



DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

Technologies of Transgression and Musical Play in Video Game Cultures

The Harvard community has made this article openly available.
[Please share](#) how this access benefits you. Your story matters.

Citation	Cheng, William. 2012. Technologies of Transgression and Musical Play in Video Game Cultures. Doctoral dissertation, Harvard University.
Accessed	April 17, 2018 3:49:09 PM EDT
Citable Link	http://nrs.harvard.edu/urn-3:HUL.InstRepos:9795485
Terms of Use	This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA

(Article begins on next page)

© 2012 by William Cheng

All rights reserved

Technologies of Transgression and Musical Play in Video Game Cultures

Abstract

Developments in video games over the last few decades have opened up many new kinds of musical experiences that pose substantial challenges to traditional understandings of music and musical agency. Virtual spaces grant us opportunities and freedoms to interact with music in manners that might not be prudent, practical, or even possible in the physical world. Players and creators of games have considerable license to play *with* music – to push the boundaries of music’s signifying and sensational potential within far-reaching narrative, ludic, and social contexts. This dissertation investigates how modern technologies of digital gaming enable and motivate such transgressive modes of musical engagement. Video game players, composers, and designers frequently employ (or otherwise interact with) music, noise, and speech in ways that deliberately or inadvertently violate technical rules, social expectations, cultural conventions, aesthetic norms, and ethical codes. Just as creators of games are constantly surprising gamers with innovative concepts and progressive designs, so gamers often come up with forms of emergent play that creators themselves might not have anticipated or intended. Though gameplay isn’t always explicitly transgressive, I argue here that it can be productively conceptualized as an activity that is largely bound up in *potentialities* for transgression. Play isn’t simply about make-believe, but additionally about *re*-making belief – about redrawing the limits of the imagination through accomplishments of acts previously unimaginable (or believed to have been outright impossible). The particular liberties that can be taken with (and in) games may ultimately teach us some profound things about what (we think) music is (and isn’t), how it works, what it’s good for, and why and to whom these questions should matter in broader social, cultural, and intellectual contexts

Table of Contents

Acknowledgments	v
Introduction: Sound Play	1
Chapter 1: A Tune at the End of the World	27
Chapter 2: Role-Playing towards a Virtual Musical Democracy	80
Chapter 3: Dead Ringers	116
Chapter 4: The Wizard, the Troll, and the Fortress	151
Epilogue	193
Works Cited	203

Acknowledgments

Writing this dissertation has been a fantastic adventure. I'm grateful to my committee of readers: Alexander Rehding, Kay Kaufman Shelemay, and Sindhumathi Revuluri. Alex lent unwavering intellectual, emotional, and moral support. He continues to be a monumental mentor, urging me to push boundaries, to play, to be creative and courageous in all things musicological and beyond. Kay guided me through the last several years with amazing counsel. Our meetings to this day remind me that there are few things as wonderful as a spontaneous interdisciplinary exchange, a fit of laughter, and a cup of good tea. Sindhu steered me through tricky epistemological and professional waters with utmost wisdom and compassion. Her seminar on Music and the Moving Image planted the seeds of this project. To all three: I thank you for believing in me from the beginning.

I've drawn tremendous inspiration from other professors, colleagues, and staff of the Harvard Music Department. Carolyn Abbate, Suzannah Clark, Christopher Hasty, Thomas Kelly, Ingrid Monson, Carol Oja, and Anne Shreffler offered unflinching ears, open minds, and sage advice. Gavin Williams read multiple chapters and gave prodigious critiques. Frank Lehman was a superb gaming partner and a steadfast confidante in worlds both real and virtual. Andrea Bohlman, Corinna Campbell, Matthew Henseler, Katherine Lee, and Hannah Lewis all provided expert feedback on various chapters. Jamie Blasina, Christopher Chowrimootoo, Elizabeth Craft, Louis Epstein, Olivia Lucas, Rowland Moseley, Matthew Mugmon, Luci Mok, Sarah Wright, Michael Uy, and many other peers in the department were inspirational scholars, terrific friends, and reliable dining companions. I'm hugely indebted to the administrative and library staff, especially Eva Kim, Nancy Shafman, and Andrew Wilson, who worked miracles and kept me afloat.

This dissertation would not have become what it is without the encouragement of many others. I owe my beginnings as a musicologist to the mentorship and invigorating seminars of Thomas Grey and Heather Hadlock. Kiri Miller lit the trail ahead in video game music studies and

inspired me to follow through with my own work. Charles Hiroshi Garrett, Daniel Goldmark, Mark Katz, Neil Lerner, and Carol Vernallis have been constant pillars of support. Karen Collins, Kevin Donnelly, Mark Grimshaw, Amy Herzog, Norm Hirschy, Daniel Jütte, Roger Moseley, John Richardson, and Anna Schultz all read portions of this dissertation and shared thoughts that greatly improved my case studies. Byron Adams, Jonathan Bellman, Dale Chapman, Suzanne Cusick, Roger Freitas, Rosemarie Garland-Thomson, William Gibbons, Dana Gooley, Stephen Hinton, Ellie Hisama, Margaret Murata, Emily Richmond Pollock, Judith Peraino, Jesse Rodin, Michael Saler, Aaron Schmidt, Eric Smialek, Flora Willson, and Anna Zayaruznaya have aided this project in diverse ways and served as outstanding interlocutors from whom I've drawn brave new perspectives. My thanks must also go out to all the friendly interviewees who gave me the time of day, particularly Christian, Dalman, Deacon Frost, Fire, Harparella, Porkins, Ross, Skjald, Tirithannon, Tristriam, and Yorugly.

My deep gratitude goes to my late English tutor from childhood, Ms. Sharon Eagles, who lent me the words to write these pages. Avery Brown, Betsy Edasery, Soo-Rae Hong, Albert Keung, Chris Schepici, and Rosalind Wong have given me heart, in times past and recent, when I needed it most. To Peter, Nancy, Da Yi, and my grandparents, thank you for your affection and joy. I dedicate this dissertation to mom and dad – for teaching me the values of work and play, for being my role models, for all their infinite patience and love.

Introduction

Sound Play

There's an enchanting story my parents love sharing with their friends. It's about the first time I picked up a video game controller at the age of four. My dad had just brought home a Nintendo Entertainment System and a game starring an iconic mustachioed plumber. Though at first I was content to sit back and watch my older brother play, it wasn't long before I started clamoring for a turn. To appease me, my dad handed me the system's Player 2 controller, which – unbeknownst to me at the time – had zero functionality when it came to this particular game's single-player mode. In practical terms, I might as well have been holding a potato, but this technicality apparently did not deter me one bit. The way my parents tell it, I spent the whole afternoon mashing happily at the buttons on my controller-pacifier, proudly showing off my virtual skills as the sights and sounds of *Super Mario Bros.* set my body in lively motion.

In reality, my brother was the one who beat the game that day. Then again, games aren't simply about reality. While I no longer have any recollection of this scene from childhood, I imagine today that my four-year-old self probably felt like he was with Mario (or *was* Mario) every step of the way, from the first Goomba to the last castle, from the inaugural fanfare to the final triumphant cadence. The slightly unusual thing about my first encounter with video games – and what has since made it a deathless anecdote at family gatherings – is that it was an experience in make-believe twice removed. In most regards, however, it was a gaming session like any other, one made marvelous and musical by journeys into lands beyond.

Fun with Boundaries

Make-believe: it's the life force of games, a guiding principle of play, and the very crux of how virtual worlds engender potent feelings of wonder, pleasure, and freedom. Although literature,

theater, opera, cinema, and other media have traditionally offered no shortage of portals into fantasy, the distinctly interactive simulations of games have lately conferred new modes of mental and bodily engagement. All forms of media, to be sure, are interactive to the extent that they constitute meaningful products of creation and consumption, but games – by demanding constant and consequential tactile feedback from players – stand apart precisely by blurring conventional boundaries between the roles of creator and consumer.¹ Much of the appeal of video games comes from their ability to translate a player’s input into extravagant sounds and onscreen animations.² This digital medium, as scholars have colorfully remarked, enables players to execute “choreographies of technological wizardry” (Mactavish 2002:46), enact “cyberathletic performances” (Dovey and Kennedy 2006:116), and experience “a joyously exaggerated sense of control, or amplification of input” (Poole 2000:160). Gaming technologies, in sum, really put the *make* in make-believe, affording players a palpable means of reimagining the nature and limits of human agency, identity, and embodied existence.³

Around the same time my dad put a Nintendo controller in my hands, my mom tucked a Yamaha piano under my fingers and started me on weekly piano lessons. Every day, one hour of practice, then one hour of games: for years, that was the deal. Although, growing up, I foremost approached these respective activities as work and reward, I like to think today that, even as a child,

¹ On problematic definitions of interactive media, see Manovich (2002:55-61). Espen Aarseth uses the term “ergodic” to describe literature and artforms for which “nontrivial effort is required to allow the reader to traverse the text” (1997:1). Whereas video games, for example, would fall into the category of ergodic media, a standard book or newspaper would, by contrast, comprise “nonergodic literature, where the effort to traverse the text is trivial, with no extraneous responsibilities placed on the reader except (for example) eye movement and the periodic or arbitrary turning of pages” (ibid.:1-2).

² Karen Collins defines “interactive audio” in video games as “sound events that react to the player’s direct input,” and “adaptive audio” as “sound that reacts to the game states, responding to various in-game parameters such as time-ins, time-outs, player health, enemy health, and so on” (2008:4). Collins groups both types of audio under the broader category of “dynamic audio,” which “reacts both to changes in the gameplay environment, and/or to actions taken by the player” (ibid.).

³ For recent scholarship on fantasy, fancy, fairy tales, and other genres and modalities of imaginative literary engagement, see Zipes (2012), Saler (2012), Smyth (2010), Tatar (2009), and Thomas (2001).

I was already instinctively drawing significant connections between the two. I say this in part because it would make for a pretty cool origin story (the kind that comic book superheroes always seem to have), letting me trace my present-day intellectual proclivities as a video game musicologist to some prodigious fusion of musical and gaming experiences in my youth. Yet the general premise of this vision is perhaps not all that facetious. Many children these days do come of age playing musical instruments as well as video games, learning in both cases how to make magic with feats of manual dexterity. Music-making and gameplay alike involve the apprehension, interpretation, and manipulation of signs within specific constraints and customs. Becoming literate, proficient, and confident in these crafts requires determination and practice. Those who persevere might eventually stand to prevail as virtuosos – and indeed as virtual superheroes – with far greater knowledge and technique than they could have initially imagined.

The performative aspects of musicking and gaming render these activities well suited to public and social engagement.⁴ Collaboration and competition nowadays are as vital to video game cultures as they are to the world of professional musicianship. For every sublimely coordinated performance of a Beethoven symphony at Carnegie Hall, one can find a similarly orchestrated clan of warriors raiding a dragon's lair in an online multiplayer gameworld. And for every professional piano competition, amateur battle of the bands, or episode of *American Idol*, there's a multimillion dollar *Starcraft* tournament featuring professional gamers (a.k.a. *e-athletes*) who train fourteen hours a day all year long. Apart from these realms of dazzling spectacle, of course, music and games also lend themselves to solitary, meditative experiences. Both mediums are said to facilitate flow, trance, and immersion (see Custodero 2012; Becker 2004; Csíkszentmihályi 1990; Rouget 1985). Both further have educational, therapeutic, rehabilitative, and analgesic effects (see Barz and Cohen 2011;

⁴ Christopher Small introduced the experientially inclusionary concept of “musicking” to describe “[t]aking part, in any capacity, in a musical performance, whether by performing, by listening, by rehearsing or practicing, by providing material for performance (what is called composing), or by dancing” (1998:9).

McGonigal 2011; Ceranoglu 2010; Freddolino and Blaschke 2009; Haas and Brandes 2009; Squire 2002). And both possess transportative powers that can usher users out of the material realities of everyday life and into spaces of fantastical (daresay transcendent) existence. These alleged provisions of escapist pleasure have historically placed music and games at the centers of comparable debates about the cultural, intellectual, and moral valence of all things leisurely. Just as musicology in its early stages took some time to attain respectability in institutions of higher education, so studies of video games today continue to face skepticism with regard to the academic legitimacy and seriousness of its designated queries (see Calleja 2010; Harker 2008:337-43; Bogost 2007:vii-viii).

Developments in gaming technologies over the last few decades have opened up many new kinds of musical experiences that pose substantial challenges to traditional understandings of music and musical agency. Virtual spaces grant us opportunities and freedoms to interact with music in manners that might not be prudent, practical, or even possible in the physical world. Players and creators of video games have considerable license to play *with* music – to push the boundaries of music’s signifying and sensational potential within particular narrative, ludic (*of or relating to play*), and social contexts. This dissertation investigates how modern technologies of digital gaming enable and motivate such transgressive forms of musical engagement. Video game players, composers, and designers frequently employ (or otherwise interact with) music, noise, and speech in ways that deliberately or inadvertently violate technical rules, social expectations, cultural conventions, aesthetic norms, and ethical codes. Developers of games are constantly surprising players with innovative concepts and progressive designs. Players in turn often come up with forms of emergent behavior that developers themselves might not have anticipated or intended.⁵ Transgression is, at its

⁵ Game developers and theorists often use the term “emergent gameplay” to describe instances in which “interactions between objects in the game world or the players’ actions result in a second order of consequence that was not planned, or perhaps even predicted, by the game developers, yet the game behaves in a rational and acceptable way” (Sweetser

core, a creative process of differentiation and exploration: incentives for overstepping bounds can range from self-promotion to sheer curiosity about what lies beyond the fence. What sorts of disturbing ironies and moral ramifications come into play when audio designers incorporate jaunty popular tunes into a hyper-violent game (Chapter 1)? How do players of online games uphold and undermine ideals of a peaceful creative democracy in their respective stagings of harmonious and aggravating performances of music (Chapter 2)? To what extent can a horror game seem like it's coming alive – terrifyingly trespassing its status as an inanimate medium – by way of anthropomorphic sound design (Chapter 3)? And how do the disembodied voices of players (when broadcast into communal gamespaces via voice-chat) unleash controversial articulations of subjectivity, sex, and power (Chapter 4)?

Gameplay can be meaningful, of course, without being outrageously deviant or subversive. Kiri Miller's research on digital games has shown that there's ample pleasure and agency in "playing along: working within the constraints of game rules, commercial platforms, and existing repertoires" (2012:226). Yet while play isn't always explicitly transgressive, I argue here that it can be productively conceptualized as an activity that is largely bound up in *potentialities* for transgression. Play isn't simply about make-believe, but additionally about *re*-making belief – about redrawing the limits of the imagination through accomplishments of acts previously unimaginable (or believed to have been outright impossible). Inherent in transgressive play is an element of virtuosity, which, as defined by Dana Gooley (concerning the legendary 19th-century pianist Franz Liszt), is above all an art of crossing "the limit of what seems possible, or what the spectator can imagine [...] [and] insistently mobilizing, destabilizing, and reconstituting borders" (2004:1). Insistence is key: bending or breaking rules is noteworthy only if there are others still following these rules to begin with.

2008:3). On more general terms, the concept of "co-construction" is used by scholars to emphasize "the end-users or consumers of a technology and the often-unappreciated power of users to shape the tools and machines that play such an important role in their everyday lives" (Katz 2012:9).

Should an extraordinary act catch on and become widely imitated, it would cease to be extraordinary.

Entertainment media and the arts commonly depict transgressive behaviors in romantic and glorified light. Mavericks, vigilantes, and star-crossed lovers make ideal subjects for uplifting narratives of daring and overcoming. Regarding modern visual arts, Anthony Julius suggests that “[t]o describe an artwork as ‘transgressive’ is to offer it a compliment. [...] Boundaries are to be deprecated; they resonate with everything that is petrified, stale, encrusted, immobile. Boundary-breaking is to be admired; it resonates with everything that is fluid, fresh, unencumbered, mobile” (2002:19-20). Granted, it’s possible for an act to be so radically transgressive that it ends up coming across as alienating rather than impressive. A chess player who suddenly jumps up and sets fire to the game board during a match is clearly a transgressor (and maybe a danger to society), but isn’t likely to be hailed as a creative (much less virtuosic) chess master per se. It would likewise be transgressive for a performer to eat the wooden hammers of a piano during a recital, but this individual shouldn’t count on being venerated as a conventional concert pianist. Oppositional behaviors within rule-based systems tend to garner greatest admiration when the constraints that are being exceeded remain in view. The most distinguished transgressors in games are usually not those who zip completely out of bounds (and out of sight), but instead those who dance gracefully along the edges of a ludic space – pushing its boundaries and yet continuing to abide visibly *as players* therein.

These boundaries (and so-called magic circles) that surround games are admittedly porous and prone to constant reinscription.⁶ Various meta- and para-games can reside in and extend beyond the graphical perimeters of simulated worlds. Put another way: there’s usually more than one game in play. Some players partake in contests of one-upmanship to see whose recordings of

⁶ Many scholars today are quick to disclaim that the magic circle of gameplay is a permeable and spatially amorphous construct (see Arsenault and Perron 2009; Taylor 2006:151; Salen and Zimmerman 2004:95).

gameplay footage can get the most hits or thumbs-ups on YouTube. Others start flame wars about game-related topics on Internet message boards to flex their rhetorical muscles and satiate their competitive appetites. And strategic trash-talking via voice-chat during matches of online games has become a veritable sport unto itself. All these additional arenas of ludic activity have their own terms of engagement that participants can negotiate to inventive, agonistic, and entertaining ends. Part of playing creatively with(in) games is finding ways to play around, between, and beyond them.

The heading of this dissertation's introduction – *sound play* – encapsulates two of my project's leading claims. First, as a spin on *word play*, the term connotes the clever and imaginative ways in which players interact with music, noise, speech, and other sonic phenomena via gaming technologies. And second, I use the word to emphasize the perceived *soundness* of play, the oft-remarked sense of safety, impunity, and distance that players ostensibly experience in make-believe settings. Players who behave transgressively in games do so based in part on what they (assume they) can get away with. It's common for offenders to trot out excuses like ...*I was just (role)playing!* or ...*it's just a game!* when faced with accusations of foul play. In the real world, one might think twice before rounding up five friends to bombard an occupied auction house with unsynchronized bagpipe music, but I've seen players simulate exactly this sort of performance in an online gameworld (Chapter 2). One likewise cannot expect to be easily pardoned for verbal sexual harassment in face-to-face scenarios, but such offenses (carried out via voice-chat) have become part and parcel of the soundscapes in modern online shooter games (Chapter 4).

Players who act transgressively through sound or speech in online games sometimes try to downplay the severity of their wrongdoings by explaining that it's *only music* or it's *only words*. How bad can music-spamming or verbal abuse really be? Sticks and stones – or so the saying goes. In multiplayer games, traditional infractions such as cheating and hacking are typically met with swift rebuke from other players (or even official sanctions from game administrators), but infringements

of a sonic nature frequently get a free pass. Perhaps this double standard owes to presumptions of sound's relative immateriality and music's kinship with ideals of recreation and leisure. Playing with music in a video game, for some, might seem a little like engaging a diversionary object within an already diversionary medium. Such concession of double frivolity – indeed, make-believe twice removed – makes it all the more expedient for players and designers of games to experiment with audio material in ways that might be impractical, immoral, or objectionable in real-worlds situations. Particular liberties that are taken in gameworlds may ultimately teach us some profound things about what (we think) music is (and isn't), how it works, what it's good for, and why and to whom these questions should matter in broader social, cultural, and intellectual contexts.

If we accept play as an important aspect of music and musical cultures at large, then it follows that the playful medium of video games may provide an effective lens through which to rethink a number of familiar musicological topics. This dissertation is at heart an enterprise in reciprocal critique: it seeks not only to investigate games from musicological perspectives but also to mobilize its conclusions to interrogate in turn the conventions, methods, rubrics, and biases of musicology and related disciplines. Over the course of four case studies, I show how games can prompt us to rethink standard assumptions underlying issues such as aurality, performance, liveness, labor, creativity, authoriality, aesthetic autonomy, noise, violence, minimalism, and artistic authenticity. The sonic phenomena discussed here include diegetic radio music (Chapter 1), simulated musical performances (Chapter 2), noises that straddle the real-virtual divide (Chapter 3), and disembodied voices (Chapter 4). While each case study grapples with its own set of concerns, there are some general questions that resound across multiple chapters. What might role-playing practices in video games reveal about the nature of human agency, performed identities, and relations between real and virtual bodies? How can musical engagements inform the pragmatic and discursive stakes of the real-virtual dichotomy? How do video games incorporate, complement, and

compete with other forms of contemporary audiovisual media? What distinguishes musical transgressions in video games (and in real-world settings) from other types of transgressive behavior? And how can investigating the ludic qualities of this digital medium motivate us to think more deeply about connections between music(ology) and play – about the various ways in which we (as historians, theorists, ethnographers, pedagogues, composers, performers, and fans) play with music in all of its signifying and material forms? The remainder of this introduction will elaborate upon a few key themes before coming full circle with reflections on methodologies, intellectual frameworks, and the values of being musically – and musicologically – playful.

Double Agents

When I played *Super Mario Bros.* as a child with a placebo controller, my maneuvers – no matter how enthusiastic or rigorous – had no direct bearing on the events transpiring on the screen. While my naiveté allowed me to feel like I was in the driver’s seat, I had little agency in terms of digital input. My presence and actions, however, could not have been altogether inconsequential. The mere fact that I was *there* at the time must have encouraged, amused, annoyed, distracted, or otherwise affected my brother and his actual gameplay performance. And though my parents had no controllers at all, they still played significant roles in going along with the fake-controller gag (a game all on its own) and sticking around to be our cheering section. These observations may sound basic, but they usefully point up the notion that agencies of gameplay are not reducible to the pressing of controller buttons. Cultures, communities, and experiences of digital gaming emerge via the collective participation of individuals dispersed across space and time – from the creators who design a game to those who go on to play, critique, and refashion it several years or even decades down the line (see Miller 2012:32-37; Newman 2002).

Jason Stanyek and Benjamin Piekut have observed that general definitions of agency often rest on a “stable and reduced ontological backdrop woven out of theories of resistance,

reinscription, refiguration, and emancipation” (2010:18). And for good reason: daring to be different implies active willfulness. But while gameplay contains precisely this kind of transgressive potential, it is seldom characterized by the straightforward possession of agency or some boundless capacity for action. In the same way that musicians – even (or especially) in the most virtuosic of moments – might feel like they are giving over to, getting lost in, or being swept up by the instrument and performance at hand, so gameplay involves the oscillation between feeling in and out of control, between acting and being acted *upon* by a game’s persuasive barrage of audiovisual stimuli. Working out these tensions is by and large what tends to make gameplay an exceptionally dynamic experience.

Agencies of transgression are highly evident in practices of role-play whereby gamers don fictional guises and reimagine the limits of their physical bodies. A virtual environment, as Ken Hillis puts it, offers “a space of performance, a multipurpose theater-in-the-round for the many components of the self” (1999:164; see also Cogburn and Silcox 2009:1-16; Waggoner 2009:3-47; Miller 2008:265-68). Ordinary people by day, virtual superheroes by night: the thrill lies in variable opportunities for re-embodiment, stylized performance, and explorations of surrogate selves. Yet role-play – whether in a digital gameworld, at a Renaissance fair, or in the bedroom – is never as simple as engraving a new or original identity onto a clean slate. Any act of role-play is necessarily always already checked by a player’s own habits, abilities, and propensities. Gaming experiences allow not for the absolute transcendence of corporeal existence but rather for particular renegotiations of this existence’s boundaries and contingencies.

The player and the avatar, consequently, are therefore like double agents whose co-constructed identities are simultaneously products and productive of play. Agency, to quote Stanyek and Piekut once more, is “never coterminous with a single body; it is not something that a person collects and, in a moment of purposeful clarity, unleashes. [...] [P]ersonhood is not equivalent to a

lone body, but is distributed among and articulated with other entities that are textual, technological, juridical, and affective” (2010:18). Although the very idea of non-human actors continues to be contested among scholars today, it’s hard to deny that avatars in games can occasionally give the impression of being somehow transgressively agentic in their own right (see Miller 2012:42-45; Cogburn and Wilcox 2009:1-15; Gregersen and Grodal 2009:66-7; Bolter and Grusin 1999:78).⁷ These puppets don’t always do what we want or expect. Pressing a single controller button can produce an intricate series of avataric actions and ludic consequences far beyond our direct operations and expectations. One of the pleasures of digital gameplay is that its avatars indeed seem capable (even if only illusively so) of outstripping our command. It is their perceived autonomy that every so often frees us in turn, permitting us to relinquish control and to project our human authority onto unruly objects of spectacle.

Double consciousness – a concept famously espoused by W. E. B. Du Bois (1903) with regard to the psycho-social tensions of African-American cultural experiences – has lately come to inform the theoretical frameworks of various literary and media scholars. As suggested by historian Michael Saler, fantasy literature (since the 19th century) has enabled readers “to exercise a ‘double consciousness’ and to embrace complementarities, to be capable of living simultaneously in multiple worlds without experiencing cognitive dissonance. [...] Imaginary worlds are inhabited through the ironic imagination, a double-minded consciousness [...] [that] permits an emotional immersion in, and rational reflection on, imaginary worlds, yielding a form of modern enchantment that delights without deluding” (2012:13, 30). In similar fashion, video game designers and researchers Katie Salen and Eric Zimmerman observe that digital gameplay entails not a state of total absorption but instead a “double consciousness” through which a player can identify with a virtual character and yet

⁷ In recent decades, proponents of actor-network theory have been particularly keen on fleshing out the potential agencies of non-human actors (see Whittle and Spicer 2008; Latour 2005; Law and Hassard 1999). A similar kind of attention to non-human objects has been proposed by scholars of “thing theory” (see, for example, articles in the Autumn 2001 special issue of the journal *Critical Inquiry*).

remain “fully aware of the character as an artificial construct” (2004:453). They propose this as a way of refuting what they call the “immersive fallacy,” the (mis)conception that, in an ideal gameplay scenario, “the player would identify completely with the [in-game] character, the game’s frame would drop away, and the player would lose him or herself totally within the game character” (ibid.; see also Murray 1997:99 and Wood 2007:116-32).⁸ Slippages between categorical delusion and critical distance manifest more generally in the ways we think and talk about images, poetry, architecture, landscapes, and other sorts of aesthetic and natural phenomena. As W. J. T. Mitchell points out, “people are able to maintain a ‘double consciousness’ toward images, pictures, and representations in a variety of media, vacillating between magical beliefs and skeptical doubts, naïve animism and hardheaded materialism, mystical and critical attitudes” (2005:7). Mitchell goes on to say that although he does not “really *believe* that images want things [...] we cannot ignore that human beings (including myself) insist on talking and behaving as if they *did* believe it” (ibid.:11, emphasis in original).⁹

That there can be playful pleasure in letting go – in unburdening our own agencies onto things and theories – is everywhere visible in musical prose. As noted by Joseph Straus, organicist philosophies have popularized understandings of “a work of music [as] a human body, a living creature with form and motion, and often with blood, organs, limbs, and skin as well” (2011:103; see also Abbate 2004:517 and Solie 1980). Richard Taruskin, however, has remarked on the dangers of writing about music (and particularly of writing music history) with excessive reliance on personification. In his introduction to *The Oxford History of Western Music*, he warns that “attributions of agency unmediated by human action are, in effect, lies – or at the very least, evasions. [...] This

⁸ Scholars have examined immersion in digital contexts with reference to theoretical precedents and analogues such as Mihály Csíkszentmihályi’s ideas of psychological “flow” and “optimal experience” (cf. Perron 2009:137), Richard Wagner’s *Gesamtkunstwerk* (cf. M. Smith 2007:163-69), Samuel Taylor Coleridge’s “willing suspension of disbelief” (cf. Hillis 2009:186), and technologies of stereoscopy since the early nineteenth century (cf. Huhtamo 1995:160-74).

⁹ Regarding animism, fetishism, idolatry, totemism, and vitalism, see Mitchell (2005:145-68) and Pels (1998).

sort of writing gives everybody an alibi. All the active verbs have ideas or inanimate objects as subjects, and all human acts are described in the passive voice. Nobody is seen as *doing* (or deciding) anything” (2005:xxvi-vii, emphasis in original; cf. Taruskin 1995:24). By way of an example, Taruskin states that it is “a fallacy (the so-called ‘pathetic fallacy’) to say [...] that the motet ‘reveled in its polyphonicness.’ Motets cannot revel. Only people revel” (2005:221).¹⁰ Ascribing agency to music, according to Taruskin’s literalist critique, is inadvisable because doing so elides the roles and responsibilities of human agents. Running afoul of the pathetic fallacy, of course, is not always a result of discursive apathy, or worse, intentional attempts at prevarication. Bestowing music with anatomical properties is more often than not simply a way of accentuating its dynamism and its affinity with the human condition.

Organic and animistic metaphors – as semantic exercises in make-believe – are in many ways the heart and soul of humanistic inquiry. They bring the world alive and allow us to make better sense of how its constituent parts resonate with our own minds and bodies. Yet it’s exactly this notion of non-human agency that has provoked social anxieties well beyond those concerning scholarly integrity or rhetorical propriety. A vision of humans losing or willingly giving up their agency to external entities has long been one of the most popular premises of dystopian science fiction. Quite common are tales about the menace of alternate realities, the auto-proliferation of nuclear arms, and sentient computers transgressing against their former human masters. Detractors of video games have commented with similar distress on this medium’s seductive, addictive powers (cf. Zimbardo and Duncan 2012; Cover 2006; Tenner 1996; Postman 1993:112-14). A standard complaint about games is that their simulated worlds are encroaching on (and luring otherwise socially productive citizens away from) the physical world.¹¹ Video games that consume their

¹⁰ The term “pathetic fallacy” was coined by the English art critic John Ruskin (1856:157-72).

¹¹ On the potential dangers of fantastic literature and of media more generally, see Zipes (2009:45-68).

consumers bring about an ironic reversal of agency between humans and machines. At the root of this irony – and the cynicism it arouses – lies one of the most heavily debated constructs in contemporary dialogues about digital technology: the real-virtual binary.

The Great Divide

Laden with complex value judgments, the terms real and virtual connote differences not just in technological engagement but also in experiential authenticity. Media theorists have long sought to affirm virtual environments as lively social settings that are not essentially peripheral or subservient to the real world.¹² Music scholars in recent years have swiftly followed suit. In a collaborative essay that identifies the Internet, email, and digital recordings as new tools of ethnomusicological research, Timothy Cooley, Katherine Meizel, and Nasir Syed voice their shared desire to “[challenge] the polemic binary between ‘virtual’ and ‘real’ in [...] fieldwork [and] to understand technologies of communication as human constructions that are *as real as* any other human cultural production” (2008:92, added emphasis). In an ethnography of an online music-modding scene, René Lysloff similarly declares that “[c]ommunities on the Internet are not ‘virtual,’ they are real – *as real as* the offline communities we belong to as embodied humans” (2003:56, added emphasis). And regarding the schizophrenic virtuosity enabled by music simulation games such as *Guitar Hero* and *Rock Band*, Kiri Miller remarks that players often describe their performative experiences with these games “to feel *as ‘real’ as* the other musical experiences in their lives” (2009:408, added emphasis).¹³ All of these

¹² See Boellstorff (2008:16-24) for a concise discussion of the problematic deployment (and implied spatial demarcations) of terms such as *virtual*, *digital*, *real*, and *actual*. For additional considerations of the real-virtual dichotomy, also see Lehdonvirta (2010), Boellstorff (2010a:126), Bell (2008:2-4), Miller and Slater (2000:7), Hillis (1999:164-99), and Poster (1995:85-86). Instead of using “real” and “real world,” scholars of fantastic literature and media have proposed the adoption of terms such as “non-virtual” (Waggoner 2009:163), “actual world” (Boellstorff 2008:21), and “Primary World” (Tolkien 2007; cf. Saler 2012: 32). Alternatives proposed for “virtual” and “virtual world” include “imaginary world” (Saler 2012:28-30), “Secondary World” (Tolkien 2007; cf. Saler 2012:31), “synthetic worlds” (Castronova 2005:4-9), and “possible worlds” (Punday 2005).

¹³ Extending R. Murray Schafer’s concept of “schizophonia” (1969), Kiri Miller defines “schizophonic performance” as an act that “[combines] the physical gestures of live musical performance with previously recorded sound” (2009:401).

writers admirably use the comparative phrase *as real as* with the aim of de-trivializing virtual technologies and attendant musical practices. One disadvantage of this equalizing rhetoric is that it implicitly reinforces the ontological precedence of the real – a vague concept that signifies anyhow mostly in contradistinction to the equally blurry idea of the virtual. Though frequently wreathed in scare quotes and disclaimers, the real and the virtual ultimately comprise a meaningful dichotomy to users of online technologies and therefore should not be too hastily conflated (much less deconstructed out of existence or altogether expelled from everyday parlance).¹⁴

The urge to valorize the virtual is understandable: it feels good to root for epistemological underdogs. But what this scholarly rescue agenda has been slow to acknowledge is that – as of circa the advent of Web 2.0 – virtuality no longer requires much defense. Few people living in today’s tech-saturated cultures need convincing that digital experiences can be socially, emotionally, and informationally significant. Yes, we continue to hear complaints these days about the superficiality of video games, online relations, and mediated musicalities, but these criticisms increasingly tend to sound like self-defeating propositions. Spilling copious ink on why something doesn’t matter all but confirms the targeted subject as one that’s clearly worthy of attention. While virtual technologies can make us uneasy, this unease doesn’t arise from a belief that virtual engagements are trivial or alienated from the real world. Quite the opposite: virtuality stirs up concerns precisely due to the powerful – even threatening – manners in which it may seem to overtake, intersect with, and trespass upon reality. Such anxiety, in brief, is a response to virtuality becoming not just *as real as* but actually *more real than* the putatively originary real.¹⁵

¹⁴ Reflecting on his fieldwork in the online virtual world of Second Life, Tom Boellstorff observes that “indexicalities, influences, and references” between virtual- and actual-world lives “had cultural force precisely because they were emically understood to move back and forth across the virtual/actual binarism” (2010b:228). He argues that scholars who “claimed that the virtual and actual were being blurred [...] were incorrect” and proposes “surfing” this dichotomy rather than “conflating” it (ibid.).

¹⁵ A now-classic text on reality and hyperreality is Jean Baudrillard’s *Simulacra and Simulation* (1994 [1981]).

Those who seek to dismiss video games sometimes do so by citing the medium's gratuitous violence.¹⁶ Misgivings about ludic violence – namely about how it might encourage mimetic acts of antisocial behavior outside of games – hinge on the assumption that virtual experiences can have potent real-world repercussions. Games would not cause any worry if they were truly regarded as isolated diversions unto themselves. The basic fear – one that journalists and politicians commonly play up in the wake of school shootings and other youth-centered violent incidents – is that the avatars we control in games will remake us in their image by filling us with trigger-happy tendencies (see Cogburn and Silcox 2009:54; Ferguson 2008; Jenkins 2006:187-225).¹⁷ The violent reputation of games is something that patrons of the medium often find themselves simultaneously embracing and trying to disavow. Egregious combat and mayhem make for exciting ludic action, but they also contribute to the stigmatization of games as delinquent, juvenile, and immoral.

Players are not the only ones who have reason to be ambivalent about the pervasive violence in video games. A similar predicament faces scholars who recognize violence as a topic that is meaningful and yet intellectually discomfiting. This kind of conflicted attitude first came to my own attention when I delivered an early draft of this dissertation's final chapter at the 2010 annual conference of the American Musicological Society. In the presentation, I showed recorded video footage from my fieldwork in a violent online multiplayer game. Following my talk, a professor – one with whom I was only casually acquainted at the time – approached me and offered a few kind words. What he said next, however, took me by surprise: he suggested quite emphatically that after finishing my dissertation, I should, for the sake of my own peace of mind, move on to a less

¹⁶ On social anxieties born of violent video games, see Boellstorff (2008:176-78), Jenkins (2006:187-225), and Castronova (2005:64-65, 277-78).

¹⁷ Despite having collectively conducted hundreds of empirical, psychological, and philosophical studies, scholars are still far from reaching any consensus about whether violent video games exert demonstrable (negative) societal effects. See, for starters, Schulzke (2010), Sample (2008), Wonderly (2008), Waddington (2007), Coeckelbergh (2007), Carnagey, Anderson, and Bushman (2007), Galloway (2004), and McCormick (2001).

disturbing topic. Two days after the conference, he clarified his initial remarks in an email, an excerpt of which I've shared below in anonymized form:

Dear William, [...] It is your spirit that I worry about in your pursuing such research. I fear that the constant violence, anger, and prejudice found in these video games will affect you psychologically in ways that you cannot foresee and that may be difficult to shake. One cannot touch pitch without some of it coming off on one's fingers. I fear the desensitization to the act of killing another person, even within such a [gaming] context. [...] Please excuse this avuncular concern if it is unwelcome, but I feel an ethical duty to point out what I see are possible dangers. At the same time, the work is important, so I am in a quandary. Warm regards, --- (email correspondence, 9 November 2010).

Since I didn't doubt that this note was penned with the best of intentions, I naturally took on offense. If anything, the message was a wake-up call, alerting me to just how perturbing violent video games can come across to those who are unaccustomed to the aesthetic and ludic conventions of these virtual arenas. Chapter 1 will soon go on to explore this issue of violence (and its epistemological discontents) in much greater depth.

Just as simulated play in video games (violent and otherwise) can have real-world effects, so the sounds in these games do not remain bound in virtual worlds as such.¹⁸ My case studies here show how different types of game audio can shuttle players between real and virtual registers of aural, visual, and haptic experience. A player who gets deeply immersed in a game might listen to the sounds of its fictional world through the ears of its virtual inhabitants (Chapter 1). Persistent cacophony in games can range from mildly agitating (Chapter 2) to outright terrifying (Chapter 3) depending on whether this noise is perceived as safely contained in or transgressively seeping out of a game space. And the sound of a human player's voice – projected via voice-chat into an online multiplayer game – might be heard as so jarringly real that it ends up compromising the perceived integrity of the virtual world as a whole (Chapter 4). Illustrated across all chapters is the idea that the sounds of video games are no more strictly confinable to virtual worlds than its players are. Game audio could be deemed virtual insofar as it has apparent origins within otherworldly

¹⁸ Various writers have used the terms “virtual music” and “virtual sound” with general reference to any music mediated by computer technologies (see Duckworth 2005; Vanhanen 2003; Cope 2001:3-32; Bianchini and Cipriani 2000).

environments, but this definition quickly unravels if one considers that these sounds – when piped through speakers or headphones – nevertheless manifest as *physical* vibrations in a player’s real-world surroundings.

The materiality of game audio neatly exemplifies the embodied nature of gaming experiences in general. Gameplay is never wholly disembodied; rather, it is re-embodied (via avatars), or better yet – following earlier notions of double agents and double consciousness – multiply embodied. Studying video games requires us to think through the “possibility of being between ‘in there’ and ‘out here’: playing at the interface of virtual and visceral experience” (Miller 2012:8; cf. Taylor 2003). Though virtual worlds can be immersive, they rarely make us take total leave of our senses. Our bodies and agencies don’t vanish but instead become redistributed as we control avatars who condition us in turn. To interrogate the real-virtual divide, in the end, is to acknowledge foremost how all things that purportedly exist in games – whether they be characters, sounds, or violent simulations – are eminently capable of exerting material, psychic, and sensorial effects well beyond the glowing screen.

Methods and Mirrors

The ludic nature of video games offers a promising opportunity to place discourses about the medium in dialogue (and at odds) with the playful dimensions of discourse itself. Practices of interpretation, analysis, ethnography, and writing all contain elements of play (cf. Currie 2009; Gadamer 1999:101-10). At stake for scholars and players alike is the goal of making sense of a game (as an object of study or as an interface), bringing its virtual world to life (via critical representation or physical input), and subsequently demonstrating mastery over the game’s complex signs and rules. Embracing reflexive inquiry – finding ways to bridge method and medium – may yield some intriguing perspectives into the relations, tensions, and points of overlap between scholarly work and play.

This dissertation deploys fieldwork and hermeneutics as its guiding methodologies. These two approaches might appear divergent and even a little oppositional at first blush. Fieldwork calls to mind bustling social engagements and laborious acts of data collection in situ, while hermeneutics conjures an image of the isolated scholar partaking in silent contemplation of some fixed text or music on a page. Or, to play fast and loose with the terms of the great divide: fieldwork presumes to deal with the real (via human interactions and the attainment of empirical data), while hermeneutics revels in the virtual (via flights of the interpretative imagination). A study of video games easily exposes the slipperiness of this methodological distinction because the medium's virtual worlds are so manifestly both *places* and *texts*.¹⁹ Online multiplayer games (cohabited by players *qua* avatars) perhaps most closely resemble traditional fields, but even single-player games can grant a sense of imagined community through simulated ecosystems and lifelike computer-operated characters.²⁰ Anthropologist Tom Boellstorff has pointed out that “[e]thnography has a special role to play in studying virtual worlds because it has *anticipated* them. Virtual before the Internet existed, ethnography has always produced a kind of virtual knowledge. [...] [Bronislaw] Malinowski’s injunction to ‘imagine yourself’ in an unfamiliar place underscores how anthropology has always

¹⁹ Early years of digital game studies were beset by an overdrawn (albeit sometimes productive) opposition between narratological and ludological approaches to game studies. Scholars who subscribed to the former endeavored to understand video games as traditional narratives, while those who adhered to the latter emphasized the need to analyze foremost the medium's rules, formal structures, and interactive dimensions (see Simon 2007; Juul 2005; Frasca 2003; Eskelinen 2001; Aarseth 1997; Murray 1997). Many social theories of play emerged prior to and apart from video games and related digital technologies. Influential scholars of play have included Huizinga (1955), Caillois (1961), and Sutton-Smith (1997). Recent decades have also witnessed a rise in studies of leisure, recreation, and sports (see, for example, articles in the journal *Leisure Studies*, which launched in 1982).

²⁰ As Kiri Miller notes, single-player games provide “shared reception frames [...] bounded territories that engender shared experience [...] [and] separate but parallel performances of particular stories in particular places” (Miller 2007:405). Miller writes elsewhere that “*Grand Theft Auto* is primarily a single-player game, but no one ever plays it alone; each player collaborates with the game designers to turn code into virtual performance, while remaining aware that millions of other players have engaged in the same endeavor” (2012:5). Michael Saler has pointed to a similar social phenomenon regarding 19th-century readers of fantastic literature: “[I]t became possible to inhabit such imaginary worlds communally and persistently as a result of new *public spheres of the imagination* that emerged alongside the New Romance at the turn of the century. Letters pages in fiction magazines became public forums for debates about imaginary characters and worlds, which often elided into discussion about the real world. Similarly, associations, publications, and conventions devoted to imaginary characters and worlds were also sites for the collective discussion of fictions and their relations with the real. [...] These fantastic, cohesive, and virtual worlds [...] provided new social networks, countering the disenchanting effects of isolation and anomie that modernity could engender” (2012:17-18, emphasis in original).

been about avatarizing the self, standing virtually in the shoes (or on the shores) of another culture” (2008:6, emphasis in original; see also Miller 2012:27-28). Scholars can bring hermeneutic analysis to bear on such virtual settings by conceptualizing them as a form of aesthetic media. Because the medium of video games is an unusually interactive one, it calls for interpretations that are extra attentive to textual, expressive, and narrative variations across individual gameplay experiences.

All case studies here proceed from my own hands-on gaming experiences as a way of opening up broader cultural and musicological inquiries. My investigations of single-player games (Chapter 1 and 3) show how creative sound design in these virtual worlds enables meaningful modes of musical and ludic experience. Though I provide general details about the production and reception of these games (occasionally citing the views of players, critics, developers, and composers), my interpretive claims in these chapters are mainly theoretical and philosophical in orientation. By contrast, I examine online multiplayer games (Chapters 2 and 4) with heavy reliance on participant observation and interviews with players. Since my multiplayer ethnographies are concerned above all with interpersonal relations in communal virtual settings, I describe and quote the perspectives of players much more extensively than I do in my single-player studies. And while gameworlds themselves constitute my principal fields of research across all chapters, I routinely look to the alternative communities that players forge outside the graphical bounds of these simulated environments. Perpetually illuminating are the impassioned debates that take place among players (and other members of the gaming industry) on Internet message boards, fanpages, YouTube comment threads, and other sites of social exchange.

Technical apparatus for my research was straightforward. The primary games featured in my case studies were all played on either a backwards-compatible PlayStation 3 (Chapter 3) or a Windows PC (Chapters 1, 2, and 4). I took screen captures and recorded real-time video footage of PlayStation games using my computer and a high-definition capture card. For both single-player and

multiplayer PC games, I used a program called Fraps to do the same. My theoretical tools were a little more eclectic. I built my analytical frameworks around insights and interpretive strategies from across a number of disciplines. Among my most direct points of reference were (ethno)musicological studies in digital media, technoculture, and performance. Likewise valuable has been the relatively small but rapidly growing body of scholarship on video games from historical, sociological, and anthropological perspectives. The dissertation's intellectual outlook skews overall toward postmodernism (as writings on new media tend to do): constructionist theories of gender, sexuality, race, and disability have been especially instructive for my discussions of identity politics, performativity, role-play, and agency. Perhaps the most challenging task throughout my case studies was finding ways to tease out the ethical, cultural, and political stakes of the stubborn binaries that inform modern understandings of video games and related technologies. Real and virtual, disinhibition and restraint, transgression and obedience, utopia and dystopia, player and avatar, human and machine, authenticity and artificiality, transcendence and embodiment, music and noise, live and recorded, sound and silence, speech and muteness – imperfect yet provocative pairings, all begging for third terms and in-betweens.

One specific musicological debate about video games may be worth relating up front. In 2011, the email listserv of the American Musicological Society bore witness to a lengthy exchange about game audio's aesthetic worth, cultural value, pedagogical potential, and relation to Western art music. The thread was initiated by a writer complaining about how the Arts section of *The New York Times* (19 October 2011) had allotted far more space to a review of a high-profile video game (854 words with a large photo) than to the coverage of an opera performance (374 words with a much smaller photo). Calling the newspaper's priorities "sad/distressing/pathetic," this individual bemoaned the rising prominence of video games and the dwindling popularity of classical music. He concluded by quipping (sarcastically) that "[p]erhaps our leading universities should consider

closing down their music departments and replacing them with Depts. of Graphic Novels and Video Gaming.”²¹ This post set off twenty-six responses that followed a compelling – if predictable – trajectory. Defenders of video games arrived promptly on the scene: some came armed with examples of what they deemed worthwhile game music, while others (appealing implicitly to the authority of classical music traditions) pointed out that game repertoire is commonly performed these days in live symphony orchestra concerts. Skeptics countered with concerns about how excessive engagements with games eat up time that could otherwise be dedicated to classical music appreciation and other forms of artistic and scholarly pursuits. “I know several individuals,” wrote one discussant, “who have spent on the order of 1000 hours playing *Guitar Hero* over the last several years, whereas had they spent the same amount of time learning to play the actual guitar they would now be quite proficient [read: on the ‘actual guitar’].” As one might expect, it didn’t take long for the conversation to take a dark turn toward topics of violence and the ethics of gameplay. One scholar asserted that violent games pose no more of a moral or psychological risk than the displays of violence we consume via opera, Greek drama, and film. In contesting this claim, a respondent declared that “danger comes with violence that does not come with a moral/religious/human/psychological/etc. context, that is mindless, repetitive, banal. In other words, violence that is found in most video games.” After about twenty posts on this thread, the individual who instigated the debate chimed in again by remarking that “cultural activities are often a zero-sum game [...]. Hours that young men (and it is predominantly young men) use to play video games are not hours in which they are engaged in other cultural activities such as reading. [...] I can’t see that playing games is, even now, a defensible part of becoming an educated scholar.” The disgruntled attitudes of this writer (and some other discussants in this exchange) seemed grounded principally in anxieties about how games matter *too* much – about how, in short, the virtual is

²¹ To view this full thread, see the archives at AMS-L@listserv.indiana.edu.

overtaking the real. The entire thread, after all, grew out of an alarmist observation of how the *Times*, in a zero-sum game of print-media real-estate, had apportioned excessive space to a video game article that visibly impinged on the resulting size of a neighboring opera review.

Arguments about the aesthetic, social, and intellectual merits of video games won't cease as long as defenders believe they have something to prove and detractors feel like they have something to lose. Over the last few years, I've come across scholars who have directly expressed to me – with varying levels of insistence – their reservations about the very viability of video games as a subject of musicological inquiry. From what I've been able to tell, this disapproval owed in most part to narrow conceptions of video games as little more than a frivolous medium of diversionary pleasure. What has consistently struck me as peculiar about such skepticism is the aforementioned notion that music – not least in the popular imagination – carries likewise diversionary connotations. Many of us who are (ethno)musicologists can attest to having encountered comparable reactions when we've told the person sitting next to us on a plane what exactly it is that we do. The courteous yet puzzled nods that greet us are no doubt a response to the *-ology*, the intellectualizing suffix that makes a scholarly deal out of something that is typically conceived as an object of (mere) pleasure and leisure. Case in point: no matter how we try to frame our research in terms of more familiar sister disciplines – by introducing ourselves, for example, as historians, sociologists, or anthropologists of music – our interlocutor's first follow-up question is still almost always about what instruments we *play*.²²

Perceptions of music as primarily played – as a performed act with recreational valence – are, in the

²² Debates about the merits of game music make up only a small part of ongoing cultural disputes about the aesthetic value of video games more generally. In 2010, film critic Roger Ebert's proclamation that "video games can never be art" ignited a firestorm of indignant responses from gaming enthusiasts (see Ebert 2010). The following year, the game industry celebrated a symbolic victory when the Supreme Court overturned a prior ban on violent games by reasoning that "[v]ideo games qualify for First Amendment Protection [...] [l]ike protected books, plays, and movies" (Kuchera 2011). Enthusiasts of game music achieved similar validation earlier that year when composer Christopher Tin's theme song for the strategy game *Civilization IV* received a Grammy Award (the first video game composition ever to do so). Between March and September 2012, the Smithsonian American Art Museum hosted an exhibition called *The Art of Video Games* that aimed to "[show] the development of visual effects and aesthetics since the 1970s, the emergence of games as a means for storytelling, the influence of world events and popular culture on game development, and the impact games can have on society" (Smithsonian 2012).

end, likely to persist regardless of the broader contexts and deeper meanings that our scholarly work purports to demonstrate.

Given that video games have had a somewhat bumpy road toward respectability in academia more generally, perhaps the supreme irony is that gamers and academics both occasionally get accused, in very similar terms, of being removed from reality. Just as residents of Second Life are commonly asked why they spend so much time in a fantasy world when they could be living in the real world, so scholars (especially humanists) sometimes come up against questions of why they would devote so much effort to discoursing about a topic when they could *really* be doing something about it (cf. Hepokoski 2012:225-26; Aarseth 2002). Is it possible that the wary stance of certain academics toward video games stems from self-conscious anxieties about being perceived as even more estranged from reality than they are already thought to be? What do we stand to gain or to lose by clinging to exclusionary views of musicology and of other disciplines? And what can we learn from charges against the hermetic and privileged nature of (scholarly) play? 8-bit castle, ivory tower: they stand on common ground – and it's important to knock on both their doors.



Presented in this dissertation is not a master narrative of music and video games but instead select accounts of meaningful musical experiences that the ludic medium has made possible. While the games featured in my case studies have all been influential, critically lauded, and commercially successful, they remain but a few samples within a massively prolific gaming industry. I chose four particular games – all released between 1999 and 2008 – for their potential to provoke broad musical, aesthetic, social, and philosophical considerations. The chapters here are organized thematically: each one problematizes a particular sonic phenomenon (music, live performance, noise, and voice) as well as a specific kind of agency (aural agency, performative agency, the loss of agency, and the agency of vocal expression). Successive case studies build on and unsettle the claims of

previous ones, progressively weaving hermeneutic strands to bear on transgressive musical engagements in different virtual worlds.

Chapter 1 begins with a look at a post-apocalyptic single-player game called *Fallout 3*. Set two and half centuries into the future, this game lets players tune to fictional radio stations that broadcast pre-set programs of 18th - to 20th-century real-world classical and popular music. The generally upbeat tunes provide a sense of companionship in the otherwise bleak wasteland, but there's something transgressive and ironic about how this looping music gets juxtaposed against the graphic acts of brutality that players have to witness and commit in the game. Some of the dissertation's most far-reaching themes are introduced over the course of this opening chapter. Questions of aural agency – of how (and whether) players listen to this (or any) game's endlessly recycled music – are set against broader issues of aesthetic autonomy, the ethics and habits of play, and the impact of violence and mechanical reproduction on the ontologies, epistemologies, and disciplinary contingencies of music as we know it.

Chapter 2 turns to matters of performative agency by moving from the single-player dystopia of *Fallout 3* to a bustling online gameworld that various players extol as a musical utopia. *The Lord of the Rings Online* is a multiplayer role-playing game with a music system that allows players to perform tunes with their avatars in the virtual world. One aspect of this system gives players the ability to download existing music files and to execute corresponding tunes in the gameworld with minimal manual input. This enables even players with no formal musical training to role-play as virtual virtuosos. Debates between players have ensued: some have praised the music system as a means to a glorious musical democracy, while others have deplored its equalizing effects and its obfuscation of so-called *real* musical skill and talent. These controversies have been exacerbated by players who – instead of performing music in a recreational and amicable manner – transgressively

deploy music as a tool of harassment, playing noisily *over* one another's music and deliberately causing a scene.

Discussions of aural and performative agencies in the first two chapters come to a head in Chapter 3's examination of survival-horror, a video game genre that derives much of its entertainment value from the way it *undermines* the player's sense of ludic agency. Making a player feel helpless – via, say, unreliable controls, labyrinthine environments, or a defenseless protagonist – is something that, in most games, would likely be denounced as a product of sloppy design. Survival-horror games, however, transgressively exploit and justify these imperfections because, as the argument goes, they make things *scarier*. My case study centers on a game called *Silent Hill* and how its industrial sounds strike fear in players. The stimulating yet oppressive effects of the game's horrific noises and overall design point up manifold tensions between pleasure and terror, between power and powerlessness, and between violating a game's rules and feeling violated *by* the game itself.

Whereas the first three chapters all focus on pre-recorded audio in games, Chapter 4 considers the human voices that players can project via microphones into the communal spaces of online multiplayer gameworlds. These spontaneous voices are by nature transgressive because they are in no way restricted by a game's technical programming. With voice-chat, players can say just about anything – and make any sound – they wish. But while this functionality offers a useful means of hands-free communication, some players have lamented how live human voices in virtual worlds sometimes carry *too* much information about the identities and bodies of otherwise anonymous, disembodied companions. In this concluding ethnography, I investigate players' own unruly voicings of agency, presence, and authority in an online shooter called *Team Fortress 2*. By probing the sexual politics of voice and subjectivity, I contemplate in particular how players negotiate ludic practices of domination, passing, and masquerade through (and between) acts of speech and silence.

Chapter 1

A Tune at the End of the World

The push of a button – that’s all it took. Hundreds of nuclear warheads soared silently across the night sky before descending upon the world in a thunderous rain of fire. No one remembers how many missiles each side launched. Then again, numbers stopped mattering the second the first bomb hit the ground. There was no sense in the conflict, no sense to the death, no sense that could be made amid this blinding and deafening ruin. Many died instantly; others, slowly, bitterly. And then there were the luckier ones – a few thousand here and there – who found refuge in giant underground bunkers known as Vaults. After returning to the land above, granted, these survivors found none of the life or logic they once knew. The war lasted mere hours, but its fallout, it appeared, would be forever. One special Vault, for reasons unknown, has since remained closed. All those who entered were never supposed to leave. It was here, so says Father, you were born.



Thus begins your life in a world that has already come to an end. Raised in the confines of Vault 101 – and mingling daily with other sheltered youths who likewise know little of the apocalypse that has befallen the land above – you spend your childhood under the supervision of the bunker’s vigilant adults. Mother died upon giving birth to you, but Father has since remained at your side as a constant and loving guardian. As you come of age, he teaches you good manners, some street smarts, and – with a practice BB gun – solid marksmanship skills. You also become adept at operating the personalized biometric radio device that gets affixed to your arm on your tenth birthday. Classes, exams, and ample festive occasions keep you busy and happy for nineteen years. And so for nineteen years, it’s a nice life.

One night, everything changes.

You're awakened from a deep slumber by your best friend Amata, who, in a frantic whisper, tells you that your father has gone missing and that there are Vault guards everywhere looking to hunt you down. Disbelieving and dazed, you stumble out of your bedroom into a hallway filled with the din of sirens and shouts. With a mix of sheer luck and some stealthy maneuvers, you slip past all the guards unnoticed – ducking in and out of the corridors you've long since memorized – before coming to an unfamiliar tunnel. At the end of this passageway stands a gigantic circular door. A pulsing red button nearby beckons your finger. You oblige: the steel door rolls noisily to one side, exposing a narrow shaft leading steeply upward. With a few more steps, you burst into a world you've never known.

