

# SOUND PLAY

**video games and the musical imagination**



**WILLIAM CHENG**



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## Sound Play

Video-based sound detection and recognition can be used to study how animals interact with their environment and each other.

With enough raw material and processing power, it is possible to automatically detect and analyse sounds from video recordings.

It is also possible to automatically analyse sounds from audio recordings.

Such methods have been used to study a wide range of topics.

Automated sound analysis can be used to study:

• bird song and calls, and their interactions

• whale song and calls, and their interactions

• insect song and calls, and their interactions

• bat song and calls, and their interactions

• songbird song and calls, and their interactions

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# Sound Play

Video Games and the Musical Imagination

WILLIAM CHENG

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*For my parents*



The human imagination is an amazing thing. As children, we spend much of our time in imaginary worlds, substituting toys and make-believe for the real surroundings that we are just beginning to explore and understand. As we play, we learn. And as we grow, our play gets more complicated. We add rules and goals. The result is something we call games.

—Will Wright (2006), creator of *SimCity*, *The Sims*, and *Spore*



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1 November 2013  
Cambridge, Massachusetts

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## FOREWORD

Be not afeard; the isle is full of noises,  
Sounds and sweet airs, that give delight and hurt not.  
Sometimes a thousand twanging instruments  
Will hum about mine ears, and sometime voices  
That, if I then had waked after long sleep,  
Will make me sleep again: and then, in dreaming,  
The clouds methought would open and show riches  
Ready to drop upon me; that, when I waked,  
I cried to dream again. —Shakespeare, *The Tempest*, Act 3, Scene 2

Life's a game. Get in the game. The games people play. Game the system. This isn't a game. Play along. There's hardly an end to wordplay when it comes to the notion of playing a game, and it's no linguistic accident that spoken maxims about games require a verbal exclamation point affirming an imperative. Playing the game is serious business.

Will Cheng's *Sound Play* embeds pretty much all of the denotative and connotative semantics, historically and culturally anchored, in the clichés catalogued in the preceding paragraph. Gameplay is multivalent, unsettled, shifting, and dialectical. Thus, playing games, a kind of synonym for fun, is irresponsible unless prejustified by being earned: work first, play and game later; broccoli precedes ice cream. But the fact is that we play (and play still more, maybe especially) when we ought to be doing other things. It's no surprise that lurking in the ludic is an awareness—sometimes vague, sometimes not—that we're getting away with something. Or maybe that we're just lazy, though being lazy can be its own form of work.<sup>1</sup> And since we value work even for work's sake, throw yourself into it! In Las Vegas, casual observation makes clear that people really work at gambling while, not coincidentally, being surrounded by the music and sound effects of "success": *You're gonna win! Really!* The Chamber of Commerce calls

it “gaming”—Vegas as Carnival (ludic pleasure, versus losing our shirts) on the chance (yes, we *do* know better) that the oranges will line up. All in all, in late-modern life, do we really wonder why we succumb to the urge?

Games are a form of surplus in a world of multiple scarcities, and on that account alone (and surely there are others) games are necessary, not only for our training to function in the world, but also as a way to keep ourselves mentally sharp (*Sudoku*) and certainly quick-fingered (in the case of digital game-play). But also (and not least), games allow us to imagine what isn’t but might be: utopic moments (the ludic again) hiding in the shadows of the dystopic real world (all too familiar). To state things bluntly, the game of life has but one outcome. The ludic provides an imaginary interruption of that inevitability and the myriad fears and setbacks that confront us: the darkness within and the darkness without. A video game’s playful enchantment, structured on terms that as players we get to set, makes possible a fairy-tale world, a world of magic, a world utterly not our own but still familiar.<sup>2</sup> The games replicate the familiar in the strange: character types, narratives, sounds, musics, and more. Their wonderful strangeness is recognizable.

Games set up oppositions, many of them ethical. Good and bad: the team we root for, the one we boo. Even (or especially) children’s games often unfold in the shadow of ethics: play fair, no fair. Game ethics, narrative fantasy, possible impossibilities, and above all imagination go hand in hand. When my son was around eight, he and his best friend played endlessly with *Star Wars* toys, with mounds of plastic spaceships and their mite-sized petroleum-based occupants. Their games invariably began by setting up the protocols to be followed, the discussion of which started with, “Let’s say....” Once the rules were agreed to, action began, although what the boys seemed to enjoy most was establishing what would shape the fantasy world of their making, one in which the minimal agency of childhood morphed into powers limited only by the kids’ imaginations and—of course—the rules. They set out to integrate themselves into an imaginary world that was as familiar to them as the one they actually inhabited, except for the weaponry and time travel. Above all, they entered this world—their world—by making decisions and experiencing the consequences. No small matter, their (new) world was filled with sounds, including theme music from the movie—boy-soprano voiced, with a lot of gusto. Indeed, to all appearances, the music was crucial.

Cheng’s book reminds us that the graphically rendered imaginary world is one in which life itself can easily hinge on the semiotics of its sounds, many of them musical, all of them meaningful. *Sound Play* sorts through the audibility of the game (and not only the video game): musical sounds mostly, but also sound effects, preprogrammed voices, live chat, and more. The degree to which all of it serves the game and the game experience is striking, but Cheng is after

something besides. He wants to understand the multifaceted pedagogical functionality that is immanent in the software and its players. In this sense, perhaps what he's after is—simply and not so simply—to understand music. Tolstoy, in a very dark mood about music's impact on human affairs, put it nicely: "And music in general's a fearful thing. What is it? I don't know. What is music? What does it do to us? And why does it do to us what it does?"<sup>3</sup> In *The Kreutzer Sonata* music leads a husband to brutally murder his wife, and in *A Clockwork Orange* it accompanies rape: Beethoven, both times. It leads Cheng—the-player to time a nuclear bomb blast to the climactic cadence in a Sousa march; precisely at that moment he decides to push the red button, and afterward he is well bothered by having done so—even though *Fallout 3* is just a game. Indeed, what does music do to us? And why does it do to us what it does?

Player commentaries, which this book usefully quotes at length, make clear that participants know a good deal about what music does for them and for the game's characters and overarching narrative. Players of *The Lord of the Rings Online* clearly value moments when all other action stops for the breathing space of making some music; avatars take up instruments and perform music made by players who are very serious about the music they put into the game. They select it carefully, and they understand how it works.

Cheng points to musical excess in video games, a common feature, and explores in this regard what on the surface might seem surprising and even bizarre: the incorporation of opera (actual old opera; made-up, purpose-composed new opera, as well as aria quotation; and more). Opera makes a nice fit as the musical medium of excesses, every bit the match for the improbabilities and hyperbole that characterize video games. Cheng is sensitive to the operatics of video game music (and here we move well beyond opera as such): its dramatic exaggeration that gives audibility to good and evil—sound that defines the performances of life and living. Video games and game music share something with Baz Luhrmann's *Moulin Rouge*, which is nothing if not excessive (visually, sonically, narratively) and reflexively operatic on that account. The movie's entertainment impresario names his new show "Spectacular Spectacular" (linguistic redundancy being the ambrosia of spectacle), ultimately worked out in one of the film's most elaborately choreographed dance numbers, the can-can. Insistently announced by the impresario (addressing the dancers and the spectators alike in the very midst of the number's insane freneticism): *Can can can!*—exactly what's possible in the game, maybe if you're good enough and make the right moves. The musics Cheng has experienced in playing games clearly beg to get out. Aggressively voiced, a Pied Piper leading us... who really knows where? But leading us without question.

Sound alerts us to its potential meaning. We learn early to listen up. Roland Barthes argues that we listen variously when sounds portend uncertainty, unfamiliarity, and

especially the possibility of danger. At a higher level of self-reflexivity, he suggests, we listen so as to decipher the *secret*: the future, but also transgression.<sup>4</sup> Film scholar Rick Altman suggests that “every sound initiates an event,” and that “every hearing concretizes the story of that event.”<sup>5</sup> Video game sound and music function in this way. Michel Chion suggests that every sound seeks “to leave its trace in the image.”<sup>6</sup> Kefka’s villainous, quasi-musical laugh in *Final Fantasy VI* at once warns and scares us. Kefka means danger. Or perhaps a predigital example: at San Francisco’s marvelous Musée Mécanique, an impressive collection of games and amusements, visitors are greeted at the entrance by a 1930s Laffing Sal, a six-foot papier-mâché mechanical woman in a glass case. Sal sits, silent and immobile, waiting for one’s coin, and then the fun begins—or not. Her task, maybe three minutes’ worth (originally, what fit onto a 78 rpm disk), is, as her name denotes, to laugh (maniacally, as it turns out). Some years ago, I was transfixed by her sonic weirdness and accompanying body language. I could turn her on (for twenty-five cents); I couldn’t turn her off. From the moment the coin dropped, Sal controlled the space around her. No digital weapons were at my disposal. A child with his mother, standing next to me, completely lost it. Twenty seconds into Sal’s routine, the kid was screaming in terror. Sal’s entire body shook; her arms gesticulated weirdly; her head bobbed; her laugh was half shriek. She seemed more than crazed. Sal was operatic, precisely part of the fun (for me), maybe. She was unworldly and uncanny, informing those who entered the Musée Mécanique that the gameworld held surprises, especially for the unwary. (She performs for free on YouTube.)

Will Cheng’s insistently insightful book is built on a knowledge foundation that is both broad and deep. Cheng knows what he’s talking about: game-wise, music-wise, otherwise; he has engaged an enormous body of disparate scholarship from half a dozen disciplinary discourses and more. He understands, and imparts, why video games matter in late modernity, socially and culturally; why play is serious; and above all what game sonics *do*. In this he brings insight about music, wherever it is played. And to be sure, he makes a lot more sense than Laffing Sal.

Richard Leppert  
University of Minnesota

## ABOUT THE COMPANION WEBSITE

[www.oup.com/us/soundplay](http://www.oup.com/us/soundplay)

Oxford has created an open-access website to accompany *Sound Play*. The site includes the author's field recordings in online multiplayer games (Chapters 4 and 5) along with compilations of other audiovisual material. Readers are encouraged to peruse these recordings. Videos available online are signaled throughout the text with the symbol .



# Sound Play



# Introduction

There's a story my parents love sharing with their friends. It has to do with the first time I picked up a video game controller at age four. My dad had just brought home a Nintendo Entertainment System and a game starring a mustachioed man in red overalls. While 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 Player 2 controller, which—unbeknownst to me at the time—had zero functionality when it came to this 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 afternoon mashing happily at the buttons on my electronic 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, video games aren't simply about reality. Though I have no personal recollection of this scene from childhood, I imagine that my four-year-old self felt like he was (with) Mario every step of the way, from the first Goomba to the last castle, from the inaugural fanfare to the triumphant closing cadence. What was noteworthy about my first encounter with video games—what has since made it a deathless anecdote at family gatherings—was how I seemed to be playing *at play*, engrossed in make-believe twice over (more on this soon). In most regards, however, it was a gaming session like any other, one made marvelous and musical by journeys into lands beyond.

## On the Musically Playful

Imagination: it's the life force of make-believe, a driving principle of play, and the crux of how we derive pleasure and enchantment from virtual worlds. Although literature, theater, opera, cinema, and other media have historically offered no shortage of portals into fantasy, video games have lately conferred on

us new modes of mental and bodily engagement. Much of the appeal of video games comes from their ability to translate our physical input into extravagant sounds and onscreen animations.<sup>1</sup> This interactive digital medium, as writers colorfully remark, enables “choreographies of technological wizardry” (Mactavish 2002:46), “cyberathletic performances” (Dovey and Kennedy 2006:116), and “a joyously exaggerated sense of control, or amplification of input” (Poole 2000:160).<sup>2</sup> Games really put the *make* in make-believe, urging us to reimagine the limits of our agency, identity, and embodied existence.<sup>3</sup>

Around the same time my dad dropped a Nintendo controller in my hands, my mom tucked a Yamaha piano under my fingers and started me on weekly lessons. Every day, an hour of piano practice, followed by an hour of games—for years, that was the deal. While these respective activities were introduced to me as work and reward, I must have grown up drawing meaningful connections between the two. I say this in part because it makes for a cool origin story (the kind that superheroes in comic books always have), letting me trace my present-day fascination with video game audio to some radioactive fusion of gaming and musical experiences in my youth. But really, this vision isn’t at all facetious: many children these days do come of age playing video games as well as musical instruments, learning in both cases how to make magic with feats of manual dexterity. Both gameplay and musical play involve the apprehension, interpretation, and manipulation of signs and materials within technical constraints and customs. Gaining proficiency in either exercise requires determination and practice. Individuals who persevere might eventually prevail as virtuosos (*qua* virtual superheroes) with greater knowledge, literacy, and technique than they initially believed possible.

Performance, collaboration, and competition are vital in musical and gaming cultures alike. For every sublime rendition of a Beethoven symphony at Carnegie Hall, one could find an expertly orchestrated clan of warriors raiding a dragon’s lair in *World of Warcraft*. And for every professional piano contest, amateur battle of the bands, or *American Idol* episode, there’s a million-dollar *StarCraft* tournament with professional gamers (a.k.a. e-athletes) who train fourteen hours a day.<sup>4</sup> Of course, apart from these arenas of dazzling spectacle, music and games accommodate solitary, contemplative engagement: both are said to have therapeutic, rehabilitative, and analgesic effects; both have potential to facilitate trance, flow, and immersion; and both possess transportative powers, ushering us into otherworldly spaces and alternative states of mind.<sup>5</sup> Such alleged provisions of escapist pleasure have long placed music and games at the centers of comparable debates about the intellectual and moral valencies of all things leisurely. Just as musicology in its early years took time to gain respectability amid wider academic circles, so video game scholarship has faced its share of skepticism toward the legitimacy of its designated queries.<sup>6</sup>

In social function, technical craft, and vocabularies of appraisal, commonalities between music and games abound. Listening for resonances across these two artforms stands to deepen our comprehension of both. “What might it mean,” asks Roger Moseley (2013:303), “to conceive of chamber music as ‘multi-player co-op,’ of Chopin’s ‘Minute’ Waltz as engaging ‘speed run’ mode, or of Liszt’s *Réminiscences de Don Juan* as a ‘single-player mod’ of Mozart’s eight-player opera?”<sup>7</sup> Questions of this sort fire synapses galore because their analogies are disarmingly sensible yet heretofore underexamined. Nestled in Moseley’s provocative comparisons are worlds of inquiry awaiting exploration by scholars, composers, and gamers. By considering how music is playful and how play is musical, we can learn much about “competitive behavior, the acceptance and evasion of protocols and constraints, the pleasures of rhythmic bodies in motion, and the dizzy delight taken in exhibitions of virtuosity” (*ibid*:283).

Innovations in video games and game music over recent decades have furnished new ways to think through matters of sound and play. Many games grant opportunities to interact with audio phenomena in manners that might not be prudent, practical, or possible in the physical world. In virtual environments, there’s unusual license to play *with* sound, to push the boundaries of its signifying and sensational capabilities in diverse, fantastical contexts. *Sound Play* lends an ear to how video games give rise to imaginative—often transgressive—forms of sonic engagement. It delves into how game creators, composers, and players employ (or otherwise come into contact with) music, noise, voice, and silence in ways that purposefully or inadvertently challenge social rules, cultural conventions, technical limitations, aesthetic norms, and ethical codes. Designers of games constantly surprise players with novel concepts and products. Players in turn persistently strike up emergent behaviors that designers themselves might not have anticipated or intended.<sup>8</sup>

Games and gaming practices, to be clear, do not have to be explicitly deviant or subversive in order to be meaningful. Kiri Miller’s research has shown that there is ample agency and import in “playing along: working within the constraints of game rules, commercial platforms, and existing repertoires” (2012:226). What I stress in *Sound Play* is that while gaming experiences aren’t always outwardly radical or resistant, they can be productively interpreted as activities bound up in *potentialities* for transgression.<sup>9</sup> Play is about more than make-believe; it’s about *re-making* belief, redrawing frontiers of the imagination through performances of actions, identities, and ideologies previously unfulfilled (or assumed to have been outright impossible).<sup>10</sup> Inherent in creative and critical play is an element of virtuosity, which, as defined by Dana Gooley (regarding the legendary pianist Franz Liszt), involves exceeding “the limit of what seems possible, or what the spectator can imagine [...] [and] insistently mobilizing, destabilizing, and reconstituting borders” (2004:1; see also Leppert 2007b:159–63). Insistence is

key: maintaining virtuosic distinction means staying a couple steps ahead of the game.<sup>11</sup> Should extraordinary acts catch on and become heavily imitated, they could cease to appear extraordinary as such.

Literature and entertainment media commonly portray rule breaking in a romantic, glorified light. Mavericks, vigilantes, and star-crossed lovers make excellent subjects for narratives of daring and overcoming. Concerning the visual arts, Anthony Julius states 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). To be sure, it is possible for an act to be so radical that it comes off as more alienating than impressive. Chess players who set fire to the game board during a match are clearly transgressors (and maybe dangers to society), but they aren’t likely to be hailed as creative or virtuosic chess masters. It would likewise be odd to spread peanut butter on a piano’s keys during a recital, but performers who do so shouldn’t count on being venerated as concert pianists in the conventional sense. In rule-based musical and ludic systems, oppositional behavior tends to garner admiration when the constraints being exceeded remain at least somewhat in view. Distinguished players are not ordinarily those who zip completely out of sight and out of bounds. Rather, they are the ones dancing precariously along the edges of a playspace, testing its boundaries while abiding as verifiable participants within.

The boundaries (and so-called magic circles) that surround games are admittedly porous and prone to constant reinscription.<sup>12</sup> Various meta- and paragames can nest within or extend beyond the graphical perimeters of simulated worlds. Put another way, there’s usually more than one game in play. Some players face off to see whose recordings of gameplay footage can nab the most hits and thumbs-ups on YouTube. Others start flame wars about game-related topics on the Internet, satiating competitive appetites by flexing their rhetorical muscles. And in online first-person shooter matches, trash-talking is an irrepressible sport unto itself.<sup>13</sup> All these arenas have their own terms of engagement that participants can negotiate to inventive ends. In today’s networked cultures, part of playing creatively with(in) games is finding means of playing around, between, and beyond them.

The title *Sound Play* captures two of this book’s leading claims. First, the phrase emphasizes the imaginative ways in which individuals play with sound via video games. And second, it raises issues about the perceived *soundness* of play, the oft-remarked sense of safety, impunity, and distance that people ostensibly experience in virtual and online settings.<sup>14</sup> In multiplayer games, it is common for players to trot out excuses such as *I was just (role)playing!* or *It’s just a game!* when facing accusations of foul play.<sup>15</sup> In the real world, one might think twice

before rounding up five friends to bombard an auction hall with unsynchronized bagpipe music—yet I've seen players simulate this sort of performance in virtual Middle-earth. Similarly, one cannot expect to be easily pardoned for verbal sexual harassment in face-to-face scenarios, but these kinds of offenses (carried out with voice chat) have become part and parcel of online shooter games.

Players who act out through sound or speech in online games sometimes downplay the severity of their transgressions by explaining that it's *only music* or *only words*. How bad can music spamming or verbal abuse really be? Sticks and stones... or so the saying goes. In multiplayer games, infractions like cheating and hacking are typically met with swift rebuke from fellow players or even official sanctions from game administrators (Consalvo 2007:108–48). Sound-based infringements, by contrast, frequently get a free pass. This double standard may be due to widespread presumptions about the recreational nature of music, the relative innocuousness of speech, and more generally, the intangibility and ephemerality of sound.<sup>16</sup> For some individuals, playing with sound in a video game can feel akin to engaging a diversionary object within an already diversionary medium. It is this double frivolity—in effect, make-believe twice over—that may embolden players and game designers to experiment with audio materials in ways that would be impractical, immoral, or objectionable in analogous real-world situations.

Instances of transgression can be paradoxically crucial to an understanding of social order because they lay bare the very rules and borders that might—in times of obedience—go unremarked or wholly unnoticed. Only when laws are broken (or under imminent threat of defiance) do we pay them much heed. Liberties taken in and with games can ultimately teach us profound things about what music is or isn't, how it works, what it's good for, and why and to whom these questions should matter in broader contexts. If play is an important part of music, it follows that games should provide an effective medium through which to rethink a number of familiar musical topics. *Sound Play* is at heart an enterprise in reciprocal critique: besides investigating video games and game audio from interdisciplinary perspectives, the book mobilizes its conclusions to reassess certain biases and rubrics entrenched in musicology, cultural theory, media studies, communications, and related fields. All in all, the sounds of play and the play of sounds can do much to expand conventional wisdom about aurality, performance, expression, creativity, authoriality, liveness, authenticity, labor, free will, aesthetic autonomy, violence, and a host of additional subjects.

Several questions echo through the book as a whole. What can practices of gaming tell us about human agency, identity, and embodiment? How do video games incorporate, complement, and compete with other media? How might engagements with games and game audio inform the theoretical, practical, and political stakes of the real-virtual divide? What—if anything—distinguishes

sonic transgressions from other types of rule-breaking behavior? And how can games inspire reflections on how we (as scholars, critics, designers, composers, performers, listeners, instructors, and fans) test and tinker with everyday sounds in all their material, signifying forms? The remainder of this introduction will elaborate on a few key themes—agency, role-play, virtuality, and violence—before contemplating the values and methods of being musicologically playful.

## Double Agents

When I first tried playing *Super Mario Bros.* as a kid using a Player 2 controller, my digital maneuvers—no matter how enthusiastic—could not directly impact the onscreen events. Naïve imagination led me to feel like I was in the driver's seat, but in terms of physical input, I had no agency per se. Still, my presence and actions must have somehow mattered: just the fact that I was *there* should have been enough to encourage, amuse, distract, or otherwise influence my brother and his actual gameplay performance. In this regard, our parents played a role as well, sticking around to be the cheering section and going along with the virtual-controller shtick—a game all on its own. Agencies of gameplay, as these simple reflections attest, are not reducible to the pressing of buttons and keys. Communities and cultures of gaming thrive on the collective actions of individuals across space and time, from the original designers of a game to all the people who play, spectate, record, mod, and critique it long thereafter.<sup>17</sup>

When it comes to video games, various nonhuman entities—mediums, formats, resources, systems, networks, and other miscellaneous matter—are evidently in constant play.<sup>18</sup> To borrow a phrase from Jonathan Sterne (writing about music and MP3s), video games are “a bundle of affordances” (2012:193), a configuration of materials, ideals, and stimuli that shape (and are shaped by) human experiences.<sup>19</sup> Indeed, under the discursive banners of actor-network theory, thing theory, object-oriented ontology, and posthuman phenomenology, scholars in recent years have vigorously questioned the primacy of humans and human agency in daily affairs.<sup>20</sup> As one would expect, the very idea of nonhuman agents is a point of perpetual contention: taken too far, the notion risks slipping into familiar traps of technological determinism; not taken far enough, it fosters anthropocentric dogma.<sup>21</sup> Walking this tightrope, Jason Stanyek and Benjamin Pieku define agency as “never coterminous with a single body; [agency] 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). On this front, avatars in video games sometimes give the impression of being agentic and transgressive in their own right.<sup>22</sup>

Our onscreen characters don't always do what we intend or anticipate. Pressing a single controller button can produce simulated actions that far exceed our expectations and direct operations. One of digital gaming's pleasures lies in how avatars outstrip our command, even if only in illusory fashion. Every now and then, it is their perceived autonomy that frees us in turn, allowing us to relinquish control and to revel in unruly objects of animated spectacle.

Players and their avatars are like double agents with co-constructed behaviors. A way to understand this relationship is to consider role-playing practices whereby players identify strongly with (or as) their in-game characters, adopting stylized mannerisms and taking on elaborate backstories. Ordinary people by day, superheroes by night: thrills come from opportunities for reembodiment, theatrics, and explorations of surrogate selves. Granted, role-play—whether in a digital gameworld, at a Renaissance fair, or in the bedroom—isn't as simple as pulling new identities out of thin air. Attempts to don original personae are necessarily checked by one's habits, memories, and abilities.<sup>23</sup> What role-play affords is not the facile transcendence of corporeal existence, but rather effortful renegotiations of this existence's material contingencies and experiential boundaries. As freeing as gaming can be, it seldom entails the straightforward possession of agency or some boundless capacity for action. In the same way that musicians—even (or especially) during their most virtuosic exhibitions—might feel as though they are getting lost in, giving over to, or being swept up by the performance and instrument at hand, so players of games oscillate between being in and out of control, playing and being played, and acting and being acted *upon* by the game's barrage of audiovisual stimuli. Working out these fundamental tensions is what makes gameplay a dynamic, interactive experience.

Whether actively role-playing or not, players of games are tasked with straddling and arbitrating between multiple frames of mind. As Ken Hillis puts it, virtual environments in general offer "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, and Miller 2008:265–68). As of late, double consciousness—the concept famously espoused by W. E. B. Du Bois (1903) regarding the psychosocial dilemmas of African-American cultural experience—has cropped up in scholarship on the imagination, video games, and aesthetic engagement at large.<sup>24</sup> Game designers Katie Salen and Eric Zimmerman suggest that digital gameplay involves a "double consciousness" through which a player may identify with an avatar and yet remain "fully aware of the character as an artificial construct" (2004:453). Salen and Zimmerman propose this as a way of refuting what they call the "immersive fallacy," the misconception that, in an ideal gameplay scenario, "the player would identify completely with the character, the game's frame would drop away, and the player would lose him or herself totally within the game character" (*ibid.*).<sup>25</sup> Historian

Michael Saler similarly notes that nineteenth-century fantasy literature moved 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). Slippages between categorical delusion and critical distance obtain more broadly in how we think and talk about images, poetry, architecture, and landscapes. As pointed out by art historian W. J. T. Mitchell, “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). In asking why “we assume pictures are something like life-forms, driven by desire and appetites,” Mitchell says that while he doesn’t “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.*:6, 11, emphasis in original; cf. Turkle 2011:23–34 and Kuznets 1994:1–3).<sup>26</sup>

That there can be pleasure in letting go—in unburdening our agencies onto things and theories—is evident in everyday descriptions of music. 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” (Straus 2011:103; see also Abbate 2004:517, Newcomb 1997:133–36, and Solie 1980:147–48). Personification, of course, is not without pitfalls. In his introduction to *The Oxford History of Western Music*, Richard Taruskin warns that “attributions of agency unmediated by human action are, in effect, lies—or at the very least, evasions. [...] This 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). By way of example, Taruskin states it is “a fallacy (the so-called ‘pathetic fallacy’) to say [...] that the motet ‘reveled in its polyphonicness.’ Motets cannot revel. Only people revel” (*ibid.*:221).<sup>27</sup> According to this literalist critique, ascribing agency to music can be problematic because doing so elides the roles and responsibilities of human agents. This said, running afoul of pathetic fallacies is not always a result of rhetorical apathy (or, worse, intentional prevarication). More often than not, bestowing music with vital properties is simply a way of accentuating its liveliness, dynamism, and affinity with human conditions.

Organic and animistic metaphors—as semantic exercises in make-believe—are, so to speak, the heart and soul of humanist inquiry. They bring the world alive, empowering us to make sense of how its constituent parts resonate with

our own minds and bodies. Such imagination of nonhuman agency, however, is also what breeds anxieties about matters far beyond scholarly integrity and verbal propriety. Visions of humans succumbing to external entities are a staple of science-fiction narratives. All too common are tales about the menace of machines, the proliferation of weapons, and forms of artificial intelligence rebelling against human masters. Detractors of video games have commented with comparable distress on the medium's beguiling and addictive powers (see Zimbardo and Duncan 2012, Cover 2006, Tenner 1996, and Postman 1993:112–14). A standard concern about gameworlds has to do with how they are encroaching on (and luring otherwise productive citizens away from) the physical world.<sup>28</sup> In alarmist perspectives, video games that consume their consumers bring about reversals of power between humans and machines. At the root of these reversals—and the misgivings they may arouse—lies one of the most popular constructs in contemporary dialogues about games and digital technologies: the real-virtual binary.

## Great Divides

The real and the virtual—as ideas, ontologies, and spatial demarcations—are as porous as terms come, shot through with ambiguities and complex value judgments. Synonyms for *virtual* (arguably the more marked of the pair) are legion: at its most neutral, it stands in for adjectives such as online, computer-mediated,<sup>29</sup> screen-based, digital, fictional, imaginary, potential, and hypothetical; at its most polemical (and pejorative), it carries implications of fakery, forgery, inauthenticity, delusion, deception, inconsequentiality, and immateriality.<sup>30</sup> This book corrals and critiques all such connotations—their uses and limitations, their connections and collisions. Rather than pin virtuality down, I deploy it in these pages with tacit nods to its polysemy. As with any problematic construct, the virtual is at once adhesive and repellent—quick to attract clusters of descriptions (all jostling for legitimacy), but loath to let any single gloss stick for long. For lack of better metaphors, virtuality is a Hydra: with every discursive whack one takes at it, it grows a couple heads to bite back, becoming only more multiplicitous, more difficult to tame. Indeed, it's often easier to talk around virtuality, to say what it is like (or what it isn't) than to settle on what it really is.

