship, nationalism, political alliances or antagonism, globalization and transnational capital) that may reveal correspondences and hopefully useful contradictions. The troll in WoW is tall, lanky, blue- to green-skinned, hails from a sandy, coastal, tropical part of the game world, live in grass and bamboo buildings, and practice voodoo, cannibalism, and blood sacrifices. Here these design choices, these representational choices, these narrative choices resonate with real world geography, cultural practices, race, and stereotypical fears and prejudices. The historical, political, economic, and cultural ties between the United States and the Caribbean get played out—fear of the racialized other, colonization and postcolonization, recuperation of the primitive, installation of corporate and military interests, commodification and fetishization of island, nature, native, and tropical fantasy. All of these things coalesce and erupt in the moment the troll says, "How you doin', mon?"

The cybertype of the troll as Jamaican (or the Tauren as Native American or the Draenei as Eastern European and so on) functions to call attention to and further calcify discursively and representationally racial logics of difference, othering, and overthere-ing, which designers and players and game narrative collectively cite, perpetuate, and assent to. In fact, these odd real world racializations of fantasy world bodies, voices, artifacts, and "nations" perform epistemological, political, and algorithmic shorthand allowing designers and players to make intelligible, recognizable, and identifiable with locations, formations,

and articulations in a narrative and medium without real places, things, and bodies. Put another way, how does a player see, relate to, and know the game, the game world, and the game characters if they are fully fantastic, unreal, alien? These cybertyped logics are a fix, a metonymic patch, a hook, a sign that orients the player to the familiar, the predictable. They are Easter eggs waiting to be found and consumed by the player; they are cybertypes that "provide familiar, solid, and reassuring versions of race which other users can readily accept and understand since they are so used to seeing them in novels, films, and video games" (Nakamura 40). They also function to mollify and mediate fears and crises over the potential slippages of identity online: "cybertypes are created in a particularly collaborative way; they reflect the ways that machine-enabled interactivity gives rise to images of race that both stem from a common cultural logic and seek to redress anxieties about the ways that computer-enabled communication can challenge these old logics. They perform a crucial role in the signifying practice of cyberspace; they stabilize a sense of a white self and identity that is threatened by radical fluidity and disconnect between mind and body…Bodies get tricky in cyberspace; that sense of disembodiment that is both freeing and disorienting creates a profound malaise in the user that stable images of race work to fix in place" (Nakamura 5-6).

But all is not lost in cyberspace, in *World of Warcraft*. Though, gamic races "are often essentialist in nature, paralleling certain offline retrograde notions of naturally or physiologically determined and unchangeable human race" (Galloway "Starcraft" 8), there are slippages, internal and external contradictions, opportunities in the ambivalent ways race is imagined and deployed. Nakamura cautions from the outset of *Cybertypes*, "Rather than adopting a utopian or pessimistic view in which the Internet is viewed either a vector for progressive change in the classical liberal tradition or as the purveyor of crude and simplistic

'stereotypical cultural narratives,' it seems crucial to first narrow the focus a bit and examine the specific means by which identities are deployed in cyberspace" (xiii). It is in the identifying and unpacking of the racial logics of games like WoW that race can be talked about at all and that racialization and racism can be challenged and disabled.

Moreover, though race or racialized logics in WoW might be fixed or stabilized in certain ways (that fixing or stabilization is still argued to be contingent though strategic), what other categories or identities are left open, unsettled, and "hackable"? For example, for Galloway, "race is static and universal, while class is variable and learned. So in World of Warcraft racial traits do exist and have a bearing on game play, but they are unmodifiable (alas, the troll-Jamaican alliance is incorruptible), while class traits are configurable in a number of significant ways including the talent tree and the boosting of class abilities via consumables or wearables" ("Starcraft" 10). Or, for instance, might gender or gender performance be left open since it is a well-known phenomenon that most female characters are usually played by men (though a great deal of work on gender-swapping, gender-switching online has already been theorized and critiqued as not necessarily radical or liberatory)? Or, finally, might sexuality, which rarely does not even appear on the menu of character characteristics (though some newer games are making this a conscious choice), be a site where the game's structure and conventions can be hacked, played against the grain.