First, the light, bright like an exploding star – and with it, an impossible silence. Impossible because, as your eyes adjust slowly to the brilliant high noon sun, it's a soundlessness unlike anything you've heard before, one that's thick and true, free of the electric hums and cavernous echoes that permeated every corner of the Vault. Scanning the foreign land, you see nothing but rock, junk, and waste stretching into a horizon where smog-filled sky meets scraggy cliffs. For the first time in your life, it seems, you're completely alone (see Figure 1.1).

But this feeling swiftly fades. Moments after stepping into the wasteland, you're alerted by your personal radio – strapped ever firmly to your arm – that it has picked up a signal from a broadcasting station called the Enclave. Curious yet apprehensive, you pull up the radio's interface and tune to this newly acquired frequency. Almost instantly, a reassuring voice starts piping from the device. "You're listening to Enclave Radio," a man announces. "I'm John Henry Eden, President of the Enclave. President of America. President of your heart." A short pause...and then some music begins to play.

Maybe you're not alone after all.



Figure 1.1. Opening gameplay moments in *Fallout 3* (clockwise from upper-left): the player *qua* character (1) being born, (2) at tenth birthday party, (3) escaping the Vault, and (4) acquiring the signal for Enclave Radio upon reaching the wasteland surface. Screen captures by author.

Radio Wars

Music and monuments lie in equal ruin across the post-apocalyptic landscape of the single-player RPG (role-playing game) *Fallout 3*. Published by the American company Bethesda Softworks in October 2008 for Windows PC, PlayStation 3, and Xbox 360, this game debuted to high critical praise and grossed over \$300 million dollars in its first week (see Fahey 2008). As the third official game of a bestselling series, *Fallout 3* is set in the year 2277, exactly two centuries after the Great Sino-American War of 2077 reduced the world to a nuclear wasteland of drought, pestilence, and extremist politics (see Figure 1.2). The game's virtual realm is staggering in its size and complexity, offering the player tremendous freedom to explore dozens of discrete locations in and around a war-

ravaged Washington, D.C.²³ Populating the world are hundreds of computer-controlled NPCs (non-player characters) who walk, talk, and emote in lifelike fashion. Professional voice actors recorded an estimated 40,000 lines of dialogue for these virtual characters (see Hicks 2008).²⁴

The player assumes the role of a former Vault-dweller in search of a missing father (voiced by Hollywood actor Liam Neeson), other survivors, and what meager vestiges of civilization remain.²⁵ The answers that this protagonist seeks eventually surface as part of a far-reaching conspiracy involving treason, genetic experimentation, and genocide. Racial tensions run high between humans who are *pure* (constituted largely by government and military officials) and those who have been tainted by the toxins of atomic fallout. The American president's agenda – which the player can attempt either to carry out or to thwart – is concerned with unleashing a virus capable of targeting and purging all irradiated survivors from the country. Quite unmistakable in this game's counterfactual dystopia are its references to real-world totalitarian legacies, the Holocaust, and ideologies of ethnic cleansing.

Prolific game composer Inon Zur crafted an unintrusive and sparsely textured musical soundtrack for *Fallout 3*. While Zur's ambient score has garnered several award nominations from the gaming industry, what has really claimed the attention of players and critics is the eclectic music that plays diegetically via three in-game radio stations (see Table 1.1).

²³ According to the lore of the *Fallout* series, the gameworld's counterfactual history diverged from the real-world timeline shortly after the end of World War II. The exact year of divergence is difficult to ascertain and remains a point of lively debate among fans of the franchise.

²⁴ Other games in this series include *Fallout* (1997), *Fallout 2* (1998), *Fallout Tactics: Brotherhood of Steel* (2001), and *Fallout: New Vegas* (2010). Bethesda released five expansion packs for *Fallout 3*: *Operation: Anchorage* (January 2009), *The Pitt* (March 2009), *Broken Steel* (May 2009), *Point Lookout* (June 2009), and *Mothership Zeta* (August 2009).

²⁵ Like many modern open-world RPGs, *Fallout 3* allows players to customize various aspects of the protagonist's identity and appearance (e.g., name, sex, race, and facial features).

Table 1.1. Programming of three main radio stations in *Fallout 3*.

Enclave Radio – Patriotic American songs, John Henry Eden’s presidential speeches (reminiscent of Franklin D. Roosevelt’s fireside chats), and other forms of exceptionalist propaganda
Galaxy News Radio – American big band music from the mid-20 th century
Agatha’s Station – Original improvisations and solo violin repertoire from the 18 th and 19 th centuries

The game’s protagonist comes equipped with an arm-mounted radio that the player can manually tune to any of these stations (see Figure 1.3).²⁶ Programming can also be heard through all sorts of visible broadcasting devices found in local pubs, shops, and NPC residences. And every so often, the player will come across transmitters called Eyebots, aerial machines that roam the wasteland spewing the Enclave’s American nationalist hymns and xenophobic gospel (see Figure 1.4).²⁷ Such assorted radio devices offer noisy relief from the silence and solitude of the barren land. Music and voices from these magic boxes reinforce a sense of imagined community by granting the simple promise – or illusion – that somewhere, someone *else* is listening to the same thing (cf. Greene and Porcello 2005:247-57; Douglas 2004:3; Lacey 1996:109).

²⁶ There are a few additional radio signals in *Fallout 3* that have smaller broadcast radii and feature minimal (mostly non-musical) content. These signals include the Recon Craft Theta Beacon (5000m radius), the Chinese Radio Beacon (3000m radius), and the People’s Republic of America Radio (16,000m radius). At the beginning of the game, the player can also listen to music on the Vault 101 radio station, which loops three instrumental swing tracks that add up to about eight minutes of material.

²⁷ In the game’s options menu, players can adjust the respective volume of the radio music, soundtrack, sound effects, and voiced dialogue. On default settings, the diegetic tunes on the radio easily cover up the quieter ambient soundtrack.



Figure 1.2. Ruins of the United States Capitol Building in *Fallout 3*. Screen capture by author.



Figure 1.3. The player's personal radio interface. Screen capture by author.



Figure 1.4. [Left] An NPC's radio device and [Right] an Enclave Eyebot. Screen captures by author.

This illusion, however, doesn't last long. Most players of *Fallout 3* – after just a few hours of adventuring – will almost inevitably come to the realization that the contents of every radio station are playing on a fixed loop. Altogether, the music and public service announcements on the three main radio stations add up to only a few hours of pre-recorded material. Once a player begins to recognize the redundant nature of the game's radio programs, these airwaves can start to feel like little more than cold comfort. The wasteland's tedious fixation on recycling songs from the past stems, players could well imagine, from the unwillingness (or inability) of the traumatized survivors to create *new* music following global atrocity. The shock of mass nuclear warfare appears to have drained all artistic impulse from the world, with day-to-day survival understandably ranking above any form of creative activity in the hierarchy of basic needs. All that remains are the radio's repetitive tunes, which, like Muzak and its generic kin, approximate an extreme form of soporific wallpaper music – heard-but-not-listened-to audio matter that may function, for better or for worse, as an anesthetic against the turmoil of a post-war climate (cf. Lanza 2004:41-67; Sterne 2003:316-45; Radano 1989:451-53). Any unease players might bear toward music's mechanical reproduction in *Fallout 3* is likely to be compounded by a creeping suspicion that no one else in the gameworld is really listening to this material in the first place. Although a couple of NPCs will casually remark on

the fuzzy signals or repetitive programming of their radios, the vast majority of the game's characters do not ever acknowledge (much less talk about or sing along to) these canned tunes in the slightest.

At the core of this game is the dilemma of music's empty existence at world's end. The Great War of 2077 between China and the United States was so devastating that it not only changed history, but also – by destroying data archives and wiping out a huge portion of the planet's population – uprooted the very institutions of history. Two centuries after the war, most people no longer remember which nation dropped the first bomb, how John Henry Eden ascended to presidency, or the means by which hostile supermutants came to inhabit the earth. The entire wasteland of *Fallout 3* suffers from a crisis of memory wherein history persists only as a web of competing fictions invented for propagandistic ends. Due to such mass amnesia, the few surviving musical recordings that are endlessly iterated on the radio can scarcely be understood to have any historical valence within the game's narrative frame. To the ears of the wasteland's NPCs, these tunes ostensibly evoke only a blurry sense of a distant past. The war's purging of history, in short, has resulted in an incredible setting in which music exists as a veritably ahistorical entity (with a degree of aesthetic autonomy that musicologists and philosophers in our own world have frequently theorized in ideal terms). Players of *Fallout 3*, as a result, must constantly negotiate a double aural consciousness – coming to terms with, on the one hand, their own possible recognition of the game's popular tunes, while acknowledging, on the other hand, the music's utter lack of cultural or historical particularity within the circumscribed fiction of this virtual setting.²⁸

Although diegetic radio music has figured prominently in modern game franchises such as *Grand Theft Auto* and *Bioshock* (see, respectively, Miller 2012:54-82 and Gibbons 2012), one unusual

²⁸ Although *Fallout 3* has sold most widely in the United States, it has also reached international markets, faring especially well in the United Kingdom, continental Europe, Australia, and Japan. The original North American version of *Fallout 3* shipped with five language options: English, Spanish, French, German, and Italian. Subsequent localized versions added other language packs for both text and voice.

aspect of *Fallout 3* is that it allows players not only to toggle between different in-game radio stations but also to regulate, to an extent, the very existence of music in the wasteland.²⁹ If the player decides, for instance, to kill the American president, then the government's Enclave station will be taken offline and its music will be irrevocably wiped from *every* radio device in the gameworld. Should the player fail to replace the faulty communication relay dish atop the Washington Monument, Galaxy News Radio's signal will remain weak and staticky throughout the game. And in the event the player refuses to retrieve a violin for a woman named Agatha Egglebrecht, the signal for Agatha's classical music will never be made available to begin with. Players of *Fallout 3* are hence accorded the power (and moral burden) of shaping the game's political as well as poetic horizons, of determining what music survives and what music passes into extinction.

The poetic gambit of this opening chapter is that it begins at the end – the end of the world – and, in doing so, raises some necessarily big-picture questions that will resurface throughout the dissertation. *Fallout 3* invites players into a wide-open sandbox and gives them the tools to commit all kinds of transgressive virtual deeds. The game's end-times scenario furnishes opportunities to proceed from a sort of acoustemological ground zero – to consider, for starters, how simulations of apocalypse might illuminate various principles surrounding the ethics and habits of play. What can eschatological imaginations teach us about aurality, the ideals of aesthetic autonomy, and the epistemological limits of musical inquiry? How do we (as listeners, musicians, and musicologists) make music matter when faced with issues of violence, trauma, and atrocity? And who cares if we (don't) listen? Offered in this initial case study is an array of philosophical and hermeneutic meditations on the sensational experiences that *Fallout 3* and its music make possible. A key premise here is that the agencies of players in gameworlds are rarely constituted by any straightforward

²⁹ Since the 1980s, various video games have featured licensed music in large part for synergistic marketing purposes (see Collins 2008:111-22). Pre-ordered copies of *Fallout 3* shipped with an audio CD featuring five songs from Galaxy News Radio. A lengthier album, released in 2011 by X5 Music Group, contained twenty-five songs from *Fallout: New Vegas*.

possession of control or capacity for action, but rather tend to be riddled with anxieties of imagined social responsibility, pressures of moral choice, and the nagging suspicion that the authority one possesses in games is really nothing more than a fickle illusion, every bit as fictional as the fictional world itself. The end, it's often said, puts things in perspective, and so it's here we begin.

Speaking of Ends

[Present-day economic and ecological] shifts cannot but shatter the comfortable subjective position of radical intellectuals, best rendered by one of their favorite mental exercises throughout the twentieth century: the urge to “catastrophize” the situation.

– Slavoj Žižek, *Living in the End Times* (2011:403)

Haven't all the differences [*différends*] taken the form of a going-one-better in eschatological eloquence, each newcomer more lucid than the other, more vigilant and more prodigal too, coming to add more to it? [...] And whoever would come to refine, to say the finally final [*le fin du fin*], namely the end of the end [*la fin de la fin*], the end of ends [...] that person would, whether wanting to or not, participate in the concert.

– Jacques Derrida, “On a Newly Arisen Apocalyptic Tone in Philosophy” (1993:145-46)

Before turning to *Fallout 3*, it's worth reflecting on the appeal of apocalypse. Especially since the zero hour of the Holocaust, the spirit of the end times has increasingly seeped into popular culture by way of dystopian literature, blockbuster disaster films, action-packed video games, and other sensationalist products of the entertainment industry. The apocalyptic imagination is an eminently transgressive one: it's concerned with what lies beyond, the frontiers of the impossible, and the wonders of unimaginable and unspeakable (non)existence.³⁰ Social, intellectual, political, and religious fascination with the ends of things, of course, is nothing new. We've heard

³⁰ Scholars across the humanities have invoked ideas of eschatology in studies of destiny, teleology, damnation, transcendence, evolution, revolution, social progress (or its termination), and various aspects of death and dying. Within musicology and ethnomusicology specifically, eschatology has come up in investigations of globalization (Bohlman 2002), worship songs (Ingalls 2011), nostalgia (Rehding 2011), and particular compositions by Hector Berlioz, Gustav Mahler, Alexander Scriabin, and Olivier Messiaen (Sholl 2007; Taruskin 1997:349-59; Roman 1980).

pronouncements about the end of ideology (Bell 1967), the end of philosophy (Heidegger 1977:369), the end of irony (Newman 2008), the end of history (Baudrillard 1994; Fukuyama 1992; Niethammer 1989), the end of *music* history (Morrison 2012), and on countless occasions, the end of the world (Gorenberg 2000; Weber 1999; Baumgartner 1999).³¹ Accompanying this litany of ends are familiar claims about the deaths of things, whether it's God (Nietzsche [1882] 2006), the author (Barthes [1967] 1977), the subject (Heartfield 2002), the liberal class (Hedges 2010), or classical music (see Lebrecht 1997). As for the ubiquity of the *post-* prefix – well, modernism, structuralism, industrialism, colonialism, feminism, and humanism are just a few of its trendy appendages. If to philosophize, as Cicero once said, is to learn to die, then it should come as no surprise that visions of ends have historically kept such a tight grip on humanistic disciplines.

Granted, paranoia about the literal end of the world need harbor no shame in the age of atomic reproduction. Since the Cold War, nothing has embodied the fragility of human existence quite so compactly as the Big Red Button – the sleek icon (extensively satirized in Hollywood cartoons, television sketch comedies, reality shows, and spy films) that reminds us of the frightening ease with which massive reserves of cataclysmic weapons may be triggered with the smallest slip of judgment...or slip of the finger. Today, however, reports of end times are so common that they're always already yesterday's news. Those who exclaim that the sky is falling are liable to be accused of alarmism, gullibility, and fanaticism. What's nonetheless seductive about these announcements is the inherent grandness of their scale, with the extreme improbability of apocalypse weighing ever darkly against the extreme consequences of its actualization. Simply trying to imagine the True End is enough to make one's heart skip a beat, to induce existential angst, and to render insignificant by comparison the affairs of art and daily life. Optimistic narratives may assert that human values and

³¹ In February 2012, Princeton University hosted, in honor of musicologist Richard Taruskin, a conference called "After the End of Music History." For Simon Morrison's description of the conference theme, see <http://etcpanel.princeton.edu/music>.

aesthetic pursuits can spring eternal despite (or even specifically in triumphant response to) the greatest of catastrophes, but these romantic visions of overcoming perhaps say more about our currencies of hope – about what we long to believe – than they do about any absolute reality per se.

Modern debates about the role and relevance of art in times of crisis have emerged from studies of memory, commemoration, ruins, monumentality, trauma, ecology, ecomusicology, nuclear culture, and above all, the Holocaust. A popular point of reference continues to be Theodor Adorno's proclamation that "to write poetry after Auschwitz is barbaric" ([1949] 1967:34), a statement that, as scholars nowadays are quick to point out, has long been reduced to a censorious soundbite (Kyriakides 2005:442-43; Baer 2000:294; Ezrahi 1996:260; Ziolkowski 1977:135-37). Although Adorno attempted to revise and qualify these words in subsequent writings, his initial remark has gone on to spawn extensive dialogues regarding the ethics of representation and historical narrative in the wake of atrocity.³² To be clear, Adorno at no point insisted that writing poetry after the Holocaust could not be accomplished on a practical level. Many citations of this slogan, however, have tellingly framed it within discourses of the no-longer-possible. While it has become somewhat of an academic (and admittedly snobbish) cliché to lament the widespread deformation of Adorno's original statement, these collective instances of its misquotation are overt testaments to the profound allure of after-ness. There is, no doubt, a good deal of transgressive pretention in the very articulation of anything as already *over*. When we profess something to be at an end – whether it's poetry, the world, feminism, an Internet meme, a viral video, or a sartorial vogue – we simultaneously ascend to the cutting edge and divest ourselves of any accountability for

³² Adorno's presumed stance has circulated over the last half-century as a hyper-compressed two-word motto – *nach Auschwitz* – the English translation of which (*af-ter Ausch-witz*) achieves an ironically poetic tone by virtue of its alliteration and consecutive trochaic feet (cf. Rothberg 1997:47). Equally ironic is the notion that the sloganization of this phrase resulted from the very sorts of atomized listening – or, in this case, atomized reading – against which Adorno so vehemently railed in his criticisms of the culture industry. Adorno himself, granted, was not above sloganeering. Žižek has remarked on the irony of how "more often than his partisans are ready to admit, Adorno gets caught up in his own game, infatuated with his own ability to produce dazzlingly 'effective' paradoxical aphorisms at the expense of theoretical substance" (2011:227).

that which we've retrospectively deemed passé. Sweeping a topic from headlines into history offers instant relief not least of an epistemological nature: headlines call for urgent engagement, whereas history, nicely settled as it is, can ostensibly be learned at one's leisure. Music scholar David Neumeier, in his review of the 2007 volume *Beyond the Soundtrack: Representing Music in Cinema* (edited by Daniel Goldmark, Richard Leppert, and Lawrence Kramer), complained that "[t]he rhetorical gimmick in a title phrase starting with 'Beyond...' [...] is ruthlessly efficient at setting up an opposition that establishes and at the same time denigrates a term understood as unmarked in favor of a marked term preferred by the author or editors. [...] Titles with 'beyond,' in other words, are tendentious and manipulative" (2008:445-46). Or, as stated concisely by feminist literary theorist Lauren Berlant: "Beyonding is a rhetoric people use when they have a desire not to be stuck" (2007:434). *That's so last week*, to put it colloquially, is the unofficial anthem not only of the fad-conscious teens who rule our malls but also of academics everywhere who so loudly trumpet the premium of intellectual originality. Getting ahead of ourselves is a reliable way to get ahead more generally, to seize upon newfangled paradigms before others beat us to the punch.

An obvious way to critique *post*-ness is to peg it as *pre*-mature, as just a symptom of pomp and empty polemics. For though it's cool and transgressive to say that things are over, it can be even cooler to roll one's eyes at such pronouncements and to instruct, in standard dialectical (or contrarian) fashion, that it's not yet time to move on, that we've only just begun. One could cite the backlash that continues to spring up against declarations of post-feminism and post-racialism, but there are also plenty of examples that stand apart from realms of theory and academia. Think back, for instance, to 21 May 2011, the day Christian radio host Harold Camping notoriously predicted the world would start coming to an end. That night, a number of parties were held by atheists and agnostics across the United States to celebrate the affair – parties that were not really taking the predictions seriously (not organized, that is, for saying goodbyes or observing last rites), but were

rather riding the media hype and treating the *non*-event as an ironic opportunity for random revelry (see Tu 2011; Jamison 2011). These social gatherings offered an excuse for fun and games, for laughing collectively in the face of a foretold apocalypse that most people were confident would not come (see Figure 1.5). Taking time to celebrate and joke about fictitious ends can be comforting because it gives us the chance to affirm, impertinently so, that we are not yet *at* the end. It is paradoxically by keeping ends in sight that we learn to live on (cf. Hägglund 2008). Camping's 2011 doomsday theory has been just one of dozens of such predictions in the last century, with the projected Mayan Armageddon having followed closely in 2012 as one of the most globally publicized and facetiously feted occasions in recent memory. Consequently, while noise these days about the End has a hard time sounding new, it still manages to be a source of great entertainment for those looking to toy with it as a thing of apparent fiction.

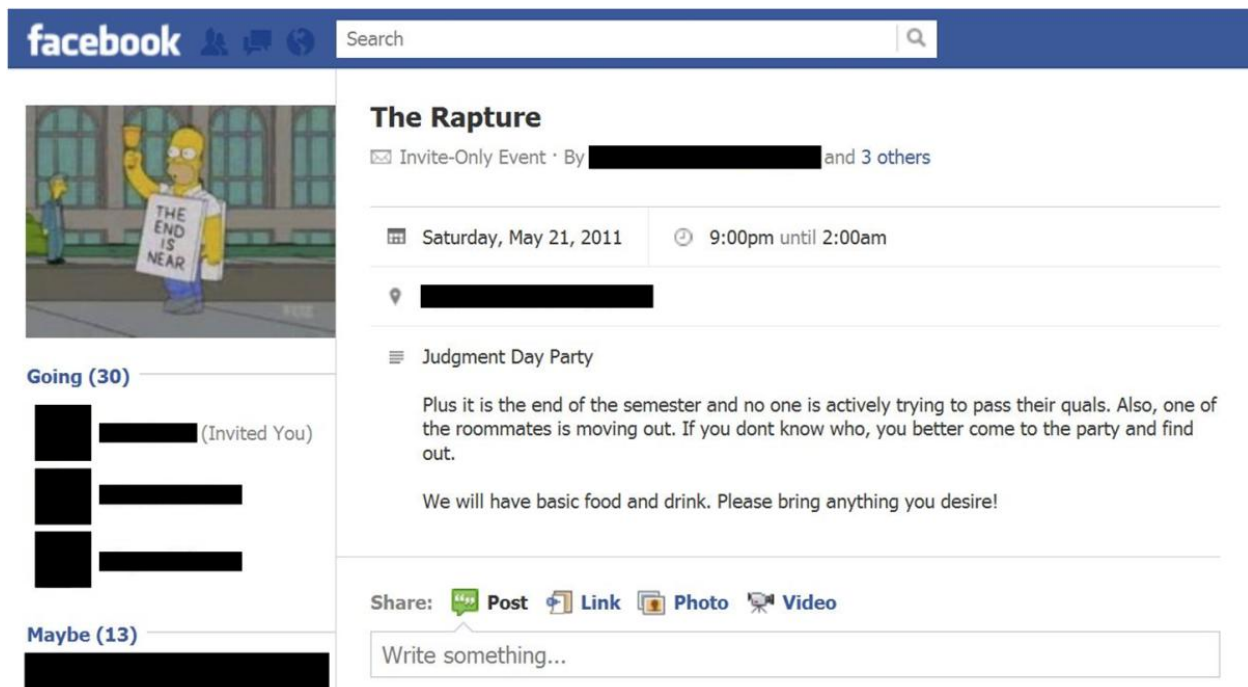


Figure 1.5. A Facebook invitation to a 2011 Rapture party. Screen capture by author.

Apocalypse Amplified

Fast-forwarding through epistemes – insisting on the ends, the deaths, and the post-ness of things – has much of the same appeal as time-travelling into the future. A bold leap into new territory allows theoreticians and sci-fi explorers alike to claim wondrous feelings of daring and adventurousness. Like the DOA Rapture or the Mayan Armageddon, *Fallout 3* affords a safe platform for play by presenting an end-of-days scenario that's evident as make-believe. The game transports the player to a virtual setting – a Washington, D.C. in the distant future – that appears at once foreign in its state of post-apocalyptic distress and yet uncannily familiar via the game's verisimilar rendering of the city's real-world geography. No matter where the player wanders – whether it's around Capitol Hill, the Lincoln Memorial, or other devastated landmarks – the city's ruins stand as brazen mementos of the terrible things that have befallen the world. These sites of simulated wreckage are awesome to behold: as with the time-worn or war-ravaged monuments of our real world, they oddly satisfy what Rose Macaulay calls the “catastrophic imagination of man [...] a profound, passionate, and poetic pleasure in ruin as such” (1953:1). In *Fallout 3*, it takes only a single glance at the dilapidated Washington Monument to sense the portentous weight of an intricate counterfactual history – a history that players know they'll have the pleasure of excavating over the course of a lengthy game. This opportunity for active discovery is one reason why post-apocalypticism has been such a common and effective premise in video game narratives. Mass destruction enforces a hard reset, one that conveniently conjures a blank slate upon which newly devised social, moral, and aesthetic fictions can be freely inscribed.³³

The principles of Adorno's moralizing slogan (...*after Auschwitz*...), it seems, have taken a literal hold in the wasteland of *Fallout 3*. There's very little new poetry or new art to be found. What few traces of aesthetic culture survive now exist indeed only as *traces* – semiotically neutral objects

³³ Examples of other notable post-apocalyptic games include *Wasteland* (1988), *Midwinter* (1989), *Beneath a Steel Sky* (1994), *Chrono Trigger* (1995), *The Legend of Zelda: Majora's Mask* (2000), *Metro 2033* (2010), *Rage* (2011), and *The Last of Us* (2013).

apparently severed from meaningful acts of creation and reception alike.³⁴ Epitomizing this bleak state of affairs is the game's radio music that is mechanically recycled without end, music oblivious to the oblivion of its surroundings, indifferent to the atrocities that have rendered it, at best, irrelevant, and at worst, abominably irreverent. What follows are short descriptions of the musical programming of the game's three main radio stations.

Enclave Radio: The American Way

This generation of Americans has a rendezvous with destiny.

– John Henry Eden (quoting Thomas Jefferson)

Whether blasting from the speakers of roving Eyebots or piping from the protagonist's own radio, the Enclave's bombastic anthems and marches resonate as blatant examples of American nationalist music (see Table 1.2). The station's tunes are punctuated by propagandistic speeches in which President Eden propounds the government's supremacy, reminisces about his childhood dog, and rambles at length about his love of baseball. Inflected with a slight Southern drawl, Eden's monologues occasionally incorporate famous quotes from past American presidents such as George Washington, Abraham Lincoln, and Franklin D. Roosevelt.

When the player finally comes face to face with Eden toward the end of the game, this supreme leader turns out to be a self-aware supercomputer whose persona is an amalgamation of the personalities of all previous American presidents. It is during this critical encounter that Eden fully explains his genocidal agenda. With beguiling rhetoric befitting a dictator, Eden asks the player to contaminate the country's water supply with a virus that is lethal solely to the wasteland's irradiated survivors. A player can either obey and agree to carry out these orders, or – through significant wile and speechcraft – ignore the instructions and persuade Eden to self-destruct. If Eden succumbs to

³⁴ On the concept of the "trace" in musical semiotics, see Nattiez (1990:12-17).

the player’s manipulation, his termination will take down the government’s base of operations, resulting in (among other things) the irreversible deactivation of the Enclave Radio station.

Table 1.2. Musical programming of Enclave Radio.

	Title	Composer / Lyricist	Year of publication
1	<i>America the Beautiful</i>	Samuel A. Ward / Katherine L. Bates	1895
2	<i>Battle Hymn of the Republic</i>	William Steffe / Julia Howe	c. 1856
3	<i>Dixie</i>	Daniel Decatur Emmett	c. 1859
4	<i>Hail, Columbia</i>	Philip Phile / Joseph Hopkinson	1789
5	<i>Marine’s Hymn</i>	Tune from Jacques Offenbach’s <i>Geneviève de Brabant</i> (1867 ed.) / Unknown	1929 (revised version)
6	<i>Stars and Stripes Forever</i>	John Philip Sousa	1897
7	<i>The Washington Post</i>	Sousa	1889
8	<i>Yankee Doodle</i>	Unknown / Richard Shuckburgh (?)	1755 / 1758

Galaxy News Radio: Greatest Hits

Hey, nifty America, it’s me, your president, John Hen- ... haha, gotcha! Three Dog here – how’s everyone doin’?

– DJ Three Dog (mocking and impersonating President Eden)

When the player first emerges from Vault 101, the signal of Galaxy News Radio is weak. The range and quality of this station’s transmissions will improve, however, if the player completes an optional quest to replace a destroyed relay dish atop the Washington Monument. This quest is assigned by Three Dog, the Galaxy News Radio host who, besides keeping the station’s music running, delivers short speeches in which he derides John Henry Eden, espouses anti-government sentiments, and praises (or criticizes) the protagonist’s heroic (or atrocious) actions. These spirited monologues sound spontaneous and plausibly live, but since the player is, in fact, able to hear Three Dog’s voice

while watching this deejay stand around his station (distinctly *not* performing on-air), it can be seen that these speeches are largely pre-recorded.

Galaxy News Radio mostly features love songs from the big band era (see Table 1.3). Lyrics about heartache hearken back to a prelapsarian golden age, to problems that many impoverished, post-war survivors in 2277 probably *wish* they had. The songs are literally about first-world (that is, pre-apocalyptic) problems, channeled through the crooning timbres and staticky whines of ancestors who could hardly have imagined what it would one day be like to live in a world truly on fire. In our real world, of course, these were exactly the sorts of tunes that once made their way onto morale-boosting V-Discs (Victory Discs), which the United States government commissioned from local performers and shipped to overseas American soldiers during the Second World War (see Sears 1980). The popular songs on these patriotic recordings, by evoking the familiar sounds of America, gave the nation's troops concentrated doses of comfort while reminding them that home, in reality, remained achingly far away. For some players of *Fallout 3*, the nostalgic music of Galaxy News Radio is likely to operate on a similar contradictory register, summoning a vague utopian past only to mark it as the stuff of impossible dreams.³⁵

³⁵ While much of Galaxy News Radio's programming comprises songs written and/or performed by black musicians (e.g., Roy Brown, Billie Holiday, and The Ink Spots), matters of race *qua* skin color do not come up at all in the fictional narrative of *Fallout 3*. In the gameworld, racism manifests as – or is sublimated into – conflicts between pure and irradiated survivors. Like other fantasy and sci-fi franchises (e.g., *Star Trek*, *Battlestar Galactica*, and *Harry Potter*), racial discrimination arises not from skin color but rather from fictionalized Others: extraterrestrial species, cyborgs/Cylons, pure-blooded wizards (vs. half-bloods and Muggles), and so forth. In *Fallout 3*, as in these books and television series, there is admittedly something pseudo-utopian about the ethnic diversity of the actors/characters: it is as if they don't even *register* one another's whiteness or blackness, perceiving instead only the particularized traits of Otherness prescribed by the lore.

Agatha's Station: Music Underground

This next piece reminds me of something my husband said: *Friendship is like a violin. Even if the music stops, you'll still have the strings.*

– Agatha Egglebrecht

The fact that so much radio programming in *Fallout 3* consists of popular American songs, marches, and anthems can give players the impression that the hyper-violence in this wasteland is somehow endemic to everyday American society – that the monsters in this world are not fundamental Others, but rather an intrinsic (and even mundane) part of what humanity has become.³⁶ The sole exception to the game's American repertoire can be heard on the classical music station run by an elderly widow named Agatha Egglebrecht. Descended from a family of talented musicians, Agatha lives alone in a shack just north of a deserted train yard. An optional quest in *Fallout 3* begins with Agatha asking the player to retrieve her great-great-grandmother's Soil Stradivarius violin (a famous antique instrument which, in our own universe, came into the possession of virtuoso performer Itzhak Perlman in 1986). Upon tracking down the violin and returning it to Agatha, the player is rewarded with the frequency for her radio station, which plays the woman's own recorded performances of compositions by J. S. Bach, Antonín Dvořák, and Pablo de Sarasate (see Table 1.4). This station can only be heard on the protagonist's portable radio and is not available on any of the other broadcasting devices in the wasteland. Classical music, as such, is at once ghettoized (relegated to the margins of the airwaves) and valorized in this virtual world, offering the player the pleasure of accessing a private signal, of obtaining a music of one's own in a realm otherwise saturated with American tunes. That the underground music in this game hails from the Western art tradition – which, in our own world, is so commonly (and ethnocentrically) glorified for its alleged universal appeal – provides a fittingly ironic reflection of the wasteland's cultural upheavals.

³⁶ Laura Wiebe Taylor (2009:229) offers a similar reading of American popular songs in the horror films of Rob Zombie's *House of 1000 Corpses* (2003) and *The Devil's Rejects* (2005).

This classical station also broadcasts six short recorded violin improvisations by Agatha (see Examples 1.1 and 1.2). These pieces share many stylistic features with one another: free rhythms, cadential double and triple stops, the liberal use of portamenti and tremolos, and a loose adherence to a double-harmonic scalar profile. On the surface, then, Agatha is a diamond in the rough: as an improviser, she looks to be the only person creating new music in this artistically bankrupt world. She will even oblige the player's request for a live performance. The first time she shows off her skills on the violin is a real treat. Although the motions of her fingers and bow do not line up at all with the music being played, the performance nonetheless constitutes, within the game, a unique simulation of live musicality. Her secluded home further serves as a suitably intimate space for demonstrations of this clandestine music (see Figure 1.5). But though players can ask Agatha for as many repeat performances as they wish, doing so quickly kills the charm – for each and every time, she will play the exact same music with the same unsynchronized gestures. It should take only a couple of these identical performances for players to realize the jig is up, for Agatha to out herself as an automaton whose supposedly new, live music is no less mechanical than all the other radio music in the wasteland. In short, the more one asks Agatha to play – the more one asks *of* her – the more she, like any other NPC, inevitably loses her magic luster, baring the gears that turn like clockwork beneath her skin.

Table 1.3. Musical programming of Galaxy News Radio.

	Title	Composer-Lyricist	Performer	Year
	1 <i>Anything Goes</i>	Cole Porter	Porter with Vince Giordano & Nighthawks	1934
	2 <i>A Wonderful Guy</i>	Rodgers & Hammerstein	Tex Beneke	1949
	3 <i>Boogie Man</i>	Sid Phillips	Phillips & band	Unknown
	4 <i>Butcher Pete (Part 1)</i>	Roy Brown & Henry Glover	Roy Brown	1949
	5 <i>Crazy He Calls Me</i>	Bob Russell & Carl Sigman	Billie Holiday	1949
	6 <i>Civilization (Bongo Bongo Bongo)</i>	Bob Hilliard & Carl Sigman	Danny Kaye with The Andrew Sisters	1947
	7 <i>Easy Living</i>	Ralph Rainger & Leo Robin	Billie Holiday	1937
	8 <i>Fox Boogie</i>	Gerhard Trede	Trede & band	Unknown
	9 <i>Happy Times</i>	Silvia Fine	Bob Crosby & The Bobcats	1949
47	10 <i>I Don't Want to Set the World on Fire</i>	Bennie Benjamin, Sol Marcus, Eddie Seiler	The Ink Spots	1941
	11 <i>I'm Tickled Pink</i>	Jack Shaindlin	Unknown	Unknown
	12 <i>Into Each Life Some Rain Must Fall</i>	Doris Fisher & Allan Roberts	Ella Fitzgerald & The Ink Spots	1944
	13 <i>Jazzy Interlude</i>	Billy Munn	Munn & band	1930s
	14 <i>Jolly Days</i>	Gerhard Trede	Trede & band	Unknown
	15 <i>Let's Go Sunning</i>	Jack Shaindlin	Unknown	Unknown
	16 <i>Maybe</i>	Frank Madden & Allen Flynn	The Ink Spots	1935
	17 <i>Mighty, Mighty Man</i>	Roy Brown	Roy Brown	1949
	18 <i>Rhythm For You</i>	Eddy Christiani and Frans Poptie	Eddy Christiani and Frans Poptie	Unknown
	19 <i>Swing Doors</i>	Allan Gray	Unknown	Unknown
	20 <i>Way Back Home</i>	Al Lewis & Tom Waring	Bob Crosby & The Bobcats	1935

Table 1.4. Musical programming of Agatha's Station.

	Title	Composer	Year of composition
1	<i>Partita No. 2, Grave (BWV 1004)</i>	Johann Sebastian Bach	c. 1720
2	<i>Partita No. 3, Prelude (BWV 1006)</i>	Bach	c. 1720
3	<i>Partita No. 3, Gigue</i>	Bach	c. 1720
4	<i>Violin Concerto in A minor, Op. 53 (I)</i>	Antonín Dvořák	1879
5	<i>Zigeunerweisen, Op. 20</i>	Pablo de Sarasate	1878
6	<i>Improvisation I</i>	Agatha / Heather MacArthur (recording artist)	2277 / 2007
7	<i>Improvisation II</i>		
8	<i>Improvisation III</i>		
9	<i>Improvisation IV</i>		
10	<i>Improvisation V</i>		
11	<i>Improvisation VI</i>		



Figure 1.5. Agatha performing one of her violin improvisations. Screen capture by author.



Example 1.1. Agatha's Station: Opening of one of Agatha's violin improvisations, which recalls Sarasate's *Zigeunerweisen* in its key, mode, scalar profile (G A^b B C D E^b F[#] G), and flexible rhythms. Transcription by author.



Example 1.2. Agatha's Station: Solo violin part from opening of Sarasate's *Zigeunerweisen* (1878).



With the exception of Agatha's improvisations, the radio music in *Fallout 3* consists exclusively of tunes composed before 1950. Given that the cataclysmic war in the game's counterfactual lore did

not occur until 2077, one might wonder why, in the year 2277, there's no trace of any music composed *between* 1950 and 2077. The game gives no official answers in this regard, but it's easy to guess some of the general motivations for this design choice. For one, developers of *Fallout 3* probably figured that the hodgepodge of pre-1950s tunes would sound sufficiently and vaguely *old* to 21st-century players of the game (especially those of younger generations). Adding music by more recent composers or songwriters – say, Kanye West or Taylor Swift – would have undermined the sense of aesthetic antiquity that the game's oldies so efficiently convey.

The use of a compilation soundtrack in *Fallout 3* must have further provided certain conveniences in technical production. By supplying a thematic premise (...*after the end of the world*...) for music's ossified state in its virtual world, *Fallout 3* lends narrative plausibility to the restricted nature of its radio programming. The game's designers even programmed a few NPCs to offer explicit rationalizations of the wasteland's limited music. When players encounter Agatha, she explains that all of her station's music is pre-recorded because it would be too tiring for her to play live day and night. "That way," she quips, "you can hear the music anytime you want, and this old woman can get some well-needed beauty sleep!" Three Dog similarly insists that the repetitiveness of Galaxy News Radio's programming owes to the fact that he has only managed to find a few music records in playable condition. These excuses, in the end, permitted the game's developers to circumvent questions regarding the forms that new music would actually assume in the years leading up to 2277. Employing licensed songs from the past relieved the game's audio designers of any responsibility to devise original artworks of the future. According to this conceit, new music fails to surface in *Fallout 3* not solely because it is unimaginable for the gameworld's traumatized inhabitants, but also because *we* likewise are not yet able to imagine what music hundreds of years from now will really sound like.

Whistle While You Wound

*The world has gone mad today
And good's bad today,
And black's white today,
And day's night today,
And that gent today
You gave a cent today
Once had several chateaux. [...]*

*Just think of those shocks you've got,
And those knocks you've got,
And those blues you've got,
From those news you've got,
And those pains you've got,
If any brains you've got,
From those little radios.*

– Cole Porter, “Anything Goes” (1934)

Violence reigns supreme in *Fallout 3*. A good day in the wasteland is any on which one doesn't get torn to bits by a supermutant, a rabid dog, or a feral ghoul. Pacifism is not the most viable of options for survivors: indeed, one of the first things the player learns to do in the game is how to do harm. Besides enabling the kinds of real-time punching, slashing, and shooting common in action-adventure games, *Fallout 3* boasts something called V.A.T.S. (the Vault-Tec Assisted Targeting System), a supplementary combat method that allows the player to pause the game and to aim attacks at specific parts of an enemy's body (see Figure 1.6). Once a player has confirmed the targeted body parts, the assault is automatically carried out in bullet-time (the stylized manner of slow-motion gunplay popularized by the 1999 film *The Matrix*), resulting in gory decapitations, the crippling of limbs, explosions of flesh, and other graphic simulations of injury.

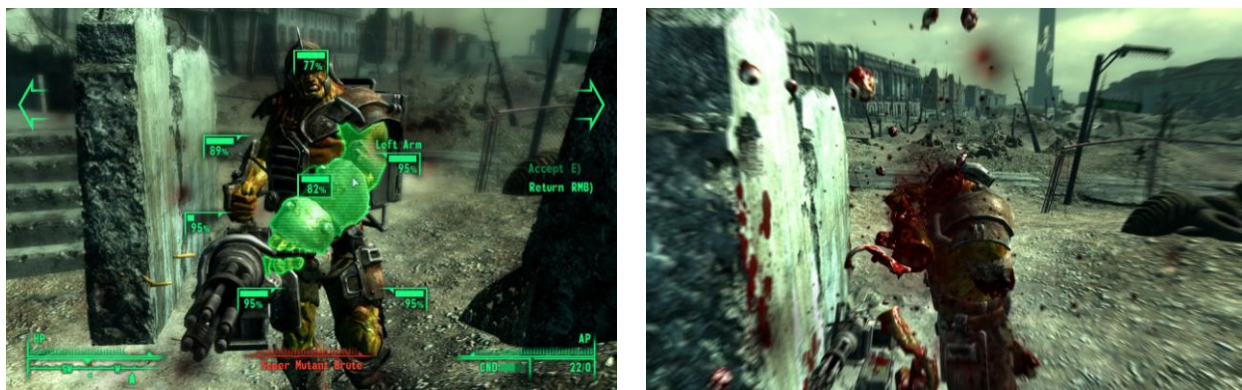


Figure 1.6. [Left] V.A.T.S targeting system and [Right] graphic result of a V.A.T.S headshot. Screen captures by author.

Readily discernible is a certain affective disconnect in the juxtaposition between these frequent acts of virtual hyper-violence and the overall upbeat songs featured on the game's music stations. The protagonist's radio, with its unchanging musical repertoire, is an exemplary anempathetic device, rambling like a robotic chatterbox that possesses none of the spontaneity exhibited by standard live radio broadcasting.³⁷ There can be something grotesquely ironic about blasting and dismembering enemies (or, should players choose, harmless civilians and animals) against the Enclave's majestic strains, the tongue-in-cheek lyrics of big band songs, or a Baroque gigue. Although the game's designers were the ones who preselected these musical tracks, it's up to individual players to decide whether to activate the radio and, by extension, whether to score their destructive activities with its seemingly ill-matching music.³⁸ Many players report that they keep their radios on during the game's violent encounters. Why would they do so? Or, put differently – and to add a moralizing spin – *how* can players stand to listen to jaunty, patriotic, or soothing music while performing these gruesome acts?

³⁷ Film scholars have used the term “anempathetic music” to describe film music that “[exhibits] conspicuous indifference to the situation, by progressing in a steady, undaunted, and ineluctable manner” (Chion 1994:8; see also Tompkins 2010:106-10; Taylor 2009:229-33; Gorbman 1987:159-61). In films, incongruous music can manifest in a number of ways: through a non-diegetic accompaniment that sounds affectively detached from the onscreen action; through a diegetic performance that comes across as likewise inappropriate or subversive (e.g., the famous “Singin’ in the Rain” rape scene in Stanley Kubrick’s 1971 film *A Clockwork Orange*); or through the visible use of music boxes, phonographs, or other mechanical devices that play pre-recorded, dramatically unsuitable tunes (commonly deployed to eerie ends in horror films; see Link 2010:46).

³⁸ Players have devised unofficial *Fallout 3* mods that add songs to the playlists of the game's radio stations. On a blog, a player named Esecell promoted these free downloadable mods as follows: “Personally, one of the things I love most about *Fallout 3* is the radio soundtrack. However, when you're approaching 60 or 80 hours in the game world, it can get aggravating to hear the same patriotic tune or '50s bop for the 100th time. Fortunately, there's a solution (or several)! The GNR — *More Where That Came From* mod adds up to 100 new songs to the Galaxy News Radio lineup. The songs chosen for the song packs fit right in with game atmosphere and are largely from the same artists as the ones featured in the game. The second half of “Butcher Pete” is included! *2xEnclave Radio* does exactly what it sounds like: it adds 8 more American patriotic melodies to the Enclave Radio station” (25 April 2009, <http://blog.knotclan.com/2009/04/25/must-have-fallout-3-mods>). It's notable that most player-made mods for *Fallout 3* extend the radio stations' playlists while remaining faithful to the stations' established musical styles and genres. Instead of adding rock & roll or techno to Galaxy News Radio (which could just as easily be done), most modders select songs that conform to the station's existing mid-century big band repertoire. Although such mods present viable, attractive content, the vast majority of players, especially in initial playthroughs of the game, are unlikely to know about (or to take the time to implement) these patches. For an empirical study of externally substituted music on players' experiences of *Operation: Anchorage* (the first *Fallout 3* expansion), see Wharton and Collins (2011).

Based on the abundant descriptions of gameplay experiences shared on Internet discussion boards, blogs, and reviews, there are a few basic ways in which players generally go about explaining their attitudes toward the game's radio music. For some, turning on the radio is a way of beating the wasteland's lonely, perilous ambience: like whistling in the dark, it shows swagger and sass. Others see the anempathetic tunes as a crafty means of aestheticizing the game's violence, using them to signify in a transgressive fashion reminiscent of disturbing scenes in films such as *Pulp Fiction* (1994), *Good Morning, Vietnam* (1987), and *A Clockwork Orange* (1971). By purposefully mashing together cheerful songs and terrible violence, players get to act the part of artistic, Kubrickian auteur-visionaries.

There are also players who say they locate a sense of pleasure simply in the random manner by which the radio's pre-recorded music can get matched up against dynamic instances of gameplay. It is, after all, only via incidental music-action pairings that the radio's regimented playlists achieve any sort of spontaneity – coincidentally jibing with, clashing against, and commenting on the player's activities in unexpected ways. The lyrics of particular love songs on Galaxy News Radio yield conspicuous double entendres when recontextualized within a post-apocalyptic setting (see Table 1.5).³⁹ A couple weeks prior to the game's release, a player stated that he was looking forward to “[listening] to that ‘Butcher Pete’ song they had in the [preview] gameplay videos. Nothing like baseball-batting Raiders while hearing, ‘He’s hacking and whacking and smacking’” (Copter 400, *Escapist Magazine*, 15 October 2008). In a review of *Fallout 3*, another player declared: “The old school music is very catchy to listen to, and may even sometimes go along with your kills. There’s

³⁹ “The sound of the music was a big factor in which songs were chosen,” *Fallout 3* audio director Mark Lambert noted in an interview, “but perhaps even more important was the lyrical content of those songs; there’s a heavy dose of black humor running through all of them” (GameSpy Staff 2008). These songs’ original artists and audiences, of course, also likely intended and perceived the lyrics to be darkly humorous, laced with direct references to (or oblique commentary on) the sociopolitical strife of the 1940s.

nothing wrong with hearing a soothing oldies song while sniping your enemies from afar” (Shogain, GameFAQs, 5 January 2009).

Table 1.5. Excerpts from lyrics of three songs from Galaxy News Radio.

<p><i>I Don’t Want to Set the World on Fire</i> By Bennie Benjamin, Sol Marcus, Eddie Seiler; recorded by The Ink Spots (1941)</p>	
<p>I don’t want to set the world on fire, I just want to start A flame in your heart.</p>	<p>In my heart I have but one desire, And that one is you, No other will do.</p>
<p><i>Civilization (Bongo Bongo Bongo)</i> By Bob Hilliard & Carl Sigman; recorded by Danny Kaye with The Andrew Sisters (1947)</p>	
<p>Don’t want no jailhouse, shotgun, fish-hooks, golf clubs, I got my spears, So no matter how they coax him, I’ll stay right here.</p>	<p>They have things like the atom bomb, So I think I’ll stay where I am, Civilization, I’ll stay right here!</p>
<p><i>Butcher Pete (Part 1)</i> By Roy Brown & Henry Glover; recorded by Brown (1949)</p>	
<p>Hey everybody, did the news get around About a guy named Butcher Pete? Oh, Pete just flew into this town</p>	<p>And he’s chopping up all the women’s meat. He’s hackin’ and whackin’ and smackin’, He just hacks, whacks, chopping that meat!</p>



Is there in fact, as the above player says, nothing wrong with listening to music (soothing or otherwise) while simulating violence and murder? And is this really a fair or productive question? It may be helpful to consider, by way of a slight detour, that any music, as a matter of *practical* fact, can accompany any image, behavior, or setting. Certain accompaniments, however, can seem inappropriate on a number of ethical, aesthetic, and hermeneutic levels. As with Adorno’s claim about poetry after Auschwitz, the main question here concerns not what is (actually) *possible* but

rather what is (allegedly) *moral*. Scholars, aside from observing stylized instances of anempathetic music in film, have grappled with vexed pairings of music and violence in studies of war, pain, torture, and totalitarianism. Joseph Moreno has recounted how the Nazi doctor Josef Mengele “would often sit whistling his favorite music. His preferences included Mozart, Wagner, Verdi, Puccini, and Johann Strauss. [...] This contradictory behavior of making music while selecting victims for the gas chambers exemplifies the Holocaust’s evocation of many disturbing questions about the meaning of music and its relationship to human feelings” (2006:265; see also Gilbert 2005:176). That Mengele whistled while he worked is unsettling insofar as it conveys a violent subversion of traditional medical as well as musical ethics. Although beauty and peace have no natural monopoly on music’s symbolic currencies, the deliberate association (or random coexistence) of music with horrific acts of injury can drastically sever this artform’s presumed kinship with ideals of edification, recreation, and pleasure (see Gilbert 2005:7-8).⁴⁰

Such rupture becomes even more pronounced when music is used not simply to accompany violence but also to *inflict* it. In her first of several essays on the American government’s employment of music as a device of torture and interrogation, Suzanne Cusick remarked:

I began desultory research on a phenomenon of the current “global war on terror” that particularly wounds me as a musician – wounds me in that part of my sensibility that remains residually invested in the notion that music is beautiful, even transcendent – is a practice whose contemplation would always lead me to contemplation of bodies and pleasures. Not bodies in pain (2006a).

This specific passage fell under swift criticism by Jonathan Bellman, who, on the now-defunct blog *Dial M for Musicology*, declared: “Far be it from me to distance myself from love, pleasure, and transcendence, but can musicologists of all people afford to go on record with an earnest, carefully worded version of Music Should Be Nice? [...] The problem is the torture, not the music” (2007a).

⁴⁰ The terrorist attacks of September 11, 2001 have become, in recent years, a popular point of reference for studies of music and violence (see Fisher and Flota 2011; Ritter and Daughtry 2007). Regarding the debacle surrounding art music composer Karlheinz Stockhausen’s remarks about 9/11, see Tommasini (2001).

A few days later, in a follow-up post, Bellman clarified his stance by adding: “What enraged me is that this comment [by Cusick] is really more about *her* offense: not the torture, but how it offends her and her ‘contemplation of bodies and pleasures.’ [...] I find far more posturing (a very adroit, fashionable, polysyllabic posturing) than argument, and by focusing on music and sound only the author allows herself a very convenient, comfortable, and all too common-and-comfy outsider’s position” (2007b, emphasis in original). Besides leveling against Cusick the typical ivory-tower charges of naivety and narcissism, Bellman voiced a certain disquiet about how she expressed compassion for *music* in addition to – or arguably at the expense of – her sympathies for the *human victims* of musical torture.⁴¹ But while one could call this a case of displaced empathy, moral outrage is obviously not a zero-sum game. The issue at hand is not reducible to whether, as Bellman put it, the problem *is* the torture *or* the music. As noted by Scott Deveaux in a brief response to Bellman’s post: “[M]usic is being used as a new, sneaky form of torture, and it has not been challenged in the same way that, say, waterboarding has been. The AMS [American Musicological Society] is at least taking a professional stance: we know music, and what you’re doing is a form of torture; since America is not supposed to do torture, stop doing it” (2008).⁴² Yet what does it mean to *know* music? When it comes to torture and violence, what do scholars of music really know that others do not? For one, musicologists are discursively well positioned to testify to the material and visceral powers of music – its capacity to harm and to pleasure, to touch and to torture. And lest we forget

⁴¹ W. J. T. Mitchell has likewise remarked on how images elicit our sympathy when they are defaced, cut, burnt, or offended by other material means: “[I]mages are sometimes treated as pseudopersons – not merely as sentient creatures that can feel pain and pleasure but as responsible and responsive social beings. Images of this sort seem to look back at us, to speak to us, even to be capable of suffering harm or of magically transmitting harm when violence is done to them” (2005:127).

⁴² In 2007-2008, three major musicological organizations – the American Musicological Society, the Society for Ethnomusicology, and the Society for American Music – passed individual resolutions opposing the practice of musical torture. As Cusick points out in a later article: “Some critics have dismissed these resolutions as ineffectual vainglory, ‘feel good’ gestures that served only to substitute public sanctimony for real political action” (2008:para.12-13). A lengthy exchange on music, torture, and the musicological academy took place in May 2009 on the AMS listserv, largely in response to a controversial article, titled “Composed in Hypocrisy,” published by Ilias Chrissochoidis in *The Chronicle of Higher Education* (see archives at AMS-L@listserv.indiana.edu).

our intellectual debts, the reason we're so familiar nowadays with notions of music's sensorial potential owes in no small part to the work of scholars *like* Cusick, who, in the early 1990s, forcefully brought questions of gender, sexuality, sensuality, and embodiment into the discipline's collective consciousness. Indeed, having internalized the wisdom of recent work in feminist musicology, sensory ethnomusicology, music in everyday life, music and manipulation, and sound studies at large, many musicologists today – perhaps more instinctively than the average person – would be prepared to rally against the claim that musical torture is, as some government officials say, “no-touch torture” (see Cusick 2006; cf. McCoy 2006:9-10). To argue that musical torment isn't that bad because it's *only sound* is to buy into an insidious logic – the same kind of logic that so pervasively characterized the Bush administration's broader attempts to euphemize certain torture practices as “enhanced interrogation methods” (see McCoy 2006:115).

Why should Bellman have felt the need to articulate such outrage toward Cusick's own expressions of moral outrage? Given our familiarity with feminist musicology's implicit motto that the musical *is* the personal *is* the political (cf. Cusick 2006b), was there really anything so unusual about the reflexive tenor of Cusick's statements? Was there something specific about the subject of musical torture that provoked these scathing accusations of academic grandstanding and hermeticism – accusations which, to be fair, could just as easily be (and has frequently been) directed toward other manners of humanistic inquiry? Debates about music and torture clearly raise moral concerns of great magnitude. At the root of these questions are anxieties about musical ownership and the (in)effectualities of musicological discourse. What's perturbing is our knowledge that we can – and we *do* – inhabit a reality in which the Mengeles and interrogators of the world are every bit as able as anyone else to indulge in the pleasures and practical functions of music.⁴³ If we supposed

⁴³ Music's harmful potential abides in instances of not only its forced reception but also its forced production. Shirli Gilbert has described the terrors of compulsory singing in Nazi concentration camps, in which a “song would be announced, and the men [prisoners] would be required to sing together in precise, military fashion, often for hours at a

that this shared affinity for music were somehow representative of additional commonalities among its users, then we might be compelled to acknowledge the humanity of murderers and torturers, or alternatively, to see righteous individuals themselves as wholly susceptible to monstrous transformation under social pressure. Music, when sounded against (or used to inflict) bodily violence, undergoes ontological violence. It suffers an identity crisis, or more accurately, becomes a canvas upon which we desperately project our own crises of identity, epistemology, and humanity. Not least for musicologists, a phenomenon such as musical torture – with its implications of real bodies, real evils, and real, indefensible pain – raises the stakes hundredfold. The topic reminds us that, for all our critical eloquence, we, as scholars, ultimately have little control over how others choose to use or abuse this thing we so authoritatively circumscribe as music. When faced with the material realities of music’s violent turn, it’s difficult not to be left with the sinking impression that sometimes – and perhaps more often than we’d like to admit – rhetorical posturing is all we have to offer (cf. Scarry 1985:3-11, 60-61).

In recent decades, the subject of music and the Holocaust has emerged as a recurring locus of reference for scholars attempting to work through the aesthetic and ethical quandaries born of atrocity. To quote Moreno once more regarding Josef Mengele’s activities in Nazi concentration camps: “*How* could genuine musical sentiment and mass murder comfortably coexist? *How* could the citizens of the country that gave us Bach, Beethoven, and Brahms not only have been Hitler’s willing executioners, but even used that very same music to aid in the extermination process of millions of Jews and many other victims?” (2006:265, added emphasis). Pamela Potter, in similar fashion, observes that the horrors of the Holocaust left the world with no means of understanding

time. Aside from the physical torment of having to sing after an exhausting day’s labour, often in the cold and without having eaten, many found it difficult to bear the frivolous, upbeat German songs they were forced to sing. [...] The length of the singing sessions depended on the whim of the officer in charge, and the same songs would often have to be sung repeatedly. Inmates were beaten or punished who did not sing along, or whose singing was deemed unsatisfactory” (2005:133).

