

California Institute of the Arts

Dolly Dirtbag

Pop Music, Gender and Technology

by

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Abstract

Through the composition and performance of music that aesthetically references certain strains of pop music but is decoupled from its associated industry, this thesis attempts to appropriate existing technologies and to develop new ones in the service of both an (almost) literal cyborg project as well as to illustrate the possibilities that technology holds for all kinds of feminist/genderqueer projects. All of these goals come together in the formation of Dolly Dirtbag, a character composed of multiple overlapping personalities who is brought to life through recorded music and in live performances using custom tools built specially for her. Chapter 2 highlights a selection of artists and musicians whose work engages with the body, feminism and pop music. Chapter 3 presents the function and concept behind the Infinity Glove, a first sort of literal step towards a musical cyborg performance system. Chapter 4 discusses the Selfie Scrambler, a performance system for custom live visual performance. And in Chapter 5, as a companion to Dolly Dirtbag's *Slug Dreams* EP, Dolly herself speaks.

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Chapter 1 Introduction

The Oxford English Dictionary defines a cyborg as “a person whose physical tolerances or capabilities are extended beyond normal human limitations by a machine or other external agency that modifies the body's functioning; an integrated man–machine system.”¹ Cyborgs are known in popular culture mostly for appearances in sci-fi films depicting dystopian futures (“RoboCop,” “Six Million Dollar Man”); these characters have prominent, high-tech metal appendages like bionic arms. But what less obvious is the degree to which in our world we have all become cyborgs already. In medicine, technologies have made their way into flesh. Pacemakers, surgical implants and splints are accepted practices. Many people with disabilities extend the capabilities of their bodies with technologies like hearing aids, prosthetics or wheelchairs. But even more broadly, our phones, computers, and our data is inextricable from our self-construction. Defining ourselves aesthetically is no longer limited to the clothes we adorn ourselves with; increasingly, it is extended to collections of digital images that live on our phones, on Tumblr, on Instagram, etc. We each have our own unique collection of mp3s, photos, documents and other files that we would experience as a great loss if misplaced or destroyed. Selves are found not only in the organic matter of bodies but in hard drives, operating systems and “the cloud.”

Although Donna Haraway’s “A Cyborg Manifesto” was originally published in 1984, it remains relevant today for its prescient reading of cyborgs through a feminist lens and vice versa. In the essay, Haraway argues “for the cyborg as a fiction mapping our social and bodily reality and as an imaginative resource suggesting some very fruitful couplings” (Haraway 292). She says we are all already cyborgs, or “chimeras, theorized and fabricated hybrids of machine and organism,” (Haraway 292) and cites modern medicine and modern warfare. But instead of fearing this development, which she sees as a result of and a potential breeding ground for the

¹ “Cyborg | Definition of Cyborg in English by Oxford Dictionaries,” Oxford Dictionaries | English, accessed February 2, 2019, <https://en.oxforddictionaries.com/definition/cyborg>.

same patriarchal systems of power that developed our society, she sees the possibility for “*pleasure* in the confusion of boundaries and for *responsibility* in their construction” (Haraway 292). Cyborgs, she says, are the “illegitimate offspring of militarism and patriarchal capitalism,” but “illegitimate offspring are often exceedingly unfaithful to their origins. Their fathers, after all, are inessential” (Haraway 293). Patriarchal systems of thought rely heavily on binaries like mind/body, animal/human, man/woman, black/white and yet cyborgs are important for breaking, confusing and collapsing a binary central to the Western scientific practice that developed them: human and machine. Further, her “cyborg myth” is about “transgressed

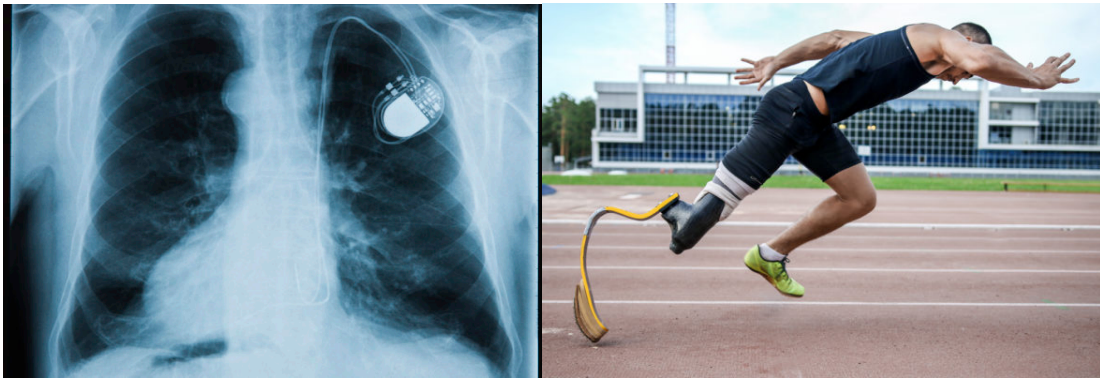


Figure 1.1 : Medical cyborg technologies (pacemaker, prosthetic leg)

boundaries, potent fusions and dangerous possibilities which progressive people might explore as one part of needed political work” (Haraway 295); in other words, cyborgs can provide a framework for understanding a new kind of feminism that doesn’t isolate people or identities into neat categories and is conscious of their construction. She critiques socialist and radical feminisms, which she contends both operate under the assumption of “male” and “female” being stable categories and argues for a “cyborg theory of wholes and parts” (Haraway 316), which allows for hybrids and ambiguity. She takes as an example the label “woman of color,” which was developed by feminists who felt marginalized by the second wave feminist movement, in which concerns of white middle-class women were often regarded as central. Instead of being a totalizing category, it is a label that recognizes the differences within itself between black, Latina, Asian and other women as well as its own deliberate invention as a political tool to unite different actors with certain concerns in common. This makes it possible to understand being a woman of color as a “cyborg identity, a potent subjectivity synthesized from fusions of outsider identities” (Haraway 311). Haraway also critiques the tendency of certain radical feminists to “insist on the organic, opposing it to the technological” (Haraway

310). She sees this as another false binary that can be broken by a cyborg-inspired hybridity; cyborgs illuminate the possibility of a feminism that engages with and potentially embraces new technology and reinterprets it to serve anti-patriarchal solutions.

CYBORG MANIFESTO



DONNA HARAWAY

Figure 1.2 : Donna Haraway’s “A Cyborg Manifesto”

For Haraway, the cyborg is a useful metaphor for a more liberated future. But is it possible that a more literal project of becoming a cyborg can serve similar purposes? The manifesto “Xenofeminism: A politics for Alienation,” which was the brainchild of Laboria Cuboniks, a collective of six women/feminists/scientists/artists, does call for a more literal takeover of technologies by oppressed groups as a path to liberation. It asserts that “technology isn’t inherently progressive” and that “serious risks are built into these tools [i.e. technology];

they are prone to imbalance, abuse and exploitation of the weak” (Laboria Cuboniks 0x02). In other words, a long history of excluding people other than white men from the development of modern technologies has affected their evolution; these technologies are not objective and/or suited to everyone but often modeled around a cis white male body (see the example of face recognition software, which is not only demonstrably less accurate on black faces but also more likely to be used by police on black suspects).² In response, “XF [xenofeminism] seeks to strategically deploy existing technologies to re-engineer the world,” and argues that “technoscientific innovation must be linked to a collective theoretical and political thinking in which women, queers and the gender non-conforming play an unparalleled role” (Laboria Cuboniks 0x02). In this endeavor, science becomes a tool for “construct[ing]” freedom, which they argue is not “natural” or a given. The manifesto asserts an anti-naturalist stance, saying that “anyone who’s been deemed ‘unnatural’ in the face of reigning biological norms, anyone who’s experienced injustices wrought in the name of natural order, will realize that the glorification of ‘nature’ has nothing to offer us—the queer and trans among us, the differently-abled, as well as those who have suffered discrimination due to pregnancy or duties connected to child-rearing” (Laboria Cuboniks 0x01).

As fruitful as these analyses are, it is important to acknowledge their limitations and the limitations of this thesis as well. Haraway’s essay has been critiqued for at times conflating gender and race-based discriminations; Malini Johar Schueller says that “race sometimes figures in Haraway’s essay as part of an undifferentiated, analogical series in which the different matrices governing race and gender/sexuality are not recognized” (Schueller 61) and that “the coalitional politics through which white women join forces with women of color while continuing to treat race and gender as analogous modes thus suggests that racial analogy within (white) feminist theory helps whiteness retain its privilege by being uninterrogated” (Schueller 62). It’s clear that Haraway’s intention is to articulate intersectionality but treating racism as analogous to sexism is not a sufficient way to address how her cyborg metaphor can be applied to anti-racist work. She also doesn’t acknowledge the significant racist history of science (e.g. craniology/phrenology and other disciplines that set out to scientifically prove white supremacy) or the related idea of people of color as “primitive” and of non-western cultures as “unscientific,” which significantly

² Ali Breland, “How White Engineers Built Racist Code – and Why It’s Dangerous for Black People,” *The Guardian*, December 4, 2017, sec. Technology, <https://www.theguardian.com/technology/2017/dec/04/racist-facial-recognition-white-coders-black-people-police>.

set western science and technology up as the domain of whiteness. Similarly, Laboria Cuboniks' manifesto does acknowledge that in trying to craft a universalist politics, it is important to "guard against the facile tendency of conflation with bloated, unmarked particulars—namely Eurocentric universalism—whereby the male is mistaken for the sexless, the white for raceless, the cis for the real, and so on." (Laboria Cuboniks 0x0F) But the same critique of Haraway's flattening of the differences between sexism and racism could be made for this manifesto as well, in which racism again appears mostly on lists of oppressions that are implied to be analogous. This thesis recognizes this failing and does not claim to speak to race or class-based oppressions; this is important work that deserves support and ideally this project would be more intersectional but it's not within the scope of this work.