Granted, there's one thing that the virtual *is* like, almost by definition: it is like the *real*, just not quite. Media theorists have long insisted on virtual environments as lively social settings that are not essentially peripheral or subservient to the real world. Music scholars have followed suit in recent years. 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 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). René Lysloff, in an ethnography of an online music-modding scene, 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). And regarding the schizophonic virtuosity enabled by *Guitar Hero* and other music simulation games, Kiri Miller shows that players describe their performative experiences to “feel as ‘real’ as the other musical experiences in their lives” (2009:408).<sup>31</sup> All these writers use the expression *as real as* with the admirable aim of de-trivializing virtual technologies and attendant musical practices. But a conundrum emerges, perhaps inevitably, from the way this equalizing rhetoric reinforces the ontological precedence of the real—a vague construct that anyhow signifies largely in contradistinction to the blurry notion of the virtual. Dilemmas of this sort speak to why the real and the virtual are so routinely wreathed in scare quotes and disclaimers. The terms are mundane yet esoteric, stiff yet volatile. To this point, the pair should not be too hastily equated or conflated (much less expelled from everyday parlance or deconstructed out of existence).<sup>32</sup> For all their elusiveness, the real and the virtual make up a salient dichotomy, one with lasting potential to generate insights into video games and related technologies.

Scholarly urges to valorize the virtual are understandable: it feels good to root for ontological underdogs. What this rescue agenda sometimes downplays, however, is that circa the advent of Web 2.0, virtual technologies have no longer required much defense in the public eye. Few people living in today’s tech-saturated cultures need convincing that mediated experiences can be socially, emotionally, and informationally significant. Yes, we continue to hear outcries about the superficiality of video games, online relations, and digital musicalities, but these complaints resemble self-defeating propositions. Spilling copious ink on why something doesn’t matter tends all but to confirm the subject as worthy of scrutiny (see Ouellette and Thompson 2012:paras. 1–3). While rapid developments in virtual technologies can make us uneasy, this unease isn’t grounded in the belief that our engagements with these technologies are trivial or alienated from the real world. On the contrary, criticisms arise precisely from the powerful, even threatening manners in which virtuality may overtake, intersect with, and trespass on reality. Such anxieties, in short, are responses to virtuality becoming not just *as real as* but putatively *more real than* the originary real.<sup>33</sup>

Nowhere are the stakes of real-virtual slippages higher than in debates about video game violence.<sup>34</sup> The fear—one that flares up in the wake of school shootings and other youth-centered violent incidents—is that the avatars we control and confront in games might remake us in their image, filling us with mimetic

trigger-happy tendencies (Cogburn and Silcox 2009:54, Ferguson 2008, Jenkins 2006:187–225).<sup>35</sup> Now more than ever, game developers, players, journalists, politicians, and scholars face sensitive questions about the effects and ethics of game violence. Qualms about virtual aggression (namely, about its correlational or causal links to real-world antisocial behavior) hinge on the assumption that gameworlds are not closed systems. Clearly, video games would be no cause for concern if they were regarded as isolated diversions unto themselves.

If the rhetorics of players and scholars are any indication, visions of utopia and dystopia encompass an irresistible dichotomy when it comes to video games and virtual technologies.<sup>36</sup> *Sound Play* takes on its share of disturbing topics: violence, loss, uncanny media, terror, oppression, territorialization, discrimination, and conflict of all kinds. On the lighter side of things, it contemplates music at sunrise, the magic of digital divas, a funhouse of fear, virtual democracies, and subversive voices. Rather than fixate on whether gameworlds are dystopian or utopian per se, I'm interested in the affective, social, intellectual, and professional forces that feed people's imaginations of these extremes. Additional binaries will become unmoored in the process: real/virtual, work/play, defiance/obedience, distinction/conformity, deviance/normativity, disinhibition/restraint, player/avatar, human/machine, authenticity/artificiality, severity/fri-  
volity, embodiment/disembodiment, singularity/multiplicity, online/offline, music/noise, song/speech, text/performance, live/recorded, sound/silence, and expression/muteness—imperfect yet indispensable pairings, all calling for third terms and in-betweens.

To the extent that gaming—violent and otherwise—can have real-world consequences, the sounds of games likewise are not bound within virtual worlds as such. This book's case studies emphasize ways in which game audio shuttles players between real and virtual registers of aural, visual, psychological, tactile, and aesthetic engagement. Some players, for example, might experience cognitive dissonance when listening to familiar real-world tunes while journeying through virtual gameworlds (Chapter 1). Many fans of old-school games express deeper interest in synthesized retro soundtracks than in the recent live performances of this repertoire by human singers and instrumentalists (Chapter 2). Muddled noises in horror games may occasionally trick players into thinking that this virtual cacophony is coming from their own physical surroundings (Chapter 3). Player-simulated musical performances in online games have the potential to enhance as well as to impede listeners' immersion in the virtual world (Chapter 4). And finally, the sound of a player's own voice, when projected through voice chat, could be heard as so jarringly real that it ends up compromising the perceived integrity of a multiplayer gameworld (Chapter 5).

As observed by Karen Collins, it is easy to overlook "the role that sound (and embodiment) can play in our phenomenological experience of the construction

of space. Audiovisual media do not only take place on the screen: such media simultaneously take place in the auditory, peripersonal space around us” (2013:45; cf. Grimshaw 2012:352–53). Sounds of video games are no more confinable to virtual worlds than the players are. Game audio could be deemed virtual for its apparent origins in simulated enclosures, but this designation quickly unravels in light of how such sounds—when piped through speakers or headphones—nevertheless manifest as palpable vibrations in players’ real-world environments. And then there are all the gameplay noises that do come from a player’s physical space: the clacking of plastic controller buttons, the striking of drums (with video games like *Rock Band* and *Donkey Konga*), the rattling of maracas (the rhythm game *Samba de Amigo*), the patter of feet (dancing and fitness games), and the din of shouts and laughter in living rooms, arcades, and tournament stadiums. In the end, the sounds of games and gaming exemplify the medium’s materiality writ large, alerting us to possibilities “of being between ‘in there’ and ‘out here’: playing at the interface of virtual and visceral experience” (Miller 2012:8; see also Moseley 2013:302, Nicholls and Ryan 2008:169–76, Taylor 2003, and Darley 2000). To grasp the real-virtual divide is to acknowledge that what happens in gameworlds rarely stays in gameworlds—that the sounds and simulations of games can resonate well beyond the glowing screen.

## Methods and Mirrors

Video games are many things: technologies, toys, mediums, interfaces, and more. In plain terms, they constitute texts and places—texts, because games are seemingly reducible to digital codes, aesthetic units, and audiovisual stimuli; and places, because together these elements manifest as vivid, sonorous worlds. Online multiplayer games (copopulated by human-controlled avatars) most closely resemble the settings that ethnographers have historically surveyed in the physical world, but single-player games also bestow imagined communities through interactive environments and lifelike computer-operated characters.<sup>37</sup> As sites of play, performance, artistic display, social exchange, political commentary, and cultural production, video games invite research approaches that are diverse in kind.<sup>38</sup> My work in *Sound Play* proceeds from hands-on experiences with gameworlds, critical interpretations of their designs, and correspondences with players. With a mix of fieldwork and hermeneutics, I synthesize perspectives across (ethno)musicology, communications, anthropology, sociology, philosophy, and other areas of study.<sup>39</sup> Besides striving for versatility in method and disciplinary affinity, I experiment with flexibility in rhetoric and discursive register. In hopes of capturing gaming’s dynamic pleasures, this book cultivates a tone that is rigorous yet playful. The writing here ranges from admissions of awkward

gut feelings to more finely wrought theses, from first impressions to reflections (and revisions) months—even years—down the line.

Games indeed extend fortuitous opportunities to place scholarship about play in dialogue (and at odds) with the playfulness of scholarship. Embracing reflexive inquiry—bridging medium and method—stands to yield valuable insights into synergies between work and play. Insofar as observation, interpretation, and writing all contain elements of play, scholars and players of games have much in common: both are tasked with making sense of a game, bringing its virtual world to life (with physical input or elucidating prose), and showing mastery over this world's complex signs; both face challenges of gaining prestige, collaborating with peers, adapting to game changes, and finding ever more effective means of manual and rhetorical control; and for both, it is the outer limits of playgrounds that often hold greatest appeal, bearing promises of things not yet accomplished or known.<sup>40</sup> As Nick Dyer-Witheford and Greig de Peuter put it, critical game studies should draw inspiration “not from purely academic voices but also from media artists, independent game designers, and media literacy advocates who are developing hacks, alternative minigames, and curricula that trouble, probe, or depart from the norms of official game culture” (2009:xxvi–vii). Plenty of gamers, certainly, are scholars in their own right—not least for maintaining Wikipedia entries, drafting walkthroughs, and fueling debates over matters big and small. Some gamers might articulate their ideas and experiences in a manner different from the conventions of academic prose, but their contributions to collective knowledge about games are no doubt indispensable to (and inseparable from) standard scholarly oeuvres.

Despite the mutual affinities between scholarship and play, video games' road toward respectability in academia has been a bumpy one—probably in large part owing to perceptions of the medium as frivolous, diversionary, and juvenile. Ironic, though, is how academics and gamers sometimes face similar accusations about losing sight of reality. Just as residents of *Second Life* are commonly asked why they would spend so much time in a fantasy world when they could be living in the real world, so scholars (especially humanists) occasionally come up against questions of why they would devote so much effort to discoursing about a subject when they could really be *doing* something about it (cf. Hepokoski 2012:225–26, Jones 2008:1–3, Aarseth 2002, and Locke 2001:499–502, 528–29). Is it possible that an initial academic wariness toward games stemmed from scholars' anxieties about being seen as even more estranged from reality than they were already thought to be? What exactly was being disavowed? Is academic work a form of sound play? What can we learn from criticisms of scholarship and gaming alike as playful, escapist affairs?

I pose these questions not by way of dignifying anti-intellectualism and moral panic, nor because I hold satisfying answers. I pose them because I believe that,

as we go forward in an age of media convergence, scholars and gamers have a lot more to learn from (and say to) one another than their surface disparities would suggest. Arguments about video games won't cease so long as defenders think they have something to prove and detractors feel they have something to lose. And as important as it is to take games seriously, it remains even more so to ask why they have ever needed defending at all—to explore, in sum, the prejudices, norms, and incentives that shape attitudes toward games in the first place. Ivory towers, 8-bit castles: they stand on common ground, and there's reason to knock on both their doors.

## Chapter Walkthrough

Over five case studies, *Sound Play* broaches what I believe are some of the most controversial, far-reaching issues pertaining to video games and their sound-worlds. With each chapter, I have selected one game for its potential to stir up aesthetic, philosophical, and sociopolitical inquiry. The first three chapters deal with single-player games; the fourth and fifth, relying extensively on participant observation and player-interviews, turn to online multiplayer games. While these five games make up only a small sample within a massive multinational industry, the questions they raise stand to divulge a great deal about the broad roles of sound and play in contemporary societies. Chapters are organized thematically, with each one building on and successively challenging the claims of those that come before.

With its case-study approach, *Sound Play* opts for depth over breadth, close readings over comprehensive surveys and master narratives. Although I address the role of nostalgia in game-music fandom, I don't go so far back as to examine the sound design of such classics as *Donkey Kong* and *Pac-Man* (or, for that matter, *Pong* and other industry pioneers). A number of scholars, in any event, are doing vital work on this front, investigating chiptunes, arcades, and retro aesthetics from varied perspectives.<sup>41</sup> And while I weigh in on debates about embodied performance and virtuosity, I make only passing references to *Guitar Hero* and other music-rhythm franchises (on which there's likewise a thriving body of research).<sup>42</sup> Needless to say—albeit often said anyway in introductions to monographs—my project's topical, historical, and geographical omissions could fill countless extra pages. In a sense, this is already the case, if we count all the web pages (fan forums, Wiki entries, blogs) containing data of encyclopedic proportions.

Chapter 1 starts things off with an apocalyptic bang. Set in the ruins of Washington, D.C. far in the future, the 2008 game *Fallout 3* lets its player toggle between fictional radio stations that broadcast eighteenth- to twentieth-century

real-world classical and popular repertoire. Provocative couplings emerge in how this upbeat, looping music gets randomly juxtaposed against the graphic acts of brutality that a player witnesses and commits in the game. Many of the book's core themes are introduced over the course of this chapter. Predicaments of human agency are explored through the lens of aesthetic autonomy, aurality, trauma, the ethics and habits of play, and the impact of violence on music as we know it.

After this initial case study pushes music's epistemologies to a breaking point, Chapter 2 hits a refresh button of sorts, returning to an earlier era when composers were tasked with making the most out of limited game audio technologies. Focusing on the opera sequence from the 1994 game *Final Fantasy VI*, I inquire into the poetics of embedded spectacle, the signifying powers of synthesized sounds, and voice's phenomenal valencies. Through comparisons between the original 16-bit opera and its present-day live concert arrangements, this chapter underscores the roles of remembrance, nostalgia, and enchantment in the reception and enduring fandom of early game music.

Discussions of aural and compositional agency in the first two case studies come to a head in Chapter 3's examination of survival-horror, a game genre that derives much of its entertainment from the way it undermines the player's sense of control. Making a player feel helpless—through, say, unreliable mechanics, labyrinthine environments, and a defenseless protagonist—is something that in most games would be denounced as a product of sloppy design. A horror game, however, can get away with such unnerving elements because (as the sneaky argument goes) they make things *more* frightening. This chapter braves the noisy streets of the 1999 game *Silent Hill*. With an ear to the scare tactics of industrial audio, I tease out manifold tensions between pleasure and terror, between power and powerlessness.

Chapter 4 turns to matters of performance and performative agency, moving from a dystopian horror game to an online multiplayer gameworld that inhabitants have extolled as a musical utopia. Released in 2007, *The Lord of the Rings Online* features an elaborate music-making system that lets players perform tunes with their avatars. One function allows for the playback of downloaded musical files with minimal manual input. Debates have ensued: many players praise this music system as the key to a glorious virtual democracy, while others deplore its obfuscation of purportedly real musical skill and talent. Related controversies have arisen as a result of players who—instead of performing music to recreational, amicable ends—deliberately play over others' performances to cause grief, attract attention, and make a scene.

Whereas preceding chapters deal mostly with games' recorded audio materials, Chapter 5 considers the human voices that players project via microphones into online multiplayer gameworlds. With their own voices, players can say

anything and make any sound they wish. However, while voice chat offers a convenient means of hands-free communication, some players have lamented that it can convey too much information about the identities of their anonymous, disembodied companions. My concluding ethnography investigates players' unruly voicings of agency, authority, and presence in a 2007 online shooter called *Team Fortress 2*. Foregrounding issues of gender politics and sexual harassment, I scrutinize how players negotiate strategies of domination, masquerade, and coming out through acts of speech and silence.

Across this book's five chapters, the sonic phenomena in question include recycled tunes on the radio, synthesized singing voices, monstrous cacophony, a collaborative bagpipe spam, and inflammatory speech. Some of these sounds—by (mis)virtue of being too dissonant, reductive, mechanical, repetitive, loud, belligerent, or offensive—may not come across as conventionally musical. Then again, it is this unconventionality that stands to challenge what we think music is and, just as important, why its ontological boundaries should matter to begin with. Any sound, when engaged in creative fashion, has the potential to be meaningful and palpable, promoting imaginations musical, playful, and otherwise. By what criteria, then, does one define actual music, real musicians, and authentic musicality? To what ends?

How we understand music depends in part on how we go about describing it. In daily life, our words and voices enable us to identify, interpret, personify, discipline, and talk about the sounds around us. One concern of the upcoming chapter has to do precisely with the limits of what we—and music—can express. How, namely, do we make sense of music when certain shocking events leave us at a loss for words? What is there left to say, and for what cause, when the world has gone up in flames?

# 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 on the earth in a thunderous rain of fire. It wasn't clear how many missiles each side launched. Numbers, then again, stopped mattering the second the first bomb hit ground zero. There was no sense to the conflict, no design in the death, no possible meaning amid the blinding and deafening ruin. Many died instantly; others, slowly, bitterly. Yes, there were luckier ones—a few thousand here and there—who found refuge in giant underground bunkers called Vaults. Yet their luck, like everything else, ran dry. For when these Vault residents returned to the land above, they found none of the life or logic they once knew. The war lasted mere hours, but the fallout, it appeared, would be forever.

One Vault, for mysterious reasons, has remained closed. All those who had entered were never supposed to leave. It was here, 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—mingling daily with other sheltered youths who know little of the apocalypse that befell 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 a loving guardian. As you grow up, he teaches you manners, street smarts, and, with a BB gun, solid marksmanship. At your tenth birthday party, you get a biometric device called the Pip-Boy affixed to your arm (as do all Vault children at this age). You learn to operate it with ease. Classes, friends, and ample festivities keep you busy and happy for the first nineteen years of your life. So for nineteen years, it's a good life.

One night, everything changes.

You're awakened from slumber by your friend Amata, who tells you in a frantic whisper that your father has gone missing and that Vault guards are trying to hunt you down. Disbelieving and dazed, you stumble out of your bedroom into a hall throbbing with sirens and shouts. With a mix of stealth and luck, you

slip past most guards unnoticed and flee desperately from the few who catch sight of you. Eventually you reach a dark tunnel with a gigantic circular door at its end. A pulsing red button nearby beckons your finger. You oblige: the steel barrier rolls noisily out of the way to expose a narrow passage sloping upward. You scramble through it and burst into a world you've never known.

First, the light, bright like an explosion—and with it, an impossible silence. Impossible, because it's a soundlessness thick and true, free of the electric hums and cavernous echoes that permeated all corners of the Vault. Squinting now into the brilliant sun, you see nothing but rock and waste stretching into a horizon where a smog-filled sky meets scraggy cliffs. For the first time in your life, it seems, you're alone (see Fig. 1.1).

But this feeling doesn't last long. Seconds after stepping into the wasteland, you're alerted by your Pip-Boy that it has picked up a broadcasting signal. You pull up the device's interface and tune to this station's frequency. Right away, you hear a reassuring voice. "You're listening to Enclave Radio," comes the crackling announcement. "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 moments of *Fallout 3*. Clockwise from upper left: the player-character (1) being born, (2) at tenth birthday party, (3) in class, and (4) acquiring the signal for Enclave Radio upon reaching the wasteland surface. Screen captures by the author.

## Apocalypse, Amplified

Music and monuments lie in ruin across the postapocalyptic land of the single-player RPG (role-playing game) *Fallout 3*. Released by Bethesda Softworks in October 2008 for Windows PC, PlayStation 3, and Xbox 360, the game debuted to high praise and grossed over \$300 million at launch.<sup>1</sup> As the third official game in a bestselling series, *Fallout 3* is set in the year 2277, two centuries after the Sino-American War of 2077 reduced the world to a nuclear hellhole of drought, pestilence, and extremist politics (see Fig. 1.2).<sup>2</sup> The gameworld is staggering in size and complexity, giving its player the freedom to explore dozens of locations in and around a war-ravaged Washington, D.C.<sup>3</sup> Nicknamed the Capital Wasteland, the realm is populated by hundreds of computer-controlled NPCs (non-player characters) who walk, talk, and emote in lifelike fashion. Voice actors recorded an estimated 40,000 lines of dialogue for these characters.<sup>4</sup>

The player assumes the role of a former Vault dweller in search of a missing father, other survivors, and what vestiges of civilization remain. Clues gradually surface with respect to a far-flung conspiracy involving treason, genetic experimentation, and genocide. Racial tensions run high between *pure* humans (made up largely of 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 either support or thwart—has to do with unleashing a waterborne virus capable of purging all irradiated survivors from the country. Unmistakable

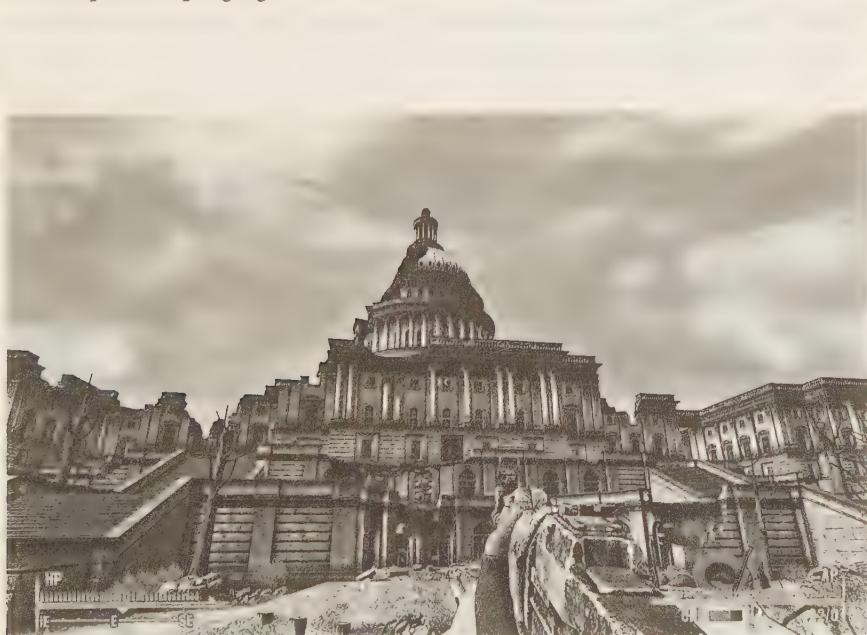


Figure 1.2. Ruins of the United States Capitol Building. Screen capture by the author.

in the game's counterfactual dystopia are references to real-world totalitarian legacies, the Holocaust, and the horrors of ethnic cleansing.

The composer Inon Zur devised an unintrusive, sparsely textured soundtrack for *Fallout 3*. Zur's ambient score has garnered much acclaim, but ever since the game's release, what has really grabbed the attention of players and critics is the eclectic programming of three diegetic (that is, in-game) radio stations.<sup>5</sup>

**Enclave Radio**—American hymns and anthems; President Eden's speeches

**Galaxy News Radio**—American big band music from the 1930s and 1940s; DJ Three Dog's announcements

**Agatha's Station**—Original improvisations and classical violin repertoire; Agatha's brief spoken interludes

The game's protagonist comes with an arm-mounted Pip-Boy that the player can manually tune to different stations (see Fig. 1.3).<sup>6</sup> Programming can be heard, too, on desk radios 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 hymns and xenophobic gospel (see Fig. 1.4).<sup>7</sup> Together, these assorted devices offer noisy relief from the silence and solitude of the Capital Wasteland. Music and voices from the radio bestow a sense of imagined community by promising that somewhere, someone else is listening to the same thing.<sup>8</sup>



Figure 1.3. The Pip-Boy's radio interface. Screen capture by the author.

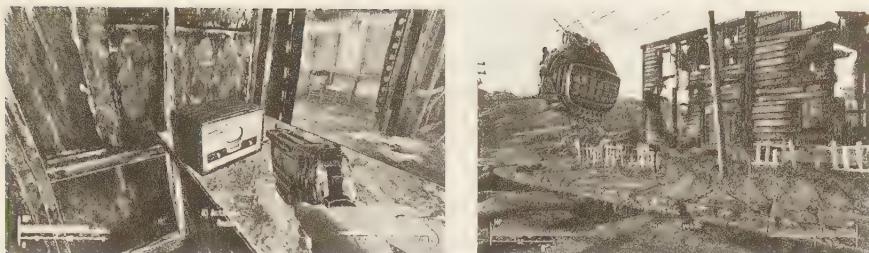


Figure 1.4. (Left) An NPC's desk radio and (right) an Enclave Eyebot. Screen captures by the author.

This promise, however, turns quickly to illusion. A player of *Fallout 3*—after tuning in for a while—will almost inevitably realize that every radio station is running on a loop. All in all, the music and announcements on the three main stations add up to only a few hours of recorded material. Once a player comes to recognize the repetitive nature of these radio broadcasts, the airwaves can start to sound like little more than cold comfort. In this wasteland, the tedious recycling of music from the past stems, players might imagine, from the unwillingness or inability of traumatized survivors to create new tunes following global atrocity. The shock of nuclear war appears to have drained all artistic impulse from the world, with day-to-day survival overtaking creative activity in the hierarchy of basic needs. Any unease a player might harbor toward the radio's mechanical music stands to be compounded by how nobody else in the gameworld seems to be listening to it in the first place.<sup>9</sup> Although a couple of NPCs will casually remark on their radio's repetitive programming and fuzzy signals, most never acknowledge (much less sing along to) these canned broadcasts.

At the core of *Fallout 3* is a dilemma of music's empty existence at world's end. Two centuries after the War of 2077 between China and the United States, the majority of survivors have no record of 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 world 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, endlessly iterated on the radio, can scarcely be understood to have any historical significance in the gameworld. To the ears of the wasteland's NPCs, these tunes ostensibly evoke no more than a blurry sense of a distant past. The war's purging of history, in short, has yielded a setting where music exists as a veritably ahistorical, autonomous entity. Players, as a result, have to negotiate a double aural consciousness—on the one hand, coming to terms with their own likely recognition of various radio selections, while on the other, acknowledging this music's lack of historical particularity within the game's circumscribed fiction.

Although diegetic radio music has been a staple of the *Fallout* series (as well as of game franchises such as *Bioshock* and *Grand Theft Auto*), one exceptional aspect of *Fallout 3* is how it gives the player control over the very existence of radio music in the wasteland.<sup>10</sup> If a player decides, for instance, to kill President Eden, then the Enclave station will go offline and its music will be wiped from every radio device in the gameworld. Should a player fail to replace the faulty relay dish atop the Washington Monument, then Galaxy News Radio's signal will remain weak and staticky throughout the game. And in the event that a 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 this game are hence accorded the power to mold its world's poetic as well as political horizons, to determine what music survives and what passes into extinction.

The gambit of this opening chapter is that it begins at the end—the end of the world—and, in doing so, raises some big-picture questions that will resurface throughout the book. Earthshaking circumstances necessarily do violence to our fundamental beliefs, priorities, and values. Simulations of end times, as such, furnish opportunities to proceed from an epistemological ground zero. How can crises of music in postapocalyptic scenarios deepen our understandings of sound and play? What can eschatological imaginations teach us about aurality, aesthetic autonomy, and the limits of musical inquiry? Just how (much) does music matter when it is pitted against bewildering instances of violence and atrocity? An important premise here is that gameplay does not entail complete control: it tends, rather, to be riddled with anxieties about the fallibility of human operations, about how one's agencies in a game may at times feel as virtual as virtual worlds themselves. Toward the end of this chapter, I narrate my own experiences with two quests in *Fallout 3*—the first, involving a nuclear bomb; the second, a sunrise. With these firsthand accounts, I call attention to interplays between obedience and transgression, between our propensity to follow rules and our will to break them. For both quests, I reflect on how the use of a video-capture program called Fraps might have in retrospect shaped my actions and moral choices in unexpected ways.

The end, it's often said, puts things in perspective, and so it's here we begin.

## Speaking of Ends

[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 [*differends*] 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” (1993:145–146)

Before venturing into a video game wasteland, it's worth contemplating how visions of apocalypse hold sway in everyday life. Especially since World War II, talk of the end times has seeped into popular culture by way of dystopian literature, disaster films, and other sensational media.<sup>11</sup> The apocalyptic imagination is a transgressive one: it is concerned with what lies beyond, the terrors of nonexistence, and unthinkable thoughts. Social, intellectual, political, and religious fascination with the ends of things, of course, is nothing new. We've heard pronouncements about the end of ideology, philosophy, irony, history, music history, and the world.<sup>12</sup> Accompanying this litany of ends are trendy claims about the deaths of things—whether it's God, the author, the subject, the liberal class, analog formats, or classical music.<sup>13</sup> And as for the prevalence of the *post-* prefix, its familiar appendages include modernism, structuralism, industrialism, colonialism, feminism, and humanism. If to philosophize is to learn to die (as Montaigne, Cicero, and others have written), then it should come as no surprise that visions of ends have historically kept a tight grip on how people think and theorize.