For example, how might we interrogate WoW's Valentine's Day in-game holiday called "Love is in the Air," where for two weeks players earn rewards and consumables by talking to amorous NPCs and completing various love-themed quests. In 2006, the initial description of the game world event read, "Something is in the air in the major cities of Azeroth. Some call it love, and some just call it friendship and admiration. Whichever it is,

many guards and townsfolks now spend their days giving and receiving tokens and gifts to other amorous citizens." Curiously enough, the initial version of "Love is in the Air" required players to don either perfume or cologne. Wearing perfume allowed the player character to interact with male NPCs; wearing cologne allowed the player character to interact with female NPCs. In fact, in Darnassus, the capital city of the night elves, all of the participating NPCs are women, and in Ironforge, the capital city of the dwarves, all of the participating NPCs are men. Therefore, regardless of the gender of the player's avatar, the love token quests required at some point same-sex exchange. Giving a love token to an NPC results in a very visible glowing heart and sparkling aura that other players can see.

Figure 29: My human male character giving a love token to a male Stormwind City Guard NPC. *World of Warcraft*. Blizzard Entertainment, 2007. Game still.

Even more curiously, though problematically so, in 2010, Blizzard changed the "Love is in the Air" holiday, adding further content and rewards but also "straightening" most of the quests by removing much of the same-sex material and mechanics. The need to use perfume

and cologne was removed (though you can still spray either on other player avatars or NPCs but with no real in-game consequence). Though the revised quests still require the player character to give "lovely charm bracelets" to various NPCs, the overt erotics of "love" and desire have been diluted. The queer possibility and room to generate alternative narratives is erased, forced back into the digital closet. In fact, the revision for and recuperation by heteronormativity is also coupled by a slide toward homophobia. Two quests added in 2010 center on homophobic humor. The first and perhaps most benign is entitled "Shafted." Evocative of phallic penetration, the achievement quest reads, "Shoot 10 players with the Silver Shafted Arrow," a special holiday item that creates a small, cupid-like goblin that flits about the target. Both the item and quest flirt with the titillation and anxiety over penetrative sex, specifically anal or male-on-male sex. The second more dubious quest is entitled "Flirting with Disaster" and requires the player to "[g]et completely smashed, put on your best perfume, throw a handful of rose petals on Sraaz [an Alliance NPC] or Jeremiah Payson [a Horde NPC] and then kiss him. You'll regret it in the morning." Though the quest can be done by a female toon, the humorous intention of "Flirting with Disaster" is for a male avatar to kiss a male NPC. When a player character drinks in-game to the point of being "completely smashed," WoW's game engine actually clouds the player's screen as if everything becomes drunkenly blurry and unfocused. These "beer goggles" then are part of the joke as they must engage in a kind of "gay chicken" and flirt with a male toon. Though the NPC does not respond in anyway, positively or negatively, the "regret" the player character supposedly feels is one of homophobic shame excused by the fiction of drunken experimentation or ignorance.

Like my previous analysis of *FrontierVille's* inability to leave open queer possibility, *World of Warcraft* fails in a similar vein. However, though both games constrain their players via normative narratives and mechanics, both games can still be played (even hacked or modified) in queer ways, whether in the players' minds and behaviors or in what Alexander Galloway calls "countergaming." Galloway says, "Conventional gamic form relies on a notion of purposeful interactivity based on a coherent set of game rules. Narrative and form are smoothly joined. But countergaming often has no interactive narrative at all and little gameplay supported by few game rules, if any. In this sense, countergaming replaces play with aesthetics, or perhaps something like the play of signification" (115, 118). For example, in *FrontierVille*, the player can attempt to subvert the marriage plots by not participating in them (understanding that would close certain avenues of advancement), by overlaying their own narratives and ideals on to the game, and by producing extradiegetic material or what Gerard Genette calls "paratexts," riffing, borrowing, and subverting the game itself. For instance, players can take screenshots of their avatars and homesteads, sample and manipulate them, share them via social networks like Facebook, and even generate countergamic fandoms (see below).

Figure 30: My queer family portrait in FrontierVille. *FrontierVille*. Zynga, 2010. Game still.

For Galloway, countergaming's end goal is to develop different games, avante garde mechanics, and radical play: "By radical action, I mean a critique of gameplay itself. Visual imagery is not what makes video games special. Any game mod focusing primarily on tweaking the visual components of a game is missing the point, at least as far as gaming is concerned. Artists should create new grammars of action, not simply new grammars of visuality. They should create alternative algorithms. They should reinvent the architectural flow of play and the game's position in the world, not just its maps and characters" (125). But countergaming can also be extended to the affordances and possibilities *within* the constraints of the game and to modes of play, production, and resistance that subvert or transform what is given into what is queerly imagined—that is the project of the technoqueer after all.