However, Haraway's fluid understanding of gender, bodies and technology and Laboria Cuboniks' call for the development of more gender-conscious technologies can still be useful concepts for any number of practices or artistic mediums. This thesis in particular is concerned with the application of these theories to the composition and live performance of a kind of pop music. "Pop" as a genre is a strange, elusive, ever-evolving thing. Its presence in our high-tech, globalized, consumerist world is guaranteed though its sounds may change over time as various genres are consumed by it and left behind. Pop has morphed from 1960s Phil Spector-produced girl groups to synth pop hits in the 1980s to boy bands and Britney Spears in the late 1990s. Even now or in any of these time periods, a wide variety of very different sounding pieces of music are considered pop; consider how different Adele's soulful ballads sound from Nicki Minaj's aggressive and also comical verses or from a upbeat Katy Perry hit. All of these sounds are in some way intended to appeal to a wide audience—maybe in lyrical simplicity, themes thought to be "universal" or in imitating sounds that are already popular in underground or niche markets. At its core, more than a sound, pop is defined by its relationship to money; pop music can be anything that revolves around maximizing profits for those who produce and sell it. This goal is accomplished both by attempting to create music with the broadest appeal possible as well as with various business deals and marketing tactics. Pop music, like the cyborg, is a product of patriarchal capitalism and its stars generally embody what the patriarchy values most: white, cis heterosexuality and "attractiveness" by those standards. But maybe pop too can become an "illegitimate offspring" and a medium through which to express an understanding of gender that is unstable, plural and always open to change.



Figure 1.3 : Britney Spears, teen pop sensation

This is what I hope to accomplish with this thesis. Through the composition and performance of music that aesthetically references certain strains of pop music but is decoupled from its associated industry, I hope to appropriate existing technologies and to develop new ones in the service of both an (almost) literal cyborg project as well as to illustrate the possibilities that technology holds for all kinds of feminist/genderqueer projects. All of these goals come together in the formation of Dolly Dirtbag, a character composed of multiple overlapping personalities who I've brought to life through recorded music and in live performances using custom tools built specially for her. Dolly Dirtbag is somewhere between real and fake. Embodying her in live performance makes the fantasy of her existence more real, tangible and visible while the aesthetic/technique of the performance calls attention to her artificiality. The live performance tools I've developed refract Dolly into multiple identities, as well as play with and incorporate technology into tropes/images of traditional femininities. Dolly expresses a sort of plural gender, which incorporates multiple different gender expressions within it. The music itself, especially the vocal editing, plays on the boundary of earnest and sarcastic, further obscuring a legible and coherent single identity. Using a character is effective for calling attention to the conventions and boundaries of pop music and also making clear that

I'm not interested in an authentic expression of me or my emotions; like in mass-produced pop music where songwriters are often anonymous, my "real" identity is not important as the creator of these songs or tools. Dolly and I together are the multiple authors of the work and this thesis.

In Chapter 2, I highlight a selection of artists and musicians whose work engages with the body, feminism and pop music. In Chapter 3, I present the function and concept behind the Infinity Glove, a first sort of literal step towards a musical cyborg performance system. In Chapter 4, I discuss the Selfie Scrambler, a performance system for custom live visual performance. And in Chapter 5, as a companion to Dolly Dirtbag's *Slug Dreams* EP, Dolly herself speaks.

Chapter 2 Influences

2.1 Flesh as Material

In New York in the 1960s, a practice of “happenings” was developing in the underground art scene; this term, taken from Allan Kaprow’s “18 Happenings in 6 Parts,” was a blanket term used by the press to refer to a diverse set of live art pieces, which came from various different backgrounds and had very different intentions (Goldberg 132). Some grew out of the visual art scene, inspired by the indeterminate aspects of Jackson Pollock’s paintings and by Robert Rauschenberg’s “combines;” Kaprow and other painters’ thinking was also developed in John Cage’s class on experimental music at the New School for Social Research (Goldberg 127). Other strains included the Fluxus movement, which was interested in performance concepts as well as the Judson Dance Theater, which was experimenting with “written texts, instructions and game assignments” in a dance context (Goldberg 140).

Carolee Schneeman arrived in New York in 1961, shortly after finishing her graduate degree in painting at the University of Illinois. Having already formed an interest in “sensate involvement,” and utilized “sharp edges, shards and fragments” in her work (Schneider 32), Schneeman quickly became involved with Fluxus and at Judson, she premiered “Newspaper Event,” “Chromelodeon” and “Lateral Splay.” But in response to her “experience as a female artist in the male-dominated movements of Fluxus and happenings,” she began to “explore the ways in which material flesh existed in bodies which could not be divorced from the histories of their socio-cultural signification” (Schneider 33). Her thinking reached a politicized turning point with the piece “Eye/Body.” In it, she crafted an immersive installation in her loft apartment with “4x9 foot panels, broken glass and shards of mirrors, photographs, lights and motorized umbrellas” and significantly, in addition, she “stepped into her own work...incorporat[ing] her naked body into her construction by painting, greasing, and chalking herself” (Schneider 33).

Although the piece was significant both for its pioneering use of the artist's own body "as primary visual and visceral terrain" and its ideological foreshadowing of both the sexual revolution and women's movement that were soon to come, at the time, the work was tellingly not taken seriously by critics or her (mostly male) peers, who panned it as too "messy," narcissistic and/or self-indulgent (Schneider 34-35). However, the piece can be read through the lens of Rebecca Schneider's concept of "binary terrorism" as it relates to the "explicit body."



Figure 2.1: Carolee Schneeman's "Eye/Body," New York City, December 1963

She defines binary terrorism as the "strategic implosion of binaried distinctions" which "assaults the generalizations of such symbolic constructs by privileging the cacophony inherent in unruly particulars" (Schneider 18,20); in other words, like Haraway's understanding of the cyborg, asserting an existence in an in-between space can call attention to the presence and the limitations of binaries. Western culture defines bodies with a set of binaries: white/black, male/female, abled/disabled; but "making any body *explicit as socially marked*" works to highlight "the historical, political, cultural and economic issues involved in its marking" (Schneider 20). In

Eye/Body, Schneeman drew on a long history of art involving the female nude but by using her own body, she collapsed the artist/muse and subject/object binaries. She drew attention to the fact that a body like hers historically was seen only as object, as existing within the frame of a piece, rather than as the creator behind a piece.

Yoko Ono was one of few other women also closely associated with Fluxus at this time and hosted many happenings in her Tribeca loft. In 1964 she debuted “Cut Piece,” a performance that drew on similar concepts. Ono originally performed the work in Tokyo and has since performed it in New York, London, Tokyo and Paris. Around this time her work was



Figure 2.2: Yoko Ono’s “Cut Piece,” London, 1965

centered around conceptual performance pieces, most of which came with a “score,” or a set of instructions for an event/action that followed.³ Though in practice she was the performer for many of her works, her scores were written specifically so that theoretically anyone could perform the piece.⁴

In “Cut Piece” it’s especially significant that Ono decided to perform it herself because it puts the performer in such a vulnerable position. The score for the piece reads as follows:

³ “MoMA | Yoko Ono. Cut Piece. 1964,” accessed April 28, 2019, https://www.moma.org/learn/moma_learning/yoko-ono-cut-piece-1964/.

⁴ “Yoko Ono Art, Bio, Ideas,” The Art Story, accessed April 28, 2019, <https://www.theartstory.org/artist-ono-yoko.htm>.

Performer sits on stage with a pair of scissors in front of him. It is announced that members of the audience may come on stage—one at a time—to cut a small piece of the performer’s clothing to take with them. Performer remains motionless throughout the piece. Piece ends at the performer’s option.

Ono was apparently inspired by the story of the Buddha, who was born a wealthy prince but found enlightenment by giving up all of his material possessions.⁵ But even if Ono’s intent was supposedly to address materialism (and the piece did not require a female performer), her piece can be thought of using Schneider’s “binary terrorism” as well.⁶ In making herself completely vulnerable to the whims of the audience, she reproduced the position that women find themselves in of being seen as passive objects to whom anything can be done without consequence. In addition, she herself was also the artist, so in making herself vulnerable she collapsed and brought attention to artist/muse, subject/object binaries as well.

If a feminist cyborg project is interesting because it attempts to sculpt new possibilities into the body, Ono and Schneeman’s works were early steps in this direction in their use of the body as a material and their consequent exploration of the space in between binaries.

2.2 BREYER P-ORRIDGE & Plural Gender

Genesis Breyer P-Orridge (who uses s/he and h/er pronouns)⁷ was already well known for fronting the seminal industrial bands Throbbing Gristle and Psychic TV as well as other interdisciplinary art projects, when s/he met the dominatrix and performance artist Lady Jaye Breyer in New York in the early 1990s. The two fell in love and began to undertake a project they called “Breaking Sex” or “Pandrogeny.” (Johnson 92). As Genesis describes it, they had an out-of-body experience while kissing, in which they “both literally left [their] bodies together and went off into this amazing beautiful realm of pure love.” “If you imagine two lots of liquid,” s/he says, “we wanted them to just end up in the same container. We would just become one.”⁸

⁵ “Yoko Ono Artworks & Famous Art,” The Art Story, accessed April 28, 2019, <https://www.theartstory.org/artist-ono-yoko.htm>.

⁶ Imagine Peace, “Yoko Ono’s CUT PIECE: From Text to Performance and Back Again by Kevin Concannon,” *IMAGINE PEACE* (blog), accessed April 28, 2019, <http://imaginepeace.com/archives/2680>.

⁷ Hermione Hoby, “The Reinventions of Genesis Breyer P-Orridge,” June 29, 2016, <https://www.newyorker.com/culture/culture-desk/the-reinventions-of-genesis-breyer-p-orridge>.

⁸ Snap Judgment, “Genesis, Lady Jaye and the Pandrogyn,” Podcast, NPR.org, June 20, 2014, <https://www.npr.org/2014/06/20/323955434/genesis-lady-jaye-and-the-pandrogyn>.