“*how* a society [Germany] so long respected for its arts, letters, and sciences could be capable of such crimes against humanity” (1996:71, added emphasis). And Holocaust scholar Lawrence Langer inquires: “[G]iven the ‘mere factual truth’ that the same individual is capable of loving Mozart and murdering children without recognizing any contradiction in his personality or being affected by it – given these instances of actual human behavior, *how* is one to respond? *How* is one to interpret? *How* is one to understand a reality that includes such phenomena?” (1975:8-9, added emphasis). The operative syntax in all these disbelieving statements – *how* ... ? – constitutes at once a discursive call-to-arms and a preemptive sigh of epistemological forfeit. Literal responses to these inquiries can only be tautological. The blithe answer to *How could someone do X while also doing Y?* is simple enough: *By doing X and Y.* These queries are principally rhetorical – not in the sense that they are posed with answers at the ready, but rather because they permit no satisfactory answer at all. Each *how* amounts to a how(l) of angst, a broken cry epitomizing the oft-claimed incomprehensibility, unrepresentability, and singularity of the Holocaust writ large (see Kyriakides 2005; Friedlander 1996:2-3; LaCapra 1996:111; Ziolkowski 1977:137).



With all this in mind, it becomes clear that asking *how* players of *Fallout 3* can listen to upbeat music while performing virtual violence is to operate on a similar tautological register. There are, to be sure, obvious things that set anempathetic music in a video game apart from sonic torture, whistling Nazis, and other musical atrocities that occur in the actual world – namely, that while the latter phenomena can *seem* unreal, video games *are* unreal, unfolding in virtual spaces that are demarcated as such. Violence in games should, in most cases, be unmistakable as (mere) simulation. This entertainment medium, moreover, is popularly recognized as one that generically trades on (and hence implicitly authorizes) the aesthetic and ludic pleasures *of* simulated violence. Games, in other words, are understood to be violent for the sake of fun. But while this might sound like

conventional wisdom, it's not necessarily wisdom that's easy to swallow. Every time I've had the occasion to present the contents of this chapter at academic conferences over the last few years, at least a couple of people end up expressing to me (either during the official Q&A or afterwards) anxieties concerning exactly this ability of players to simulate violent acts against an otherwise pleasant backdrop of popular, patriotic, and classical tunes. What some players may claim as instances of canny subversion (with regard to, for example, the double entendres of song lyrics), some lecture attendees were quick to peg as sheer perversion.

An alternate way to understand the troublesome union of music and action in *Fallout 3* is to imagine that its players are *not really listening* to the music at all. Many adventurers, after dozens of hours of gameplay, might very well cease to notice the radio music and its juxtaposition against their own aggressive actions. Failing to attend to the game's looping tunes incidentally renders players rather akin to the wasteland's amnesic NPCs who, for the most part, likewise appear to pay music no heed. If neither players nor the game's AI characters are listening to the songs on the radio as such, then this music effectively winds up as nothing more than a neglected product of mechanical reproduction, a vestigial scrap of history littered amid the wasteland's necropolis of pre-war artifacts, existing autonomously not as some valorized, anti-commercial object of aesthetic contemplation, but instead as an entity that subsists entirely apart from the human realm, drained of meaning and moral substance alike.

Distress about aural inattention has historically spurred criticisms against practices of so-called "distracted," "easy," "reduced," and "atomized" listening (see, respectively, Goodman 2010; Keightley 2008; Schaeffer 1966; Adorno 2002:226). These criticisms, however, betray concerns beyond those pertaining to perceptual diligence. Anxieties about aurality – about whether others are *listening* (to music, to speech, to academic discourse) – are fundamentally anxieties about *expression* (that is, about whether we – as performers, as interlocutors, as musicologists – have anything to *say*

that's sufficiently valuable and capable of commanding attention). Gamers are expedient subjects for working out this issue because they're so commonly portrayed by popular media as empty-headed casualties of the entertainment industry. To inquire further into how music, violence, and aurality can register across the real-virtual divide, there's one particular quest in *Fallout 3* that cannot go unmentioned, as it entails one of the most transgressive deeds a player can commit in the game: the detonation of an atomic bomb.

Remembering Megaton

The push of a button – that's all it's going to take.

One of the first things a player is asked to do in *Fallout 3* is to rig and set off a nuclear warhead in a small populated town. The controversial quest – which, for apparent political reasons, was censored from the localized Japanese version of the game – gives the player the ability to simulate the extermination of an entire human settlement. This task is optional in that players don't need to complete it to advance through the game's main adventure, but those who do follow through with it are rewarded with a handsome sum of virtual money (see Schulzke 2009). The target is a town called Megaton, home to about fifty survivors, a considerable lot by post-war standards.



Figure 1.7. The unexploded nuclear bomb in the middle of Megaton. The device resembles the Fat Man warhead model that was detonated over Nagasaki in World War II. Screen capture by author.

Megaton was named after its most prominent attraction: an unexploded nuclear warhead lying in a pool of radioactive water (see Figure 1.7). Although a religious cult in this settlement worships the bomb like a mystic idol, most residents have grown to ignore it as they go about their daily lives, convinced of its dormant, innocuous state. This town is the first place a player will typically come across after escaping from Vault 101. Shortly after getting inside Megaton's makeshift walls, the player receives many opportunities to assist inhabitants with menial jobs here and there. Between doing some grunt work for a scientist and convincing a bartender to kick his drug habit, it's easy to bond with a number of hospitable characters while earning small change in the process.

Not every face here turns out to be so friendly. In the local saloon, there sits a suspiciously well-dressed gentleman named Mr. Burke. He introduces himself to players as the right-hand man of Alistair Tenpenny, a wealthy 80-year-old recluse who presides over a distant refurbished luxury hotel called Tenpenny Tower. This heavily guarded skyscraper – a monument to capitalist privilege – sticks out flagrantly amid the flattened rubble of the Capital Wasteland. Mr. Tenpenny, according to Mr. Burke, spends his days on one of the hotel's balconies, gleefully using his rifle to snipe at animals and monsters (and yes, human beings) that wander within range. His sole displeasure lies with the settlement of Megaton, which he considers an eyesore and a blemish in his panoramic view of the world below. He wants Megaton gone from his sight – eradicated in its totality, the townsfolk along with it. If a player successfully completes this task, then Mr. Tenpenny would be willing to hand over a sizable reward of 500 Caps (the wasteland's unit of currency) and a priceless key to a private suite in the opulent Tenpenny Tower. The player is instructed to strap a pulse charge onto the bomb before reporting to the tower, where the warhead could be detonated remotely.⁴⁴

⁴⁴ In the censored Japanese version of *Fallout 3*, Mr. Burke does not appear at all in Megaton's saloon. Disarming the bomb, therefore, is the player's only option (apart from ignoring the device altogether).

I've conducted two full playthroughs of *Fallout 3* – the first, in the summer of 2010, and the second, between August 2011 and October 2012.⁴⁵ During the former, I chose to disarm the bomb rather than to detonate it. For my kind deed, I received plentiful thanks from Megaton's residents and a modest payment of 100 Caps from the town sheriff. My actions, unfortunately, also earned the fury of Mr. Burke. Throughout the rest of that first adventure, I periodically found myself the target of assassination by his sneaky mercenaries.

On my second playthrough, I decided to go the other route. Upon reaching Megaton, I rigged the bomb just like Mr. Burke had asked. I then made my way on foot, across a precarious stretch of wasteland, to Tenpenny Tower. When I reached its iron gates, I told a guard through the intercom that I was there to see Mr. Burke and Mr. Tenpenny. Though the guard sounded wary, I was granted entry without any trouble. I moved briskly through a posh lobby, passed a café, and took an elevator up several floors before arriving in front of a stately double door to Mr. Tenpenny's private balcony. At this point, I took a moment to turn on Fraps, a computer program that records onscreen gameplay. I assumed I was going to want footage of the events about to unfold.

After stepping onto the balcony, I saw Mr. Burke standing to my left, Mr. Tenpenny sitting in an upholstered chair to my right, and between the two gentlemen, an open suitcase containing the remote detonator for the bomb (see Figure 1.8).

"The pulse charge is rigged?" Mr. Burke asked excitedly when he saw me. "Excellent! Excellent! Ah, the anticipation is palpable, isn't it? When you've finished savoring the moment, you may have the honor of pressing the button. Oh, and mind your eyes. It'll be brighter than bright."

⁴⁵ By full playthrough, I mean the successful completion of the game's main adventure. My first playthrough took about 30 hours, while the second took just over 22 hours.



Figure 1.8. [Left] Mr. Burke and [Right] Mr. Tenpenny on the balcony of Tenpenny Tower. Screen captures by author.

With both gentlemen watching my every move, I walked towards the detonator, ready to complete the quest and to collect my reward. As I looked down at the pulsing red button, an unassuming line of instructive text popped up on the game’s display. It read: *E) Activate Remote Detonator*. This information wasn’t really necessary; by now, I knew that, on my computer keyboard, *E* serves as the game’s Action key, the one that makes my character pick up objects, initiate conversations with NPCs, and perform other standard acts. I thought back to the first time I had seen this instruction in the game: I was a one-year-old toddler, and Father had left me in a playpen. The display had informed me that I could push open the gate by pressing *E*. From nudging a tiny door to annihilating an entire town – definitely not a baby step (see Figure 1.9).



Figure 1.9. [Left] Nuclear detonator and [Right] playpen gate (character as toddler) with respective *E* button prompts. Screen captures by author.

As I continued to stare at this detonator atop Tenpenny Tower, something else struck me as uncanny. I couldn't quite put my finger on it...until I almost literally did. I realized that since pressing the *E* key would lead my character in the game to press the Big Red Button in the gameworld, there was an eerily mimetic link between the two actions. Most of the time, when a player presses a computer key or a controller button while playing a game, it causes an avatar to perform a rather virtuosic action – a superhuman jump, a roundhouse kick, or some other intense simulated motion. “If you swing the joystick to move Pac-Man around his maze,” Steven Poole points out, “he opens and shuts his mouth automatically while on the move. If you press a button to make Lara [Croft in *Tomb Raider*] walk forward, she walks in a fluid, hip-swinging motion that is the result of hundreds of frames of painstaking digital animation. These are both examples (one ancient, one modern) of how characters give us videogaming pleasure: through a joyously exaggerated sense of control, or amplification of input” (2000:160). With the detonator in *Fallout 3*, however, this potential for amplification lay not just in my action but in my character's as well. My avatar, in brief, was also poised to press a button. The deed, while clearly a simulation, almost felt too close for comfort. Given this kinesthetic bond, our labor would be identical – so whose finger was it anyway?

And then there was the music.

Having left the radio on the Enclave station – though with no recollection of when I had last tuned to it – I found myself listening to John Philip Sousa's “Stars and Stripes Forever.” This must have been, I think, at least the third or fourth time I was hearing this piece since my escape from Vault 101. As I stood idly in front of the detonator, its familiar strains floated above the realm of my own worldly actions, the march marching forward, indifferent to my cause and to the fates of Megaton's unsuspecting residents. As the official national march of the United States, Sousa's tune is surely among today's most recognizable musical markers of American patriotism. Through its

widespread use in cartoons, films, parades, and other popular media and events, the piece has become a cliché that hazily invokes the American nation in all its cultural, political, and military pride. As I stood before the Big Red Button, however, Sousa's march didn't sound much to me like a musical badge of liberty, democracy, or other good old-fashioned American values. Rather, it drew my attention to Mr. Tenpenny's embodiment of the Enclave's radical authority and the wasteland's extremist ideologies. Within a couple of minutes, the march came to a rousing end, closing with an emphatic cadence and an ascending octave flourish in the melody.

Then, before I knew it, I was pressing the button.

First, the light, bright like an exploding star – and with it, an impossible silence. Impossible because, despite all the bomb's brilliance, the noise seemed to take forever to reach the tower. But the noise did eventually come, a wall of sound borne on a gust of debris that engulfed the tower and nearly knocked Mr. Burke off his feet. A mushroom cloud bloomed and bloomed, starting out blood-red before fading to bone-grey, escaping with the last wisps of proof that a town called Megaton ever existed (see Figure 1.10).

The virtual explosion was a stupefying sight to behold. To this day, I remember the astounding feeling of how, with a single stroke of the finger, I – and my character – had turned the scant lives of Megaton to dust. Where there had once stood a bustling settlement, there was now only a silent, smoldering hole in the ground. As I gazed into the distance, I noticed that my radio was still on, already playing the next selection from the Enclave station. Given the grave circumstances, this music now sounded embarrassingly, profanely loud, like the magically amplified ringtone of a cell phone going off at a funeral. That the tune was another one of the Enclave's patriotic hymns – “America the Beautiful” – made it all the more tasteless, as if it (and I, the radio-bearer) were rubbing the noses of the departed in Mr. Tenpenny's triumph. And so, for the first

time in as long as I could remember, I turned off the radio altogether. As I did so, the two other gentleman on the balcony struck up the most casual of conversations.



Figure 1.10. The Megaton explosion. Screen capture by author.

“Well done, Mr. Burke!” Mr. Tenpenny called out to his partner in crime. “What a grand display of fireworks! I almost wish there was another nuke we could detonate. You don’t see that very often.”

“I’m glad you’re pleased. I had help, of course,” replied Mr. Burke, his voice slick as always, as if the explosion had been business as usual, a menial chore for the day.

“Quite right,” said Mr. Tenpenny. “And you are to offer him the reward we discussed. Now, all this bright light and wind has given me quite a thirst. Where’s my scotch?”

Upon turning to leave the balcony, I was handed a cash payment by Mr. Burke, along with, as promised, a priceless key to my own private Tenpenny Tower suite. With one last glance at the

mushroom cloud – now almost fully assimilated into the late afternoon sky – I made my way onto the elevator, down to the first floor, past the gift shop, through the lobby, and back into the wasteland, with ample money in one pocket and a guilty conscience in the other.



These days, when I rewatch the recorded footage of my actions on the Tenpenny balcony, what strikes me most is the fact that I pressed the detonator button at pretty much the exact moment Sousa's march came to a close. Had this been a scripted scene in a film, the conclusion of a grand musical performance would surely have been the ideal moment for some hero (or villain) to execute this kind of climactic deed. It's often at the ends of anthems and marches, after all, that important symbolic gestures are made – whether it's the drop of a hockey puck, the commencement of a ceremony, or a big speech. While it's possible that my timing with the Big Red Button was totally coincidental, I suspect it was motivated in part by my unconscious construal of Sousa's march as a serendipitous overture to what I figured would be an astonishing display. Since I knew, furthermore, that Fraps was active and recording my every action, perhaps I felt preemptively compelled to put on a show for the lecture audiences to whom I expected I would one day present this footage. The patriotic music of the Enclave Radio, by lending this moment a certain flair, nudged me into the role of an actor all too eager to uphold the stylized conventions of dramatic spectacle. Even though I was playing a video game, I may have ended up pressing the button when I did so because, curiously, it was the *theatrical* or *cinematic* thing to do.

It was also the obedient thing to do. To the extent that a musical march is supposed to get listeners to step literally to the beat of one drum, so Sousa's tune might have led me, in this instance, to fall in line and conform to what Mr. Tenpenny had asked me to become: a mercenary, one who's good at following orders, every bit as mechanical as the game's repetitive radio programming. I sometimes wonder whether I would've pressed the button if this exact music had not been playing

at the time. Would I have been any more or less likely to go through with the act had I been listening to a different tune (say, a Bach Partita instead of a patriotic American march)? If the radio had been set to a different station? Or turned off entirely? My own decisive gesture – pressing *E* – was so slight and easy that it may have been more of a reflex than a deliberate, calculated motion. But even if I could make the case that, in this split second, my finger simply slipped, there remains more incriminating evidence in the fact that I had nevertheless rigged the bomb, conscientiously trekked to Tenpenny Tower, strolled onto that balcony, and positioned myself – my character – within arm’s reach of the detonator. In truth, it took much more than just the push of a button. What, then, could have possessed me to undertake the quest to begin with?

Well, the game – or rather, its mouthpieces, Mr. Burke and Mr. Tenpenny – did dangle before me plenty of incentives to carry out the despicable task. Using the virtual blood money they offered me, I was indeed able to go on and purchase all kinds of armor, weapons, food, and medical supplies to boost my chances of survival in the wasteland. It would be somewhat misguided to say, however, that it was the game (a medium) or the two gentlemen (AI characters within that medium) that told me to do anything *per se*. Such pressure, rather, was exerted by the game’s developers, the human agents who had designed Megaton, planted the bomb, and made the simulation of this transgression possible in the first place. Yes, detonating Megaton’s bomb was ultimately my choice (or, to retool the intentionalist mantra of the National Rifle Association: Avatars don’t push buttons; people push buttons). That any player *can* blow up Megaton in *Fallout 3*, however, renders the act, on some level, a formally sanctioned one. Insofar as the detonation exists as one of the game’s multiple outcomes, it conceivably resides *within* the game (and its so-called text) prior to a player’s

engagement with it.⁴⁶ The crime, in other words, is always already there, ready to be actualized as such. All players do is fill out the paperwork.

This strategy of blame-displacement should sound distressingly familiar. We've heard it in Hannah Arendt's influential account of Adolf Eichmann's trial (1963), the shocking tests of Stanley Milgram (1961), the controversial Stanford Prison Experiment (1971), and additional legal, philosophical, sociological, and psychological studies that have aimed to expose the susceptibility of human beings to authority, religious duty, and other perceived external imperatives. The virtual crimes that players commit in games, needless to say, are not the real deal, but the notion that extreme simulated violence can be perpetrated out of "sheer thoughtlessness" (to borrow Arendt's term)⁴⁷ is one that has long since underpinned contemporary media's stereotypical depictions of the hardcore, addicted gamer: a shell of a being parked faithfully in front of a bright flashing screen, eyes unblinking and body motionless save for furiously twitching hands responding obediently to a game's bombardment of audiovisual stimuli – in a nutshell, a machine begotten by machines. Games compel us to confront the banality of our own virtual evils by pointing up our willingness to play into the medium's slew of arbitrary rules and mandates.

After setting off the Megaton bomb in my own playthrough of *Fallout 3*, I spent several hours browsing Internet discussion boards, blog entries, and FAQs to see what other players were

⁴⁶ Some video game scholars (especially those who identify as ludologists) might object to the notion that an action can exist in a game without (or prior to) a player's active engagement. Debates about this tree-falling-in-forest ideal, of course, are not limited to the topic of ergodic media. Questions of whether meaning and events reside *in* texts – or, alternatively, whether metaphysical properties are constructed solely through human reception and interpretation – have been central to all manners of literary, artistic, and musical hermeneutics.

⁴⁷ "The trouble with Eichmann," Arendt famously argued, "was precisely that so many were like him, and that [...] they were, and still are, terribly and terrifyingly normal. [...] [Eichmann] *merely never realized what he was doing*. [...] It was sheer thoughtlessness [...] that predisposed him to become one of the greatest criminals of that period" ([1963] 1994:276, 287-88, emphasis in original). Eichmann, the functionalist argument goes, didn't want to set the world on fire; as a middling bureaucrat, he simply wanted to get through his work day, and by complying with fascist edicts, happened to become one of the most notorious desk-killers in modern history. What readers have found so enticing about Arendt's report on the banality of evil, observes David Cesarani, was that it "seemed to offer a way of understanding the modern world: totalitarian systems, the threat of nuclear annihilation at the press of a button, and the depredations of the Vietnam war" (2006:15).

saying about this quest. Quite notable were the exceedingly banal manners in which many players described their own attitudes and approaches toward the task. Several forums contained discussions about whether blowing up Megaton is a *good* idea – in a couple different senses of the word. Some players advised against the detonation, while others enthusiastically recommended it. Even more intriguing were the differences I saw in these players’ argumentative strategies, which, as shown in Table 1.6, I’ve broadly parsed into categories of pragmatic versus moral reasoning. The sentimental rationalizations in the table’s left-hand column convey a sensitivity to the imagined existence and rights of Megaton’s virtual residents.⁴⁸ The player Kush reported sparing the townsfolk for the sake of *(role)playing* as a good *character*, while someone named Rapture, in a slightly different vein, purported to have arrived at the same decision *as* a good *person*. Across virtually all discussion threads that I visited, however, these morally oriented explanations were far outnumbered by those that were more pragmatic in tone, demonstrating greater concern with the monetary, material, and ludic contingencies of simulated mass destruction than with the act’s social or ethical implications. The practical comments in Table 1.6’s right-hand column may, on the one hand, sound calculating and heartless, boiling down considerations of simulated genocide to a laundry list of pros and cons. On the other hand, these pragmatic players are being just that – good *players* (rather than, say, morally *good* players), preoccupied foremost with maximizing ludic achievements and virtual currencies. After browsing these players’ matter-of-fact accounts, I felt less guilty about my own actions atop Tenpenny Tower. Reading about the similar behaviors of so many others made me rethink whether my deed was transgressive at all. Call it, perhaps, vindication (or moral palliative) in numbers.

⁴⁸ In March 2012, the phrase “Fallout 3 Megaton explosion” yielded approximately 2,000 search results on YouTube (with the phrase “Fallout 3 Megaton” yielding close to 10,000). A subgroup of these videos features various players’ creative simulated murders of Mr. Tenpenny and Mr. Burke (along with, in some cases, the massacre of the other privileged guests in Tenpenny Tower). These videos tend to sport titles like “Killing Tenpenny...16 Different Ways” or “The Many Ways to Kill Mr. Tenpenny.” In some of these morbid videos, players detonate the Megaton bomb anyway; in others, players spare the town, exacting vengeance solely on Mr. Burke and Mr. Tenpenny for issuing such an atrocious order in the first place.

Table 1.6. Players’ remarks in online forums about whether or not to detonate the Megaton bomb.

Moral Reasoning	Pragmatic Reasoning
<p>Before I finally bought <i>Fallout 3</i>, I was actually looking forward to blowing up Megaton, but I quickly fell in love with the place and everyone living there. I can’t believe how quickly I’m becoming connected to the characters in <i>Fallout 3</i>.</p>	<p>Do all quests in Megaton, then go on a wide killing spree and scavenge all the useful stuff you can. THEN nuke it :D</p>
<p>– samcotts (4 December 2008)</p>	<p>– BYERE (10 January 2009)</p>
<p>I usually play as the good guy in games with decisions like this, so...I didn't. Anyway, I don't like the idea of blowing up the kid(s) in Megaton, especially because the little girl said to me “I've heard of you, you're one of the good guys!”</p>	<p>Don't blow up Megaton...you don't get anything useful from doing so. While if you keep Megaton you get free items and an extra shop or two.</p>
<p>– Alphawolfy (4 December 2008)</p>	<p>– Neonivek (9 February 2009)</p>
<p>I didn't blow it up because I always play the good guy...I don't think a good guy would blow up an entire city. :P</p>	<p>I didn't find there to be anything useful in megaton so I blew it up...but before I blew it up, I killed everybody in the town and took everything that wasn't bolted down.</p>
<p>– Kush (4 December 2008, added emphasis)</p>	<p>– Bobbis360 (9 February 2009)</p>
<p>i didn't because i am a good person.</p>	<p>I'm still trying to figure out whether or not it's worth it to blow up the town. Can anyone tell us what the perks are for getting into Tenpenny Tower? I know that you get the suite but is it closer to DC? Do the people try to kill you if you steal some worthless crap? How's the decor?</p>
<p>– Rapture (4 December 2008, added emphasis)</p>	<p>– BlackSuits (4 December 2008)</p>

It’s not difficult to see why, on these social forums, pragmatic instructions about the Megaton quest have turned out to be much more prevalent than moral ones. That real genocide is wrong – and, on the flip side, that virtual genocide is not *really* wrong – are, for most people, commonsensical claims. The NPCs of Megaton are not actual people: they’re *in* our monitors, existing as lines of 0s and 1s, rightless by virtue of their virtuality. As philosophers Jon Cogburn and

Mark Silcox point out, the player of a video game “knows that she is not causing real agony, mutilation, and death. For surely the moral wrongness of violence derives from the fact that people actually get hurt by it; if nobody is being injured in any way, then it follows that the makers, sellers, and players of these games have nothing to feel guilty about” (2009:51).⁴⁹ A predictable rebuttal against this line of reasoning would suggest that players, by committing virtual atrocities, are actually harming *themselves* – their own minds, bodies, and spirits – and by extension, endangering the moral fabric of the real-world societies they inhabit.⁵⁰ If, after all, the atomic destruction of Megaton were unequivocally devoid of ethical significance or any outwardly referential capacity, then why would anyone have seen a need to remove this quest from the Japanese version of the game? Censors, in effect, must have expected and feared that some Japanese players would make undesirable, politically incorrect connections between the simulated act and the nation’s historical nuclear tragedies.⁵¹

⁴⁹ *Fallout 3*, like the majority of modern games, allows the player to create save files (containing the progress data at a given point in the game) that can be reloaded an unlimited number of times. The save-anywhere system of *Fallout 3* gives a single player the ability to create multiple temporalities and role-playing personas. Whether a player can *undo* an action (e.g., the detonation of the Megaton bomb) by reloading a prior save point, however, is up for debate – for although a reload can bring the character’s actions back in virtual time (i.e., *detonating the bomb* within the gameworld), the player’s actual deeds (i.e., *pressing the E button* on the keyboard to detonate the bomb) are not reversible as such.

⁵⁰ In *Fallout 3*, players can gain or lose Karma by performing specific actions. Players begin with neutral Karma (0 points), which can increase to +1000 via “good” deeds (e.g., giving purified water to a beggar) or decrease to -1000 via “evil” ones (e.g., killing random civilians). Detonating the Megaton bomb, not surprisingly, results in the greatest loss of Karma (1000 points) by way of any single action in the game. In *Fallout 3*, sainthood, demonic notoriety, and perfect neutrality all offer their own ludic perks and drawbacks. A player’s Karma level influences the social reactions of NPCs, the breadth of dialogue options, and the ease with which particular locations in the Wasteland can be accessed. In purely practical terms, however, no single moral path in the game is necessarily more advantageous or enjoyable than another.

⁵¹ In October 2011, I presented an early draft of this chapter at a lunch talk in the Harvard Music Department. There were twenty-two people in attendance (three professors, the rest graduate students). When I got to my discussion of the Megaton quest, I polled the audience to ask how many of them – based on what they had thus far learned about *Fallout 3* – would, if playing the game, detonate the bomb. About half the people in the room raised their hands (some hesitantly and with sheepish grins, others more confidently). After launching *Fallout 3* on my PC and loading a save file – one that showed my character standing in front of the pulsing detonator button on the Tenpenny balcony – I asked if anyone wanted to press the Big Red Button right then and there. Three people raised their hands; I picked one volunteer at random. She came up to the front of the room, hit the *E* button on my laptop’s keyboard, and set off the virtual bomb, causing a detonation to flash across the projector screen for all to see. After the talk, this volunteer told me that she had felt strangely guilty pressing the button in front of her peers and professors, especially because half of these people had *not* raised their hands when asked if they would be willing to press the button. “I felt like everyone [i.e., the audience] was judging me,” she remarked, “even though they’re [the Megaton residents] not real!” (correspondence with author, 21 October 2011).

If many – possibly most – players of video games are able to contemplate (and advise either in favor of or against) simulated genocide based principally on dispassionate assessments of use value, then surely these same players should have little problem achieving a similar degree of critical distance when committing acts of smaller-scale violence in these virtual worlds. There are different ways to spin this conclusion: those who are suspicious of video games as a whole might be inclined to describe gamers’ aloofness toward violence as an appalling sign of desensitization; others (read: most gamers), by contrast, would defend this mentality as a kind of hard-earned savvy toward the aesthetic and ludic conventions of games. Underlying these otherwise opposing views is the shared notion that, at times, it’s not just the *music* of a video game that can get pushed to the back of a player’s mind, but the *violence* as well. Soundtrack and savagery alike, when repeated ad nauseum, are easily relegated to the status of background noise (more on this in Chapter 3). Just as players cannot usually afford to let incidental music distract them from achieving a game’s practical goals, so they don’t tend to have the luxury (or pragmatic motivation) to ponder the ethics of virtual violence every time they’re tasked with undertaking a routine destructive act. Assuming this logic holds, it stands to reason that players of *Fallout 3*, in the end, need not perceive *any* contradiction between its virtual violence and upbeat music. Given that the two exist as thoroughly mundane, redundant components of a gaming experience, they go together just fine. Of course, what might still disturb outside observers of the game – especially those unaccustomed to the medium’s graphic violence – is the capability of players to tune out both music and virtual murder without any moral misgivings. Perpetually at issue between gamers and their detractors, above all, are questions concerning not simply the murky border between simulation and reality but, moreover, the extent to which players possess sufficient ability (and willingness) to distinguish between them.

Conclusion: Sarasate, Sunrise; or, Beginnings

In the autumn of 2011, as I was drafting shorter versions of this chapter for presentation at conferences and lectures, I wanted to ensure that audiences would have a clear idea of the different types of music featured on the radio stations in *Fallout 3*. During the weeks leading up to these presentations, I used Fraps to capture footage of my gameplay accompanied by various diegetic tunes from my character's radio. The signals for Enclave Radio and Galaxy News Radio were automatically available upon my escape from Vault 101, but it wasn't until about eight hours into the game – not long after the Megaton incident – that I completed Agatha's quest and gained access to the classical music station. Immediately after returning the Soil Stradivarius to Agatha, I left her house and tuned the radio to this newly acquired signal. I figured I would leave Fraps running to record a single complete loop of the station's contents. Later, I reasoned, I could edit this footage down to a couple of short segments suitable for my lectures.

As I made my way out of Agatha's cottage, the first piece that came on the radio was the Prelude to Bach's 2nd Partita. After checking again to ensure that Fraps was indeed functioning properly, I walked to the peak of a nearby cliff, no more than a stone's throw from Agatha's abode. Below me was an abandoned train yard, while to my left, a pale, thin creek snaked miles into the distance. Aside from some gulls circling above, there were no living creatures in sight. I knew I had other things to do in this game – quests to complete, places to go, monsters to kill, a father to find – yet, for about a half hour, all I did was stand on this rocky hill, occasionally pacing along its edges, taking in a grand view of the wasteland while the sounds of the solo violin droned on. I remember thinking that, for the purposes of my presentations, this setting would make for an elegant showcase of Agatha's music, unsullied by violence, dialogue, and excessive ambient noises. The world didn't look so scary from up here. The sky started out dark, but as the station's music played on – cycling

through more Bach, a couple of improvisations, Dvořák – my surroundings got brighter by the minute. It eventually dawned on me that I was witnessing sunrise.

As the morning light yawned across the horizon, I was struck by the realization that, in all my hours playing *Fallout 3* thus far, this was the first time I was simply listening to the radio while definitively *not* playing the game (at least not in the conventional sense). Over the course of this half hour, I barely touched my computer's mouse or keyboard. Having positioned my character at a nice vantage point, I was content to sit back in my chair, my eyes panning the virtual landscape displayed on my monitor, my ears tuned to Sarasate and other strains (see Figure 1.11). In retrospect, maybe it was the unusual serenity of sunrise that compelled me to take this hiatus from the game's adventure. If ever the hostile wasteland could offer up a fugitive setting for peaceful, aesthetic contemplation, this would be it.



Figure 1.11. The Meresti Trainyard at dawn. Screen capture by author.

Or maybe I listened so attentively because I, like many modern concertgoers, have been habituated to act a certain way (quietly, motionlessly, raptly) when confronted with a classical music

performance. Since I knew Fraps was recording my gameplay – and since I was aware that this recorded footage would one day be seen by various conference audiences (which, I reckoned, would consist mainly of musicologists) – perhaps I also felt like I needed to be on my best behavior. Sensing that I was (already) being watched, I conscientiously performed the part of a good listener, exactly as I'd do if I were attending a public concert of classical music in the real world. Like my dramatically timed button-press on the balcony of Tenpenny Tower, my restrained conduct on this cliff may have been informed by a self-conscious and theatrical impulse, an urge to play a respectably engaged role. In doing so, I unwittingly indulged in a protracted moment of careful listening while abstaining from playing the game as such. By taking a time-out from the game's explicit goals, I temporarily assumed the guise of an eminently unpragmatic player. For although it wasn't long before I was off on another quest, it was with this first disobedience, in retrospect, that I transgressed ever so slightly *against* the game, refusing its call to arms one tune at a time.



The end times in *Fallout 3* may be virtual, but this doesn't make it any less visceral. It's everywhere visible in the craters where bombs first fell, audible in the radio tunes that never change, and very nearly palpable in the ash-drenched air that brushes against a player's second skin. The game's recycled music can offer companionship and a provocative sense of irony, but through its incessant repetition and random juxtaposition against the wasteland's atrocities, it also comes across as an autonomous object that's utterly bereft of value and significance. It is from this point of crisis, from this first philosophy of sorts, that I will venture, through the remainder of the dissertation, across other virtual worlds in search of alternative musical epistemologies, agencies, and communities. Video games, by facilitating embodied experiences rife with symbolic and even allegorical potential, constitute a powerful lens through which we can scrutinize the metaphysical, poetic, and acoustemological fallout of discursive collisions between music and violence. Despite (or precisely

due to) their simulated nature, gameworlds unravel all kinds of anxieties toward the cultural definitions and ethical contingencies of play, transgression, and the real-virtual divide. Some games can really push people's buttons – and sometimes, this is a good thing.

Given the predominance of combat-oriented video games, this won't be the last we hear of violence. The subject will, on the contrary, be a constant refrain, concerning, for example, the weaponization of sound (Chapter 2), the oppressive effects of noise (Chapter 3), and verbal sexual harassment (Chapter 4). In all its material and metaphorical forms, violence unmoors presumptions about the value(s) of not just music but also musicology. To return once more to the case of music and torture, consider the following remark by Suzanne Cusick, who recognized exactly such a dilemma in her research on this subject:

The acoustical practices in detention camps so challenge our discipline's beliefs about music that my work might *not* be musicology after all. [...] When we contemplate how "music" has been used in the detention camps of contemporary wars, we find this meaning stripped away. We are forced, instead, to contemplate "music" as an acoustical medium for evil. The thing we have revered for an ineffability to which we attribute moral and ethical value is revealed as morally and ethically neutral – as just another tool in human beings' blood-stained hands (2008:para.2-4, emphasis in original).

When Jonathan Bellman criticized Cusick's initial article on music and torture, he insisted that "[t]he issue is really torture, which to me is always wrong, period. I can't see that music as torture is more or less wrong than anything else as torture, and I confess that deep down this feels like special pleading – e.g., water resource managers complaining about the use of water for torture" (2007a). Whether the topic of musical torture exceeds the intellectual providence of musicology naturally depends on how we define the boundaries of this discipline. One could, in any event, describe most musicological (and, for that matter, academic) pursuits as special pleading – or, recast in less pejorative and accusatory terms, scholastic activism. When working within institutionally divided disciplines, scholars may feel pressure to foreground certain aspects of study while ignoring or

downplaying others (cf. Bohlman 1993). In ethical terms, maybe music can and should sometimes take a backseat to other objects of inquiry, but it's supposedly the job of music scholars (who identify themselves primarily as such) to emphasize, publicize, and salvage the significance of music to the best of their abilities. The question of *whether* music is important is not one that tends to get asked. The task of musicologists, according to semantic imperatives, is to make music matter, to locate (or invent) problems that produce avenues toward meaning and, subsequently, to tailor this meaning into digestible, publishable, and marketable narratives. It's impractical, not least on professional grounds, for music scholars to admit that maybe music is, on occasion, not as pertinent as they're making it out to be. Conceding music as ornamental or diversionary (as just sound, as just play) would be like proclaiming the end of musicology. And while sound studies has recently done a great deal to broaden the ontologies, epistemologies, and ecologies of music, the young (sub)field necessarily partakes in very much the same sort of rescue mission – pleading for the relevance and covert import of the everyday acoustic phenomena that music scholars have traditionally overlooked.

Against the blinding flash of extinction, issues of music – what it's good for, why it matters, and how we're supposed to talk about it – are liable to pale by comparison. When we find ourselves staring into the maw of violence, apocalypse, and the ends of things, it can feel a little imprudent (daresay irresponsible) to redirect our attention toward comparatively abstract matters of music, poetry, and art. Aesthetic contemplation, some might say, is a luxury. Others, however, would deem it a necessity, the surest proof of our humanity. There may be some truth in both arguments, though in the end, it's the latter that keeps us going. Echoes of ruin leave a perplexing question ringing in our ears: *What if music doesn't have anything left to say?* Our soundest course of action – as scholars, as human beings – will be to keep our fingers pressed not against this Big Red Button, but instead against the pulse of humanistic inquiry, so as to ask, for starters: *What if it does?*

Chapter 2

Role-Playing towards a Virtual Musical Democracy

Boasting some of the finest ale in Middle-earth, Bree-Town's Prancing Pony Inn serves these days as a nightly haven for local townsfolk seeking to lift their spirits from the gravities of war. Sturdy kegs stacked from floor to ceiling hold infinite promises of liquid mirth. Sprawled in front of a crackling fireplace are red velvet rugs that have soaked up centuries of memories from the boots of weather-worn travelers. The smaller flames of candelabras cast a humble glow on chairs bumped askew by tipsy Dwarves, while across long wooden tables, Humans exchange tales of dragon-slaying and crop-harvesting with equal zeal. On a stage in the far corner, musicians perform merry strains to the tapping feet of Elves and the wild dancing of Hobbits. The cheers of patrons grow from murmurs to roars as dusk swings to daybreak. Even in the darkest of times, it seems, there's some joy to be found in the minstrel's song.

Making Music in Middle-earth

This vignette describes a lively evening in the multiplayer game *The Lord of the Rings Online* (LOTRO). Developed by the American game company Turbine Incorporated and set in J. R. R. Tolkien's fantasy realm of Middle-earth, LOTRO launched on 24 April 2007 across North America, Europe, Australia, and Japan.⁵² Players interact with one another in the game using avatars that can be customized in terms of name, gender, race, class, and appearance.⁵³ In contrast to the single-player world of *Fallout 3*, LOTRO is a public domain that's molded daily by the social activities of its

⁵² Following its initial launch, LOTRO went on to be released in China, Korea, Russia, and various other countries. The full title of the base-game is *The Lord of the Rings Online: Shadows of Angmar*. Three expansion packs – *Mines of Moria* (2008), *Siege of Mirkwood* (2009), and *Rise of Isengard* (2011) – have since supplied additional content to the gameworld and broadened its virtual geographical scope.

⁵³ The four playable races in LOTRO are Man (a.k.a. Human), Hobbit, Elf, and Dwarf. Classes that players can select for their avatars include Burglar, Captain, Champion, Guardian, Hunter, Lore-Master, Minstrel, Rune-Keeper, and Warden.

cohabitants. Like many Massively Multiplayer Online Role-Playing Games (MMORPGs), LOTRO encourages players to embark together on adventures, advance the skills and reputations of their avatars, and nurture lasting friendships (see Figure 2.1). Dungeon raids and epic battles figure prominently in the game, but just as vital to its communities are more casual events such as concerts, costume contests, birthday parties, weddings, barter fairs, horse races, and seasonal festivals. As players go about their daily lives in this virtual world, they're able to communicate with one another via instant text messages, private voice-chat, and avataric animations called *emotes*.⁵⁴



Figure 2.1. The activities of players in LOTRO take place primarily in the region of Eriador (circled here on a map of Middle-earth). Image reproduced from Turbine's manual for *The Lord of the Rings Online: Shadows of Angmar*.

⁵⁴ A player's adventures in LOTRO take place during the Third Age of Middle-earth and coincide with the events in Tolkien's *The Lord of the Rings* trilogy. Every once in a while, players may cross paths with key figures from the novels (e.g., Gandalf, Gimli, and the Balrog of Moria), but for the most part, quests that are undertaken in the game remain tangential to the trilogy's epic narrative. For general insights into the mechanics and social dynamics of MMORPGs, see Nardi (2010:52-93), Taylor (2006:49-52), Castronova (2005:1-22), and Kelly (2004:24-45).

In an attempt to honor the rich musical lore of Tolkien's Middle-earth, Turbine implemented in LOTRO one of the most elaborate music-making systems in any MMORPG to date.⁵⁵ This system allows players to perform both live and pre-recorded tunes that can be heard by other nearby players in the gameworld. A player's musical performance is visually simulated by avataric motions and strings of colorful notes that float out of the character's instrument (see Figure 2.2). Examples of such instruments – each of which sports a different synthesized timbre and a range of three chromatic octaves along the Western twelve-pitch scale – include the bagpipes, clarinet, flute, horn, cowbell, drums, harp, lute, and theorbo.



Figure 2.2. [Left] A collaborative musical performance inside the Bree Auction Hall (13 November 2008) and [Right] my own avatar playing the lute on the streets of Bree-Town (23 January 2009). Bodies of avatars sway from side to side as they simulate musical performances. The hands and fingers of avatars make pre-programmed performative gestures that are in no way synchronized with the instrumental music being played. Screen captures by author.

Many players regard music-making in LOTRO primarily as a hobby that offers temporary respite from adventuring and formal quests. As one player explains: “After a day of fighting goblins or farming ores for money, it’s nice to head to the Prancing Pony Inn for some music-playing” (interview, Aellwen, 4 November 2008). Another player remarks that “music is one of the only

⁵⁵ Other online gameworlds and simulation programs with player-music systems include Sony Online Entertainment’s *Star Wars Galaxies* and Linden Lab’s *Second Life* (see Harvey 2009:151-67).

activities that really helps ‘break up’ the game, which is almost absolutely based on physical combat” (interview, Alexander, 19 December 2008). Given the automated performative gestures of LOTRO’s avatars and the mechanical *beeps* and *boops* of player-made tunes, readers might be inclined to envision a musical performance in this gameworld as little more than a crude assemblage of moving pixels and tinny waveforms. The potential significance of music in LOTRO, however, quickly becomes evident when one sees a player performing eulogistic bagpipe melodies at an in-game memorial service for a real-life cancer victim, or alternatively, when one witnesses six bagpipers blasting an auction hall with six *different* musical pieces in an attempt to drive all other players from the room. These are but two examples of events from the field – among many which will be recounted here – that attest to the affective as well as coercive force of musical performances within LOTRO’s communities.⁵⁶

Much of my investigation in this case study will center on a debate among LOTRO players pertaining to the game’s two modes of musical production – known as *freestyle* and *ABC* – and their respective merits. A player performing freestyle strikes a series of individual keys on the computer keyboard to produce corresponding musical sounds in the game. A menu in LOTRO gives players the ability to map any number or letter (e.g., 7 or P) to a specific pitch (e.g., middle C) within the three-octave range of an equipped instrument. One of the primary challenges for freestylers is devising and getting accustomed to a keymap that facilitates the performability of various kinds of music (see Figure 2.3). Many players share their own customized keymaps on LOTRO’s online forums to assist others with the execution of musical pieces (see Figure 2.4).

⁵⁶ LOTRO contains a soundtrack that features both digitally synthesized music (created principally by Stephen DiGregorio) and recorded orchestral and choral music (composed and conducted by Chance Thomas). Players generally choose to perform their own music in areas with sparse and unobtrusive ambient music (namely towns and indoor areas). LOTRO gives players the ability to adjust in-game audio settings, including the Master Volume, Player Music Volume, Sound Effects Volume, Ambient Sound Volume, and Combat Sound Volume.



Figure 2.3. An excerpt of a LOTRO freestyle customization menu in which a player can assign computer keystrokes to individual musical pitches. Screen capture by author.

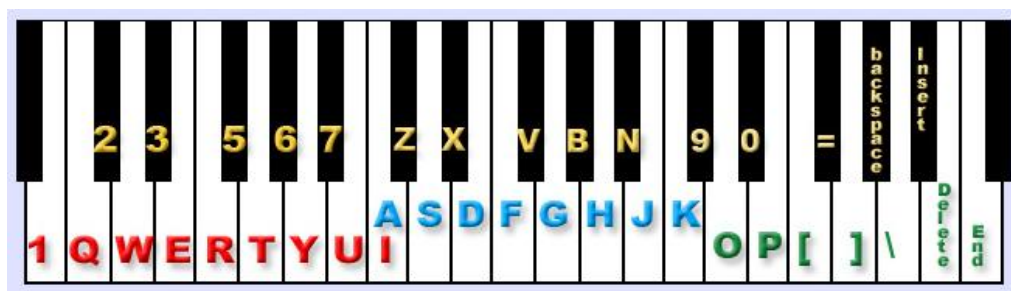


Figure 2.4. A keymap devised by a player named Psomm (shared on LOTRO’s official forums).

Whereas freestyling approximates a live performance on a keyboard instrument (or likewise configured metallophone), the game’s other mode of music-making – ABC – allows players to activate an entire pre-composed sound file with a single text command. Players can create their own ABC files with Windows Notepad or other plain-text applications. ABC notation uses ASCII (American Standard Code for Information Interchange) characters and symbols to designate sequences of musical pitches and rhythms. General parameters are specified with the letters Q

(tempo), M (meter), L (default duration of a note), and K (key).⁵⁷ Once an ABC file has been assigned a name and saved to a player's "My Documents\The Lord of the Rings Online\Music" folder, it can be activated in LOTRO's gameworld with the text command "/play <filename>." The music that is coded in the file will then play from start to finish without any further input from the player. Example 2.1 contains an illustration of the ABC notation that I drafted for my own arrangement of the English folk song "Greensleeves."⁵⁸

Q: 120
M: 3/4
L: 1/4
K: Amin

Letter ~ pitch	_ ~ flat (not used in this transcription)
Lower-case ~ upper octave	= ~ natural
Upper-case ~ middle octave	~ barline
Followed by comma ~ lower octave	[] ~ pitches inserted within will sound simultaneously
Number ~ note length (multiply by default duration)	z ~ rest (not used in this transcription)
^ ~ sharp	

A | c2 d | e3/2 ^f/2 e | d2 B | G3/2 A/2 B | c2 A | A3/2 ^G/2 A | B2 ^G | E2 [EA] | [E2c2] [^Fd] | [=G3/2e3/2] [A/2^f/2] [Ge] | [G2d2] [^FB] | [E3/2G3/2] [^F/2A/2] [GB] | [=F3/2c3/2] [F/2B/2] [FA] | [E3/2^G3/2] [E/2^F/2] [E^G] | [A,3A3] | [A,2A2] |

♩ = 120

H K O P = P O J G H J K H H B H J B

D H K O P = P O J G H J K J H B V B H H

D D V G H G G V D V G F F F D D D Y Y

Example 2.1. [Above] Lines of ABC notation with [Below] corresponding Western staff notation of "Greensleeves." Shown below each Western staff are the keystrokes that players can alternatively use to perform this tune in freestyle mode (according to the keymap presented in Figure 2.4).

⁵⁷ Freestylers have no means of altering the intensity of individual pitches produced during a performance, but players can add modifiers to an ABC file to specify the desired dynamics of particular sections of music (e.g., +pp+ for *pianissimo* and +mf+ for *mezzo-forte*).

⁵⁸ LOTRO's music system also allows players to convert MIDI files into ABC files. Although this function can considerably speed up the ABC creation process, many players emphasize that raw converted files almost always require extensive editing. One musician explains that MIDI-ABC conversion "isn't just as easy as it first sounds. People hear, 'Get Midi. Plug into program to change the format. Play in game.' They don't hear all the detailed work that goes into making something in MIDI format come across as something that sounds awesome in the game" (interview, Reclusiveone, 6 December 2008).

Many players share their ABC creations on websites such as *The Fat Lute* (www.thefatlute.com) and *LOTRO-ABC* (www.lotro-abc.com). As of June 2012, *The Fat Lute* contained over 8,000 ABC files uploaded by hundreds of different contributors. Any player can download these files free of charge as well as preview the corresponding music in MIDI format. The stylistic diversity of these ABC compositions can be seen in Table 2.1, which lists twenty of the site's most frequently downloaded files. Such friendly practices of peer-to-peer filesharing, however, have encountered opposition from various LOTRO players who look down on ABC and describe it as nothing more than the empty recycling of digital code. For while freestyling appears to require a live and skillful demonstration of hand-eye coordination and musical expression – somewhat like playing an acoustic keyboard instrument – the activation of an ABC file is routinely accused of lacking performative engagement because it requires no manual input from the player-musician beyond an initial text command. On 22 July 2008, a player named Chazcon posted the following comment on a LOTRO forum thread titled “ABC – Way to Ruin a Wonderful Music System”:

There is no skill in playing ABC music. Any chimp can download “Crazy Train” [by Ozzy Osbourne] and inconsiderately slam it on the ears of passersby by clicking a button. That is not playing music. There is no creativity involved, there are none of the dynamics that happen when a band plays live, nor the satisfaction of a job well done based on long practice at a craft.

Other players have gone so far as to suggest that only individuals with real-life musical talent should have the right to play music in the game. Those who protest against this exclusionist attitude tend to cite the carte-blanche premises of online role-play as a way of justifying their technologically amplified virtuosity. As an interviewee named Harparella (3 November 2008) defiantly asks: “I can’t swing a sword in real life; why should in-game minstrels be required to be real musicians?”

Why indeed?

Table 2.1. Commonly downloaded ABC files from *The Fat Lute* (sorted in order of popularity).
List compiled by author.

	Title	Original artist	Player-arranger	Number of parts
1	<i>Concerning Hobbits</i>	Howard Shore	Cranberry	3 (all lutes)
2	<i>Bard's Song</i>	Blind Guardian	Musgo	3 (flute, harp, lute)
3	<i>Through the Fire and Flames</i>	Dragonforce	ThorHal	5 (drums, theorbo, lute, flute, horn)
4	<i>Highway to Hell</i>	AC/DC	Tapiron	1 (lute)
5	<i>Into the West</i>	Howard Shore	Cranberry	1 (lute)
6	<i>Bohemian Rhapsody</i>	Queen	Snosh	1 (lute)
7	<i>Welcome to the Jungle</i>	Guns N' Roses	Ratissia	1 (lute)
8	<i>May It Be</i>	Enya	Ocie-1	1 (harp)
9	<i>All the Small Things</i>	Blink 182	Prosc0	1 (lute)
10	<i>Don't Stop Believin'</i>	Journey	Arie	1 (harp)
11	<i>Dancing Queen</i>	ABBA	Ogfast	1 (lute)
12	<i>Moonlight Sonata (Adagio sostenuto)</i>	Ludwig van Beethoven	Jazriel	1 (lute)
13	<i>(Don't Fear) The Reaper</i>	Blue Öyster Cult	Warden	5 (clarinet, cowbell, drums, lute, theorbo)
14	<i>Für Elise</i>	Beethoven	Jazriel	1 (lute)
15	<i>Wanted Dead or Alive</i>	Jon Bon Jovi	Warden	1 (lute)
16	<i>Blackbird</i>	The Beatles	Figgy	2 (harp, lute)
17	<i>Crazy Train</i>	Ozzy Osbourne	Snosh	3 (drums, theorbo, lute)
18	<i>Dream On</i>	Aerosmith	Bungee	4 (drums, clarinet, theorbo, lute)
19	<i>Boulevard of Broken Dreams</i>	Green Day	Tirithannon	2 (theorbo, lute)
20	<i>Smooth Criminal</i>	Michael Jackson	Trignis	1 (lute)

Arguments about what constitutes a legitimate musical performance in LOTRO (and who deserves recognition as a musician) hinge on the understanding that musicality – whether in a

conservatory, academia, or an online gameworld – carries symbolic capital.⁵⁹ But what exactly happens to this symbolic capital when every player in LOTRO can *role-play* as a virtual virtuoso? With ABC files available for download on websites, thousands of masked Paganinis roam the free-for-all musical networks of Middle-earth. The prestige of musicality is thus simultaneously everywhere and – as a ubiquitous asset – nowhere. That player-made ABC files are not formally copyrighted has further led players to express concerns about intellectual theft, artistic integrity, and the ethics of online filesharing.⁶⁰ On the LOTRO forums, one player remarked: “Hell, I’ve run into people who use OTHER people’s ABC files that they’ve downloaded, and when someone compliments them, instead of giving credit where it’s due, they take the praise upon themselves” (MahaTahu, 27 December 2008). It’s clear that LOTRO players regard musicality as a marker of social distinction – a distinction that, by its very nature, is sustained by the exclusion of those who are not deemed able or worthy to possess it. Perhaps less apparent is why some players should feel so strongly that the boundaries between musicians and non-musicians in an online gameworld need to be policed in the first place.

This chapter examines how inhabitants of LOTRO simulate musical behaviors and negotiate ideologies of virtual musical performance in light of the perceived freedoms that accompany practices of online role-play. Many players – especially those who prefer to use ABC – appeal to the egalitarian principles of role-play to defend their sense of performative entitlement. As a musician named Dalman puts it: “Players who want to play music in the gameworld ought to be able to regardless of whether they can in reality. I don’t know many folks who can take an enemy out of commission entirely for thirty seconds with a flash of light, or by telling a riddle. Yet we do these

⁵⁹ On musicality’s implications of social distinction, see, for example, Cheng (2011:62-66), Bigenho (2008:29-32), Brett (2006:11), Kingsbury (1988:59-84), and Blacking (1973:4-11).

⁶⁰ For musicological case studies concerning these issues, see Katz (2010:177-210), Gillespie (2007:1-20), Lysloff (2003:47-54), Taylor (2001:117-35), and Théberge (1997:214-41).

things in-game, and I don't view the music system any differently" (interview, 23 December 2008). Whereas Chapter 1 introduced issues of aurality, violence, and musical epistemology from philosophical perspectives, this case study takes a fieldwork-centered approach in its considerations of musical performance, role-play, and virtual social relations. Some players perform music in LOTRO to promote ideals of artistic democracy and ludic immersion. Others, by contrast, choose to deploy music as a tool of harassment and territorialization. Those who sonically provoke others or deliberately play over one another's performances transform the game's soundscapes into veritable arenas that point up the potentially offensive consequences of music-making. Integral to this chapter is the assertion that emergent musical practices in LOTRO can broadly illuminate 1) the impact of video game technologies on understandings of music and musical agency and 2) the social dynamics and motivations that inform uses and abuses of sound in formations of musical communities.

Different Strokes

I conducted fieldwork in LOTRO between September 2008 and May 2009 on a North American English-speaking server called Brandywine. With my avatar – a Hobbit Minstrel named Willshire – I attended concerts, engaged in instant-text interviews with the gameworld's inhabitants, sharpened my own musical skills, and performed recreationally alongside other players. I encountered an extraordinary range of player-made music, including Beethoven sonatas, opera arias, *Star Wars* medleys, Japanese pop songs, Christmas tunes, and all manners of original compositions and improvisations. Most of my time was spent in a small village called Bree-Town, where the Auction Hall and the Prancing Pony Inn rank among the most popular venues in the game for formal concerts as well as for more spontaneous acts of music-making (see Figure 2.5). Outside the gameworld, I gathered the views that players, journalists, and game developers shared in blogs,

online discussion boards, magazines, and commentaries on gameplay footage. Using instant messaging and email, I also initiated conversations with a number of players who were actively participating in debates about music on LOTRO's official forums. Many interviewees, during our exchanges, described their epic and quotidian gameplay experiences alike with considerable detail and flair. Quite often it was through the avid storytelling and poetic embellishments of these players that I was thoroughly able to grasp the social import of musical actions in LOTRO's simulated environments.⁶¹

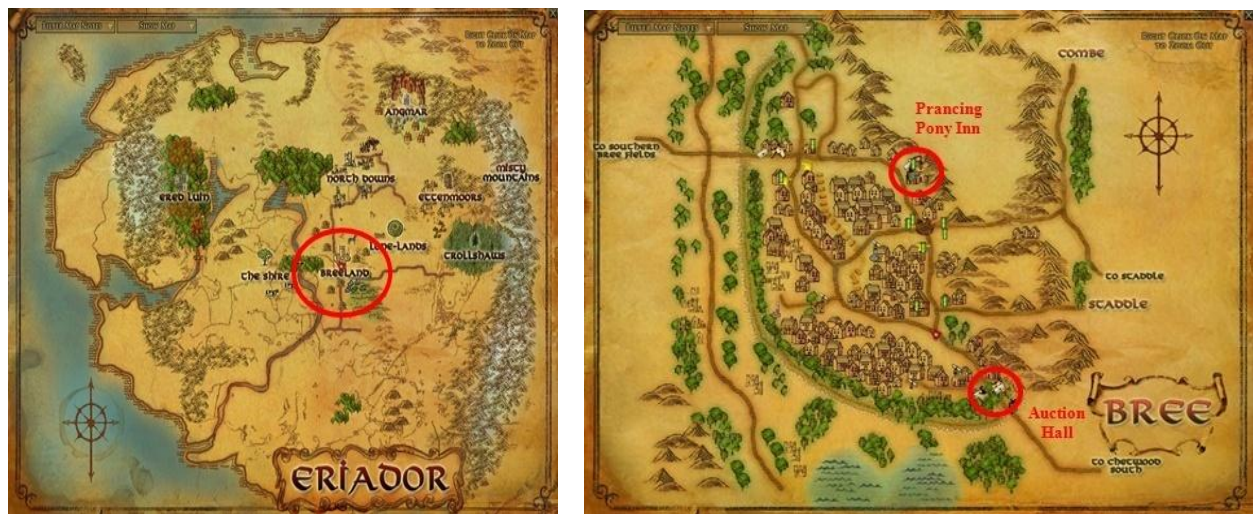


Figure 2.5. [Left] Bree-Land circled on a map of Eriador and [Right] the Prancing Pony Inn and the Auction Hall circled on a map of Bree-Town (a central village in Bree-Land). Images reproduced from Turbine's LOTRO game manual.