In terms of much more complex and culturally embedded games like *World of Warcraft*, how might we imagine and articulate a rhetorical, visual, and political economy

not solely dependent on and fixated on the cybertype as racist, sexist, homophobic, classist, and violent? But rather, how might this economy turn to what Bhabha calls a "shift from the ready recognition of images as positive or negative, to an understanding of the *processes of subjectification* made possible (and plausible) through stereotypical discourse" (67). In other words, to deem WoW racist would ignore how, why, when, where, and what logics—algorithmic and cultural, played and lived—are at work in the game and that may offer points of leverage for change, repositioning, and new articulations. No easy task, certainly. Galloway remarks, "[W]e must admit that to *play* with race and to play *with* race are two entirely different things. The worrisome conclusion is that this view on race is typically what we would call, in the offline context, racism, in that the game assigns from without certain identifiable traits to distinct classes of entities and then builds complex machineries for explaining and maintaining the natural imperviousness of it all…Let me stress, the most interesting thing to observe is not that World of Warcraft is racist. That would be absurd. The interesting thing to observe is precisely the way in which racial coding must always pass into fantasy before it can ever return to the real" ("Starcraft" 10). It is in that passing from reality to "reality", from one register to another, from one economy to another—and back again—that marks and opening into the ambivalent maneuvers of the game. Because the stereotype, the cybertype "vacillates between what is always 'in place', already known, and something that must be anxiously repeated…[that] can never really, in discourse, be proved" (66), what Bhabha calls the "process of ambivalence," a slippage, an opportunity is revealed to throw a progressive wrench into the works. We must recognize and map these points and seams of ambivalence and make them "*productive* ambivalence" (Bhabha 67), what Nakamura calls these "disruptive moments of recognition and misrecognition" (144). It is a

way for us to vex what is vexing, to imagine and create what Galloway calls "countergaming," and to more fully realize that play in all senses of the word is a vital requirement, flickering variable for progress and possibility.

Queerly Gameful

> "Games do need to present us with problems and patterns that do not have one solution, because those are the problems that deepen our understanding of ourselves."
>
> —Raph Koster, *A Theory of Fun for Game Design*

As an epilogue to this chapter, I want to return to my idea of the gameful imagination, the video game version of the technoqueer imagination, which extends Galloway's countergaming politics. While mindful of the seductions of video games and gamification, gameful imagination is both critical and hopeful, it is playful and productive. "Gameful" comes from Jane McGonigal's *Reality is Broken: Why Games Make Us Better and How They Can Change the World*, which offers an alternative to the business model of "gamification." *Reality is Broken*, published in 2011, takes up the seductions of gamification to argue that "gameful design" is the better solution to many of the social, political, even material ills of the world. McGonigal posits, "What if we decided to use everything we know about game design to fix what's wrong with reality? What if we started to live our real lives like gamers, lead our real businesses and communities like game designers, and think about solving real-world problems like computer and video game theorists?" (7). She continues, "Imagine a near future in which most of the real world works more like a game" (7). Like Edward Castronova, McGonigal believes that the answer to the asymmetries of real world subjectivities and embodiments, of lived limitations and challenges is to game (perhaps not "gamify") reality. She says, "The truth is this: in today's society, computer and video games

are fulfilling *genuine human needs* that the real world is currently unable to satisfy. Games are providing rewards that reality is not. They are teaching and inspiring us in ways that reality is not. They are bringing us together in ways that reality is not" (4).