In search of this oneness, the couple began to dress more alike and get their hair cut similarly. Eventually, s/he says:

“going back to William Burroughs and Brion Gysin and some of their work, we thought, well, if they do cut-ups with literature and even with images and even with tape recorders, what if we do a cut-up with our bodies so that we become a third being, not just a third mind?”⁹

The “third mind” was a concept developed by Burroughs and Gysin in the 1960s to refer to the results of a collaborative collage writing praxis in which “a new author emerges, an absent third person invisibly and beyond grasp, decoding the silence” (Johnson 93). Genesis says that Lady Jaye “was a registered nurse...she’d seen that the human body is just this meat and bones that can be rebuilt, almost like a car, with screwdrivers and pins and so on” and so with this



Figure 2.3 : Genesis and Lady Jaye in the film “The Ballad of Genesis and Lady Jaye”

understanding of the body as a malleable, constructable form, the artists began in 1999 to have a series of plastic surgeries in order to look more alike and to create a third body together. Genesis had Lady Jaye’s beauty spots tattooed on h/er cheek, Lady Jaye had eye and nose jobs,

⁹ Snap Judgment.

they both got bigger lips and breast implants (Johnson 94). Through these surgeries they became a new being that they called “BREYER P-ORRIDGE” (Johnson 92). When Lady Jaye very suddenly died of heart failure in 2007, Genesis began to refer to h/erself with plural “we” pronouns; s/he says, “when Lady Jaye, as we say, dropped her body, as a matter of principle, we wanted to maintain what we believe is the state of things, which is that she's still as much a part of me as before, so now my body represents us both in this material world, and she represents us both elsewhere.”¹⁰

Genesis also says that people often “think what we’ve been doing has something to do with gender, and it doesn’t...we just feel trapped in a body. What we’re talking about is an idealized future where male and female become irrelevant.”¹¹ Although s/he denies it and clearly Genesis does not fit into the neat, mainstream narrative of trans womanhood (“a woman trapped in a man’s body”), h/er and Lady Jaye’s project does very much address the category of gender in the way it expands and eludes it. Although BREYER P-ORRIDGE, the third being, is feminine-presenting (having breasts and wearing women’s clothes), their gender is plural, exploding a Western conception of a bounded, singular, male/female self and calling attention to the constructedness of gender as a category. The piece itself is an exercise in the creative construction of a new type of gender. Part of what Haraway values so much about the cyborg is that it illuminates the possibility of this kind of envisioning of genders and other concepts outside the binaries we’ve accepted. In addition, the piece is a xenofeminist cyborg project in its use of surgery/medical technology to forge that new identity and carve it into bodies. The xenofeminist manifesto ends with the line: “If nature is unjust, change nature!” (Laboria Cuboniks, 0x1A) and that is what BREYER P-ORRIDGE has used technology to do.

2.3 Pop Music on the Fringes

In the late 1990s and early 2000s, acts with meticulously produced electronic instrumentation like Britney Spears and the Backstreet Boys found massive mainstream success but also sparked a backlash of criticisms that their music was too synthetic, too clean and too robotic and that even their public personas were engineered by executives. In the last decade or so, the industry has responded to the idea that these stars were too simple, too bland or “soulless” with a shift at

¹⁰ Snap Judgment.

¹¹ Snap Judgment.

least in part to stars like Adele, Ariana Grande, or Ed Sheeran whose virtuosic vocal technique, use of more acoustic instrumentation and/or earnest songwriting is hoped to convey “authenticity.” And it was out of this landscape that a new wave of “pop” or pop-inspired music that wholeheartedly embraced a synthetic, squeaky clean aesthetic emerged in the global underground in recent years.

The collective or “label” PC Music began posting its signature “hyper-pop” tracks online (on Soundcloud and its own website) in 2013 but it wasn’t until 2014 that it started to gain a following and the attention of blogs like The Fader, Pitchfork, etc. It was inevitably noted in articles that the label was unusually secretive and opaque—many songs were by what seemed to be pseudonyms or aliases for the same people or for “unknown quantities” (e.g. Lipgloss Twins, Thy Slaughter, Princess Bambi).¹² Some tracks, like “Time’s Up (Remix)” were labeled remixes even though no known original version exists.¹³ But they all for the most part shared a common sonic style or lived in similar sonic worlds populated by pitched up and heavily edited vocals,

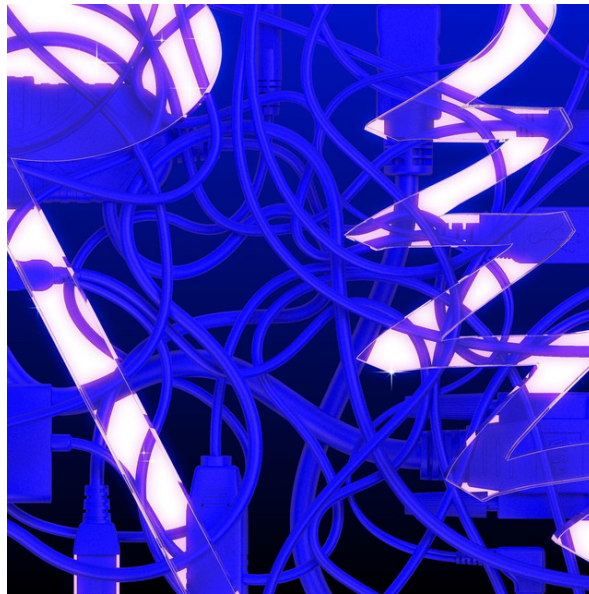


Figure 2.4: Album Artwork for PC Music Volume 1

slick crackles and pops, dramatic detuned synth stabs, perfect pop hooks and lyrics consisting of materialist pop themes pushed to extremes. Many tracks were seemingly produced by co-

¹² Philip Sherburne, “PC Music’s Twisted Electronic Pop: A User’s Manual,” Pitchfork, September 17, 2014, <https://pitchfork.com/thepitch/485-pc-musics-twisted-electronic-pop-a-users-manual/>.

¹³ Sohrab Golsorkhi-Ainslie, “A G Cook PC Music Exclusive Mix,” Tank Magazine, 2014, <https://tankmagazine.com/tank/live-archive-music/radio-tank-mix-a-g-cook/>.

founder A.G. Cook, who in a rare interview describes “enjoy[ing] playing a bit of an A&R role,” working with “people who don’t normally make music and treating them as if they’re a major label artist,” this means both teasing out and executing a style specific to that artist but also bringing his own strong vision to every song.

An artist Cook frequently collaborates with is the singer and image-maker Hannah Diamond, who is partly responsible for the visual style that has become a hallmark of the label; every song is accompanied by images that are usually heavily retouched, super sparkly, bright and clean, often nostalgic for late 90s and early 2000s fashion. Her vocals are high-pitched, childish talk-singing, deadpan and almost comic in their delivery; her melodies are perfectly catchy and Cook’s production is filled with sparkly twinkles, chopped up vocal samples and trance-influenced crescendos. Her lyrics often deal with romance or heartbreak (essential pop music themes) but almost seem to be parodying mainstream pop’s blandness, innocence and obsession with image. “Make Believe” describes a superficial romance:

You look at me, I look at you
You say the words "I love you"
I make believe with you
I make believe
I make believe with you, with you

The first verse of “Every Night” plays on a similar theme while also scrambling and repeating just a few words until they’re almost meaningless:

I know you like the way that I look
And it looks like I like you too
You know I do
I like the way you know
That I like how you look
And you like me too
I know you do

Many earlier profiles of PC Music speculated that the label’s music and visual aesthetic were making some kind of critique or comment on pop music, that the label was “post-modern”

and “vehemently art-schooled,”¹⁴ and that their work “propose[d] a set of critical questions about pop culture, accelerationism, hyperrealism, digital communities, gender, identity, and consumerism.”¹⁵ But in an interview from 2016, Hannah Diamond responded to questions about the label’s possibly parodic intentions saying, “I wouldn’t say there’s irony in what I do, but I definitely think there’s a humor there” and expressed dissatisfaction with the perception of



Figure 2.5 and Figure 2.5: Album Artwork for Hannah Diamond’s “Hi” and “Every Night”

her music as lacking in “authenticity.” She’s also said, “I’ve been musical my whole life—I used to play instruments at school—but I didn’t think to myself, ‘oh, you know what, I’m going to set out to be a pop star’ or ‘a conceptual artist who criticizes pop music.’”¹⁶ So clearly, critics and listeners were not reading the intentions of the artists entirely correctly—likely in part because of the name (which seems to imply some kind of big ideas about “the digital age”), in part because of the initial mysteriousness, and in part because being an independent label lends a sort of legitimacy to the use of “corny” sounds and words as a serious artistic choice and makes it more palatable to the kind of listeners who wouldn’t want to listen to pop music if it wasn’t “intelligent” or “critical.” There is nothing inherently subversive or feminist about this music

¹⁴ Clive Martin, “PC Music: Are They Really the Worst Thing Ever to Happen to Dance Music?,” *Vice* (blog), September 16, 2014, <https://www.vice.com/sv/article/4wmymj/pc-music-are-they-really-the-worst-thing-to-ever-happen-to-dance-music-clive-martin-017>.

¹⁵ Sherburne, “PC Music’s Twisted Electronic Pop.”

¹⁶ Michael Cragg, “Hannah Diamond Is Real,” *The FADER*, February 29, 2016, <https://www.thefader.com/2016/02/29/hannah-diamond-interview>.

but it does illustrate the potential for a repurposing of pop's aesthetics outside its industry infrastructure.

Another artist working in contemporary independent pop is Tami T (aka Tami Tamaki). Born and raised in Sweden, Tami played in skate punk bands as a teenager and started producing electronic music around that time. At age 26, she was working on a factory production line in Gothenberg but decided to quit and move to Leipzig, Germany and it was there in isolation that she developed a signature sound and began to self-release music online.¹⁷ Her songs take from “trashy” genres like EDM, trance, house and radio-ready pop music but also retain a uniquely strange quality. Her lyrics are mostly about romance but her tone is worlds away from a radio hit in its directness and explicit sexual content. Take the second verse of “I Never Loved This Hard This Fast Before,” which is delivered matter-of-factly in a Swedish accent and girlish voice:

I never came this hard this long before
But then again I never fucked a boy like you before
Never had somebody I could fuck hardcore
Until I met you

In reference to her writing style, she says, “The only way for me to write lyrics, is to write honest lyrics. I love details and have always thought that songs about very specific moments are more relatable for a listener. Even if they haven’t experienced the same significance, I prefer to be sincere in my songs, especially when compared to songs that describe moments or feelings in a more general manner.”¹⁸ So although she places an importance on specificity that Hannah Diamond and much of radio pop doesn’t, she similarly values conveying emotional authenticity.