Today, reports of end times are so common that they increasingly sound like yesterday's news. Anyone who exclaims that the sky is falling stands to be roundly accused of gullibility, alarmism, and fanaticism. Granted, paranoia about the literal end of the world harbors 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 diminutive icon (satirized in Hollywood cartoons, television sketch comedies, and spy films) that signals the frightening ease with which massive reserves of cataclysmic weapons can be triggered with the smallest slip of judgment... or slip of the finger. The eschatological imagination is seductive in its monolithic stakes, with the extreme improbability of annihilation weighing darkly against the tremendous consequences of its actualization. Simply trying to comprehend 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 daily life. Optimistic outlooks routinely assert that human values and aesthetic pursuits can spring eternal despite (or even specifically in triumphant response to) the greatest of catastrophes. At times, however, these overcoming narratives perhaps say more about our currencies of hope—about what we long to believe—than they do about the realities of unbearable hardship *per se* (cf. Scarry 1985:3–19).

Modern debates over the role of art in times of crisis have variously emerged from studies of memory, commemoration, ruins, monumentality, trauma, ecology, nuclear culture, and the Holocaust. A popular point of reference continues to be Theodor Adorno's proclamation that "to write poetry after Auschwitz is barbaric" (1949:34), a statement that, as scholars nowadays are quick to point out, has long been reduced to a censorious soundbite.<sup>14</sup> Although Adorno tried to qualify this claim in subsequent writings, his initial remark has spawned ceaseless heated dialogues about the ethics of aesthetic representation. To be clear, Adorno wasn't insisting that one could or should never again attempt poetry after the Holocaust. Rather, he was gesturing to the broader problems with lyric writing and historical narrativity in the wake of atrocity.

Many citations of Adorno's slogan have tellingly framed it within discourses of the no-longer-possible and the no-longer-permissible. While it has become commonplace to lament the widespread deformation of Adorno's original statement, the collective instances of its misquotation are in themselves valuable testaments to the allure of afterness. There's great pretension in describing anything as already over. When we profess something to be dead or at an end—poetry, feminism, chivalry, an Internet meme, a viral video, a sartorial vogue—we ascend to the cutting edge, sweeping headlines into history and divesting ourselves of epistemic accountability for that which we deem passé. In a review of the 2007 volume *Beyond the Soundtrack: Representing Music in Cinema* (edited by Daniel Goldmark, Richard Leppert, and Lawrence Kramer), David Neumeyer performed a close reading of the title, protesting 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" (2008:445–446). Or, as stated by 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 anthem not only of the fad-conscious teens who rule our malls, but also of academics everywhere who trumpet the premium of intellectual originality. Fast-forwarding through epistemes—insisting on the ends, the deaths, and the post-ness of things—has the same appeal as time-traveling into the future. Getting ahead of ourselves is a way to get ahead more generally, to seize newfangled paradigms before others beat us to the punch.

A common way in which writers criticize post-ness is by calling it premature, by dismissing it as pomp and polemics. For though it can be cool and subversive to say that something is over, it can be even cooler to roll one's eyes at such pro-

nouncements and to instruct, in dialectical (or contrarian) fashion, that it's not yet time to move on, that we've only just begun. Consider the backlash against declarations of postfeminism and postracialism. Or, for a more sensational example, think back to 21 May 2011, the day on which the world—according to the Christian radio host Harold Camping—was supposed to come to an end. On that night, numerous parties were held across the United States to mark the occasion (see Tu 2011 and Jamison 2011; cf. Shyong 2012). As one would expect, the majority of these parties were not organized for saying goodbyes or observing last rites. Instead, they were riding the media hype, treating the presumed nonevent as an ironic affair for random revelry. These social gatherings offered opportunities for fun and games, for laughing collectively in the face of a foretold apocalypse that most were certain would not come. The 2011 Rapture has been just one of many predicted doomsdays in recent memory, followed closely by the 2012 Mayan Armageddon and its own worldwide celebrations (see Fig. 1.5).

Taking time to proclaim and play with fictitious ends can be fun and cathartic because it lets us affirm that we are not yet *at* an end. By keeping finitude in sight, we learn to live on.<sup>15</sup> Apocalyptic chatter may have a hard time sounding like anything new these days, but it remains a reliable source of entertainment for those looking to engage the end as a point of apparent fiction.



Figure 1.5. Advertisement for a 2012 Mayan Armageddon party.

## Worlds on Fire

Like facetious parties ringing in the Rapture, the simulated world of *Fallout 3* affords a sound platform for playing with the end of days. The game transports the player to a future Washington, D.C. that appears foreign in its postapocalyptic distress yet uncannily familiar via the verisimilar rendering of the city's geography. No matter where the player wanders—whether it's around Capitol Hill, the Lincoln Memorial, or other landmarks—the city's ruins stand as brazen mementos of the terrible things that have befallen the country. These sites of wreckage are awesome to behold: as with the war-torn and time-worn monuments of the real world, they appeal to what Rose Macaulay has called the “catastrophic imagination of man [...] a profound, passionate, and poetic pleasure in ruin” (1953:1). In the Capital Wasteland, it takes only a glimpse of the dilapidated Washington Monument to sense a portentous counterfactual history, one that players have the pleasure of excavating over the course of a lengthy adventure. Such opportunity for discovery is what makes postapocalypticism a common and effective premise in video games. Mass destruction enforces a hard reset and erects a convenient blank slate upon which new social, moral, and aesthetic fictions can be freely inscribed.<sup>16</sup>

The principles of Adorno's moralizing slogan (*after Auschwitz...*) seem to have taken a tight hold in this gameworld. There's little original art or poetry to be found. Epitomizing this bleak state of affairs is the mechanical radio music being recycled without end—music oblivious to the oblivion of its surroundings, indifferent to humanity's past and present atrocities. Below are brief descriptions 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 Franklin D. Roosevelt)

Whether piping from the protagonist's own radio or blasting from roving Eyebots, the Enclave's anthems and marches resonate as bombastic examples of patriotic American music (see Table 1.1). The station's tunes are punctuated by President Eden's speeches, which, in tone and format, recall the fireside chats of Franklin D. Roosevelt. Speaking with a slight southern drawl, Eden propounds the Enclave's supremacy, professes his love for baseball, and reminisces about his childhood dog. His addresses incorporate quotes from past American presidents, including George Washington, Thomas Jefferson, and Abraham Lincoln.

When the player comes face to face with Eden toward the end of the game, this supreme leader turns out to be a self-aware supercomputer whose programming

Table 1.1. Music of Enclave Radio.

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

derives from the amalgamated personalities of all previous American presidents. It is during this critical encounter that Eden fully explains his genocidal agenda. With the beguiling rhetoric of 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. Through wile and speechcraft, the player can ignore these instructions and persuade Eden to self-destruct. If Eden succumbs to such 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.

#### 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 impersonating President Eden

When the player first escapes from Vault 101, the signal for Galaxy News Radio (GNR) is weak. The range and quality of the station's transmissions will improve only if the player completes an optional quest to replace the relay dish atop the Washington Monument. This quest is assigned by GNR's host, a charismatic DJ named Three Dog. Besides running the station's music, Three Dog broadcasts short speeches in which he derides John Henry Eden, spouts antigovernment sentiments, and praises (or censures) the player's heroic (or despicable) actions.

*Table 1.2. Music of Galaxy News Radio.* Official credits for *Fallout 3* do not specify songwriters, performers, or recording years for several of the GNR selections licensed by APM Music. Names and dates have been provided for such cases in which this information could be ascertained with moderate confidence.

	Title	Composer & lyricist	Performer	Year
1	Anything Goes	Cole Porter	Porter	1934
2	A Wonderful Guy	Rodgers & Hammerstein	Tex Beneke	1949
3	Boogie Man	Sid Phillips	Phillips	Unspecified
4	Butcher Pete (Part 1)	Roy Brown & Henry Glover	Roy Brown	1949
5	Crazy He Calls Me	Bob Russell & Carl Sigman	Billie Holiday	1949
6	Civilization (Bongo Bongo Bongo)	Bob Hilliard & Carl Sigman	Danny Kaye with the Andrews Sisters	1947
7	Easy Living	Ralph Rainger & Leo Robin	Billie Holiday	1937
8	Fox Boogie	Gerhard Trede	Uncredited (courtesy of APM Music)	Unspecified
9	Happy Times	Silvia Fine	Bob Crosby & the Bobcats	1949
10	I Don't Want to Set the World on Fire	Bennie Benjamin, Eddie Durham, Sol Marcus, & Eddie Seiler	The Ink Spots	1940
11	I'm Tickled Pink	Jack Shaindlin	Uncredited (APM Music)	Unspecified
12	Into Each Life Some Rain Must Fall	Doris Fisher & Allan Roberts	Ella Fitzgerald	1944
13	Jazzy Interlude	Billy Munn	Uncredited (APM Music)	Unspecified
14	Jolly Days	Gerhard Trede	Uncredited (APM Music)	Unspecified
15	Let's Go Sunning	Jack Shaindlin	Uncredited (APM Music)	1954

<i>Title</i>	<i>Composer &amp; lyricist</i>	<i>Performer</i>	<i>Year</i>
16 Maybe	Frank Madden & Allen Flynn	The Ink Spots	1935
17 Mighty, Mighty Man	Roy Brown	Brown	1948
18 Rhythm For You	Eddy Christiani & Frans Poptie	Uncredited (APM Music)	1948
19 Swing Doors	Allan Gray	Uncredited (APM Music)	1935
20 Way Back Home	Al Lewis & Tom Waring	Bob Crosby & the Bobcats	1935

These spirited monologues sound spontaneous and plausibly live, but since the player is able to hear Three Dog on the radio while watching him mill around the station (*not* performing on air), it can be inferred that his speeches are recorded.

Most of GNR's selections are love songs from the big band era (see Table 1.2). Lyrics about heartache hark back to a prelapsarian golden age, to problems that impoverished, irradiated survivors in 2277 probably *wish* they had.<sup>17</sup> The songs are about first-world (that is, preapocalyptic) problems, channeled through the crooning tones and staticky whines of predecessors who could hardly have imagined what it would be like one day to live in a world truly on fire. In World War II (from our real-world timeline), these were exactly the sorts of tunes that were most popular on morale-boosting Victory Discs (a.k.a. V-Discs)—recordings that the United States government commissioned from local performers and sent to American soldiers overseas.<sup>18</sup> With familiar sounds of home, the popular and patriotic songs on V-Discs offered concentrated doses of comfort to American troops abroad, all the while reminding them that home in reality remained achingly far away. To the ears of *Fallout 3* players, GNR's nostalgic music may operate on a similar contradictory register, summoning a utopian past only to mark it as the stuff of fugitive dreams.

#### 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

A preponderance of American songs, marches, and anthems on GNR and Enclave Radio can give players the impression that the hyperviolence in the wasteland is somehow endemic to everyday American society—that the

monsters and monstrosities of this world are not fundamental Others but rather an intrinsic (even mundane) part of what humanity has become.<sup>19</sup> The sole exception to the game's American repertoire can be found on the classical music station operated by an elderly widow named Agatha Egglebrecht. Descended from a family of musicians, Agatha lives alone in a shack just north of a deserted train yard. An optional quest in the game begins with Agatha asking the player to retrieve her great-great-grandmother's Soil Stradivarius (a famous eighteenth-century violin that, in our own universe, has been used by virtuoso Itzhak Perlman since 1986). For tracking down this instrument and returning it to Agatha, the player is rewarded with the frequency for her radio station, which plays the woman's recorded performances of compositions by J. S. Bach, Antonín Dvořák, and Pablo de Sarasate (see Table 1.3). This station can only be detected on the protagonist's Pip-Boy and cannot be heard on any other broadcasting device 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. The fact that the game's underground music hails from the Western art tradition—which, in our world, is often glorified for its alleged universal appeal—provides a fittingly ironic reflection of the wasteland's cultural upheavals.<sup>20</sup>

This classical station also broadcasts six short violin improvisations by Agatha. The improvisations feature flexible rhythms, cadential double and triple

*Table 1.3. Music of Agatha's Station.*

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

stops, abundant portamenti and tremolos, and a loose adherence to a double-harmonic scalar profile (G–A♭–B–C–D–E–F♯–G); the overall style happens to resemble that of Sarasate's *Zigeunerweisen* (Gypsy Airs), one of the selections on Agatha's station (cf. Ex. 1.1 and Ex. 1.2). At first blush, 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.

*Example 1.1.* Agatha's Station: Opening of one of Agatha's violin improvisations. Performance by Heather MacArthur. Transcription by the author.



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





Figure 1.6. Agatha performing a violin improvisation in her home. Screen capture by the author.

When Agatha shows off her skills for the first time, it's a real treat. Although the motions of her fingers and bow don't line up with the music, the performance represents a rare simulation of live musicality in the game (see Fig. 1.6). Players are able to ask Agatha for as many repeat performances as they wish. Seeing her play on multiple occasions, however, can quickly kill the charm—for every time, she will dole out the same music and gestures. It should take only a couple of these identical performances for a player 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 a player asks Agatha to perform, the more she, like any NPC, inevitably loses her magic luster, baring the gears that turn like clockwork beneath her painted skin.

\* \* \*

With the exception of Agatha's improvisations, radio music in the Capital Wasteland is limited to pre-1950 repertoire. But given that the Sino-American War in the game's counterfactual timeline did not occur until 2077, a player has reason to wonder why, in the year 2277, there's no trace of music composed (at the very least) *between 1950 and 2077*. What happened to musical production in this interim? Did it cease? Did it flourish but fail to be preserved? No official answers are given, but it is easy to surmise some practical motivations for this design choice. Developers, for starters, might have figured that the hodgepodge of pre-1950s tunes could sound sufficiently old to 21st-century players of the game. Pieces by more recent artists (say, Golijov or Gaga) would have had greater difficulty establishing the vague sense of pastness that the game's radio selections so efficiently evoke.

Using a compilation soundtrack also afforded developers a number of technical conveniences. By supplying a thematic premise (*after the end of the world...*) for music's ossified state, the game lends narrative plausibility to its limited radio programming. A few NPCs even offer explicit rationalizations for the wasteland's dearth of new music. Agatha, for instance, explains that all of her station's music is 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 GNR's programming is repetitive because he hasn't managed to scavenge more than a few music records in playable condition. Excuses like these permitted the game's creators to circumvent questions about what directions music would take in the years leading up to 2277. Besides the benefit of reduced licensing costs, using music from the distant past relieved audio designers of the responsibility to devise original artworks of the future. According to this conceit, new music fails to surface in the Capital Wasteland not just because it is unimaginable for the gameworld's traumatized inhabitants, but furthermore because we likewise aren't fully able to imagine what music hundreds of years from now will sound like.

Each of the game's three radio stations telegraphs pastness in its own way. Many players, despite not having lived through the 1930s or '40s, stand to recognize GNR's repertoire as mid-century popular music because they have encountered its aesthetic via old-timey films, television parodies, theme parties, and grandparents' dusty records. Enclave Radio's patriotic melodies conjure legacies of American pomp and pride. And Agatha's classical music conveys antiquity because, well, it's classical music, with roots reaching back centuries. To be sure, most players are not likely to know the exact date (or even decade) of particular pieces on these stations. However, the playlists' collective legibility as somehow *dated* suffices to elicit a hazy nostalgia. It's a longing not for the 1940s (GNR), 1890s (the Enclave's Sousa), or 1720s (Agatha's Bach) specifically, but for an obscure, daresay conflated, past—remembrance without precise referent. Such nostalgia operates on a broader level as well: upon completing their adventure, players who encounter big band tunes, American hymns, or Baroque preludes in everyday life (at concerts, on YouTube, in coffee shops) are liable to yearn for the game itself, for the memorable hours they spent wandering its future world, once upon a time.<sup>21</sup>

Besides opening channels for reminiscence, musical selections across the three stations resound with fraught ideals. The Enclave's patriotic anthems and marches are double-edged, embodying not just American nationalism but also its shadows of imperialism and xenophobia. The cheery, sassy nonchalance of GNR's big band songs belies the brutal wartime climates out of which this repertoire emerged. Agatha's classical strains—including improvisations in the style

of Sarasate's *Zigeunerweisen*—come freighted with potential connotations of elitism, exoticism, and colonialism. And of course, the fact that all this music is transmitted through radio is enough to fuel endless debates about consumerism, commercialism, and propaganda.

Radio playlists in *Fallout 3* are evidently ripe for critique. How much any player recognizes or cares about these possibilities for critique remains a different question. The game's tunes, in any case, will necessarily communicate different things to different listeners (depending on cultural background, age, gameplay experience, musical knowledge, and so on). It would no doubt be a valuable endeavor to continue unpacking what this music means and to whom. Kiri Miller (2012:54–82) and William Gibbons (2011) have undertaken analyses of this sort with regard to diegetic radio music in *Grand Theft Auto* and *Bioshock* respectively.

At this chapter midpoint, however, I wish to steer my own study into a separate line of inquiry. I would like to change up the question: instead of doing additional close readings of what the radio music in the Capital Wasteland might signify, I seek to contemplate the kinds of things that are capable of affecting music's very ability to signify (and to be perceived as significant) in the first place.

Violence may be one such thing.

## Whistle While You Wound

The world has gone mad today,	Just think of those shocks you've got,
And good's bad today,	And those knocks you've got,
And black's white today,	And those blues you've got,
And day's night today,	From those news you've got,
And that gent today	And those pains you've got,
You gave a cent today	If any brains you've got,
Once had several chateaus. [...]	From those little radios.

—Cole Porter, “Anything Goes” (1934)

With violence reigning in the wasteland, pacifism is not the most viable option for survivors. One of the first things a player learns is how to do harm. Besides enabling the real-time 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 lets the player pause the action and aim attacks at specific parts of an enemy's body (see Fig. 1.7). Once a



Figure 1.7. (Left) V.A.T.S. interface and (right) its violent results. Screen captures by the author.

player has confirmed the targeted parts, the assault is automatically carried out in bullet-time (stylized slow-motion), resulting in decapitations, the crippling of limbs, and other explosions of flesh.

Against these graphic simulations of injury, some of the more upbeat tunes on the game's radio can sound out of place. There's something potentially grotesque about blasting enemies (or, should players choose, harmless civilians and animals) against the Enclave's majestic strains, the sultry voice of Ella Fitzgerald, or a Bach gigue. Designers of the game were the ones who preselected its licensed musical tracks, but it's up to individual players to decide whether to keep the radio on during the game and, by extension, to score their destructive activities with its music.<sup>22</sup> Patriotic, big band, and classical repertoires, of course, are not fundamentally incompatible with depictions of violence and ruin. It just so happens that, as far as aesthetic conventions and affective codings go, these easy-listening tunes can come off as contextually *dissonant*.

On Internet discussion threads, blogs, and reviews, players of *Fallout 3* have a few popular ways of describing their attitudes toward its radio music. Some turn on the radio to beat the wasteland's lonely, perilous ambience: like whistling in the dark, it shows swagger and sass. Others find pleasure foremost in the random manner in which radio tunes match up against gameplay events; it is only through incidental music-action pairings, after all, that the radio's fixed playlists achieve a semblance of spontaneity—jibing with and scraping against images, gestures, and occurrences in unexpected ways. Lyrics of several GNR songs bear out conspicuous double entendres when heard in the game's post-apocalyptic setting (see Table 1.4).<sup>23</sup>

Many players express amusement at how radio tunes in *Fallout 3* can comment on and clash with the game's hyperviolent encounters, reminiscent of films that deploy music in likewise ironic fashion. By mashing together cheerful songs and terrible conflict, players get to act the part of subversive Kubrickian visionaries. Here's a sample of players' remarks from a couple of online threads:

Table 1.4. Excerpts from lyrics of three songs on Galaxy News Radio.

*"I Don't Want to Set the World on Fire"*

By Bennie Benjamin, Eddie Durham, Sol Marcus, and Eddie Seiler.  
Recorded by the Ink Spots (1940)

I don't want to set the world on fire, I just want to start A flame in your heart.	In my heart I have but one desire, And that one is you, No other will do.
--	---

*"Civilization (Bongo Bongo Bongo)"*

By Bob Hilliard and Carl Sigman. Recorded by Danny Kaye  
with the Andrews Sisters (1947)

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.	They have things like the atom bomb, So I think I'll stay where I am. Civilization: I'll stay right here!
---	--

*"Butcher Pete (Part 1)"*

By Roy Brown and Henry Glover. Recorded by Roy Brown (1949)

Hey everybody, Did the news get around About a guy named Butcher Pete? Oh, Pete just flew Into this town,	And he's chopping up All the women's meat. He's hackin' and Whackin' and smackin', He just hacks, whacks, Chopping that meat!
--	--

[I prefer] particularly Enclave radio. Something about the marching music makes me wanna shoot someone...I'm not violent...really. (Kyriptonite, *Escapist Magazine*, 23 September 2008)

I want to listen to that "Butcher Pete" song [on GNR] they had in the gameplay [preview] videos. Nothing like baseball-batting Raiders [an enemy] while hearing, "He's hacking and whacking and smacking." (Copter 400, *Escapist Magazine*, 15 October 2008)

It's pretty epic with the violin music station in VATS. Almost reminds me of *V for Vendetta* [the 2005 film directed by James McTeigue]. You know, classical music, heads exploding, blood spewing out, etc. (kybotica, *GameFAQs*, 21 December 2008)

The old school music [on GNR] is very catchy to listen to, and may even sometimes go along with your kills. There's nothing wrong with

hearing a soothing oldies song while sniping your enemies from afar.  
 (Shogain, *GameFAQs*, 5 January 2009)

Is there, as this last player declares, “nothing wrong” with listening to soothing oldies while simulating gruesome actions? Or with deriving pleasure, even militant motivation, from a march or a violin piece? What aesthetic, social, and ethical issues materialize by way of such attitudes and actions?

An excursus into debates about music and violence may help clarify the stakes of these queries. First, it’s worth stating the obvious: any music, as a matter of course, can accompany any image, behavior, mood, or setting. Certain musical accompaniments, however, come across as more problematic than others. As with Adorno’s notes on poetry after Auschwitz, the point is not what’s technically possible, but rather what’s allegedly moral and respectable. Besides teasing out stylized instances of anempathetic music in film, scholars have critiqued troublesome pairings of music and violence via studies of war, pain, torture, trauma, and totalitarianism.<sup>24</sup> Joseph Moreno recounts 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 2005:7–8, 176). That Mengele whistled while he worked is unsettling for its 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 acts of injury can seemingly sever this artform’s presumed kinship with ideals of edification, recreation, and pleasure.<sup>25</sup>

Such ideological rupture becomes especially pronounced in cases where music is used to *inflict* violence. In her first of several essays on the American government’s use of music as a device of torture and interrogation, Suzanne Cusick (2006) 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.

A few months after the essay’s publication, this passage came under attack by Jonathan Bellman who, on the 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). 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, poly-syllabic 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). On the surface, Cusick’s comments about the abuse of music do evince a degree of displaced sympathy, as they allocate compassion to both the weaponized musical object and the (really) suffering human subject. But moral outrage isn’t a zero-sum game: any issues at hand are not reducible to whether the problem *is* the torture or the music.<sup>26</sup> As suggested by Scott Deveaux in a brief response to Bellman’s post: “Music 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).<sup>27</sup> Armed with insights from sensory ethnomusicology, sound studies, feminist and queer musicology, and other fields that keep notions of embodiment at the fore, musicologists today should indeed be particularly well positioned—in terms of discourse, if not direct intervention—to rally against claims that musical torture is, as some government officials say, “no-touch torture” (Cusick 2006, McCoy 2006:9–10). To argue that musical torture isn’t so bad because it’s *just sound* is to hide behind an insidious logic, the same logic that informed the George W. Bush administration’s broader attempts to euphemize various torture practices as “enhanced interrogation methods” (McCoy 2006:115).

Contemplation of sonic violence points up the limits of musical inquiry. It is perturbing to know that we inhabit a reality where the Mengoles and interrogators of the world, no less than anyone else, are capable of partaking in music’s pleasures and practical functions.<sup>28</sup> If a shared affinity for music were somehow indicative of additional commonalities among its users, then this would also compel us to acknowledge the humanness of monstrous torturers and, inversely, to see peaceful humans as susceptible to monstrous transformation.<sup>29</sup> Music, when sounded against (or used to inflict) bodily violence, undergoes ontological violence. It suffers an identity crisis—or, more aptly, becomes a canvas onto which we, its patrons and admirers, project our own crises of identity, epistemology, and humanity. With implications of real bodies, real evils, and real, indefensible pain, a subject like musical torture reminds us that, for all our critical eloquence, there’s little means of dictating music’s uses and abuses. Faced with music’s violent turn, it is difficult not to be left with the impression that sometimes—perhaps more often than we would like to admit—rhetorical posturing is all we can offer (cf. Scarry 1985:3–11, 60–61).

In recent decades, the subject of music and the Holocaust has been a recurring locus for scholars trying to work through the aesthetic and ethical quandaries born of violence and atrocity. To quote Joseph Moreno again on the musical 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, emphasis added) Pamela Potter, in similar fashion, observes that the Holocaust left the world with no means of understanding “*how* a society [Germany] so long respected for its arts, letters, and sciences could be capable of such crimes against humanity” (1996:71, emphasis added). And Lawrence Langer asks: “[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, emphasis added) The operative syntax in these statements—*how* . . . ?—sounds at once like a discursive call to arms and a sigh of epistemic forfeit. Literal answers to these questions, after all, can only be tautological. The blithe response to how someone could do both X and Y is straightforward enough: by doing X and Y. It happened, really; it falls to us, in the aftermath, to come to terms with this reality, surreal though it may seem. These writers’ queries are rhetorical in principle—not in the sense that they are posed with answers at the ready, but rather in that they permit no satisfactory answer at all. Each *how* is a howl of angst, a broken cry epitomizing the oft-claimed incomprehensibility and unrepresentability of the Holocaust writ large. The disbelieving statements remind us that, whether we’re dealing with classical tunes, patriotic hymns, or usual suspects like rap and Manson, there is no inviolable music, no artform immune to the darker dimensions of human activity.

Combinations of music and violence have abundant historical precedents and manifestations, in everything from wartime newsreels and V-discs to horror soundtracks and sonic torture. Although music as/for/with violence has long resounded through everyday society, we sometimes talk about such coupling as if it were unthinkable. Rationally, we know it’s far from unimaginable. Nowadays, in fact, it’s neither unusual nor difficult: with technologies of audio production and consumption, it has become easier than ever to (mis)match music with images, ideas, events, and environments—whether by redubbing videos for YouTube, or simply by listening to iPods while walking down the street, rescore our urban travels with promiscuous swirls of sights and sounds (see Davison 2013, Bull 2012:527–531). Today, there’s reason to wonder whether music can any longer be contextualized in a truly ironic or shocking manner.

How many times must filmgoers encounter juxtapositions of upbeat music and violent scenes before these pairings come to seem clichéd, banal, and predictable? How many hours do players have to spend in games from the *Fallout*, *Bioshock*, and *Grand Theft Auto* franchises before the potpourri of diegetic radio music starts sounding like an unironic, even natural, fit? If savvy spectators and gamers have lately learned to expect certain disjunctions between music and image, then what real aesthetic disjunctions remain possible?

The prevalence of music-violence pairings in everyday life does not mean that all pairings are equal. Compared to whistling Nazis and musical torture, a video game's combinations of violent simulations and cheerful music present lower stakes. For while the former cases can be hard to believe, video games are supposed to *be* make-believe, unfolding in virtual spaces demarcated as such. It's just a game, it's safe and sound: these are the stock alibis. Some people might see cause for alarm in how players score virtual violence with popular, patriotic, and classical pieces; many players, in turn, would defend their choices as stylized and subversive, as a way of lending an ear with a knowing wink. These differences in perspective hinge on basic questions about whether games and gameplay are really as virtual as they appear—about how our engagements with gameworlds (and the sounds in there) speak to who we are and our values out here.

To further probe how music and violence can register across the real-virtual divide, there's one quest in *Fallout 3* that deserves considerable mention. It involves one of the most destructive deeds a player can commit in this game: the detonation of an atomic bomb.

## Remembering Megaton

The push of a button—that's all it will take.

One of the first things a player gets asked to do in *Fallout 3* is to rig and set off a nuclear warhead in a populated town. This quest—which was censored in the localized Japanese version of the game—lets the player exterminate a human settlement.<sup>30</sup> The task is optional in that players don't need to complete it to advance through the main adventure. Those who do undertake it, however, are rewarded with in-game perks and a handsome sum of virtual currency.

The target is Megaton, a town named after its central attraction: an unexploded bomb lying in a pool of radioactive water (see Fig. 1.8). Home to about fifty survivors (a large population by postwar standards), Megaton is the first settlement that a player will typically find after escaping from Vault 101. Inside Megaton's makeshift walls are opportunities to assist inhabitants with little chores here and there. Between doing some grunt work for a scientist and convincing a bartender



Figure 1.8. Megaton's unexploded nuclear bomb in *Fallout 3*. The device resembles the Fat Man warhead model that the United States detonated over Nagasaki in World War II. Although a religious cult in Megaton worships this bomb like a mystic idol, most residents have grown to ignore it as they go about their lives, convinced of its dormant, innocuous state. Screen capture by the author.

to kick his drug habit, the player has the chance to bond with a number of hospitable characters while earning small change in the process.