Though more gamic paean than critique, McGonigal's manifesto wants to think big and play big. She argues that "there is nothing trivial about playing a good game. The game *matters*" (27) and that games offer a kind of "flexible optimism" (69). Ultimately, *Reality is Broken* proclaims, "We can play any games we want. We can create any future we can imagine" (345). Though McGonigal presupposes players and gamers to be genuinely altruistic, cooperative, collaborative, and kind (or that well-designed gamic enterprises reward players for these qualities), the gameful imagination is crucial and a necessary catalyst to global change. Though reality is broken for her, her gameful imagination (unlike Castronova and other gamificationists) makes an important step from gamespace back to the real world, to real lives:

> Reality is too easy. Reality is depressing. It's unproductive, and hopeless. It's disconnected, and trivial. It's hard to get into. It's pointless, unrewarding, lonely, and isolating. It's hard to swallow. It's unsustainable. It's unambitious. It's disorganized and divided. It's stuck in the present. Reality is all of these things. But in at least one crucially important way, reality is also *better*: reality is our destiny. (348)

Unlike Castronova, who sees only a one-way exodus from the real world to synthetic worlds, McGonigal's vision requires a return to reality, materiality, and embodiment. Games and gameful design then offer spaces and temporalities that can reshape and transform the real world. As she says, "Life is hard, and games make it better" (349)—with mindful critical tools and radical interventions, of course. Games and game worlds, like the real world, cannot remain natural, neutral, or empty. They are full of reality and can equally oppress as they allow for expression, can limit and control even as they provide a limited kind of

agency, and can displace or disguise problematic discourses and identifications excused or even celebrated as "fun." Games cannot be deadly. As Galloway warns, "[T]he more emancipating games seem to be as a medium, substituting activity for passivity or a branching narrative for a linear one, the more they are in fact hiding the fundamental social transformation into informatics that have affected the globe during recent decades" (106). Therefore, we must cultivate the gameful imagination. As we have seen in this chapter, video game development, consumption, and critique need to further the normative perpetuations and blindspots, addressing the intersection and interconnection of game race, gender, and sexuality in particular. But games can also leverage openings and provide different mappings and configurations for all of this reality. Bogost agrees, saying, "When we make videogames we construct simulated worlds in which different rules apply. To play games involves taking on those roles in those worlds, making decisions within the constraints they impose, and then forming judgments about living in them. Videogames can synthesize the raw materials of civic life and help us pose the fundamental political question, *What should be the rules by which we live?*" (*How* 61).

Again, games do matter.

Coda
Technoqueer Utopias

Even up to his eventual death on June 8, 1954, Alan Mathison Turing continued to imagine, to envision different possibilities, alternative futures as his own future was coming to a difficult and grim close. In a letter penned in May, attributed by the Turing Archive to the same year, Turing included a short story about an openly homosexual man and scholar or inventor. According to Leavitt's biography, "Here he [Turing] cast himself as Alec Pryce…a scientist who resembles him in every way except that instead of computer design, his area of expertise is 'interplanetary travel.' Just as Turing is the father of the Turing machine, Alec is the architect of something called Pryce's buoy—presumably a sort of satellite or spacecraft" (271). What is powerful and poignant about "Pryce's Buoy" is not only in its autobiographical resonances but in its invocation of hope and its imagining of a better time and place. "Pryce's Buoy" plays with the multiple meanings and rhymes of "buoy"—it is something that floats, lifts, provides safety, marks a boundary, and of course is a cognate of

"boy." Cyberpunk writer Rudy Rucker muses, "Pryce's buoy is an object correlative for the Turing machine, and the pun on "boy" is deliberate…What might Pryce's buoy be? I'm thinking of the space end of a space elevator." Turing's letter and short story, even in its indeterminate date and in its incompleteness, represents what Tom Moylan calls a "critical utopia" or what José Esteban Muñoz calls "queer futurity."

"Pryce's Buoy," which the story has been unofficially titled, opens with Alec Pryce shopping for Christmas gifts and cruising for a man. The story is told from two perspectives: Alec's, at the opening, and Roy Miller, a would-be hustler who gets picked up by Alec. Though the story is unfinished (or the ending is lost), it still provides a technoqueer vision, a "romance or fantasy [that] serves to stimulate in its readers a desire for a better life and to motivate that desire toward action by conveying a sense that the world is not fixed once and for all" (Moylan 35). "Pryce's Buoy" is decidedly messy—like Turing's erratic handwriting—connecting and contrasting the quotidian life of an academic, the urgency and unsettledness of sexuality, and the incredible willingness to imagine and, in Moylan's formulation, demand the impossible, in this case the science fictional desire to reach a different world. Here is Turing's story transcribed[56] (as best as possible) at length:

> Alec Pryce was getting rather exhausted with his Christmas shopping. His method was as slightly unconventional. He would walk round the shops in London or Manchester until he saw something which took his fancy, and then think of some one of his friends and whether who would be pleased by it. It was a sort of allegory of his method of work (though he didn't know it) which depended on waiting for inspiration.
>
> When applied to Christmas shopping this method led to variety of emotions just as much as when applied to work. Long periods of semi-despair wandering the

[56] For high quality scans of the letter, go to the Turing Archive: http://www.turingarchive.org/browse.php/A/13. There is no full transcription of the story as far as I can find, but David Leavitt's autobiography of Turing *The Man Who Knew Too Much* does contain several paragraphs. (I quibble over several small differences in transcription.) My transcription attempts to preserve the wording, paragraphing, punctuation, including grammatical and narrative errors. Places where Turing's handwriting is illegible or where I have some question as to the transcription are set off by brackets. Special thanks to Jane Lee, Michael Hodges, Jess Zimmerman, Heather Pool, Monty Watson, and Rebecca Slingwine for their keen eyes.

stores, and every half hour or so, but quite eventually, something would leap out from the miserable background. This morning Alec had spent a good two hours at it. He had found a wooden fruit bowl which would just suit Mrs. Bowley. She would be sure to appreciate it. Alec had also bought an electric blanket for his mother, who suffered from poor circulation. It was more than he had intended to pay, but she certainly needed just that and will never think of getting one for herself. [Grace too showed minor incentive to hide her dull wit, but my feeling to wit had been dealt with.[57]] But how it was time for lunch, and Alec was walking towards the university but looking out for a reasonably good restaurant. Alec had been working rather hard until two or three weeks before. It was about interplanetary travel. Alec had always been rather keen on such crackpot problems, but although he rather liked to let himself go rather wildly to newspaper men or on the Third Programme when he got the chance, which he wrote for technically learned readers his work was quite sound, or had been when he was younger. This last paper was real good stuff. Better than he'd done since his mid twenties when he introduced the idea which is now currently known as "Pryce's buoy". Alec always felt a glow of pride when this phrase was used. The rather obvious <u>double-entendre</u> rather pleased him too. He always liked to parade his homosexuality, and in suitable company Alec would pretend that the word was spelt without the 'u'. It was quite some time now since he had 'had' anyone, in fact it was since he had met that soldier in Paris last summer. Now that his paper was finished he might justifiably consider that he had earned another gay man, and he knew where he might find one who might be suitable.

Ron Miller was distinctly bored. He had been out of a job for two months, and he'd got no cash. He ought to have had [10£] or so for that little job he had helped Ernie over. All he had had to do was to hold the night watchman in conversation for a few minutes whilst the others got on with it. But still it wasn't really safe. Being punished by the police was very uncomfortable. Ron was hungry and rather cold in the December weather. If he let someone take him under the arch for a few minutes he might get five bob. The men didn't seem to be so keen for it as they were a year ago before his accident. Of course it wasn't the same as having a girl, nothing like it, but if the chap wasn't too old it wasn't unpleasant. Ernie had said how his chaps would make love to him just as if he were a girl, and say such things! But these were toffs. Ernie with his pansy wig and his pretty-pretty doll's face could get them as easy as [winking]. Should think he liked it quite a lot too, the sorry little swine. Heard him boast he couldn't do anything with a girl when <u>she</u> paid <u>him</u>. That chap who was walking round the place had given him quite a look last time he came past. Wonder what he'd be worth. Better than he was used to get, though Ernie might [illegible]. Here he was coming round again. This time Ron stared back, and Alec faltered in his walk and hurried on round the plot again. No doubt of what he wanted. Didn't seem to have the nerve though. Better give him a little encouragement if he comes past again. He was coming too. Ron caught Alec's eye and gave him a half-hearted smile. It was enough though. Alec approached the park

[57] This sentence is nearly illegible, though the phrases "her dull wit" and "had been dealt with" are decipherable.