The video for “I Never Loved This Hard This Fast Before,” shows Tami performing the song live in one take with only a small, cheap MIDI keyboard and a microphone but she manages to make it an engaging performance with her live control of a vocoder, filters and other effects. And in many live performances, she’s known to use a self-built MIDI controller which she calls a “musical strap-on;” it’s a small, phallic object covered in rhinestones that she wears in

¹⁷ Amy Cliff, “Here’s What You Need To Know About Tami T, Berlin’s Joyously Candid Pop Provocateur,” *The FADER*, June 3, 2016, <https://www.thefader.com/2016/06/03/tami-t-need-to-know>.

¹⁸ Katy Diamond Hamer, “She’s Got the Beat: Tami Tamaki,” *Eyes Towards the Dove*, January 18, 2016, https://eyes-towards-the-dove.com/2016/01/tami_tamaki/.

a rope harness on her crotch and with it she “can play notes and chords by touching or drumming on it.”¹⁹ Not only is this instrument super bizarre and interesting to watch her play, it



Figure 2.6 : Tami T performing with her “musical strap-on,” 2018

expresses a kind of gender and sexuality “deviance” that would never be able to exist in a contemporary mainstream pop context. The way that she plays the instrument like a drum also implies a significant sort of irreverence for the phallus, which is such a potent symbol of male power in western culture, and begins to strip the symbol of that power.

Even though pop is meant to be all-inclusive in its targeting of the broadest possible audience, in doing so it actually centers itself around what is considered “normal.” In western culture this is heterosexual, heteronormative, and white so in pop music, everything else is excluded, including Tami T’s type of sexuality. But like Haraway suggests is possible and productive with her cyborg metaphor, Tami T has successfully found a way to re-appropriate the aesthetics of pop and remake them around her own image.

¹⁹ Hamer.

Chapter 3 Infinity Glove

The Infinity Glove is a pink evening glove embedded with sensors built specifically to control vocal effects. The sensor data is transmitted wirelessly to a laptop and converted to a MIDI signal which can be used in Ableton or any other digital audio workstation (DAW) to control any parameter and/or instrument. Depending on how information is mapped, the glove can cause dramatic or subtle sonic changes, making it suitable for use in various genres of music.

The glove was created for the character Dolly Dirtbag to use in live performance. It was inspired by other vocal processing methods as well as an interest in the cultural associations of the voice and its modification, but is also informed by a tradition of wireless wearable controllers and glove controllers, especially those used to explore tropes of femininity in some way. The original circuit was built around an Adafruit Flora, but because of limitations a second version was built using a Teensy LC. The Infinity Glove is effective in bringing to life Dolly Dirtbag's live performances, making a performance of pop-tinged music more dynamic and playing off of and warping an image of traditional femininity.

3.1 Review of Relevant Work

In 2003, husband and wife Tomie Hahn and Curtis Bahn presented a radical new performance system at the International Conference on New Interfaces for Musical Expression (NIME). Called “SSPeaPer” (from Sensor-Speaker-Performer), it tracked the performer's (in this case Hahn's) movements and generated corresponding sounds that were played through speakers on her body. Hahn was outfitted with two sensors on her hands which could sense 2 axes of tilt and pressure. Data from those sensors was sent to a microcontroller on her hip where it was converted to a continuous MIDI signal and sent wirelessly via radio to a computer where it was processed by MAX/MSP. 2 channels of audio from MAX/MSP were sent back to the speakers on Hahn's body through a radio transmitter and the other 6 were sent to speakers onstage.²⁰

²⁰ <http://www.arts.rpi.edu/~bahnc2/activities/SSpeaPer/SSpeaPer.htm>

The performance was inspired partly by Hahn's research into *nihon buyo*, a traditional Japanese dance that comes from *bunraku*, or puppet theater, which uses sound to punctuate a dancer's movements. Hahn also developed a character named "Pikapika" for the performance, which was inspired by anime and manga; she wore a futuristic outfit and a wig.



Figure 3.1 : Tomie Hahn performing with SSPeaPer, 2003

The project was significant in the music technology field for its development of a wireless MIDI system and was a major development for wearable tech, which to exist on a large scale would need to be wireless. Even if wearable technology is impermanent, it can still be considered a cyborg project, especially in a project like this, where the body's movement is integral to the operation of the machine. The circuit must conform to and move with the shape of the body and even if it's just for the duration of the performance, body and machine become one in their function. Hahn's combination of this technology with an exploration of traditional Japanese (non-Western) femininity is particularly interesting: in this case the technological development is not sectioned off from society and culture as a whole, but used as a tool to examine it.

A second significant artist in this field is Laetitia Sonami; since the early 1990s, the artist has been developing a series of prototypes of glove controllers, a project that she calls the “lady’s glove.” The first was developed for a performance with Paul DeMarinis at the Ars Electronica Festival in 1991. Sonami built off a pair of rubber kitchen gloves, attaching hall effect sensors to the fingertips of the left hand and a magnet to the back of the right hand. Touching a sensor to the magnet would trigger a signal fed to a “Forth board,” which would

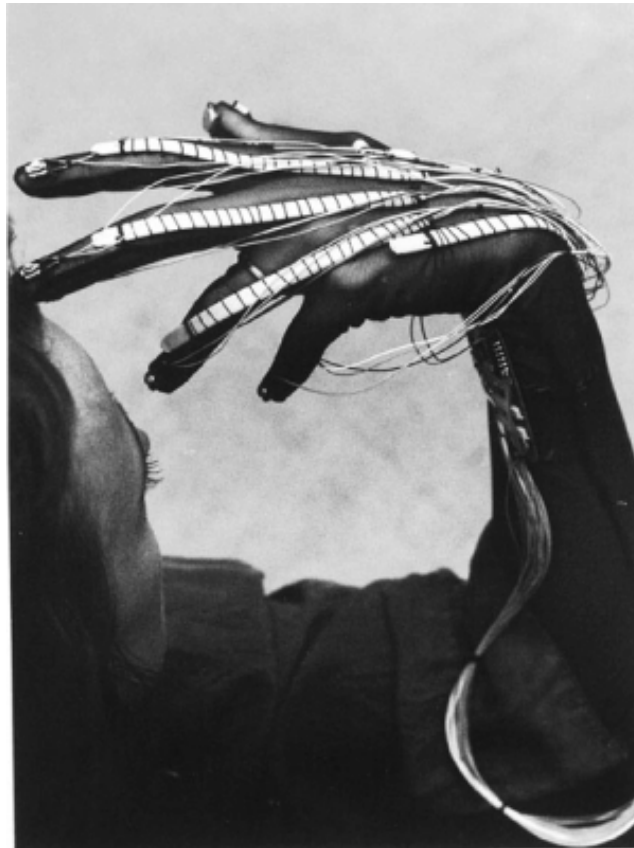


Figure 3.2 : Laetitia Sonami’s “lady’s glove”

then convert the signal to MIDI and feed it to various synthesizers and samplers.²¹ Of this version Sonami says, “While I was intent on finding a more fluid way to perform with the computer, this first glove was also somewhat of a joke, a response to the heavy masculine apparel used in virtual reality systems;” using kitchen gloves was a way to reference a domestic type of femininity. A second prototype was only a left glove with a magnet on the inside of the thumb, leaving the right hand free to control other hardware; in this version the wires were hidden inside the glove, in order to achieve a sort of “magical” effect. A third prototype added

²¹ Laetitia Sonami, “Lady’s Glove,” Artist’s website, Laetitia Sonami, n.d., <http://sonami.net/ladys-glove/>.

bend sensors, a “pressure pad” on the inside of the index finger and an ultrasonic transmitter on the palm, which with transmitters on the right arm and left foot could be used to calculate the distance between the artist’s limbs.²² Fourth and fifth versions were built with help from Bert Bongers in 1994 and 2001; he was able to expertly embed the sensors in a tailored thin black mesh glove, which was meant to be worn underneath a regular glove of any color or fabric for aesthetic purposes (though the artists notes she never made use of this since the mesh glove was so well done). Sonami also added to these an accelerometer to measure the speed of the hand’s motion as well as a tilt switch, and eventually “two accelerometers on a right wrist band, some more hall effects, light sensor, extra switches, leds and more recently a miniature mic.”²³

Sonami has used these gloves in many performances over the years. In ““Why ___ dreams like a loose engine (autoportrait)” (2000-2008),²⁴ a “a farewell to the mechanical age,” she used the lady’s glove to control servo-motors, live electronics as well as “shadows and lights;” while in “Conversation with a Light bulb,” (2000-2005) she used it to control sound as well as light bulbs.²⁵ Despite the name of the ongoing piece and the early reference to women’s work in the kitchen, the “lady’s glove” is more significant for its development of a wireless controller system than for an exploration of gender performance, which is an important aim of the Infinity Glove.

Lastly, since 2010, a team of creative technologists led by Imogen Heap and Adam Stark have been developing the Mi.Mu glove, a highly advanced glove controller with flex sensors, accelerometer, button, wireless communication and a dedicated mapping software.²⁶ Early versions were tested in Imogen Heap’s live performances, but since 2014 the gloves have been used by a number of different artists including Kris Halpin (aka Dyskinetic), Ariana Grande and Chagall.²⁷ As of April 2019, the gloves are also available for pre-order to the general public.

3.2 Inspiration

The Infinity Glove was inspired by the BOSS VE-20, a vocal processing unit with a built in loop pedal that allows the user to adjust different parameters like harmonies, reverb, delay, autotune,

²² Sonami.