Scholars across disciplines have lately come to note that virtual fields – with all the conveniences and liberties promised therein – are highly capable of scrambling an ethnographer's moral compass.⁶² As I conducted fieldwork in LOTRO, I sought to be as transparent as possible about my research aims without unduly disrupting the adventures and role-playing activities of other

⁶¹ As noted by Michael Saler, readers of Tolkien's Middle-earth fictions in the mid-twentieth century engaged in various pre-digital means of fantastical cohabitation: "Clubs and fanzines were the earliest public spheres of the imagination dedicated to the communal habitation of Middle-earth and often comprised a diverse membership. [...] The one thing they shared was Middle-earth: it was their communal home, uniting them despite their differences" (2012:189).

⁶² See, for example, Boellstorff (2008:79-86), Lysloff (2003:24-28), Kendall (2002:233-46), and Turkle (1995:321-24).

players. My avatar was, as shown in Figure 2.2, fairly unremarkable in dress – outfitted with a standard Hobbit-sized tunic, a pair of green gloves, and a short kilt – and would have been wholly indiscernible as a fieldworker based on appearances alone. The extent to which I found it necessary for Willshire to be visible as a researcher varied according to different social circumstances. When attending large public performances in the gameworld, I saw no need (and no practical way) to come out continuously as a fieldworker to every player in the vicinity. But when conducting one-on-one interviews with musicians, I chose to provide my real name and information about the nature of my project while, in turn, permitting players to reveal as little or as much about their own real-life identities as they wished. I informed all complying interviewees that their responses were being logged and that the opinions they were sharing would eventually be cited in scholarly forums. Among those who opted to disclose their real-world occupations were two philosophy students, two computer technicians, a graphic designer, a full-time professional gamer, a book editor, and a retired horse trainer. Interviewees hailed from diverse musical backgrounds and possessed expertise in topics ranging from Middle-earth lore to performance theory. Between the summer of 2009 and early 2010, I invited several of my longer-term correspondents to read former drafts of this chapter and have since benefited tremendously from their insightful feedback.

When asked about LOTRO's music system, most players start out by relating their views on freestyle and ABC. Mastering ABC notation, according to those who attempt it, requires remarkable time and patience. The payoff is that this system permits players to execute intricate polyphonic pieces that may not be as easily realized via freestyling. For some performers, the appeal of freestyle is dampened by lag and other technical factors contingent on the speed of a player's Internet connection, the responsiveness of a player's keyboard, and the stability of LOTRO's servers. All sorts of glitches in the game can result in unpredictable delays between the freestyler's input and the sonic output. As such, a player's competence with acoustic keyboard instruments does not

guarantee an equivalent level of aptitude when freestyling in LOTRO with a computer keyboard. One player explains: “I tried playing live [freestyle] music myself when I was new to the game, before I even found out you could use ABC files, but coming from a piano and organ background, I found the number-key system for playing music live far too clunky and laggy. I only really started ‘playing’ music once I figured out how to use ABC” (interview, Christian, 31 October 2008). Given that the intensity of lag tends to be proportional to the amount of player activity in a particular area, attempts at cooperative freestyling often lead to problems with synchronization. As a result, most players aiming to coordinate large ensemble performances favor the ABC system, which features a built-in function that automatically aligns the beats across the ABC files of collaborating performers. A member of a LOTRO band called the Hobbiton Philharmonic commented as follows on the toils and rewards of creating ABC ensemble pieces:

I was one of those people who initially only played live music in the game, and at first scoffed at ABC. But I came to discover that there is immense satisfaction in making a 5+ part song for an in-game band. I’ve been working for weeks on my 54-minute adaptation of *Carmina Burana* [by Carl Orff], which will be for an 8- to 10-player group (LOTRO forums, Vraell, 27 December 2008).

What’s notable about this player’s proud statement is its suggestion that ABC – despite the pre-recorded nature of its sonic materials – can sometimes actually be more effective than freestyling for bringing together a live community of player-musicians.

Three videos that I recorded during my fieldwork may help demonstrate some different types of musical collaboration. In Video 2.1 (<http://vimeo.com/album/1662580/video/27421516> – recorded 21 December 2008), two players named Dalman and Icke improvise a freestyle duet on lute and drums outside Bree-Town’s Prancing Pony Inn.⁶³ By contrast, Video 2.2 (<http://vimeo.com/album/1662580/video/27421543> – 13 November 2008) shows a group of players performing a multi-part ABC arrangement of Howard Shore’s “Concerning Hobbits”

⁶³ Please use the password *willshire25* to access all videos referenced in this dissertation.

(originally composed for Peter Jackson's 2001-03 *The Lord of the Rings* film trilogy) around a campfire in the Bree Auction Hall. Likewise recorded in the Auction Hall, Video 2.3 (<http://vimeo.com/album/1662580/video/27421576> – 26 October 2008) features an impromptu ABC-freestyle duet between myself and Skjald, the first LOTRO player I interviewed in the gameworld. In this instance, I was in the middle of conversing with Skjald when he launched into an ABC rendition of Ludwig van Beethoven's *Für Elise* on his harp. Upon seeing him do so, I equipped my lute and attempted to freestyle along by ear (resulting in plenty of musical missteps on my part, but also producing some interesting moments of improvised counterpoint).

By giving players the ability to (role)play music, LOTRO's ABC system extends the sorts of equalizing prospects that have traditionally inspired characterizations of online environments as postmodern playgrounds.⁶⁴ The Internet's presumed capacity to elide or to mask social hierarchies has been considered a cause for both celebration and distress. Postmodernism, according to more cynical perspectives, does not simply level the proverbial playing field, but steamrolls unceremoniously over it, leaving in its wake a flattened wasteland that sustains only the padded rhetorics of value-free relativism. It is perhaps this disquieting vision that in part motivates some players to deride ABC performances or to argue that Guitar Hero enthusiasts would be better off spending their time and money learning how to play real guitars.⁶⁵ These criticisms resonate with broader stereotypical media depictions of video games as addictive diversions that breed lazy social citizens, brainwash children, and instill violent tendencies in players. Sensationalist reports these days about how Second Life and other online phenomena are overtaking people's real (or First) lives betray anxieties akin to those concerning how musical role-playing in games might one day

⁶⁴ For considerations of video games and virtual environments from postmodernist perspectives, see Payne (2008:62-64), Filiciak (2003:93-99), and Hillis (1999:xxix-xxx).

⁶⁵ See Miller (2009:401) for an investigation into the kinds of criticisms that writers have lodged against the virtual virtuosity enabled by *Guitar Hero* and *Rock Band* games.

completely supplant the good old-fashioned values of acoustic musicality. Such are the controversies that lie at the base of LOTRO's virtual musical democracy and its discontents.

Music's Labors Lost

My oldest sister plays flute and piccolo.

My other sister plays clarinet, flute, guitar, keyboard...and any other instrument she can get her hands on.

I tried flute. I tried trombone.

I wanted to try sax, e-guitar and drums but got vetoed.

I have a joke. I tell people what my sisters play...then I say I play the radio.

– Milctoaste, response to Chazcon's initial post in the thread "ABC – Way to Ruin a Wonderful Music System," *The Lord of the Rings Online: Community Forums* (26 August 2008).

Shortly after LOTRO's launch, an audio director at Turbine announced: "We wanted [the music system] to be accessible to people. You don't want to be afraid of the music system if you're a non-musician. We really encourage people to equip an instrument and play around with it" (Scott 2007). LOTRO players have since come to champion as well as contest this philosophy of musical utilitarianism. Heated debates have arisen in particular around the ABC system and the way it enables players who are not musically adept in real life to role-play as avatars that are capable of amazing virtuosic feats in the gameworld. One player suggests that "ABC in LOTRO was added to give every player the ability to experience the fun and enjoyment of music. I appreciate that I can easily teach even the most intimidated pupil how to play a song with their favorite character, and thus appreciate the sense of utter wonderment they experience when they do so" (interview, Tirithannon, 12 November 2008). Another player states: "I think those individuals who put down others for using the ABC music system are a tad elitist, as they would rather maintain a system in which the few excel, but the many are left behind" (interview, Tristram, 31 October 2008).

Dedicated role-players in LOTRO pen detailed fictional profiles for their avatars, adopt Tolkienesque linguistic mannerisms, and feign ignorance of real-world technologies, traditions, and current events. Those who uphold this virtual world as a musical democracy insist on their rights *as* role-players to re-imagine and extend their human abilities with the game's assistance. As noted in the previous chapter (with regard to the Big Red Button), video games allow players to experience "a joyously exaggerated sense of control, or amplification of input" (Poole 2000:160). A couple presses of computer keys or controller buttons can make one's avatar execute a back flip, a tumble, or – in this case – a full-fledged ABC musical performance. What opponents of LOTRO's ABC system have tended to condemn, of course, is none other than its amplification of musical input and its apparent minimization of purportedly *real* skill and labor.

In LOTRO, it's possible to tell whether a player is performing freestyle or ABC by watching the animated notes floating out of the avatar's instrument. The noteheads are solid if musicians are freestyling but discernibly more transparent if they are executing an ABC file. Any disdain toward ABC therefore does not rest primarily with an issue of potential deception. Whereas practitioners of record splicing, lip-synching, and (in some cases) auto-tune might aim to conceal these respective tools of sound manipulation and reproduction (see, respectively, Hecker 2008; Auslander 2008:73-127; Katz 2010:50-52), ABC musicians in LOTRO are not usually attempting to pass as freestylers or otherwise technologically unmediated performers.

As might be expected, the concept of liveness comes up quite a bit in discussions about the authenticity and merit of ABC performances. The social capital of live performances largely owes, as Philip Auslander observes, to their connotations of "spontaneity, community, presence, and feedback between performers and audiences" (2008:63). LOTRO players often use the terms "canned" and "live" to describe respectively the game's ABC and freestyle modes of performance. The implied opposition between the two, however, is more complicated than it might first appear.

For while it is true that the ludic input of players is not required to sustain an ABC file once it has begun, these performers can nevertheless complement their music with other kinds of distinctly live actions. Unlike freestylers – whose fingers are necessarily preoccupied with the task of producing music with a computer keyboard – the hands-free functionality of ABC allows its performers to banter with audience members via text chat, dramatize emotions, and even provide running commentaries on the music being played. Three dedicated ABC musicians describe their musical role-playing strategies as follows:

If role-playing, I will incorporate the music-playing into the role-playing. I will emote text describing my character's attitude or the degree of apparent effort he is putting into the music. I've found that playing music can be a great hook for drawing other role-players into conversations (interview, Christian, 16 December 2008).

If someone compliments my song, I respond. If I happen to be using a wind instrument, well, obviously one cannot talk while playing a wind instrument, so I usually do a nod emote (interview, Aellwen, 5 December 2008).

There is one ABC song my kinsmen play: "Riverdance." It was really well put together, I believe, and has been a hit every time we play it. Now, if you are familiar with the song, it has slow parts and speeds up, and gets faster and faster by the end. We, almost without fail, play this up every time:

A: You know, this is kind of an easy pace for us.

B: You think we should go faster, huh?

A: Yeah.

B: Okay ... When do you want to pick it up?

A: Hmmm ... How about ...

All: NOW! (interview, Reclusiveone, 6 December 2008).

In online gameworlds, the conveyance of human presence relies on prosthetic vocabularies – that is, on pre-programmed avataric animations and sounds that players must learn to perform in order to render their surrogate bodies legible as live and living entities. Whereas freestylers in LOTRO depend exclusively on the production of music to telegraph liveness, ABC performers can carry out extra-musical actions that grant this mode of performance its *own* dimensions of liveness. These supplementary role-playing gestures verify the engaged presence of the ABC musician and affirm that even though the production of the music itself is not live, the production of the *musical*

performance in its totality is demonstrably live. That music cannot always be regarded as the sole – or even central – component of a musical performance unsettles any definitive ontological boundaries one might attempt to draw between the respective liveness of ABC and freestyle.

Debates about the ABC system's utilitarian potential, of course, have ample precedents in historical discourses surrounding technology's democratizing effects on the performance, production, and distribution of music. Simon Frith suggests that synthesizers, drum machines, and tape recorders "made possible new forms of cultural democracy and new opportunities of individual and collective expression. [...] Each new development in recording technology enables new voices to be heard and to be heard in new ways" (1986:278).⁶⁶ David Sanjek (2003:363), René Lysloff (2003:44), and Paul Théberge (1997:131), moreover, all tentatively use the term "utopian" to describe Do-It-Yourself musical practices and cultures of online filesharing. Timothy Taylor pursues a similar line of thought in remarking on electronic technology's "democratization of musicking" (2001:161), but he is careful to stipulate that the fulfillment of these egalitarian values depends on an individual's ability to access the requisite technology to begin with (cf. Miller 2012:222; Katz 2012:248). As many scholars have pointed out, visions of cyberspace as a site of democracy tend to be born primarily out of the idealistic fantasies of individuals who have the luxury of inhabiting these realms and propagating such optimistic theories.⁶⁷ New technologies do open up new channels of access and social engagement, but at the end of the day, it's not just *anyone* who can afford to be a Hobbit virtuoso. While some LOTRO players might indeed recognize that one's very entry into virtual Middle-earth already signals a social advantage, the admission (and articulation) of this reality can interfere with the seductive ideologies of liberalist universalism

⁶⁶ In a study of sampling technologies, Alan Durant proposes three conditions of musical democracy: the "cheapness of the equipment," "input into definition of the technology," and "a low or easily attainable skills-threshold for using the technology" (1990:193).

⁶⁷ See, for example, M. Smith (2007:167), Taylor (2001:155), and Turkle (1995:244-45).

offered by the ABC system in particular and by gaming technologies more generally. A promotional slogan such as *Now anyone can be a Guitar Hero!* would probably lose much of its ring if it were appended with the qualification *...provided one possesses sufficient financial means to purchase the video game and resides in a country where this product can be acquired*. Especially since the advent of radio, reports about technology's capacity to democratize music have successfully appealed to specific publics in part by understating the practical and cultural limits of democracy. In this regard, musical democracies, well before LOTRO and the era of video games, have always in a sense been virtual, manifesting primarily as objects of privileged imaginations.

An argument commonly set forth by detractors of LOTRO's ABC system is that the activation of a pre-composed sound file does not represent a legitimate mode of musical performance at all. "ABC," as Chazcon pronounced in his contentious online thread, "is not *playing* music" (LOTRO forums, 22 July 2008). Most respondents who took issue with this statement ended up expressing either outright indignation (*Yes, it is!*) or a musick-and-let-musick philosophy of laissez-faire (*So what if it isn't?*). Players of LOTRO knowingly enter what they perceive to be alternate spatial realities precisely so that they can simulate actions which they might not otherwise be able or willing to perform in physical settings. Few players would insist that only those with real-life equestrian training should be permitted to mount a steed in LOTRO's gameworld. There's clearly something about the simulation of a musical performance, therefore, that sets it apart, in the minds of many players, from simulations of horseback riding, swordsmanship, and other ludic actions.

The perceived elitism and frustration of LOTRO players who denounce ABC might be engendered by a sense that the game's music system does not really serve as a satisfying medium through which one can achieve recognition for hard-earned, real-life musical talents. LOTRO's developers appear to have come very *close* to creating a system capable of translating certain musical

skills, but as a result of some technical shortcomings – lag, lack of input sensitivity, and so on – the performative aspirations of freestylers do not always compute. One could argue that the freestyle system still “leaves room for those who ARE truly gifted to express themselves via original live performances” (interview, Tristram, 31 October 2008), yet in most cases, even players who perform freestyle with apparent finesse can have a hard time attracting large and appreciative audiences. As noted by one player: “I think this is where many people find the problem with ABC music: they themselves are great musicians, and only play live. Then they go to Bree or wherever, and see someone with ‘canned’ music with a huge crowd and lots of applause, while they sit in the corner with one or two people watching their performance. I really think it’s a jealousy thing” (interview, Ross, 31 October 2008). Dedicated freestylers have reason to lament not only their unpopularity but also the notion that – in a virtual world replete with flashy ABC performances – there’s little room for live musicianship. This state of affairs may not sound all that different from Chapter 1’s dystopian vision of recycled music in *Fallout 3* (or, for that matter, pessimistic accounts of real-world music and musical performance since the age of mechanical reproduction). Despite being an online gameworld populated by live human players, LOTRO has become a place where canned music prevails and where, furthermore, it can be hard to tell how much players are really listening to it. In the end, the ability to download ABC files from the Internet, to pass them off as one’s own in the game, and subsequently to steal the thunder of nearby freestylers severely confounds possibilities in LOTRO for a discernible system of musical meritocracy.

To be sure, recording-based modes of musical performance have historically incited much debate between individuals eager to assert the creativity of such practices and those who would claim otherwise. Researchers of musical sampling in genres such as hip-hop have submitted some of the most extensive arguments regarding the expressive potential of pre-recorded materials. Mark Katz describes sampling as “an art of *transformation*” rather than mere “technological quotation”

(2010:174, emphasis in original), while Kai Fikentscher similarly characterizes the deejay as a “composer [who] manipulates sounds in creative ways so as to render his or her performance *unique* to a time and place” (2003:294, emphasis in original). By thinking through the putatively non-reproducible and unscripted elements of sampling and turntablism – for example, technical glitches, a deejay’s spontaneous bodily gestures, the audience’s reactions, and the mutable acoustics of a particular space – it’s easy to imagine the soundscapes and experiences of these performances as eminently (read: humanly) variable.⁶⁸ Just as inventions of the pianola, the phonograph, and the radio all initially sparked controversies about issues of musical authoriality, canned sounds, amateur ideologies, and the dangers of mass consumption, so sampling, LOTRO’s ABC system, and other technologies today are continuing to call attention to the slippery criteria on which writers have traditionally relied to distinguish active performers from allegedly passive consumer-listeners.⁶⁹

The democratization of musical craft in LOTRO, quite evidently, has thus *not* paved way for a virtual utopia – indeed, quite the contrary. Flames of controversy have been fanned by the equalizing power of ABC and its subversion of critical rubrics by which exhibitions of musical competence and learnedness have conventionally been measured. Players who favor freestyle seem particularly eager to import real-world musical hierarchies into the gameworld so as to lay claim to the social distinctions typically associated with formal musical training and live performance. Possibilities for a peaceful musical democracy in LOTRO are also undermined, in an even more palpable way, by music’s ability to function as a tool of disruption, harassment, and territorialization. Disputes abound concerning what kinds of music qualify as good, pleasing, and stylistically appropriate to the gameworld. The fact that player-made music in LOTRO is automatically

⁶⁸ On additional ways in which sampling invites reexaminations of distinctions between performance and recording (and between human and machine), see Schloss (2004:46) and Porcello (1991:75).

⁶⁹ On anxieties incited by these technologies, see Goodman (2011), Katz (2010:56-79), Rehding (2005), Douglas (2004:20-25, 328-46), Sterne (2003:291), Taylor (2001:5-8, 161-64), Morton (2000:48-73), and Théberge (1997:29).

broadcast in a sizable radius around a performer means that any musician can trespass (whether intentionally or unintentionally) upon the aural ranges of listeners without first obtaining consent. Players who deliberately interrupt or perform over the music of others do so to attract attention, to provoke nearby audience members, and to test and transgress the limits of what music can do in a virtual world. Through acts of disorderly playfulness, these LOTRO musicians expose a host of social and ethical issues surrounding the weaponization of sound as well as the antagonistic potential of musical expression writ large.

A Question of Co-Hobbitation

The harpists, and the lutanists, the flautists and pipers, the organs and the countless choirs of the Ainur began to fashion the theme of Ilúvatar into great music; and a sound arose of mighty melodies changing and interchanging, mingling and dissolving amid the thunder of harmonies greater than the roar of the great seas. [...] But as the great theme progressed it came into the heart of Melko to interweave matters of his own vain imagining that were not fitting to that great theme of Ilúvatar. [...] Then did [Ilúvatar] smile sadly and raise his left hand, and immediately, though none clearly knew how, a new theme began among the clash. [...] But the discord and noise that Melko had aroused started into uproar against it, and there was a war of sounds, and a clangour arose in which little could be distinguished.

– J. R. R. Tolkien, “The Music of the Ainur” (ed. Christopher Tolkien, 1983), 50-51.

One need look no further than to Tolkien’s own creation myth for Middle-earth to see the kinds of sonic and social discord that can arise when musical performances collide. In Tolkien’s tale, the God Ilúvatar instructs his choir of holy beings, the Ainur, to bring the universe into existence through the production of beautiful harmonies. This Ur-Music, according to Ilúvatar, will serve as a blueprint for all subsequent cultural relations in the cosmos. But one of the Ainur, the mischievous and overconfident Melko, refuses to play along, opting instead to fabricate his own competing strains. Ilúvatar eventually triumphs in this noisy battle, while Melko tellingly goes on to be the

primal source of all evil in Middle-earth (eventually recruiting minions such as Balrogs, dragons, werewolves, and most remarkably Sauron, the principal antagonist in *The Lord of the Rings*).

What can LOTRO's communities teach us about the social consequences of – and motives for – agonistic musical behavior? How does the virtual nature of the gameworld influence the kinds of musical practices that players are inclined to perform and to tolerate? And what is it about musical conflict in particular that, in the eyes of players, distinguishes it from other forms of ludic contention? Consider, for starters, this complaint voiced by a player on a LOTRO forum thread titled “Don’t Play Bad Music!”:

My god, some folks in here must be deaf or lack any intonation. I passed by the [horse] stable area in Bree last night & OMG [...] they must have been just banging keys. Course, I made a comment thinking I said it to Kin [private chat] and it was on Say [public chat]. Something about god-awful noise. But if you heard it on my end, you’d be crying too! (27 August 2008)

Another player posted an indignant response the next day:

Funny, I looked at this post and thought, this really can’t be about me, can it? Hark it is, that was me and my friend playing there, thanks for the vote of confidence by the way. [...] I personally know some people in your kin, just wanted them to be aware you were representing their kin in such a positive way. [...] Guess it really doesn’t matter though since I can’t get my partner to play anymore. Have a good day and be sure to check your chat [Kin vs. Say] before bad-talking people (28 August 2008).

The scenario recounted in this exchange sounded like it was, to say the least, embarrassing and upsetting for both individuals. The second player, after being shamed in the gameworld as an inept musician, retaliated by likewise publicly rebuking the first player on the forums for having broadcast the initial insult to everyone else in the Bree-Town area. The fundamental issue raised by this brief encounter was about who had the right to perform what (and where) in LOTRO’s gameworld, and in turn, who had the right to object (and to whom).

Official rules for player behavior in LOTRO are outlined in its Code of Conduct, which the developers at Turbine drafted as a subsection to the game's End-User License Agreement.⁷⁰ One rule states: "While playing the Game or participating in related services, you may not exhibit or partake in behavior that is disruptive to the Game's normal playability [or] causes grief or alarm to other players" (Turbine 2007:106). These vague terms of common decency are complicated by LOTRO's role-playing premises, such that the Code makes a provision that reads: "Although the Game is a role-playing game, you may not claim 'role-playing' in defense of any violation of the Code of Conduct" (ibid.:107). Indeed, if it were not for this stipulation, players could justify virtually any offensive act by citing the hypothetically ill-mannered dispositions of their avatars. It is ultimately, however, within the legal purview of Turbine's game administrators to discipline injurious behaviors as they see fit. According to the User Agreement, any "player who violates the Code of Conduct may be warned by Turbine staff, but some particularly serious violations or repeated violations can result in other sanctions, such as a lockout or permanent ban, without warning" (ibid.). The most extreme penalty involves the termination of a player's account, a sort of virtual capital punishment insofar as it entails the irreversible deletion of a player's avatar from Turbine's central server.

Although the Code of Conduct abstains from legislating or recommending the types of music that should be played in the gameworld, many players choose to perform only musical pieces that they believe accord stylistically with the setting of Middle-earth. Players have frequently reported instances in which their sense of ludic engagement has been disrupted by encounters with what they considered inappropriate music. One player explains: "I prefer that other role-players play at least vaguely period-correct music while role-playing, in the same way that I prefer them to speak

⁷⁰ The complete Code of Conduct can be found on the official LOTRO website (<http://www.lotro.com/support/policies/1033-coc>) as well as in the instruction manual that ships with hard copies of the game.

in-character and to avoid ‘Internet speak’ or other references which break the immersion. I don’t like to play easily recognized popular or classical tunes at all, because playing more obscure pieces preserves the idea that the pieces were written for Tolkien’s world, not ours” (interview, Christian, 16 November 2008).⁷¹ Another player insists that “music like heavy metal and rap really don’t have a place in Middle-earth. All the songs I play actually in some ways fit within the realm of fantasy, like Irish folk songs and Celtic music such as Enya” (Aellwen, 4 November 2008).⁷² Attempts of players to honor musical lore-authenticity in LOTRO, however, can be challenging given that there is no unequivocal or primary real-world culture (or historical era) from which Tolkien derived his fantasy land of Middle-earth. Historians and literary critics have posited, for starters, a mix of Norse, Celtic, Anglo-Saxon, Welsh, Irish, and Germanic mythologies as sources of Tolkien’s inspiration (Caldecott 2008:211-24; Flieger 2005:55-84; Chance 2004:4-14; cf. Donnelly 2006:306-16). And while many players’ imaginations of Middle-earth’s soundscape have likely been influenced by Howard Shore’s soundtracks for the recent *The Lord of the Rings* blockbuster trilogy, the musical lore of the gameworld remains highly contested. Conflicts in LOTRO arise between players who possess contrasting perspectives on the kinds of actions, linguistic conventions, and musical practices that contribute to a compelling gameplay experience. Players who are not at all invested in immersive role-play can also end up butting heads with those who regard the maintenance of immersion as a collective responsibility.

Seeing as how very little consensus exists within LOTRO’s communities concerning the styles of music that are conducive to effective role-play, some players try to circumvent tricky questions of authenticity by advocating for performances of music that suit particular social

⁷¹ Players in LOTRO can set their avatar’s status to indicate whether or not they are role-playing so as to inform others about how they wish to be approached in the game.

⁷² LOTRO players concerned with musical lore-authenticity appear to be pursuing a kind of empathy and experiential verisimilitude akin to that which is sought by *Grand Theft Auto: San Andreas* players who, as Kiri Miller reports, listen to rap on the in-game radio “because that’s what CJ [the avatar-protagonist] would do” (2007:422).

instances of gameplay rather than the lore of the virtual world as a whole. One player notes that music should be “situational in LOTRO, much like it is in real life. Most people, for example, wouldn’t choose to play ‘In Da Club’ [by 50 Cent] at a funeral” (interview, Tristram, 31 October 2008). When I asked this player about the kinds of music he would personally consider appropriate for a funeral, he responded: “Incidentally, this past Wednesday, we had a memorial event [in LOTRO] for the founder of our kinship, Vincent, who passed away in real life a year ago from cancer. At the event, a number of kin-mates and I played ‘Into the West’ via the ABC system, along with a few other musical numbers, as a tribute to a fallen leader. My closing piece was a solo rendition of ‘Danny Boy’ on the bagpipe” (ibid.).⁷³ The mourners expressed here a sense of duty not to any single musical aesthetic but instead to the staging of a sensitive performance befitting a solemn ceremony. They imported into the gameworld their own encultured notions of what they considered respectful commemorative music without dwelling extensively on its degree of authenticity within the greater context of Middle-earth.

Given the sheer amount of musical activity in LOTRO, it might come as a surprise that none of the thirty-four rules in the game’s Code of Conduct makes any reference to music at all. Such omission might stem from perceptions of in-game musical performances as primarily recreational acts that resist explicit governance. While many other forms of misconduct – such as chat-spamming, stealing the loot of fellow players, or hacking the game code to gain an unfair technical advantage – are liable to face serious repercussions, I have not, to this day, heard of a single instance of a LOTRO player being formally disciplined for music-related violations. We

⁷³ Composed by Howard Shore, Annie Lennox, and Fran Walsh, the melancholy farewell song “Into the West” (originally recorded by Lennox) plays during the closing credits of Peter Jackson’s film *The Lord of the Rings: The Return of the King* (2003). The song was inspired in part by the Auckland filmmaker Cameron Duncan, who passed away from bone cancer in 2003. It received an Oscar for Best Original Song at the 76th Academy Awards in 2004.

might call this music's ludic alibi – a defense premised on the notion that musical transgressions are merely play and playful, beyond the reach of (and need for) serious admonition.⁷⁴

Musical confrontations in LOTRO become especially fraught when players attempt to disturb others on purpose and with antagonistic intent. In online gaming communities, the term *griefing* is used to describe any behavior that a player deliberately commits with the aim of annoying or offending others.⁷⁵ Griefers derive pleasure from violating implicit codes of social conduct and hindering the ludic experiences of surrounding players. In LOTRO, performers who employ sound in a disruptive manner exhibit what one might call *musical* griefing. One player explains: “As a listener, I am often annoyed when one musician walks up too close to another musician and starts playing a different song. It’s inconsiderate not only to the first musician but also to anyone in the audience who now can only hear the competing and clashing songs” (interview, Christian, 31 October 2008). Another player describes a particularly unpleasant instance of musical rivalry:

A guild leader was leading a few of his members in a band performance of Pachelbel’s Canon on three different instruments. However, it wasn’t that great, and I could tell they had struggled to put it together. I gave them constructive criticism at which they took personal offense. Shortly after that I started playing a song, since they seemed to be done playing theirs (common courtesy in the game dictates that if there are multiple people nearby that you give each person time to play a song or take turns playing songs for an accumulated audience). While in the middle of my rendition of Pachelbel’s Canon, the leader as well as another member [of the group] started playing the two most auditorially abusive instruments in the game, the cowbell and drums, in order to drown out my music and drive me away (interview, Michael, 13 December 2008).

What began here as an impromptu battle-of-the-bands ended as a turf war in which music was harnessed as a tool of spatial dominion. So while Melko, the Ainur’s rogue chorister, was perhaps

⁷⁴ Anthony Julius has likewise noted that people who defend transgressions in visual arts often do so with recourse to the “aesthetic alibi,” the premise that “[a]rt is a privileged zone in which the otherwise unsayable may be said, and the otherwise unpicturable may be pictured” (2002:25-26).

⁷⁵ Regarding online griefing practices, see Dibbell (2009:11-12), Bakioglu (2009), Boellstorff (2008:187-98, 220-25), J. Smith (2007), and Ludlow and Wallace (2007:89-107). In his seminal book on cultures of play (before the advent of digital games), Johan Huizinga used the term “spoil-sport” to describe a “player who trespasses against the rules or ignores them [...] shatters the play-world itself [...] [and] reveals the relativity and fragility of the play-world in which he had temporarily shut himself with others” (1955:11).

the first musical griever in Tolkien's virtual universe, he was certainly not the last. This said, I'll conclude with two tales from the field. In the first case, a lone griever is effectively banished from an outdoor concert via the collaborative efforts of the performers and audience members. In the second, six musical griefers appear to emerge victorious when their orchestrated performance of cacophony manages to drive an entire roomful of players out of a communal area.

Holiday Noise at the Prancing Pony

On the evening of 19 December 2008, a LOTRO kinship called the Lions of Judah (LoJ) staged a Christmas concert in front of Bree-Town's Prancing Pony Inn. Clad in gold and maroon uniforms with red boots and plumed hats, eight members of LoJ assembled inside the inn around 9:30PM (EST) to review their program and to finalize their plans. Having seen announcements for this event on LOTRO's forums, I arrived early to interview the performers. The leader of the kinship, a Dwarf Minstrel named Gadowar, informed me that LoJ, though not primarily a music clan, enjoyed putting on performances whenever its members could find time to do so. All of the music they were about to play at this concert, according to Gadowar, would be ABC ensemble pieces arranged by one of the kinship's members.

At 10:00PM, the LoJ performers headed out of the inn to face a rowdy audience of about fifty players. Although dusk had descended, dozens of players illuminated the area by building campfires and shooting streams of fireworks into the air. Using emotes, players made their avatars applaud, cheer, laugh, dance, smoke pipes, and breathe fire (see Figure 2.6). The server's public chat window buzzed continuously with jokes and festive wishes. During the first half of the concert, the LoJ performers played ABC renditions of holiday songs such as "God Rest Ye Merry, Gentlemen," "Carol of the Bells," "Carol of the Birds," "Let It Snow," and, as shown in Video 2.4 (<http://vimeo.com/album/1662580/video/27421587>), "Angels We Have Heard on High." Later, they turned to non-holiday tunes such as Kansas's "Dust in the Wind," Harry Chapin's "Cat's in the

Cradle,” and the Blue Öyster Cult’s “Don’t Fear the Reaper.” The LoJ musicians handed out prizes to players who were quickest to identify correctly the songs being performed. The overall spirits of audience members were also lifted by the distribution of virtual beer by a Dwarf named Vanthli.



Figure 2.6. [Left] The Lions of Judah kinship performing in front of the Prancing Pony Inn as [Right] audience members light up the evening sky with fireworks and colorful spells (19 December 2008). Screen captures by author.

Everything was going smoothly until about halfway through the concert, when a Hobbit named Dugly began to play freestyle music on a clarinet against the ABC tunes of the LoJ performers (see Figure 2.7 and Video 2.5 – <http://vimeo.com/album/1662580/video/27421603>). The simultaneous performances of two disparate musical pieces created jarring sounds that agitated the concert performers and audience members alike. The following excerpt from the chat window shows examples of the remarks and emotes that players used to express their disapproval of Dugly’s behavior:

Gadowar shouts, ‘No prizes, no music until spamming is done.’

Marlomur says, ‘Dugly is stupid.’

Fothicheis sighs at Dugly.

Elrohiraran scolds Dugly.

Gadowar shouts, ‘EVERYONE /ignore DUGLY.’

Hiyo gestures rudely towards Dugly.

Marthared says, ‘you can just put Dugly on “ignore” and it turns him off.’

Over the course of several minutes, players also used emotes to slap Dugly an impressive total of fifty-six times. Such chiding actions, however, seemed only to exacerbate the bewildering scenario and to encourage Dugly to persist in grieving. I tried to initiate a conversation with Dugly in a private instant-chat session, but received no response.



Figure 2.7. Dugly (circled) grieving with a clarinet during the LoJ Christmas concert (19 December 2008). Screen capture by author.

Since LOTRO does not support a traditional Player vs. Player mode, the audience members at the LoJ concert had no way of restraining or chasing away Dugly with avataric actions.⁷⁶ Even the reproachful slaps of players remained purely symbolic gestures that could not directly affect Dugly in any ludically consequential way. To this end, LOTRO's developers – perhaps anticipating the kinds of musical harassment that could proliferate in the gameworld – included in the game's initial design a technical counter-measure called the *Ignore* function. This utility allows a player to block all incoming music from any other specified player while leaving the rest of the gameworld's sounds – including the music of other non-ignored players – fully audible. At the Christmas concert,

⁷⁶ Player vs. Player (PvP) gameplay, common in most MMORPGs, allows players to attack and inflict damage to one another's characters. Although LOTRO does not have a standard PvP mode, it does offer a Player vs. Monster Player (PvMP) mode in which players – when occupying specific PvMP-sanctioned zones – can temporarily assume the guise of a high-level Monster and engage in combat with non-Monster players. These zones, naturally, do not tend to be situated in civil areas and villages such as Bree-Town.

Gadowar and other irritated players repeatedly directed audience members to type “/ignore add Dugly” in their command windows so that they could block the sounds of Dugly’s clarinet and enjoy the unadulterated performance of LoJ’s music. Once several audience members confirmed that they had “/ignored” Dugly, the LoJ performers proceeded with the remainder of their musical program. Dugly, possibly upon realizing that the grieving music could no longer be heard by most of the surrounding players, vacated the premises a little while thereafter.

To reformulate a familiar philosophical query: If a Hobbit grieves at a Christmas concert – but no one else can hear him – does he make a sound? Though the Ignore function in LOTRO places a filter in the listener’s ear rather than a muzzle on the performer’s mouth, a musician who is “/ignored” by everyone within earshot becomes effectively mute. The measures taken by the performers and audience members at the LoJ concert show that musical censorship in LOTRO is possible through collective action. Yet as one player argues: “The ability for an abused player to shut down both text and sound coming from their abuser is the final step provided by the game, but its utility shouldn’t provide justification for the abuser to simply say, ‘If they don’t like it, they can shut me off.’ Giving players the tools to avoid harassment does not excuse those willing to harass in the first place” (interview, Tirithannon, 6 December 2008). “/Ignoring” a player, in any case, does not render the target invisible. Dugly, even after being placed on the Ignore lists of audience members, could still be seen, in the middle of the crowd, *attempting to grieve* on the clarinet (see Video 2.6 – <http://vimeo.com/album/1662580/video/27421613>). Consequently, the Ignore function, despite its name, does not actually allow its users to become instantly or blissfully *ignorant* of a griever’s presence and offensive intentions. One final tale will continue to stress the practical limits of LOTRO’s tools of musical censorship and convey just how forceful musical grieving can be when it is executed in an organized and pre-meditated fashion.

Bagpipe Spam in the Auction Hall

On the afternoon of 11 November 2008, I encountered in Bree-Town a Hobbit named Jimbrosil who informed me that he and a few members of his kinship were planning to “bagpipe spam” the Auction Hall a little after 10PM (PST). When I asked him to explain bagpipe spamming, he responded: “About 6 people go in there, stand in different locations, and play different songs on the bagpipes. It’s like listening to 100 dying cats” (interview, 11 November 2008). Sure enough, around 10:40PM that night, Jimbrosil and five other members of his kinship marched into the Auction Hall with bagpipes and matching uniforms. At the time, there were about a dozen other players in the hall, a small space with dim lighting and modest decor. These players were retrieving letters from in-game mailboxes, trading items, and casually chatting and role-playing with one another. One can imagine their surprise when the room suddenly became filled with the sounds of six bagpipers simultaneously performing six different ABC files. Jimbrosil and his kinmates had positioned themselves such that every corner of the hall fell within the musical range of at least one performer (see Video 2.7 – <http://vimeo.com/album/1662580/video/27421633>). Anyone standing near the center of the room would have been able to hear all six performers (see Figure 2.8).

The group of music spammers acted here like a virtual flash mob, taking everyone else unawares with their spectacular stunt. Although a few players expressed amusement toward these performers, most others were less pleased. None of them, of course, were captive listeners in the literal sense: they were free at any point to mute their audio, turn off their speakers, or exit the game. They also had the option to “/ignore” all six grievers – though to do so, they would have had to run up to each of the grievers to view their respective names and subsequently to place these names, one by one, on their Ignore lists. Given the burdensome nature of such technical counter-measures, most players appeared to resolve that it would be easier to flee the scene altogether. Within minutes, all but one or two of these listeners had vacated the space. The spammers therefore seemed to win

the day, disrupting the activities of the Auction Hall's prior patrons and demonstrating that music can break communities apart just as easily as it can bring them together (cf. Shelemay 2011:364-74).



Figure 2.8. Jimbrosil and five other players (circled) bagpipe-spamming Bree-Town's Auction Hall (11 November 2008). Screen capture by author.

This bagpipe spam is a drastic example of how music in LOTRO can function as an instrument of provocation and territorialization. It represented a transgressive instance of musical behavior lying far beyond the basic applications of the game's music system. Any player who enters this virtual Middle-earth, granted, will almost inevitably learn about the prospects of musical grieving either through experimentation or by watching others. LOTRO's musical griefers are, one might say, exemplary *ludic* virtuosos. These players are always looking for ways to push the aesthetic and behavioral boundaries of musical performances and to shock unsuspecting listeners with the resulting sounds. The seemingly effortless execution of music via the ABC system facilitates these possibilities for noise pollution and sonic rivalry. It's arguably during such moments of

transgression, in fact, that the musical creativity and playfulness of ABC performers become most discernible. For despite the limited input of its single-click functionality, the ABC system permits players to weave together all sorts of musical and cultural harmonies as they learn to play, to compete, and to coexist with one another in a constantly changing world – harmonies that resonate with social and moral valence precisely because possibilities for discord are always *only* a click away.

Conclusion: Freedom Rings

In his *Republic*, Plato opens a dialogue about justice and human goodness by invoking the myth of the Ring of Gyges, an ancient artifact that is said to grant its bearer the power to turn invisible. According to Glaucon (the character through which Plato relates the myth), no one equipped with this ring “would be so incorruptible that he would stay on the path of justice or stay away from other people’s property, when he could take whatever he wanted from the marketplace with impunity [...] and do all the other things that would make him like a god among humans” (1992:36 [360c]). Tolkien’s *The Lord of the Rings* trilogy foregrounds the allegorical principles of Plato’s myth by relating an epic tale of how the protagonist Frodo must resist not only the flesh-and-blood demons of Sauron’s empire but also the internally corruptive force of the One Ring. Online cultures today are putting the Gyges hypothesis to the test. Behind a veil of pseudonymity, players of LOTRO and other online games are accorded enormous liberties to experiment with behaviors that they might otherwise not be able or willing to enact in real-world settings. Some players might feel especially motivated to take part in musical grieving because it’s one of the only reliable ways to garner any serious attention with music in the gameworld. Respectful and unintrusive musical performances are a dime a dozen in LOTRO. When playing nice fails to pique the ears of passersby, it makes sense that some musicians may turn to performative tactics that are less than courteous.

Musical griefers in LOTRO engage in a form of sound play wherein the risks and possibilities for harm are relatively low. They treat musical offenses as a means of being noticeably transgressive without being excessively so – as a game within a game, as a way of having a little fun, as a social nuisance rather than a genuine threat. Misconduct of a musical nature has increasingly become an integral part of the gameworld, for better and for worse: worse, because it can annoy listeners, disrupt concerts, and (especially when carried out in collaborative fashion) take over an entire space; and better, because it's a resounding reminder to all players – the griefers as well as the grieved – that LOTRO's gameworld is a privileged place where one can explore these sorts of transgressive behaviors with relative ease, freedom, and security. That musical grieving tends to get a free pass from official disciplinary measures by no means suggests that players and administrators perceive music in the game as utterly insignificant or inconsequential. Rather, LOTRO's inhabitants endure and partake in grieving *because* they recognize it as a distinctive act, as something that conspicuously shows just how much music can really matter in the gameworld.

Controversies about music in LOTRO come down to questions of tolerance and cohabitation: how much (and why) players will put up with griefers; the extent to which freestylers are willing to respect the musical role-playing rights of ABC performers (and vice versa); and what all this might say about the contingencies, pleasures, and discontents of virtual musical performances. LOTRO's inhabitants have together discovered over the last few years many ways of using music to forge social ties in a dynamic role-playing universe. To this day, players are driving one another to test the sorts of things that can be said and done with music. These virtual troubadours, in sum, are relentlessly playing with music, and in doing so, they have shed light on the convergences as well as divergences between virtual and real-world musical experiences.

This ethnography offers one starting point for further conversations about the ways in which the means and effects of music-making are rapidly transforming alongside developments in

video game technologies. The creative potential and limitations of LOTRO's ABC system in particular can productively inform ongoing critical debates about the very definition of a musical performance in cultures saturated with practices of recording, reproduction, and simulation. For some players, ABC signals the beginning of an anarchic nightmare wherein players mindlessly regurgitate ready-made music with pretensions to artistic agency. For others, the system embodies the foundation of an exquisite democracy that grants musical wings to all. Negotiating dystopian and utopian conceptions of musical role-play requires an acknowledgment of tensions between musicality's democratic and elitist realities – put simply, the notion that though all humans are musical, some are more musical than others. What are our incentives for judging aesthetic worth or policing authentic musicality? Why should we really care who is or gets to be musical? What are the intellectual and academic stakes that underlie cultural formulations of boundaries between music, sound, noise, and other categories of acoustic phenomena? These are the basic yet powerful questions that LOTRO musicians are posing to one another – and now, to us – via their everyday engagements. In the end, as the populations of LOTRO and other online communities continue to grow, it will only become ever more vital to attune ourselves to the roles that musicians play in both their real and virtual lives.

Chapter 3

Dead Ringers

I experience a ludic nightmare within minutes of entering the world of the 1999 game *Silent Hill*. After watching a brief introductory video – one that shows protagonist Harry Mason crashing his car into the side of a road while driving through the game’s eponymous town – I take control of this avatar to go in search of his missing daughter. Things are quiet save for the hollow sounds of my footfalls and the distant noise of creaking metal. Though it’s almost impossible to see anything through the thick fog and flurries of snow, I soon spot a young girl not too far away. She’s standing eerily still, arms crossed, one leg angled slightly forward, thick strands of black hair covering her face. Just as I almost reach her, she springs to life and runs into an alley. I instinctively follow. Deeper and deeper into this dark passageway I go, passing by an empty wheelchair, then a blood-stained gurney, before arriving at a dead end where I encounter a terrible sight: a flayed humanoid corpse, ribs all exposed, pinned against a barbed wire fence. Upon turning away from this abomination, I see – to my even greater horror – a pair of child-like demons teetering towards me. I manage to edge past these monsters, but something now blocks my path out of the alleyway. Though I could swear this barrier was not here earlier (as this was the same way I came), I have no time to dwell on such mysteries. Harry is defenseless and escape is impossible. The two demons lunge at him with knives and emit guttural cries as they gnaw at his legs. No amount of button-mashing on my part is capable of rescuing Harry from a grisly fate. With a soft moan, he collapses and dies before my eyes.

A cutscene then shows Harry waking up – unscathed, it appears – inside a run-down diner (see Figure 3.1). Was it all a dream? This narrative sleight-of-hand reveals the protagonist’s fake death to have been a pre-scripted event that was vital to my advancement through the game. But a certain sting of impotence lingers in my mind. Though this diner looks like a relative safe haven,

I'm not sure I feel any more secure than I did before. The game has already tricked me once. Who knows what else it could be up to? I know what the game wants me to do: exit the diner, solve some puzzles, fend off an army of monsters, and find Harry's daughter. After the foul play in the alleyway, however, I'm no longer sure how much I should be trusting this game or following its orders to begin with. What am I getting myself – and Harry – into?



Figure 3.1. [Left] Harry getting attacked by monsters in the opening alleyway sequence of *Silent Hill* and [Right] Harry waking up in a diner. Screen captures by author.

No Exit

Silent Hill is a survival-horror PlayStation game created by the development group Team Silent and published by Konami Computer Entertainment Tokyo. The game received a North American release (with English text) on 31 January 1999 and a Japanese release shortly thereafter on 4 March 1999.⁷⁷ It debuted to favorable reviews and has since gone on to spawn multiple sequels, prequels, and film adaptations.⁷⁸ While preceded by notable survival-horror games such as *Alone in the Dark* (1992), *Clock Tower* (1995), and *Resident Evil* (1996), the *Silent Hill* series has emerged as one of this

⁷⁷ On the genealogy of survival-horror games, see Perron (2012:17-26), Therrien (2009), McRoy (2006), and Hand (2004). Recent survival-horror games and franchises include the *Fatal Frame* series (2001), *Eternal Darkness: Sanity's Requiem* (2002), the *Dead Space* series (2008), *Amnesia: The Dark Descent* (2010), and *Lone Survivor* (2012). A growing emphasis on action and combat in horror games has lately led writers to question whether the survival-horror genre still exists in its purest form (see Alexander 2008).

⁷⁸ Subsequent installments in the *Silent Hill* series have included *Silent Hill 2* (2001), *Silent Hill 3* (2003), *Silent Hill 4: The Room* (2004), *Silent Hill: Origins* (2007), *Silent Hill: Homecoming* (2008), *Silent Hill: Shattered Memories* (2009), and *Silent Hill: Downpour* (2012).

genre's defining franchises. To this day, ardent fans continue to fashion and debate intricate theories about the settings, characters, monsters, and timeline of the *Silent Hill* universe. Fan fictions, instruction manuals, strategy guides, novels, comic books, and other supplementary media have altogether done much in past years to flesh out the lore surrounding the fabricated American town of Silent Hill.

Writers have variously posited English gothic literature, Japanese Noh theater, the stories of H. P. Lovecraft, and the films of Alfred Hitchcock as sources of inspiration for this survival-horror series.⁷⁹ The first *Silent Hill* game, however, draws most plainly from Japanese horror cinema (J-horror) and its emphasis on demonic mothers, victimized daughters, vengeful reincarnated spirits, and the terrorizing powers of sentient technologies.⁸⁰ The convoluted plot of this game centers on a conspiracy involving the physical torture of a young girl named Alessa Gillespie by her mother Dahlia. At one point in the game, Dahlia explains to the protagonist that the protracted torment of Alessa has served to revive the dark god of a wicked cult: "For the seven years since that terrible day [the day on which Alessa was supposed to be sacrificed in a fire], Alessa has been kept alive, suffering a fate worse than death. Alessa has been trapped in an endless nightmare from which she never awakens. 'He' [the god] has been nurtured by that nightmare, waiting for the day to be born." The torture of Alessa is never explicitly depicted over the course of the game, but her pain is everywhere discernible in its gruesome palette of sights and sounds. Over the course of the player's adventure, the town of Silent Hill routinely transforms into the Otherworld, an alternate reality which, in Harry's words, looks like a realm of "someone's nightmarish delusions come to life,"

⁷⁹ As noted by Bernard Perron (2012:1, 39-40, 55), other likely influences for *Silent Hill* include *The Exorcist* (1973), *Jacob's Ladder* (1990), and the television series *Twin Peaks* (1990-91).

⁸⁰ The plots of many recent J-horror films have centered on the sentient homicidal powers of everyday devices such as cellphones (*One Missed Call*, 2003), computers (*Pulse*, 2001), video cassettes (*Ringu*, 1998), and video games (*St. John's Wort*, 2001). As noted by Jay McRoy, J-horror "[literalizes] the darker side of a process of nation-wide industrialization largely orchestrated as a result of, and in direct response to, western military and cultural imperialism" (2005:6). On J-horror's thematic conventions, see Balmain (2008:128) and Goldberg (2004:371-73). On cross-cultural influences between Japanese and American horror media, see Picard (2009), Balmain (2008:26), and McRoy (2005:114).

where environments are soaked in shadows and stained with blood. The flesh wounds of Alessa are mirrored in these hellish surroundings, while echoes of her mental anguish reverberate through a soundscape that pulses with groaning metal, squeaking wheels, air raid sirens, howling monsters, and other noises of nature and technology gone awry. The fog, darkness, and sounds that permeate *Silent Hill* collectively signal a disavowal of legibility – a disavowal grounded in a trauma so unspeakable that its symptoms and aftershocks lie beyond all conventional forms of representation (see Figure 3.2).

Paranormal externalizations of Alessa's pain seem to manifest not only in the virtual world's desolate aesthetic but also in the player's distressing interactions with the game.⁸¹ *Silent Hill* compels players to empathize with Alessa's suffering via gameplay that stresses vulnerability and desperate survival instead of blazing guns and performances of superhuman feats. Harry Mason is a ludological anomaly who lacks the extravagant powers possessed by typical heroes and heroines of action-adventure games. He is an Everyman – an extraordinarily ordinary human being whose relative lack of offensive capabilities makes him easy prey for the monsters of *Silent Hill*.



Figure 3.2. The Otherworld in *Silent Hill*. Screen captures by author.

A defining characteristic of survival-horror games is the way they elicit fear by destabilizing the player's sense of control. Mark Simmons – project director of *Silent Hill: Origins* (2007) and *Silent*

⁸¹ In a similar vein, scholars have commonly interpreted disaster and horror films as critical texts that aestheticize, sublimate, and critique historical national traumas and other social maladies (see Blake 2008; Lowenstein 2005).

Hill: Shattered Memories (2009) – once declared in an interview that when one “[looks] back at the survival-horror genre, it’s pretty clear that the monster scares were built upon awkward controls, clumsy combat, and constantly being kept in a state of low health. Other genres had moved on [by] leaps and bounds, but the survival-horror genre continued to fall back on these unrefined elements of gameplay because they added to the fear” (2009:45).⁸² As suggested by Tanya Krzywinska, the “interactive dimension of horror games enables a *more* acute experience of losing control than that achieved by most horror films. This is achieved partly because, at times, the player does have a sense of self-determination; when this is lost, the sense of pre-determination is enhanced by the relative difference” (2002:216, emphasis in original; see also Rouse 2009; Perron 2009; Kirkland 2007b; Carr 2003). Krzywinska cites non-interactive cutscenes as examples of especially disturbing instances that “[wrest] control away from the player” (2002:211), but this assessment – while theoretically intriguing – doesn’t necessarily hold up in practice. As remarked by Will Porter in a GSR (Galvanic Skin Response) study of emotional and physiological responses to horror games, savvy players tend to see cutscenes not as a cause for alarm but instead “as respite from gameplay – a time when they know they’re definitely safe” (2011:65).⁸³ With this in mind, the alleyway sequence in *Silent Hill* is horrifying precisely because it is *not* a cutscene in the traditional sense: the player retains control over Harry’s movements as the monsters launch their assault. For a few awful seconds, the (first-time) player will instinctively fight for survival, pressing every possible button,

⁸² One reviewer, praising *Silent Hill*, summarized the protagonist’s defenselessness as follows: “[Harry’s] aim is awful and his running pace, though quicker than most enemies, still keeps him only a heartbeat away from being mowed down by the demons running amok on the streets of Silent Hill. In fact, because of the limited amount of ammunition available in the game and Harry’s inexperience with firearms, you’ll find yourself evading enemies more often than confronting them. [...] Not only does this strengthen the adventure element in *Silent Hill*, but it also draws the player into the world of the game by mixing in enough realism into the madness” (Reyes 1999).

⁸³ Like Krzywinska, Aylish Wood proposes that game cutscenes reduce “the degree of agency for gamers, relocating them as viewers who are able to actively excavate it for relevant narrative information” (2007:128; cf. Kirkland 2007a). Though Krzywinska and Wood both raise compelling points, Will Porter’s study (2011) suggests that the purported lack of agency during a conspicuously non-interactive cutscene can be offset by a player’s understanding that there is no possibility for *ludic* failure – that is, for a Game Over scenario. The pre-determined nature of cutscenes, in other words, relieves the player of any pressure to perform in the first place.

frantically trying everything but accomplishing nothing. The game requires Harry to die *in the player's hands*.

In the same way that Alfred Hitchcock's *Psycho* (1960) famously broke the rules of the horror film genre by killing off its female protagonist mid-shower (and mid-story), so the first five minutes of *Silent Hill* effectively warn players that all bets are off. The most upsetting aspect of the attack in the alleyway is how it explodes the player's conceptions of what the *game* is allowed to do: the scripted demise is likely to leave a player feeling not simply frightened, angry, and confused, but moreover betrayed by the breach of contract between gamer and game – a contract that, under ordinary circumstances, should grant the player some mastery over a protagonist's fate.⁸⁴ This violation of trust in the opening moments of *Silent Hill* gives players enough reason to be henceforth wary not only of the game's enemies but also of the game itself. As the player goes on to contend with narrative fake-outs, unreliable controls, and a dearth of combat options, *Silent Hill* increasingly assumes the guise of a living entity actively seeking to undermine the player's sense of agency. The game can instill in players a sense of the uncanny, which, according to Ernst Jentsch's (ante-Freudian) definition, pertains to the "doubt as to whether an apparently living being is animate and, conversely, doubt as to whether a lifeless object may not in fact be animate. [...] [W]hen [...] a wild man has his first sight of a locomotive or of a steamboat [...] the feeling of trepidation will here be very great, for as a consequence of the enigmatic autonomous movement and the regular noises of the machine, reminding him of human breath, the giant apparatus can easily impress the completely ignorant person as a living mass" ([1906] 1997:11). Players of *Silent Hill* might likewise feel, at times, as if they are fighting an animate ludic apparatus, one that churns out fear through unruly gameplay and shocking outcomes.

⁸⁴ Some video games also feature pre-scripted instances of failure in the form of unwinnable boss battles. Classic examples include the initial encounter with Vile in *Mega Man X* (1993) and the first battle with the Cloud of Darkness in *Final Fantasy III* (1990).

Just as this horror game can appear to transgress its status as an idle medium, so its grotesque soundscape resembles a sentient antagonist, an invisible yet omnipresent force that seethes and convulses as it plays terrible mind games with the player. Such noise is capable of provoking all sorts of ludic, perceptual, and intellectual anxieties. Whereas my previous two case studies dealt with questions of players' aural and performative agencies, this chapter grapples with the uncanny agencies exhibited by the sounds of *Silent Hill*. By underscoring the ways in which the game's industrial noises haunt various borders – between diegetic and non-diegetic, real and virtual, lingering and ephemeral, organic and mechanical, surface and subdermal, instructive and manipulative – I show how these sounds work to unsettle a player's sense of control and rational thought. Through brief comparisons of historical discourses on noises and monsters, I frame the game's noises *as* living monsters in their own right: abject, liminal, and always potentially transgressing against the bodies and inhabited spaces of players. Underpinning these considerations are ultimately broader investigations into what I call the *economy of fear* – that is, the frightening efficiency with which the minimal sounds and reductive aesthetics of horror media can evoke sensations of maximal terror.