Not every face here turns out to be friendly. In the local saloon, the player meets a suspiciously well-dressed gentleman named Mr. Burke. He's the right-hand man of Alistair Tenpenny, a wealthy eighty-year-old recluse who presides over Tenpenny Tower, a luxury hotel (admitting only pure humans) that looms high above the wasteland rubble. Mr. Tenpenny spends his days on a balcony gleefully using a rifle to snipe at animals, monsters, and irradiated survivors who wander within range. His sole displeasure lies with the nearby settlement of Megaton, which he considers an eyesore in his panoramic view of the world below. He wants Megaton gone from his sight—eradicated in its totality, and the townsfolk along with it. For this deed, Mr. Burke tells the player, Mr. Tenpenny has prepared a sizable reward of 500 Caps (the wasteland's unit of currency) and a key to a private suite in Tenpenny Tower. The player is instructed to strap a pulse charge onto the bomb before reporting to the hotel, where a remote detonator for the warhead will be waiting on Mr. Tenpenny's balcony.<sup>31</sup>

In writing this chapter, I conducted two full playthroughs of *Fallout 3* on PC—the first, between June and October 2010, and the second, between August and October 2011.<sup>32</sup> When I reached Megaton on my first playthrough, I disarmed the bomb instead of detonating it. By doing so, I received 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, whose mercenaries made repeated attempts to assassinate me throughout the rest of my adventure.

On my second playthrough a year later, I tried out the other path. In Megaton, I rigged the bomb as Mr. Burke requested. I then made my way on foot, across a precarious expanse of wasteland, to Tenpenny Tower. When I reached the hotel's iron gates, I told a guard through the intercom that I was here to see Mr. Burke. Although the guard sounded wary in his reply, I was granted entry before long. Once inside, I moved briskly through a posh lobby, past a café, and up several floors by way of an elevator, eventually arriving at a pair of stately doors to Mr. Tenpenny's private balcony.

At this point I paused the game, returned to my Windows desktop, and took a moment to activate Fraps, a computer program that records gameplay video and audio. I did so because I assumed that, going forward, I would want footage of whatever was about to unfold.

Upon resuming the game, I opened the double doors and stepped onto the balcony. I saw Mr. Burke standing to my left, Mr. Tenpenny sitting in a chair to my right, and, between the two gentlemen, an open suitcase containing a remote detonator for the bomb (see Fig. 1.9).

"The pulse charge is rigged?" asked Mr. Burke. "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."

With the gentlemen watching my every move, I walked to the detonator, ready to complete the quest and collect my reward. As I looked at the pulsing red button, an instruction popped up on my interface: *E) Activate Remote Detonator* (see Fig. 1.10). Having played several hours of the game, I knew by this point that E on the computer keyboard serves as the context-dependent Action key, which can lead my character to pick up objects, initiate conversations with NPCs, and perform other standard acts. Looking at this prompt now, I thought of the first



Figure 1.9. (Left) Mr. Burke and (right) Mr. Tenpenny on the balcony of Tenpenny Tower. Screen captures by the author.

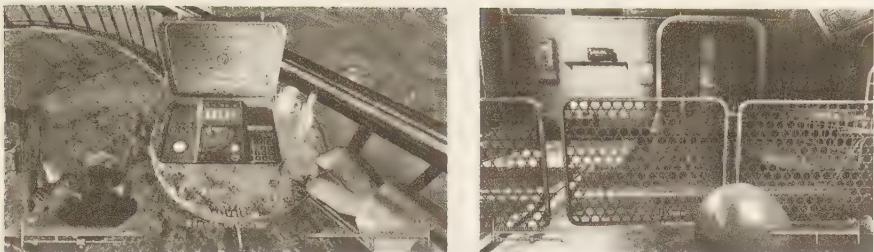


Figure 1.10. (Left) Nuclear detonator (character as adult) and (right) playpen gate (character as a toddler) with respective E button prompts. Screen captures by the author.

time I had seen such an instruction in *Fallout 3*. It was at the outset of the game, back when my character was a toddler. Left in a playpen, I had been tasked with pushing open its gate by pressing E. From nudging a tiny door to annihilating an entire town—definitely not a baby step.

As I stared at the detonator atop Tenpenny Tower, something else struck me as uncanny. For several seconds, I couldn't put my finger on it...until I almost literally did. Since pressing the E key would lead my character to press the Big Red Button in the gameworld, these gestures had an eerie, mimetic link. Most of the time when players press a computer key or a controller button, it causes avatars to perform overt simulated actions—a jump, a roundhouse kick, a flashy spell. “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] 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; cf. Juul 2010:49–61). In the case of this nuclear detonator, the potential for amplification lay not just in my actions but in my character's as well. With my avatar poised to press a button, the simulated deed could be almost too close for comfort. Given our kinesthetic bond, the 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, or what had been playing immediately before—I found myself listening to John Philip Sousa's “The Stars and Stripes Forever.” By my estimate, this was the third or fourth time I was hearing the piece on this playthrough alone. As the United States' official march, Sousa's tune ranks among today's most recognizable musical markers of American patriotism. Through its widespread use in cartoons, films, parades, sports games, and other popular events, the piece invokes the American nation in all its cultural and military pride. As I stood before the Big Red Button, however, this music didn't sound like a badge of liberty, democracy,

and good old-fashioned values. Rather, it drew my attention to Mr. Tenpenny's embodiment of the Enclave's radical authority and extremist ideologies. Sousa's strains, in this moment, sounded familiar yet foreign, salient yet inconsequential. Hovering above the realm of my virtual actions, the march marched forward, indifferent to my cause and to the fates of Megaton's unsuspecting residents. Within a couple of minutes, the piece came to a rousing close, its final seconds punctuated by 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 the sun—and with it, an impossible silence. Impossible, because against the bomb's instant brilliance, the noise took an eternity to reach the tower. But it did 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 then fading to bone-gray, escaping skyward with the last wisps of proof that the town of Megaton ever existed (see Fig. 1.11).

With a single stroke of the finger, my character and I turned the meager lives of Megaton to dust. Where there had once stood a bustling settlement, one would now find only a smoldering hole in the ground. As I gazed into the distance, I noticed my radio was still on, already playing the next selection on the Enclave station. Given the grave circumstances, this music struck me as profane and unacceptably loud, like the magically amplified ringtone of a cell phone going off at a funeral. The fact that it was another one of the Enclave's patriotic tunes—this time, "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.



Figure 1.11. The Megaton explosion. Screen capture by the author.

And so for the first time in as long as I could remember, I turned off the radio altogether—mostly out of tedium, maybe partly out of shame. As I did so, the other two men on the balcony struck up a conversation.

“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 in his slick voice, as if the explosion had been business as usual, a menial chore for the day.

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

I was handed a cash payment by Mr. Burke, along with, as promised, a key to my own hotel suite. With one last glance at the mushroom cloud—its outlines now barely visible in the ashy sky—I made my way through the balcony’s double doors, onto the elevator, down to the first floor, past the gift shop, across the lobby, and back into the wasteland, with blood money jingling in one pocket and my conscience rattling in the other.

\* \* \*

These days, when I rewatch the Fraps footage of my actions on the Tenpenny Tower balcony, what never fails to strike me is how I pressed the detonator button at almost 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 piece would surely be an ideal moment for a hero or villain to perform such a climactic deed. It is often at the ends of anthems and marches, after all, that big symbolic gestures are made—whether it’s the drop of a hockey puck, the initiation of a ceremony, or the commencement of a speech. While my timing with the Big Red Button might have been pure coincidence, I suspect it was motivated in part by my unconscious construal of Sousa’s march as a serendipitous overture to what I assumed would be an incredible display. And since I was also aware on some level that Fraps was recording my actions, perhaps I felt preemptively obliged to put on a show for the eventual lecture audiences to whom I expected to present my video recording. The Enclave’s patriotic music, by lending the moment a certain flair, seemingly nudged me into the role of an actor (or director) all too eager to uphold the stylized conventions of dramatic spectacle. Although I was playing a video game, I may have ended up pressing the button when I did 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 to the beat of its drum, Sousa’s tune in this instance encouraged me to fall in line and conform to what Mr. Tenpenny had asked me to become: a mercenary who is good at doing what he’s told, who is as reliable

as the regimented playlists of the in-game radio. Watching and rewatching the Fraps footage, I have since wondered whether I would have 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 an American march)? Or if the radio had been turned off entirely? The decisive gesture—pressing E—was so slight, so easy that it may have been more of a reflex than a deliberate, calculated motion. But even if I could make the case that my finger slipped in this split second, there's incriminating evidence in how I had rigged the bomb, trekked to Tenpenny Tower, strolled onto that balcony, and positioned my character within reach of the detonator. In truth, it took much more than the push of a button.

To be sure, the game—along with its mouthpieces, Mr. Burke and Mr. Tenpenny—offered plenty of incentives for carrying out the task. Using their cash reward, I was 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 might be misguided, though, to say that it was the game (the medium) or the two gentlemen (AI characters within the medium) that told me to do anything *per se*. Such pressure originated with the game's developers, the human agents who had designed Megaton, planted the bomb, and made the simulation of the explosion possible to begin with. Detonating the bomb is a choice; the fact, however, that a player has the technical *option* to blow up Megaton renders the act, on some level, a formally sanctioned one. Insofar as the detonation exists as one of the game's possible outcomes, it conceivably resides within the game (and its so-called text) prior to a player's engagement with it.<sup>33</sup> The crime, in other words, is already there, awaiting completion as such. All players do is fill out the paperwork.

This strategy of blame displacement should sound familiar. Its principles have come up in the shocking tests of Stanley Milgram (1963), Hannah Arendt's report on Adolf Eichmann's trial (1963), the Stanford Prison Experiment (1971; see Zimbardo 2007), and additional legal, philosophical, sociological, and psychological studies that have aimed to expose the susceptibility of human beings to authority, religious duty, and other external imperatives. Crimes committed 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 phrase) is one that has long underpinned the stereotype of the hardcore addicted gamer—a shell of a being parked in front of a flashing screen, eyes unblinking and body motionless save for twitching hands responding obediently to a game's bombardment of audiovisual stimuli (on the face of it, a machine begotten by a machine).<sup>34</sup> While the stereotype may not be accurate or fair, video games do confront us with the banality of virtual evils, pointing up our willingness to play into the hands of arbitrary rules and oftentimes violent mandates.

Shortly after setting off the Megaton bomb, I did what many players probably do after facing an unusual or scandalous moment in a video game: I sought out Internet forums to read about other people's experiences with the quest. Several online threads contain debates about whether blowing up Megaton is a good idea. Some players advise against detonation, while others enthusiastically recommend it. Most intriguing were the differences in players' arguments, which, in Table 1.5, I've roughly divided into pragmatic versus moral reasoning. Rationalizations in the left-hand column convey a sensitivity to the imagined existence and rights of Megaton's virtual residents.<sup>35</sup> The player Kush reports sparing the townsfolk for the sake of *playing as a good character*, while someone named Rapture, in a slightly different vein, purports to have arrived at the same decision as a result of *being a good person*.

But across all the discussion threads that I found, these sentimental and moral explanations were far outnumbered by those more pragmatic in tone—more concerned, that is, with the monetary, material, and ludic contingencies of simulated destruction than with the act's ethical implications. The comments in Table 1.5's right-hand column might sound calculating and heartless, boiling down considerations of virtual mass murder to a laundry list of pros and cons. Yet these players are being just that—good *players* (rather than morally *good* players), preoccupied foremost with maximizing in-game achievements and currencies. When it comes to a controversial and possibly guilt-inducing quest such as Megaton, the visible pooling of pragmatic views may lead players to rethink whether their own actions in the game can ever be truly offensive or transgressive. Everyone is doing it, the game technically permits it, and the designers expected it to be done as much: call it vindication in numbers.

It should come as no surprise that pragmatic instructions about Megaton are far more prevalent than moral ones. That real destruction is wrong—and, on the flip side, that virtual destruction is not really wrong—are commonsensical claims. The NPCs of Megaton are not actual people: they are in our monitors, existing as lines of 0s and 1s, rightless by virtue of their virtuality. According to philosophers Jon Cogburn and Mark Silcox, 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; cf. Schulzke 2010:131–135 and Sicart 2009:41, 137–149). A rebuttal against this reasoning might insist that players, by committing virtual atrocities, are harming themselves (their own minds and sensibilities) and, by extension, endangering the moral fabric of the real-world societies in which they live.<sup>36</sup> If, after all, the bombing of Megaton were incontrovertibly devoid of ethical significance or outwardly referential capacities, then no one would have seen a need to remove this

Table 1.5. Players' remarks in online forums about whether to detonate the Megaton bomb.

Moral reasoning	Pragmatic reasoning
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> . —samcotts (4 December 2008)	Do all quests in Megaton, then go on a wide killing spree and scavenge all the useful stuff you can. THEN nuke it. D —BYERE (10 January 2009)
I usually play as the good guy in games with decisions like this, so... I didn't [blow up Megaton]. 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!" —Alphawolfy (4 December 2008)	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. —Neonivek (9 February 2009)
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 —Kush (4 December 2008, emphasis added)	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. Bobbis360 (9 February 2009)
I didn't because I am a good person.—Rapture (4 December 2008, emphasis added)	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? How's the decor? —BlackSuits (4 December 2008)

quest from the Japanese version of the game. Censors must have been wary of how players in Japan could make undesirable connections between the virtual act and this nation's real-world nuclear tragedies.<sup>37</sup>

While an atomic bomb has far greater destructive power than, say, a pistol or an ax, the act of pressing a button and watching an explosion from afar lacks the visceral edge that accompanies violence up close and personal. A far-off blast retains an aesthetic (even antiseptic) sheen. With remoteness comes safety, inculpability. Distance and disinhibition, of course, lie at the heart of debates about the real-virtual divide and the alleged soundness of play. It comes down to not just how close our characters are to the simulated explosions in games, but also how close we (as the button-pressing players out here) *feel* we are to these virtual worlds and the depictions of violence in there. Someone who is suspicious of gaming might be inclined to describe players' aloofness toward virtual violence as appalling desensitization. Many players, by contrast, would defend this mentality as hard-earned literacy in the medium's aesthetic, technical, and ludic conventions.

Just as players do not have practical motivations to ponder the ethics of virtual violence every time they perform a routine destructive act, so they cannot usually afford to let incidental music distract them from a game's objectives. Indeed, after spending dozens, even hundreds of hours in the Capital Wasteland, players are liable to ignore the looping tracks on the radio (assuming they keep the device on in the first place). Soundtrack and savagery alike, when repeated ad nauseam, easily become relegated to the status of background noise. In this sense, there's no contradiction between virtual violence and cheerful tunes. To the extent that the two exist as mundane, redundant components of a gaming experience, they go together just fine.

For anyone unaccustomed or resistant to violent games, what can be disturbing is precisely this capability of players to tune out virtual murder without serious misgivings. The issue here is not just the murky border between simulation and reality, but additionally the degree to which players possess sufficient ability and willingness to distinguish between the two. Questions of aural attention up the ante of this debate. Since the advent of sound recording technologies, writers have commented, sometimes warily, on "distracted," "easy," "atomized," and "reduced" manners of listening (Goodman 2010, Keightley 2008, Bull and Back 2003:3-5, Adorno 2002:226, Schaeffer 1966).<sup>38</sup> What motivates these criticisms? Is it a concern about delinquency, laziness, and unculturedness? Who cares if you (don't) listen?

Distress about whether others are listening is inextricable from distress about wanting to be heard—about, that is, whether we (as scholars, players, composers, everyday interlocutors) have anything to *say* that is interesting and important enough to catch the attention of fellow human beings. Anxieties about aurality, in sum, are bound up with anxieties about expression: what we can articulate, what our words can do, whom we are able to convince, and how, therefore, others might

respond, concur, or obey (see Leppert 2005:94, 113). With this, the chapter's themes come full circle, for—as I hope my reflections on Megaton show—few aspects of human interaction prove trickier than persuasion, authority, and obedience.<sup>39</sup> By the same token, few things more deeply shake our confidence in self-expression than unspeakable encounters with violence and its vexing ends.

## Sarasate, Sunrise; or, Beginnings

In the autumn of 2011, as I began drafting oral presentations based on this case study, I was looking for ways to give audiences a sense of the varied music on the radio stations in *Fallout 3*. During the weeks leading up to my first lecture on the game, I used Fraps to capture gameplay footage accompanied by different genres of music playing on the Pip-Boy. Signals for Enclave Radio and Galaxy News Radio had instantly become 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 Pip-Boy to this newly acquired signal. I figured I would leave Fraps running to record a full loop of the station's contents. Later, I reasoned, I could edit this footage down to a couple of short clips suitable for presentations.

As I made my way out of Agatha's cottage, the first piece that came on the radio was the Prelude of Bach's Violin Partita No. 2. I walked to the peak of a nearby hill, a stone's throw from Agatha's abode. Below was an abandoned train yard, a necropolis of twisted metal; to my left, a pale thin creek snaked miles into the distance. Other than some gulls circling above, there were no living creatures in sight. I knew I had things to do in the game—places to go, quests to complete, monsters to kill, a father to find—yet for about half an hour, I stood on this hill, taking in a superb 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 an elegant showcase for Agatha's music, free of violence, dialogue, and excessive ambient noise. 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. Slowly, some light—bright, but for once, not too bright.

As this morning glow yawned across the horizon, I realized that, in all my hours wandering the wasteland thus far, this was the first time I was listening to the radio while definitively *not* playing the game in a conventional sense. In that half hour, I hardly touched my mouse or pressed a key. Having positioned my character at an ideal vantage point, I was content to sit back in my chair, my eyes panning the landscape onscreen, my ears tuned to Agatha's strains (see Fig. 1.12). Upon reflection,

maybe I was so attentive to the music because, like modern concertgoers, I have been taught to act and listen a certain way (quietly, raptly, motionlessly) when confronting a classical music performance. Or maybe it was the unusual serenity of sunrise that compelled me to take a hiatus from adventuring. If ever the hostile wasteland could serve up a fugitive setting for aesthetic contemplation, this would be it.

Since, moreover, I knew Fraps was recording my gameplay—and since I was aware this recorded footage would one day be seen by conference audiences (many of whom, I reckoned, would be musicologists)—perhaps I felt that I needed to be on my best behavior. Sensing that I was (already) being watched, I performed the part of a conscientious listener, exactly as I would do if I were at a live recital of classical music in the real world. Like my dramatically timed button-press on the balcony of Tenpenny Tower, my restrained conduct on this hill may have been informed by a self-conscious impulse to play in a respectable, theatrical fashion. As such, I unwittingly indulged in a protracted moment of focused listening. By taking a time-out from the game's explicit goals, I temporarily played the role of an unpragmatic player.<sup>40</sup> For although it wasn't long before I was off on another quest, it was, in retrospect, with this first disobedience that I subtly transgressed against the game itself, dismissing its call to arms one track at a time.

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In the Capital Wasteland, signs of the end times prevail: visible in craters where bombs first fell, audible in tunes that never change, and virtually palpable in the ashy air brushing against players' second skins. Radio music in *Fallout 3* invites



Figure 1.12. The Meresti Trainyard at dawn. Screen capture by the author.

cultural critiques and close readings, but through its repeated juxtapositions against simulated atrocity, it also rings hollow, divested of significance. It is from this portrait of music in upheaval—a first philosophy of sorts—that I will venture, in the remainder of *Sound Play*, across other virtual worlds in search of alternative musical epistemologies, agencies, and communities.

Despite (or precisely owing to) their simulated nature, video games can really push our buttons. In doing so, they offer expedient platforms on which to stage and scrutinize the critical fallout of collisions between music, violence, and other sensitive subjects. Inquiries along these lines stand to yield insights into our habits, ethics, and ways of living in worlds both real and virtual. Violence, for one, explodes some of our most precious assumptions about musical and human values. Returning to the case of music and torture, consider this remark by Suzanne Cusick:

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:paras. 2–4, emphasis in original).

When Jonathan Bellman took Cusick to task for her initial article on music and torture, he insisted that the "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 musical torture lies beyond the intellectual providence of musicology obviously depends on how the boundaries of the discipline are defined. One could, in any event, describe many musical and scholarly pursuits as special pleading—or, to put it in less pejorative terms, epistemic activism (cf. Leppert 2007a:xvi). Working within designated disciplines, writers may feel pressure to foreground specific subjects while downplaying others. In particular ethical, social, and political contexts, maybe music can and should sometimes take a backseat to certain topics. Presumably, however, it remains the job of music scholars (who identify primarily as such) to salvage, emphasize, and publicize the significance of music to the best of their abilities. Questions of whether or *how much* music matters do not tend to get asked. According to semantic imperatives, the musicologist's task is to make music matter—to locate avenues

toward meaning and, subsequently, to tailor this meaning into persuasive, publishable narratives. It is inconvenient, not least on pragmatic and professional grounds, to say that music on occasion isn't as pertinent as it is made out to be. Taken to extremes, conceding music as less than crucial (as just sound, just play) would be tantamount to proclaiming the end of musicology.

Against the flash of extinction, issues of music—why it matters, what it's good for, and how we're supposed to talk about it—are prone to pale by comparison. Staring into the maw of violence and apocalypse, it can feel a little imprudent to direct our attention toward matters of artistic pursuit. Aesthetic contemplation, some might say, is a luxury. Others would deem it a necessity, our surest proof of humanity. While there may be truth to both arguments, it is the latter that keeps us going. This alone is reason enough to keep our fingers pressed not against big red buttons, but instead against the pulse of humane and humanist inquiries.

Echoes of ruin can leave us with doubts as to whether music has anything left to say. When all is said and done, the soundest sentiment may be to believe that it does and always will.



# CHAPTER 2

## How Celes Sang

Life, dreams, hope—where do they come from?

And where do they go?

Such meaningless things!

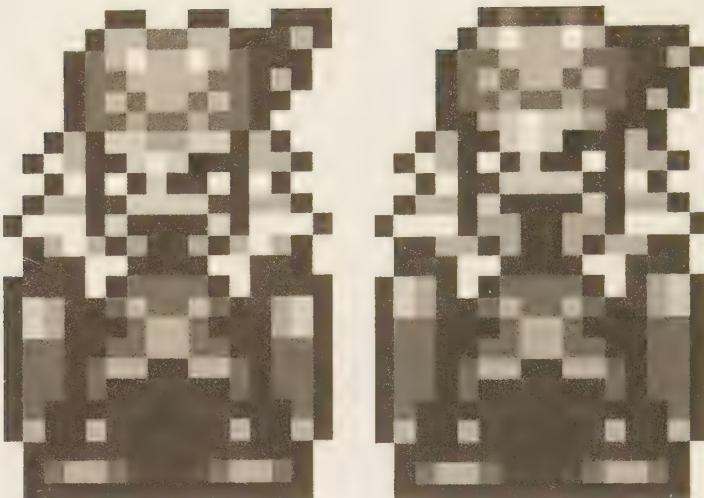
Why do you build, knowing destruction is inevitable?

Why do you yearn to live, knowing all things must die?

—Kefka Palazzo

Meet Kefka—flamboyant jester, trickster extraordinaire, nihilist psychopath. Like many villains, he's out to destroy the world. Unlike most, he actually succeeds.<sup>1</sup> As the lead antagonist in the 1994 Super Nintendo game *Final Fantasy VI* (FFVI), Kefka comes with a trademark utterance: a maniacal whooping laugh, synthesized by way of a staccato descending melody.<sup>2</sup> The first time a player hears this sound, it is synchronized to a looping two-frame animation of Kefka's convulsing body—a pixelated assemblage of heaving shoulders, a bobbing head, and most notably a flapping mouth, unhinged like the villain's mind (see Fig. 2.1). This pairing of melody and gesture renders the former legible *as* laughter, anchoring the imagined source of the sound in Kefka's throat rather than, say, in the musical underscore or elsewhere in the game's environment. Despite the mechanical and minimal nature of the simulated laugh (which, all told, comprises no more than two seconds of 16-bit audio), many players to this day count it among the most unforgettable, unsettling noises in video game history. Over the years, fans have paid tribute to the compact sound by creating videos that present, parody, and remix the laugh to amusing and provocative ends.

Kefka's laugh is a crystalline example of how noises in video games take on significance via creative deployment. Histories of early game audio often stress the challenges that composers faced in their attempts to fashion salient sounds out of *beeps* and *boops* (see Fritsch 2013:12–20, Karhulahti 2011:36–37, Jørgensen 2009:13–23, Collins 2008a: 20–51, Gersic 2008:145–147, and Bessell 2002:141–142). Until the 1990s, most video games accommodated no more than a few simultaneous melodic tracks. Hardware and memory limitations further prompted extensive reliance on the repetition of short musical loops.



*Figure 2.1.* The two animated frames of Kefka's laughing sprite. To make out these images (and distinguish between the two), it might help to squint at them from a distance.

Game composers, consequently, had to telescope minimal musical material into sounds that could stand up to the monumental fantasies and larger-than-life characters of virtual worlds. Noises accompanying a player's encounters with dragons and giants had to be presented in a manner that inspired similar registers of awe and enchantment. Nobuo Uematsu (b. 1959), composer for FFVI and for many other games in the *Final Fantasy* franchise, described the difficulties and rewards of game audio design as follows: “The NES [Nintendo Entertainment System] only had three [melodic] tracks, 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 composers [...] had totally different creations by using the same three instruments” (quoted in Belinkie 1999).

Composers were not the only ones carrying the torch of creativity. Players, too, grew ears to extract maximum significance from minimal sounds. In the same way that players had to learn to interpret the pixelated graphics of early games as ludic iconography—for example, a stack of dots as a spaceship—so they had to exercise their aural imaginations when confronting the tinny *pew-pews* of interstellar battle. As game audio design came of age, composers and players engaged in a semiotic business of audio data compression and decompression.<sup>3</sup> They were tasked with negotiating technological constraints—or, more specifically, with cultivating the medium’s expressive possibilities to forge effective forms of sonic shorthand.<sup>4</sup> This may bring to mind innovations in radio dramas a half

century earlier, for which sound engineers conceived of an “alternate approach to reality [that] relied upon the suggestive power of sound [...] in symbolic, rather than realistic, terms” (Dyson 1992:337; see also Huwiler 2005:45–59, Douglas 2004:7–12, and Rattigan 2002:123–133).<sup>5</sup> Or, in the realm of visual arts, we could think of how comics rely on “iconic abstraction” and “amplification through simplification,” in which the artist, by “stripping down an image to its essential meaning [...] can amplify that meaning in a way that realistic art can’t” (McCloud 1993:30, 46; see also Chute 2010:4–9).<sup>6</sup>

Postapocalyptic scenarios in the previous chapter ventured to the epistemic brink of Kefkaesque nihilism, noting how violence and other distressing topics shake up everyday views on why music matters, how it works, and what it can say. The present chapter hits the reset button, taking us back to a generation when game audio, on its surface, offered comparatively little in terms of raw materials. Faced with technical bottlenecks, how did composers make game sounds say something?

For starters, composers sometimes literally made their sounds *say* something—that is, by molding them into synthesized approximations of vocal expression. The resulting utterances were not always speech or speechlike *per se*; in fact, some of the most iconic video game soundbites have historically been extralinguistic pronouncements (cries, screams, grunts, laughter), neither spoken nor sung.<sup>7</sup> Even without discernible verbal content, a sound can seem to say more—to signify with greater intensity, specificity, and urgency—when it is framed and apprehended as vocal in nature. Take Kefka’s laugh: its appeal derives from the listener’s understanding that the noise is emanating from the villain, issuing forth as a rare manifestation of vocal excess in a game that otherwise includes no synthesized or recorded speech. Early in FFVI, the player learns to recognize this sound as laughter through its synchronization with Kefka’s palpitating figure.<sup>8</sup> Later on, the game occasionally presents the sound without these coinciding animations, removing the indexical scaffold to let the noise stand comprehensibly on its own.

As remarkable as Kefka’s cackle may be, FFVI contains another case of vocal synthesis that is far more elaborate in scope. It is a spectacular opera performance, one with pixelated *mise en scène*, star-crossed lovers, doppelgängers, backstage drama, and a vindictive talking octopus. We’ll get there soon—but first, a word on speech and song.