²³ Sonami.

²⁴ Laetitia Sonami, “CV,” accessed April 26, 2019, <http://sonami.net/cv/>.

²⁵ “Laetitia Sonami,” *23 Five* (blog), n.d., <http://www.23five.org/archives/laetitiasonami.html>.

²⁶ “Mi.Mu Gloves: Story,” accessed April 26, 2019, <https://mimugloves.com/>.

²⁷ “Mi.Mu Gloves: Artists,” accessed April 26, 2019, https://mimugloves.com/#section_7.

tremolo, distortion, etc. Since it has only one knob and two buttons for controlling effects, it is more suited for use as a foot pedal to switch on and off pre-coded harmonies or effects and to create loops rather than for live modulation of effects and parameters. Using it for live modulation leads to a lot of menu-diving and these menus make it impossible to modulate multiple effects at once. The infinity glove attempts to address these shortcomings and to make the modulation of parameters more instinctual, intuitive and connected to the physicality of the performance. A left hand glove was chosen because of the assumption that the right would probably be controlling other musical instruments and/or holding a microphone; it also sets up the performer to reference motions that many pop singers do already (think Mariah Carey or Christina Aguilera).



Figure 3.3 : Boss VE-20 vocal effects pedal

The voice is an instrument unlike any other: it is not external but instead located inside of our bodies; we all have one (some of us use it mostly for speech, some for singing as well) and each of ours has a unique sound and timbre. There is a strong cultural link between a person's voice and their identity; the idea of someone's "voice" as an artist or writer is a ubiquitous metaphor to refer to their unique self-presentation in any medium. And when our physical voice doesn't sound how we imagine ourselves to be, it is potentially shocking,

dissociating or upsetting. It's an issue that's of particular significance to people who don't conform to the gender binary. For example, a drag queen might accentuate his/her deep voice for comedic effect, or a trans woman's deep voice could be an unwanted giveaway in a dangerous situation; either way there is a tension between an expected "feminine" voice and an embodied "masculine" one. But just as plastic surgery has allowed non-binary people and others to transform their bodies and leave behind their originally assigned identities in search of manifesting a new, desired physical manifestation of identity, so can vocal processing technology enable us to create new sonic selves. This is where the infinity glove becomes a literal feminist cyborg project and a xenofeminist reclamation of technology: it expands the realm of vocal expression, which is so culturally gendered, beyond biology's limitations. The human controlling the Infinity Glove comes together with the machine, in this case the circuit attached to the glove and the computer processing its data stream, to produce a new identity. And in allowing for live modulation, the sound controlled by the glove implies a gender expression that is not static but rather plural and unstable; i.e. instead of crossing over from a "male" voice to a "female" one and staying there, the user moves between and around any stable and identifiable category of voice. The use of the glove to control autotune is also an appropriation of a technology that by definition makes a voice conform to certain sounds deemed culturally acceptable (i.e. the notes of a western scale) and that is ubiquitous in pop music, which values "perfect" and "appealing" sounds above all else. Turning the retune speed up all the way makes the autotune audible and gives the voice a robotic, inhuman quality; as an effect, this has become fashionable in pop music on top of its ubiquity as a sort of retouching tool. But by pitching up and down the "gender" (as the Boss VE-20 calls it) or throat length of the processed vocals, Dolly Dirtbag builds off of this typically restraining technology to convey a stranger, more unstable understanding of gender than exists in pop music.

The infinity glove has been effective in elevating Dolly Dirtbag's live performances as well. Because the sensors can be mapped to any parameter, different sets of effects can be created for each piece; these range from more aggressive sounds like grain delay and frequency modulation to more subtle modulations of autotune throat length or chorus. Sonically, this accommodates Dolly Dirtbag's music, which ranges from more experimental, noise-centric pieces to emotional ballads to upbeat, danceable pop. In addition, different sets of effects between songs as well as modulation within songs highlight/accenuate tonal shifts; for example, between verses in the song "Over My Head," which is otherwise a more sincere ballad about

unrequited love, Dolly will often turn on a set of delays whose length is controlled by the accelerometer and use these to accentuate a stilted, fake laugh. These kinds of shifts are important to communicating Dolly Dirtbag as more than just a simple character, but rather as an amalgam of shifting personas.

3.3 Design Elements

The original Infinity Glove's circuit consists of three 2.2" flex sensors, one 0.16" force sensitive resistor (FSR), one accelerometer, an Adafruit Flora microcontroller, an X-Bee wireless module and a 3.7v lithium ion polymer battery for power. The FSR was chosen as a thinner and more flexible alternative to a button, which if it were plastic or metal would be cumbersome. This circuit is embedded in a stretchy pink evening glove, an object that evokes a certain kind of traditional, wealthy, white femininity but also the parody and mimicry of that image by drag queens and Halloween costumes. The three flex sensors can be inserted and removed from custom pockets sewn onto the back of the first three fingers, the FSR similarly has a pocket on the inside of the pinky, and all the other elements are attached with snaps, one side of which was