The Hill Is Alive

Composer Akira Yamaoka (b. 1968) created a soundworld for *Silent Hill* using discordant combinations of synthesized noises. Discrete musical tracks accompany Harry's travels through corresponding regions in the game.⁸⁵ Some locales are deathly silent (aptly living up to the game's title), while others are almost intolerably noisy. The looping sounds in Yamaoka's tracks feature effects such as microtonal slides, dissonant stacked chords, timbral distortions, juxtapositions of extreme registers, rapid vibrato, drones, prolonged decays, and ghostly echoes. This soundtrack's

⁸⁵ According to Yamaoka, his main musical influences have included punk, techno, metal, and British New Wave rock bands such as Depeche Mode, Ultravox, and Visage (see Kalabakov 2002).

aesthetic approximates a mixture of industrial music, glitch music, Japanese noise music, punk, and other countercultural genres that emphasize the use of unconventional sound materials. The resulting music amounts to what Zach Whalen calls an “atonal chaos [that is used] to reflect the player-character’s [i.e. Harry Mason’s] psychological state” (2004; see also Whalen 2007). Though these strident sounds do convincingly exemplify Harry’s unstable frame of mind, the game’s story tells us that such noises are meant to be the supernatural projections of a poor girl’s pain. All the while, of course, this cacophony evinces (and contributes to) the player’s own harrowing ludic experience. Together, Harry, Alessa, and the player constitute a band of suffering souls, an ill-fated trinity whose fears resound fitfully through this terrible world of din and darkness.

The annotations in Figure 3.3 trace the musical events that unfold over the course of the game’s introductory alleyway sequence. Predetermined layers of noise are progressively triggered and sustained as Harry reaches specific geographical nodes. These sounds increase in both density and volume as the passageway becomes ever more narrow. The simultaneous compression of space and expansion of noise produce a claustrophobic effect, with the accumulated soundwaves filling the alley, bracing against its walls, bursting at the seams of the screen and barely staying contained, it seems, within the realm of the virtual. As Harry’s surroundings gradually go dark – as it becomes almost impossible to *see* anything at all – the player has little choice but to lend a compensatory ear to the assaultive sounds, to *listen* to (and through) the noise for signs of danger. We can afford to cover our ears and close our eyes when things get scary during a horror film, but this isn’t a viable option when playing a horror video game. The player is impelled to stay on high alert – to embrace every terrifying ounce of audiovisual data – for the sake of Harry’s survival. Granted, despite all the noises that clutter this alleyway, danger doesn’t surface until the player reaches a dead end, at which point it comes in the form, alas, of two undefeatable monsters. Not until Harry dies his false death do the suffocating sounds fade away. A grueling start to an unforgiving game.

Following the car crash, Harry (1) wanders the streets of Silent Hill in search of his daughter Cheryl. He (2) spots a girl in the distance and (3) follows her into a dark alley. He passes by (4) an abandoned wheelchair and (5) a bloody gurney. As he heads deeper into the alley, he (6) reaches a dead end and (7) sees a flayed corpse pinned against a fence.



(1) Sound of groaning metal



(2) Addition of faint sounds intoned approximately at G^b , C, and D^b (A440)



(3) Addition of air raid sirens



(4) Addition of sound of grinding wheels (noise fades by the time Harry reaches the gurney)



(5) Addition of resonant percussive noises



(6) Addition of looping dissonant chords (chordophonic timbre) and a staccato melody that plays only once (metallophonic timbre)



(7) Addition of bass beat

Figure 3.3. Progressively layered sound events in the introductory alleyway sequence. Segments (2) and (7) occur as brief cutscenes. Screen captures by author.

Yamaoka has explained that he scored *Silent Hill* with industrial noises because they could produce “much of the essence needed [for the game] [...] [a] cold and rusty feeling” (Kalabakov 2002).⁸⁶ Industrial music offers, as Paul Hegarty states, an “anti-aesthetic, using the tools of art to undo art. [...] Stylistically, it often combines objects not usually thought of as belonging to music” (2007:105). Or, as Karen Collins puts it: “[I]ndustrial music is built around ‘non-musical’ and often distorted, repetitive, percussive sounds of mechanical, electric and industrial machinery, commonly reflecting feelings of alienation and dehumanisation as a form of social critique” (2002:13).⁸⁷ The repetitive noises in *Silent Hill* come together like recycled bits of detritus that reflect the grime and decay of the gameworld. The resulting soundscape resembles an experiment in patchwork gone wild, comprising scraps of noise sewn together and grotesquely reanimated into an acoustic equivalent of Frankenstein’s monster.⁸⁸ These noises reach fever pitch (and can be particularly harsh on the ears) whenever the town transforms into the nightmarish Otherworld.

The anti-aesthetic ideology of industrial music is well suited to *Silent Hill* given that the game – in minimizing and frustrating the player’s agencies – also comes off as resolutely anti-*ludic*. Sounds in this game constantly work to unhinge the player’s mental fortitude and sensory orientation. One perturbing aspect of the game’s soundscape is how its noises straddle the diegetic and non-diegetic divide: sirens, rattles, clinks, drips, whirs, and scrapes frequently punctuate the soundscape but lack

⁸⁶ The music that accompanies the game’s introductory and concluding full-motion videos has an aesthetic that is distinctly more lyrical, tonal, and rhythmically regular than the noise-based tracks heard during actual gameplay. Yamaoka has acknowledged that the former aesthetic was influenced in part by the music composed by Angelo Badalamenti for *Twin Peaks* (see Perron 2012:89; Kalabakov 2002).

⁸⁷ Like industrial music, the broad genre of noise music is informed by ideologies that are radically countercultural and anti-aesthetic (see Kelly 2009:210-82; Toth 2009:25-37; Hegarty 2007:133-65).

⁸⁸ Various studies of horror films and gothic literature highlight thematic resonances between medium and subject matter. James Heffernan, for example, suggests that “film versions of *Frankenstein* implicitly remind us that filmmaking itself is a Frankensteinian exercise in artificial reproduction” (1997:139; see also Spadoni 2007:107). Judith Halberstam similarly remarks that Bram Stoker’s *Dracula* “assembles a writing machine from letters and journals, dictaphones and phonographs; it [like Mary Shelley’s *Frankenstein*] feeds cannibalistically on its sources. The structures of both *Frankenstein* and *Dracula* activate and exemplify models of production and consumption which suggest that Gothic, as a genre, is itself a hybrid form, a stitched body of distorted textuality” (1995:33; see also Twitchell 1985:165-67).

visible sources.⁸⁹ It's often tough to tell (and, in many cases, impossible to verify) whether a sound is coming from an unseen monster, from some distant machinic apparatus, or from beyond the game's diegesis entirely. This orgiastic commingling of noises in *Silent Hill* can, according to Guillaume Roux-Girard, "lure the gamer into thinking that there are more threats than there actually are [and succeed] at diverting the gamer's attention from the real threats in the game. [...] [N]on-diegetic music [...] includes in its loop a sound that is very similar to the sounds generated by the flying monsters of the game. Since the flying demons' sounds are mixed very low within the music, the gamer, who is concentrated on his activity, probably won't notice that this cue is repeated on a fixed temporal line and will be bound to associate this sound [with] an oncoming monster" (2010:207). Such devious design can swiftly lead players to lose faith in their own visual, aural, and cognitive faculties. Bernard Perron, author of a monograph on the *Silent Hill* series, recounts his gameplay experiences as follow: "[W]ith the town of SH1 [*Silent Hill 1*] shrouded in mist and darkness, I mistook a fire hydrant for a dangerous dog; I've also been frightened by white noise that finally ended without any sign of danger. I shuddered when I heard a child crying in the boys' restroom of Midwich Elementary School" (2012:29). To be clear, this restroom harbors no visible child. The sobbing noise is a floating sonic index: it poses no technical threat to Harry, yet does a good job messing with the player's own head.

Even more disturbing than the muddling of diegetic and non-diegetic noises in *Silent Hill* is the way these sounds cross between the game's virtual world and the player's real world. Buzzes, rumbles, door-slams, and other noises bleed with ease from the gameworld into the player's physical space precisely because they sound like everyday acoustic and synthesized urban clamor. We might

⁸⁹ Regarding designers' strategic blurring of soundtrack and sound effects in survival-horror games, see Brown (2011:2-3). On the likewise unsettling effects of "[u]nidentifiable, unlocatable sound" in film, see Stilwell (2007:188). Van Elferen (2011), Jørgensen (2009:97-116), and Collins (2008:125-27) have noted the problematic divisions between diegetic and non-diegetic audio in video games (cf. Winters 2010 and Smith 2009 for similar discussions concerning film).

occasionally be fooled into hearing these in-game sounds as if they're coming from real-world sources – from our living rooms, from upstairs, from just outside our windows. What's liable to trick us in this regard are not so much the game's outrageously loud, dissonant, or repetitive noise samples, but rather the little mundane sounds that pop up now and then: a creaking floorboard here, a muted thump there, a generic beep from nowhere. The sheer density of this industrial audio is also enough to create an illusion of surround-sound. Noises from the game – even when piping unidirectionally out of a television's speakers – so extensively saturate a player's physical space that they can sound like they're invading from all directions. This illusion stands to prevail despite the overall mediocre sound quality of the game's noises. A low-fi *thud* and a high-fi *thud*, after all, are not easy to tell apart (cf. Munday 2007:52). Improbable and irrational though it may seem for a player to mistake a game's noises for real-world sounds, it's worth remembering that fear grants no refuge in reason. Hearing virtual noises as if they're coming from our own surroundings can be genuinely frightening because *real* sounds intimate *real* threats.

Consider the famous opening scene in Fred Walton's 1979 thriller *When a Stranger Calls*. teenage babysitter Jill Johnson (Carol Kane), after putting the children to bed, starts getting sinister calls from a deep-voiced man. Jill dials up a policeman, who tells her to stay safely locked up in the house. He also informs her that he's working on tracing the menacing calls. Following a nerve-racking wait – during which Jill receives increasingly nasty calls from the stranger – the policeman finally phones her back and reports, "We've traced the call. It's coming from inside the house!" Jill goes into a state of shock. Her eyes glaze over, her mouth hangs agape. The film quickly shifts from the expression of fear flash-frozen on her face to a montage of many different areas in the house: the foyer, the dining room, the kitchen, the stairwell – all dark, all potentially hiding a killer who has been there *all along*. Every passing second of this digressive montage is pure agony for the viewer. Though we might be paralyzed with horror along with Jill, there's a shot of a swinging

pendulum in a grandfather clock (accompanied by a loud quasi-diegetic *tick*) to remind us that time has *not* stopped and, moreover, that the film's protracted survey of the house's interior is – if nothing else – giving the intruder all the more time to get to Jill (see Figure 3.4).



Figure 3.4. [Left] Jill paralyzed with fear and [Right] the swinging pendulum of the grandfather clock in the opening scene of *When a Stranger Calls* (1979). Screen captures by author.

While the cop's warning is not a jump-scare in the traditional sense, the revelation is terrifying for the way it instantaneously turns the house inside out, collapsing the distance previously believed to have been separating victim and enemy. The scariest thing here isn't just the sudden vanishing of the protective walls surrounding the film's protagonist; especially if we're watching this movie in our own living rooms, we might also get the uncanny feeling that the killer is now closer to *us* (the viewers) in the real world. An appeal to basic reason should allow us to understand that our act of watching this scene (*...coming from inside the house...*) has no bearing on (much less a causal relation to) the possible presence of a killer in our own abodes. But once again, we're not dealing with a genre that trades on reason. Horror doesn't play fair. Its most potent manifestations are supposed to inject us with doubt – and with fear for our *own* safety.

Consider, by way of another example, a climactic moment in Hideo Nakata's J-horror movie *Ringu* (1998). Toward the end of the film, the male protagonist Ryūji watches a video in which the demon-child Sadako gropes her way out of a water well. She creeps through the soil, inching in Ryūji's direction, until she looks like she's pressed right up against the other side of the television

screen. Then, in a shocking move, she bursts *through* the screen. As Ryūji backs into a corner, his eyes twitching with disbelief, Sadako (now inhabiting the movie's intradiegetic realm) turns and faces the camera of the film proper (see Figure 3.5).



Figure 3.5. [Clockwise from top left] Sadako climbing out of the television set and turning to face the camera (and the movie's audience) in *Ringu* (1998). Screen captures by author.

It's at this point that we might (against our better judgment) be inclined to wonder: If Sadako can crawl out of the television screen within the film – if she can literally penetrate the fourth wall once – can she go one step further and break through *our* screen as well? Yes, she can, we tell ourselves, because she's a *supernatural* character. And no, she cannot, because, well, she's a supernatural *character*.

Since much of the industrial audio of *Silent Hill* is indistinguishable from everyday real-world ruckus, it can sound, in brief, like it's *coming from inside the house*. Perhaps even more disconcerting is how this crossover – according to one of my own gameplay experiences – is able to operate in reverse. At one point while playing through *Silent Hill* for the first time, I started to notice a hum:

soft, very low in register, but somehow timbrally distinctive enough for it to be audible alongside the many layers of in-game noises that were already accompanying my ludic actions. On my notepad, I documented the sound as a drone pitched approximately at a D-flat two octaves below middle C. When I turned off the game twenty minutes later, however, I could still hear the noise. The trajectory of my emotions rapidly followed thus: panic, puzzlement, and finally, embarrassment, when I realized that the sound was coming not from the game at all but instead from my own refrigerator. This noise was one that I had long since learned to tune out while going about daily business in my apartment, yet it returned with a sudden vengeance upon being mashed against the audio of *Silent Hill*. The game's patchwork soundscape, in this instance, functioned like a noise-magnet, an acoustic *katamari* that drew the hum of my fridge into the orbit of its own ghastly formation, ripping open a portal through which noises of real and virtual domains freely intermingled to incestuous ends. If my experience is any indication, the game's industrial noises have the potential not only to break out of the screen like a trespassing creature (à la Sadako) but also to absorb the sounds of a player's physical surroundings into its depraved ludic plane. Our world, the gameworld, the game's Otherworld: a monstrous welter of spaces and sounds, perverse to their very core.⁹⁰

Things are bound to get unnerving when video games breach the fourth wall. Some horror games feign hardware and ludic malfunctions as a means of threatening the player's ability to connect reliably with the gaming interface. In Nintendo's *Eternal Darkness: Sanity's Requiem* (2002) for GameCube, the protagonist comes with a sanity meter, which, when depleted, can variously lead the game to flash a fake Blue Screen of Death, pretend to delete the player's save file, black out the

⁹⁰ In Konami Digital Entertainment's *Silent Hill: Shattered Memories* (2009) for Wii, an even more disturbing compression of real-virtual distance may occur when noises are emitted directly from the speakers embedded in the Wiimote (the console's wireless controller). When the protagonist receives a phone call in the game, the ringing sound comes not from the television's speakers – presumably positioned several feet away from the player – but instead from the Wiimote clutched in the player's hands.

screen (to give the impression that the player's television has turned off on its own), or mute the audio.⁹¹ This game terrorizes the player not only via images and sounds of monsters, but also by *being* a monster, an animate platform toying mercilessly with the player's mind. These fake-outs can often be more alarming than the average monster scare. Being made to believe that one's save file has been deleted – that all the hard-earned progress one has made in a game has been lost – entails an entirely different level of horror. Animated monsters *in there*, in the simulated world, we can handle (so long as our character is good at fighting or running away). But a ghost in the machine, a faux-virus, a monster *out here* – that's a whole other story.

Once a player starts catching on to such gimmicks, they naturally lose some of their original impact. Yet because a fake Blue Screen looks *exactly* like a real Blue Screen, it's not so simple for players, by faith or willpower alone, to achieve total psychological immunity against these antics. For while most of us would say that there's no such thing as zombies, there *is* such a thing as hardware failure. Each time a message in *Eternal Darkness* pops up to tell us that our save file has been deleted, we know it's probably false – and yet a sliver of doubt ever lingers. A similar paranoid mentality informs our anxieties toward sounds that cross from virtual-world to real-world spaces. When playing *Silent Hill*, we should have little problem understanding that the noises we're hearing are coming from the dense, industrial soundscape of the gameworld.⁹² But since the noises in there are dead ringers for the everyday noises out here, we're necessarily working with scrambled sensoria.

⁹¹ While these types of gimmicks have figured prominently in recent games such as *F.E.A.R.* (2005), *Batman: Arkham Asylum* (2009), and *Amnesia: The Dark Descent* (2010), one of the earliest and most famous examples occurs during a boss battle in Konami's stealth-action Playstation game *Metal Gear Solid* (1998). At the beginning of this encounter, the enemy character Psycho Mantis claims to have psychic powers. Upon instructing the player to lay down the game controller on a flat surface, this character declares that he will proceed to move the controller with his mind. Lo and behold: the player's controller indeed springs to life, rattling noisily against the surface on which it has been placed. How is this remotely possible? Remotely, it turns out, is key: Psycho Mantis – or, rather, the game's programming – accomplishes the illusion of fourth-wall-shattering telekinesis by triggering the rumble pack inside the PlayStation controller, synchronizing its vibrations with each dramatic wave of this boss character's arms.

⁹² On the breaking of the fourth wall in *Silent Hill*, Ewan Kirkland notes: "[S]elf-reflexive moments in *Silent Hill* suggest an almost Brechtian game series, drawing attention to its own artifice, deconstructing the videogame form and the processes it employs, while simultaneously producing an effect of extreme disquietude" (2007b:411; see also Harpold 2006).

Regardless of how we might strive to perceive these noises as safely contained within the game's fictional diegesis, we can never entirely ward off the uncertainty that nibbles at the fringes of our consciousness. Any time we succumb to such tricks, we might feel as if we're no longer involved in sound play (that is, a truly safe ludic encounter). Whenever we go on record saying that we know a horror film or game poses no real threat – whenever we're willing to affirm that the suspicious sound we just heard definitely came from the television set rather than from outside our own windows – we brush up against the question of whether we would literally bet our lives on this claim. It's easy to answer yes when we're in broad daylight, reading *about* horror while sitting in the middle of a bustling coffee shop, bundled in the warmth of ample company and the authority of rational discourse. It isn't nearly as easy to do so, however, when we're in the middle of experiencing a horror movie or a horror game, when we're alone at night, and when our minds and bodies are being held hostage by our own imaginations run amok.

Monstrous Noise

When asked about how he used music in *Silent Hill* to arouse fear in players, composer Akira Yamaoka responded: "First and foremost is 'irregularity.' People are analog creatures [...]. When things don't happen as we expect, or when the rhythm breaks, we start to get very nervous. [...] In short, I betray the user's expectations" (2009:39). Irregular rhythms, as noted by Yamaoka, do occur within the individual loops of the music in *Silent Hill*, though several of the game's tracks actually achieve an oppressive effect by repeating the exact same sounds with unwavering regularity. Much of this game's music can be parsed into melodic and rhythmic ostinati that last no longer than a few seconds. The endless recycling of these sonic fragments evokes a hellish labyrinth in which paths toward escape and resolution are persistently concealed or deferred. While gamers might get tired of redundant radio programming in *Fallout 3* (Chapter 1) or mildly aggravated by a bagpipe spam in *The Lord of the Rings Online* (Chapter 2), the soundtrack of *Silent Hill* can feel downright oppressive. With

Fallout 3, a player might hear a repeated American hymn on Enclave Radio every couple of hours, but in the case of *Silent Hill*, a player has to tolerate jarring noises that recur every couple of seconds. And while *Fallout 3* and LOTRO allow players to turn off the in-game radio or to block out the sounds of musical performances, *Silent Hill* offers no such option. A player of *Silent Hill* can technically mute the television audio altogether, but again, doing so is not advisable because these noises supply vital information about potential nearby dangers. Put simply: damned if you listen, dead if you don't.

The repetitive industrial noises in *Silent Hill* – much like Jentsch's uncanny locomotive – chug away with an air of mechanical anempathy that verges on sentient antipathy.⁹³ One may hear this redundant music as somehow sinister in its mimicry and mockery of the player's own compulsive repetition of dreadful ludic actions. A typical playthrough of the game will involve Harry perishing again and again in a number of gruesome ways before being resurrected each time (via the reloading of save files) for the abusive ritual to carry on. As Torben Grodal writes, players of video games in general partake in an “aesthetics of repetition [...] based on the [following] sequence: first *unfamiliarity and challenge*, then *mastery*, and finally *automation*” (2003:148, emphasis in original; cf. Kirkland 2007a:77; Darley 2000:164; Buse 1996:170-76). It is telling that Grodal concludes his list not with mastery – not with some apotheosis of agency – but instead with a descent into automation and its connotations of mechanistic play. Trying to master something too well, this trajectory implies, is to risk becoming enslaved to it.⁹⁴ The most cynical assessments of

⁹³ On the use of anempathetic music in horror films, see Link (2004). Regarding anempathetic effects of minimalist music in film more generally, see Eaton (2008:97-121, 186-251) and Chion (1994:9).

⁹⁴ Such an outlook is like the pessimistic flipside of Mihaly Csikszentmihalyi's (1990) influential notion of flow, which locates possibilities for pleasure in immersive engagements with activities that contain just the right level of challenge (not too hard, not too easy). Kiri Miller also offers a more balanced view of ludic repetition: “In popular-music and media studies, repetition often has negative connotations: of mass production, commodification, lack of originality, mind-numbing sameness consumed by a docile public. But scholars and practitioners of traditional rituals, games, and performing arts have a different relationship with repetition. In these repeating practices, each iteration may reinforce

repetitious gameplay would cast it as a fatuous, unreflective activity by which players are disciplined, subordinated, systematized, and otherwise drained of all operative authority by a game's demands for redundant action.

Many studies of minimalist soundtracks in horror films and games similarly frame musical repetition as a marker of trauma, psychological malfunction, or mindlessness. Claire King, for example, proposes that the redundant music accompanying a specific scene in William Friedkin's *The Exorcist* (1973) demonstrates a "struggle against the continuity of time [which] recalls the paralysis engendered by traumatic memory" (2010:120). Inger Ekman and Petri Lankoski describe the repetitive moans of monsters in the 2001 survival-horror game *Fatal Frame* as a "sign of [the monsters'] mental incapacity" (2009:192). And Kevin Donnelly (2010:160-61) regards the minimalist drone of white noise in John Carpenter's *The Fog* (1980) as an acoustic analogue to the film's eponymous fog and the fraught human unconscious. Such readings might be deemed interpretatively compensatory in that they strive to highlight minimalist music's maximal import – to eschew, in the words of Susan McClary, assumptions of minimalism as the mere "refusal" or "self-erasure" of meaning (2007:52). Or as Robert Fink succinctly puts it, a "true cultural hermeneutic of minimal music [...] must attempt to make its emptied-out formal language *signify*" (2005:18, emphasis in original).

Noise – conceived as both material and metaphor – has likewise been widely theorized with a heavy reliance on compensatory hermeneutic premises. Writers and composers since the turn of the twentieth century have increasingly embraced noise as an object "existing in all music [...] essential to its existence, but impolite to mention" (Cowell [1929] 2001:252), comprising "sounds we have learned to ignore" (Schafer [1973] 2004:30), signifying "only in relation to the system within which it is inscribed" (Attali 1985:26), connoting all the "local impurities [that] are subsumed under a

precedents or subtly alter them, gradually creating new traditional narratives, musical canons, embodied performance techniques, and cultural ideologies" (2012:226).

communication presumed to be successful” (Kahn 1999:25), and “present in every musical signal” (Russo and Warner 2004:50).⁹⁵ These characterizations familiarize noise by emphasizing its ontological relativity and phenomenological ubiquity, by proclaiming not simply (and tautologically) that the *rest* is noise, but moreover that *all* is already potentially not-noise.⁹⁶ The standard rescue mission of exegetes and composer-experimenters has been to salvage noise from foreign spaces of absolute non-signification, and by doing so, to grant it a covert home in socially sanctioned forms of musical and verbal expression.

An apophenic sensibility inheres in delineations of noise as a semiotic vacuum – an auditory Rorschach test that is capable of signifying at once everything and nothing. Appeals to definitional promiscuity are evident in descriptions of noise as “a refusal of representation, a refusal of identity” (Toth 2009:27) and “out of control [...] situated within excess, a transgressive act that exceeds managed data” (Kelly 2009:63). Electronic music composer Kim Cascone describes noise as exemplifying an “aesthetics of failure” (2000:12), but other writers have, by contrast, insisted on noise as always already *failing to be* noise. According to Paul Hegarty, “noise cannot remain message and still be noise [...] When noise catches on, [...] if it were to become a [cultural or artistic] movement or inspire one, it would already be failing” (2007:126). Simon Reynolds similarly asserts that “to speak of noise, to give it attributes, to claim things for it, is immediately to shackle it with meaning again, to make it part of culture. [...] To confer the status of value upon [the] excess and extremism [of noise] is to bring these things back within the pale of decency. So the rhetoricians of noise actually destroy the power they strive to celebrate” ([1990] 2004:56; see also Echard 2005:87). Noise, in a word, is self-negating. Like most countercultural artifacts, it is constantly tugging at its

⁹⁵ Or, as John Cage famously stated: “Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating” (1973:3).

⁹⁶ *The Rest Is Noise* is the title of music critic Alex Ross’s 2007 bestselling collection of essays. The phrase itself is, of course, a play on Hamlet’s final words, “The rest is silence.”

own roots and slipping toward the mainstream, toward the realms of social and aesthetic respectability against which it's supposed to be defined. To be sure, formulations of noise's paradoxical status often revel in so much rhetorical ambivalence that they can appear to run the risk of getting sucked into noise's own nihilistic abyss – and hence becoming discursive noise in themselves.

Just as noise is conceivably present in every communicatory signal, so monsters are popularly regarded as externalizations of the monstrosities residing ubiquitously in human nature. Descriptions of noise's polysemy closely mirror critical representations of monsters as interstitial objects (organic or otherwise) that facilitate the deferral of hermeneutic terminus (see Carroll 1990:32-52). The monster, according to various writers, is “a remarkably mobile, permeable, and infinitely interpretable body” (Halberstam 1995:11), a “fantasy screen where the multiplicity of meanings can appear and fight for hegemony” (Žižek 1991:63), and “a category that is itself a kind of limit case, an extreme version of marginalization, an abjecting epistemological device” (Cohen 1996b:ix).⁹⁷ Like noise, monsters are ideal sites for discursive play: while they're supposed to be fearsome and powerful, they also serve as catch-all vehicles for scholarly displays of interpretative prowess. Rhetoricians *qua* monster-tamers – much like music connoisseurs who claim to comprehend noise *as* music or who disavow (with theoretical flourish) the legibility of noise altogether – champion principles of definitional mutability in bids for intellectual authority. The relationship of hermeneuts to monsters is, to put it colorfully, ironically vampiric given the ease with which the latter can be appropriated as repositories for deconstruction.⁹⁸ To reformulate one of the

⁹⁷ The monster *qua* interstitial construct also appears regularly in (ableist) representations of disabled persons and non-normative bodies. On the metaphorization and stigmatization of disabled individuals as pathological terata, see Garland-Thomson (1996), Grosz (1996), Weinstock (1996), and Bogdan (1988). Concerning the deployment of monsters in feminist and posthuman discourse, see Haraway (1991:21-22).

⁹⁸ This point resonates with Cohen's description of the monster as “[a] construct and a projection [...] [that] exists only to be read: the *monstrum* is etymologically ‘that which reveals,’ ‘that which warns,’ a glyph that seeks a hierophant” (1996a:4).

overriding constructionist theses of gothic criticism: monsters are not born, but made – made, in no small part, by (and into) discourse.

Cheap Scares: The Economy of Fear

Like the writers who work to domesticate monsters via critical inquiry, composers for early video games assumed the role of veritable noise-tamers in their attempts to fashion ludically salient music out of otherwise arbitrary *beeps* and *boops*. Until the 1990s, audio technologies of game consoles mostly accommodated soundtracks with no more than a few simultaneous melodic voices (see Jørgensen 2009:13-23; Collins 2008:20-51; Gersic 2008:145-47; Bessell 2002:141-42). Meager hardware memory further required designers to rely on the extensive repetition of relatively short tracks. Composers of early game audio were therefore tasked with acoustically telescoping minimal musical material into sounds that could stand up to the monumental fantasies and larger-than-life characters of video games. The limited noises accompanying a player's exciting encounters with dragons and giants had to be deployed in a manner that could inspire a similar level of awe and exhilaration. As the prolific Japanese composer Nobuo Uematsu explains: "The NES [Nintendo Entertainment System] only had three tracks [melodic voices], and each of their sounds was very unique. I had to focus on the melody itself and think about how each chord would move the audience. I struggled to produce originality in the same three tones, just like any composer for that period. It's amazing to listen to how [different] composers [...] had totally different creations by using the same three instruments" (Belinkie 1999). The burden of creativity, of course, did not rest wholly on the shoulders of composers: players were also expected to grow ears that could extract maximal significance from minimal sounds. In the same way that players had to learn to interpret a game's pixilated graphics as ludic iconography – for example, a triangular stack of dots as a spaceship – so they had to exercise a certain degree of aural imagination when confronted with the tinny *pew-pews* of interstellar battle. Composers and players of early games, much like the sound

directors and audiences of early radio dramas (see Huwiler 2005:45-59; Douglas 2004:7-12; Rattigan 2002:123-33), effectively engaged in a semiotic business of audio data compression and decompression.⁹⁹ The early eras of game sound design were largely about overcoming technological restrictions – or more accurately, about embracing these restrictions and cultivating the innovative possibilities therein to forge expressive forms of sonic shorthand.

Much of early game audio was reductive by technical necessity, but developers of survival-horror games in particular excelled at devising thematic justifications for stripped-down design. *Silent Hill*, aside from using a repetitive soundtrack to horrific and oppressive ends, features dark and foggy environments that obviate the need for graphical rendering beyond the immediate sight-radius of the third-person avatar (see Rouse 2009:19; King and Krzywinska 2002:11-12). Harry's constant blackouts and hallucinations additionally explain (away) his instant teleportation between distant locales during several instances in the game (see Therrien 2009:31; Kirkland 2009:75).¹⁰⁰ Awkward camera angles, an opaque inventory system, fuzzy enemy hitboxes, poor aim-assist, the absence of weapon reticles, and other agency-inhibiting dimensions of gameplay are also prevalent and yet find plausible vindication in the presumed ludic and aesthetic conventions of the survival-horror genre. These alleged defects, according to the sneaky wisdom of developers, make things *scarier*.¹⁰¹

⁹⁹ As Frances Dyson points out, sound engineers of radio dramas conceived of an “alternative approach to reality [that] relied upon the suggestive power of sound, and [...] recast the acoustical dimensions of radio drama in symbolic, rather than realistic, terms” (1992:337). Fire, as noted by Allucquère Rosanne Stone, was aurally communicated “by crumpling cellophane, because to the audience it sounded *more like* fire than holding a microphone to a real fire did” (1996:7, emphasis in original).

¹⁰⁰ Over the course of the game, Harry voices an awareness of his mystifying teleportation between distant locations. After one particular mid-game cutscene fades to black, Harry is shown waking up in an unfamiliar place. As he picks himself up from the ground, he says to himself: “Was that *another* dream? Did I pass out again? I don’t want to think so, but maybe this is all just going on in my head. I could have had a car accident, and now I’m lying unconscious in a hospital bed. I don’t know what’s real anymore.” Fittingly, one of the five possible endings for *Silent Hill* shows Harry slumped over in his car, suggesting that he had already died in a car crash at the beginning of the game (and that none of the subsequent events ever really took place). A similar twist occurs at the end of *Silent Hill: Shattered Memories* (2009).

¹⁰¹ In describing the survival-horror game *Resident Evil* (1996), Tom Bissell similarly observes how a lack of data (and a limited interface) can be unsettling during gameplay: “This zombie [in the game], however, had no health bar. Neither do you [the character], properly speaking. What you do have is an electrocardiographic waveform that is green when

To this end, perhaps the soundest alibi for technical blunders and gaping plot holes in *Silent Hill* comes from the premise that the gameworld is a preternatural projection of a frightened, traumatized girl. This simulated town, as expressly remarked by characters in the game, is so degenerate, noisy, and bizarre because it is born out of Alessa's pain and twisted imagination. Anything goes when there's an unreliable narrator – in this case, Alessa (an occult maker of nightmarish worlds) – and furthermore, when the unreliability of this narrator is *narratively* legitimized.¹⁰² As far as monster-taming is concerned, Alessa is a perfect specimen: made monstrous by her own monstrous mother (or rather, by the developers of the game), she is placed in service of numerous storytelling and stylistic conceits. Powerful though Alessa may be within the game's fictional universe, she functions foremost as a subordinated device of crafty game design. Her trauma is a convenient basis for horror, a blanket contrivance that reflects (and expediently excuses) all the bewildering visual, sonic, and ludic phenomena that manifest in the game.

As noted in Chapter 1, developers of *Fallout 3* cleverly programmed characters like Agatha and Three Dog to provide explicit justifications for the paucity of music in the wasteland. Agatha, in her own words, is old and unable to play much music, while Three Dog says that he's been unable to find very many music recordings for his radio station. A game like *Silent Hill*, however, doesn't need to resort to such justifications. Excuses are built into its very genre. There can be little doubt that horror media trades cunningly in an economy of fear – namely, in its capacity to gain esteem and commercial success via the exploitation of (apparently) simplified aesthetics and low-budget production. Among the most familiar cases of such exploitation nowadays can be seen in the

you are at full health, orange when you are hurt, and red when you are severely hurt. Not only is this EKG stashed away in the inventory subscreen, [but] it provides only an approximate state of health. Right now your health is red. But *how* red? You have no idea. This game is rationing not only resources but *information*" (2010:25, emphasis in original).

¹⁰² Amnesic protagonists are common in role-playing and adventure games. The purported inability of a hero to recall past events conveniently allows the player (who likewise would know nothing about the gameworld at the outset) to identify with the character's blank-slate state of mind. Games with stories about an amnesiac's quest for lost memory include *Fallout: New Vegas* (2010), *Amnesia: The Dark Descent* (2010), and *Planescape: Torment* (1999).

found-footage subgenre of horror films. Movies such as *The Blair Witch Project* (1999) and *Paranormal Activity* (2009) accrued indy-cred and massive profits by capitalizing on discernible elements of bare-bones presentation: low-resolution visuals, amateurish camerawork, and sparse soundscapes all helped achieve a sense of DIY faux-realism and subcultural cachet.¹⁰³ In these films, standard rubrics for labor and value are confounded by a license to *flaunt* what might be perceived in other genres as technical or presentational flaws.¹⁰⁴ The horror film genre in general, as observed by Judith Halberstam, “constantly attempts to call our attention to cinematic production, its failures and its excesses [...] [exposing] the theatricality of identity because it makes specular precisely those images of loss, lack, penetration, violence that other films attempt to cover up” (1995:153; cf. Weiner 2010:52; Schaefer 1999:43; Clover 1992:10-23; Twitchell 1985:54-56).¹⁰⁵ While horror movies are often viewed as “always-already ‘low’” (Wu 2003:86) and “the ultimate B-movies, crude, cheap, and basic” (Dickstein 2004:53), it’s hard not to admire (and envy) them for taking such great advantage of – and really owning up to – their rough edges and thrifty constitution.

Reductive art tends to be condemned when it is assumed to be the result of unrefinement or incompetence, but commended if it can somehow be confirmed as a product of intentional, painstaking stylization. We’re bound to feel a bit uneasy when we can’t tell the degree of effort that has gone into making something (say, a piece of minimalist art or, as discussed in Chapter 2, a LOTRO ABC file) look simple and easy. One really scary thing about horror films – aside from the actual content – is their alarmingly lucrative role within the entertainment industry. To put things in perspective: whereas mega-blockbuster movies such as James Cameron’s *Titanic* (\$200 million

¹⁰³ For more on the sound design, fandom, and budgeting of *The Blair Witch Project*, see Coyle (2009) and Jenkins (2006:103-5). See Carter (2010) for a study of the transgressive appeal of based-on-a-true-story exploitation films.

¹⁰⁴ This kind of extreme profitability manifests not just in the horror genre but also in diverse examples of exploitation cinema (Weiner 2010:41; Schaefer 1999:2) and paracinema (Sconce 1995:372).

¹⁰⁵ David Rodowick has similarly pointed to ways in which the horror genre thematizes the “subject of exploitation itself [...] [and] by the very nature of its economy opens up the possibility of attacking problems and subjects of representation forbidden to mainstream films” (2004:347).

budget) and *Avatar* (\$237 million budget) both earned approximately *10 times* their respective budgets at box offices worldwide, the first *Paranormal Activity* film (shot for a meager \$15,000) earned *12,000 times* its budget (with a combined domestic and international gross of nearly \$200 million). Horror media can be unsettling not least for curbing our ability to gauge how much labor, money, and time have gone into manufacturing a lowbrow surface and – by the same token – the extent to which filmmakers and game developers are profiting from our willingness to throw money at the final product.

Just as central to this concept of horror's economy is the sheer *efficiency* with which the genre viscerally affects its consumers. Linda Williams has influentially classified the horror film (along with pornographic and melodramatic films) as a "body genre" because it compels "the body of the spectator [to be] caught up in an almost involuntary mimicry of the emotion or sensation of the body on the screen," resulting in "an apparent lack of proper esthetic distance, a sense of over-involvement in sensation and emotion" (1991:4, 5; cf. Perron 2009:122-25 and Carroll 1990:88-96). One of horror's most reliable scare tactics is the "stinger" (Donnelly 2008:95), a sudden loud sound used to shock the viewer or player. The economy of the stinger lies in the baseness of the sign (a *mere* noise) as well as in its irresistibly manipulative force (a *cheap* shot). Like visual jump-scares, stingers have the reputation of being a crude and underhanded maneuver. Whereas suspense is lauded, shock tends to be scorned as lazily sensational. Whenever we deride stingers as the inept stuff of B-movies or B-games, we do so, I suspect, out of not just snobbish disdain but also embarrassed indignation – the annoyance of being cheated out of control of our own bodies and finding ourselves with little means of defending against (or preparing for) such a rudimentary ploy. We have reason to begrudge a stinger, in other words, not only for its material economy but also because – despite knowing that it's a cheap trick – we can't help falling for it time and time again. Seeing as how a stinger, as remarked by Kevin Donnelly, "precedes complex mental cognition and

responses” (2008:95), its impact can be nearly impossible to defy. Though it’s just a simple, reductive blast of sound, it’s an example of a monster whose power cannot be tamed by discourse or mitigated by savvy. It doesn’t matter if we’re world-class experts on horror. Stingers will get us all the same. In bypassing our intellectual faculties, this most vulgar of noises exposes all listeners as equally susceptible to its effects, reminding us that – notwithstanding our pretty words and persuasive theories – we’re animals through and through.

While stingers are efficient generators of fear, they are not the only kinds of reductive noises capable of scaring us. Perhaps the single most manipulative sound in *Silent Hill* is actually not a stinger at all; it is, in fact, the *opposite* of a stinger. This particular noise always fades in and out, never takes the player by total surprise, and will recur literally hundreds of times over a single playthrough of the game – yet it’s terrifying all the same. The force of this sound lies in the way it discreetly conditions and controls the player’s body: instead of delivering a direct jolt to the nervous system (as a stinger would do), it burrows deep into the mind and under the skin. To grasp what this noise is, how it works, and why it has become one of the most iconic sounds in survival-horror games to date, we’ll need to return to Harry’s arrival in Silent Hill, to the beginning of the nightmare that didn’t end.

Because the Radio Told Me To

You know the story now by heart: crashed car, missing daughter, cacophonous alleyway, flayed corpse, invincible monsters, inevitable death. All a nightmare, perhaps. But the nightmare goes on.

When Harry wakes up in the diner following this series of events, I make him walk around the small space to pick up a few useful items – among them a map, a flashlight, and a knife. As I try to get Harry to exit the diner, a red pocket radio sitting on a table suddenly starts emitting a static signal. A cutscene then shows Harry walking over to examine this device. Before he can pick it up, however, a flying pterodactyl-like beast smashes through one of the diner windows and starts

attacking him. The cutscene ends: Harry falls back under my control. Flustered and panicked, I use a knife to slash at the monster. The radio is still going berserk, but its white noise is now barely audible over the beast's piercing screeches and a noisy soundtrack suddenly come to life (see Figure 3.6). Just as I start to wonder whether this is going to end in yet another scripted demise, the creature crumples to the ground with a thud. The radio noise stops. All is silent once more. I take the radio and head out into the foggy town.



Figure 3.6. Harry's encounter with a monster in the diner. Screen captures by author.

Wandering the streets, it becomes clear to me that this pocket radio – though unable to perform any conventional receiving and transmitting functions – is a supernatural monster-detector. White noise from the device increases in loudness as monsters approach Harry and dies away when they are successfully dispatched or eluded.¹⁰⁶ While this sound telegraphs the general proximity of enemies, it does not convey their exact location. Especially when heard amid the game's hazy environments, the noise tends to be doubly alarming because it suggests to players not only that a monster is *near*, but also that it can come from *anywhere*. This radio static, as noted earlier, is completely contrary to a stinger. While the latter manifests as a sudden blast of sound, the former ebbs and flows in volume. And whereas the visceral impact of a stinger comes largely from its

¹⁰⁶ An electronic transmission device (radio, walkie-talkie, phone) serving as a monster detector has appeared in most *Silent Hill* games to date.

shocking *noise* (rather than from any indication of a specific threat), the radio static, by portending the presence of enemies, is frightening precisely (and primarily) as an *index* of ludic danger.

Harry's radio – an apparent transmitter of messages from the beyond – literalizes the kinds of occult powers that were historically attributed to this technology in the early 20th century (see Rehding 2006:255-60; Sterne 2003:290; Sconce 2000:62). Players who are preoccupied mainly with survival, however, should really have little incentive to reflect on how this device is able to do what it does. The fact that a player never again *sees* the radio after it is initially placed in Harry's inventory eases the assimilation of the static into the level of pure interface. Players have no need to hear the signal as one that's coming from a pocket radio. What matters is the noise's warning function. "Game sound," as described by Ekman and Lankoski, "is free to challenge narrative fit since it is primarily serving a function other than maintaining narrative plausibility: its role is to facilitate gameplay and help the player make meaningful choices. [...] The *functional fit* refers to the ease by which sound provides information for performing actions" (2009:185, emphasis in original). That functional sounds can assist ludic progress does not mean, however, that they unequivocally enhance a player's agency. The radio static in *Silent Hill* is useful, but a player's excessive dependence on the alarm can make it seem as if the *static* is controlling the *player* – leading the player, for example, to run aimlessly through fog or to unload scarce ammunition into the edges of the screen in hopes of striking unseen monsters. The hyper-compressed nature of this radio static epitomizes horror's coercive economy: white noise, after all, is by definition the noisiest of all noises, a combination of random signals, devoid of estimable aesthetic intervention, full of sound and fury, signifying nothing. Still, for all its material crudeness, this static steers the player's actions with masterful efficiency. Despite serving as an aural lifeline, the noise effectively reduces players to Pavlovian creatures – again, basic animals – whose bodies tick with every *tick* of the industrial soundscape.

Radio static in *Silent Hill* is distressing not least for its ability to lull and lock its listeners into a state of unquestioning compliance. This techno-dystopian view invites broader reflections on all the little mechanized noises that pervasively and subliminally shape our everyday acts of work and play. Beckoning beeps of computers, ringtones of mobile devices, musical earworms, and other contaminants of urban noise pollution all constitute automated audio signals that push and pull us in expeditious ways.¹⁰⁷ These sounds, though potentially *legible*, control our behaviors without providing us with much inclination to *read* them per se – to deconstruct their anatomy, source, and function with intellectual discourse so as to restore some semblance of human authority. A vision of players succumbing to the noises of *Silent Hill* certainly resonates with popular media depictions of video games at large as a manipulative, dangerous medium of entertainment. Players who grow conditioned to respond with unwavering obedience to a game’s white noise end up committing what might appear to be a host of mindless actions – exactly the kinds of mindless actions that detractors of video games more generally love to lament.

As a tribute to the final twists that always occur at the ends of horror narratives, I’ll offer here a modest one to close this section. Thus far, I’ve been referring to the radio static in *Silent Hill* as “white noise,” which many other scholars of this game have also tended to do (see Perron 2012:28; Nitsche 2008:132; Kirkland 2007b:410; Whalen 2004:76). The reality is that this sound is technically *not* white noise (defined loosely, a combination of multiple frequencies with uniform intensity), but rather a stylized representation of it. The radio static consists of a high-pitched ringing tone (approximately an F-sharp two octaves above middle C) juxtaposed against a dull crackling sound in a lower register. What’s notable is that the game’s designers went this extra mile to create an aestheticized *approximation* of white noise when they could have just resorted to blasting

¹⁰⁷ Studies of musical manipulation, violence, music in everyday life, and sound ecologies have variously emphasized the ability of acoustic phenomena to act on, inhibit, and control human thought and behavior (see, for example, Goodman 2010:5-13; Cusick 2008; Martin 2006; North and Hargreaves 2006; DeNora 2000).

actual static. One reason for investing this additional effort was perhaps to make this recurring noise more palatable to a player's ears. Just as no player of a survival-horror game would want to suffer actual bodily harm (or to be confronted by a real Blue Screen of Death), so most may not be so eager to tolerate pure white noise for a lengthy span of time. The result of this stylization is a noise that retains a mildly grating timbre and yet befits extended aural consumption. That most players, critics, and scholars nevertheless describe the sound *as* white noise – and perceive it (virtually) as such – testifies to the successful implementation of this almost-but-not-quite musicalized aesthetic. Consequently, while *Silent Hill* contains many sneakily economical aspects – a repetitive soundtrack, foggy environments, and plot holes *qua* traumatic visions – the radio static's sound design represents somewhat of a reversed scenario.¹⁰⁸ The stylized static ultimately reminds us that, for all the labor- and cost-cutting strategies that frequently inform the production of horror entertainment, there are also subtle acts of creative effort that sometimes go unsung.

Conclusion: Would You Kindly...?

Characters in video games have uttered many memorable phrases in recent decades. Few statements, however, have gained as much popular and critical attention as the final words spoken by Andrew Ryan right before he's beaten to death during the climax of the 2007 FPS survival-horror game *Bioshock* (developed by 2K Boston). "A man chooses!" Ryan sputters with his last breath. "A slave obeys!" Today, this mantra can be found on T-shirts, in tattoo designs, and across countless online forum threads devoted to debates about what the phrase signifies within and beyond the context of this game.

Here's the backstory of *Bioshock* in a nutshell. When the player's character, Jack, tracks down Andrew Ryan (the creator of an underwater metropolis called Rapture), the latter reveals that Jack

¹⁰⁸ Another good example of subtle creative labor would be the 200 different footstep sounds that Akira Yamaoka reportedly used for *Silent Hill 2* (see Kalabakov 2002).

has unwittingly been acting under the mind control of an insidious man named Frank Fontaine. According to Ryan, Fontaine (who has been posing as Jack's ally) is the true villain and, all this time, has been trying to conquer Rapture by getting Jack to complete various destructive tasks. By using a subliminal trigger phrase – “Would you kindly...?” – Fontaine was able to order Jack around like a perfectly obedient automaton. After divulging this information, Ryan tells Jack – if he would kindly – to *kill*. As a cutscene unfolds, the player has to look on, horrified, as Jack bludgeons Ryan with a golf club. Although interpretations of this astonishing moment have varied widely, many players and critics understand Ryan's actions as self-sacrificial, as an attempt to snap the protagonist out of his obedient state and to show him the truth about his internal programming. This scene has become renowned not simply for its grand narrative twist – the revelation of Jack's enslavement to the smooth-tongued Fontaine – but additionally for prompting gamers (who play *as* Jack) to think about their own ludic obedience and prior willingness to carry out Fontaine's (and the game's) directives to the letter. The game reflexively thematizes the idea of free will and makes us recognize just how good we (as players, as human beings) tend to be at following arbitrary orders and social scripts.¹⁰⁹ Video games are always dangling carrots before us – virtual survival, prestige, a key to the Tenpenny suite – and asking us: “Would you kindly...?” For us to play these games, to enter into their contracts, is to perform compliant actions that seem to say, more often than not: “But of course!”

The survival-horror genre works in particular to limit our agencies and to thwart our abilities and motivations for transgressive play. A game like *Silent Hill* deploys scare tactics that efficiently wrangle players into submission and complacency. Compared to *Fallout 3*, *The Lord of the Rings Online*, and other open-world or multiplayer games, *Silent Hill* offers a relatively linear, constricted

¹⁰⁹ The fact that Jack's encounter with Ryan unfolds as a noninteractive cutscene complicates things even further. By depriving us (the players) of control over Jack's murderous actions, the game doesn't technically allow us to *choose* the path of nonviolence at all.

adventure, affording players little choice but to direct Harry from one frightening scenario to the next.¹¹⁰ This said, disobedience is not altogether impossible. We could oppose the ludic imperatives of *Silent Hill*, for example, by opting to leave Harry next to his crashed car at the beginning of the game. Instead of making Harry go in search of his daughter, we could put down our controllers, sit back, and leave him as he is. No exploration, no alleyway, no monsters, no noise, no fear, no risk...and Harry survives indefinitely as he stands around doing nothing. But while this manner of inaction might sound provocative on an ideological level – as a philosophical statement about (or against) human obedience, technological dominance, gaming addiction, violence and pacifism, and so on – it’s arguably so radical that it no longer constitutes a true engagement with(in) the game.¹¹¹ The deliberate refusal to play (and to this end, we could think back to Sarasate and sunrise in Chapter 1) is a transgressive move, but by entailing so little actual work, it lacks the virtues and virtuosity of conspicuous exertion. In the same way that one might be skeptical of aesthetically reductive products (say, found-footage horror films, a minimalist Red Dot on Canvass, or 4’33” by John Cage) for the apparent lack of labor exhibited therein, so attempts to be creative via ludic abstinence are not likely to appear visibly agentic or impressive as such. No work and no play makes (attempted) transgression a dull ploy.

The reason we voluntarily subject ourselves to horror media is, in any case, to go forth and learn fear. And to experience fear in a horror video game, we must follow the trail of breadcrumbs through its terrible gauntlet. In this regard, we would be remiss to keep our protagonist too far from harm’s reach. At every turn, *Silent Hill* implicitly asks players – if they would kindly – to venture into darkness, to peek around this corner, to open that unassuming door behind which there

¹¹⁰ *Silent Hill* does not feature extensive branching paths or side quests, but there are a couple of choices a player can make to determine which one of five cutscenes will be triggered at the end of the game.

¹¹¹ The post-9/11 Velvet-Strike movement consisted of a group of gamers who sought to express pacifist, anti-war sentiments via video games. Instead of playing the (counter)terrorism-themed online first-person-shooter *Counterstrike* (1999) in conventional fashion, members of Velvet-Strike entered the game’s servers for the purpose of making artistic, social, and political statements (see Bogost 2007:125; Schleiner 2002).

might lurk a couple of formidable (or even insurmountable) monsters. We instinctively oblige because, well, that's the point of the game. Thus we force Harry into the terrors of the unknown, making him (and ourselves) vulnerable to monsters from nowhere, noises from everywhere, stingers that shock us, static that steers us.

When it comes to survival-horror, it tends to be not the player but instead the game that is at liberty to transgress – to break with convention, to violate ludic contracts, to overstep its inanimate status, to be a monster of a medium, to bombard us with redundant noise, and to tease us with illusions of real danger. Just as spectatorial experiences of horror films are often said to be ruled by a masochistic impulse, so there's an awful pleasure in stumbling through the haunted house of a horror game, surrendering to its manipulative powers and being transgressed *against*.¹¹² Capitulating to cheap scares requires that we accept cacophony, repetition, reductive aesthetics, and illogical plot points as compelling conceits. To play *Silent Hill* with conviction is to play (and buy) *into* its economy of fear.

The visceral scares of horror media point up the limited defenses of our rational and rhetorical faculties. Try as we might to keep noises and monsters tucked safely away in our discursive webs, they're constantly capable of slipping through, running wild, and returning to invade our imaginations with utmost ease. Noises and monsters are perfect subjects for metaphysical dissection, but – if there's anything we've learned from Dr. Frankenstein and his gothic kin – these patients do not always remain so docile. Hermeneutic control only gets us so far. As we attempt to discipline rogue phenomena with theories and theses, they discipline our minds and bodies in turn. In the end, interpreting video games and their stimuli as uncannily living entities may help shed valuable light on matters of interactivity, repetition, automation, and the points of potential intersection between our ludic, perceptual, and intellectual agencies. A fantasy of things

¹¹² On masochism and horror film spectatorship, see Powell (2005:47), Clover (1992:222), and Carroll (1990:158-214).

come to life, of course, is the very stuff of video games – a medium that allows players to displace authority onto virtual characters, to experience conflicting sensations of being in and out of control, and to inhabit murky spaces where nothing ever stays dead for long.

Chapter 4

The Wizard, the Troll, and the Fortress

Recently I logged into *World of Warcraft* and I wound up questing alongside a mage and two dwarf warriors. I was the lowest-level newbie in the group, and the mage was the de-facto leader. [...] He [the mage] seemed like your classic virtual-world group leader: confident, bold, and street-smart. But after a few hours he said he was getting tired of using text chat – and asked me to switch over to Ventrilo, an app that lets gamers chat using microphones and voice. I downloaded Ventrilo, logged in, dialed him up and [...] realized he was an 11-year-old boy, complete with squeaky, prepubescent vocal chords. When he laughed, his voice shot up abruptly into an octave range that induced headaches. [...] Oh, and he used “motherfucker” about four times a sentence, except when his mother came into his bedroom to check on him.

– Journalist Clive Thompson (19 June 2007) describing his experience with voice-chat in the MMORPG *World of Warcraft*

Online video games over the last decade have increasingly featured voice-chat capabilities that enable players to speak with one another through microphones connected to computers and game consoles. Voice communications greatly assist collaborative and competitive gaming by offering a hands-free means of verbal exchange. Despite its obvious utility, however, voice-chat has been denounced by some players and critics as an unwelcome development in game design. Media researcher Richard Bartle declares:

If you introduce reality into a virtual world, it's no longer a virtual world: it's just an adjunct to the real world. It ceases to be a place, and reverts to being a medium. Adding reality to a virtual world robs it of what makes it compelling – it takes away that which is different between virtual worlds and the real world: the fact that they are *not* the real world. Voice is reality (2003).

In August 2007, the introduction of voice-chat into the online community simulator Second Life incited protests from various residents who feared that the sounds of live human voices would undermine the pseudonymity of this virtual world's social interactions (see Figure 4.1). Tom Boellstorff, in an ethnography of Second Life, explains that what “made debates about voice particularly impassioned were questions of presence and immersion that implicated the boundary

between virtual and actual. Some residents felt voice would facilitate greater intimacy, [but] other residents felt that voice would damage a border between the virtual and actual that they wished to maintain” (2008:114).¹¹³ Detractors of voice-chat pined for Second Life’s prelapsarian days – an era during which it had not yet been possible for the grits and grains of human voices to fold excessive reality into the virtual world’s communities. Many residents feared that the implementation of voice-chat would lead to a mass exodus of disillusioned individuals from Second Life, or, at the very least, create an irreparable schism between populations willing to embrace voice and those that would refuse to do so. Among these outcries were predictions that voice-chat would literally bring about the end of Second Life’s virtual world by its egregious violation of the disbelief-suspending mechanisms that made this world *virtual* to begin with.

Given that this dissertation’s first chapter began at the end of another world – amid the ruins of the Washington wasteland – it’s fitting that we’ve come full circle by way of eschatological rhetoric. While human voices did not really lead to any fire-and-brimstone apocalypse in Second Life, they did cause players to question whether this Life was one still worth living. At stake in disputes over the desirability of voice-chat in this virtual realm were concerns about the power of voice to carry identifying information that one might wish neither to divulge (as a speaker) nor to apprehend (as a listener). In Clive Thompson’s humorous account of his rude awakening in *World of Warcraft*, the wizard (or mage) behind the curtain was revealed as a potty-mouthed child whose prior demonstration of ludic expertise had made him seem older than he actually was. Thompson went on to explain: “There’s no doubt that hearing each other’s voices abruptly changed our social milieu. He seemed equally weirded out by me – a 38-year-old guy who undoubtedly sounds more like his

¹¹³ Greg Wadley and Martin R. Gibbs explain that, in Second Life, “[v]oice-haters responded that a voice-using community might be suspicious of those who refused to use voice. SL [Second Life] participants mentioned situations where voice was especially useful, such as rehearsing and performing plays, teaching foreign languages, playing music, collaborative building [of in-game structures], meetings and discussions, and sexwork. They felt that speech conveyed richer and more nuanced meaning when compared with text, and did it faster” (2010:192). For more on the debates surrounding voice-chat in Second Life, see Llewelyn (2007), Combs (2007), Prokofy (2007), and Hunter (2006).

father than anyone he recognizes as a ‘gamer.’ After an hour of this, we politely logged off and never hooked up again” (ibid.). The ability of disembodied voices to betray bodily identities – however vaguely – gave rise here to an exchange that was apparently a little too close for comfort. “With voice,” concludes Thompson, “the real world is honking in your ear” (ibid.). In virtual worlds, this awkward tale suggests, we speak, and therefore, we suddenly are.