> seat; Ron made room for him and he sat down. Didn't seem to be very well dressed. What an overcoat! Why wasn't he saying anything? Could he be mistaken? No, he was having a furtive look. [Illegible] if he wasn't careful nothing would come of it.
>
> "Got a fag?" he asked. As it happened Alec had got a fag. He didn't smoke, because he hadn't quite enough control if he did, and anyway, it didn't really agree with him. But he knew that if "clicked" he would need some cigarettes.
>
> "Doing anything this afternoon?" Alec asked suddenly. It was a standard opening. A bit brusque certainly, but he hadn't thought up anything better. Anyway the brusqueness tended to prevent misunderstandings. This chap would do well enough. Not a real beauty, but had a certain appeal. Beggars couldn't be choosers. He was shaking his head. "Come and have some lunch with me."
>
> "Don't mind if I do" said Ron. He didn't go in for lad-di-dah ways of talking. It'd come to the same anyway. Bed's bed whatever way you get in it. Alec thought otherwise, and was silent for a couple of minutes as they made their way towards [Grenkoff's]. He'd got to go through with the lunch at least now. Ron was quite clear about this too. At least he was sure of the meal. He wasn't sure whether he'd do anything. Perhaps he'd be able to get something without. Seemed to be quite a toff after all. You could tell by the way he talked. Sounded a bit like that [flaky] theatrical chap who'd tried to [illegible] with him. He wouldn't have [illegible] though. No cash then. Nice to have the door opened for you by a commissionaire, and to go through first like a girl. Upstairs Alec was taking off his overcoat; underneath as always he was wearing an old sportcoat and rather unpressed worsted trousers. He didn't care to wear a suit, preferred the undergraduate uniform, which suited his mental age, and encouraged him to believe he was still an attractive youth. This arrested development also showed itself in his work. All men, who were not regarded as prospective sexual partners were fellow scholastics to whom Alec had to be actively showing off his intellectual powers. The undergraduate uniform had no effect on Ron. In any case his attention was now concentrated on the restaurant and its happenings. Alec was enjoying himself now. Usually when he went to a restaurant he felt self-conscious, either for being along, or for not doing the right thing. Ron wouldn't…

Levitt, Turing's biographer, imagines a decidedly hopeful and recuperative reading of "Pryce's Buoy," saying, "And here the story breaks off. We never learn what happens to Ron and Alec. They are left forever on the brink of possibility—perhaps of possible happiness—untouched by the shadow that had swooped down and destroyed the life of their creator" (274-275). The story puts into practice the potentiality of queerness, the utopian desire of science fiction. It is literally and figuratively "cruising utopia," which evokes travel, motion, sex, and potential intimacies, which Muñoz characterizes as the project of

queerness. He argues, "Queerness is an ideality…Queerness is a structuring and educated mode of desiring that allows us to see and feel beyond the quagmire of the present…Queerness is that thing that lets us feel this world is not enough, that indeed something is missing…Queerness is also a performative because it is not simply a being but a doing for and toward the future" (*Cruising* 1). Cruising here is also evocative of Samuel Delany's notion of "contact" in *Times Square Red, Times Square Blue*, a liminal space, moment, and connection between people that crosses race, gender, sexuality, class, neighborhood, public, and private. As Alec and Ron above cruise for sex, lunch, warmth, companionship, opportunity, or money, they enact a critical imagination, a queer futurity that "does not underplay desire. In fact, it is all about desire, desire for both larger semiabstractions such as a better world or freedom but also, more immediately, better relations within the social that include better sex and more pleasure" (Muñoz 30). Much in the same way that the main character Mike of David Gerrold's "In the Quake Zone" (as discussed in Chapter Three) can imagine the possibility of shifting his own assumedly fixed heterosexuality, the character of Roy in "Pryce's Buoy" does not identify as a "toff" but recognizes that both desire and necessity can shift his desires too and in the end it is not "unpleasant," and that the hope to "click" is shared by both men.

Add in the fact that Alec is working on the "crackpot" idea of interplanetary travel and the story takes on a different timbre, a different hope routed through the affordances of a new technology. Much in the way Turing himself argued for the potentiality of a new world order with the advent of the computer, Alec hopes for the ability to travel to a different, ostensibly better world where he may find a "suitable" man and the "glow of pride" that comes not only for being recognized and accepted as a brilliant scholar but also an openly

gay man. It is this technoqueer longing that is tantalizingly set up by Turing's tale. Technology, possibility, desire, and worldmaking intersect to imagine a different social and erotic order:

> The utopian societies imagined in critical utopias ultimately refer to something other than a predictable alternative paradigm, for at their core they identify self-critical utopian discourse itself as a process that can tear apart the dominant ideological web. Here, then, critical utopian discourse becomes a seditious expression of social change and popular sovereignty carried on in a permanently open process of envisioning what is not yet. (Moylan 213)