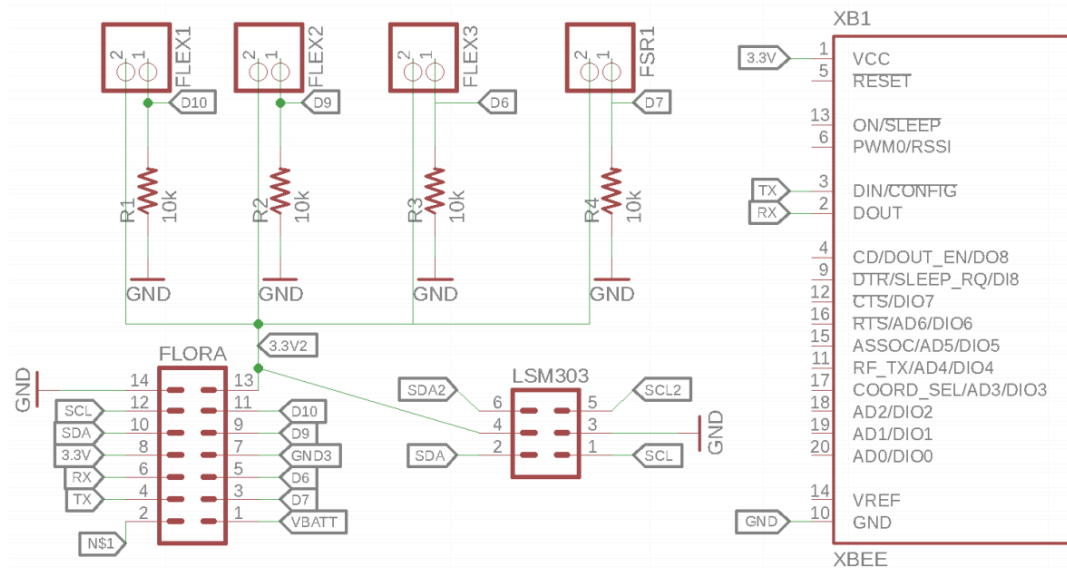


Figure 3.4 : Schematic for first version of Infinity Glove

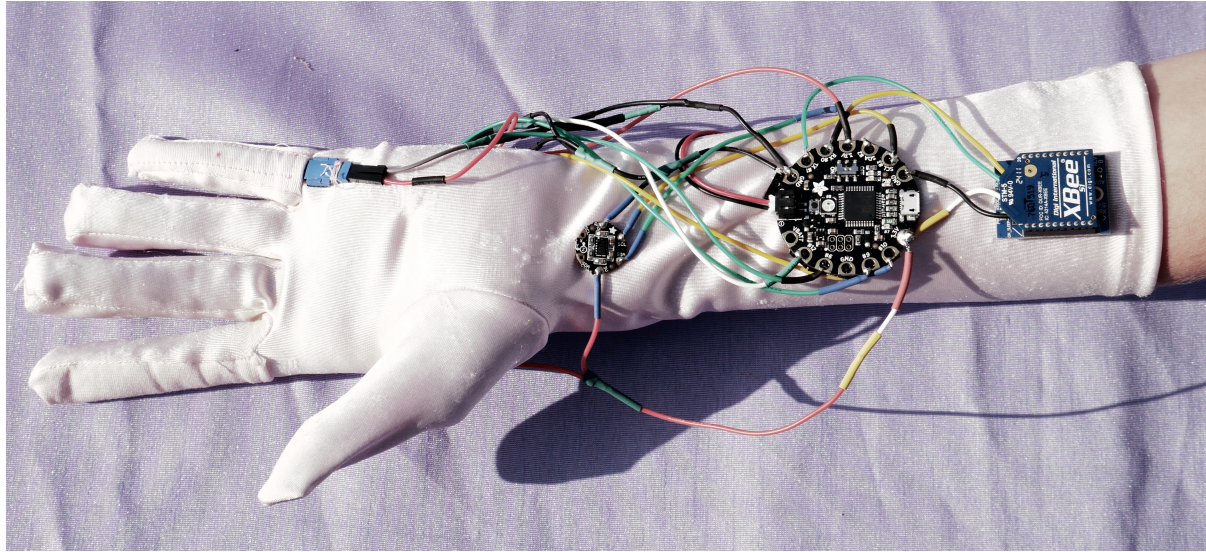


Figure 3.5 : Bottom view of Infinity Glove, version 1

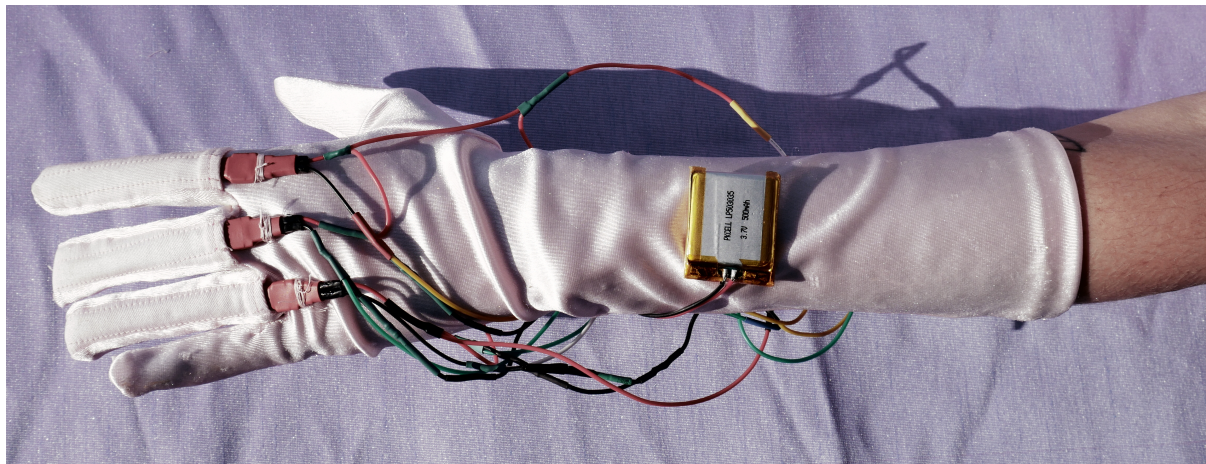


Figure 3.6 : Top view of Infinity Glove, version 2

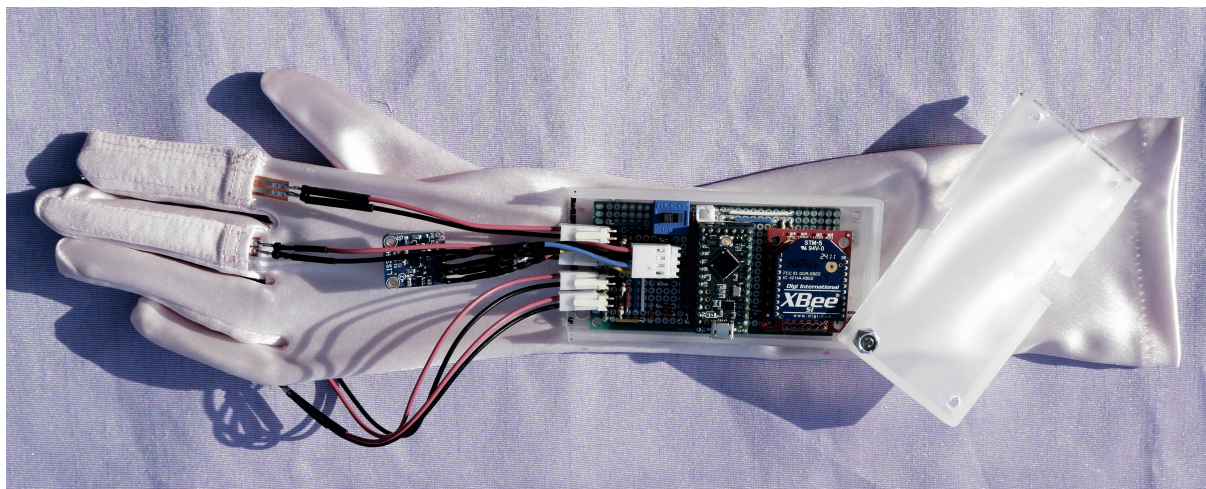


Figure 3.7 : Top view of Infinity Glove, version 2

superglued onto the back of the component and the other sewed down to the glove. In this way, the circuit can be fully detached from the glove if needed for maintenance or testing.

The second version's circuit is only slightly different in that it includes two flex sensors, two FSRs, one accelerometer and a Teensy LC microcontroller, as well as the same X-Bee module and battery. This version however has the circuit mostly embedded in a perfboard which is encased in a small box and then attached to the back of the arm. This box is attached to the glove with the same snap method, as well as elastic straps to hold the box in place.

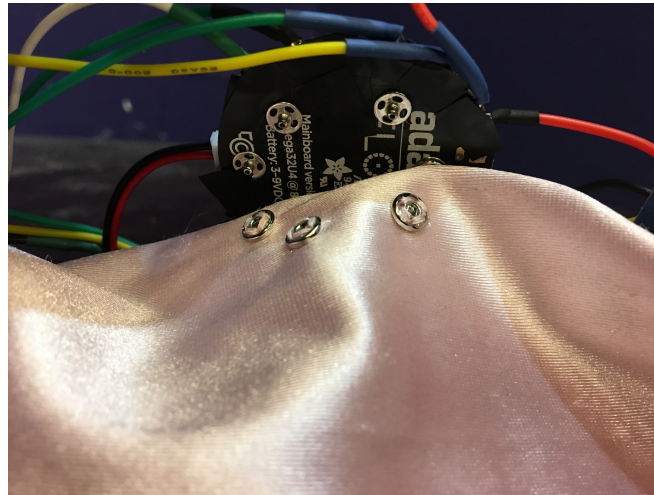


Figure 3.8 : Infinity Glove snap attachments

In both versions, data from the glove's sensors are sent wirelessly via the X-Bee module to a laptop, where a script written in Chuck processes the information, converts it to MIDI format and sends MIDI messages to Ableton (or any other DAW). The sensors then can control any parameter that Ableton makes available for MIDI mapping, though the intended use is for parameters of effects on an audio track through which live vocals are running. The system has to be configured before use; because Ableton's MIDI mapping system works by assigning a MIDI channel to a parameter after one message from a channel, there is a script for each sensor that sends just one MIDI message in order to assign it to a parameter.

3.4 Challenges and Limitations

An early prototype of the Infinity Glove had the circuit embedded in a custom handmade silk glove (unlike the first finished prototype, which used an altered store-bought polyester stretch glove). While this looked good, because it wasn't stretchy it could only fit my hands, which are

on the smaller side and therefore limited its capacity for different users. Also in this early version, the circuit was originally attached to the glove permanently by hand-sewing through the Flora's port holes. Within a few hours, it began to short-circuit because regular polyester thread is semi-conductive and only one thread had been used through all of the holes, connecting power and ground. This contributed to my decision to use snaps in the next version and also led me to cover all exposed connections on the Flora with electrical tape.

A problem that continued to arise with the first Infinity Glove was that connections were often broken if the glove was used too forcefully, which limited its use to certain kinds of movement. It's a difficult calculation to balance using enough wire between a given connection to allow for movement but also not so much that there is constantly excess hanging off, which could get caught on something and snap. Connections to the Flora also become brittle with solder, and some of the ones on the side stick out, which makes them especially vulnerable to breaking. So the circuit was very fragile and in constant need of repair. This is what led to the development of the second version; because the connections are almost all protected by the small box, there is far less danger of them breaking. The flex sensors and FSR are also attached to the circuit via molex connectors so they can be plugged and unplugged, making breakage less likely and repairs less complicated.

Another challenge was encountered with using flex sensors for effects. If they are mapped to an effect only meant to be used for less frequent accents (like a conspicuous throat length change for instance), that means that the user's fingers need to be held completely straight to most reliably maintain a sensor value close to zero (remapping to accommodate this is often inaccurate). This is actually not a natural resting position for fingers and can therefore be a little straining. It can potentially also read to an audience as a sort of stiffness in the performer, which is not always desired, depending on the song. And especially with the middle and ring fingers, it's very difficult to keep one finger completely straight while bending another, so there's a sort of bleed in parameters where if one is being increased, another might be unintentionally.

3.5 Summary

The Infinity Glove is an attempt to build off of earlier wearable wireless controller technology while bringing in a deliberately hyper-feminine aesthetic to articulate and illustrate the possibility of a type of femininity that is high-tech. An image like this is powerful in redirecting an

understanding of technology as being “masculine” and/or objective, scientific and separate from larger social context. The glove’s application to vocal effects suits the shifting nature of the character Dolly Dirtbag, whose voice ranges over a diverse sonic palette as a way of complicating a stable expression of identity and gender. It is both a wearable piece of technology that even if only for the brief period of performance turns the wearer into a literal human-machine hybrid but also contributes to a metaphorical feminist cyborg project in its resistance to stable identity and gender.

Chapter 4 Selfie Scrambler

The Selfie Scrambler is an interactive visual system in which live footage from an iPhone's camera is wirelessly transmitted to a computer, where it is manipulated in TouchDesigner according to data from the iPhone's accelerometer as well as a wireless push-button remote. In Dolly Dirtbag's live musical performances the iPhone is placed in a selfie stick with the screen facing the performer so that she can sing into the camera. This system enhances the performance of a pop song, transforms a technology with sexist associations into a productive tool for a feminist critique and helps communicate the complexity of the Dolly Dirtbag character.

4.1 Inspiration

The Selfie Scrambler was conceived of as a response to the association of selfie culture in the media with young women as well as to the “media-fueled characterization of the gesture as a gratuitous and excessive expression of narcissism.”²⁸ Derek Murray argues that this association functions as a sort of scapegoating that unfairly projects “a range of fears about technology's creeping infectiousness” onto “the young white female.”²⁹ Like the cyborg, like pop music, the selfie and its cultural narrative has emerged as a by-product of patriarchal capitalism and its technological developments (smartphones, tablets, laptops, digital cameras). And in many contexts, its creation enables the perpetuation of sexist ideas; for example, the women who attempt to embody the meticulously groomed, exaggerated femininity of the Kardashians reinforce unreasonable and destructive heteronormative beauty expectations. But at the same time, the selfie also contains feminist possibilities.

For so many years of Western art history, women, especially women embodying whatever was considered most attractive at their time, were the “muses” of the men who portrayed them (painting, drawing, photographing); they were objects being literally shaped by

²⁸ Murray, “Notes to Self: The Visual Culture of Selfies in the Age of Social Media,” 3

²⁹ Ibid., 3

the tastes and decisions of men. But what's different and potentially exciting about the selfie from previous forms of image-making is that its subject is also its author. A woman in a selfie is no longer just posing for a camera, but composing the image as well. There is also a long tradition of self-portraiture in visual art but because of this history, self-portraiture by women and femme-presenting people is especially interesting; it reminds us of what our assumptions about who an artist should be are. And as Murray argues, this is part of what can make the selfie an “aggressive reclaiming of the female body” and “a forum to produce counter-images that resist erasure and misrepresentation.”³⁰ So maybe the practice of selfie-taking can be not a destructive form of narcissism but rather the use of the self as a material for performance and/or art-making.