Behind the Curtain

Yet questions of who we really *are* in virtual worlds – and what it means to (co)exist in these graphically simulated spaces – are confounded by popular conceptions of video games as playgrounds where identity pluralism and performativity prevail. Our avatars, ourselves: where do we draw the line? Across preceding case studies, we’ve seen how players embody, articulate, and negotiate real and virtual personas by way of avataric simulations – whether it’s a press of a detonator button (Chapter 1), a simulated musical performance (Chapter 2), or frantic flight from monsters (Chapter 3). All such behaviors are made possible by the particular gestural vocabularies of individual games. Players can perform and combine these actions in innovative and deviant ways, but the gestures themselves – manifesting as pre-rendered frames of animation and pre-recorded waves of sound – are largely dictated by a game’s technical allowances. A player’s own voice, by contrast, is in no way restricted by a game’s audiovisual programming.¹¹⁴ It’s for this reason that the live voice – with its spontaneous and unscripted expressive potential – is so often regarded by players as a palpable and transgressive embodiment of human difference in these virtual environments. What happens when players of online games are able to drop their masks and

¹¹⁴ As noted by Edward Castronova: “Much of the immersive effect of the [virtual] world occurs because everything you see and *hear* in the worlds conforms to the designer’s theme. If it is a medieval world, all the buildings look medieval, the music is medieval-sounding, and the animals and trees look like they were taken from fourteenth-century France. [...] The failure of user communication to conform to the world’s atmosphere is not much of a problem when it is confined to a small chat box. With a voice system, however, everyone will hear the modern-day babbling of others all the time” (2005:89, emphasis in original; see also Nitsche 2008:140-41).

introduce their *own* voices into a communal virtual space? How do the sounds of these voices influence player actions and relations? What factors bear upon the differing proclivities of players to speak out in the first place? And what new masks – new fictions of identity – materialize when disembodied voices of players conjure forth ambiguous, multiplicitous, or duplicitous bodies?

The sounds of players speaking through avatars render these simulated bodies legible as surrogate living entities. An avatar is, by definition, a prosthesis, serving as a “bodily appendage-cum-psyche extension and therefore as an actual (if not material) part of [a] person” (Hillis 2009:132). But a player’s voice in a gameworld also inversely functions like a prosthesis *for* an avatar by fulfilling a purpose that is at once compensatory (enhancing the perceived aliveness of the avatar through which the player speaks) and intrusive (distracting listeners with its *too*-human sound within a virtual space).¹¹⁵ Insofar as prostheses are meant to assume correctional roles, they simultaneously work to normalize bodies – (re)making bodies whole (read: wholly human) – while pointing up the socially contrived conditions of human normalcy. The implicit standardizing agenda of a visible prosthesis necessarily reproduces its own failure by virtue of the appended body that is ambivalently perceived as almost normal, but not quite.¹¹⁶ A prosthesis unsettles holistic ideals of corporeality and facile distinctions between nature and technology: it not only draws attention to its own artificial status, but also exposes human identity as a mutable cultural invention – as an arbitrary assemblage of signifying parts that are all too prone to physiological as well as epistemological alteration,

¹¹⁵ Literary theorists, sociologists, philosophers, linguists, and disability scholars in recent years have increasingly extended biomedical conceptions of prostheses to critical explorations of identity and agency in poststructuralist perspectives. As Vivian Sobchack notes: “Sometime, fairly recently, after ‘the cyborg’ became somewhat tired and tiresome from academic overuse, we started to hear and read about ‘the prosthetic’ – less as a specific material replacement of a missing limb or body part than as a sexy, new metaphor that, whether noun or (more frequently) adjective, has become tropological currency for describing a vague and shifting constellation of relationships among bodies, technologies, and subjectivities” (2006:19). For studies on the cultural and discursive valencies of prostheses, see Nelson (2001:304-5), Mitchell and Snyder (2000), Jain (1999:31-54), Lury (1998), and Wills (1995).

¹¹⁶ Theories of posthumanism posit “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” (Hayles 1999:3). For additional discussions of prosthetics and identity ambivalence, see Garland-Thomson (2009:128-29), Wilson (1995:239-59), and Tanenbaum (1986:63-65).

extension, fracture, and substitution.¹¹⁷ In online gameworlds, the human voices of players shore up the porousness of the real-virtual dichotomy by registering as objects of phenomenal and somatic excess. These prosthetic voices, in short, can ironically ring false in virtual worlds by telegraphing too many truths about the speaking body.

Many women report a reluctance to use voice-chat in online games out of a fear that the sonic revelation of their real-world sex might cause male players to respond in an undesirable manner. In gamespaces, the sound of a female voice that is discerned as such can impact the social dynamics between players in any number of ways: it might lead male players to inquire into and obsess over the identity (and especially the physical attractiveness) of the female speaker; it might instigate an explosion of misogynist jokes and expletives; or it might have a domesticating effect, causing swearing to drop to a minimum and the communications between male players to become unusually chivalrous and polite.¹¹⁸ The prevalence of adult male voices in online gamespaces contributes to formations of homosocial soundscapes in which all players are effectively assumed to be men unless they vocally *out* themselves as other(wise). Female players who participate in mute play can automatically pass as men and escape direct sexual harassment, but such behavior entails the bargaining of silence for immunity from persecution.¹¹⁹

¹¹⁷ The metaphor of the prosthesis has been invoked in a small number of musical studies to date: Tia DeNora has likened music to a “prosthetic device [that] provide[s] organizing properties for a range of [...] embodied experiences and in ways that involve varying degrees of deliberation and conscious awareness on the part of music’s conscripts” (2000:103); Raiford Guins and Omayra Cruz have described turntablism as “an instance of media as technological extension/prosthetic” (2006:225); and Jennifer Iverson has framed elements of electronica in Björk’s music as “a prosthesis, a mechanical supplement that draws attention to the lack latent in the natural voice” (2006:65).

¹¹⁸ Regarding issues of gender politics and sexual harassment in video games, see, for example, Jenkins and Cassell (2008), Taylor (2006:98-102), Kendall (2002), Sherman (1997), and Edwards (1990).

¹¹⁹ Eve Kosofsky Sedgwick’s seminal book opens with the assertion that “closeted-ness itself is a performance initiated as such by the speech act of a silence – not a particular silence, but a silence that accrues particularity by fits and starts, in relation to the discourse that surrounds and differentially constitutes it” (2008:3). What is so distinctive about possibilities for gender-passing in an audibly male-dominated online FPS environment is that staying in the closet demands nothing more than the act of remaining *literally* silent amid the surrounding differential discourse – a discourse constituted by, namely, a sheer abundance of male voices.

On one of several Internet forums devoted to debates about the respective merits of voice-chat and text-chat in online games, a proponent of the latter remarked: “If you introduce [voice into a virtual space] the whole ambience changes: the shy are revealed as shy, and the noisy start to dominate. [But] it is hard to type LOUDER than everyone else in the room” (Owen Kelly, 2007). A concurring forum participant stated: “Text may get messy, but it’s pretty democratic – everyone gets a say eventually” (Ace Albion, 2007). Those who oppose such views have pointed to the online first-person shooter (online FPS) as a game genre that benefits enormously from voice-chat. As one player puts it: “Text (and democracy) are slow. In games with tactical situations, speech is the only way to give orders while fighting” (anonymous, 2007).¹²⁰ Characterized by graphic simulations of gunplay and team-based combat, online FPS games require players to cultivate quick reflexes and a thorough knowledge of strategic maneuvers.¹²¹ Voice-chat indeed conveniently allows players to relay orders to teammates, call for help, and divulge enemy positions in the heat of battle. A team’s chances for victory can hinge greatly on the consistency with which players are able and willing to impart pertinent information to teammates during a match. Transmitting such information with voice tends to be considerably quicker and less cumbersome than doing so with text-chat. In most online FPS games, text messages appear in miniscule chat boxes near the bottom of the screen and can therefore easily go unread amid the wealth of graphical stimuli competing for the player’s attention (see Figure 4.1).

The proper use of voice in an online FPS game carries significant ludic capital, testifying to a speaker’s dedication to teamwork and competitive gameplay. Yet as noted above by one of the

¹²⁰ These three comments were posted on a forum titled “The Inevitability of Voice,” http://terranova.blogs.com/terra_nova/2007/02/the_inevitabili.html (accessed 15 June 2008); see also Kramer (2010).

¹²¹ Popular online FPS games released in recent years include *Counter-Strike: Source* (2004), *Unreal Tournament 3* (2007), *Halo: Reach* (2010), *Killzone 3* (2011), *Crysis 2* (2011), *Battlefield 3* (2011), and *Modern Warfare 3* (2011). Most competitive online games released over the last decade have launched with built-in voice-chat support. Console gamers in particular benefit from voice-chat since they tend to use gamepads (with which text input can be especially arduous) instead of the default mouse and keyboard configurations supported by computer games.

forum respondents, voice communications are most useful overall when they are deployed *undemocratically* – that is, when *not everyone* on a team opts to speak at once, or, at the very least, when certain players seize leadership roles by speaking noticeably louder or in a more authoritative tone than others. In this hierarchy of audibility, female players generally do not fare so well. One woman reckons that female players abstain from speaking “because some of us are afraid we’ll get [hit] on by sketchy nerds or yelled at by 12-year-olds who don’t want to play a girl online” (Xkc20d, 2007). Another player states: “Throw up a vent [Ventrilo chat] server, the girls stop talking completely, the shy people shut up mostly, and all that is left are the 12-18 year old guys, and it becomes a locker room. Not so much fun, really” (Judson, 2007). The players who remain in this locker room – those who actively speak – are by default the ones who get to set the social tone of the gamespace. Those who are unable or unwilling to speak, by contrast, are effectively barred from sharing in the cultural currencies of voice and the implications of power therein.



Figure 4.1. Examples of public chat messages in the online FPS game *Team Fortress 2* (see bottom-left of display). Screen capture by author.

If, in any case, a female player's very act of speaking in an online gamespace is routinely perceived as an act of defiance – as speaking *out* or speaking *against* – then questions arise as to what women in these environments are really able to *say*. That the actual sound of a woman's voice is what attracts so much attention suggests that it can all too easily supersede any semantic content that a female speaker might actually wish to convey. Further complicating the sexual politics of voice-chat in these games are instances in which voices fail to yield definitively gendered bodies. One notable sexist (and ageist) insult – abbreviated in some gaming circles as *LOL 12/woman* (read: Are you a twelve-year-old boy or a woman?) – serves as a declaration of sexual (in)difference, one that infantilizes female players and feminizes youths by deriding the androgynous grain of their vocal timbres. As one player states: “Whenever I play the game [*Team Fortress 2*] and use voice-chat, all I get is: ‘Are you 12 or a girl?’ And then starts the ‘You should be in bed’/‘This is a big boy game’/‘You should be playing hello kitty instead’ kind of stuff, until I quit” (Karma Guard, 2008). A remark such as *LOL 12/woman* conflates the perceived amateurism of women and youths as a way of denying the prerogative of either group to participate in what is commonly maintained as a grown man's game.

The ability of a disembodied voice to evoke a human body necessarily depends on the varying capabilities of individuals to employ and to decode it as a timbral, registral, and phonetic index of appearance, age, sex, sexuality, ethnicity, nationality, class, (dis)ability, and other physiological and cultural categories of identity. Although any such manner of vocal signification can substantially affect the nature of interactions between players in online FPS games, issues of sex and gender will take center stage in this chapter because the voice of the female player has been an especially powerful magnet for harassment among the male homosocial cultures in these environments. Through metaphors of the closet, I consider how the coming of voice has impacted

the politics of assimilation, repression, deception, and revelation in online games.¹²² By highlighting three particularly thorny issues – trolling, vocal androgyny, and voice-changing technologies – I also challenge traditional characterizations of voice as a site of authentic and agentic expression.

Attempts here to put pressure on the reliability and singularity of voice-body relations ultimately speak to my broader desire to reassess the conventional wisdom of cyberspace as wholly liberating – that is, as enabling practices of passing, masquerade, and identity transgression writ large.

Our Voices, Our Selves

I conducted fieldwork between March 2009 and May 2011 on the English-speaking servers of an online FPS game called *Team Fortress 2*.¹²³ Released in 2007 by the American company Valve Corporation for Windows PC, Xbox 360, and Playstation 3, *Team Fortress 2* features team-based tactical combat. Matches take place on a variety of server maps (simulated graphical arenas) and involve a Red Team and a Blue Team competing to accomplish map-specific objectives. Examples of match types include Capture the Flag (a violent variant of the eponymous schoolyard game), Payload (a mode in which the Blue Team must escort a bomb-strapped cart into the defending Red Team's home base), and King of the Hill (which tasks the two teams with seizing and maintaining control over a designated point on a map). The number of players occupying a single game server at one time typically ranges from 16 to 32. According to the statistics on the website of Valve's game-

¹²² Online environments have been widely characterized by scholars as fundamentally queer(ed) spaces that accommodate and stimulate performances of plural, liminal, and transgressive identities. On the politics of gender masquerade and passing online, see, for example, Huh and Williams (2010), Nardi (2010:152-75), Dumitrica and Gaden (2009), White (1999), Roberts and Parks (1999), and Turkle (1995:212). For similar discussions pertaining to race and ethnicity, see Nakamura (2008), Kolko (2000), González (2000), Sharpe (1999), and Bailey (1996). Various writers, granted, have also taken care to resist idealistic depictions of cyber-communities as domains in which identities can be effortlessly reconfigured or altogether transcended (see Hillis 2009:203-60; Campbell 2004:84; Chatterjee 2002:202; Wakeford 2000; O'Brien 1999; Vaid 1996).

¹²³ *Team Fortress 2* can be downloaded via Steam, a digital distribution and multiplayer gaming platform operated by Valve Corporation. The game was made Mac-compatible in June 2010 and free-to-play in June 2011. Although it's also available on consoles, most people who play the game do so on computers.

distribution platform, a total of approximately 55,000 players are active on servers at any given point during the day.¹²⁴

Players of *Team Fortress 2* interact with one another in the gameworld by controlling avatars belonging to one of nine character classes: the Scout, the Soldier, the Pyro, the Demoman, the Heavy, the Engineer, the Medic, the Sniper, and the Spy. Each class has a unique set of combat abilities and its own distinct male character model.¹²⁵ During a match, players can press specific keys as a way of commanding their avatars to emit short canned vocal utterances.¹²⁶ The regional and national origins of the game's characters are connoted by the exaggerated speech accents of each class's vocal taunts: the Heavy speaks grammatically broken English with a thick Russian drawl; the Medic injects German phrases into his caustic remarks; and the Engineer has, under his belt, an arsenal of suggestive Southern colloquialisms. As shown in Figure 4.2, several classes have at least one or two taunts that are misogynistic in tone.

Accompanying the sporadic vocal quips of avatars in *Team Fortress 2* are diegetic noises of battle as well as various non-diegetic musical cues that signal states of victory and failure (see Figure 4.3 and Video 4.1 – <http://vimeo.com/album/1662583/video/25870373>).

¹²⁴ This statistic was taken from August 2011. To view live statistics of player activity in *Team Fortress 2*, see store.steampowered.com/stats.

¹²⁵ There have been some debates on Internet forums about whether Valve should release female skins for avatars in *Team Fortress 2*. It has been suggested that adding a female model counterpart to each character class would compromise the ease with which these classes can be identified during gameplay. Having a total of eighteen instead of nine silhouettes, some players argue, would demand an additional and undesirable layer of mental processing during a fast-paced match. Although players have created their own fan art and unofficial mods for female skins (see, e.g., Ghostfire 2008), very few servers put these to use.

¹²⁶ Avatars also automatically speak when they are made to perform certain actions in the game. The voice-actors who recorded the taunts of *Team Fortress 2*'s characters are Nathan Vetterlein (Scout), Gary Schwartz (Heavy and Demoman), Rick May (Soldier), Dennis Bateman (Pyro and Spy), Grant Goodey (Engineer), Robin Downes (Medic), and John Lowrie (Sniper).

Class	Avatar	Speech Accent	Examples of Taunts
Scout		Bostonian	<p>“I’m runnin’ circles around ya!”</p> <p>“Say goodbye to your kneecaps, chucklehead!”</p>
Soldier		Midwestern American	<p>“You sissified maggot scum have just signed your death warrants!”</p> <p>“I’m going to strangle you with your own frilly training bra!”</p>
Pyro		Unknown	Muffled, unintelligible statements
Demoman		Scottish	<p>“Ya great lactating wet-nurse!”</p> <p>“In your language: Eat lead, laddies!”</p>

Figure 4.2. Character classes in *Team Fortress 2* and examples of pre-programmed vocal taunts.

Heavy



Russian

“I was told we would be fighting men!”

“The entire team is babies!”

Engineer



Texan

“You ladies shoulda-oughta brought some men-folk with ya.”

“Come here, sissy!”

Medic



German

“Hello, Fräuleins!”

“Hold still, Schweinehund! This will only sting for a moment!”

Sniper



Australian

“You prancing show ponies!”

“Do they make them shirts for men?”

Figure 4.2. (Continued)

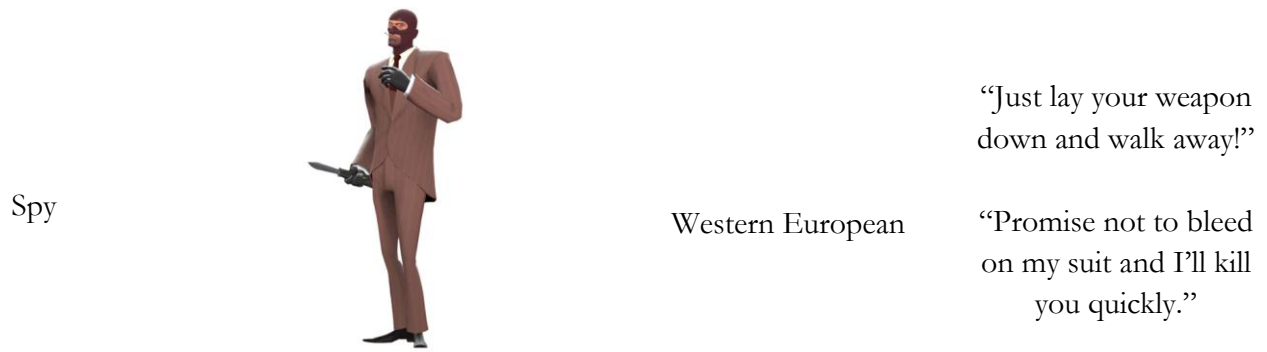


Figure 4.2. (Continued)

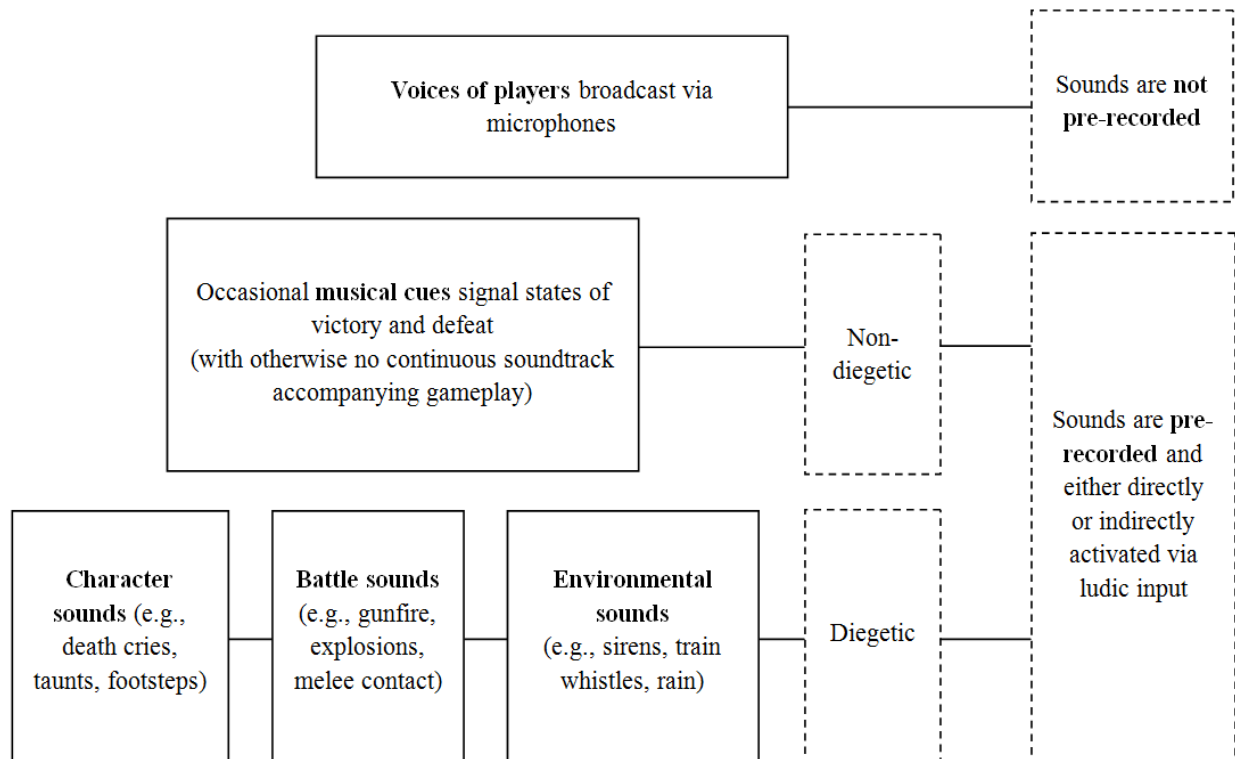


Figure 4.3. A soundscape map of a *Team Fortress 2* match.



Figure 4.4. [Left] An exclamation mark pops up above a character’s head whenever the player holds down V to speak. [Right] The names of all players who are speaking at a particular moment are displayed in the bottom right-hand corner of the in-game display. Screen captures by author.

Floating conspicuously above all of these pre-recorded sounds are the live human voices that players can project into the gameworld. Players transmit voices in *Team Fortress 2* by holding down V on the computer keyboard while speaking into microphones (see Figure 4.4). The audibility and volume of a player’s voice are in no way affected by the proximity of the speaker’s avatar to the avatar of a listener. A dozen players can position their respective characters in different corners of an expansive map and still be able to hear one another as if everyone were connected by a mass conference call. The game’s default chat setting permits only players who are on the same team to hear one another’s voices (so as to prevent opposing players from listening in on a team’s strategic exchanges), but server administrators can turn on an *all-talk* option to make the voices of all players audible across both teams. Although the clarity of player-voices may naturally vary according to the quality of microphones and speakers being used, the overall staticky timbres of these voices render them, in most cases, easily distinguishable from the crisp, canned utterances of avatars.

Voice communications between players in *Team Fortress 2* range from intense strategic jargon to informal chatter about casual topics – weather, news, sports – that have little to do with the technical goals of the game. This alternation between ludological and mundane conversational matter offers relief from the otherwise incessant obligations of simulated combat. The competitive nature of the game, however, predictably fuels plenty of trash-talk and offensive language. Racist, sexist, and homophobic slurs are often heard alongside the use of the word *rape* as a synonym for humiliating defeat (a semantic custom that extends to the lingo of many other online gaming and Internet communities).

An atmosphere of male heterosexual dominance in *Team Fortress 2* is bolstered by the preponderance of player-customized *sprays* depicting female figures in pornographic fashion (see Figure 4.5). Sprays are images that players can upload from their computer desktops and subsequently imprint onto virtual surfaces in the gameworld. Any image in bitmap or jpeg format – whether downloaded from the Internet or created from scratch – can be imported into a player’s game account and then used as a spray.¹²⁷ These graphical signatures are flaunted by players as a form of virtual graffiti that – like the unrestrained dialogues broadcast via voice-chat – lie outside the aesthetic bounds of the game’s pre-rendered audiovisual content. Many players take advantage of such artistic license by creating sprays that are outrageously eye-catching and inflammatory. Customized images of nude or almost-nude women in the gameworld are quite common and – to draw from the influential (albeit traditionally heteronormative) tenets of cinepsychoanalytical gaze theory – possess a quality of to-be-looked-at-ness that reinforces male scopophilic hegemony.

¹²⁷ A player’s *Team Fortress 2* account can retain only one uploaded spray at a time. Importing a new spray results in the automatic deletion of the existing one. A player, moreover, cannot imprint more than one copy of a spray at a time within a *Team Fortress 2* environment. Attempting to spray a second copy will simply cause the first spray to disappear. These limitations presumably serve to prevent players from plastering large areas of maps with multiple images of their sprays.

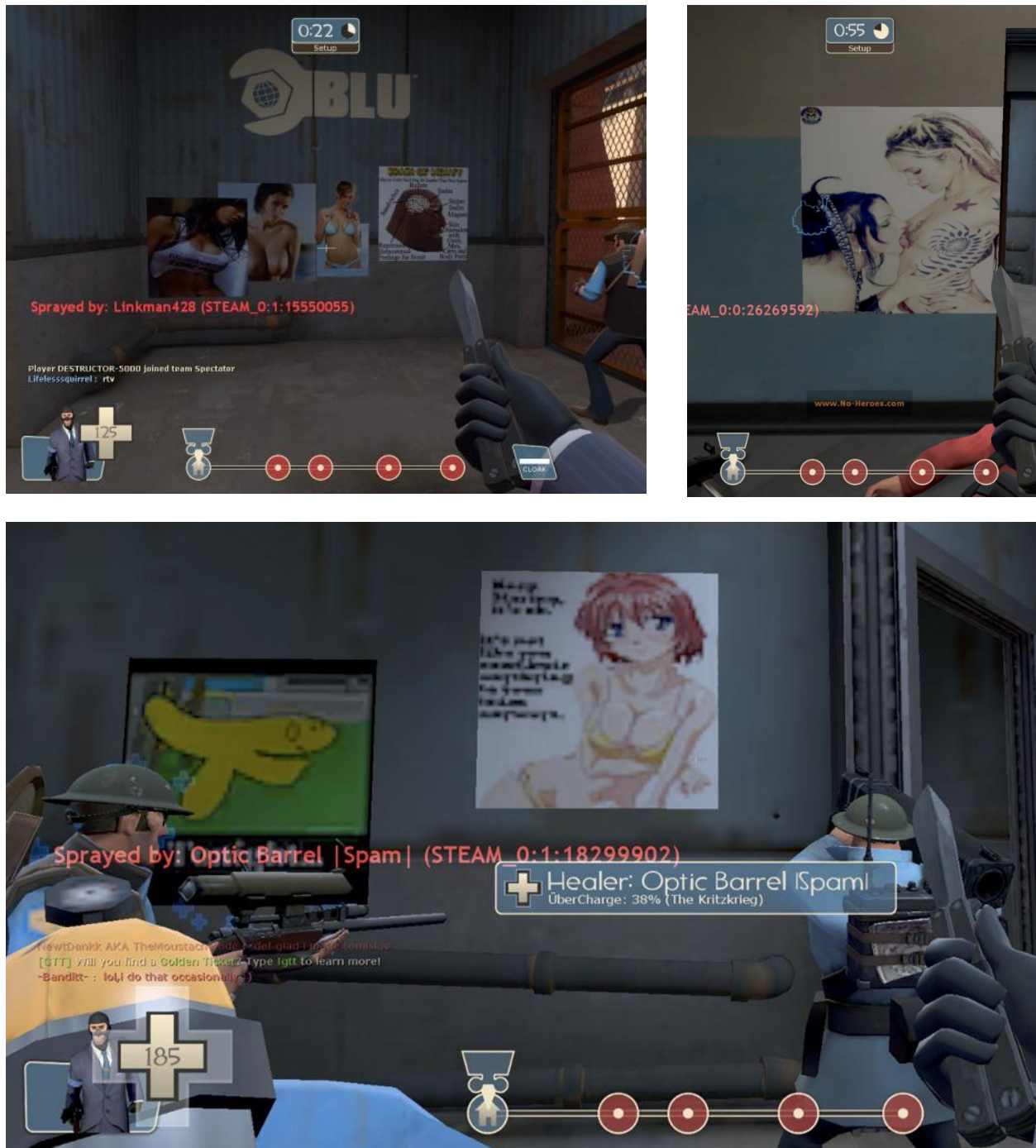


Figure 4.5. Players staring at various custom-made sprays in *Team Fortress 2*. Screen captures by author.

The sound of a female player's voice in *Team Fortress 2* likewise provides ample opportunities for masculine posturing and demonstrations of male sexual authority. Voices perceived as (maybe)

belonging to women rarely fail to garner attention and excited commentary not least due to how rarely these voices are heard in the gameworld. Possibilities for different kinds of games – games predicated on aural fascination, sexual inquiry, and harassment – can all of a sudden emerge upon the introduction of voices that, in whatever capacity, do not seem to belong. Given that Valve does not release statistical information about the identities of its players, however, it's difficult to ascertain exactly how many women play *Team Fortress 2*. More readily evident is the notion that the exceptional infrequency with which one encounters female voices reinforces *perceptions* that most players are male: one interviewee estimated that “there is probably a 20/1 or 30/1 ratio of males to females playing TF2” (interview, Noobinator, 12 June 2010); another player reckoned that “there’s maybe only one or two female players in our server” (interview, Sepharite, 31 May 2010); and yet another respondent went so far as to say that “pretty much any girl I’ve played with has used their microphone. It’s usually mostly guys that play and a couple girls at most” (interview, Power Paki, 29 May 2010). Informing all of these estimates – most explicitly the last one – is the assumption that the paucity of female voices in the game owes to the actual scarcity of female players rather than to women’s relative disinclination to speak up. Impressions of the gender demographics in a *Team Fortress 2* match are constantly regulated by the prevailing voices in its soundscape. At play is a politics of audibility wherein players who do not speak are, to an extent, always already being spoken for by those who do.

One might be tempted to rescue the agency of non-speaking women in *Team Fortress 2* by imagining them as gleefully passing through the ranks of more outspoken players and reveling in their role-play as silent soldiers. Peggy Phelan has remarked on the “real power in remaining unmarked” in her attempts to expose the “[falsifying] binary between the power of visibility and the impotency of invisibility” (1993:6). Linda Schlossberg has similarly suggested that even though the act of passing “generally holds larger social hierarchies firmly in place,” it can nonetheless be “a

uniquely pleasurable experience, one that trades on the erotics of secrecy and revelation” (2001:3). The construal of passing as pleasurable is no doubt appealing for its empowering political orientation. Yet – like many outlooks grounded in standpoint epistemology – this runs the risk of reinscribing the very power gradients that a de-minoritizing discourse should presumably seek to undermine.¹²⁸ A principal danger in valorizing the passing of the oppressed is that it casts subjugated individuals as somehow appeasable by their putative occupation of a moral or intellectual high ground. As Barbara Hillyer argues, passing “involves adopting the values of the privileged group; it causes ‘emotive dissonance’; it is harmful to mental and physical health; it makes the secret the central focus of the passer’s life [...] and it maintains the very repressive system that causes it” (1993:150). Trading silence for impunity comprises a sacrificial social contract not unlike that which underpinned the former American military policy of Don’t Ask, Don’t Tell. Such arrangements permit discrimination to *pass* as paranoid indifference (oxymoronically so) as a way of bringing prejudicial ideologies back within the pale of a supposedly greater good.

Some female players of *Team Fortress 2* have reported that they became more comfortable speaking up after gaining technical proficiency with the game and getting acquainted with regular patrons of particular servers.¹²⁹ One player explained during our initial interview: “When I first joined the No Heroes [server] I didn’t really know anyone and I often got teased for being a girl. I quickly proved myself as a valuable member with my Pyro skills, so it’s not a problem anymore for me. I won’t just randomly say something if I don’t know anyone, until I’ve actually kicked some ass” (interview, YORugly, 31 May 2010). This strategy of coming out after purposefully passing might bring to mind any number of dramatic and literary cases in which the unmasking of a female

¹²⁸ On the advantages and limitations of feminist standpoint epistemologies, see Walby (2001), Hekman (1997), and Harding (1993).

¹²⁹ Players of *Team Fortress 2* can add one another to their Friends lists and subsequently engage in instant-chat outside of the game. The online social platforms for *Team Fortress 2* are Steam (Windows PC and Mac), Xbox Live (Xbox 360), and PlayStation Network (Playstation 3).

protagonist, previously disguised as a male warrior, brings about a climactic confrontation that ends up challenging social preconceptions of what women can and cannot do. Clorinda in Claudio Monteverdi's dramatic madrigal *Il combattimento di Tancredi e Clorinda* (1624), Éowyn (the slayer of the Witch King) in J. R. R. Tolkien's *The Lord of the Rings: The Return of the King* (1955), and the titular character of the animated Disney film *Mulan* (1998) rank among just a few examples of such heroines.¹³⁰ Of course, the fact that a woman should need to gain entry at all – to become *like* one of the guys – remains the fundamental problem with conditions of compulsory masculinity. This road to empowerment, in any event, is not always one that female players of online FPS games choose to take. One woman posted the following comment on the *Team Fortress 2* forums:

For a while, I was just too timid to speak to the team as I was learning. Now that I'm much better at playing, I still haven't used a mic. I suppose a reason for it is that every time a female uses a mic, everyone seems to become obsessed and spout obscenities of some sort or try to flirt with her or find out where she's from or how old she is. It gets old and annoying and it's distracting to gameplay. So, I suppose I don't use a mic for the sake of sparing my team from such nonsense (Diamantha, 2 June 2008).

The male homosocial environment described by this player seems to derive much of its power by inducing not simply fear but also complacency. Women who decide that the gains of coming out are outweighed by that which is lost or threatened by doing so have already become ensnared within a pacifying culture that thrives on the deflection of blame.

Players who actively engage in *Team Fortress 2* matches are scattered across thousands of different servers, most of which can accommodate up to only thirty-two players. Any player can join any server as long as it has an available slot and is not protected by a password. It is common for players to hop quickly from one server to another (maybe after playing a match or two on each one) so as to experience different maps and game modes. These rapid and unpredictable turnovers in server populations constantly bring together new communities of players who are unlikely to be

¹³⁰ For more on disguised female soldiers in historical perspectives (e.g., during the American Civil War), see Blanton and Cook (2002:25-44, 107-29), DePauw (1998:104-9, 147-51), and Hall (1993).

acquainted with one another at the outset of a match. Closets in online FPS games therefore lie on perpetually shifting ground: female players who decide to speak and to come out as women must do so continuously lest they become automatically absorbed back into a male homosocial fabric.

Whereas a policy such as Don't Ask, Don't Tell did not permit outed individuals to *return* to the closet (and to remain in military service), the closets in *Team Fortress 2* are nothing if not a point of magnetic return. It is by now a truism, in the views of feminist, queer, and disability scholars, that coming out entails not a single (or temporally delimitable) act but rather an exercise in repetition, a cyclical routine of always coming out *again*.¹³¹ For female players of *Team Fortress 2* – as for any unmarkedly deviant individual – the closet, with its revolving doors, remains by definition an imagined home base that cannot disappear so long as its secrets lie outside the bounds of social expectations.

What the Troll Said

What's in a voice? For many neo-Barthesians, opera fans, and theorists of corporeal feminism, there's one fairly standard answer: the *body* is in the voice.¹³² As an oral signature, the voice is, as Emily Wilbourne writes, “[c]onditioned by and yet fragmented from semantic meaning [...] the sonorous remnant of speech, an unwieldy synecdoche for the body” (2010:5). The voice, in other (or, rather, its own) words, can already *say* too much even when the speaker is not trying to say anything at all. Adriana Cavarero has proposed, in her study of speech and politics, a “vocal ontology of uniqueness,” the notion that “the voice manifests the *unique being* of each human being, and his or her spontaneous self-communication according to the rhythms of a sonorous relation”

¹³¹ See Halberstam (2005:52-53), Samuels (2003:237), Kleege (2003), Butler (1997b:302), Tyler (1994:222), and Phelan (1993:774).

¹³² See, respectively, Barthes (1977:179-89), Koestenbaum (1993), and Grosz (1994). In his influential essay on the grain of the voice, Barthes (1977) posits the terms *geno-song* and *pheno-song* to distinguish respectively between the materiality of sound and the linguistic-representational expression of sound. Barthes adapted these concepts from Julia Kristeva's (1984:86-89) functional differentiation between *geno-text* and *pheno-text*.

(2005:173, emphasis in original). Sound and media scholar Jonathan Sterne, by contrast, has cautioned against tendencies to “[idealize] hearing (and by extension, speech) as manifesting a kind of pure interiority” (2003:15). What needs to be resisted are blanket understandings of voice (and the speech it may carry) as somehow capable of conveying a kind of agency or sincerity that lies beyond the alternative expressive potentialities of text and gesture. As declared by a Second Life resident on an online forum: “I hate voice. I hate it with a passion. I’m a woman and I’m shy. I am a nerdy bookish person and I’m more at home with text. It’s a place where my nasal voice and softness disappear and my ability to write lets my personality really come out” (Kathy, 1 March 2007). It can be presumptuous and even ableist to assume (especially with regard to online interactions) that the articulation of a so-called real or complete identity cannot occur without vocal communication. Denaturalizing voice – stripping it of its association with true identity – can open up conceptual possibilities akin to those extended by theories of gender performativity. One such possibility might emphasize voice *as* performance – as a socially adaptive construct that assumes the guise of coherent and authentic expression via the repetition of stylized speech acts and other learned vocal qualities.

Characterizations of the voice as a subversive force have emerged perhaps nowhere more prominently than in discourses on opera and song. Writers have insisted on the power of the lyric voice in relation to the erotic cult of diva-worship,¹³³ the sexual interstitialities embodied by castrati and cross-dressed performers, and the transgressive significations of extra-linguistic utterances such as the scream (Friedheim 1983:63-70), the cry (Poizat 1992), and laughter (Bronfen 1996; Huebner 2006).¹³⁴ In response to Catherine Clément’s influential monograph ([1979] 1988) on women’s

¹³³ See Leonardi and Pope (1996), Robinson (1994), Castle (1993), and Morris (1993).

¹³⁴ Ethnomusicological studies about the impact of women’s songs on the production of culture and community (e.g., Magrini 2003; Du Perron 2002; Sugarman 1997; Koskoff 1993; Vander 1988) have appeared alongside a multitude of recent edited volumes containing essays that emphasize women’s voices as instruments of authoriality and

victimized roles in opera, Carolyn Abbate offers an alternate narrative whereby singing heroines might be heard to exist “as sonority and sheer physical volume, asserting themselves outside spectacle and escaping murderous fates” (1993:254). Voice is salvaged here, (so) to *speak*, as a way of affirming a virtuosic female presence that rages against opera’s pandemic of prima donnas. She sings; therefore, she survives, transcending corporeal fate and living on through the physical vibrations of her miraculous voice. The obvious catch here is that this hermeneutics of material vocal triumph is made possible precisely by voice’s relative *immateriality* and definitional promiscuity. Just as music and noise are frequently cited for their non-representational and ineffable qualities, so voice is oftentimes invoked, in the words of Michelle Duncan, as “a place-marker for something unarticulated or inarticulable, taking on a rhetorical task in the service of a theoretical argument” (2006:284). It is not, in the end, solely the female voice that has been lionized as a locus of sensorial fixation, but rather voice more broadly in all its metaphorical and material forms. As the chameleonic poster-child of subjectivist criticism, voice has traditionally been harnessed to say whatever we – as students of music, poetry, and the humanities broadly writ – have aimed to make it say.

A strain of romantic idealism runs through the arguments of writers who privilege voice as a mode of sincere expression and an acoustic window into the soul. On the one hand, this mindset posits an inviolable bond between voice and subjectivity. On the other, it displaces agency from the human individual onto the autonomous, reified voice. To conceive of voice as somewhere *out there* – whether as a diva’s postmortem echo or as a prosthetic signature of an FPS player’s body – is already to call into question the naturalness of voice and its relationship to the human subject. In a gameworld, customary practices of role-play and posturing further complicate what it means to

empowerment (e.g., Austern and Naroditskaya 2006; Feldman and Gordon 2006; Bernstein 2004; Smart 2000; Barkin and Hamessley 1999; Blackmer and Smith 1995; Dunn and Jones 1994).

speaking one's identity and, consequently, what it really means for any disembodied voice to be or to sound authentic to begin with.

On 10 December 2007, an unidentified user posted on the gaming website 1UP.com a video that has since become infamous within the *Team Fortress 2* community. This video features an outspoken male player named Ralphie obsessing over the presence of a (mostly silent) female player during the course of a match. Throughout this video, other male players on the server tell Ralphie that the female player's name is Asie and that she is Japanese. Asie – if that is indeed her name – speaks intermittently and goes on to be treated as an object of sexual and ethnic difference by the other players. Below is a transcript of Video 4.2

(<http://vimeo.com/album/1662583/video/25871304>), which comprises a collection of excerpts from the original recorded footage.

Ralphie: You know what? I'm surprised and I'm disappointed. I hear that there's a female in this server, and she's just joining in with the other bullies and assholes.

Male Player 1: Yeah, she is. And she's Asian, 'cause she likes animation.

Ralphie: What, really?

Male Player 2: She's Asian 'cause she likes animation? Or she's really Asian?

Male Player 3: [*laughs*] Did you say she's Asian 'cause she likes animation?

Ralphie: Let me hear her! Let me hear her! Let me hear her! Let me hear her!

Male Player 1: No, then you might, like, jack off or something.

[...]

Ralphie: Shut up, I didn't want to hear you! I wanted to hear the Asian girl!

Male Player 2: I am Asian. I am a girl.

Ralphie: Asian girl on this server, will you say hi so I know they're not lying?

[...]

Male Player 1 [*to Ralphie*]: Are you a fifty-year-old stalker? You're on that show, aren't you? What is it – fuckin' "How to Catch a Predator?"

Asie: Maury Povich?

Ralphie: Say that again?

Male Player 1: She called you Maury Povich.

Asie: No!

Male Player 2: She wants to rub your balls.

Asie: Wow.

Ralphie: Stop being so rude when there's a lady in the presence! Asie, I didn't mean for them to say that at all. I didn't want them to talk that way around you, Asie.

[...]

Ralphie: Asie, can we – do you have Ventrilo? Do you want my Ventrilo IP [Internet Protocol], Asie?

Asie: No.

Ralphie: Well, 'cause they keep saying all that stuff. I don't want it to be that way. I'm not trying for it to be that way.

[...]

Male Player 2 [*to Ralphie*]: You're totally racist – or not racist, sexist.

Male Player 1: Yeah, you're a sexist bastard.

Ralphie: It's not – that's a different culture! It's not the same.

Asie: It's not!

Male Player 2: No – learn our culture.

Male Player 1: You know, that used to maybe be the culture...

Ralphie: You can learn honor from Japan!

Male Player 1: She's Japanese, retard!

Male Player 2: Yeah, treating women like slaves.

Ralphie: It's not a slave; it's not a slave to respond when someone's talking to you.

Male Player 2: Oh, I'm sorry, just a sex slave.

Male Player 1: Are you into the bondage?

Ralphie: I didn't say anything else. All I said was that in the Japanese culture of honor – that the geisha will respond to the man [...*unintelligible*].

Asie: [*amid chatter of other players*] I'm not a geisha!

A few days later, it was revealed on an episode of GFW Radio (a podcast affiliated with 1UP.com) that the figure of Ralphie in this video was a persona that a game journalist named Shawn Elliott had adopted in his endeavor to rile up other *Team Fortress 2* players. One of the hosts of GFW Radio

launched a discussion of Elliott's stint by reporting (see Video 4.3 –

<http://vimeo.com/album/1662583/video/25875515>):

I have to say that I did play some *Team Fortress 2* with you [Elliott]; I don't know what night that was – in the last few nights – and I was laughing my head off. I had to move the mic away from my head because he was playing as Ralphie, basically, and he just sucks these guys in so bad. You have this innate ability to get people totally mad at you [*laughter from other podcasters*].

Elliott's role-play as Ralphie exemplified what is commonly termed *trolling* – displaying a controversial stance or behavior (usually in online contexts) in a deliberate effort to incite vexed responses from other members of a community. A troll posts or voices inflammatory remarks as bait and then takes pleasure in luring others into disputing a viewpoint to which this troll might not even actually subscribe. As Judith Donath declares, trolling “is a game about identity deception, albeit one that is played without the consent of most [other] players” (1999:45). Trolls are essentially griefers (as discussed in Chapter 2) who intentionally cause mischief while concealing their grieving agenda. All trolls by definition need to pass as non-trolls – as genuine adherents to whatever polemical views they are espousing – lest they become outed as trolls and chastised accordingly (or ignored altogether). A skilled troll knows how to push the right buttons in order to prompt reactions from others and to stir up contention for its own sake.

In the case of the Ralphie video, Shawn Elliott managed to gain recognition first by passing as a non-troll at the moment of trolling before coming out as a troll whose prior impersonation of a despicable persona allowed his actions to be understood, in retrospect, as a clever bid for provocation. It's difficult to gauge, simply by watching the video, the extent to which Asie and other players felt harassed, annoyed, or threatened by Elliott during that *Team Fortress 2* match. What the limited video footage does suggest is that the majority of players on the server did not seem to have been fully aware (or certain) that Elliott was trolling. Elliott stated over the course of the GFW Radio episode that he had indeed been trying to get a rise out of not only Asie but also the

other male players. He then gave a demonstration of the nasal, drawling voice he had used when speaking as Ralphie (see Video 4.4 – <http://vimeo.com/album/1662583/video/25875533>):

Whenever there's a girl in any shooter, she's got like an entourage of white knights, and as soon as you say something to her, they're all, like, "Haha, who's this fuckin' retard!" And then I'll just be, like, [*in the voice of Ralphie*] "Oh yeah, go ahead and call me that! My own grandma calls me 'retard!' You think it's gonna hurt my feelings anymore? I get called that every day!" [*In previous podcasting voice*] You know, whatever [*laughter from other podcasters*].

Elliott's observation about the valiant posturing of men in the presence of female players is something I've commonly heard from other players of *Team Fortress 2*. One player explains: "I've seen the female player placed on top of a pedestal. Talkative players would fawn over her, people would personally heal her the entire game as Medic, and even start asking personal questions that really have nothing to do with the situation at hand, thus making her feel uncomfortable and either stop talking or leave the server altogether. I know it's nice to let a girl feel welcomed in the TF2 community, but some players go borderline stalker if a female shows up" (interview, Kyle McKasty, 5 June 2010). Such acts of chivalry, however, are not always as straightforward as they first seem. In the Ralphie video, it's notable that although many male players rushed to Asie's defense against Elliott's come-ons, they nonetheless made lewd statements *about* Asie via oblique references. These players addressed Ralphie directly but used exclusively third-person pronouns when commenting on Asie ("She's Asian, 'cause *she* likes animation"; "*She* called you Maury Povich"; "*She* wants to rub your balls"). The outrageous nature of Elliott's harassment of Asie, it appears, allowed the other male players to seize a high ground from which they could take *relatively* discreet potshots at Elliott and Asie alike.

On the same day it appeared on 1UP.com, this Ralphie trolling video was uploaded to YouTube, where it has since received about a half million hits. Viewers who commented on the YouTube video fell into one of two general camps: 1) those who regarded it as a basic instance of sexual harassment and 2) those who ridiculed the gullibility of the first group by pointing out that

Elliott was *merely* trolling. The latter respondents – perhaps out of an eagerness to reap the privilege that comes with being in on a joke – were quick to cite Elliott’s subversive ingenuity as a grounds for refuting any accusations of sexual harassment at play. Left out of these exchanges was any explicit discussion about whether the harmless intentions of such offensive behavior necessarily rendered it any less a form of harassment.¹³⁵ To excuse an instance of misconduct on the basis of its allegedly self-conscious and performative nature is to abide by a logic with a dangerously slippery slope. At the bottom of this slope lies the argument that sexual harassment is (always) just a game – one sanctioned by humorous, flattering, parodistic, and non-threatening intentions – and that everything can be okay as long as everyone plays along.

Elliott used a voice for his Ralphie persona that sounded markedly different from his podcasting voice, but it would perhaps be hasty to call the latter his normal, real, or ordinary voice. People who speak, as a matter of course, do so in multiple voices – voices that vary in speech content, timbre, register, inflection, affectation, loudness, rhythm, and pacing according to the demands and allowances of different social situations. The pseudonymous nature of online ludic interactions promotes and implicitly authorizes role-playing and polyvocality. It is in this authorization that trolls and other cyber-offenders find refuge. As Ken Hillis has observed, online avataric communications represent a form of “ventriloquism [that] can serve as a defensive strategy, one that seems to project the source of the message to somewhere or something else other than the sender” (2009:147). After all, the ludic premise of games, as noted earlier in Chapter 2, is what motivated developers of *The Lord of the Rings Online* to stipulate that “[a]lthough the Game is a role-playing game, you may not claim ‘role-playing’ in defense of any violation of the Code of Conduct” (Turbine 2007:107). To *say* that one *was speaking* in a different voice (when trolling, grieving, or

¹³⁵ In virtual environments, as Sherry Turkle concisely puts it, “words *are* deeds” (1995:15, emphasis in original). On critical notions of speech *as* act, see Felman (2003:6-11), Powers (2003), Munt, Bassett, and O’Riordan (2002:128-29), and Butler (1997a).

otherwise) already comprises a double speech act – a manner of free indirect discourse that skirts social liability via its denial of the slippage between respective claims to impersonation and authentic expression. Trolls *qua* ventriloquists who displace voices onto alternate entities are granted the flexibility simultaneously to disavow what they say (when under critical fire) and to take credit for a gag (as soon as it is opportune to do so). Offenders in online games, as such, find safe haven precisely in the mutability of voice and in the capacity of transgressive acts to pass as ostensible forms of role-play.

Once, during a *Team Fortress 2* match, I heard a trolling player named Nigel speak with a voice remarkably similar to that of Shawn Elliott's Ralphie persona. When I later interviewed this player, he told me he had indeed been directly inspired by videos of Elliott's trolling. He enjoyed playing the Ralphie-like part of "a nerdy, angry dude with a nasally voice that takes the game too seriously and won't shut up" (interview, 16 August 2011). According to Nigel, "it's a perfect voice; the idea isn't to be a big man and bully people around, because then they just ignore you. You have to let them think they're better than you. The entertainment comes from them getting frustrated about not being able to make this little nerd bitch shut up" (ibid.). In paying homage to Ralphie, Nigel occasionally targeted female players with his trolling. When I asked him whether he considered this offensive, he maintained: "You can't sexually harass someone in a video game [because of the] the lack of potential to act on anything you're saying and the woman's ability to mute me or leave at any time. I think it stops being harassment the second the target has an opportunity to stop it and to choose not to" (ibid.). Like musical grieving in LOTRO, vocal trolling in *Team Fortress 2* at times gets a free pass for its comedic value. "Sometimes, people will ask an admin to ban me," explains Nigel, "but the funniest times are when the dude is begging for me to be muted/banned, but the admin won't because he [the administrator] thinks it's funny" (ibid.). While trolling has the potential to offend, most players see it as a nuisance rather than as a genuine threat.

Like the unwitting targets of the bagpipe spam in LOTRO's Auction Hall, the victims of trolling are not captive listeners per se. Granted, the boundary between stylized and genuine attempts at harassment – and between trolling personas and authentic identities – can often be every bit as porous as the membrane that separates the real from the virtual. Whenever we're dealing with real voices in virtual spaces, things are bound to get a little murky.

Any Other Name

The trolling sprees of players such as Shawn Elliott and Nigel represent conscious, pre-meditated performances of alternate voices – materially as well as metaphorically speaking. Yet virtually all disembodied voices, including those which are not deliberately modified in service of deception, are in some ways misleading due to their inability to relay exact information about a speaker's body.

Any player's voice in *Team Fortress 2* can end up telegraphing drastically different identities to different listeners. When I asked interviewees about how they tend to visualize the real-world identities of other players, I received responses such as the following:

I think I unconsciously associate a voice with someone in my head. When I actually see a picture of them, I'm always caught off guard, and continue to still picture them as I did before. Normally it's someone famous, I think, someone who has a voice similar to someone I've seen in movies or on TV (interview, Jayrod, 12 June 2010).

I am a creative person by nature and I find it only normal to want to know what someone looks like when you hear them speak over the phone or voice chat. I work at a job where I talk on the phone 90% of the time and I find myself wondering what the old lady on the other line looks like (interview, YORugly, 31 May 2010).

If someone has a very high-pitched voice, you could ascertain them to be small in stature and thin; or if someone happens to have a rasp, maybe they are a smoker or sick; or with a deep voice, perhaps a stocky-built guy (interview, Noobinator, 12 June 2010).

The human impulse to anchor disembodied voices to imagined bodies has been a topic of empirical and theoretical study at least since the advent of public broadcasting in the 1920s. Researchers during this time conducted experiments on how radio listeners used particular qualities of a

disembodied voice to construct a mental image of the speaker's disposition and physical attributes. Susan Douglas notes that early radio audiences, "with the voice as their only clue, used a combination of their imaginations and social knowledge to ascribe all sorts of traits to an unseen speaker. Herta Herzog, a pioneer in audience research, found that listeners pictured the speaker's age, social status, appearance, and personality all from his or her voice. In addition, listeners made all sorts of assumptions about a speaker's intelligence, honesty, compassion, generosity, and competence simply based on accent, as well as on tone of voice and delivery" (2004:102). Whether in the case of radio, film, or an online gamespace, envisioning the body of an unseen speaker permits listeners to develop a sense of intimacy toward the imagined personality as well as to rein in the vague significations and potentially unsettling authority of the disembodied voice.¹³⁶ What probably matters most to a listener, to be sure, is not whether a fantasized body is perfectly accurate, but rather the extent to which a coherent and believable image of this body can be sustained in the mind's eye. The conjured image of a speaker is, in effect, an avatar – a virtual construct that serves as a vehicle for identification and as a placeholder for the real.

Players of *Team Fortress 2* rarely inquire into one another's appearance, class, race, nationality, educational background, or occupation. The real-life identities of teammates are usually understood as privileged information and irrelevant to the technical game at hand. This respect for mutual anonymity, however, often goes out the window when a female player's voice is heard on a server. It is not uncommon for a woman who uses voice-chat to be bombarded with invasive questions about her height, weight, hair color, ethnicity, sexual experience, state of dress, and even bra size. Among the most popular queries tend to be those concerning a woman's age, relationship status,

¹³⁶ Regarding mid-20th-century attitudes toward female voice-overs and voice-offs in cinema, Kaja Silverman has remarked that to "allow [a woman] to be heard without being seen would be [...] dangerous, since it would disrupt the specular regime upon which dominant cinema relies; it would put her beyond the reach of the male gaze [...] and release her voice from the signifying obligations which that gaze enforces" (1998:164; see also Dusman 2000; Flinn 1992:51-69; Doane 1991).

and attractiveness – all of which are posed presumably with the intention of confirming the female speaker as an admissible and worthwhile object of desire.

Complicating these pursuits of sexual fantasy are instances wherein the target's voice is not discernible as unequivocally female. The low fidelity transmissions of most voice communications in *Team Fortress 2* easily result in sound distortion, background noise, and the masking of certain timbral nuances that might otherwise assist listeners in determining the sex of a speaker. A common question that outspoken women are first asked in *Team Fortress 2* is thus *whether* they are women at all. Two adult female players who frequently use voice-chat describe their experiences as such:

I'll usually get "oh a girl!" etc. and guys will hit on me – most of the time jokingly. Sometimes if I'm being bossy – which I can be sometimes, I am an aggressive player – I'll piss someone off and they will call me a "bitch" or "cunt." Sometimes my voice gets made fun of, for sounding like a 12 yr old boy (interview, Evillittlekiwi, 3 June 2010).

Typically, I will get asked after speaking, "Are you a guy?" – I'll answer no. Then the next question is usually, "How old are you then?"...so it seems I just sound like a young child in general, but the majority of the time I'm asked if I'm a boy, not a young girl (interview, YORugly, 31 May 2010).

Although Evillittlekiwi and YORugly play regularly on select servers and have become well acquainted with the communities therein, they still encounter harassment and probing inquiries from male players (especially those who might be joining these servers for the first time). It is noteworthy, however, that both of these women use photos of their actual faces as the profile pictures for their respective *Team Fortress 2* accounts (see Figure 4.6).¹³⁷ They do so in part to assert that they *are* women and, as Evillittlekiwi states, to "stop all the requests for pictures" (interview, 22 June 2010). Since both Evillittlekiwi and YORugly persistently utilize voice-chat and do not have any qualms about coming out as women in the gameworld, they elected, at earlier points, to

¹³⁷ Very few players of *Team Fortress 2* use photos of themselves as their profile pictures. Most players choose instead to use animated figures, abstract symbols, famous video game icons, the faces of celebrities, graphical cyber-memes, or other eye-catching and anonymizing images.

publicize their identities as a way of dispelling up front any misconceptions about their sex, age, or appearance.