## On the Genealogy of Voices

When arcade and console games introduced speech synthesis technologies in the early 1980s, the artificial voices that resulted were full of quirks.<sup>9</sup> Limitations in hardware and software led to mispronunciations, choppy delivery, and improper inflections. In the following decade, various game systems transitioned to

CD-ROM formats that could accommodate recorded human voices. While this development improved the overall intelligibility of in-game speech, it did not give way to natural-sounding dialogues *per se*. Recordings of human voice actors came with their own oddities—owing no longer to technical restrictions, but rather to unpolished scripts, lack of coordination between voice actors, and the shortchanging of resources devoted to a game’s audio.<sup>10</sup> This wasn’t necessarily so bad: for with their *so-bad-it’s-good* appeal, stilted voices had the potential to pass as charming products of stylized design.<sup>11</sup> On occasion, awkward monotonous speech fit right in with corresponding games’ blocky graphics and synthesized noises.<sup>12</sup> In this sense, dialogues that sounded too refined could have come off as incongruous in games that otherwise made no pretensions to aesthetic verisimilitude.

Video games over the last decade have shown a sharp rise in voice-acting standards. Hollywood A-listers (among them Judi Dench, Mark Hamill, Neil Patrick Harris, Tricia Helfer, Samuel L. Jackson, Heidi Klum, Liam Neeson, Gary Oldman, and Patrick Stewart) have lent their vocal talents to memorable characters, while dedicated voice actors such as Troy Baker, Jennifer Hale, and Nolan North are hailed in gaming circles as celebrities in their own right. The annual Spike Video Game Awards has included categories for achievements in voice acting since its first show in 2003. Many games nowadays contain enormous volumes of recorded dialogue, and with big-budget franchises (especially in adventure, action, and role-playing genres), voice acting is virtually guaranteed.

Not all players and critics regard the advent of voice-saturated games as a positive development.<sup>13</sup> Journalist Kirk Hamilton, citing examples from the *Final Fantasy* series, argues that voice acting can inhibit immersive gameplay by distracting players from an enchanting musical soundtrack:

Melody and voice-acting can very quickly come into conflict. [...] *Final Fantasy VII* [released in 1997] has no voice-acting, no ambient sound, and minimal sound effects. Every scene is drawn and punctuated by the music, and the story’s wide range of emotions is conjured entirely by enthusiastic, melodramatic melody. If you give yourself over to it, it’s spellbinding, like plunging your head into a deep well of sound and symphony. [...] Contrast the experience of playing FFVII with the more recent *Final Fantasy XIII* [released in 2009]. In [*Final Fantasy XIII*], characters are fully voiced, shouting their way through the entire 60-hour game. [...] Our ears simply don’t have the bandwidth to process both a strong melody and a person talking. (2011; cf. Collins 2013:70–76)

Hamilton’s observations echo those of film critics who expressed dissatisfaction with the rise of talkies nearly a century earlier. Some writers from this transi-

tional era of cinema drew on seemingly counterintuitive vocabularies of *loss* when lamenting the *addition* of synchronized voices to films. In the late 1920s, the French filmmaker René Clair observed:

In [the talkie's] variety of sounds and its orchestration of human voices, it seems richer than the silent cinema. But isn't its richness false and its luxury ruinous? The screen is losing more than it is gaining by this "progress." It is conquering the world of voices but losing the world of dreams over which the silent cinema reigned. I observed the spectators leaving after hearing a talking picture. [...] They were not plunged into that comfortable numbness which a trip to the land of pure images used to bestow on us. [...] *They had not lost the sense of reality.* [...] The imaginary words we used to put into the mouths of those silent beings [actors] in those dialogues of images will always be more beautiful than any actual sentences. *The heroes of the screen spoke to the imagination with the complicity of silence.* Tomorrow they will talk nonsense into our ears and we will be unable to shut it out. (1929:141, 144, emphasis in original; see also Fischer 1977:35–36)

A concern raised by both Hamilton and Clair has to do with spoken words' ability to compromise absorptive media experiences. For while aural attention is not a zero-sum game, there's no denying the force with which voices draw perceptual focus. Tuning out intelligible speech is not outright impossible, but it can at times be as difficult as staring at a comprehensible word (see: *apple*) while trying to refrain from taking in its meaning or subvocalizing its pronunciation. Perhaps we are so alert to spoken words in part because we assume they embody the communicative efforts of other human beings. Our logocentric instincts tell us that where there's a speaking voice, there's someone with something to say—and, therefore, that it might behoove us to listen.

Singing voices operate somewhat differently. As with speech, songs may carry comprehensible lyrics that place demands on linguistic processing. But unlike speaking voices, singing voices come with explicitly musical properties—stylized melodies, dynamic contrasts, instrumental accompaniments—that can obscure or pull attention away from the text at hand. The operatic voice, for one, has been described as capable of transcending speech altogether, materializing as a pure cry unfettered by verbal particularities (see Poizat 1992:40–44, 77–79). Aspects of operatic singing that convey extralinguistic flight include the prolongation of syllables, rhythmic irregularities in declamation, intonations that override speech inflections, the competing sounds of orchestras and choruses, extreme vocal tessitura, and the foreign language of a libretto. It has been said that opera may be most enjoyable when it is performed in a language one doesn't understand; in

opera, to wit, voice reigns supreme, with text playing second fiddle.<sup>14</sup> In romantic and glorified delineations of voice, operatic singing has the capacity to gesture toward the dream worlds allegedly conferred by silent films, non-voice-acted video games, and spellbinding media at large.

Compared to instances of spoken dialogue, cases of diegetic singing in video games are few and far between. When singing does occur, it is thus likely to command significant attention, taking center stage and marking out a self-important space of performance (see Fig. 2.2).<sup>15</sup> One thing we can expect from embedded performances is that they will pretty much never proceed as expected. Something has to go amiss (onstage, backstage, or both) in order to produce the sorts of intrigue that would warrant the inclusion of a metadiegetic event in the first place. Nested spectacles—a play within a play, a movie outing in a short story, a recital in a cartoon—serve as expedient occasions for character development, plot advancement, and reflexive commentary on the overarching fiction and its larger themes (see Garrett 2011:247–252, Citron 2011, Joe and Gilman

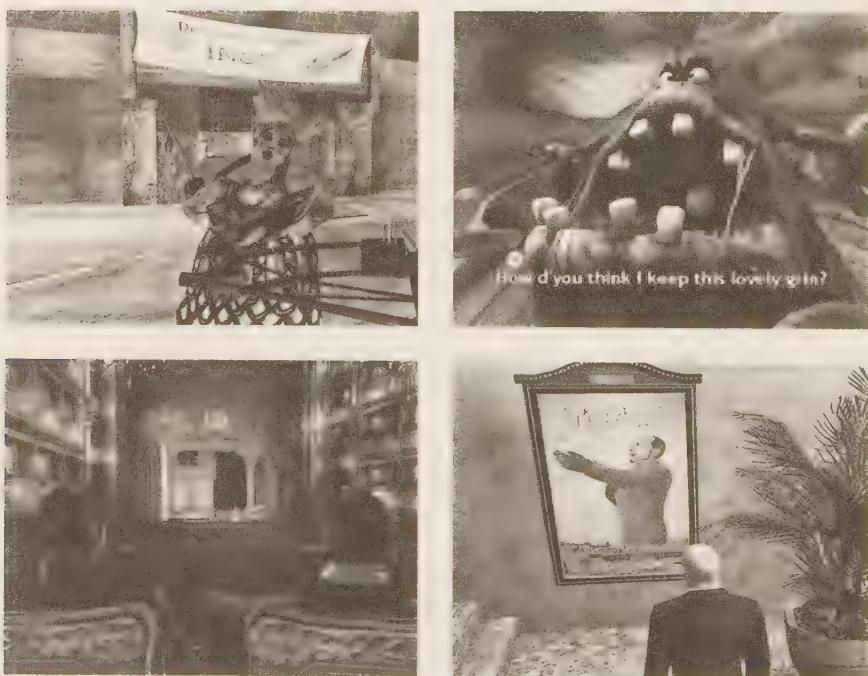


Figure 2.2. Instances of operatic singing in recent video games. Clockwise from upper left: (1) battle with Inge Wagner in *The Operative: No One Lives Forever* (2000), (2) battle with Great Mighty Poo in *Conker: Live & Reloaded* (2005), (3) the Paris Opera's rehearsal of Giacomo Puccini's *Tosca* in *Hitman: Blood Money* (2006), and (4) a performance of John Gay's *The Beggar's Opera* at Covent Garden in *Assassin's Creed III* (2012). Screen captures by the author.

2010, Goldmark 2005:107–131, Joe and Theresa 2002, and Tambling 1994). It is often at the most glitzy, glamorous outings (say, a night at the opera) where the most debauched and outrageous things end up happening behind the scenes. And for good reason: juxtapositions of the refined and the vulgar, the high and the low, and the scripted and the spontaneous make for subversive, entertaining schemes.

In terms of popular perception, few artforms today are reputed to be more highbrow, serious, and esoteric than opera. Video games, by contrast, still get stereotyped as lowbrow, diversionary, and (especially with modern smartphones) accessible.<sup>16</sup> When opera crops up in games, it is hence liable to come across as a foreign presence, a rarefied display that agitates a game's aesthetic and narrative frames. Opera's curious presence in gameworlds offers a means of thinking through additional conceptual tensions—between background and foreground music, song and speech, diegetic and non-diegetic realms, and high and low cultures.

This chapter is about the big stories that little sounds tell. It explores the craft, reception, and expressive possibilities of early game audio through cases of synthesized voices—specifically, the sights and sounds of an opera performance in *Final Fantasy VI*. The opera's main attraction is a mezzo-soprano aria sung by the warrior-turned-diva Celes Chere. A chief inquiry pertains to how Celes sang (the past tense being key), with emphasis on the vicissitudes of remembrance, nostalgia, and enchantment. To infiltrate the cult of this digital diva, I look to online social forums, interrogating the vocabularies, personae, and interpersonal dynamics of game music fandom articulated therein. In doing so, I trace the legacy of the FFVI opera from its humble 16-bit origins to its grand adaptations for the live concert stage. From this trajectory, I extrapolate broader perspectives on what game audio once was, what it has become, and its powers to engage musical imaginations past and present.

## Thus Sang Celes

FFVI was developed and published by the Japanese company Square. Released in Japan and North America in 1994, the game stars an eclectic party of warriors united in their efforts to overthrow a corrupt Empire and the maniacal Kefka.<sup>17</sup> A third of the way through their adventure, these heroes decide to set out for the Empire's capital. To reach their destination, they need the airship of an elusive jetsetter named Setzer Gabbiani. Searching for Setzer eventually leads the heroes to an opera house, where they find the Impresario suffering a panic attack. A mysterious gentleman—Setzer, it turns out—has recently sent a letter announcing his intentions to abduct the prima donna, who is scheduled

to perform the lead in the upcoming production of an opera called *Maria and Draco*. Fortunately (and improbably), one member of the heroes' party, Celes, happens to look exactly like the resident starlet. Locke, the party leader, hatches a plan: Celes will take the prima donna's place on the opera stage so that when Setzer swoops in and mistakenly kidnaps her, the other heroes can track both of them back to the airship. Celes protests at first but eventually complies. As she dashes backstage to prepare for this last-minute changeup, her companions head to the balcony to take their seats.

With its lavish stage design, courtly themes, large orchestra, and Romantic lyricism, the FFVI opera features many characteristics of nineteenth-century grand opera. The performance showcases a cocktail of additional musical styles, mixing tonal, melodic, rhythmic, and contrapuntal idioms of Broadway theater, Japanese pop, Baroque organ preludes, hunting songs, marches, and waltzes (see Ex. 2.1).<sup>18</sup> Singing voices in the performance are simulated by synthesized tones, with each note enunciated as (what sounds like) an open-vowel (ō/ah) phoneme. Rapid pulsations within individual tones impart the effect of heavy vibrato. Progressions from note to note occasionally match up with the opening and closing of performers' mouths, shoring up the impression that this music is indeed sung. The melodies of the three main characters—Celes, Draco, and Ralse—are glossed by captions in dialogue boxes (see Fig. 2.3). Two additional roles, the Narrator and the Chancellor, look as if they have speaking rather than singing parts because their captions are not accompanied by the pseudo-vocal melodies of the three leads.

The player of FFVI has to undertake various small tasks throughout the opera. Depending on a player's proficiency, the performance will take between twenty and twenty-five minutes to complete. Below are descriptions of the opera's onstage action, the offstage events, and the active duties of the player.<sup>19</sup>



Figure 2.3. (Left) Celes responding to Locke's plan and (right) Draco's opening lines in the opera. Screen captures by the author.

Role	Voice Type	Cast
Maria, Princess of the West	Mezzo-soprano	Celest
Draco, Warrior of the West	Bass	Unnamed
Ralse, Prince of the East	Tenor	Unnamed
Chancellor	N/A	Unnamed
Narrator	N/A	Impresario

*Example 2.1.* Opening measures of (a) the Overture, (b) the Aria, (c) the Waltz & Duel, and (d) the Grand Finale. Parts are labeled according to the instrumental timbres approximated by the game's synthesized sounds. Music by Nobuo Uematsu. Transcriptions by the author.

(a)

snare roll and cymbal crash

Full orchestra

Strings

Full orchestra

Strings

(b) Metallophone (with heavy reverb)

Metallophone (with heavy reverb)

## Example 2.1. Continued

(c)

Snares  
Clarinet  
Piano  
Trumpets  
Double Bass

(d)

Cymbal  
Snares  
Trumpet  
Timpani



### I. OVERTURE (~4'46")

Onstage: House lights dim. The conductor leads the orchestra in an overture. The Impresario, serving as Narrator, appears and offers a bit of backstory (delivered in captions).<sup>20</sup> He explains that the East and the West are at war. The Princess of the West, Maria, is in love with Draco, the hero of the Western army. But with this army recently defeated and Draco presumed dead, Maria is now being forced to marry Prince Ralse of the East.

Upon the Narrator's exit, the operatic action begins in earnest. Draco wanders onto the stage—despondent, alone, stranded in an unfamiliar place. He sings the opera's first lines, simultaneously apostrophizing Maria and instructing the player to hear his melody as voice: *Oh Maria / Oh Maria / Please, hear my voice! / How I long to be with you!*

Offstage: Locke gets out of his balcony seat and heads to Celes's dressing room.

Player's Tasks: Guide Locke to the dressing room.

### II. ARIA DI MEZZO CARATTERE (~3'55")

Offstage: In the dressing room, Locke chats with Celes, who has been made up to look like Maria. Locke advises Celes to review the libretto before she heads onstage to perform.

Onstage: Alone on the castle balcony, Maria (Celes) sings an aria in which she yearns for Draco's return. During the instrumental interlude, Draco's specter materializes, dances with Maria for a few moments, then vanishes. The Chancellor appears at the end of the aria to tell Maria that Prince Ralse is requesting her presence at the wedding ball.

Player's Tasks: Have Celes review the libretto and then guide her onstage to perform her solo number.

## III. WEDDING WALTZ &amp; DUEL (~4'00")

Onstage: Maria and Prince Ralse are waltzing at the wedding ball. The festivities, however, are interrupted before long by a surprise attack by Draco and other soldiers of the Western army. Ralse challenges Draco to a duel for Maria's hand.

Offstage: Locke exits the dressing room after watching Celes's aria performance from backstage. On his way back to the balcony, Locke sees a piece of paper on the floor. It's a letter from the villain Ultros, a talking octopus that the party defeated once earlier in the game. The note reads: *I owe you one, so I'm gonna jam up your opera!*—Ultros (troublemakers in this game apparently enjoy sending signed letters to forecast devious intentions).

Player's Tasks: Get Locke to exit the dressing room, read the note on the floor, and then tell the Impresario about Ultros's plan.

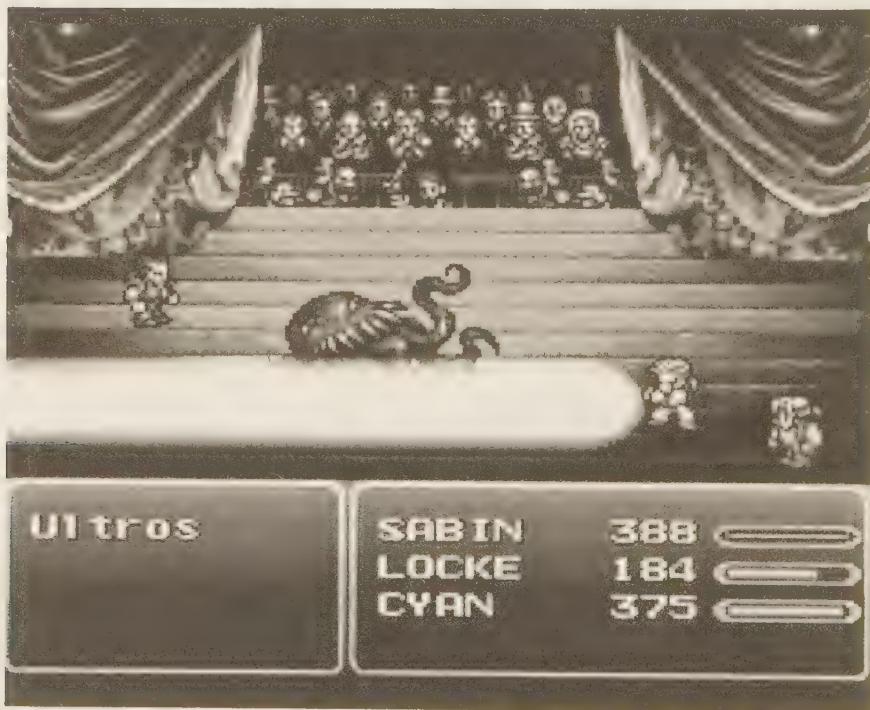


Figure 2.4. The heroes' battle with Ultros on the opera stage. Screen capture by the author.

#### IV. GRAND FINALE (~3'14")

Offstage: Locke and the Impresario spot Ultros on the rafters preparing to drop a four-ton weight on Celes below. Locke dashes across the rafters to confront Ultros. After a brief tussle, both fall onto the stage and in the process knock out the actors playing Draco and Ralse.

Onstage: With the opera's two male leads unconscious, the music stops and a stunned silence ensues. The Impresario rushes onto the stage and tries to convince the audience that this interruption is all part of the performance. At this point, the player (controlling Locke and other heroes) must engage Ultros in battle while the orchestra plays the Grand Finale and the audience looks on (see Fig. 2.4). When Ultros is defeated, he flees the stage. But the heroes have no time to rest—for immediately afterward, Setzer (the self-pronounced kidnapper) arrives and seizes Celes (mistaking her for the resident prima donna). With this, the show comes to a premature close. Owing to disruptions by Ultros and Setzer, it is not clear how the duel between Draco and Ralse is supposed to end. Following the curtailed performance, the heroes leave the opera house. They eventually track down Setzer and convince him to lend them his airship.

Player's Tasks: Lead Locke to Ultros on the rafters (within five minutes) and then defeat this villain in battle on the stage. The remainder of the scene progresses without the player's input.

\* \* \*

*Example 2.2.* Second stanza of FFVI aria. Parts are labeled according to the instrumental timbres approximated by the game's synthesized sounds. Music by Nobuo Uematsu. Transcription by the author.

The musical score consists of five staves, each representing a different instrument or vocal part. From top to bottom, the parts are: Maria (soprano), Violin, Harp, Trombone, and Bass. The music is in common time and major key. The vocal line for Maria starts with a single note followed by a series of eighth notes. The violin part follows with its own eighth-note pattern. The harp part features a continuous eighth-note loop. The trombone and bass parts provide harmonic support with sustained notes and simple rhythmic patterns.

## Example 2.2. Continued

The image shows three staves of musical notation in G major (two sharps) and 2/4 time. The top staff uses a treble clef, the middle staff an alto clef, and the bottom staff a bass clef. The notation consists of various note heads (solid black, hollow white, and filled with diagonal lines) and stems, some with short horizontal dashes at their ends. Measures are separated by vertical bar lines, and measures 3 and 5 contain double bar lines with repeat dots. Measures 4 and 6 begin with a fermata. Measures 1 through 5 have a common ending, indicated by a brace under the first five measures and a repeat sign. Measures 6 through 9 have another common ending, indicated by a brace under the first four measures of this section.

Table 2.1. Form of FFVI aria. Time stamps in bottom row are based on the musical track from the game's original album.

	A			B	A'		
Introduction	a	a	a'	b	a	a'	Coda
	Stanza 1	S2	S3	Interlude	S4	S5	
8 bars	8	8	8 + 2 (cadential extension)	14	8	8	8 + 2 (c. ext.)
0:00 (minutes)	0:26	0:55	1:21	1:50	2:35	3:00	3:23—3:55

The centerpiece of the FFVI opera is the second scene, the solo aria that Celest (as Maria) performs on the castle roof. The aria's form resembles a modified strophic song with instrumental introduction, interlude, and coda (see Table 2.1).

Apart from minor discrepancies in cadences, instrumentation, and accompanimental figurations, the music across the aria's five stanzas remains almost identical. Celest's voice spans a modest range of one octave, sporting no ornamentation and resounding clearly above rippling arpeggios. This melody's gentle arching contours, internal phrasal symmetries, steady harmonic rhythms (typically one chord change per measure), and consonant tonal language evoke the Italianate *cantilena* writing of Vincenzo Bellini, Gaetano Donizetti, and other early Romantics (see Ex. 2.2). Events in the FFVI aria unfold as follows.<sup>21</sup>

### Introduction (captions only—no synthesized voice or visible Narrator)

The forces of the West fell, and Maria's castle was taken. Prince Ralse of the East took her hand by force. But she never stopped yearning for Draco.

*Enter Maria.*

### Maria

Oh my hero, so far away now,  
Will I ever see your smile?  
Love goes away like night into day.  
It's just a fading dream.

I'm the darkness, you're the stars.  
Our love is brighter than the sun.  
For eternity, for me there can be  
Only you, my chosen one.

Must I forget you? Our solemn promise?  
 Will autumn take the place of spring?  
 What shall I do? I'm lost without you.  
 Speak to me once more!

*Enter Draco's specter.*

**Draco**

Come, Maria, follow my lead!

*Draco's specter dances with Maria. The specter disappears, leaving behind a bouquet of flowers.*

**Maria**

We must part now, my life goes on.  
 But my heart won't give you up.  
 Ere I walk away, let me hear you say  
 I meant as much to you.  
  
 So gently, you touched my heart.  
 I will be forever yours.  
 Come what may, I won't age a day,  
 I'll wait for you always!

*Enter Chancellor.*

**Chancellor** (text only—no synthesized voice)

Prince Ralse is looking for a dance partner. Leave the past behind! Our kingdom is adopting the spirit of the East!

*Exit Chancellor. Celes casts a final glance into the distance, then follows.*

The aria's completion depends on the player's successful input at several points throughout the number. At the beginning of each of the first three stanzas, the game prompts the selection of the correct opening words, which a player should recall from having had Celes peruse the libretto prior to the performance (see Fig. 2.5). Here are the incipits (with incorrect lines struck through):

Stanza 1: Oh, my hero... / ~~Alas, Draco...~~  
 Stanza 2: ~~I wish I...~~ / I'm the darkness...  
 Stanza 3: Must I... / ~~Prince Ralse...~~



Figure 2.5. Prompt for incipit selection in the aria's second stanza. Screen capture by the author.

Following these three stanzas, the aria's interlude presents two tasks of its own. First, the player must lead Celes to dance with Draco's specter when it appears (an action that entails using the gamepad's directional buttons to move Celes around the roof of the castle). And second, after Draco's specter vanishes and leaves behind a bouquet of flowers, the player has to direct Celes to *pick up the flowers, climb the stairs, and toss the flowers from the highest balcony* (the libretto's instructions) before the interlude ends. If a player accomplishes both tasks in a timely fashion, the second half of the aria will automatically reach its conclusion without any more input from the player. But should the player at any point botch the interlude's requisite actions (or choose an incorrect stanza incipit before that), the production screeches to a halt. In this case, the player must reattempt the aria from the beginning.<sup>22</sup> A similar fail-state arises in the event a player is unable to reach Ultros on the rafters within the five-minute time limit (during the Waltz & Duel scene) or loses to this villain in battle (during the Grand Finale).

A player's range of admissible actions throughout the opera is technically quite limited. There's little means or incentive to deviate from the deeds needed to bring the performance to a proper close. The aria in particular, by impelling players to pick out correct lines from stanza to stanza, points up the opera's imperative text and the setbacks awaiting anyone who neglects to reproduce it with utmost accuracy. A single slip-up can spell the performance's unceremonious

termination and the need to do it all over. This kind of penalty might sound familiar to fledgling musicians who are instructed to restart a passage when they make too many mistakes (with note perfection looming as the objective). The FFVI opera's demands for textual compliance may also resonate more generally with the experiences of music students who are taught to abide by a score's prescriptive authority. With this opera as well as certain pedagogies of musical performance, the message to the player-musician is clear: stick to the script or be condemned to repeat it.

Although the progress of the FFVI opera depends on a player's actions, the performance is not as rigorous as many other parts of the game. Memorizing a few lines of an aria, pressing a button to toss flowers off a balcony, and defeating Ultros (a pushover) in battle are relatively straightforward affairs. Developers could easily have made the opera sequence more strenuous—say, by requiring the player to memorize extra lines or by making Ultros a tougher opponent. The design could also have swung in the opposite direction, doing away with player-input altogether and rendering the opera as a fully noninteractive cutscene. As it stands, the flow of the opera strikes a happy middle ground. The aria is a good case in point: a player needs to fulfill small tasks up to the end of its interlude, but afterward can relax and watch the number's second half without any pressure to perform.

Besides deftly balancing spectacle and play, what is it about the FFVI aria that has spoken so powerfully to players? How has the piece come to occupy such a special place in gamers' memories and in the greater oeuvre of game music? From what technical, aesthetic, and narrative idiosyncrasies does Celes's voice derive its past and present allure? Where, in short, lies the magic of synthesized song?

## Timely Meditations

The Internet today is rife with players' video recordings of the FFVI aria. Among the first of these recordings to appear on YouTube was uploaded by a user named zeroreplloid14 on 13 September 2006. Within six years, as of October 2012, this four-minute clip accrued a respectable 222,292 views, 880 thumbs-ups, 27 thumbs-downs, and 816 user comments (totaling about 20,000 words). With terms like "chills," "goosebumps," "touching," and "heartbreaking," many commenters emphasize the unexpected delight of encountering such a moving scene in a 16-bit video game. Of course, admirers of this (or any) YouTube video are a self-selecting group to some extent, comprised of individuals seeking out specific clips for a nostalgia fix and the companionship of Like-minded viewers. In a sense, long-term fans of the FFVI aria might come to its YouTube recordings in part to make up for lost time—that is, to redress the fact that online expressions

of fandom were just barely possible when the game first came out in 1994. For even though FFVI players back then could assume that there were millions of others like themselves around the world, it wasn't easy to receive explicit, hyper-visible testimonies of collective enthusiasm. What YouTube and other online sites offer modern fans of old-school media, therefore, is not simply a sense of contemporary community, but also the retroactive verification that they have been a community *all along*.

Nostalgic, sentimental, and passionate comments are no doubt common on YouTube. Of the 816 responses to zero reploid14's video, forty-five contain a variant of the word "cry" or some associated sobbing expression (such as "brought me to tears," "choked up," "lyk dis if you cry everytim," and teary-eyed emoticons). A subset of these remarks comes from users who go the extra mile to identify themselves as men:

I don't even remember what the hell the opera was about, but this makes me, a grown man, cry every time. (Kevv14, 2011)

You're not a man until you cry to this. (BLAKATheSINISTER, 2011)

This part did make me cry. And I am a guy! (98wongjf, 2009)

Think you're not the only one :') (Proserpyne, response to above, 2009)

Lmfao I'm glad I'm not the only guy who cried at this part...I'm NOT the only guy that cried at this part... right? (ICheatAtGolf, response to kitykatdude1, 2008) [+ 6 thumbs-ups]

+ 1 Guy (steveguy, response to above, 2008) [+ 4 thumbs-ups]

These comments volunteer information about gender alongside avowals of teary reactions. Many admissions pop up consecutively and as direct responses to the sympathetic declarations of other male-identified viewers (as in two pairs of quotes above). Simultaneously humble and haughty, the unsolicited confessions come off as bids for male-homosocial solidarity via masculinist posturing (of the men-who-aren't-afraid-to-cry persuasion). The result is a coming-out party for tear-prone lovers of synthesized song.<sup>23</sup> Such disclosures of male identity also work to intensify the compliments to the music at hand, affirming that the aria is so beautiful, it can even make a guy cry.