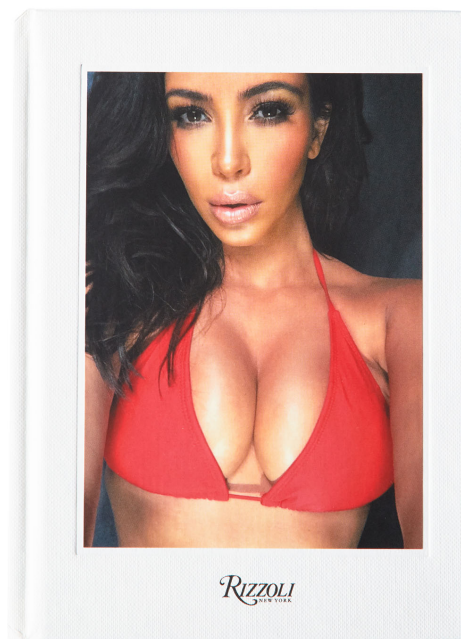


Figure 4.1 : Cover of *Selfish*, Kim Kardashian’s book of selfies

The Selfie Scrambler attempts to reference this collapse of author and feminine subject by performing the creative process that goes into the composition of a selfie. Not only can the audience see what might be the final product onscreen (i.e. the composed image), they can also see Dolly herself primping and posing live. Making this practice more visible and performing both the aspiration of achieving a heteronormative, “attractive” femininity and the failure to do

³⁰ Murray, “Notes to Self: The Visual Culture of Selfies in the Age of Social Media,” 1-2

so calls attention to what is most interesting about the selfie to begin with, which is the feminine figure as both artist and work. Because this device enables the appropriation of selfie creation for an intentional feminist critique it is therefore also a cyborg project in its re-contextualization of a technology with sexist potential for a feminist project.

The performance also helps to communicate Dolly Dirtbag as a character made up of multiple shifting personas by refracting what might have been a coherent presentation of a performer into two connected but disparate selves. For the viewer, there is a sort of tension in not knowing which one to watch or which one is the “real” Dolly Dirtbag. Dolly Dirtbag is both everywhere and nowhere, bouncing around the space. It’s especially effective when used with the song, “Eternity,” in which Dolly sings, “I’m always stuck in this hall of mirrors.” The selfie stick then also emphasizes a plural, hybridized, cyborg understanding of self.

4.2 Review of Relevant Work

Signe Pierce is alternately known as a performance artist, multimedia artist and “reality artist;” her work is in part inspired by reality tv stars like the Kardashians and Real Housewives.³¹ She is best known for “American Reflexxx” (2015), a collaboration with filmmaker Alli Coates in which Pierce roams the streets of Myrtle Beach, South Carolina, dressed as a version of the hypersexual anonymous women in advertisements and porn with a reflective face mask. The film documents the reactions of onlookers, including harassment and eventually even violence.³² A piece of hers that is especially relevant to the Selfie Scrambler is 2016’s “iDentity Bend,” a performance in which Pierce has a conversation with a selfie of hers that has come to life (Figure 4.2). As described by the exhibition, “they engage in a discourse debating the metaphysical paradox that surrounds actual reality and personal perception when split between two forms, the body and the machine. It’s Freaky Friday meets an iPhone—an identity crisis in the iCloud.”³³ The piece speaks to a split cyborg identity, as well as how that identity intersects with an expression of heterosexual female sexuality.

³¹ Madelaine D’Angelo, “Artist Interview with Reality Artist Signe Pierce,” *Huffington Post* (blog), June 27, 2016, https://www.huffpost.com/entry/artist-interview-with-rea_b_10698358.

³² Kati, “The Lush-Noir of Signe Pierce’s Cyber-Feminism”

³³ Kati, “The Lush-Noir of Signe Pierce’s Cyber-Feminism”



Figure 4.2 : Signe Pierce's "iDentity Bend," 2016

4.3 Design Elements

The Selfie Scrambler works via FaceTime, which allows the wireless transfer of footage; the iPhone in use is on a FaceTime call with the computer that will run TouchDesigner. In order to import this footage into TouchDesigner, an application called ScreenCaptureSyphon was used; this allows the user to import footage from any running application. The footage is then processed by a patch that generates effects according to parameters controlled by the performer. A four button wireless keyfob remote control and receiver were used to add on and off controls. The receiver is hooked up to an Arduino, which is programmed to send data from the remote to TouchDesigner via the serial port. One of the visual effects triggered by this remote is also controlled by accelerometer information from the phone; this is transmitted wirelessly using the TouchOSC app, which sends OSC directly to TouchDesigner. This effect warps the image with varying strength according to how tilted the phone is. A second button was used to trigger an



Figure 4.3 : Dolly Dirtbag performing at CalArts, April 9, 2019



Figure 4.4 : Dolly Dirtbag performing at CalArts, April 9, 2019

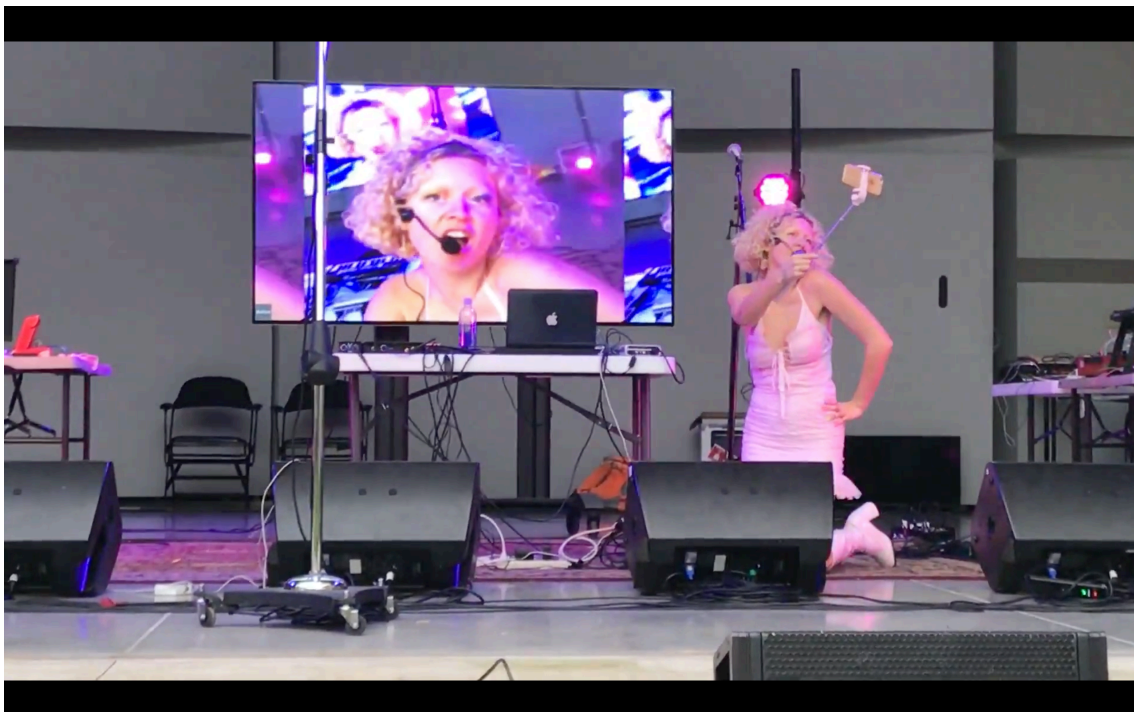


Figure 4.5 : Dolly Dirtbag performing at CalArts, March 23, 2019

effect that layers an image of dancers on top of the iPhone footage and a third was used to freeze frame the image, making it look as if the performer is taking a selfie, the way one might normally use a selfie stick. The fourth button was used to override the video footage and project a still image (usually of the text: “Dolly Dirtbag”); since the system is usually only used for one song in a longer set, a still image is projected behind the performer during the other songs played.

4.4 Challenges and Limitations

Problems were encountered in importing footage into TouchDesigner. Originally a built-in screen capture TouchDesigner object was used, which required FaceTime to always be visible on some part of the screen in order to capture the image. This was inconvenient but still functional on the computer, but made it impossible to use with a projector without mirroring screens, since the projector otherwise couldn’t correctly determine what screen to read from. This was solved by the use of ScreenCaptureSyphon, which doesn’t require the application being screen-captured to be displayed on the screen.

A problem that persists is optimizing lighting during performance, as there needs to be enough light that the iPhone will capture the performer’s image, but not so much light as to wash out the image if it’s projected behind the performer. This means that the system’s success depends heavily on the performance space and its projection options. For example, one performance was done on an outdoor stage during the day at the CalArts Wild Beast concert hall; although it was light out, the images were shown on a large monitor so they were visible from the audience (Figure 4.5). At another performance at the CalArts Roy O. Disney concert hall, a projector was used, but the use of stage lights made it possible to still see the projected image clearly (Figures 4.3 and 4.4).

4.5 Summary

While the Selfie Scrambler does not literally make the user into a cyborg, it does accomplish a more metaphorically cyborg-feminist goal of playing with the subject/author binary and the xenofeminist goal of repurposing an existing technology with a feminist aim. It also helps communicate the plural gender of the Dolly Dirtbag character and re-contextualizes a familiar pop culture image with this new understanding of gender.

Chapter 5 Dolly Dirtbag

The music that Dolly Dirtbag performs comes from the *Slug Dreams* EP, a collection of songs that showcase her many personalities (see Appendix for track listing and link to audio). As a companion to this EP, she has written this text.

* * * * *

HEY—she poses—I'M DIRTY DOLLY—close up—AND I'M JUST ABOUT THE LOW DOWN DIRTIEST DOLL YOU'VE EVER SEEN!