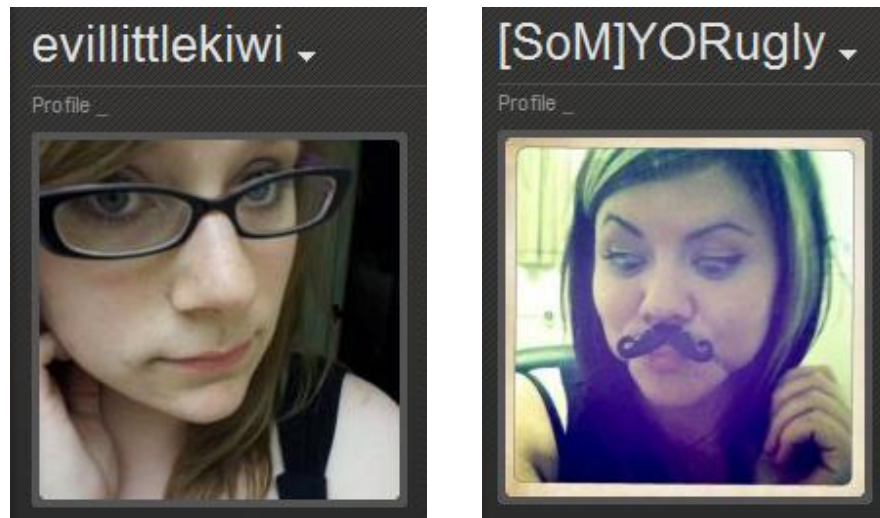


Figure 4.6. Evillittlekiwi’s and YORugly’s respective *Team Fortress 2* profile pictures (reproduced here with the permission of both players). YORugly has also described to me how she tries to use her physical attractiveness to her own advantage: “I have a picture of myself on my public profile as well as a link to my Facebook page. I am good looking in general, and I think this factors into how I am treated. I think if I wasn’t, I wouldn’t be treated as nicely” (interview, YORugly, 1 June 2010).

Disembodied androgynous voices in *Team Fortress 2* can be a subversive force not least because they confound their own legibility as objects of aural fantasy.¹³⁸ If the speaker, on the one

¹³⁸ Across recording and transmission technologies over the last century, the sounds of disembodied female voices in particular have garnered fascination and anxiety in equal measure. In a 1902 article in the *American Telephone Journal*, the critic C. E. McCluer commended female telephone operators for their “traits of domesticity, patience, courtesy, and contentment” and remarked that “the dulcet tones of the feminine voice seem to exercise a soothing and calming effect upon the masculine mind, subduing irritation and suggesting gentleness of speech and demeanor, thereby avoiding unnecessary friction” (1902:31). These women, as described by communications scholar Lana Rakow, spoke in voices that were thoroughly “commoditized, controlled, and restrained for business purposes” (1988:224). Contemporary writers praised female operators as obedient aides whose feminine dispositions and willingness to accept low wages made them more conciliatory candidates for the job than the rowdy young boys whom they replaced. Female operators were required to attend group lessons during which they learned to soften their voices and to make their pronunciation of specific words pleasing to listeners. They were taught never to deviate from a strict list of approved phrases and were forbidden to respond to verbal abuse from callers with anything other than rote expressions of deference. Social practices of taming and policing the disembodied female voice also persisted in mediums such as the gramophone and radio. In a 1928 article published in the *Musikblätter des Anbruch*, Theodor Adorno famously noted: “Male voices can be reproduced better than female voices. The female voice easily sounds shrill – but not because the gramophone is incapable of conveying high tones, as is demonstrated by its adequate reproduction of the flute. Rather, in order to become unfettered, the female voice requires the physical appearance of the body that carries it. But it is just this body that the gramophone eliminates, thereby giving every female voice a sound that is needy and incomplete” ([1928] 1990:54; see also Engh 1994:120-35). Experiments conducted at the Bell Laboratories in the 1920s actually concluded

hand, is an adult woman, then for the heterosexual male player, the voice is perceptible as a target of normative desire. But if the speaker is a child, then such fixation is steeped in pedophilic taboo. Players in *Team Fortress 2* often get intensely preoccupied with the prospect of resolving this ambiguity. As one player recounts: “A recent notable instance would be when either a young boy or a young girl was speaking over voice-chat, but would not reveal their gender when asked about it. Several players continued to ask other players if the player in question was male or female even after the player had already left the server” (interview, Isaac Richeson, 31 May 2010).

Players of online FPS games sometimes type the insult *LOL 12/woman* as a way of indiscriminately infantilizing and feminizing women and younger men in one fell swoop.¹³⁹ The remark is interrogatory insofar as it can goad its targets to respond, to denounce the conflation of prepubescence and womanhood, and to disclose a purely male or female identity. But the slash in *LOL 12/woman* is also a syntactic embodiment of sexual *indifference*, an attitude that forgoes the discretion of either/or for the ambivalence of both/neither.¹⁴⁰ One consequence of this ambivalence is that even female players who choose to speak out in *Team Fortress 2* are by no means guaranteed to establish themselves as female. The casual abbreviation and apathetic tone of *LOL 12/woman* simultaneously work to oppress women and to suppress (or at least to defer) altogether possibilities for a decisively female presence in the gameworld.

that the high register of a woman’s voice rendered it “equal to men’s in loudness, but significantly less intelligible” (McKay 1998:187), though as Amy Lawrence points out, the alleged technical crises concerning the transmission of the female voice grew out of “a tangle of technological and economic exigencies, each suffused with ideological assumptions about [a] woman’s ‘place’” (1991:32). Surveys at the time showed a general public distaste toward female radio personalities, especially “women who had too much of an air of ‘cultivation and refinement’ [...]. [Listeners] didn’t want to hear women who sounded upper-class or too aggressive. Women, in other words, who weren’t too prissy, who seemed like guys, did fine over the air” (Douglas 2004:135; see also Halper 2001:43 and Lacey 1996).

¹³⁹ Regarding early modern discourses on femininity, age, and sexual maturity, Linda Phyllis Austern notes that “English Renaissance gender theory equated boys and women on many levels, including outward physical characteristics and a shrillness of voice that enabled the former to imitate the latter in the theater in a highly convincing manner. In addition, both groups, perceived as morally and spiritually undeveloped, required adult male control and gentle guidance toward properly restrained behavior” (1994:102).

¹⁴⁰ In a different discursive context, Teresa de Lauretis has likewise used the term “sexual indifference” to highlight notions of lesbian identity and the psychoanalytics of self-same desire (1988:155-77; see also Hope 1994).

The tendency of players to attribute high-pitched voices to adult women and boys – while overlooking the category of the young girl – likely owes to assumptions that boys play online FPS games more commonly than girls do. Another particularity is the invocation of the *twelve*-year-old boy as a representative for youths more generally. Perhaps this stems from a view of boys this age as figures poised on the cusp of puberty and its awkward gauntlet of transitional vocality – as almost-teens who are old enough to grasp the teasing intentions behind a remark like *LOL 12/woman*, yet just young enough to possess the androgynous voices that would sustain such an accusation.¹⁴¹ Boys themselves often participate in the harassment of women, but they are also occasionally mistaken *for* women and harassed accordingly by adult male players (as well as by other young boys). A boy who takes the initiative to harass might thus do so as a means of disavowing boyhood, of pre-emptively asserting that he is a (soon-to-be) man and that he can dish out the abuse just as effectively as the grown-ups can. A similar self-disavowal may likewise inform the bullying actions of older players who, by openly mocking adolescents, become better positioned to detach themselves from the juvenile image that societies still tend to associate with gamers of all ages.

On the afternoon of 2 December 2010, I participated in a 32-player match of *Team Fortress 2* on a server called No Heroes. Shortly after this match began, several individuals started to remark on the high-pitched voice of a chatty player named *xxsnipergodxx*. When asked about his or her

¹⁴¹ The topic of vocal androgyny has received much attention from music scholars with particular regard to the singing voice, which, as remarked by Judith Peraino, “seems to open the doors of gender with the opening of the throat,” and – more so than the speaking voice – sheds “the indelible mark of a binary gender system” (2007:63). The figure of the castrato has served as a popular case study for illustrating listeners’ fascination with voices that transcend gender categories (see Ashley 2009; Braga-Pinto 2002; Miller-Frank 1995:84-117; Dame 1994). Naomi André describes the voices of castrati “as neither man nor woman in an exclusive sense, but [...] as a combination of something in between: a ‘third’ option for gendering the singing voice” (2006:48). And since, as Michel Poizat suggests, the castrato’s high voice “also happens to be the voice of the child, of the prepubescent male child, of the supposedly presexual or ‘trans-sexual’ child, [it] establishes a filiation between [the] angelic voice, juvenile voice, and female voice” (1992:119). Embraced by many modern-day scholars as a veritable holy grail (or lost ark) of musical beauty, the castrato’s voice is eminently suited to psychoanalytical study and rigorous hermeneutic display. Only in more recent years have writers begun in earnest to normalize the castrato as a way of rescuing this oft-fetishized figure from the brink of mystical and de-humanizing alterity (see, for example, Freitas 2009; for comparable queer and disability discourses that have aimed to destigmatize transsexual, intersexed, disabled, and other non-normate individuals, see Valentine 2007; Heyes 2003; Preves 2002; Davis 2002; Garland-Thomson 1997).

identity, this player claimed that s/he¹⁴² was in eleventh grade but refused to divulge any additional information. Although other players eventually began to articulate suspicions that xxsnipergodxx was using a voice-changer, many of them continued to address this player as if s/he were a young boy. The (more) audibly male players – particularly one named Youngfamous – teased xxsnipergodxx relentlessly throughout the match. There also arose, however, a palpable reversal in the power dynamics between these players and xxsnipergodxx every time the latter threatened to leave the server. During such instances, players – again, none more insistently than Youngfamous – implored xxsnipergodxx to stay for additional rounds of the game. On multiple occasions, Youngfamous tried to placate xxsnipergodxx by offering him or her tradable in-game items called hats.¹⁴³ Below is a transcript of the dialogue in Video 4.5

(<http://vimeo.com/album/1662583/video/25875547>):

xxsnipergodxx: I'm in eleventh grade – of course I can read.

Youngfamous: Probably has a voice-changer.

Rex: A what?

Scott Pilgrim: Dude, it totally sounds like a voice-changer.

Youngfamous: Yeah, of course it is, bro.

xxsnipergodxx: Are you talking to me?

[...]

Youngfamous [to xxsnipergodxx]: No, don't leave, dude, I'll give you a hat, I'll give you a hat, please don't leave.

xxsnipergodxx: No. It's not even worth a thing [...*unintelligible*].

¹⁴² Although I use gender-binaristic pronouns (e.g., “s/he”) in my references to xxsnipergodxx, I do not know (and am not trying to suggest) that this player necessarily identifies as either male or female. Since xxsnipergodxx declined to be interviewed, I was unable to obtain information about this player's identification preference(s).

¹⁴³ In a study of *Team Fortress 2*'s aesthetics and economy, Christopher Moore explains that “hats for player avatars were introduced in [*Team Fortress 2*] in May 2009, eighteen months after its initial commercial release [...] for differentiating player avatars through customisable wardrobe options. [...] Hats are earned by completing tasks set by the game's achievement system; they are also distributed randomly during play at a rate that is monitored and adjusted by the developers” (2011). A subsequent update has allowed players to purchase these hats from *Team Fortress 2*'s online store with real-world currency, but some hats remain extremely rare and can only be found via random distribution. Players have established unofficial markets for buying and selling these rare items (e.g., on eBay via PayPal). In mid-2011, individual items were being sold for upwards of \$3,000 USD.

Youngfamous: I'll give you ten hats.

xxsnipergodxx: You're lying, no one will give me the hats.

Youngfamous: I'll give you a hat. What do you mean nobody?

xxsnipergodxx: I'm calling you a "nobody" – what does it sound like?

Scott Pilgrim: Oh, snap!

[...]

xxsnipergodxx: I'm in a position where I can snipe them [enemy players] when they come out of their spawn.

Youngfamous: You're in the position where you should go fuckin' suck a booby [laughter and unintelligible chatter from other players]. Sucking booby is like the best thing you can ever do, bro. So while you're a young kid, take advantage of it, 'cause it's pretty hard once you get a little older.

xxsnipergodxx: What?

Youngfamous: You're gay. You probably like dick anyway.

xxsnipergodxx: Okay, now I know you're not talking to me.

[...]

xxsnipergodxx [to the team]: If you seriously want me to stay, then you'll win.

Youngfamous: Don't leave!

Barker: I think he should just leave [...unintelligible].

Youngfamous: You're such a credit to our team. We can't win without you.

[...]

xxsnipergodxx [to the team]: Fine, I'm leaving! Bye!

Youngfamous: Don't leave, don't leave. Please, sniper, don't leave, please. Please don't leave. I'll give you a hat, I'll give you a hat.

xxsnipergodxx: I'm not even kidding. Good-bye!

Youngfamous: Trade me, trade me, I'll give you a hat. Trade me right now, trade me. I'll give you a hat. Open trade.

By the end of this match, Youngfamous sounded like he was practically begging xxsni-pergodxx not to leave, even though he had been pelting this player with insults only a few moments earlier.

Youngfamous's desperate offering of hats, moreover, seemed to signal not so much a gesture of

remorse but instead the realization that keeping xxsnipergodxx on the server could make the match more stimulating.

The presence of xxsnipergodxx, in short, opened up possibilities for a social game alongside the game proper. While other players could not know for sure whether or not xxsnipergodxx was indeed using a voice-changer, the mere suspicion that a voice-changer *might* have been in play was enough to generate enthusiastic dialogue and an overall air of heightened excitement. Some players did choose to address xxsnipergodxx as if s/he were a young boy, but if they believed that s/he *really* had been using a voice-changer, then they must also have understood, on some level, that this player's identity could not be discerned with any certainty. A degree of indeterminacy, of course, comes with any disembodied voice. Suspicions about the use of a voice-changer, in this case, simply boosted players' awareness of epistemological limitations. The recognition that xxsnipergodxx could in actuality have been *anyone* – say, a white, middle-class, heterosexual, able-bodied, male-identifying adult trolling for laughs – in no way deterred other players from celebrating the entertainment value and peculiar tone of the voice itself. What intrigued these players was the very *idea* of otherness, the prospect of indiscriminate difference betrayed by a voice that acutely defied associations with any verifiable persona.

Conclusion: Beneath the Pyro's Mask

A few years ago, the topic of this chapter came up while I was having a round of late-night drinks with a friend, a doctoral candidate in genetics (specifically, virology) who has since graduated from his program. I summarized my intellectual framework of my project as best as I could, describing to him theories of homosociality, anxieties concerning the introduction of real voices into virtual communities, the gender politics of passing and coming out via voice-chat in *Team Fortress 2*, and the scholarly fetishization of voice. Before I could tell him about the Ralphie trolling video that I'd just

found, my friend – who, until this point, had been nodding silently along – chimed in with what he believed was a winning solution for problems of sexual harassment in online gameworlds. His suggestion involved none other than voice-changing devices, which, he reasoned, could eliminate all social hierarchies if they were integrated into gaming software and democratically bestowed upon every player. The ubiquitous use of voice-changers, in his view, would muddy the crosshairs of potential harassers and give heart to shy players who might otherwise hesitate to speak. His argument seemed to imply that the widespread (and ideally obligatory) employment of voice-changers might pave way for a paradise regained, a cyber-utopia where wizards could return behind the curtain, where Second Life residents would have no more cause to protest, and where closets could effectively be everywhere – and consequently, nowhere.

I was skeptical about this idea – not, I should stress, because I saw the implementation of the proposed technology as a practical impossibility, but rather because I was not convinced that adding this level of vocal camouflage would be a sufficient measure to prevent discrimination and oppression from seeping into online spaces.¹⁴⁴ For while it is true that someone who uses a voice-changer in *Team Fortress 2* might be able to escape harassment by passing as a normatively voiced adult male (whatever that's supposed to sound like), deeper problems lie in the social structures of repression that compel women, children, individuals with speech impediments, non-native English speakers (on English-speaking servers), and other voice-adverse players to pass in the first place (whether via silence or voice-changers). None of the *Team Fortress 2* players whom I later interviewed, in any event, reported ever having used a voice-changer or owning voice-changing software. Several players, in fact, responded defensively, stating that they would never consider employing voice-changing technologies because they didn't feel like they had anything to hide. One

¹⁴⁴ In 2009, developers of Second Life announced plans to introduce voice-changing technologies into their virtual platform (see Linden 2011 and Seiler 2009). Residents of Second Life nowadays have the option to purchase a number of different voice fonts to alter their speaking voices in this online world. Most games to date, however, do not have built-in support for such voice-changing capabilities.

player additionally explained that he found it “silly to go the extra mile to be anonymous on the Internet” when the medium already offers a certain layer of concealment and security (interview, Sepharite, 31 May 2010). For some players, the ability to speak with one’s own voice seems to provide a happy compromise between total obscurity and excessive disclosures of bodily identity, a means of reclaiming a sonorous glimmer of the purportedly real self amid online avataric interactions.

There’s a running joke among *Team Fortress 2* players about the Pyro, one of the game’s nine characters classes. Equipped with a flamethrower and other incendiary weapons, the Pyro is outfitted with a gas mask and a fire-resistant suit. That the Pyro’s face and body are completely covered by this full-length attire has ignited dozens of online threads (containing thousands of individual posts) devoted to speculations about the identity – and in particular, the sex – of this character (see Figure 4.7). Articles with titles such as “Rumours of Pyro’s Hose Denied: Pyro’s a Lady,” “Save the Fire Hose Jokes: Pyro Is a She?” and “Proof that Pyro is a MALE!!!” have cropped up alongside a slew of debates among players on Internet discussion boards:

The pyro is a chick. Or at least a very effeminate dude (Usernotfound, 6 December 2007).

Actually, the pyro is neither male nor female. IT is a polygonal mesh (DurbanPoison, 26 October 2007).

Has anyone ever considered that maybe the pyro isn’t straight? He is a flamer after all (OMGWTFBBQ32, 17 February 2009).

He [the Pyro] can be gay, pedophile, necrophile, transvestite. HE is NOT a FEMALE (Peperoros, 7 September 2008).

I don’t really care whether she’s a female or not, but since someone suggested she could be a girl with long-flowing hair with a hot bod, now I’m interested ☺ (Lord Destructo, 9 October 2007).

Players have also submitted all kinds of conjectures about the Pyro’s race, ethnicity, and sexuality.

Unlike the other eight character classes, whose stereotypically inflected vocal taunts give clues as to their respective national origins, the Pyro only makes muffled, unintelligible utterances through his

or her gas mask. Some players have attempted to affirm the Pyro's sex by pointing out that the person who recorded the Pyro's garbled speech – the voice-actor Dennis Bateman – is male. One perseverant player even rummaged through the game script of *Team Fortress 2* to show that the Pyro's "actor" is designated as "male" at the level of digital code (see Figure 4.8). Yet such arguments – despite being advanced in the guise of authoritative evidence – have done little to extinguish the flames of controversy. Most players, it would appear, are not really looking for (or willing to be placated by) hard facts and incontrovertible proofs. They're interested more in the pleasures of speculation than in finding an answer to the very question that's being asked.

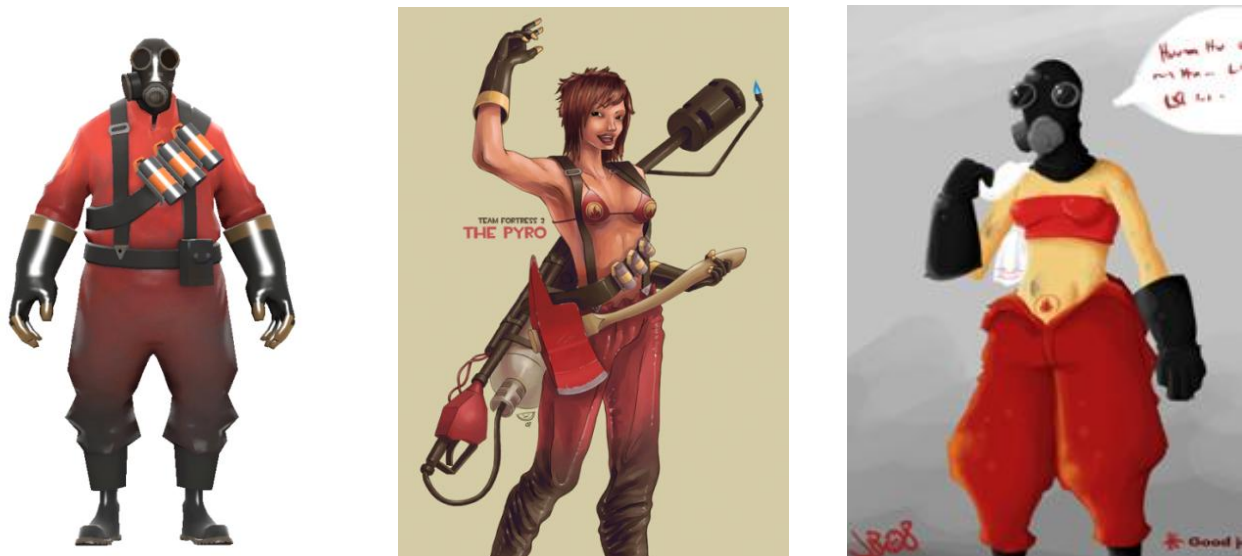


Figure 4.7. [Left] The default appearance of the Pyro in *Team Fortress 2* (from <http://www.tfportal.de>). [Center and Right] Fan-art depicting the Pyro as a woman (from <http://www.fpsbanana.com> and <http://img60.imageshack.us> respectively).

1. Download gcfscape.
 2. Open team fortress 2 content.gcf located in steam\steamapps
 3. Navigate to tf\scripts
 4. Open the file global_actors.txt
- Inside you will find this:
Code:

```
globalactors
{
    "demo"          "male"
    "engineer"       "male"
    "heavy"          "male"
    "heavy_hwm"      "male"
    "medic"          "male"
    "pyro"           "male"
    "scout"          "male"
    "sniper"         "male"
    "soldier"        "male"
    "spy"            "male"
```

Figure 4.8. A player's instructions for locating the digital scripts of the character classes in *Team Fortress 2*.

That the Pyro's sex is unknowable has evidently not deterred players from participating in conversations about its unknowability. In the end, it is such limits of knowing with which epistemologies and acoustemologies of the closet must perpetually contend. The preoccupation of players with what lies beneath the Pyro's suit has persisted largely as a result of the topic's infinite disputability. As with the voice of xxsnipergodxx (or, for that matter, any disembodied voice), the Pyro serves as a repository for players' fascination with identities that are undecidable – identities shrouded in tantalizing but ultimately inadequate clues, identities that have little bearing on the game's technical goals and yet manage to provoke endless inquiry anyway. Of course, these irresolvable dialogues about the Pyro – much like the utterances of trolls, of griefers, or of players simply looking for casual conversation – are more than just idle chatter. Such exchanges are an integral part of multiplayer games and indeed of any online platform that encourages the adoption of alternative, contrarian, and pluralistic personas. In gameworlds, voices carry considerable powers of communication, telegraphing human difference in a flash and letting players imprint their prosthetic

stamps of self into realms of otherwise pre-rendered sprites and sounds. Sitting at the threshold of these resonant closets of cyberspace are practices of oppression and passing that need to be addressed precisely because they are inscribed in silence. To penetrate this silence is to venture behind the curtain, beneath the mask, and beyond the pale of definitive identities, to struggle with knowing nothing about those who do not speak, yet all the while preparing for the possibility of finding out too much – or, sometimes, still not quite enough – about those who do.

Epilogue

17 March 2004

Paris, France

You take care to walk not too fast – but not too slow – upon entering through the double glass doors of the Palais Garnier. Security officers, maintenance workers, and a throng of gaudily dressed American tourists pay you little heed as you make your way through the lobby. Rehearsals are currently underway for the Opéra's upcoming production of Giacomo Puccini's *Tosca*. From behind the closed doors of the inner auditorium, faint voices drift into the foyer as the singers run through the final scene.

The concluding moments of this three-act opera are as tragic as they come. The lead character Tosca believes that her lover Cavaradossi is facing a staged execution. Before the firing squad arrives, she tells him he should feign death convincingly so that they can together flee the city thereafter. Due to the treachery of the villainous Scarpia, however, the riflemen end up truly killing Cavaradossi. After the volley of shots, Tosca is at first elated by what she assumes is simply beautiful acting on Cavaradossi's part. Only after a few moments of blissful innocence does our heroine come to realize that her lover has in fact perished. A virtual death turned real: a twist so cruel it could certainly only ever happen on a theater stage.

It's a heartbreaking story, for sure, but as you stroll through the foyer of the opera house, you don't have time to give it much thought. There's work to be done.

Your target is a man named Alvaro d'Alvade. By day, he reportedly indulges in a child prostitution ring operating out of Eastern Europe. By night, he's preparing to play the part of Cavaradossi. According to your sources, he's right here at the Opéra. Taking him out, however, won't be easy. Every entrance leading into the auditorium is sealed and closely guarded. Civilians

and security personnel are all around you, so minimizing collateral damage will be a challenge. You may be a professional hitman, but you're not a monster. This can't be a standard run-and-gun mission.

You head into the basement of the opera house, through a series of underground hallways, all the while gauging your proximity to the auditorium by the sounds of the orchestra and singers. You eventually come across a row of empty dressing rooms. Somewhere close by, the rehearsal is building to a rousing climax: a timpani roll, a gunshot, Tosca's oblivious cry of joy. Ringing bells follow, indicating that the actors are about to take a short break. With little time to spare, you duck into d'Alvade's dressing room and conceal yourself inside a tall antique armoire. Scarcely a minute passes before a man walks into the room. You take one look at him through the sliver of space between the armoire's doors...and your heart sinks.

The man is not d'Alvade. Instead, from the look of his costume, he plays one of the riflemen from the firing squad. You're in the wrong dressing room.

It's time to improvise. Your first instinct is to burst out from your hiding place, knock out the actor, put on his costume, take his place on the stage for the next run-through, and then shoot d'Alvade point-blank with your own loaded gun. This is a risky plan: for starters, d'Alvade (or, for that matter, the guards at the stage doors) might recognize you as an impostor. Quite a lot could go wrong. At this point, though, it's probably your best bet. Yet just as you're about to make your move, the actor suddenly turns and exits the room. He must be heading back to rehearsal, which means d'Alvade is most likely returning to the stage as well – once again going behind guarded doors. And so you're back to square one.

After waiting a few seconds, you step out of the armoire, silently cursing at yourself for letting the window of opportunity slip by. As you prepare to leave the room, however, something on the dressing room table catches your eye: a prop gun. Your pulse quickens. The actor must not

have gone far after all; he'll probably be back any second to retrieve this item. In a series of swift motions, you seize the prop, place your own loaded pistol on the table, and leave the room just in time to see the actor coming out of a restroom at the far end of the hall. It doesn't seem like he saw you. You walk right past him, then past a couple security guards, before brushing shoulders with none other than d'Alvade, who looks like he's now making his way back to the stage.

The rehearsal bell sounds. They're going to run the final scene one more time. You casually make your way back to the entrance of the opera house, walking not too slow, not too fast. Upon getting to the foyer, you perk up your ears – and yes, there it is: a timpani roll, a gunshot, Tosca's (truly) oblivious cry of joy.

What an artist, indeed!



The events described above take place early on in the 2006 stealth-action game *Hitman: Blood Money* (developed by IO Interactive). This mission at the Paris Opera may not sound like an average night out at the theater, but its backstage drama no doubt typifies the sorts of intrigue we've come to expect from instances of embedded spectacle in games, films, and other narrative media. This summary of my playthrough, for brevity's sake, leaves out many details about the mission, including a crucial encounter at the coat check, the assassin's multiple costume changes, the oddly discreet presence of the woman performing the role of Tosca, and implications of d'Alvade's homosexuality and pedophilic tendencies. There is also a second target that the player needs to take out along with d'Alvade: a man named Richard Delahunt, a wealthy former Massachusetts governor who obsessively attends d'Alvade's every performance (and more than lives up to the stereotypes of the Koestenbaumian opera queen). Death-by-chandelier (very much in *Phantom of the Opera* fashion), incidentally, ranks among the player's most effective options for making Delahunt's death look like an accident.

Rather than devote this dissertation's closing pages to routine summaries of earlier chapters, I conclude here with this *Hitman* vignette because it so efficiently raises – and further problematizes – various themes that have recurred throughout the four preceding case studies. Consider, for starters, issues of aesthetic economy in game design: recall how, in *Fallout 3* (Chapter 1), Agatha and Three Dog give all sorts of rationalizations for the redundant programming of their respective radio stations; or how, in *Silent Hill* (Chapter 3), Yamaoka's looping noise tracks are excusable (and even desirable) because they so effectively capture the game's themes of horror, oppression, and traumatic fixation. With these examples in mind, it's easy to figure out some of the reasons why developers of *Hitman: Blood Money* chose to feature a rehearsal of *Tosca* instead of a performance of the full work. First of all, a rehearsal eliminates any need to render an actual audience in the auditorium, hence affording technical conveniences similar to how, for example, the fog and darkness of *Silent Hill* could terrify players while (as a bonus) reducing the workload of the graphic designers. For a practice run of an opera, it makes sense that the only people present are the actors, directors, a few stagehands, and security personnel. It is also reasonable for the stage to be sparse (devoid of fancy backdrops and props) because, as the argument might go, the casual run-through is not yet the real deal. Second, the fact that this is a rehearsal makes its sheer repetitiveness believable. As d'Alvade and his fellow performers sing through the final scene over and over again, the player receives multiple chances to observe their actions and to hatch an ideal plan. That the singers are exclusively rehearsing the final scene further means that the player does not need to sit through two hours of the opera each time before the almost-too-good-to-be-true window of opportunity (Cavaradossi's execution) presents itself. And lastly, the short duration of this execution scene plausibly increases the frequency with which actors take breaks in their dressing rooms, where the player's protagonist can hide in advance and carry out devious actions. All these narrative and ludic

conceits together allowed the game's sound designers to include only a brief recording of the opera's final scene, thus saving on audio memory, licensing fees, and overall production costs and efforts.

While *Hitman: Blood Money* contains detailed AI scripts for all its NPCs (d'Alvade, the police officers, the rifle squad actor, and so on), the characters who incessantly rehearse the opera in this mission repeat the same series of actions every few minutes like clockwork (accompanied by the same recorded musical segment from the opera). Since the mission has no time limit, the rehearsal will simply keep looping until the player does something to intervene. As with Agatha's violin improvisations in *Fallout 3* (Chapter 1), there's something eerily automaton-like about these identical run-throughs of the opera's final minutes. The repetitiveness of these rehearsals is liable to be especially conspicuous because the game encourages the player to watch (or listen to) it multiple times – so as to learn the layout of the opera house, to figure out the actors' break schedule, and to memorize the locations and patrol routes of all the guards. The player, upon scoping out the scene, has quite a few ways to go about assassinating d'Alvade besides the gun-swapping method described earlier – such as shooting him point blank (while disguised as a rifleman), sniping him from a balcony (timing the shot so that it ideally gets covered up by the sound of onstage rifle fire), or dispatching him in his own dressing room (via strangulation, poison, or other means). While the broad range of these solutions is impressive, there are clear limits to what the game permits the player to do. The most apparent commonality among these otherwise diverse options is that they all entail a violent end, which is admittedly unsurprising given the very premise of the game.

The main function of the opera rehearsal in this mission, after all, is to facilitate an ironically gruesome outcome. The rehearsal, in other words, boils down to a device of practical level design – something that serves the player's ludic goals. While it's possible to disrupt the rehearsal (say, by shooting up the entire opera house), the player doesn't actually have any way of partaking peacefully in the lyric spectacle. Even if the player were to kill d'Alvade by going onstage disguised as a

rifleman (and shooting the tenor with a real gun during the execution scene), there's no singing involved in this ploy. The only action required, in this scenario, is the pulling of a trigger (which, for the player, requires the press of a single button). Short of refusing to play the mission altogether, violence is the only way to go. As in the case of many video games, violence is often the *only* answer.

This isn't to say that the opera mission would have been any more effective had its designers somehow found a way to allow players to assume an active role in the rehearsal. The point here, rather, is that this game – like most action games – really reduces the player to a hitman: a truly silent killer, one who has little choice but to let bullets do the talking. Granted, musical and sonic actions in games are not always so peaceful either. As we've seen in *LOTRO* (Chapter 2) and *Team Fortress 2* (Chapter 4), musical performances and voice-chat may offer respite from virtual combat, but even such activities contain aggressive, offensive, and agonistic potential. Juxtapositions of music and violence are common in video games as well as in the real world. Like blasting mutants or setting off the Megaton bomb to upbeat, romantic, or patriotic strains in *Fallout 3* (Chapter 1), offing d'Alvade against a backdrop of beautiful operatic singing constitutes a perverse muddling of the nasty and the nice. Furthermore, in line with Chapter 1's discussions of Mengele's whistling and other cases of music-loving criminals, the character of d'Alvade yields a disturbing portrait of someone who can traffic children during the day and then go on to sing the part of Cavaradossi in the evening.

Open-world games may offer illusions of endless possibilities and boundless play, but these illusions don't always last. From time to time, any video game – with all its rules, frames, and formulas – might lead us to wonder whether we, as players, ultimately possess any greater degree of agency than the characters we control and observe in virtual worlds. Dystopian horror games like *Silent Hill* and *Bioshock* (Chapter 3) in particular can make us question our capacities for ludic action and genuine transgression. They also compel us to reflect on how good we truly are at

distinguishing the real from the virtual. The opera mission in *Hitman* exemplifies how dizzyingly complicated things can get when real and virtual phenomena collide: within the opera, the character Tosca believes it's a fake execution when it's actually a real one; within the game, the character who *plays* Tosca likewise believes she's watching a staging of a fake-turned-real execution (when in fact it's a real death-by-assassination); and within the real world (the one inhabited the player), d'Alvade's virtual-turned-real-turned-real death is, in the end, still virtual because, needless to say, it's occurring in a video game. But what happens when virtual violence and deaths turn real in real life? When, for example, someone who claims to be the Joker sets off tear gas and shoots up a theater during a screening of a Batman film (almost like something out of a movie)?¹⁴⁵ When an opera singer threatens to kill his costar onstage for real during an opera's death scene if she (read: the actress) doesn't perform up to his standards?¹⁴⁶ Or when a suicide in a play goes awry because the dulled prop knife was mysteriously replaced with a real one?¹⁴⁷

The disturbing thing about these true scenarios is not just the way the virtual turns real, but also how the audience never realizes what's really going on until it's too late. A convincing stage death (or murder) should look and sound like a real one. When violence turns real during a show, it can come off as almost surreal – jolting us out of our former reveries in all the virtual violence that saturates modern media and spectacle.



We've come a long way: from an American wasteland to a pub in Middle-earth, out of a dark alleyway and into a fortress of clever trolls. Video games, as I hope this journey has shown, offer

¹⁴⁵ This refers to the shooting that took place at a screening of *The Dark Knight Rises* in Aurora, Colorado on 20 July 2012 (see Pilkington 2012).

¹⁴⁶ Manuel García allegedly told his daughter Maria Malibran that he would kill her onstage during a production of Rossini's *Otello* if her performance as Desdemona did not end up satisfying him (see Clément 1988:11 and Fitzlyon 1987:39-41).

¹⁴⁷ On 6 December 2008, actor Daniel Hoevens injured and nearly killed himself with a sharp knife while acting out a suicide scene in Friedrich Schiller's play *Mary Stuart* (see Pearse 2008).

players relatively sound spaces in which to test the limits and understandings of what music is, what it can do, and how it matters. The sonic phenomena explored across this dissertation's case studies have manifested as wallpaper tunes on the radio, a collaborative bagpipe spam, monstrous noises gone wild, and voices that at once say too much and too little. None of these sounds are musical in a conventional sense, but it is precisely by being unconventional that they point up music's definitional boundaries and musicology's disciplinary contingencies. Transgressive things and theories are paradoxically vital to social and intellectual order because they lay bare the conditions, operations, and very existence of borders that might – in times of unwavering obedience – go unremarked or altogether unnoticed. Only when rules are broken (or under imminent threat of defiance) do we tend to pay them heed. It's for this reason that the edges of the playground can be so appealing to players and scholars alike. The beyond holds promises of things we do not yet know, have not yet done, cannot yet attain – promises of discovery, adventure, and a sense of getting ahead in (and with) our lives.

I've stressed throughout this dissertation the importance of recognizing intersections between musical, ludic, and scholarly agencies. Comparing intellectual discourse with casual play stands to illuminate the respective activities, motivations, and strategies of gamers and academics. Players and scholars face shared challenges of taming a game's monstrous signs, interpreting rules and scripts, and sharing these interpretations with wider communities. Both are constantly tasked with gaining prestige, outdoing and collaborating with peers, adapting to game changes, and finding ever more creative means of ludic and hermeneutic control. Players, of course, are very much scholars in their own right: they rigorously maintain Wikipedia pages, participate in message board debates, write fan fictions, and upload provocative gameplay videos on YouTube. They might articulate their ideas and experiences in a discursive register different from that of traditional

academic prose, but their contributions to collective knowledge about gaming cultures are indispensable to (and inseparable from) ordinary scholarly oeuvres.

If the rhetorics of fans and scholars alike are any indication, visions of utopia and dystopia rank among the powerful driving forces of modern humanistic inquiry. Whether we slide toward these radical poles or try to stay modestly grounded in between, it's often in our imaginations of these extremities where the most productive conversations are born. This project has broached its fair share of dark topics: violence, territorialization, terrors of uncanny media, and discrimination of all kinds. On the brighter side of things, we've contemplated music at sunrise, bids for virtual artistic democracies, the pleasures of haunted house adventures, and the subversive value of rousing role-play. In the end, then, how high – and how real – are the stakes of ludic transgressions in these gameworlds? Detonating a virtual atomic bomb while listening to an American anthem cannot be facetiously likened to whistling and wounding in the real world. Musical grieving in an online auction hall does not take actual captive listeners. Industrial noises that delude us into thinking they're coming from inside our house certainly up the ante, but frightened players who simply can't handle it have the option of turning off the game (or not playing it in the first place). And while verbal sexual harassment in an online shooter can be seriously troubling and hurtful, it doesn't usually cause too much direct harm to players who understand that such trash-talking and trolling are mere games unto themselves.

Yet here's why the stakes of sound and play are always *potentially* real. Even the most theoretical and abstract discussions of video games, music, and agency, I think, can speak volumes about the very viability of human coexistence. It comes down to a few simple assumptions. First, that how we approach AI characters and quests in virtual worlds may be an indication of how we approach people in the real world, how we pass and transgress, how we cohabit and compete. Second, that the way we listen to music in both real and virtual worlds may likewise inform the care

with which we listen to other human beings. And lastly, that how we approach sound more broadly – how we use, abuse, preserve, manipulate, exploit, heed, or ignore it – may ultimately reflect how we treat one another in everyday life. If there's the slightest truth in these relational slippages, then students of music and games have an important role to play indeed.

While we began at the end of the world, we can conclude by taking heart in the promising beginnings that writers are carving out today in the broad subject of music and video games. The nascent state of research into this topic is providing scholars these days with tremendous liberties in choices of aims, methodologies, and scope. There does not yet exist a definitive canon of game music or a magisterial corpus of scholarship on game music about (or against) which one must necessarily write. Present and future researchers of video game cultures possess considerable freedom (and daresay responsibility) to experiment with innovative, interdisciplinary, and reflexive approaches to this area of study. At the moment, there's license to play. There should be no reason to play it safe.

We've come a long way – beyond ends, between worlds, across imaginations light and dark – and paths ahead ever beckon.

Works Cited

- Aarseth, Espen. 2002. "The Dungeon and the Ivory Tower: Vive la différence ou liaison dangereuse?" *Game Studies: The International Journal of Computer Game Research* 2(1). <http://www.gamestudies.org/0102/editorial.html>.
- _____. 1997. *Cybertext: Perspectives on Ergodic Literature*. Baltimore: Johns Hopkins University Press.
- Abbate, Carolyn. 2004. "Music – Drastic or Gnostic?" *Critical Inquiry* 30:505-36.
- _____. 1993. "Opera; or, the Envoicing of Women." In *Musicology and Difference: Gender and Sexuality in Music Scholarship*, edited by Ruth A. Solie, 225-58. Berkeley, CA: University of California Press.
- Adorno, Theodor. 2002. *Essays on Music*, commentary and notes by Richard Leppert, translated by Susan Gillespie. Berkeley, CA: University of California Press.
- _____. [1928] 1990. "The Curves of the Needle," translated by Thomas Y. Levin. *October* 55:48-55.
- _____. [1949] 1967. "Cultural Criticism and Society." In *Prisms*, translated by Samuel and Shierry Weber, 19-34. London: Spearman.
- André, Naomi. 2006. *Voicing Gender: Castrati, Travesti, and the Second Woman in Early-Nineteenth-Century Italian Opera*. Bloomington: Indiana University Press.
- Arendt, Hannah. [1963] 1994. *Eichmann in Jerusalem: A Report on the Banality of Evil*. New York: Penguin Books.
- Arsenault, Dominic and Bernard Perron. 2009. "In the Frame of the Magic Cycle: The Circle(s) of Gameplay." In *The Video Game Theory Reader 2*, edited by Bernard Perron and Mark J. P. Wolf, 109-31. New York: Routledge.
- Ashley, Martin. 2009. *How High Should Boys Sing? Gender, Authenticity and Credibility in the Young Male Voice*. Burlington, VT: Ashgate.
- Attali, Jacques. 1985. *Noise: The Political Economy of Music*, translated by Brian Massumi. Minneapolis: University of Minnesota Press.
- Auslander, Philip. 2008. *Liveness: Performance in a Mediatized Culture* (2nd edition). New York: Routledge.
- Austern, Linda Phyllis. 1994. "'No women are indeed': The boy actor as vocal seductress in late sixteenth- and early seventeenth-century English drama." In *Embodied Voices: Representing Female Vocality in Western Culture*, edited by Leslie C. Dunn and Nancy A. Jones, 83-102. Cambridge: Cambridge University Press.

- Austern, Linda Phyllis and Inna Naroditskaya, ed. 2006. *Music of the Sirens*. Bloomington: Indiana University Press.
- Baer, Ulrich. 2000. *Remnants of Song: Trauma and the Experience of Modernity in Charles Baudelaire and Paul Celan*. Stanford: Stanford University Press.
- Bailey, Cameron. 1996. "Virtual Skin: Articulating Race in Cyberspace." In *Immersed in Technology: Art and Virtual Environments*, edited by Mary Anne Moser, 29-50. Cambridge, MA: MIT Press.
- Bakioglu, Burcu. 2009. "Spectacular Interventions in Second Life: Goon Culture, Griefing, and Disruption in Virtual Spaces." *Journal of Virtual Worlds Research* 1(3):3-21.
- Balmain, Colette. 2008. *Introduction to Japanese Horror Film*. Edinburgh: Edinburgh University Press.
- Barkin, Elaine and Lydia Hamessley, ed. 1999. *Audible Traces: Gender, Identity, and Music*. Zurich: Carciofoli.
- Barthes, Roland. 1977. *Image, Music, Text*, translated by Stephen Heath. New York: Hill and Wang.
- Bartle, Richard A. 2003. "Not Yet, You Fools!" *Game Girl Advance*.
http://www.gamegirladvance.com/archives/2003/07/28/not_yet_you_fools.html (accessed 16 February 2009).
- Barz, Gregory and Judah M. Cohen. 2011. *The Culture of AIDS in Africa: Hope and Healing in Music and the Arts*. Oxford and New York: Oxford University Press.
- Baudrillard, Jean. 1994. *The Illusion of the End*, translated by Chris Turner. Cambridge: Polity Press.
- _____. [1980] 1994. *Simulacra and Simulation*, translated by Sheila Faria Glaser. Ann Arbor: University of Michigan Press.
- Baumgartner, Frederic. 1999. *Longing for the End: A History of Millennialism in Western Civilization*. New York: St. Martin's Press.
- Becker, Judith. 2004. *Deep Listeners: Music, Emotion, and Trancing*. Bloomington: Indiana University Press.
- Belinkie, Matthew. 1999. "Video Game Music: Not Just Kid Stuff."
<http://www.vgmusic.com/vgpaper.shtml> (accessed 24 June 2009).
- Bell, Daniel. 1967. *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties*. New York: Free Press.
- Bell, Mark W. 2008. "Toward a Definition of 'Virtual Worlds.'" *Journal of Virtual Worlds Research* 1(1):2-5.

- Bellman, Jonathan. 2007a. "Music as Torture: A Dissonant Counterpoint." *Dial M for Musicology*. <http://musicology.typepad.com/dialm/2007/08/music-as-tortur.html> (accessed 13 September 2011).
- _____. 2007b. "Music Blogging as Torture." *Dial M for Musicology*. <http://musicology.typepad.com/dialm/2007/08/music-blogging-.html> (accessed 13 September 2011).
- Berlant, Lauren. 2007. "Starved." *South Atlantic Quarterly* 106(3):433-44.
- Bernstein, Jane, ed. 2004. *Women's Voices across Musical Worlds*. Boston, MA: Northeastern University Press.
- Bessell, David. 2002. "What's That Funny Noise? An Examination of the Role of Music in *Cool Boarders 2*, *Alien Trilogy* and *Medievil 2*." In *Screenplay: Cinema/Videogames/Interfaces*, edited by Geoff King and Tanya Krzywinska, 136-44. London: Wallflower Press.
- Bianchini, Riccardo and Alessandro Cipriani. 2000. *Virtual Sound: Sound Synthesis and Signal Processing, Theory and Practice with Csound*. Rome, Italy: ConTempo.
- Bigenho, Michelle. 2008. "Why I'm Not an Ethnomusicologist: A View from Anthropology." In *The New (Ethno)musicologies*, edited by Henry Stobart, 28-39. Lanham: The Scarecrow Press.
- Bissell, Tom. 2010. *Extra Lives: Why Video Games Matter*. New York: Pantheon Books.
- Blacking, John. 1973. *How Musical Is Man?* Seattle: University of Washington Press.
- Blake, Linnie. 2008. *The Wounds of Nations: Horror Cinema, Historical Trauma and National Identity*. Manchester: Manchester University Press.
- Blanton, DeAnne and Lauren Cook. 2002. *They Fought Like Demons: Women Soldiers in the American Civil War*. Baton Rouge: Louisiana State University Press.
- Boellstorff, Tom. 2010a. "A Typology of Ethnographic Scales for Virtual Worlds." In *Online Worlds: Convergence of the Real and the Virtual*, edited by William Sims Bainbridge, 123-33. London: Springer.
- _____. 2010b. "Queer Techne: Two Theses on Methodology and Queer Studies." In *Queer Methods and Methodologies: Intersecting Queer Theories and Social Science Research*, edited by Kath Browne and Catherine J. Nash, 215-30. Burlington, VT: Ashgate.
- _____. 2008. *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton, NJ: Princeton University Press.
- Bogdan, Robert. 1988. *Freak Show: Presenting Human Oddities for Amusement and Profit*. Chicago, IL: University of Chicago Press.
- Bogost, Ian. 2007. *Persuasive Games: The Expressive Power of Videogames*. Cambridge, MA: MIT Press.

- Bohlman, Philip. 2002. "World Music at the 'End of History.'" *Ethnomusicology* 46(1):1-32.
- _____. 1993. "Musicology as a Political Act." *The Journal of Musicology* 11(4):411-36.
- Bolter, David and Richard Grusin. 1999. *Remediation: Understanding New Media*. Cambridge, MA: MIT Press.
- Braga-Pinto, César. 2002. "Superman and Chiquita Bacana's Daughters: Transgendered Voices in Brazilian Popular Music." In *Lusosex: Gender and Sexuality in the Portuguese-Speaking World*, edited by Susan Canty Quinlan and Fernando Arenas, 187-207. Minneapolis: University of Minnesota Press.
- Brett, Philip. 2006. "Musicality, Essentialism, and the Closet." In *Queering the Pitch: The New Gay and Lesbian Musicology* (2nd edition), edited by Philip Brett, Elizabeth Wood, Gary C. Thomas, 9-26. New York: Routledge.
- Bronfen, Elisabeth. 1996. "Kundry's Laughter." *New German Critique* 69:147-61.
- Brown, Michael. 2011. "Puppet Masters: How Game Musicians Manipulate You." *1UP.com*. <http://www.1up.com/features/puppet-masters-game-musicians-manipulate-dead-space-pulse> (accessed 11 July 2011).
- Buse, Peter. 1996. "Nintendo and Telos: Will You Ever Reach the End?" *Cultural Critique* 34:163-84.
- Butler, Judith. 1997a. *Excitable Speech: A Politics of the Performative*. New York: Routledge.
- _____. 1997b. "Imitation and Gender Insubordination." In *The Second Wave: A Reader in Feminist Theory*, edited by Linda Nicholson, 300-15. New York: Routledge.
- Cage, John. 1973. *Silence: Lectures and Writings*. Middletown, CT: Wesleyan University Press.
- Cailliois, Roger. 1961. *Man, Play, and Games*, translated by Meyer Barash. New York: Free Press of Glencoe.
- Caldecott, Stratford. 2008. "Tolkien's Project." In *Tolkien's The Lord of the Ring: Sources of Inspiration*, edited by Stratford Caldecott and Thomas Honegger, 211-32. Zurich and Jena: Walking Tree Publishers.
- Calleja, Gordon. 2010. "Digital Games and Escapism." *Games and Culture* 5(4):335-53.
- Campbell, John Edward. 2004. *Getting It On Online: Cyberspace, Gay Male Sexuality, and Embodied Identity*. New York: Harrington Park Press.
- Carnagey, Nicholas L., Craig A. Anderson, and Brad J. Bushman. 2007. "The Effect of Video Game Violence on Physiological Desensitization to Real-life Violence." *Journal of Experimental Social Psychology* 43:489-96.

- Carr, Diane. 2003. "Play Dead: Genre and Affect in *Silent Hill* and *Planescape Torment*." *Game Studies: The International Journal of Computer Game Research* 3(1). <http://www.gamestudies.org/0301/carr/>.
- Carroll, Noël. 1990. *The Philosophy of Horror, or Paradoxes of the Heart*. New York: Routledge.
- Carter, David Ray. 2010. "It's Only a Movie? Reality as Transgression in Exploitation Cinema." In *From the Arthouse to the Grindhouse: Highbrow and Lowbrow Transgression in Cinema's First Century*, edited by John Cline and Robert G. Weiner, 297-315. Lanham, MD: Scarecrow Press.
- Cascone, Kim. 2000. "The Aesthetics of Failure: 'Post-Digital' Tendencies in Contemporary Computer Music." *Computer Music Journal* 24(4):12-18.
- Castle, Terry. 1993. *The Apparitional Lesbian: Female Homosexuality and Modern Culture*. New York: Columbia University Press.
- Castronova, Edward. 2005. *Synthetic Worlds: The Business and Culture of Online Games*. Chicago, IL: University of Chicago Press.
- Cavarero, Adriana. 2005. *For More Than One Voice: Toward a Philosophy of Vocal Expression*, translated by Paul A. Kottman. Stanford, CA: Stanford University Press.
- Ceranoglu, T. Atilla. 2010. "Video Games in Psychotherapy." *Review of General Psychology* 14(2):141-46.
- Cesarani, David. 2004. *Becoming Eichmann: Rethinking the Life, Crimes, and Trial of a "Desk Murderer"*. Cambridge, MA: Da Capo Press.
- Chance, Jane. 2004. "Introduction: A 'Mythology for England?'" In *Tolkien and the Invention of Myth: A Reader*, edited by Jane Chance, 1-16. Lexington, KY: University of Kentucky Press.
- Chatterjee, Bela. 2002. "Razorgirls and Cyberdykes: Tracing Cyberfeminism and Thoughts on Its Use in a Legal Context." *International Journal of Sexuality and Gender Studies* 7(2/3):197-213.
- Cheng, William. 2011. "Hearts for Sale: The French *Romance* and the Sexual Traffic of Musical Mimicry." *19th-Century Music* 35(1):34-71.
- Chion, Michel. 1994. *Audio-Vision: Sound on Screen*, edited and translated by Claudia Gorbman. New York: Columbia University Press.
- Clément, Catherine. [1979] 1988. *Opera, or the Undoing of Women*, translated by Betsy Wing. Minneapolis: University of Minnesota Press.
- Clover, Carol. 1992. *Men, Women, and Chain Saws: Gender in the Modern Horror Film*. Princeton: Princeton University Press.
- Coeckelbergh, Mark. 2007. "Violent Computer Games, Empathy, and Cosmopolitanism." *Ethics and Information Technology* 9:219-31.

- Cohen, Jeffrey Jerome. 1996a. "Monster Culture (Seven Theses)." In *Monster Theory: Reading Culture*, edited by Jeffrey Jerome Cohen, 3-25. Minneapolis, MN: University of Minnesota Press.
- _____. 1996b. "Preface: In a Time of Monsters." In *Monster Theory: Reading Culture*, edited by Jeffrey Jerome Cohen, vii-xiii. Minneapolis, MN: University of Minnesota Press.
- Cogburn, Jon and Mark Silcox. 2009. *Philosophy through Video Games*. New York: Routledge.
- Collins, Karen. 2008. *Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design*. Cambridge, MA: MIT Press.
- _____. 2002. "The Future Is Happening Already: Industrial Music, Dystopia and the Aesthetic of the Machine." University of Liverpool: Ph.D. dissertation.
- Combs, Nate. 2007. "The Inevitability of Voice." *Terra Nova*.
http://terranova.blogs.com/terra_nova/2007/02/the_inevitabili.html (accessed 16 February 2009).
- Cooley, Timothy J., Katherine Meizel, and Nasir Syed. 2008. "Virtual Fieldwork: Three Case Studies." In *Shadows in the Field: New Perspectives for Fieldwork in Ethnomusicology*, (2nd edition), edited by Gregory Barz and Timothy J. Cooley, 90-107. Oxford and New York: Oxford University Press.
- Cope, David. 2001. *Virtual Music: Computer Synthesis of Musical Style*. Cambridge, MA: MIT Press.
- Cover, Rob. 2006. "Gaming (Ad)diction: Discourse, Identity, Time and Play in the Production of the Gamer Addiction Myth." *Game Studies: The International Journal of Computer Game Research* 6(1).
<http://gamestudies.org/0601/articles/cover>.
- Cowell, Henry. [1929] 2001. *Essential Cowell: Selected Writings on Music*, edited by Dick Higgins. Kingston, NY: Documentext.
- Coyle, Rebecca. 2009. "Spooked by Sound: *The Blair Witch Project*." In *Terror Tracks: Music, Sound and Horror Cinema*, edited by Philip Hayward, 213-28. London: Equinox.
- Csikszentmihályi, Mihaly. 1990. *Flow: The Psychology of Optimal Experience*. New York: Harper & Row.
- Currie, James. 2009. "Music After All." *Journal of the American Musicological Society* 62(1):145-203.
- Cusick, Suzanne G. 2008. "Musicology, Torture, Repair." *Radical Musicology* 3. <http://www.radical-musicology.org.uk/2008/Cusick.htm>, 24 pars
- _____. 2006a. "Music as Torture/Music as Weapon." *Transcultural Music Review* 10.
<http://www.sibetrans.com/trans/a152/music-as-torture-music-as-weapon>.
- _____. 2006b. "On a Lesbian Relationship with Music: A Serious Effort Not to Think Straight." In *Queering the Pitch: The New Gay and Lesbian Musicology* (2nd edition), edited by Philip Brett, Elizabeth Wood, and Gary C. Thomas, 67-84. New York: Routledge.

Custodero, Lori A. 2012. "The call to create: Flow experience in music learning and teaching." In *Musical Imaginations: Multidisciplinary Perspectives on Creativity, Performance, and Perception*, edited by David J. Hargreaves, Dorothy Miell, and Raymond A. R. MacDonald, 369-84. Oxford and New York: Oxford University Press.

Dame, Joke. 1994. "Unveiled Voices: Sexual Difference and the Castrato." In *Queering the Pitch: The New Gay and Lesbian Musicology*, edited by Philip Brett, Elizabeth Wood, Gary C. Thomas, 139-53. New York: Routledge.

Darley, Andrew. 2000. *Visual Digital Culture: Surface Play and Spectacle in New Media Genres*. New York: Routledge.

Davis, Lennard J. 2002. *Bending over Backwards: Disability, Dismodernism, and Other Difficult Positions*. New York: New York University Press.

De Lauretis, Teresa. 1988. "Sexual Indifference and Lesbian Representation." *Theatre Journal* 40(2):155-77.

DeNora, Tia. 2000. *Music in Everyday Life*. Cambridge: Cambridge University Press.

DePauw, Linda Grant. 1998. *Battle Cries and Lullabies: Women in War from Prehistory to the Present*. Norman, OK: University of Oklahoma Press.

Derrida, Jacques. 1993. "On a Newly Arisen Apocalyptic Tone in Philosophy," translated by John Leavey, Jr. In *Raising the Tone of Philosophy: Late Essays by Immanuel Kant, Transformative Critique by Jacques Derrida*, edited by Peter Fennes, 117-71. Baltimore and London: John Hopkins University Press.

Deveaux, Scott. 2008. "Response to Jonathan Bellman's 'Music as Torture: A Dissonant Counterpoint.'" *Dial M for Musicology*. <http://musicology.typepad.com/dialm/2007/08/music-as-tortur.html> (accessed 13 September 2011).

Dibbell, Julian. 2009. "Mutilated Furies, Flying Phalluses: Put the Blame on Griefers, the Sociopaths of the Virtual World." In *The Best Technology Writing 2009*, edited by Steven Johnson, 9-19. Ann Arbor, MI: University of Michigan Press.