Effusive viewer-responses to recordings of the FFVI aria may be fueled in part by the pride and pleasure of locating unlikely beauty in an unreal voice. Produced by the modest audio technologies of the Super Nintendo, Celes's singing is largely devoid of dynamic contrast, timbral inflection, intelligible text (captions aside), and other audible nuances that one would expect from human singing. A present-day

listener who happens upon a recording of this aria for the first time might not immediately comprehend how such digital warbling could have moved (and can continue to move) so many players to tears and elation. A standalone four-minute YouTube clip, in any case, conveys neither the aria's context nor the sorts of player-input demanded by the game. Fans who celebrate Celes's singing with hyperbolic hurrahs might thus do so as a way of preemptively defending the aria against anyone who would deem it trivial—to compensate, as it were, for the relative ease with which the aria's simple surface could go unadmired by hypothetical naysayers or non-gamers. Such compliments spin a salvage narrative up front, deploying enthusiastic overstatements to countervail potential underappreciation.<sup>24</sup>

Videos of Kefka's synthesized laugh have garnered viewer-comments that likewise stress the ingenuity and unexpected valencies of reductive audio material. The most-viewed YouTube clip of Kefka's laugh is a diminutive six-second recording (uploaded by user Libregkd on 16 August 2006) containing three loops of Kefka's cackling soundbite. Accompanying the audio is a repeating two-frame animation of Kefka's sprite (as shown back in Fig. 2.1). As of October 2012, the video had 304,597 views, 1,031 thumbs-ups, 38 thumbs-downs, and 949 comments. A few responses are quoted here:

How can a 16-bit sound file manage to be so frigging CREEPY!?!? Especially at Thamasa [a town that Kefka razes]. You hear that sound, you know things are about to go downhill, fast. (HappleProductions, 2012)

I used this laugh to give someone nightmares. My day is complete. (SixWingZombi, 2011)

And to think no voice actor could ever provide this; only a simple synthesized choir instrument generated this memorable laugh that haunts all of us to this day. (WitchChao, 2010) [+ 3 thumbs-ups]

Best sound effect in video game history. It's near impossible to forget. (turkranma, 2007) [+ 5 thumbs-ups]

Another popular YouTube video of Kefka's laugh is one called "Kefka Laughs at You for Nearly 10 Minutes" (uploaded by user Dogs4def on 25 August 2009). The title says it all: the 9'53" clip takes the two-second sample of Kefka's laugh and repeats it 291 times. The design of the recording is presumably tongue-in-cheek. It goes without saying that viewers are not expected to watch it in its entirety (though notably, a few commenters brag precisely about managing to endure all ten minutes). As it stands, the video embodies a parodic critique of modern soundbite cultures and atomized listening habits. It lays out the techniques and conceits of early game audio, with the incessant recycling of Kefka's

laugh epitomizing the reproducibility, loopability, and creative economy of the medium's sound design as a whole.<sup>25</sup>

Video game music, to be sure, has gained significant cultural traction and validation in recent years. The repertoire is piquing scholarly interest, getting reviewed in high-profile newspapers, and receiving frequent performances by university orchestras, a cappella groups, marching bands, and touring concert series such as Video Games Live and Distant Worlds. Technical advances have lately cleared away prior hurdles in game audio design. In terms of sound quality and material complexity, the soundtracks of modern games easily hold their own against (or outright resemble) classical symphonies, film scores, electronica, and other contemporary music. This said, many players nowadays retain a soft spot for games and game music from decades past. For those who came of age in the 1980s and 1990s, video games supplied memorable tunes that accompanied countless hours spent in virtual worlds. As noted by Henry Jenkins, Sam Ford, and Joshua Green: "Retrogames (whether older games reprogrammed for emulators or new games based on older aesthetics) remain objects of nostalgia for older players who recall them fondly from their own childhood (which coincidentally was also the childhood of a still-evolving medium), while other players embrace them as objects of camp and pastiche. Both sets of aesthetic considerations shape the ways materials associated with retrogames circulate online" (2013:99). Besides the avid sharing of videos on YouTube and other websites, the fandom of retrogame audio manifests today in the curation and distribution of sheet music transcriptions, MIDI libraries, rare album covers, and additional memorabilia.

With this in mind, it is clear that fans of the FFVI aria (and of retrogame soundtracks more broadly) are devoted to this music not despite but rather largely *because* of its aesthetic constraints. Implicitly motivating the exuberant praise of this repertoire is a sense of wonderment at the mileage that early game audio squeezed out of meager materials. That less can be more is an attractive notion in the arts, the sciences, and daily life. The paradoxical motto gets at what's so compelling about the amplification of labor in video games (Chapter 1), minimalist art and music (more on this in Chapter 3), nonlinear systems in engineering and mathematics, and other scenarios in which the respective magnitudes of input and output appear out of joint. Such schemes are reducible to a handful of underdog slogans—about the little engine that could, how a little can go a long way, how size doesn't matter. These platitudes speak to the wishful thrills of overcoming odds, making comebacks, and thwarting expectations.

When a well-known acoustic work—for example, a Mozart symphony—is transcribed and played back with electronic samples (say, via composition software), the result can sound stripped down, hollow, even blasphemous.

Straight-up MIDI-ocre conversions, if devoid of skillful tweaking or chiptuned stylization, might grate on a listener's ears and come across as impostors of beloved originals (cf. Sterne 2003:219–225).<sup>26</sup> Game music such as the FFVI aria poses a different case because the synthesized version *is* the original. Although Celes's voice was designed to approximate a human operatic voice, it came into existence first and foremost as electronic sound. Not surprisingly, some players have said they prefer this digital diva's simulation of song over live performances of the aria by human singers. In one YouTube comment thread, a viewer remarked that the "SNES [Super Nintendo] version [of the aria] will always be my favorite, clunky lyrics and all" (eunicron, response to KirbyPhelpsPK, 2009). Another individual stated: "Je vois que je suis pas la seule à préférer cette version 'pourri[e]'! Elle me touche 1000 fois plus que [la] version orchestrale!" [I see I'm not the only one who prefers this "rotten" version. It's a thousand times more touching than the orchestral version!] (Grenadinedamour, response to Ralexiel59, 2012). Players' fondness for the synthesized aria is sustained by memories of its charming novelty. Nostalgia is the miracle fuel of deep-seated loyalties: it trumps aesthetic conventions with the sheer force of yearning. Like the pixelated graphics, chiptune soundtracks, and hammy voice acting of early games, Celes's voice has since come to be not just vindicated but outright valorized as an artifact of historical design.

Seeing as how there was no way for the SNES to accommodate a human-voiced recording of the FFVI aria, Celes's synthesized voice was the next best thing. It served as an expedient compromise, one that gestured toward beautiful singing without breaking from the game's broader sonic palette.<sup>27</sup> On the face of it, there's nothing extraordinary about the melody, harmony, or even timbre of the FFVI aria. Notwithstanding its simulation of vibrato, the track does not sound so different from most of the other music in the game. Were the aria's textless melody not foregrounded as diegetic lyric spectacle, it could very well pass as a theme in the underscore. To be clear, what allows the aria to say something profound is the way it alludes to vocal utterance. Whereas Kefka's cackle sends chills, Celes's voice lights a spark of human warmth. Just by virtue of its synchronization with the diva's performative animations, the aria metamorphoses from mechanical sound into sentimental song.

To attempt a more poetic reading of the matter, it is possible that the allure of Celes's voice owes to how it resounds through an uncanny valley between human and machine. Perhaps the singing is aurally tantalizing because it reproduces an unbridgeable gap between the virtual and the real. This digitized voice, in sum, grasps at the real—straining to achieve true lyric flight—but, despite its mimetic efforts, has no hope of ever arriving there.<sup>28</sup> For lack of better analogies, Celes's singing is like a musical Pinocchio in desperate plight:

first, for the way it tells a lie; and second, for its aspiration to be a real live voice. So close, yet so impossibly far—aching beauty resides in such illusion (or elusion, as the case may be). Straddling this differential between virtual and real is a spirit of yearning that echoes how Maria pines for Draco (as well as how contemporary players pine for the good old games and game music of decades past). To be nostalgic for Celes's voice, in the end, is to play along in a game of virtual longing—virtual, because it's a longing for something that could never really be, for a voice that never even existed in the way it would have us believe.

## Celes *contra* Kefka

Notwithstanding a few minor tasks, the FFVI opera offers the player a rare oasis of relief from the intensive exploration and combat of the game's larger adventure. Just as the lovesick Maria slips away from her own wedding to steal some solitary moments on the castle roof, so the player gets a few precious minutes to behold a lyric performance with minimal obligations. Celes's captivating voice reigns over the showstopping aria, with time, narrative, and conflict suspended in the strains of contemplative song. In its entirety, the opera is an elegant spectacle insulated from the calamities of the outside land. Its singing voices, daring to be beautiful in the face of impending doom, stage a symbolic resistance against Kefka's destructive streak. The performance stands for high musical culture and for culturedness in general, asserting that even in a world gone mad, the show can go on.

Yet as we've seen, it isn't long before uncredited characters arrive and disturb the peace. When Locke and Ultros fall from the rafters and onto the stage at the end of the Waltz & Duel scene, their offstage entanglement collapses—figuratively, literally—into onstage action. They land on (and knock out) the actors playing Ralse and Draco. A flustered Impresario then rushes onto the stage to cover things up.

### Impresario

(*aside*) Disaster! If the two heroes are flattened, the opera's over!  
Then who'll win the girl?

### Locke

Neither Draco nor Ralse will save Celes [*sic*]! I, Locke, the world's premier adventurer, will save her! (*applause from audience*)

**Impresario**

(*aside*) Aya! What awful acting!

**Ultros**

(*to Locke*) Silence! You are in the presence of octopus royalty! A lowborn thug like you could never defeat me! (*more applause from audience*)

**Impresario**

Hmm...might as well make the most of this! (*to the conductor*) MUSIC!

Moments later, when Setzer arrives to kidnap Celes, the Impresario continues to do his best to keep up the charade:

**Setzer**

(*entering from above*) What a performance!

**Impresario**

Setzer!

**Setzer**

I'm a man of my word, music man! (*seizes Celes and escapes*)

**Impresario**

(*to the audience*) What a reversal! Thinking she's Locke's new queen, Maria is instead nabbed by Setzer! What fate lies in store for her? Stay tuned for Part 2!

Entrances by troublemakers disenchant the safe haven afforded by the opera house. With the quick-thinking Impresario's attempts to work these interruptions into the show (attempts, that is, at reenchantment), a makeshift spectacle ensues, one involving combat, abduction, entrapment, mistaken identities, and other twists that would fit right in with the most melodramatic of operatic—and video game—plots.<sup>29</sup>

By crashing the stage, Ultros and Setzer indeed draw attention to various affinities between operas and games. While the former artform can seem unusual

for its persistent singing and farfetched stories, the latter is no less peculiar with its stylized aesthetics and outrageous narrative premises. There is, after all, no lack of improbable coincidences surrounding the FFVI opera performance. First of all, Setzer, whose airship the heroes require, just happens to be obsessed with the prima donna of the local opera house. Celes happens to look exactly like this prima donna. And, luckily for the heroes, she happens to sing like an angel.

Dramatic conceits aside, FFVI as a whole resembles an opera in the way it scores the player's adventure with nearly uninterrupted music. As with many RPGs (especially Japanese RPGs of this era), FFVI contains a soundtrack consisting of discrete themes associated with characters and locations. Several of the game's heroes and villains boast signature musical selections that function like operatic and filmic leitmotifs.<sup>30</sup> Individual themes play when particular characters make entrances or come into narrative focus. Most tracks feature lyrical, looping melodies foregrounded in an upper register. In part because these melodies are so clear and singable, they may lend the impression of being virtually sung—illusorily giving voice to characters who lack audible speech.<sup>31</sup> Music in FFVI, in other words, isn't simply accompanimental or indexical, but potentially ventriloquistic as well, speaking for characters whose dialogues appear as soundless captions.<sup>32</sup>

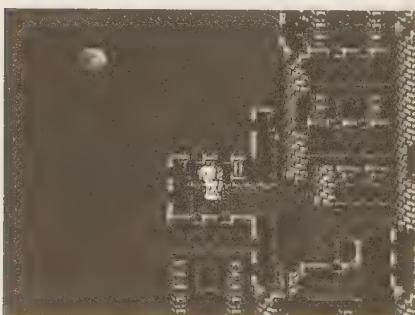
A compelling example of musical ventriloquism arises in one of FFVI's most tragic scenes. The moment comes about two-thirds of the way through the game, shortly after Kefka murders an emperor, brings about the apocalypse, ascends to godhood, and scatters the heroes across multiple continents. Following this fracturing of the party, the first character that the player sees and controls is Celes, who awakens to find herself on a deserted island with her ailing adoptive grandfather Cid. It's possible for the player to nourish Cid back to health by having Celes obtain appropriate food. Should Cid die, however, Celes spirals into depression. Cid's death brings about not a Game Over screen but instead a cutscene in which Celes, believing she's all alone in the world, sets out to commit suicide.

If online chatter is any indication, the scene of this diva's self-undoing rivals the game's opera sequence in renown. Although the North American SNES version of FFVI—by taking liberties in its English translation of the original Japanese text—obfuscates (and in effect censors) the leap as a true suicide attempt, it remains apparent, based on the context and animations, that Celes is looking to kill herself.<sup>33</sup> YouTube clips of the scene have provoked passionate remarks along the lines of those inspired by videos of the FFVI aria. Plentiful admissions of (manly) tears appear alongside superlative praise of the scene's emotional force. In one comment thread, a viewer describes the suicide attempt as the “saddest moment ever in a video game. Waking up to a post apocalyptic nightmare where the world is ending and the only family you know painfully dies in front of you.”

Plus literally hitting rock bottom" (Kefkadet, 2012). Another fan writes: "This is one of the only scenes in the history of video games (or movies, for that matter) that has actually made me cry. I still remember getting to this part when I was like 12, and I was just totally bowled over. I was literally choking back tears" (Gatotsu911, 2008).

The music that accompanies this cutscene is none other than the tune of the FFVI opera aria. In place of the simulated vocals of Celes's earlier performance, the melody here has a different tone, one that approximates a metallophone ringing above swells of synthesized strings. As the music plays, Celes climbs to the top of a nearby cliff. She takes a minute to gaze at the ocean in a pose reminiscent of how she, when singing the aria in the opera, looked longingly into the distance from the castle roof (see Fig. 2.6). The virtual yearning that Celes previously acted out onstage has now become all too real; inversely, the music has shifted from real (diegetic) song to virtual (non-diegetic) underscore. For although the melody harks back to her opera performance, the diva sings here no more. The tune, cloaked in memories of a better past, serves as a bittersweet reminder of how Celes sang. Having lost all hope and voice, this heroine—with nothing left to live for, nothing left to sing or say—surrenders to Kefkaesque despair. Her fall is animated in slow motion, a string of suspended tears plotting her earthbound trail. And since this is a cutscene, there's no way to stop her. All a player can do is listen and look on.

Labeled "Celes's Theme" on the game's official album, this musical track juxtaposes Celes's present dejection against her shining turn in a bygone spotlight. As an echo of the earlier aria performance, the melody says and sings here more than it otherwise would. At the same time, it doesn't quite say enough: the rendition is a ghost of a once-great lyric voice, haunting in its abstraction, calling attention to Celes's singing only to mark it as already lost. It is a music doubly



*Figure 2.6. (Left) Celes (as Maria) looking into the distance during her aria performance and (right) Celes looking out to the ocean before attempting suicide. Screen captures by the author.*

distanced from actual song—a shadowy memento of a synthesized simulation of a human singing voice.

While this cutscene bears out an especially clear, poignant instance of vocal allusion, other character-specific themes in FFVI have similar capacity to invoke phantom voices. Even without overtly quoting diegetic performances, the melodies on the game's soundtrack can be heard as projections of inner voices, as externalizations of the songs that characters carry in their hearts. Facilitating this potential illusion is the aforementioned lack of significant timbral distinction between FFVI's synthesized singing and the synthesized soundtrack at large. It takes only a slight leap of the imagination to apprehend the game's themes as music that is actively emanating from (rather than merely speaking for) corresponding characters in the game. As heroes and villains do battle across FFVI's epic adventure, the continuous wash of lyric music gives rise to a virtual (almost-but-not-quite) opera—a subvocalized spectacle that lies somewhere between the abstractly instrumental and the actually sung.

Despite overwhelming odds, devastating plot twists, and unconsummated romances, the adventure ends well. Celes, who miraculously survives her fall, finds a way off the island and in due course reunites with her companions. Together the heroes storm Kefka's tower and slay the villain for good, allowing survivors of the ravaged world to rebuild and live on. As if to round out the game's theatrical frames and embedded spectacles, a lengthy credits sequence begins by displaying a book (a libretto, perhaps, or a musical score) that comes to life, its pages turning on their own. Before listing the game's designers, these credits present the names of the FFVI heroes one by one—Celes, Locke, Setzer, and so on—thereby teasing the notion that the characters are performers and that all the game's a stage (see Fig. 2.7). The musical accompaniment strings together some of the game's most prominent themes. Totaling over twenty minutes in length, it is a medley befitting a finale, a last lyric hurrah recalling journeys in songs without words.<sup>34</sup>



Figure 2.7. FFVI end credits. Screen captures by the author.

## Live, All Too Live

So far, we've considered Celes's singing voice (the opera sequence), instrumental allusions to that voice (the suicide scene), and the vague voicedness of other characters' musical themes (on the game's soundtrack as a whole): three modes of synthesized musical expression that could be construed as respectively once, twice, and three times removed from a real singing voice. In this final stretch, then, let us turn to real voices—namely, to live adaptations of the FFVI opera, which, since the game's release in 1994, has received hundreds of performances by human singers with orchestral accompaniment.

To date, most live renditions of the FFVI opera have been presented in concertized format. Performances tend to involve no dramatic blocking or acting (much less any intensive choreography for the Waltz & Duel scene); only rarely are props and costumes used. One popular adaptation of the opera is that of the composer Shiro Hamaguchi, who arranged Uematsu's music into a twelve-minute piece (originally with Japanese text) for three vocal soloists and a full classical orchestra. Hamaguchi's arrangement premiered in the Tour de Japon: Music from Final Fantasy, a 2004 concert series that held performances in six Japanese cities (see Fig. 2.8).<sup>35</sup> Featuring the local orchestras of respective tour locations, these concerts were conducted by Taizo Takemoto and starred mezzo-soprano Etsuyo Ota (as Maria), tenor Tomoaki Watanabe (as Draco), and bass Tetsuya Odagawa (as Prince Ralse).

Hamaguchi's arrangement leaves out some key aspects of its source material. Besides doing away with the Narrator and the Chancellor, it omits the intruding characters of Ultros and Setzer. These cuts make dramatic sense: a battle with a talking octopus may prove difficult to translate elegantly to a concert stage, while the scheme of Setzer's entrapment could seem underdeveloped if lifted out of the game's larger plot. The adaptation consequently does not end with



Figure 2.8. (Left) Flower-tossing scene in FFVI aria and (right) Ota (as Maria) with Watanabe (as Draco) in a 2004 Tour de Japon performance of Hamaguchi's arrangement. Screen capture by the author.

Setzer's abduction of the heroine; instead, it concludes with Draco defeating Ralse in their duel, which, in the game's opera sequence, was left unresolved due to Ultros's interruption.<sup>36</sup> And since Ultros does not appear, the Grand Finale is removed entirely. New musical material is introduced in turn for the exchange between Draco and Ralse after their duel (see Ex. 2.3).

*Example 2.3.* New musical material in Hamaguchi's arrangement. Transcriptions by the author.

The image shows two staves of musical notation. The top staff is labeled "Ralse" and the bottom staff is labeled "Draco". Both staves are in 2/4 time and G major. The Ralse staff has a bass clef and the Draco staff has a treble clef. The music consists of two melodic phrases. The first phrase starts with eighth-note chords followed by eighth-note patterns. The lyrics for Ralse are: "I \_\_\_ yield, this day is yours, Dra - co\_\_\_. Curse you, should you let Ma-ri-a go!" The lyrics for Draco are: "Peace, then! For you have my word: with me she'll know no-thing but peace!" The second phrase continues the melodic patterns from the first.

One of the first English-language performances of Hamaguchi's arrangement took place in Stockholm on 4 December 2007 at the inaugural show of an international concert tour called *Distant Worlds: Music from Final Fantasy*.<sup>37</sup> The two columns in Table 2.2 show how sections of this arrangement's English text match up with or deviate from Uematsu's original music.<sup>38</sup>

Defying the conventions of tragic opera, the duel between Ralse and Draco does not end in death. Finding himself bested, the prince surrenders and lets Maria go.

Or does he? Instead of graciously exiting after conceding defeat, Ralse remains onstage and joins the lovers in singing the opera's final lines, set to the tune of Maria's preceding aria: "Our love, come what may, / Will never age a day. / I'll wait forevermore! / I'll wait forevermore!" Were the text of this arrangement aiming for dramatic plausibility, it would make sense for Ralse to fall silent upon losing the duel to Draco and facing rejection by Maria. For although Ralse doesn't come off as a full-blown villain in Hamaguchi's arrangement—at worst, he resembles a spurned *buffa* antagonist—his lingering presence as a clueless third wheel tarnishes the otherwise intimate reunion between Maria and Draco.<sup>39</sup> The situation isn't sinister per se, but it's a little bewildering (tragic, even, in a different sense). Ralse's persistent participation in song betrays his prior promise of capitulation. His voice, so to speak, doesn't live up to his words. The resulting scenario, if nothing else, makes a strong contender for the most awkward threesome ever.

Insofar as three singing voices can sound louder and fuller than two, the arrangement presumably keeps Ralse around for the sake of rounding out the performing forces in the closing moments. Given how sparse the narrative

Table 2.2. English-language rendition of Hamaguchi's FFVI opera arrangement

<i>Text and events in English-language version of Hamaguchi's musical arrangement</i>	<i>Corresponding musical material in Uematsu's original FFVI opera</i>
<i>Orchestral Overture</i>	
<b>Draco</b>	
Oh Maria!	
Oh Maria!	
Though I call you from afar, Will this message reach your heart?	Overture
Oh, how I long to be with you!	
<i>Orchestral Episode 1</i>	
<b>Maria</b>	
Oh, my hero! My beloved!	
Shall we still be made to part?	
Though promises of perennial love	
Yet sing here in my heart.	
I'm the darkness, you're the starlight	
Shining brightly from afar.	First three stanzas of Aria
Through hours of despair, I offer this prayer	
To you, my evening star.	
Must my final vows exchanged	
Be with him and not with you,	
Were you only here to quiet my fear,	
Oh, speak! Guide me anew!	
<i>Orchestral Episode 2</i>	First half of Aria interlude
<i>Orchestral Episode 3</i>	
<b>Draco</b>	
Maria!	
<b>Maria</b>	
Draco! I knew you would return to me, my love!	
<b>Ralse</b>	Wedding Waltz & Duel
Insolent rogue! Knave of the Western horde!	
Would you address my queen-to-be, Maria?	
<b>Draco</b>	
Never shall you have Maria's hand!	
I would die before that day comes!	

<i>Text and events in English-language version of Hamaguchi's musical arrangement</i>	<i>Corresponding musical material in Uematsu's original FFVI opera</i>
<b>Ralse</b> Then we duel! <i>Orchestral Episode 4</i>	Wedding Waltz & Duel (continued)
<b>Ralse</b> I yield, this day is yours, Draco. Curse you should you let Maria go!	<i>New material</i>
<b>Draco</b> Peace, then! For you have my word: With me she'll know nothing but peace!	
<b>Ralse</b> Maria! Maria! I love you so!	Second half of Aria interlude
<b>Draco and Ralse</b> Maria! Maria! Return to me!	
<b>Maria (to Draco)</b> I am thankful, my beloved, For your tenderness and grace. I see in your eyes, so gentle and wise, All doubts and fears erased. Though the hours take no notice Of what fate might have in store.	Two stanzas of Aria, with final lines set to modified and prolonged Aria material
<b>Maria, Draco, and Ralse</b> Our love, come what may, Will never age a day. I'll wait forevermore! I'll wait forevermore! Ah!	

is to begin with, maybe it shouldn't come as a surprise that a concert rendition would forfeit dramatic realism in favor of sheer spectacle. In this way, Hamaguchi's arrangement exemplifies a commonly remarked feature of opera in general—the notion that the artform, for better or for worse, prioritizes beautiful singing at the expense of believable plotlines, intelligible text, and persuasive acting. The final vocal gesture of Maria, Draco, and Ralse drives this

point home: after singing “I’ll wait forevermore!” (and following a couple of stately cadential chords in the orchestra), the three performers bring down the house by unleashing an “Ah!” (set to a tonic triad of D3–A4–F#5) at the top of their lungs.

Open-vowel cries aren’t uncommon in opera. They are usually heard when characters are sighing or dying (or both). Classic examples include the Messenger’s “Ah, caso acerbo!” in Claudio Monteverdi’s *L’Orfeo* (1607), Dido’s “But ah! Forget my fate!” in Henry Purcell’s *Dido and Aeneas* (c. 1688), and the glut of death-screams in late Romantic and Expressionist opera (see Friedheim 1983). In the case of the concertized FFVI opera, however, the characters are not perishing as such (unless we imagine they are dying of jealousy or bliss). This trio’s cry, furthermore, sounds nothing like the flamboyant wails of “Yeah!” or “Whoa!” that soul divas and rock gods let rip at the ends of their songs. While such pop-vocal flourishes are likewise exclamatory and devoid of conventional text, they tend to be highly melismatic, virtuosic, and even improvisatory (at least in effect). By contrast, the synchronized “Ah!” at the close of Hamaguchi’s arrangement is sung to a fixed triad with steady, disciplined vibrato. It would be one thing if this utterance were set to a meaningful word or syllable—say, the “-more!” of “forevermore!” But seeing as how it’s sung to a nonsensical phoneme, it leans more toward the sorts of ear-piercing and glass-shattering operatic singing that gets caricatured in cartoons and comedy films. In truth, the trio’s “Ah!” sounds so stiff, daresay artificial, that it comes across as . . . well, *synthesized*—like what one would get by holding down a D chord on an electric keyboard for seven seconds. On the one hand, then, this collective explosion of voice is absurd, contrived, and mechanical. On the other hand, it serves as an apt throwback to the *ah-ah-ah* singing in the video game version of the opera, a pitch-perfect homage to how Celes sang.

Indeed, the specter of the original game is rarely far off in live performances of the FFVI opera. Distant Worlds concerts often use a screen suspended above the orchestra to display recorded footage from the *Final Fantasy* series. At these performances, the FFVI opera arrangement is accompanied by muted clips of matching scenes from the game (a format that may call to mind the live-accompaniment practices of silent cinema). A segment from the FFVI opera that always draws big laughs from audiences is one that shows the in-game maestro vigorously leading the orchestral overture. The amusement derives from the mirroring between the gestures of the virtual (onscreen) and real (on-stage) conductors (see Fig. 2.9). More generally, audiences might find it charming to see and hear live performing forces juxtaposed against the 16-bit footage projected above the stage. The retro animations have the potential to make the human singers and orchestra sound too acoustic, too human, and too real by comparison.



Figure 2.9. Live performance of *Maria and Draco* at a Distant Worlds concert in Munich, Germany (3 March 2013).

With their magisterial orchestras, virtuoso vocalists, imposing maestros, and posh concert halls, live performances of the FFVI opera lay claim to the cultural cachet of classical music. These arrangements, however, do not stray far from their playful roots. Not least when accompanied by footage from the game, the concerts wear their origins as a pixelated badge of pride. The multimedia formats, as a matter of course, foster interplay between disparate modes of spectacle: live orchestras, video games, in-game operas—each enthralling on its own, even more so in concert.

## Twilight of the Odds

In addition to its orchestral treatments, the FFVI opera has had a colorful afterlife at the hands of professional as well as amateur musicians. A band called the Black Mages (of which Nobuo Uematsu is a founding member) released a progressive-rock version of the opera in 2008. It includes voice-over narration in Japanese, an altered ending in which Ralse is fatally wounded by Draco, and the vocal talents of the three soloists who performed in the Tour de Japon concerts.<sup>40</sup> In 2010, the independent media website Elder-Geek produced a video that overlaid a recording of Hamaguchi's arrangement onto reedited footage of the original opera sequence. More recently, composer Roger Wanamo incorporated the opera's aria melody into the second movement of his virtuosic *Final Fantasy Piano Concerto*, which premiered in Cologne on 9 July 2011 in a concert titled *Symphonic Odysseys: Tribute to Nobuo Uematsu*.<sup>41</sup>

Abundant reworkings of the FFVI opera have pulled the source material in new aesthetic and narrative directions. While these reincarnations do sound more extravagant than the 16-bit original, players long ago fell in love with the FFVI opera on its own terms: not for what it could or would one day become (an orchestral or prog-rock arrangement, a theme in a concerto movement, and so forth), but for what it already was. There was something special in how Celes sang—in the illusions of (and allusions to) synthetic song and symphony that Uematsu and his peers procured from available audio technologies. Today's concert adaptations of early game music dispel the need for illusion by bridging the gap between virtual and real performing forces. These musical real-izations obviate the exercises in compositional and aural imagination that were so prominently at play in the production and reception of early game audio.