Dirty Dolly: *I'm so so so excited to be here, this is like a dream come true, but I know I want that crown and I'm not gonna let any of the other bitches snatch it from me!!*

The walls of the room dip and dive with geometric patterns, black, white, orange, green blue, sequins. Dirty Dolly seats herself on a fluffy pink couch surrounded by matching lounge chairs. She struggles uncomfortably with her tutu which does not fit well in the seat, trying to keep her crotch hidden but we get a glimpse of her fraying pink cotton underwear anyway.

I am lightless, heavy, placid like the puddle, like a pile of junk in the moonlight and I wait empty, dreading hauling myself around but for now waiting for anything, some vibration in the air to come and evaporate me back to life, back to an airy place, an easy place, a place where there's time to be still. I need something I can finish.

The mist is yellow, soft and fuzzy and at first it's calm but then the droplets start to buzz and bounce and squeeze and shades of pink and blue and green light up and then there is a slick, dark purple hide, porous and sloping, a long thick wet body slowly writhing and leaving behind translucent blackish slime. This is the dirtbag, they are the dirtbag, they descend from the sky without wings softly on their cloud.

“Open your eyes.”

Words move slowly into them and slowly back out and many are lost. An eye opens halfway, a bulging green thing with a black vertical slit pupil, and they look down through the clouds to a still ocean. *There's no one down there*, they think. They half burp and half giggle and go back to sleep.

She was my childhood demon, the doll in the computer game I dressed up in red and called Satan. Or draping myself in scraps, tying them around and singing without caring. I wanted to grow as a different plant into her, enough leaves to hide my lumpy middle. But the warm slime she left on me and everything became thinner and clearer and left a sad puddle on the ground. Flattened, uninterested, I was stranded in a logical world.

The world is a large concrete plain. I don't want to talk well about pain because it's not enough. Only a cartoon could make me feel and when it sings its stupid songs, when it says, "I like you a lot, so I do what you want," I feel like maybe I never needed to be real.

It's so lonely being Dolly, having to be all these Dollies by myself.

In comes Down Home Dolly in a red rhinestone-encrusted, fringed jumpsuit and a large and elaborately curled blonde wig. Her tanned face is caked in foundation but even so betrays wrinkles in the bright stage lights. On a silver chain around her neck is a gaudy heart-shaped diamond, a diamond which is really a dump, a trash can for all our fantasies, which it swallows and shits back out in a million directions. I want to be in it digesting, floating in stomach acid and becoming every dream at once. I want to be everyone at once.

The dirtbag heals me. They come down from the cloud in my dreams and hug me, they breathe me and fill in corners, they open and I feel disappointed when I look in the mirror and my limbs are long and human-size and I wish that I were short and thick with a big head like a doll or a stuffed animal.

"Are you asleep Dolly?" Her eyes are half open.

"Mmmmm..."

"Dolly?"

“No, I don’t think so. I was just thinking...”

“What did you think?”

“Forever. It's been hours seems like days. Since you went away. And all I do is check the screen. To see if you're okay. You don't answer when I phone. Guess you want to be left alone.”

“So I'm sending you my heart, my soul.”

“And this is what I'll say.”

“I'm sorry.”

“Oh so sorry.”

“Can't you give me one more chance.”

“To make it all up to you.”

“E-mail my heart.”

“And say our love will never die.”

Chapter 6

Conclusion

This thesis builds off of Donna Haraway's idea of the cyborg as a useful metaphor for a feminism that tries to confuse and elide binaries, particularly the gender binary, as well as the Laboria Cuboniks' call for the re-engineering of technology with a feminist consciousness. It attempts to re-appropriate tools that come out of patriarchal traditions, especially pop music and digital technology, and utilize them to communicate the character Dolly Dirtbag, who is an amalgam of different kinds of femininity and non-binary gender expressions. This is accomplished by the development of two performance tools, the Infinity Glove and the Selfie Scrambler, as well as the composition of the *Slug Dreams* EP.

These projects are just the beginning of a way to manifest these ideas. Further work could make Dolly's different personas more physically visible onstage or create an interactive home for them on the internet. In addition, the repurposing of technology need not be limited to an exploration of gender. The people behind developing so much of our technology are overwhelmingly white and it would be important and interesting to use technology as a way to speak about racial prejudice and structural racism. So much of the infrastructure around the development of new technology is linked to sites of economic and political power like the military or large corporations. Technology also comes out of a tradition of western science that for hundreds of years sought to use "scientific" methods to prove racist and sexist theories and excluded anyone who was not a white cis, heterosexual man from becoming the powerful knowledge-maker that a scientist is in our society. And as consumer technologies like laptops and smartphones become more ubiquitous and intertwined with every aspect of life, it is more important than ever for these tools to be understood and engineered by people with a

consciousness of their potential both for perpetuating structural oppression and for creating a world without it.

Appendix

Slug Dreams Track Listing:

1. 2 Late
2. Eternity
3. Cure
4. Over My Head
5. Broken Shell
6. All This Time
7. Burn
8. So Wrong

Listen to *Slug Dreams* here:

<http://dollydirtbag.bandcamp.com>

Bibliography

- Breland, Ali. "How White Engineers Built Racist Code – and Why It's Dangerous for Black People." *The Guardian*, December 4, 2017, sec. Technology.
<https://www.theguardian.com/technology/2017/dec/04/racist-facial-recognition-white-coders-black-people-police>.
- Cliff, Amy. "Here's What You Need To Know About Tami T, Berlin's Joyously Candid Pop Provocateur." *The FADER*, June 3, 2016.
<https://www.thefader.com/2016/06/03/tami-t-need-to-know>.
- Cragg, Michael. "Hannah Diamond Is Real." *The FADER*, February 29, 2016.
<https://www.thefader.com/2016/02/29/hannah-diamond-interview>.
- "Cyborg | Definition of Cyborg in English by Oxford Dictionaries." Oxford Dictionaries | English. Accessed February 2, 2019.
<https://en.oxforddictionaries.com/definition/cyborg>.
- D'Angelo, Madelaine. "Artist Interview with Reality Artist Signe Pierce." *Huffington Post* (blog), June 27, 2016. https://www.huffpost.com/entry/artist-interview-with-rea_b_10698358.
- Goldberg, RoseLee, and RoseLee Goldberg. *Performance Art: From Futurism to the Present*. Rev. & Expanded ed. World of Art. New York: Thames & Hudson, 2001.
- Golsorkhi-Ainslie, Sohrab. "A G Cook PC Music Exclusive Mix." *Tank Magazine*, 2014.
<https://tankmagazine.com/tank/live-archive-music/radio-tank-mix-a-g-cook/>.
- Hamer, Katy Diamond. "She's Got the Beat: Tami Tamaki." *Eyes Towards the Dove*, January 18, 2016. https://eyes-towards-the-dove.com/2016/01/tami_tamaki/.
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology and Socialist-Feminism in the Late Twentieth Century." In *The Cybercultures Reader*, 291–316. Routledge, 2000.
- Hoby, Hermione. "The Reinventions of Genesis Breyer P-Orridge," June 29, 2016.
<https://www.newyorker.com/culture/culture-desk/the-reinventions-of-genesis-breyer-p-orridge>.

Kati. "The Lush-Noir of Signe Pierce's Cyber-Feminism." *Girls Are Awesome* (blog), August 22, 2016. <https://girlsareawesome.com/lush-noir-signe-pierces-cyber-feminism>.

"Laetitia Sonami." *23 Five* (blog), n.d. <http://www.23five.org/archives/laetitiasonami.html>.

Martin, Clive. "PC Music: Are They Really the Worst Thing Ever to Happen to Dance Music?" *Vice* (blog), September 16, 2014. <https://www.vice.com/sv/article/4wmymj/pc-music-are-they-really-the-worst-thing-to-ever-happen-to-dance-music-clive-martin-017>.

"Mi.Mu Gloves: Artists." Accessed April 26, 2019. https://mimugloves.com/#section_7.

"Mi.Mu Gloves: Story." Accessed April 26, 2019. <https://mimugloves.com/>.

"MoMA | Yoko Ono. Cut Piece. 1964." Accessed April 28, 2019. https://www.moma.org/learn/moma_learning/yoko-ono-cut-piece-1964/.

Murray, Derek Conrad. "Notes to Self: The Visual Culture of Selfies in the Age of Social Media." *Consumption Markets & Culture* 18, no. 6 (November 2, 2015): 490–516. <https://doi.org/10.1080/10253866.2015.1052967>.

Peace, Imagine. "Yoko Ono's CUT PIECE: From Text to Performance and Back Again by Kevin Concannon." *IMAGINE PEACE* (blog). Accessed April 28, 2019. <http://imaginepeace.com/archives/2680>.

Schneider, Rebecca. *The Explicit Body in Performance*. London ; New York: Routledge, 1997.

Schueller, Malini Johar. *Locating Race: Global Sites of Post-Colonial Citizenship*. SUNY Series, Explorations in Postcolonial Citizenship. Albany: SUNY Press, 2009.

Sherburne, Philip. "PC Music's Twisted Electronic Pop: A User's Manual." Pitchfork, September 17, 2014. <https://pitchfork.com/thepitch/485-pc-musics-twisted-electronic-pop-a-users-manual/>.

Snap Judgment. "Genesis, Lady Jaye and the Pandrogyné." Podcast. NPR.org, June 20, 2014. <https://www.npr.org/2014/06/20/323955434/genesis-lady-jaye-and-the-pandrogyné>.

Sonami, Laetitia. "CV." Accessed April 26, 2019. <http://sonami.net/cv/>.

———. "Lady's Glove." Artist's website. Laetitia Sonami, n.d. <http://sonami.net/ladys-glove/>.

"Xenofeminism: A Politics for Alienation." Laboria Cuboniks. Accessed April 27, 2019. www.laboriacuboniks.net.

"Yoko Ono Art, Bio, Ideas." The Art Story. Accessed April 28, 2019. <https://www.theartstory.org/artist-ono-yoko.htm>.

"Yoko Ono Artworks & Famous Art." The Art Story. Accessed April 28, 2019. <https://www.theartstory.org/artist-ono-yoko.htm>.