It is this utopian openness, this process, and this horizon that "Pryce's Buoy" begins to imagine, a world where Alec Pryce—as analogue to Turing himself—can love as he desires, can work unimpeded, and can live past the end of the page, over the ellipses, and beyond the hard stop of heterosexism, homophobia, and technophobia. In a sense, Turing imagines an alternative narrative for his own life, one which would extend beyond his own abrupt end, depending on the account, in either suicide or accidental poisoning. In other words, in "Pryce's Buoy" (and in "the imitation game") Turing lives on and his dreams and hopes live on to frame, pattern, and invigorate a different future. It is this spirit that is also imagined in Rudy Rucker's short story "The Imitation Game," which would later become part of a larger project, a "beatnik SF novel," called *Turing and Burroughs*. The description of the project reads: "What if Alan Turing, founder of the modern computer age, escaped assassination by the secret service to become the lover of Beat author William Burroughs? What if they mutated into giant shapeshifting slugs, fled the FBI, raised Burroughs's wife from the dead, and tweaked the H-bombs of Los Alamos?" "The Imitation Game" does not let Turing die, but rather launches the figure into an adventure where "the cosmos bore no distinct animus towards homosexuals, and the world might yet grant some peace to the tormented, fretful gnat labeled Alan Turing" (204). Surreal, Burroughsian details aside,

Rucker's story allows Turing's story to march on (in spite of the reality of this world): "Alan's work on universal machines and computational morphogenesis has convinced him that the world is both deterministic *and* overflowing with endless surprise" (205).

The technoqueer utopia sketched by both stories articulate what Lauren Berlant and Michael Warner call queer world making, saying, "Queer culture has found it necessary to develop this knowledge in mobile sites of drag, youth culture, music, dance, parades, flaunting, and cruising-sites whose mobility makes them possible but also renders them hard to recognize as world making because they are so fragile and ephemeral" (561). The characters of Pryce and Turing acknowledge that their present circumstances and troubled worlds offer them at best precarious existences and agency. Though they can be punished for their queerness, though they can be discredited for their "crackpot" theories and ideas, both also recognize that there is potentiality for transformation, for alternatives, and for joy and pleasure. These changes will be hard won, will require a trickster spirit, and will depend on radical reconfiguration of all things normative. Pryce and Turing understand that "[m]aking a queer world has required the development of kinds of intimacy that bear no necessary relation to domestic space, to kinship, to the couple form, to property, or to the nation. These intimacies *do* bear a necessary relation to a counterpublic—an indefinitely accessible world conscious of its subordinate relation. They are typical both of the inventiveness of queer world making and of the queer world's fragility" (Berlant & Warner 558).

Finally, like Rucker, David Leavitt's biography of Turing ends with an open-ended narrative surprise, connecting Turing's surprising suicide, the urban legend regarding the logo of Apple Computers, and the film *Snow White and the Seven Dwarfs*:

> Perhaps what chills us is that in taking his own life, Turing actually chose to camp it up a bit—to invest his departure from a world that had treated him shabbily with some of the gothic, eerie, colorful brilliance of a Disney film…In the fairy tale the apple into which Snow White bites doesn't kill her; it puts her to sleep until the Prince wakes her up with a kiss. (280)

All of the above—Turing's embodiment, his life story and his fiction, and all of the technologies leveraged to his repression, rescue, and resurrection—form bright constellations of time, space, and subjectivity that point the way to heterotopias and technoqueer utopias. These configurations resist what Judith Halberstam articulates as "reproductive time" and heteronormative spaces and what Munoz further describes as "a horizon…a modality of ecstatic time" (*Cruising* 32) and as "a path and a movement to a greater openness to the world" (*Cruising* 25). I reiterate a quote from Turing's "Computing Machines and Intelligence," which says, "I believe that at the end of the century the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted" (442). By analogy, then, we might extend this idea to perhaps the horizon of the end of the twenty-first century where we might speak of not only machines thinking but of technologically reconfigured sexuality, gender, and race without fear, disavowal, or violence. "Pryce's Buoy" serves as lifeline and transport to Turing's imagined queer world. And in Turing's final words to his famous essay: "We can only see a short distance ahead, but we can see plenty there that needs to be done" (460).

Let us, then, hope, dream, play, and get to work.

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