In light of dramatic hardware and software improvements, audio designers for modern games have the luxury of using elaborate synthesized samples, lengthy orchestral recordings, and extensive voice acting. It is precisely this proliferation of complex and monumental audio that gives fans of old-school game music something to be nostalgic about. Nowadays, there are designers and fans who are still creating video games with 8-bit graphics and chiptune sounds—not out of technological necessity, but as a way of affirming and sharing the inspirational potential of retro materials (see Jenkins, Ford, and Green 2013:100). Whether we deem it magic or basic semiotics, one remarkable aspect of early game audio is how it conveyed so much with so little. Particularly with synthesized utterances like Kefka's laugh and Celes's voice, we're dealing with sounds saying more than they seemingly should.

Given that voice—as material, medium, metaphor—is so tightly bound up in matters of agency and expression, it will reclaim the spotlight in the final case study of *Sound Play*. For now, as we move into the next chapter, it might be useful to think more about how noises speak to us in illusory fashion. In our everyday lives, we may hear speaking and singing voices in sounds that are not technically vocal: cello melodies, radio static, the wind, even silence.<sup>42</sup> A comparable phenomenology obtains in the way we see and seek meaningful patterns in inkblots, clouds, tea leaves, and arbitrary shapes (a propensity that some scientists and psychologists term *apophenia* or *patternicity*).<sup>43</sup> Making something out of apparently nothing is a testament to the enterprising whims of the human imagination. At work here is a vague animism born of our desire for things to murmur to us, to let spill the secrets beneath their silent surfaces. Such impulses reveal us as hungrily hermeneutic in disposition, as interpretative beings craving company, conversation, and means of tuning into surroundings both real and virtual. For while our physical realities aren't filled with singing clocks and candelabras (of the Disney variety), we do, in the end, live in an animated world of sorts, a world envoiced and enlivened by our own flights of fancy. With FFVI, it could be said

that Celes is able to sing because we want her to; put another way, her successful simulation of song thrives on our will to hear it as such. To the extent that we, the players, are rooting for the digital diva to come through in this regard, we're her number-one fans.

Fantasies of entities coming rowdily to life, however, do not always make for enchanting scenarios. It can be unsettling to hear something that is not really there, especially when it's not clear where *there* is. What's at stake when a game's sounds go from marvelous to mischievous, from humorous to horrific? When we sense that we've lost guard of our own imaginations? And that someone—or something—else is pulling our strings? The next chapter takes on these questions through a turn to the uncanny and the occult. By venturing into a horror game, the case study will continue to explore how we play with sounds. At the same time, it will stress how sounds play with *us*—how they can toy with our minds, tinker with our bodies, and leave us feeling helpless and speechless in their noisy wake.



# CHAPTER 3

## Dead Ringers

I'm gripped by a nightmare within minutes of entering the gameworld of *Silent Hill*. A brief introductory video shows the protagonist, Harry Mason, crashing his car into the side of a road while driving through the game's eponymous town. When Harry regains consciousness, I take control of him to go in search of his seven-year-old daughter. She has disappeared from the vehicle.

Things are quiet save for the hollow *clops* of Harry's footfalls and the distant noise of creaking metal. Wading through fog and flurries of snow, I soon spot a young girl not far away. She's standing still, her arms crossed, one leg extended at an odd angle, thick strands of black hair covering her face. Just as I'm about to reach her, she springs to life and runs into an alley.

I instinctively follow.

Deeper and deeper into the dark alley I go, passing an empty wheelchair, then a blood-stained gurney, before arriving at a dead end, where I encounter a dreadful sight: a flayed humanoid corpse, its ribs exposed, pinned against a barbed wire fence. Upon turning away from this abomination, I see, to my even greater horror, a trio of childlike monsters teetering toward me. I manage to edge past these enemies, but some kind of gate now blocks my path out of the alley. Although I could swear this barrier was not here earlier (for this was the way I came), I have no time to dwell on such mysteries. Harry is defenseless and escape looks impossible. With guttural cries, the monsters lunge with knives and gnaw at Harry's—my—legs. No amount of button-mashing on my part can avert this grisly fate. With a soft moan, Harry collapses and dies before my eyes.

A cutscene then shows Harry waking up, unscathed, in a run-down diner. Was it a dream? This narrative sleight of hand reveals the protagonist's fake death to have been a scripted event, a necessary and unavoidable part of advancing through the game (see Fig. 3.1). The sting of impotence, however, lingers in my mind. While this diner looks like a safe haven, I'm not sure I feel any more secure than I did before. The game has already tricked me once. What else could it be up to?

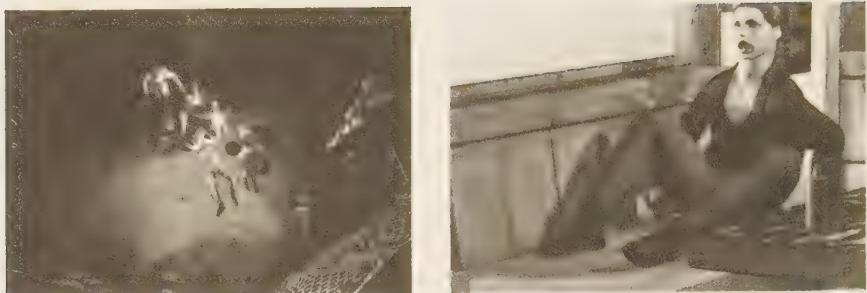


Figure 3.1. (Left) Harry getting attacked by monsters in the alleyway, then (right) waking up in a diner. Screen captures by the author.

I know what the game wants me to do: exit the diner, solve some puzzles, fend off monsters, and find Harry's daughter. But after the foul play in the alley, I'm no longer sure how much I should trust the game or follow its orders. What am I getting myself into?

## The Hill Is Alive

*Silent Hill* is a survival-horror game developed by Team Silent and published by Konami Computer Entertainment Tokyo for the Sony PlayStation.<sup>1</sup> Released in 1999 across North America, Japan, and other regions, the game debuted to favorable reviews and has since spawned multiple sequels and film adaptations.<sup>2</sup> Although preceded by such notable survival-horror games as *Alone in the Dark* (1992), *Clock Tower* (1995), and *Resident Evil* (1996), the *Silent Hill* series emerged as one of the genre's most iconic franchises. To this day, players 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 together done much in recent years to flesh out the lore surrounding the fabricated American town of Silent Hill.

Scholars have posited gothic literature, the stories of H. P. Lovecraft, Japanese Noh theater, and the films of Alfred Hitchcock as sources of inspiration for *Silent Hill*.<sup>3</sup> Most evidently, the game draws from Japanese horror cinema (J-horror) and its topical arsenal of demonic mothers, victimized daughters, vengeful spirits, and terrorizing technologies.<sup>4</sup> The conspiratorial plot of *Silent Hill* involves the torture of a young girl named Alessa Gillespie by her mother, Dahlia. At one point in the game, Dahlia explains to Harry that Alessa's protracted agony has served to revive the god of a 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 torment of Alessa is never depicted in the game, but her pain is palpable in its world’s gruesome sights and sounds. Over the course of a player’s adventure, the town of Silent Hill routinely transforms into the Otherworld, a realm soaked in shadows and blood. It resembles, in Harry’s words, an alternate reality of “someone’s nightmarish delusions come to life.” The flesh wounds of Alessa are etched in these hellish environments, while her mental anguish reverberates 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 jumbled sounds, darkness, and fog in this world signal a collective disavowal of aesthetic legibility—a disavowal born of trauma so unspeakable that its symptoms and aftershocks lie beyond all conventional representation.<sup>5</sup>

Paranormal externalizations of Alessa’s pain are mirrored in the player’s distressing interactions with the game. *Silent Hill* compels its player to empathize with Alessa’s suffering via gameplay that stresses vulnerability instead of blazing guns and superhuman feats. Harry Mason is a ludological anomaly who lacks the extravagant powers possessed by the typical heroes and heroines of action-adventure games. He is an Everyman, an extraordinarily ordinary being whose poor offensive capabilities make him easy prey for the monsters in the game.

One way survival-horror games elicit fear is indeed by destabilizing the player’s sense of control. Mark Simmons, the project director for *Silent Hill: Origins* (2007) and *Silent Hill: Shattered Memories* (2009), 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).<sup>6</sup> As Tanya Krzywinska suggests, 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, Tavinor 2009:146–147, Perron 2009, Kirkland 2007b, and Carr 2003). Krzywinska cites games’ noninteractive cutscenes as examples of especially disturbing instances that “[wrest] control away from the player” (2002:211). While intriguing in theory, this assessment does not always hold up in practice. As remarked by Will Porter in a Galvanic Skin Response study of horror game experiences, savvy players see cutscenes not as cause for alarm, but instead “as respite from gameplay—a time when they know they’re definitely safe” (2011:65).<sup>7</sup> With this in mind,

the opening 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 by pressing controller buttons, frantically trying everything but accomplishing nothing. The game forces 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 by killing off its female protagonist mid-shower (and mid-story), so the first five minutes of *Silent Hill* 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 can do. Harry's scripted demise is likely to leave us 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 us some say over our characters' fates.<sup>8</sup> This violation of trust in the opening moments of *Silent Hill* gives a player reason to be henceforth wary not only of the monsters in the game, but also of the monstrous game itself. With its narrative fake-outs, unreliable controls, and dearth of combat options, *Silent Hill* assumes the guise of a living entity seeking to undermine its player's agencies. The game imparts 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" (1906:11).<sup>9</sup> Players of *Silent Hill* might likewise feel as if they are at times fighting an animate apparatus, one that churns out fear through unruly mechanics and unfair outcomes.

Just as *Silent Hill* can seemingly transgress its status as an idle medium, so its grotesque soundscape manifests as a sentient antagonist that seethes and convulses as it plays mind games with the player. The present chapter contemplates the ludic, perceptual, and hermeneutic anxieties provoked by this game's uncanny sounds. By underscoring the ways in which industrial noises in *Silent Hill* haunt various borders—between diegetic and non-diegetic, real and virtual, lingering and ephemeral, organic and mechanical, surface and subdermal, instructive and manipulative—I explore how the game's audio works to unsettle a player's mental and bodily control. Through comparisons of discourses on noises and monsters, I frame the sounds in this gameworld as living monsters in their own right: abject, liminal, and always potentially trespassing on players' own spaces. Underpinning these considerations are broader investigations

into the economies of fear—the frightening efficiency with which the minimal sounds (and overall reductive aesthetics) of horror media can evoke maximal terror.

## Hearing Things

Discrete musical tracks accompany a player's travels through *Silent Hill*. Some locales are deathly quiet (aptly living up to the game's title) while others are almost intolerably clamorous. Japanese composer Akira Yamaoka (b. 1968) created a spooky soundworld with recorded and synthesized noises.<sup>10</sup> Audio effects include microtonal slides, dissonant stacked chords, timbral distortions, juxtapositions of extreme registers, rapid vibrato, drones, prolonged decays, and ghostly echoes. As a whole, the aesthetic approximates a mix of industrial music, glitch music, Japanese noise music, punk, and other countercultural genres that emphasize the use of unconventional sounds. The result invokes what Zach Whalen calls an "atonal chaos" that "[reflects] the player-character's [Harry's] psychological state" (2004; see also Whalen 2007). Although these strident sounds do convincingly exemplify Harry's unstable mind, they are also, as the game tells us, the supernatural projections of Alessa's pain. All the while, this cacophony contributes and gives expression to the player's own harrowing experience. Together, then, Harry, Alessa, and the player constitute a band of suffering souls, an ill-fated trio whose fears resound through a terrible world of din and darkness.

Annotations in Figure 3.2 trace the sound events in the game's introductory alleyway sequence. Predetermined layers of noise are progressively triggered and sustained as Harry reaches corresponding spatial nodes. Sounds increase in both density and volume as the passageway narrows. A sense of claustrophobia is compounded by this simultaneous compression of space and expansion of noise: accumulating soundwaves overfill the slender alley, bracing against its walls and virtually bursting at the seams of our screen. As Harry's surroundings go dark—as it becomes almost impossible to see anything—the player has little choice but to lend a compensatory ear to the game's assaultive sounds, to listen to and through this noise for signs of danger. For while we can afford to cover our ears and close our eyes when things get scary in a horror film, this isn't a realistic option when playing a horror video game. For the sake of Harry's survival, a player is impelled to stay on high alert, to tolerate every terrifying byte of audio-visual data. Not until Harry dies his false death at the end of the alleyway do the suffocating sounds fade away. A grueling start to an unforgiving game.

Repetitive audio in *Silent Hill* resembles an experiment in musical patchwork gone wrong. Scraps of sound are sewn together and grotesquely reanimated into an acoustic equivalent of Frankenstein's monster, with noises reaching fever

Following the car crash, Harry (1) wanders the streets of Silent Hill in search of his daughter. He (2) spots a girl in the distance and (3) follows her into a dark alley, passing (4) an abandoned wheelchair and (5) a bloody gurney. Heading deeper into the alley, Harry (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<sup>3</sup>, C, and D<sup>5</sup> (A=440)



3) Addition of air raid sirens



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



5) Addition of resonant percussive noises



6) Addition of repeating dissonant clusters (chordophone timbre) and a staccato melody that plays only once (metallophone timbre)



7) Addition of bass beat

*Figure 3.2.* Progressively layered sound events in the introductory alleyway sequence. Segments 2 and 7 occur as brief cutscenes. Screen captures by the author.

pitch whenever the town transforms into the nightmarish Otherworld.<sup>11</sup> In an interview, Yamaoka explained that he scored the game with industrial audio because it produced “much of the essence needed [for the game] [...] [a] cold and rusty feeling” (Kalabakov 2002).<sup>12</sup> According to Paul Hegarty, the genre of industrial music offers 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 writes: “[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; see also Reed 2013:13–17).<sup>13</sup>

Industrial music’s anti-aesthetic is appropriate for *Silent Hill* given that the game—in frustrating the player’s agencies—comes off as resolutely anti-ludic. Sounds in the gameworld work constantly to unhinge the player’s mental fortitude and sensory orientation. One perturbing aspect of this soundscape is how its

noises straddle the diegetic and non-diegetic divide: sirens, rattles, clinks, drips, whirs, and scrapes punctuate the game's environments but lack visible sources.<sup>14</sup> 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 mechanical apparatus, or from beyond the game's diegesis entirely. The orgiastic commingling of noises in *Silent Hill*, notes Guillaume Roux-Girard, can "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" (2010:207). Bernard Perron, author of a monograph on the *Silent Hill* series, likewise recounts one of his gameplay experiences as follows: "[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). The restroom that Perron mentions, to be clear, harbors no visible child. The sobbing noise is a floating sonic index, messing with the player's head but posing zero threat to Harry. Such devious design can swiftly lead players to lose confidence in their own visual, aural, and cognitive faculties.

Even more disturbing than the muddling of diegetic and non-diegetic noises is how these sounds cross from the game's virtual world into the real world inhabited by the player. Buzzes, rumbles, door slams, and other noises bleed with ease from the gameworld into a player's own environment precisely because they sound like everyday racket. We may occasionally be duped into hearing these in-game sounds as if they're coming from real-world sources—from our living rooms, from upstairs, from right outside our windows. Liable to fool us in this regard are not 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 enough to create the impression of surround-sound; that is, noises in the game—even when piping out of a television's speakers—can so extensively saturate a player's physical space that they might sound as if they are invading from all directions.<sup>15</sup> Such illusion stands to prevail despite the mediocre audio quality of the game's noises. A low-fi *thud* and a high-fi (or acoustic) *thud*, after all, are not easy to tell apart (cf. Munday 2007:52). Thinking that a game's noises are coming from our own surroundings can be genuinely frightening because real sounds indicate real threats. Irrational though it may be for anyone to fall for these tricks, real fear grants no refuge in reason.

Consider the famous opening scene in the 1979 thriller *When a Stranger Calls*. Teenage babysitter Jill (Carol Kane), after putting the children to bed, starts getting sinister calls from a deep-voiced man. Jill dials 911 and reaches a

policeman, who tells her to stay in the house. He says he will try to trace the calls. Following a long wait—during which Jill receives increasingly nasty calls from the stranger—the policeman finally rings back and reports, “We’ve traced the call. It’s coming from *inside the house!*” Jill goes into shock. Her eyes glaze over, her mouth hangs agape. The film then shifts from this expression of fear flash-frozen on Jill’s face to a montage of the many different areas of the house: the foyer, the dining room, the kitchen, the stairwell—all dark, all potentially hiding a stranger who has been there *all along*. Every passing second of this digressive montage is agony to behold. Although we, the viewers, 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, what’s more, that the film’s protracted survey of the house’s interior has—if anything—given the intruder all the more time to get to Jill (see Fig. 3.3).

While the cop’s warning is not a jump scare in the traditional sense, the revelation knocks the wind out of the viewer by turning the house inside out, collapsing the distance previously (assumed to have been) separating predator and prey. Here, what is scary isn’t just the sudden vanishing of the protective walls surrounding the film’s protagonist—for, especially if we’re watching this movie in our own living rooms, we too might get the feeling that a stranger is now closer to *us* in the real world. An appeal to common sense would allow us to understand that our act of watching this scene (*coming from inside the house...*) has no bearing on the possible presence of a killer in our own homes. But once again, this is not a genre that trades in logic. Horror doesn’t play fair. Its most potent manifestations inject us with doubt, superstition, and fear for our own safety.

For another example, recall the climax of the 1998 J-horror film *Ringu*. The character Ryuji is in his living room when his television set switches on by itself. The screen shows a water well in a grassy clearing. From this well emerges the tortured demon-child Sadako, who proceeds to crawl through the soil until she



*Figure 3.3. (Left)* Jill receiving the frightening news and *(right)* the swinging pendulum of the grandfather clock in the opening scene of *When a Stranger Calls*. Screen captures by the author.

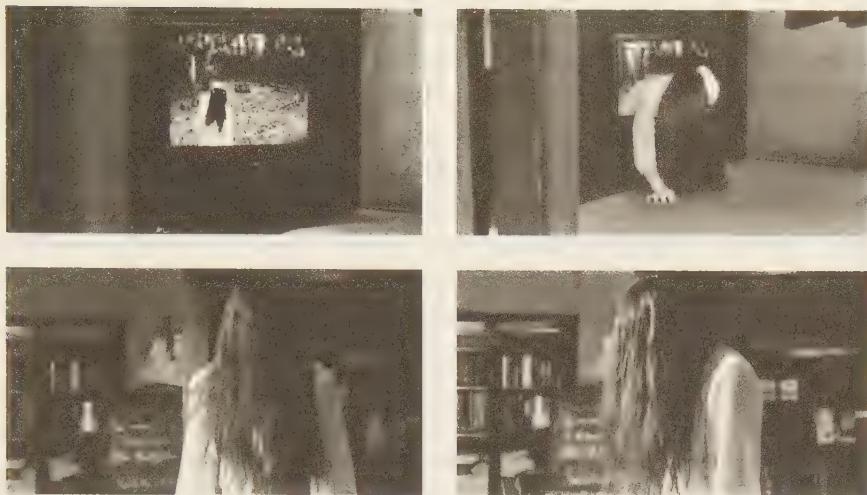


Figure 3.4. Clockwise from upper left: Sadako climbing out of the television set and turning to face the camera (and the movie's audience) in *Ringu*. Screen captures by the author.

looks like she's pressed against the other side of the television. Then, alarmingly, she bursts *through* the screen, sending a terrified Ryuji into a corner, his eyes twitching with disbelief. Now inhabiting Ryuji's realm, Sadako turns and, for a fleeting moment, faces the camera of the film proper (see Fig. 3.4).

With Sadako facing us, we might wonder (against our better judgment): if she can escape the television screen within the film—if she can penetrate the fourth wall once—can she go one more step and break through our screen as well? Yes, she can, our fears whisper to us, because she's a *supernatural character*. And no, she cannot, because she's a *supernatural character*.

Since much of the industrial audio in *Silent Hill* is indistinguishable from real-world ruckus, it can easily sound as if it were *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 noticed a hum: low in register, soft, but timbrally distinctive enough to be audible amid the many layers of in-game noises already in the mix. On a notepad, I documented this sound as a drone pitched approximately at D, two octaves below middle C. When I turned off the game twenty minutes later, however, I could still hear the noise. My emotional trajectory rapidly followed thus: panic, puzzlement, and finally embarrassment, when I realized that the sound was coming not from the television set at all, but from my refrigerator. It was a noise I had long learned to tune out while going about daily business in my apartment—and yet, when mashed against this game's audio, it returned with sudden vengeance. In this instance, the game's

patchwork soundscape functioned as a noise-magnet, an acoustic *katamari* that drew the hum of my fridge into the orbit of its own ghastly formation. If my experience is any indication, the game's industrial noises have 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 surroundings into its depraved ludic plane, opening a portal through which noises of real and virtual domains mingle to incestuous ends. Our world, the gameworld, the game's Otherworld: a monstrous welter of spaces and sounds, perverse to their cacophonous core.

Things are bound to get unnerving when a media experience teases a breach in the fourth wall. Some horror games feign hardware and interface errors to threaten a player's sense of connection to the medium. In *Eternal Darkness: Sanity's Requiem* (2002) for the Nintendo GameCube, the protagonist comes with a Sanity Meter, which, when depleted, can variously lead the game to flash a fake Blue Screen of Death, mute the audio, black out the screen (to trick the player into thinking the television has turned off on its own), or pretend to delete the player's save file.<sup>16</sup> *Eternal Darkness* terrorizes the player not just with images and sounds of monsters, but furthermore by being a monster itself, an animate platform toying with the player's mind. These fake-outs stand to be more alarming than the average monster scare. Being led to believe that one's save file has been deleted—that all of one's hard-earned progress in a game has been lost—is horrifying in a very real way. Animated monsters in there, in the simulated world, we can handle so long as our characters are good at fighting or running away. But a ghost in the machine, a virus, a monster out here...that's a different story.

Once a player starts catching on to such gimmicks, they naturally lose some of their impact. However, because a fake Blue Screen of Death can look exactly like a real one, it is not so simple to achieve psychological immunity against these antics. For while most people 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 say that the game has malfunctioned, a player has reason to suspect it is fake—and yet a sliver of doubt lingers. A similar paranoia informs our anxieties toward sounds crossing from virtual to real-world spaces. When playing *Silent Hill*, we should have little problem reassuring ourselves that the noises we're hearing are coming from the gameworld's dense industrial soundscape.<sup>17</sup> But since the noises in there are dead ringers for the everyday noises out here, we are working with scrambled sensoria. Regardless of how we might strive to perceive these noises as being safely contained in the game, some uncertainty can continue to nibble at the fringes of our consciousness. Anytime we succumb to such tricks, we might feel as if we are no longer involved in sound play (to wit, in a safe ludic encounter).<sup>18</sup>

When we go on record saying that we know a horror film or game poses no real threat—whenever we are willing to swear 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 bet our lives on this claim. It's easy to answer yes when we are in broad daylight, reading *about* horror while sitting in a bustling coffee shop, bundled in the warmth of ample company and the authority of rational thought. It isn't nearly so easy when we're in the middle of experiencing a horror movie or a horror game, when we're alone in the dark, when our minds and bodies are being held hostage by our own imaginations run amok.

## Monstrous Noise

When asked about how his music for *Silent Hill* strikes fear in players, 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 [player's] expectations" (2009:39). In the game, as Yamaoka notes, individual musical loops contain irregular rhythms and sound events, most of which defy transcription with conventional Western notations for duration and pitch. On a broader scale, however, several of the game's tracks achieve an oppressive effect by repeating samples with unwavering regularity. Much of this music can be parsed into melodic and rhythmic cells lasting no longer than a few seconds each. These recycled noise fragments evoke a hellish labyrinth in which paths toward escape and resolution are persistently concealed or deferred. Although a player can mute the game's audio, doing so is not advisable because these sounds supply important information about potential dangers nearby.

Like Jentsch's uncanny locomotive, the noises in *Silent Hill* chug away with a mechanical an empathy that verges on sentient antipathy.<sup>19</sup> It's possible to hear this industrial music as somehow sinister in its mimicry of the player's own repetition of dreadful actions. A typical playthrough of the game involves Harry perishing again and again, being resurrected each time (via the reloading of save files) for the gruesome ritual to carry on. According to Torben Grodal, players of video games partake in a general "aesthetics of repetition [...] based on the [following] sequence: first *unfamiliarity and challenge*, then *mastery*, and finally *automation*" (2003:148, emphasis in original; cf. Juul 2013:115–118, Rettberg 2008:179–182, Kirkland 2007a:77, Fink 2005:215–231, Darley 2000:164, and Buse 1996:170–176).<sup>20</sup> It is telling that this list ends not with mastery but rather with automation and its connotations of mechanistic play. The trajectory calls to mind Hans-Georg Gadamer's chiastic formulation that "[a]ll playing is a being-played. The attraction of a game, the fascination it exerts, consists precisely in the fact that the game masters the players" (2004:95).<sup>21</sup> There are, of course, positive

ways to think about automation: namely, as the apotheosis of expertise, a form of hypermastery enabled by the muscle memory and procedural knowledge that gamers, musicians, dancers, and other virtuosos possess.<sup>22</sup>

Cynical assessments of repetitious play might cast it instead as a fatuous activity through which gamers are disciplined, subordinated, homogenized, and drained of all operative authority by a game's demands for redundant action. Indeed, many studies of horror media posit musical repetition and minimalism as markers of trauma, mindlessness, or psychological unrest. Claire King proposes that a looping melody in the film *The Exorcist* (1973) demonstrates a "struggle against the continuity of time [that] 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 (2010:160–161) frames the drone of white noise in John Carpenter's film *The Fog* (1980) as a sonic analog to the fraught human unconscious. Besides equating repetition with dysfunction, these readings are interpretatively compensatory in the way they strive to highlight minimalist music's maximal import—to eschew, in the words of Susan McClary, understandings of minimalism as the mere "refusal" or "self-erasure" of meaning (2007:52).<sup>23</sup>

Noise has been widely theorized with similar reliance on compensatory hermeneutic premises and metaphors of malfunction. Since the turn of the twentieth century, writers and composers have progressively embraced noise as "existing in all music [...] essential to its existence, but impolite to mention" (Cowell 1929:252), consisting of "sounds we have learned to ignore" (Schafer 1973:30), signifying "only in relation to the system within which it is inscribed" (Attali 1985:26), and connoting all the "local impurities [that] are subsumed under a communication presumed to be successful" (Kahn 1999:25).<sup>24</sup> These characterizations familiarize noise by emphasizing its ontological relativity and phenomenological ubiquity, proclaiming not simply (and tautologically) that the *rest* is noise, but moreover that *all* is already not-noise.<sup>25</sup> Whereas modern communication engineers sought to mask noise, experimental composers have taken the opposite approach, foregrounding noise and finding it a home in creative musical expression (see Sterne 2012:117–122).<sup>26</sup>

Apophenic sensibilities inhere in portrayals of noise as a semiotic vacuum—an auditory Rorschach test signifying at once everything and nothing. Appeals to definitional promiscuity abound 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 has described noise as an "aesthetics of failure" (2000:12), while other writers have 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). To this point, Simon Reynolds 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" (1990:56; cf. Echard 2005:87). Noise is, in a word, self-negating. Even as a countercultural artifact, it cannot but slip toward the mainstream, toward the realms of social and aesthetic respectability against which it is supposed to be defined.

Just as noise is conceivably present in every signal, so monsters are popularly regarded as externalizations of the ubiquitous monstrosities in human nature. Descriptions of noise as "a wild card for bold metaphors" (Reed 2013:306) mirror critiques of monsters as interstitial beings (organic and otherwise) that facilitate polysemy and the deferral of hermeneutic terminus (see Carroll 1990:32–52). The monster 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 "an extreme version of marginalization, an abjecting epistemological device" (Cohen 1996b:ix).<sup>27</sup> Like noises, monsters are ideal sites for discursive play. Although they are intimidating and powerful, they reciprocally serve as vehicles for scholars' intimidating displays of interpretative power. Rhetoricians *qua* monster-tamers—much like music connoisseurs who claim to comprehend noise as music—champion definitional mutability in bids for intellectual authority.<sup>28</sup> In the end, the relationship of hermeneuts to monsters is ironically vampiric given the ease with which the latter can be appropriated as repositories for deconstruction. To reformulate one of the overriding constructionist theses of gothic criticism: monsters are not born, but made—made, in no small part, by (and into) discourse.