Dickstein, Morris. 2004. "The Aesthetics of Fright." In *Planks of Reason: Essays on the Horror Film*, edited by Barry Keith Grant and Christopher Sharrett, 50-71. Lanham, MD: The Scarecrow Press, Inc.

Doane, Mary Ann. 1991. *Femmes Fatales: Feminism, Film Theory, Psychoanalysis*. New York: Routledge.

Donath, Judith S. 1999. "Identity and Deception in the Virtual Community." In *Communities in Cyberspace*, edited by Marc A. Smith and Peter Kollock, 29-59. New York: Routledge.

Donnelly, K. J. 2010. "Hearing Deep Seated Fears: John Carpenter's *The Fog* (1980)." In *Music in the Horror Film*, edited by Neil Lerner, 152-67. New York: Routledge.

- _____. 2008. *The Spectre of Sound: Music in Film and Television*. London: BFI.
- _____. 2006. "Musical Middle Earth." In *The Lord of the Rings: Popular Culture in Global Context*, edited by Ernest Mathijs, 301-16. London: Wallflower Press.
- Douglas, Susan. 2004. *Listening In: Radio and the American Imagination*. Minneapolis: University of Minnesota Press.
- Dovey, Jon and Helen W. Kennedy. 2006. *Game Cultures: Computer Games as New Media*. New York: Open University Press.
- Du Bois, W. E. B. [1903] 1989. *The Souls of Black Folk*. New York: Penguin Books.
- Duckworth, William. 2005. *Virtual Music: How the Web Got Wired for Sound*. New York: Routledge.
- Dumitrica, Delia and Georgia Gaden. 2009. "Knee-High Boots and Six-Pack Abs: Autoethnographic Reflections on Gender and Technology in Second Life." *Journal of Virtual Worlds Research* 1(3):3-23.
- Duncan, Michelle. 2006. "The Operatic Scandal of the Singing Body: Voice, Presence, Performativity." *Cambridge Opera Journal* 16(3):283-306.
- Dunn, Leslie C. and Nancy A. Jones, ed. 1994. *Embodied Voices: Representing Female Vocality in Western Culture*. Cambridge: Cambridge University Press.
- Du Perron, Lalita. 2002. "'Thumri': A Discussion of the Female Voice of Hindustani Music." *Modern Asian Studies* 36(1):173-93.
- Durant, Alan. 1990. "A New Day for Music? Digital Technologies in Contemporary Music-Making." In *Culture, Technology & Creativity in the Late Twentieth Century*, edited by Philip Hayward, 175-96. London: J. Libbey.
- Dusman, Linda. 2000. "No Bodies There: Absence and Presence in Acousmatic Performance." In *Music and Gender*, edited by Pirkko Moisala and Beverley Diamond, 336-45. Urbana, IL: University of Illinois Press.
- Dyson, Frances. 1992. "The Ear That Would Hear Sounds in Themselves: John Cage 1935-65." In *Wireless Imagination: Sound, Radio, and the Avant-Garde*, edited by Douglas Kahn and Gregory Whitehead, 373-407. Cambridge, MA: MIT Press.
- Eaton, Rebecca Marie Doran. 2008. "Unheard Minimalisms: The Functions of the Minimalist Technique in Film Scores." University of Texas at Austin: Ph.D. dissertation.
- Ebert, Roger. 2010. "Video Games Can Never Be Art." *Roger Ebert's Journal*. http://blogs.suntimes.com/ebert/2010/04/video_games_can_never_be_art.html (accessed 3 July 2011).
- Echard, William. 2005. *Neil Young and the Poetics of Energy*. Bloomington: Indiana University Press.

- Edwards, Paul N. 1990. "The Army and the Microworld: Computers and the Politics of Gender Identity." *Signs* 16(1):102-27.
- Ekman, Inger and Petri Lankoski. 2009. "Hair-Raising Entertainment: Emotions, Sound, and Structure in *Silent Hill 2* and *Fatal Frame*." In *Horror Video Games: Essays on the Fusion of Fear and Play*, edited by Bernard Perron, 181-99. Jefferson, NC and London: McFarland.
- Engh, Barbara. 1994. "Adorno and the Sirens: Tele-phono-graphic Bodies." In *Embodied Voices: Representing Female Vocality in Western Culture*, edited by Leslie C. Dunn and Nancy A. Jones, 120-35. Cambridge: Cambridge University Press.
- Eskelinen, Markku. 2001. "The Gaming Situation." *Game Studies: The International Journal of Computer Game Research* 1(1). <http://www.gamestudies.org/0101/eskelinen>.
- Ezrahi, Sidra DeKoven. 1996. "'The Grave in the Air': Unbound Metaphors in Post-Holocaust Poetry." In *Probing the Limits of Representation: Nazism and the "Final Solution"*, edited by Saul Friedlander, 259-76. Cambridge, MA: Harvard University Press.
- Feldman, Martha and Bonnie Gordon, ed. 2006. *The Courtesan's Arts: Cross-Cultural Perspectives*. Oxford and New York: Oxford University Press.
- Felman, Shoshana. 2003. *The Scandal of the Speaking Body: Don Juan with J. L. Austin, or Seduction in Two Languages*, translated by Catherine Porter. Stanford, CA: Stanford University Press.
- Ferguson, Christopher. 2008. "The school shooting/violent video game link: Casual relationship or moral panic?" *Journal of Investigative Psychology and Offender Profiling* 5:25-37.
- Fikentscher, Kai. 2003. "'There's not a problem I can't fix, 'cause I can do it in the mix': On the Performative Technology of 12-Inch Vinyl." In *Music and Technoculture*, edited by René T. A. Lysloff and Leslie C. Gay, 290-315. Middletown: Wesleyan University Press.
- Filiciak, Miroslaw. 2003. "Hyperidentities: Postmodern Identity Patterns in Massively Multiplayer Online Role-Playing Games." In *The Video Game Theory Reader*, edited by Bernard Perron and Mark J. P. Wolf, 87-102. New York: Routledge.
- Fisher, Joseph and Brian Flota, ed. 2011. *The Politics of Post-9/11 Music: Sound, Trauma, and the Music Industry in the Time of Terror*. Burlington, VT: Ashgate.
- Fitzlyon, April. 1987. *Maria Malibran: Diva of the Romantic Age*. London: Souvenir Press.
- Flieger, Verlyn. 2005. *Interrupted Music: The Making of Tolkien's Mythology*. Kent, OH: Kent State University Press.
- Flinn, Caryl. 1992. *Strains of Utopia: Gender, Nostalgia, and Hollywood Film Music*. Princeton, NJ: Princeton University Press.
- Frasca, Gonzalo. 2003. "Simulation versus Narrative: Introduction to Ludology." In *The Video Game Theory Reader*, edited by Mark J. P. Wolf and Bernard Perron, 221-36. New York: Routledge.

- Freddolino, Paul P. and Christina M. Blaschke. 2008. "Therapeutic Applications of Online Gaming." *Journal of Technology in Human Services* 26:423-46.
- Freitas, Roger. 2009. *Portrait of a Castrato: Politics, Patronage, and Music in the Life of Atto Melani*. Cambridge: Cambridge University Press.
- Friedheim, Philip. 1983. "Wagner and the Aesthetics of the Scream." *19th-Century Music* 7(1):63-70.
- Friedlander, Saul. 1996. "Introduction." In *Probing the Limits of Representation: Nazism and the "Final Solution"*, edited by Saul Friedlander, 1-21. Cambridge, MA: Harvard University Press.
- Frith, Simon. 1986. "Art versus Technology." *Media, Culture and Society* 8:263-79.
- Fukuyama, Francis. 1992. *The End of History and the Last Man*. New York: Free Press.
- Gadamer, Hans-Georg. 1999. *Truth and Method* (2nd edition), translated by Joel Weinsheimer and Donald G. Marshall. New York: Continuum.
- Galloway, Alexander R. 2004. "Social Realism in Gaming." *Game Studies: The International Journal of Computer Game Research* 4(1). <http://www.gamestudies.org/0401/galloway>.
- Gamespy Staff. 2008. "Fallout 3: The Sound of Silence (interview with Mark Lampert)." *Gamespy*. <http://xbox360.gamespy.com/xbox-360/fallout-3/923817p1.html> (accessed 8 April 2012).
- Garland-Thomson, Rosemarie. 2009. *Staring: How We Look*. Oxford and New York: Oxford University Press.
- _____. 1996. "Introduction: From Wonder to Error – A Genealogy of Freak Discourse in Modernity." In *Freakery: Cultural Spectacles of the Extraordinary Body*, edited by Rosemarie Garland-Thomson, 1-19. New York: New York University Press.
- Gersic, Thomas E. 2008. "Toward a New Sound for Games." In *Playing the Past: History and Nostalgia in Video Games*, edited by Zach Whalen and Laurie N. Taylor, 145-63. Nashville, TN: Vanderbilt University Press.
- Ghostfire. 2008. "TF2: Select a Class." *Deviant Art*. <http://ghostfire.deviantart.com/art/TF2-Select-A-Class-87717764>? (accessed 10 June 2011).
- Gibbons, William. 2011. "Wrap Your Troubles in Dreams: Popular Music, Narrative, and Dystopia in *Bioshock*." *Game Studies: The International Journal of Computer Game Research* 11(3). <http://gamestudies.org/1103/articles/gibbons>.
- Gilbert, Shirli. 2005. *Music in the Holocaust: Confronting Life in the Nazi Ghettos and Camps*. Oxford and New York: Oxford University Press.
- Gillespie, Tarleton. 2007. *Wired Shut: Copyright and the Shape of Digital Culture*. Cambridge, MA: MIT Press.

- Goldberg, Ruth. 2004. "Demons in the Family: Tracking the Japanese 'Uncanny Mother Film' from *A Page of Madness* to *Ringu*." In *Planks of Reason: Essays on the Horror Film*, edited by Barry Keith Grant and Christopher Sharrett, 370-85. Lanham, MD: The Scarecrow Press.
- González, Jennifer. 2000. "The Appended Subject: Race and Identity as Digital Assemblage." In *Race in Cyberspace*, edited by Beth Kolko, Lisa Nakamura, and Gilbert Rodman, 27-50. New York: Routledge.
- Goodman, David. 2011. *Radio's Civic Ambition: American Broadcasting and Democracy in the 1930s*. Oxford and New York: Oxford University Press.
- Goodman, Steve. 2010. *Sonic Warfare: Sound, Affect, and the Ecology of Fear*. Cambridge, MA: MIT Press.
- Gooley, Dana. 2004. *The Virtuoso Liszt*. Cambridge: Cambridge University Press.
- Gorbman, Claudia. 1987. *Unheard Melodies: Narrative Film Music*. London: BFI.
- Gorenberg, Gershom. 2000. *The End of Days: Fundamentalism and the Struggle for the Temple Mount*. New York: Free Press.
- Greene, Paul and Thomas Porcello. 2005. *Wired for Sound: Engineering and Technologies in Sonic Cultures*. Middletown, CT: Wesleyan University Press.
- Gregersen, Andreas and Torben Grodal. 2009. "Embodiment and Interface." In *The Video Game Theory Reader 2*, edited by Bernard Perron and Mark J. P. Wolf, 65-84. New York: Routledge.
- Grodal, Torben. 2003. "Stories for Eye, Ear, and Muscles: Video Games, Media, and Embodied Experiences." In *The Video Game Theory Reader*, edited by Bernard Perron and Mark J. P. Wolf, 129-56. New York: Routledge.
- Grosz, Elizabeth. 1994. *Volatile Bodies: Toward a Corporeal Feminism*. Bloomington, IN: Indiana University Press.
- Guins, Raiford and Omayra Zaragoza Cruz. 2006. "Prosthetists at 33¹/₃." In *The Prosthetic Impulse From a Posthuman Present to a Biocultural Future*, edited by Marquard Smith and Joanne Morra, 221-36. Cambridge, MA: The MIT Press.
- Haas, Roland and Vera Brandes, ed. 2009. *Music That Works: Contributions of Biology, Neurophysiology, Psychology, Sociology, Medicine, and Musicology*. New York: Springer.
- Häggglund, Martin. 2008. *Radical Atheism: Derrida and the Time of Life*. Stanford, CA: Stanford University Press.
- Halberstam, Judith. 1995. *Skin Shows: Gothic Horror and the Technology of Monsters*. Durham, NC: Duke University Press.
- Hall, Richard. 1993. *Patriots in Disguise: Women Warriors of the Civil War*. New York: Paragon House.

- Halper, Donna L. 2001. *Invisible Stars: A Social History of Women in American Broadcasting*. Armonk, NY: M. E. Sharpe.
- Hand, Richard J. 2004. "Proliferating Horrors: Survival Horror and the *Resident Evil* Franchise." In *Horror Film: Creating and Marketing Fear*, edited by Steffen Hantke, 117-34. Jackson, MS: University Press of Mississippi.
- Haraway, Donna. 1991. "The Actors are Cyborg, Nature is Coyote, and the Geography is Elsewhere: Postscript to 'Cyborgs at Large.'" In *Technoculture*, edited by Constance Penley and Andrew Ross, 21-26. Minneapolis, MN: University of Minnesota Press.
- Harding, Sandra. 1993. "Rethinking Standpoint Epistemology: What Is 'Strong Objectivity?'" In *Feminist Epistemologies*, edited by Linda Alcoff and Elizabeth Potter, 49-82. New York: Routledge.
- Harker, Brian. 2008. "Milton Babbitt Encounters Academia (and Vice Versa)." *American Music* 26(3):336-77.
- Harpold, Terry. 2006. "Screw the Grue: Mediality, Metalepsis, Recapture." *Game Studies: The International Journal of Computer Game Research* 7(1). <http://gamestudies.org/0701/articles/harpold>.
- Harvey, Trevor S. 2009. "Virtual Garage Bands: Collaborative Cybercommunities of Internet Musicians." The Florida State University College of Music: Ph.D. dissertation.
- Hayles, N. Katherine. 1999. *How We Became Posthuman: Virtual Bodies in Cybernetic, Literature, and Informatics*. Chicago, IL: University of Chicago Press.
- Heartfield, James. 2002. *The 'Death of the Subject' Explained*. Leicester, UK: Perpetuity Press.
- Hecker, Tim. 2008. "Glenn Gould, the Vanishing Performer and the Ambivalence of the Studio." *Leonardo Music Journal* 18:77-83.
- Hedges, Chris. 2010. *Death of the Liberal Class*. New York: Nation Books.
- Heffernan, James A. W. 1997. "Looking at the Monster: 'Frankenstein' and Film." *Critical Inquiry* 24(1):133-58.
- Hegarty, Paul. 2007. *Noise/Music: A History*. New York: Continuum.
- Heidegger, Martin. 1977. *Basic Writings: From Being and Time (1927) to The Task of Thinking (1964)*, edited by David Farrell Krell. New York: Harper & Row.
- Hekman, Susan. 1997. "Truth and Method: Feminist Standpoint Revisited." *Signs* 22(2):341-65.
- Hepokoski, James. 2012. "Ineffable Immersion: Contextualizing the Call for Silence." *Journal of the American Musicological Society* 65(1):223-30.
- Heyes, Cressida J. 2003. "Feminist Solidarity after Queer Theory: The Case of Transgender." *Signs* 28(4):1093-120.

- Hicks, Chris. 2008. "Bethesda: 'Over 40,000 Lines of Dialogue' in *Fallout 3*." *CVG UK*.
<http://www.computerandvideogames.com/192438/bethesda-over-40000-lines-of-dialogue-in-fallout-3> (accessed 12 February 2012).
- Hillis, Ken. 2009. *Online a Lot of the Time: Ritual, Fetish, Sign*. Durham, NC: Duke University Press.
- _____. 1999. *Digital Sensations: Space, Identity, and Embodiment in Virtual Reality*. Minneapolis: University of Minnesota Press.
- Hillyer, Barbara. 1993. *Feminism and Disability*. Norman: University of Oklahoma Press.
- Hope, Trevor. 1994. "The 'Returns' of Cartography: Mapping Identity-In(-)Difference." *differences: A Journal of Feminist Cultural Studies* 6(2/3):208-11.
- Huebner, Steven. 2006. "Laughter: In Ravel's Time." *Cambridge Opera Journal* 18(3):225-46.
- Huh, Searle and Dmitri Williams. 2010. "Dude Looks Like a Lady: Gender Swapping in an Online Game." In *Online Worlds: Convergence of the Real and the Virtual*, edited William Sims Bainbridge, 161-74. New York: Springer.
- Huhtamo, Erkki. 1995. "Encapsulated Bodies in Motion: Simulators and the Quest for Total Immersion." In *Critical Issues in Electronic Media*, edited by Simon Penny, 159-86. Albany, NY: State University of New York Press.
- Huizinga, Johan. 1955. *Homo Ludens: A Study of the Play Element in Culture*. New York: Roy Publishers.
- Hunter, Dan. 2006. "Mike Fright." *Terra Nova*.
http://terranova.blogs.com/terra_nova/2006/11/mike_fright.html (accessed 16 February 2009).
- Huwiler, Elke. 2005. "Storytelling by Sound: A Theoretical Frame for Radio Drama Analysis." *The Radio Journal – International Studies in Broadcast and Audio Media* 3(1):45-59.
- Ingalls, Monique. 2011. "Singing Heaven Down to Earth: Spiritual Journeys, Eschatological Sounds, and Community Formation in Evangelical Conference Worship." *Ethnomusicology* 55(2):255-79.
- Iverson, Jennifer. 2006. "Dancing out of the Dark: How Music Refutes Disability Stereotypes in *Dancer in the Dark*." In *Sounding off: Theorizing Disability in Music*, 57-74. New York: Routledge.
- Jain, Sarah S. 1999. "The Prosthetic Imagination: Enabling and Disabling the Prosthesis Trope." *Science, Technology, & Human Values* 24(1):31-54.
- Jamison, Peter. 2011. "'Rapture Party' Planned for May 21." *SF Weekly*.
http://blogs.sfweekly.com/thesnitch/2011/05/rapture_party_planned_in_oakla.php (accessed 4 January 2012).

Jenkins, Henry. 2008. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.

_____. 2006. *Fans, Bloggers, and Gamers: Exploring Participatory Culture*. New York: New York University Press.

Jenkins, Henry and Justine Cassell. 2008. "From *Quake Grrls* to *Desperate Housewives*: A Decade of Gender and Computer Games." In *Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming*, edited by Yasmin B. Kafai, Carrie Heeter, Jill Denner, and Jennifer Y. Sun, 5-20. Cambridge, MA: MIT Press.

Jentsch, Ernst. [1906] 1997. "On the Psychology of the Uncanny," translated by Roy Sellars. *Angelaki* 2(1):7-16.

Jørgensen, Kristine. 2009. *A Comprehensive Study of Sound in Computer Games: How Audio Affects Player Action*. Lewiston, NY: Edwin Meller Press.

Julius, Anthony. 2002. *Transgressions: The Offences of Art*. London: Thames & Hudson.

Juul, Jesper. 2005. *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: MIT Press.

Kahn, Douglas. 1999. *Noise, Water, Meat: A History of Sound in the Arts*. Cambridge, MA: MIT Press.

Kalabakov, Daniel. 2002. "Interview with Akira Yamaoka." *Spelmusik.net*, http://www.spelmusik.net/intervjuer/akira_yamaoka_eng.html (accessed 4 March 2010).

Katz, Mark. 2012. *Groove Music: The Art and Culture of the Hip-Hop DJ*. Oxford and New York: Oxford University Press.

_____. 2010. *Capturing Sound: How Technology Has Changed Music* (2nd edition). Berkeley, CA: University of California Press.

Keightley, Keir. 2008. "Music for Middlebrows: Defining the Easy Listening Era, 1946-1966." *American Music* 26(3):309-35.

Kelly, Caleb. 2009. *Cracked Media: The Sound of Malfunction*. Cambridge, MA: MIT Press.

Kelly, R. V. 2004. *Massively Multiplayer Online Role-Playing Games: The People, the Addiction, and the Playing Experience*. Jefferson, NC: McFarland.

Kendall, Lori. 2002. *Hanging out in the Virtual Pub: Masculinities and Relationships Online*. Berkeley, CA: University of California Press.

King, Claire Sisco. 2010. "Ramblin' Men and Piano Men: Crises of Music and Masculinity in *The Exorcist*." In *Music in the Horror Film: Listening to Fear*, edited by Neil Lerner, 114-32. New York: Routledge.

King, Geoff and Tanya Krzywinska. 2002. "Introduction: Cinema/Videogames/Interfaces." In *ScreenPlay: Cinema/Videogames/Interfaces*, edited by Geoff King and Tanya Krzywinska, 1-32. London: Wallflower Press.

Kingsbury, Henry. 1988. *Music, Talent, and Performance: A Conservatory Cultural System*. Philadelphia, PA: Temple University Press.

Kirkland, Ewan. 2009. "Storytelling in Survival Horror Video Games." In *Horror Video Games: Essays on the Fusion of Fear and Play*, edited by Bernard Perron, 62-78. Jefferson, NC and London: McFarland.

_____. 2007a. "Repetition in Horror Videogames: A Psychoanalytic Perspective." *Repeat Repeat Conference Proceedings*. <http://www.cpara.co.uk/events/repeatrepeat/technology/kirkland.html> (accessed 9 November 2009).

_____. 2007b. "The Self-Reflexive Funhouse of *Silent Hill*." *Convergence: The International Journal of Research into New Media Technologies* 13:403-15.

Kleege, Georgina. 2002. "Disabled Students Come Out: Questions about Answers." In *Disability Studies: Enabling the Humanities*, edited by Sharon Snyder, Brenda Brueggemann, and Rosemarie Garland-Thomson, 308-16. New York: Modern Language Association of America.

Koestenbaum, Wayne. 1993. *The Queen's Throat: Opera, Homosexuality, and the Mystery of Desire*. New York: Poseidon Press.

Kolko, Beth. 2000. "Erasing @race: Going White in the (Inter)Face." In *Race in Cyberspace*, edited by Beth Kolko, Lisa Nakamura, and Gilbert Rodman, 213-32. New York: Routledge.

Koskoff, Ellen. 1993. "Miriam Sings Her Song: The Self and the Other in Anthropological Discourse." In *Musicology and Difference: Gender and Sexuality in Music Scholarship*, edited by Ruth A. Solie, 149-63. Berkeley, CA: University of California Press.

Kramer, Josh. 2010. "Zip It! Ten Reasons Why Voice Chat Sucks." *Thunderbolt*. <http://www.thunderboltgames.com/features/article/zip-it-feature-for-ps3-xbox-360-wii.html> (accessed 10 June 2012).

Kristeva, Julia. 1984. *Revolution in Poetic Language*, translated by Margaret Waller. New York: Columbia University Press.

Krzywinska, Tanya. 2002. "Hands-On Horror." In *ScreenPlay: Cinema/Videogames/Interfaces*, edited by Geoff King and Tanya Krzywinska, 206-23. London: Wallflower Press.

Kuchera, Ben. 2011. "Supreme Court Strikes Down Video Game Law on First Amendment Grounds." *Ars Technica*. <http://arstechnica.com/gaming/2011/06/us-supreme-court-strikes-down-video-game-law-on-first-amendment-grounds/> (accessed 12 April 2012).

Kyriakides, Yvonne. 2005. "'Art after Auschwitz is Barbaric': Cultural Ideology of Silence through the Politics of Representation." *Music, Culture & Society* 27(3):441-50.

- LaCapra, Dominick. 1996. "Representing the Holocaust: Reflections on the Historians' Debate." In *Probing the Limits of Representation: Nazism and the "Final Solution,"* edited by Saul Friedlander, 108-127. Cambridge, MA: Harvard University Press.
- Lacey, Kate. 1996. *Feminine Frequencies: Gender, German Radio, and the Public Sphere, 1923-1945*. Ann Arbor, MI: University of Michigan Press.
- Langer, Lawrence. 1975. *The Holocaust and the Literary Imagination*. New Haven: Yale University Press.
- Lanza, Joseph. 2004. *Elevator Music: A Surreal History of Muzak, Easy-Listening and Other Moodson*. Ann Arbor, MI: University of Michigan Press.
- Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford and New York: Oxford University Press.
- Law, John and John Hassard. 1999. *Actor Network Theory and After*. Oxford, UK and Malden, MA: Blackwell/The Sociological Review.
- Lawrence, Amy. 1991. *Echo and Narcissus: Women's Voices in Classical Hollywood Cinema*. Berkeley, CA: University of California Press.
- Lebrecht, Norman. 1997. *Who Killed Classical Music? Maestros, Managers, and Corporate Politics*. New York: Birch Lane Press.
- Leonardi, Susan J. and Rebecca A. Pope. 1996. *The Diva's Mouth: Body, Voice, Prima Donna Politics*. New Brunswick, NJ: Rutgers University Press.
- Lehdonvirta, Vili. 2010. "Virtual Worlds Don't Exist: Questioning the Dichotomous Approach in MMO Studies." *Game Studies: The International Journal of Computer Game Research* 8(1). <http://gamestudies.org/1001/articles/lehdonvirta>.
- Linden, Jeremy. 2011. "Voice Morphing." *Second Life: English Knowledge Base*. <http://community.secondlife.com/t5/English-Knowledge-Base/Voice-morphing/ta-p/700167> (accessed 15 May 2011).
- Link, Stan. 2010. "The Monster and the Music Box: Children and the Soundtrack of Horror." In *Music in the Horror Film*, edited by Neil Lerner, 38-54. New York: Routledge.
- Llewelyn, Gwyneth. 2007. "The Schism around Voice: Multicasting vs. Broadcasting." *Gwyn's Home*. <http://gwynethllewelyn.net/2007/03/26/the-schism-around-voice-multicasting-vs-broadcasting> (accessed 16 May 2011).
- Lowenstein, Adam. 2005. *Shocking Representation: Historical Trauma, National Cinema, and the Modern Horror Film*. New York: Columbia University Press.
- Ludlow, Peter and Mark Wallace. 2007. *The Second Life Herald: The Virtual Tabloid That Witnessed the Dawn of the Metaverse*. Cambridge, MA: MIT Press.

- Lury, Celia. 1998. *Prosthetic Culture: Photography, Memory and Identity*. New York: Routledge.
- Lysloff, René T. A. 2003. "Musical Life in Softcity: An Internet Ethnography." In *Music and Technoculture*, edited by René T. A. Lysloff and Leslie C. Gay, 23-63. Middletown, CT: Wesleyan University Press.
- Macaulay, Rose. 1953. *The Pleasure of Ruins*. London: Weidenfeld and Nicolson.
- Mactavish, Andrew. 2002. "Technological Pleasure: The Performance and Narrative of Technology in *Half-Life* and other High-Tech Computer Games." In *Screenplay: Cinema/Videogames/Interfaces*, edited by Geoff King and Tanya Krzywinska, 33-49. London: Wallflower Press.
- Magrini, Tullia, ed. 2003. *Music and Gender: Perspectives from the Mediterranean*. Chicago, IL: University of Chicago Press.
- Manovich, Lev. 2002. *The Language of New Media*. Cambridge, MA: MIT Press.
- Martin, Peter J. 2006. "Music, Identity, and Social Control." In *Music and Manipulation: On the Social Uses and Social Control of Music*, edited by Steven Brown and Ulrik Volgsten, 57-71. New York: Berghahn Books.
- McClary, Susan. 2007. "Minima Romantic." In *Beyond the Soundtrack: Representing Music in Cinema*, edited by Daniel Goldmark, Lawrence Kramer, and Richard Leppert, 289-98. Berkeley, CA: University of California Press.
- McCluer, C. E. 1902. "Telephone Operators and Operating Room Management." *The American Telephone Journal* 6(2):31.
- McCormick, Matt. 2001. "Is It Wrong to Play Violent Video Games?" *Ethics and Information Technology* 3:277-87.
- McCoy, Alfred. 2006. *A Question of Torture: CIA Interrogation from the Cold War to the War on Terror*. New York: Metropolitan Books.
- McGonigal, Jane. 2011. *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*. New York: Penguin Press.
- McKay, Anne. 1988. "Speaking Up: Voice Amplification and Women's Struggle for Public Expression." In *Technology and Women's Voices: Keeping in Touch*, edited by Cheris Kramarae, 187-206. New York: Routledge.
- McRoy, Jay. 2005. "Introduction." In *Japanese Horror Cinema*, edited by Jay McRoy, 1-17. Edinburgh: Edinburgh University Press.
- Miller, Daniel and Don Slater. 2000. *The Internet: An Ethnographic Approach*. Oxford and New York: Berg.

Miller, Kiri. 2012. *Playing Along: Digital Games, YouTube, and Virtual Performance*. Oxford and New York: Oxford University Press.

_____. 2009. "Schizophonic Performance: *Guitar Hero*, *Rock Band*, and Virtual Virtuosity." *Journal of the Society for American Music* 3(4):395-429.

_____. 2008. "Grove Street Grimm: *Grand Theft Auto* and Digital Folklore." *Journal of American Folklore* 121(481):255-85.

_____. 2007. "Jacking the Dial: Radio, Race, and Place in *Grand Theft Auto*." *Ethnomusicology* 51(3):402-38.

Miller-Frank, Felicia. 1995. *The Mechanical Song: Women, Voice, and the Artificial in Nineteenth-Century French Narrative*. Stanford, CA: Stanford University Press.

Mitchell, David T. and Sharon L. Snyder. 2000. *Narrative Prosthesis: Disability and the Dependencies of Discourse*. Ann Arbor, MI: University of Michigan Press.

Mitchell, W. J. T. 2005. *What Do Pictures Want? The Lives and Loves of Images*. Chicago, IL: University of Chicago Press.

Moreno, Joseph. 2006. "Orpheus in Hell: Music in the Holocaust." In *Music and Manipulation: On the Social Uses and Social Control of Music*, edited by Steven Brown and Ulrik Volgsten, 264-86. New York: Berghahn Books.

Morris, Mitchell. 1993. "Reading as an Opera Queen." In *Musicology and Difference: Gender and Sexuality in Music Scholarship*, edited by Ruth A. Solie, 201-21. Berkeley, CA: University of California Press.

Morrison, Simon. 2012. "Why 'After the End'?" *After the End of Music History – For Richard Taruskin: Conference at Princeton University, February 9-12, 2012*.
<http://etcpanel.princeton.edu/music/why-after-the-end> (accessed 3 March 2012).

Morton, David. 2000. *Off the Record: The Technology and Culture of Sound Recording in America*. New Brunswick, NJ: Rutgers University Press.

Munday, Rod. 2007. "Music in Video Games." In *Music, Sound and Multimedia: From the Live to the Virtual*, edited by Jamie Sexton, 51-67. Edinburgh: Edinburgh University Press.

Munt, Sally R., Elizabeth H. Bassett, and Kate O'Riordan. 2002. "Virtually Belonging: Risk, Connectivity, and Coming Out On-Line." *International Journal of Sexuality and Gender Studies* 7(2/3):125-37.

Murray, Janet Horowitz. 1997. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. New York: Free Press.

Nakamura, Lisa. 2008. "Cyberbace." *Publications of the Modern Language Association* 123(5):1673-82.

- Nardi, Bonnie A. 2010. *My Life as a Night Elf Priest: An Anthropological Account of World of Warcraft*. Ann Arbor: University of Michigan Press.
- Nattiez, Jean-Jacques. 1990. *Music and Discourse: Toward a Semiology of Music*, translated by Carolyn Abbate. Princeton, NJ: Princeton University Press.
- Nelson, Diane M. 2001. "Phantom Limbs and Invisible Hands: Bodies, Prosthetics, and Late Capitalist Identifications." *Cultural Anthropology* 16(3):303-13.
- Neumeyer, David. 2008. "Review of *Beyond the Soundtrack: Representing Music in Cinema*, edited by Daniel Goldmark, Lawrence Kramer, and Richard Leppert." *Journal of the American Musicological Society* 61(2):445-53.
- Newman, Andy. 2008. "Irony Is Dead. Again. Yeah, Right." *The New York Times*. <http://www.nytimes.com/2008/11/23/fashion/23irony.html?pagewanted=all> (accessed 10 March 2012).
- Newman, James. 2002. "'The Myth of the Ergodic Videogame: Some Thoughts on Player-Character Relationships in Videogames.'" *Game Studies: The International Journal of Computer Game Research* 2(1). <http://www.gamestudies.org/0102/newman>.
- Niethammer, Lutz. 1989. "Afterthoughts on Posthistoire," translated by Bill Templer. *History and Memory* 1(1):27-53.
- Nietzsche, Friedrich. [1882] 2006. *The Gay Science*, translated by Thomas Common. Mineola, NY: Dover Publications.
- Nitsche, Michael. 2008. *Video Game Spaces: Image, Play, and Structure in 3D Game Worlds*. Cambridge, MA: MIT Press.
- North, Adrian and David Hargreaves. 2006. "Music in Business Environments." In *Music and Manipulation: On the Social Uses and Social Control of Music*, edited by Steven Brown and Ulrik Volgsten, 103-25. New York: Berghahn Books.
- O'Brien, Jodi. 1999. "Writing in the Body: Gender (Re)production in Online Interaction." In *Communities in Cyberspace*, edited by Marc A. Smith and Peter Kollock, 76-104. New York: Routledge.
- Payne, Matthew Thomas. 2008. "Playing the Déjà-New: 'Plug It in and Play TV Games' and the Cultural Politics of Classic Gaming." In *Playing the Past: History and Nostalgia in Video Games*, edited by Zach Whalen and Laurie N. Taylor, 51-68. Nashville: Vanderbilt University Press.
- Pearse, Damien. 2008. "Actor slits his own throat as knife switch turns fiction into reality." *The Guardian*, <http://www.guardian.co.uk/world/2008/dec/11/actor-slits-throat> (accessed 12 July 2012).
- Pels, Peter. 1998. "The Spirit of Matter: On Fetish, Rarity, Fact and Fancy." In *Border Fetishisms: Material Objects in Unstable Spaces*, edited by Patricia Spyer, 91-121. New York: Routledge.

- Peraino, Judith. 2007. "Listening to Gender: A Response to Judith Halberstam." *Women & Music* 11:59-64.
- Perron, Bernard. 2012. *Silent Hill: The Terror Engine*. Ann Arbor, MI: University of Michigan Press.
- _____. 2009. "The Survival Horror: The Extended Body Genre." In *Horror Video Games: Essays on the Fusion of Fear and Play*, edited by Bernard Perron, 121-43. Jefferson, NC: McFarland.
- Phelan, Peggy. 1993. *Unmarked: The Politics of Performance*. New York: Routledge.
- Picard, Martin. 2009. "Haunting Backgrounds: Transnationality and Intermediality in Japanese Survival Horror Video Games." In *Horror Video Games: Essays on the Fusion of Fear and Play*, edited by Bernard Perron, 95-120. Jefferson, NC and London: McFarland.
- Pilkington, Ed. 2012. "Aurora theater shooting: 'I had to go. I was going to get shot.'" *The Guardian*, <http://www.guardian.co.uk/world/2012/jul/20/aurora-shooting-denver-colorado> (accessed 20 July 2012).
- Plato. 1992. *Republic*, translated by G. M. A. Grube. Indianapolis, IN: Hackett Publishing Company.
- Poizat, Michel. 1992. *The Angel's Cry: Beyond the Pleasure Principle in Opera*, translated by Arthur Denner. Ithaca, NY: Cornell University Press.
- Poole, Steven. 2000. *Trigger Happy: The Inner Life of Videogames*. London: Fourth Estate.
- Porcello, Thomas. 1991. "The Ethics of Digital Audio-Sampling: Engineers' Discourse." *Popular Music* 10(1):69-84.
- Porter, Will. 2011. "The Science of Fear." *Official Xbox Magazine* 125:64-67.
- Poster, Mark. 1995. "Postmodern Virtualities." *Body & Society* 1(3/4):79-95.
- Postman, Neil. 1993. *Technopoly: The Surrender of Culture to Technology*. New York: Vintage Books.
- Potter, Pamela. 1996. "Musicology under Hitler: New Sources in Context." *Journal of the American Musicological Society* 49(1):70-113.
- Powell, Anna. 2005. *Deleuze and the Horror Film*. Edinburgh: Edinburgh University Press.
- Powers, Thomas M. 2003. "Real Wrongs in Virtual Communities." *Ethics and Information Technology* 5:191-98.
- Preves, Sharon E. 2002. "Sexing the Intersexed: An Analysis of Sociocultural Responses to Intersexuality." *Signs* 27(2):523-56.
- Prokofy. 2007. "Vox Lindeni." *The Alphaville Herald*. http://alphavilleherald.com/2007/02/vox_linden.html (accessed 4 April 2010).

Punday, Daniel. 2005. "Creative Accounting: Role-playing Games, Possible-World Theory, and the Agency of Imagination." *Poetics Today* 26(1):113-39.

Radano, Ronald. 1989. "Interpreting Muzak: Speculations on the Musical Experience in Everyday Life." *American Music* 7(4):448-60.

Rakow, Lana F. 1988. "Women and the Telephone: The Gendering of a Communications Technology." In *Technology and Women's Voices: Keeping in Touch*, edited by Cheris Kramarae, 207-28. New York: Routledge.

Rattigan, Dermot. 2002. *Theatre of Sound: Radio and the Dramatic Imagination*. Dublin: Carysfort Press.

Rehding, Alexander. 2011. "Ecomusicology between Apocalypse and Nostalgia." *Journal of the American Musicological Society* 64(2):409-14.

_____. 2006. "Magic Boxes and *Volkssempfänger*: Music on the Radio in Weimar Germany." In Nikolaus Bacht, *Music, Theatre and Politics in Germany: 1848 to the Third Reich*, edited by Nikolaus Bacht, 255-71. Burlington, VT: Ashgate.

_____. 2005. "Wax Cylinder Revolutions." *Musical Quarterly* 88(1):123-60.

Reyes, Francesca. 1999. "Review: *Silent Hill*." *IGN*
<http://psx.ign.com/articles/153/153982p1.html> (accessed 24 February 2010).

Reynolds, Simon. [1990] 2008. "Noise." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 55-58. New York: The Continuum International Publishing Group.

Ritter, Jonathan and J. Martin Daughtry, ed. 2007. *Music in the Post-9/11 World*. New York: Routledge.

Roberts, Lynne D. and Malcolm R. Parks. 1999. "The Social Geography of Gender-Switching in Virtual Environments on the Internet." *Information, Communication & Society* 2(4):521-40.

Robinson, Paul. 1994. "The Opera Queen: A Voice from the Closet." *Cambridge Opera Journal* 6(3):283-91.

Rodowick, D. N. 2004. "The Enemy Within: The Economy of Violence in *The Hills Have Eyes*." In *Planks of Reason: Essays on the Horror Film*, edited by Barry Keith Grant and Christopher Sharrett, 346-55. Lanham, MD: The Scarecrow Press.

Roman, Zoltan. 1980. "The Limits of Romantic Eschatology in Music and Literature: From Byron and Berlioz to Mahler and Kafka." *Studia Musicologica Academiae Scientiarum Hungaricae* 22(1-4):273-98.

Ross, Alex. 2007. *The Rest Is Noise: Listening to the Twentieth Century*. New York: Farrar, Straus, and Giroux.

- Rothberg, Michael. 1997. "After Adorno: Culture in the Wake of Catastrophe." *New German Critique* 72:45-81.
- Rouget, Gilbert. 1985. *Music and Trance: A Theory of the Relations between Music and Possession*. Chicago: University of Chicago Press.
- Rouse III, Richard. 2009. "Match Made in Hell: The Inevitable Success of the Horror Genre in Video Games." In *Horror Video Games: Essays on the Fusion of Fear and Play*, edited by Bernard Perron, 15-25. Jefferson, NC and London: McFarland.
- Roux-Girard, Guillaume. 2010. "Listening to Fear: A Study of Sound in Horror Computer Games." In *Game Sound Technology and Player Interaction: Concepts and Developments*, edited by Mark Grimshaw, 192-212. Hershey, PA: IGI Global.
- Ruskin, John. 1856. *Modern Painters* (Vol. III). London: Smith, Elder, and Co.
- Russo, Mary and Daniel Warner. 2008. "Rough Music, Futurism, and Postpunk Industrial Noise Bands." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 47-54. New York: The Continuum International Publishing Group.
- Salen, Katie and Eric Zimmerman. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press.
- Saler, Michael. 2012. *As If: Modern Enchantment and the Literary Prehistory of Virtual Reality*. Oxford and New York: Oxford University Press.
- Sample, Mark. 2008. "Virtual Torture: Videogames and the War on Terror." *Game Studies: The International Journal of Computer Game Research* 8(2). <http://gamestudies.org/0802/articles/sample>.
- Samuels, Ellen. 2003. "My Body, My Closet: Invisible Disability and the Limits of Coming-Out Discourse." *GLQ: A Journal of Gay and Lesbian Studies* 9(1/2):233-55.
- Sanjek, David. 2003. "Fairly Used: Negativland's U2 and the Precarious Practice of Acoustic Appropriation." In *Music and Technoculture*, edited by René T. A. Lysloff and Leslie C. Gay, 358-78. Middletown, CT: Wesleyan University Press.
- Scarry, Elaine. 1985. *The Body in Pain: The Making and Unmaking of the World*. Oxford and New York: Oxford University Press.
- Schaefer, Eric. 1999. "Bold! Daring! Shocking! True!" *A History of Exploitation Films, 1919-1959*. Durham, NC: Duke University Press.
- Schaeffer, Pierre. 1996. *Traité des objets musicaux*. Paris: Editions du Seuil.
- Schafer, R. Murray. [1973] 2004. "The Music of the Environment." In *Audio Culture: Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 29-39. New York: The Continuum International Publishing Group Inc.

- Schleiner, Anne-Marie. 2002. "Velvet-Strike: War Times and Reality Games." *Velvet-Strike: Counter-Military Graffiti for CS*. <http://www.opensorcery.net/velvet-strike/about.html> (accessed 2 June 2010).
- Schloss, Joseph G. 2004. *Making Beats: The Art of Sample-Based Hip-Hop*. Middletown, CT: Wesleyan University Press.
- Schlossberg, Linda. 2001. "Introduction." In *Passing: Identity and Interpretation in Sexuality, Race, and Religion*, edited by María Carla Sánchez and Linda Schlossberg, 1-12. New York: New York University Press.
- Schulzke, Marcus. 2010. "Defending the Morality of Violent Video Games." *Ethics and Information Technology* 12:127-38.
- Sconce, Jeffrey. 2000. *Haunted Media: Electronic Presence from Telegraphy to Television*. Durham, NC: Duke University Press.
- Scott, Geoff. 2007. "Lord of the Rings Online: Shadows of Angmar Developer Diary." *World News Network*. http://wn.com/Lord_of_the_Rings_Online_Shadows_of_Angmar_developer_diary (accessed 6 February 2010).
- Sears, Richard. 1980. *V-Discs: A History and Discography*. Westport, CT: Greenwood Press.
- Sedgwick, Eve Kosofsky. 2008. *Epistemology of the Closet* (updated edition). Berkeley, CA: University of California Press.
- Seiler, Joey. 2009. "Second Life Has Skype in Its Sights." *Engage Digital*. <http://www.engagedigital.com/blog/2009/05/19/second-life-embraces-voice> (accessed 15 May 2011).
- Sharpe, Christina. 1999. "Racialized Fantasies on the Internet." *Signs* 24(4):1089-96.
- Shelemay, Kay Kaufman. 2011. "Musical Communities: Rethinking the Collective in Music." *Journal of the American Musicological Society* 64(2):349-90.
- Sherman, Sharon, R. 1997. "Perils of the Princess: Gender and Genre in Video Games." *Western Folklore* 56(3/4):243-58.
- Sholl, Robert. 2007. "Love, Mad Love and the 'point sublime': The Surrealist Poetics of Messiaen's *Harawi*." In *Messiaen Studies*, edited by Robert Sholl, 34-62. Cambridge: Cambridge University Press.
- Silverman, Kaja. 1988. *The Acoustic Mirror: The Female Voice in Psychoanalysis and Cinema*. Indianapolis, IN: Indiana University Press.
- Simmons, Mark. 2009. "Scream Team: Interview with Mark Simmons, Sam Barlow, and Tom Hulett." *Nintendo Power* 241:45.

- Simons, Jan. 2007. "Narratives, Games, and Theory." *Game Studies: The International Journal of Computer Game Research* 7(1). <http://gamestudies.org/0701/articles/simons>.
- Small, Christopher. 1998. *Musicking: The Meanings of Performing and Listening*. Hanover, NH: University Press of New England.
- Smart, Mary Ann, ed. 2000. *Siren Songs: Representations of Gender and Sexuality in Opera*. Princeton, NJ: Princeton University Press.
- Smith, Jeff. 2009. "Bridging the Gap: Reconsidering the Border between Diegetic and Nondiegetic Music." *Music & the Moving Image* 2. <http://www.press.uillinois.edu/journals/mmi.html>.
- Smith, Jonas Heide. 2007. "Tragedies of the Ludic Commons: Understanding Cooperation in Multiplayer Games." *Game Studies: The International Journal of Computer Game Research* 7(1). <http://gamestudies.org/0701/articles/smith>.
- Smith, Matthew Wilson. 2007. *The Total Work of Art: From Bayreuth to Cyberspace*. New York: Routledge.
- Smithsonian. 2012. "The Art of Video Games." *Smithsonian*. <http://www.si.edu/exhibitions/details/The-Art-of-Video-Games-840> (accessed 8 April 2012).
- Smyth, Maura Josephine. 2010. "The Flight of Fancy, 1611-1725." Indiana University: Ph.D. dissertation.
- Sobchack, Vivian. 2006. "A Leg to Stand On: Prosthetics, Metaphor, and Materiality." In *The Prosthetic Impulse: From a Posthuman Present to a Biocultural Future*, edited by Marquard Smith and Joanne Morra, 43-72. Cambridge, MA: The MIT Press.
- Solie, Ruth A. 1980. "The Living Work: Organicism and Musical Analysis." *19th-Century Music* 4(2):147-56.
- Spadoni, Robert. 2007. *Uncanny Bodies: The Coming of Sound Film and the Origins of the Horror Genre*. Berkeley, CA: University of California Press.
- Squire, Kurt. 2002. "Cultural Framing of Computer/Video Games." *Game Studies: The International Journal of Computer Game Research* 2(1). <http://www.gamestudies.org/0102/squire>.
- Stanyek, Jason and Benjamin Piekut. 2010. "Deadness: Technologies of the Intermundane." *The Drama Review* 54(1):14-38.
- Sterne, Jonathan. 2003. *The Audible Past: Cultural Origins of Sound Reproduction*. Durham, NC: Duke University Press.
- Stilwell, Robynn. 2007. "The Fantastical Gap between Diegetic and Non-diegetic." In *Beyond the Soundtrack: Representing Music in Cinema*, edited by Daniel Goldmark, Lawrence Kramer, and Richard Leppert, 184-202. Berkeley, CA: University of California Press.

- Stone, Allucquère Rosanne. 1996. *The War of Desire and Technology at the Close of the Mechanical Age*. Cambridge, MA: The MIT Press.
- Straus, Joseph N. 2011. *Extraordinary Measures: Disability in Music*. Oxford and New York: Oxford University Press.
- Sugarman, Jane. 1997. *Engendering Song: Singing and Subjectivity at Prespa Albanian Weddings*. Chicago, IL: University of Chicago Press.
- Sutton-Smith, Brian. 1997. *The Ambiguity of Play*. Cambridge, MA: Harvard University Press.
- Sweetser, Penny. 2008. *Emergence in Games*. Boston, MA: Charles River Media.
- Tanenbaum, Sandra J. 1986. *Engineering Disability: Public Policy and Compensatory Technology*. Philadelphia, PA: Temple University Press.
- Taruskin, Richard. 2005. *The Oxford History of Western Music, Volume 1*. Oxford and New York: Oxford University Press.
- _____. 1997. *Defining Russia Musically: Historical and Hermeneutical Essays*. Princeton, NJ: Princeton University Press.
- Tatar, Maria. 2009. *Enchanted Hunters: The Power of Stories in Childhood*. New York: W. W. Norton & Co.
- Taylor, Laura Wiebe. 2009. "Popular Songs and Ordinary Violence: Exposing Basic Human Brutality in the Films of Rob Zombie." In *Terror Tracks: Music, Sound and Horror Cinema*, edited by Philip Hayward, 229-37. London: Equinox.
- Taylor, Laurie. 2003. "When Seams Fall Apart: Video Game Space and the Player." *Game Studies: The International Journal of Computer Game Research* 3(2). <http://www.gamestudies.org/0302/taylor>.
- Taylor, Timothy D. 2001. *Strange Sounds: Music, Technology & Culture*. New York: Routledge.
- Taylor, T. L. 2006. *Play between Worlds: Exploring Online Game Culture*. Cambridge, MA: MIT Press.
- Tenner, Edward. 1996. *Why Things Bite Back: Technology and the Revenge of Unintended Consequences*. New York: Knopf.
- Théberge, Paul. 1997. *Any Sound You Can Imagine: Making Music/Consuming Technology*. Hanover, NH: University Press of New England.
- Therrien, Carl. 2009. "Games of Fear: A Multi-Faceted Historical Account of the Horror Genre in Video Games." In *Horror Video Games: Essays on the Fusion of Fear and Play*, edited by Bernard Perron, 26-45. Jefferson, NC: McFarland.
- Thomas, Nicholas. 2001. "Introduction." In *Beyond Aesthetics: Art and the Technologies of Enchantment*, edited by Christopher Pinney and Nicholas Thomas, 1-12. Oxford and New York: Berg.

- Thompson, Clive. 2007. "Voice Chat Can Really Kill the Mood on *WoW*." *Wired.com*.
http://www.wired.com/gaming/virtualworlds/commentary/games/2007/06/games_frontiers_0617 (accessed 16 February 2009).
- Tolkien, J. R. R. 2007. *Tolkien on Fairy-stories*, edited by Verlyn Flieger and Douglas A. Anderson. London: Harper Collins.
- _____. 1983. *The Book of Lost Tales: Part I*, edited by Christopher Tolkien. London and Boston: Allen and Unwin.
- Tommasini, Anthony. 2001. "Music; The Devil Made Him Do It." *The New York Times*.
<http://www.nytimes.com/2001/09/30/arts/music-the-devil-made-him-do-it.html> (accessed 4 March 2009).
- Tompkins, Joe. 2010. "Pop Goes the Horror Score: Left Alone in *The Last House on the Left*." In *Music in the Horror Film*, edited by Neil Lerner, 98-113. New York: Routledge.
- Toth, Csaba. 2009. "Noise Theory." In *Noise & Capitalism* (Arteleku Audiolab), edited by Mattin Iles and Anthony Iles, 24-37, available online at www.arteleku.net/audiolab/noise_capitalism.pdf.
- Tu, Janet I. 2011. "Atheists Counter Prediction of Doom with 'Rapture Party.'" *Seattle Times*.
[http://http://seattletimes.nwsourc.com/html/localnews/2015071658_rapture17m.html](http://seattletimes.nwsourc.com/html/localnews/2015071658_rapture17m.html) (accessed 4 January 2012).
- Turbine Inc. 2007. *Game Manual for The Lord of the Rings Online: Shadows of Angmar*. Westwood, MA: Turbine Inc.
- Turkle, Sherry. 1995. *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.
- Twitchell, James B. 1985. *Dreadful Pleasures: An Anatomy of Modern Horror*. Oxford and New York: Oxford University Press.
- Tyler, Carole-Anne. 1994. "Passing: Narcissism, Identity, and Difference." *differences: A Journal of Feminist Cultural Studies* 6(2/3):212-48.
- Vaid, Urvashi. 1996. *Virtual Equality: The Mainstreaming of Gay and Lesbian Liberation*. New York: Anchor Books.
- Valentine, David. 2007. *Imagining Transgender: An Ethnography of a Category*. Durham, NC: Duke University Press.
- Vander, Judith. 1998. *Songprints: The Musical Experience of Five Shoshone Women*. Urbana, IL: University of Illinois Press.
- Van Elferen, Isabella. 2011. "¡Un Forastero! Issues of Virtuality and Diegesis in Videogame Music." *Music and the Moving Image* 4(2):30-39.

- Vanhanen, Janne. 2003. "Virtual Sound: Examining Glitch and Production." *Contemporary Music Review* 22(4):45-52.
- Waddington, David. 2007. "Locating the Wrongness in Ultra-Violent Video Games." *Ethics and Information Technology* 9:121-28.
- Wadley, Greg and Martin R. Gibbs. 2010. "Speaking in Character: Voice Communication in Virtual Worlds." In *Online Worlds: Convergence of the Real and the Virtual*, edited by William Sims Bainbridge, 187-200. New York: Springer.
- Waggoner, Zach. 2009. *My Avatar, My Self: Identity in Video Role-Playing Games*. Jefferson, NC: McFarland.
- Wakeford, Nina. 2000. "Cyberqueer." In *The Cyberculture Reader*, edited by David Bell and Barbara Kennedy, 403-15. New York: Routledge.
- Walby, Sylvia. 2001. "Against Epistemological Chasms: The Science Question in Feminism Revisited." *Signs* 26(2):485-509.
- Weber, Eugen Joseph. 1999. *Apocalypses: Prophecies, Cults, and Millennial Beliefs through the Ages*. Cambridge, MA: Harvard University Press.
- Weiner, Robert G. 2010. "The Prince of Exploitation: Dwain Esper." In *From the Arthouse to the Grindhouse: Highbrow and Lowbrow Transgression in Cinema's First Century*, edited by John Cline and Robert G. Weiner, 41-54. Lanham, MD: Scarecrow Press.
- Weinstock, Jeffery A. 1996. "Freaks in Space: 'Extraterrestrialism' and 'Deep Space Multiculturalism.'" In *Freakery: Cultural Spectacles of the Extraordinary Body*, edited by Rosemarie Garland-Thomson, 327-37. New York: New York University Press.
- Whalen, Zach. 2007. "Case Study: Film Music vs. Video-Game Music: The Case of *Silent Hill*." In *Music, Sound and Multimedia: From the Live to the Virtual*, edited by Jamie Sexton, 68-84. Edinburgh: Edinburgh University Press.
- _____. 2004. "Play Along: An Approach to Video Game Music." *Game Studies: The International Journal of Computer Game Research* 4(1). <http://www.gamestudies.org/0401/whalen>.
- Wharton, Alexander and Karen Collins. 2011. "Subjective Measures of the Influence of Music Customization on the Video Game Play Experience: A Pilot Study." *Game Studies: The International Journal of Computer Game Research* 11(2). http://gamestudies.org/1102/articles/wharton_collins.
- White, Michele. 1999. "Visual Pleasure in Textual Places: Gazing in Multi-User Object-Oriented Worlds." *Information, Communication & Society* 2(4):496-520.
- Whittle, Andrea and André Spicer. 2008. "Is Actor Network Theory Critique?" *Organization Studies* 29(4):611-29.

- Wilbourne, Emily. 2010. "Lo Schiavetto (1612): Travestied Sound, Ethnic Performance, and the Eloquence of the Body." *Journal of the American Musicological Society* 63(1):1-43.
- Williams, Linda. 1991. "Film Bodies: Gender, Genre, and Excess." *Film Quarterly* 44(4):2-13.
- Wills, David. 1995. *Prosthesis*. Stanford, CA: Stanford University Press.
- Wilson, Robert Rawdon. 1995. "Cyber(body)parts: Prosthetic Consciousness." *Body & Society* 1(3/4):239-59.
- Winters, Ben. 2010. "The Non-Diegetic Fallacy: Film, Music, and Narrative Space." *Music & Letters* 91:224-44.
- Wood, Aylish. 2007. *Digital Encounters*. New York: Routledge.
- Wu, Harmony H. 2003. "Trading in Horror, Cult and Matricide: Peter Jackson's Phenomenal Bad Taste and New Zealand Fantasies of Inter/national Cinematic Success." In *Defining Cult Movies: The Cultural Politics of Oppositional Taste*, edited by Mark Jancovich, Antonio Lázaro Reboll, Julian Stringer, and Andy Willis, 84-108. Manchester: Manchester University Press.
- Yamaoka, Akira. 2009. "Mad Maestro: Interview with Akira Yamaoka." *Nintendo Power* 241:39.
- Zimbardo, Philip and Nikita Duncan. 2012. "The Demise of Guys': How Video Games and Porn Are Ruining a Generation." CNN. http://edition.cnn.com/2012/05/23/health/living-well/demise-of-guys/index.html?hpt=hp_c2 (accessed 26 May 2012).
- Ziolkowski, Theodore. 1977. "Review: The Literature of Atrocity." *The Sewanee Review* 85(1):135-43.
- Zipes, Jack. 2012. *The Irresistible Fairy Tale: The Cultural and Social History of a Genre*. Princeton: Princeton University Press.
- _____. 2009. *Relentless Progress: The Reconfiguration of Children's Literature, Fairy Tales, and Storytelling*. New York: Routledge.
- Žižek, Slavoj. 2011. *Living in the End Times*. New York and London: Verso.
- _____. 1991. "Grimaces of the Real, or When the Phallus Appears." *October* 58:44-68.