## Cheap Scares

Like scholars who tame monsters with critical inquiry, composers for early video games took on the role of noise-tamers in their attempts to fashion meaningful music out of limited resources. Much of early game audio was reductive out of technical necessity (see Chapter 2), but developers of horror games excelled at coming up with justifications for stripped-down designs. Besides featuring a repetitive and fittingly oppressive soundtrack, *Silent Hill* uses dark and foggy environments that obviate the need for graphical rendering beyond Harry's limited line of sight (see Rouse 2009:19 and King and Krzywinska 2002:11–12).<sup>29</sup>

Awkward camera angles, an unwieldy inventory system, fuzzy enemy hitboxes, the absence of weapon reticles, and other prohibitive quirks are prevalent in gameplay, yet all find plausible vindication in survival-horror's ludic and aesthetic conventions.<sup>30</sup> These alleged defects, according to the sneaky wisdom of developers, make things scarier.

With *Silent Hill*, one of the soundest excuses for technical blunders and plot holes lies with the premise that the gameworld is a preternatural projection of a frightened, traumatized girl. This simulated town, as remarked by the game's characters, 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, maker of nightmarish worlds—and furthermore, when this narrator's unreliability is *narratively* legitimized.<sup>31</sup> As far as monster-taming goes, Alessa is the perfect specimen: made into a monster by her own monstrous mother (or rather, by the game's developers), she is placed in service of numerous stylistic and storytelling conceits. Powerful though Alessa may be within the game's fictional universe, she operates as a subordinated device of crafty game design. Her trauma is a convenient basis for horror, a blanket contrivance that reflects and expediently justifies the game's bewildering visual, sonic, and ludic phenomena.

As noted in Chapter 1, the characters Agatha Egglebrecht and DJ Three Dog provide excuses for the paucity of music in the world of *Fallout 3*. Agatha, in her own words, is elderly and unable to record many tracks for her classical station, while Three Dog says he has managed to find only a few musical albums in usable condition. A game like *Silent Hill* doesn't need to resort to explicit rationalizations for its repetitive music; alibis are built into the genre. Horror media trades cunningly in economies of fear—namely, in gaining 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 found-footage subgenre of horror films. Movies such as *The Blair Witch Project* (1999) and *Paranormal Activity* (2009) accrued indie cred and massive profits by capitalizing on elements of bare-bones presentation. Low-resolution visuals, shaky camerawork, and sparse soundscapes all helped achieve a sense of DIY faux realism and subcultural cachet.<sup>32</sup> 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.<sup>33</sup> Horror films, as observed by Judith Halberstam, "constantly [attempt] 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; see also Weiner 2010:52, Schaefer 1999:43, Clover 1992:10–23, and Twitchell 1985:54–56). Although horror films are sometimes panned 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 owning up to—and taking advantage of—their rough edges and thrifty constitution.

Reductive art gets condemned when it is (assumed to be) the result of incompetence but commended if it can somehow be confirmed as the product of intentional, painstaking stylization. We're bound to feel uneasy when we cannot tell how much effort has gone into making something look simple. Content aside, one scary thing about horror films is their lucrative role in the entertainment industry. To put things in perspective: whereas mega-blockbuster movies such as James Cameron's *Titanic* (\$200 million budget) and *Avatar* (\$237 million budget) both earned approximately *ten times* their respective budgets at box offices worldwide, the first *Paranormal Activity* film (shot for a meager \$15,000) earned *twelve thousand times* its budget, with a combined domestic and international gross of about \$200 million. Horror media, in sum, is unsettling not least for curbing our ability to gauge how much labor, money, and time may have gone into manufacturing a crude surface and, in turn, the extent to which the creators are profiting from consumers' willingness to embrace the final products.

Also central to 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; see also Perron 2009:122–125 and Carroll 1990:88–96). One of horror's most reliable scare tactics is the "stinger," a sudden loud sound used to galvanize the viewer or player (Donnelly 2008:93–95; cf. Ndalianis 2012:69–72). The economy of the stinger lies in the baseness of the sign (*mere noise*) as well as in its manipulative force (a *cheap shot*). Like visual jump scares, the stinger has the reputation of being an underhanded, lowbrow maneuver. Whereas suspense tends to be lauded, shock gets scorned as lazily sensational. When we deride stingers as the inexpert stuff of B-movies and B-games, we may do so in part out of embarrassed indignation—the feeling of being cheated out of control of our own bodies, of having little means of defending against 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 it's a cheap trick—we can't help falling for it. Seeing as how the impact of a stinger "precedes complex mental cognition and responses" (Donnelly 2008:95), its power is nearly impossible to defy. This simple blast of sound represents a monster that cannot be tamed by discourse or mitigated by savvy. It doesn't matter if we're world-class experts on horror. Some stingers will get us all the same. In bypassing our intellectual

faculties, this most vulgar of noises exposes all listeners as susceptible to shock, reminding us that—notwithstanding our persuasive words and 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, in fact, virtually the opposite of a stinger. This noise fades in and out, never takes the player by total surprise, and will recur hundreds of times in a single playthrough of the game. Yet it's flat-out terrifying. The force of this sound comes from the way it discreetly conditions and controls the player. Instead of delivering a jolt to the nervous system, 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, let us 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: car crash, missing daughter, cacophonous alleyway, flayed corpse, unbeatable monsters, necessary death. All a nightmare, perhaps. But then the nightmare goes on.

When Harry wakes up in a diner following these events, he's greeted by a lone cop. She tells him that strange things have been happening around town: all phones are dead, all streets dead empty. She hands Harry a gun but warns him to use it with discretion. Ammunition is precious.

After the cop leaves, I get Harry to explore the diner and grab a few items—among them a map, a flashlight, and a knife. As Harry nears the diner's exit, a red pocket radio on a table starts emitting a static signal. A cutscene shows Harry walking over to examine this device...but before he can pick it up, a flying pterodactyl-like beast smashes through one of the diner windows (see Fig. 3.5). The cutscene ends: Harry falls back under my control. In a panic, I shoot at the mon-



Figure 3.5. Harry's encounter with an Air Scream in the diner. Screen captures by the author.

ster with the gun I received from the cop. Though the radio is still going berserk, its white noise is now barely audible over my gunshots, the beast's screeches, and a percussive musical track. Just as I start wondering whether this is supposed to end in yet another scripted demise—just as I start slowing my shots, thinking I should give up—the creature crumples to the ground. The radio noise stops. All is silent once more. I take the radio and head into the foggy town.

Within minutes of wandering the streets, I come to realize that this pocket radio—while unable to perform any conventional receiving or transmitting functions—is a monster detector. Its white noise increases in loudness as monsters approach Harry and fades away when they are successfully dispatched or eluded.<sup>34</sup> Although this sound telegraphs the proximity of enemies, it does not convey their exact location. Especially when heard in the game's hazy environments, the noise stands to be doubly alarming because it tells the player not only that monsters are near, but also that they can come from anywhere. This radio static, as noted earlier, is contrary to a stinger. Whereas the latter manifests as a blast of sound, the former ebbs and flows in volume. And whereas a stinger's visceral impact comes largely from the shocking noise itself (rather than from the indication of a specific threat), the radio static, by portending enemies, is frightening precisely as an index of danger.

Harry's radio literalizes the occult powers that writers attributed to this technology in the early twentieth century (see Rehding 2006:255–260, Sterne 2003:290, and Sconce 2000:62). It is a magic box, a channeler of messages from beyond. Granted, players who are preoccupied with virtual survival in *Silent Hill* have little incentive to reflect on how Harry's radio is able to do what it does. The fact that a player never sees Harry carrying the device eases the assimilation of its static into the level of pure interface.<sup>35</sup> Players have no need to hear the signal as something coming from a pocket radio. What matters is its warning function. "Game sound," as Ekman and Lankoski put it, "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). Although functional sounds can assist ludic progress, this isn't to say they unequivocally enhance a player's agency. The radio noise in *Silent Hill* is useful, but an excessive dependence on the alarm may suggest that 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 as-yet-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, combining signals devoid of aesthetic intervention, full of sound and fury, signifying nothing (see Reed 2013:306). Yet for all its material crudeness, this noise

in *Silent Hill* steers the player's actions with masterly efficiency. Despite serving as an aural lifeline, it points up players as Pavlovian creatures whose bodies tick with every tick of the radio.

The static in *Silent Hill* is distressing not least for its ability to lull and lock its listener into a state of compliance. This techno-dystopian scenario invites broader reflections on all the little mechanized noises that subliminally shape our everyday acts of work and play. Computer beeps, musical earworms, the beckoning ringtones of mobile devices, and other contaminants of urban noise pollution all constitute automated signals with potential to move and master us.<sup>36</sup> Many of these sounds, while legible, influence our behaviors without ever providing us with much reason to read into them *per se*—to think through their anatomy, source, and function so as to restore some semblance of human intellectual authority (see Goodale 2011:138–141). A vision of players succumbing to the noises of *Silent Hill* resonates with popular media depictions of video games at large as a manipulative medium of entertainment. Players who grow conditioned to obey a game's white noise end up committing what might appear to be a host of mindless actions—exactly the sorts of actions that detractors of games love to lament.

As a tribute to the twists that tend to occur at the ends of horror narratives, I'll offer a modest one to close out my discussion in kind. Like many who have written about *Silent Hill*, I have so far referred to the game's radio static as "white noise" (Perron 2012:28, Nitsche 2008:132, Kirkland 2007b:410, and Whalen 2004:76). The reality is that this sound is technically not pure white noise but rather a stylized representation of it. The static of Harry's radio consists of a high ringing tone—pitched at about 700 Hz—juxtaposed against looping samples of crackling sounds in a lower register. What's notable is how designers went this extra mile to create an aestheticized approximation of white noise when they could have just resorted to blasting actual static. One reason for investing such effort was perhaps to make this recurring noise more palatable to players' ears. Just as no player of a video game would want to suffer bodily harm (or face a real Blue Screen of Death), so most may not wish to tolerate real white noise for long. 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 hear it virtually as such—testifies to the successful implementation of this almost-but-not-quite musicalized aesthetic. So while *Silent Hill* contains many sneakily economical aspects (repetitive musical tracks, foggy environments, and plot holes *qua* traumatic visions), the sound design of its radio static presents a reversed scenario.<sup>37</sup> The stylized noise reminds us that, for all the labor- and cost-cutting strategies in the production of horror entertainment, there are also subtle acts of creative effort that can sometimes go unsung.

## Would You Kindly...?

Few statements by video game characters have gained more renown in recent years than what Andrew Ryan says right before he is beaten to death at the climax of the 2007 game *Bioshock*. “A man chooses!” Ryan sputters with his last breath. “A slave obeys!” This declaration can be found today on T-shirts, in tattoo designs, and across countless online forums devoted to debates about what the words mean within and beyond the context of the 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 has unwittingly been acting under the mind control of a man named Frank Fontaine. As Ryan tells it, 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 destructive tasks. Using a subliminal trigger phrase (*would you kindly...*), Fontaine had the power to make Jack do anything. After divulging this information, Ryan asks Jack if he *would kindly kill*. In the ensuing cutscene, the player looks on, horrified, as Jack bludgeons Ryan with a golf club. Although interpretations of this moment have varied widely, many fans understand Ryan’s actions as self-sacrificial, as an attempt to snap Jack out of his obedient state and to show him the truth about his internal programming. The scene is remarkable not simply for its narrative twist—the revelation of Jack’s enslavement to the smooth-tongued Fontaine—but additionally for prompting players (embodying Jack) to recognize their own prior obedience and willingness to carry out Fontaine’s (read: the game’s) directives to the letter. *Bioshock* reflexively critiques the idea of free will, urging us to contemplate just how good we are at following orders and social scripts.<sup>38</sup> Video games dangle carrots in front of us—ludic survival, virtual money, a suite in Ten-penny Tower—as if to ask us: “Would you kindly...?” 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!”

With efficient scare tactics that wrangle us into submission, survival-horror games in particular limit our agencies and thwart motivations for transgressive play. Compared to *Fallout 3* and other open-world or multiplayer games, *Silent Hill* offers a linear, constricted adventure, affording the player little choice but to direct Harry from one frightening scenario to the next.<sup>39</sup> This said, disobedience is not impossible. A player could oppose the imperatives of *Silent Hill*, for example, by keeping Harry next to his crashed car at the outset of the game. Instead of making Harry search for his daughter, the player could put down the controller, sit back, and leave him as he is. No exploration, no alleyway, no monsters, no noise, no risk, no fear...and Harry survives indefinitely, standing around doing nothing. But while this manner of inaction might sound provocative on

a conceptual level—as a statement about (or against) human obedience, technological determinism, gaming addiction, violence, and so on—it arguably no longer represents an engagement with(in) the game.<sup>40</sup> The deliberate refusal to play may be an unusual move (think back to Sarasate and sunrise in Chapter 1), yet by entailing so little work, it lacks the virtues and virtuosity of conspicuous exertion. In the same way that one could be skeptical of aesthetically reductive products (found-footage horror films, a minimalist Red Dot on Canvas, or 4'33" by John Cage) for their lack of apparent labor, so assertions of agency via ludic abstinence are not likely to come across as imaginative or impressive as such. No work and no play makes for a rather dull ploy.

The reason we voluntarily subject ourselves to horror media, in any case, is to go forth and learn fear. And to experience fear in a horror video game, we have to 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* asks us if we would kindly venture into darkness, to peek around this corner, to open that door behind which might lurk a couple of formidable, even undefeatable monsters. We oblige because 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.

A survival-horror game can be a monster of a medium: it oversteps its inanimate status, breaks with convention, violates ludic contracts, bombards us with noise, and teases us with illusions of real danger. Just as the spectatorship of horror films is 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 manipulation and being transgressed *against*.<sup>41</sup> Capitulating to cheap scares requires that we accept cacophony, reductive aesthetics, and illogical plot points as compelling conceits. To play *Silent Hill* with conviction is to play (and buy) into its economies of fear.

The visceral scares of horror media expose 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 are capable of slipping through, running wild, and returning to invade our imaginations. Noises and monsters make perfect subjects for metaphysical dissection, but—if there's anything we can learn from Dr. Frankenstein and his gothic kin—these patients do not always remain 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. Interpreting video games and their stimuli as uncannily living entities can shed light on interactivity, repetition, automation, and the intersections between our ludic, aural, and intellectual agencies. Imagination of things coming to life, of course, is the very stuff of video games—a medium that lets us displace authority onto virtual characters, to experience conflicting sensations of being in and out of control, and to inhabit spaces where nothing stays dead for long.

# CHAPTER 4

## Role-Playing toward 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 townsfolk seeking to lift their spirits from the gravities of war. Kegs stacked from floor to ceiling hold endless promise 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. 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. Cheers of patrons grow from murmurs to roars as dusk swings to day. Even in the darkest of times, there's excitement 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 for Windows PC by the American company Turbine Incorporated, LOTRO launched on 24 April 2007 across North America, Europe, Australia, and Japan.<sup>1</sup> Players interact with the gameworld using avatars that can be customized in terms of name, gender, race, class, and appearance.<sup>2</sup> In contrast to the single-player games discussed so far in this book, LOTRO is a Massively Multiplayer Online Role-Playing Game, a sprawling public domain molded by the daily activities of its cohabitants. Set in the Third Age of Middle-earth (and coinciding with the events in J. R. R. Tolkien's *Lord of the Rings* trilogy), LOTRO encourages players to embark on quests, advance their skills, boost their reputations, and communicate with one another using



Figure 4.1. The activities of players in *The Lord of the Rings Online: Shadows of Angmar* (the base-game) take place primarily in Eriador (circled here on a map of Middle-earth). Screen capture by author.

text messages and private voice chat (see Fig. 4.1).<sup>3</sup> Many adventurers form allegiances called kinships to pursue common goals and nurture lasting friendships. As they fight the forces of Sauron, players get to feel like small yet vital cogs in a giant universe, every so often crossing paths—or swords—with key NPCs like Gandalf, Gimli, Saruman, and the Balrog of Moria.

Dungeon raids and epic battles are prominent in LOTRO, but just as vital to the game's communities are casual events such as concerts, costume contests, birthday parties, weddings, barter fairs, horse races, and seasonal festivals.<sup>4</sup> 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 online RPG to date.<sup>5</sup> The system allows players to perform both live and recorded tunes that can be heard by other nearby players in the gameworld.<sup>6</sup> These musical performances are visually simulated by the movements of players' avatars and the strings of colorful notes that float out of equipped instruments (see Fig. 4.2). Examples of instruments—each of which sports its own timbre and a range of three chromatic octaves along the Western twelve-pitch scale—include the bagpipes, clarinet, flute, horn, drums, harp, lute, theorbo, and cowbell.



Figure 4.2. (Left) A collaborative musical performance around a campfire in the Bree Auction Hall and (right) my own avatar, Willishire, playing the lute on the streets of Bree-Town. During musical performances, the bodies of avatars sway gently. Their hands and fingers make gestures that are in no way synchronized with (or affected by) the instrumental music being played. Screen captures by the author.

Many players regard music-making in LOTRO primarily as a hobby that offers respite from formal adventuring. 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 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 sampled *beeps* and *boops* of players’ tunes, one might imagine the gameworld’s musical activities to be little more than crude assemblages of moving pixels and tinny waveforms. The significance of this music, however, becomes evident when it involves a player performing eulogistic melodies for a kinmate who has passed away from cancer in real life, or when it’s a clan of six bagpipers blasting an auction hall with six different musical pieces in an attempt to drive all other players from the room. These are two examples of actual events from the field—among many others I will recount in this chapter—that attest to the affective as well as coercive potential of LOTRO’s musical performances.

Much of my investigation centers 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. Players performing freestyle strike individual keys on their computer keyboards to produce corresponding musical sounds in the game. A menu in LOTRO lets the player map any number or letter (e.g., 7 or S) to a pitch (e.g., middle C) within the three-octave range of an equipped

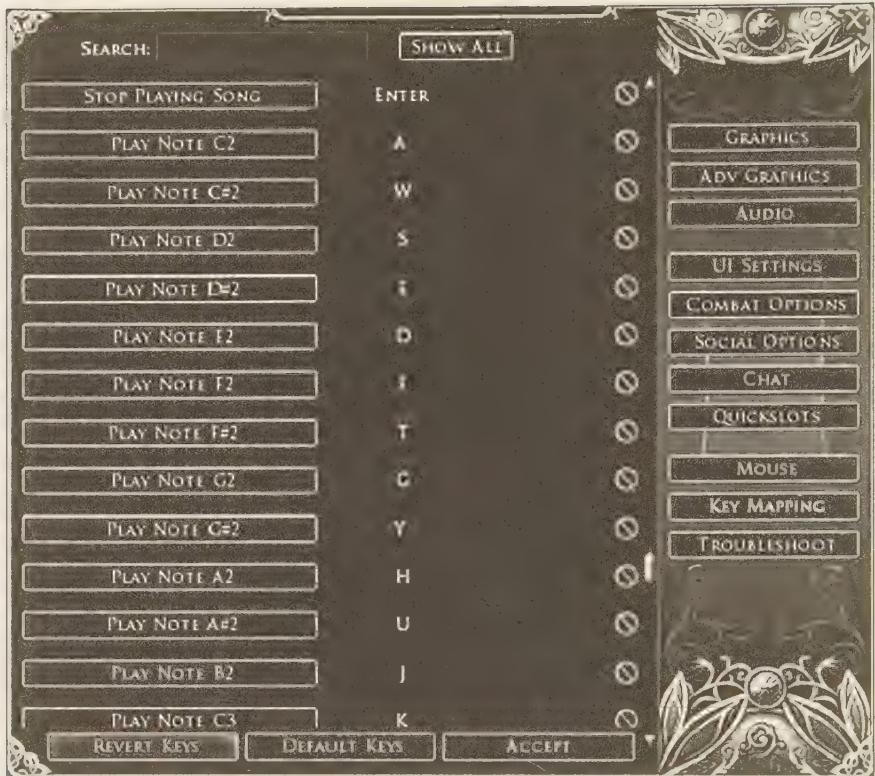


Figure 4.3. The LOTRO key bindings menu in which a player can assign freestyle keystrokes to individual pitches. Screen capture by the author.



Figure 4.4. A keymap devised by a player named Psomm (shared on LOTRO's forums).

instrument. For freestylers, one of the main challenges lies in devising and getting accustomed to a keymap that optimizes the performability of music (see Fig. 4.3). Many players share their customized keymaps on LOTRO's online forums to assist others with the execution of musical pieces (see Fig. 4.4).

Whereas freestyling approximates a live performance on a keyboard instrument (or a similarly configured metallophone), the game's other mode of music-

making—ABC—allows players to activate an entire precomposed sound file with a single text command. Players can create their own ABC files with plain-text applications such as Windows Notepad. ABC notation uses ASCII (American Standard Code for Information Interchange) characters to designate musical pitches and rhythms. Additional parameters are specified with the letters Q (tempo), M (meter), L (default note duration), and K (key).<sup>7</sup> Once an ABC file has been assigned a name and saved to a player's "The Lord of the Rings Online\Music" folder, it can be activated in LOTRO with the command "/play <filename>." An avatar will then perform the music coded in this file from start to finish without any further input from the player. Ex. 4.1 illustrates the ABC notation that I used for my simple arrangement of the English folk song "Greensleeves."<sup>8</sup>

*Example 4.1.* Lines of ABC notation with corresponding Western staff notation for "Greensleeves." Shown below each system are the keystrokes that players could alternatively use to perform this tune in freestyle (according to the keymap presented in Fig. 4.4).

**Letter**—pitch (A through G)

\_—flat (not used in this transcription)

**Lower-case**—upper octave

=—natural

**Upper-case**—middle octave

|—barline

**Followed by comma**—lower octave

[ ]—pitches inside sound simultaneously

**Number**—note duration (multiply by L)

z—rest (not used in this transcription)

^—sharp

Q (tempo): 120      M (meter): 3/4      L (default note duration): 1/4      K (key): Amin

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



freestyle  
keystrokes

K O P = P O J G H J K J U B V B H Y H  
 D V G H G G V D V G F F D D D Y Y

Hundreds of players have shared their ABC creations on websites such as *The Fat Lute* ([www.thefatlute.com](http://www.thefatlute.com)) and *LOTRO-ABC* ([www.lotro-abc.com](http://www.lotro-abc.com)). As of June 2012, the archives of *The Fat Lute* contained over eight thousand ABC files. Table 4.1 lists twenty of this site's most frequently downloaded files.

Friendly filesharing practices, however, have encountered opposition from LOTRO players who look down on ABC and describe it as the empty recycling of digital code. For while freestyling appears to require a live, skillful demonstration of hand-eye coordination and musical expression—again, somewhat like playing an acoustic keyboard instrument—the activation of an ABC file is routinely accused of lacking performative engagement because it requires no player-input beyond an initial text command. A player named Chazcon posted the following comment on a LOTRO forum thread titled “ABC—Way to Ruin a Wonderful Music System” (22 July 2008):

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 play music in the game. Those who protest this exclusionist attitude tend to cite the carte blanche premises of online role-play to justify 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?

Arguments about what constitutes an authentic musical performance in LOTRO hinge on the understanding that musicality—whether in conservatories, academia, or online gameworlds—carries symbolic capital.<sup>9</sup> So what happens to this capital when every player in LOTRO can *role-play* as a virtual virtuoso? With ABC files available for download on websites at no charge, 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 to concerns about intellectual theft, artistic integrity, and the ethics of online filesharing.<sup>10</sup> On LOTRO’s 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 mark of

*Table 4.1. Popular ABC files from *The Fat Lute* (sorted in order of popularity). List compiled by the author in June 2011.*

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

social distinction—a distinction that, by its very nature, is sustained by the exclusion of those deemed unable or unworthy to possess it. Perhaps less apparent is why players 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 LOTRO's cohabitants simulate musical behaviors and negotiate ideals of virtual performance in light of role-play's perceived freedoms. Many players—especially those who prefer ABC—appeal to role-play's egalitarian principles to defend their sense of performative entitlement. As a dedicated LOTRO 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 things in-game, and I don't view the music system any differently" (interview, 23 December 2008). But whereas some LOTRO players do perform music to promote a peaceful artistic democracy, there are also those who deploy music as a tool of harassment and territorialization. Players who sonically provoke others or play over others' performances point up music's offensive potential. Whether engaging music to harmonious or agonistic ends, LOTRO players bring tricky issues of privilege, elitism, liveness, and authenticity to the fore. In doing so, these performers are broadly illuminating the 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, interviewed musicians, honed my performance skills, and jammed recreationally with other players. I encountered an extraordinary range of player-made music, including Beethoven sonatas, opera arias, *Star Wars* medleys, *Final Fantasy* themes, Japanese pop songs, Christmas tunes, and all manners of original compositions and improvisations. Most of my time was spent in a village called Bree-Town, where the Auction Hall and the Prancing Pony Inn rank among the gameworld's most popular concert venues (see Fig. 4.5). Outside LOTRO, I gathered the views that players, journalists, and developers shared in blogs, magazines, and commentaries on gameplay footage. With instant messaging and email, I conversed with players who were actively participating in debates about music on LOTRO's forums. Many interviewees described their epic as well as quotidian gameplay experiences with great detail and flair. It was often through players' avid storytelling and poetic embellishments that I caught the clearest glimpses of music's social import in LOTRO.



Figure 4.5. (Left) Bree-Land circled on a map of Eriador and (right) a map of Bree-Town (one of Bree-Land's central villages), with the Prancing Pony Inn and the Auction Hall circled in the northeast and southeast corners respectively. Screen captures by the author.

Recent scholars have noted the ease with which the anonymity and technical conveniences of online worlds can scramble an ethnographer's moral compass.<sup>11</sup> As I went about fieldwork in LOTRO, I sought to be as transparent as possible about my research aims without unduly disrupting the activities of other players. Willshire, my avatar, was unremarkable in dress—outfitted with a standard Hobbit's tunic, a pair of green gloves, and a short kilt—and so was wholly indistinguishable as a fieldworker based on appearance alone. The extent to which I made myself visible as a researcher varied according to different 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, I always provided my real name and information about my project while, in turn, permitting players to reveal as little or as much about their real-life identities as they wished. I informed all complying interviewees that their responses were being logged and that the opinions they were sharing could eventually be cited in scholarly contexts. 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. Players hailed from diverse musical backgrounds and possessed expertise in topics ranging from Middle-earth lore to performance theory.

When asked about LOTRO's music system, many players start by relating their views on freestyle and ABC. Mastering ABC notation, according to those who attempt it, requires time and patience. The payoff is that this system lets players 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 Internet speed, keyboard responsiveness, and server stability. All sorts of glitches can result in delays between a freestyler's input and the sonic output. As such, a player's competence with acoustic keyboard instruments doesn't 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 an area, attempts at cooperative freestyling often lead to problems with synchronization. As a result, most players aiming to coordinate large ensembles favor the ABC system, which has 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 and performing 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. (Vraell, LOTRO forums, 27 December 2008)

What is most revealing about this proud statement is its suggestion that ABC—despite the 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 fieldwork can demonstrate some different types of musical collaboration. In Video 4.1 , two players named Dalman and Icke improvise a freestyle duet on lute and drums outside Bree-Town’s Prancing Pony Inn. Video 4.2  shows a group performing a multi-part ABC arrangement of Howard Shore’s “Concerning Hobbits” (composed for Peter Jackson’s *Lord of the Rings* film trilogy) around a campfire in the Bree Auction Hall. Video 4.3 , likewise recorded in the Auction Hall, features an impromptu freestyle and ABC duet between myself and Skjald, the first player I ever interviewed in the gameworld. In this instance, I was in the middle of typing a question for Skjald when he broke into an ABC rendition of Beethoven’s *Für Elise* on his harp. Upon seeing him do so, I equipped my lute and attempted to freestyle along by ear. Although this resulted in plenty of musical missteps on my part, it also produced some interesting moments of improvised counterpoint.

By affording players the ability to role-play music—in a sense, to play *at* playing music—LOTRO’s ABC system extends the kinds of equalizing prospects that motivate characterizations of the Internet and multiplayer gameworlds as post-

modern playgrounds. Online environments' presumed capacity to reconfigure or even elide social hierarchies has kindled celebration and distress in equal measure (see Payne 2008:62–64, Filiciak 2003:93–99, and Hillis 1999:xxix–xxx). In cynical perspectives, postmodern cyber-ideals do not simply level the proverbial playing field, but steamroll over it, leaving only the padded rhetorics of value-free relativism. It is in part this disquieting vision that breeds skepticism toward LOTRO's ABC system (and toward music sims such as *Rock Band* and *Guitar Hero*): the standard argument is that players of these games would be better off spending their time and money learning how to play "real" instruments.<sup>12</sup> Sensationalist reports about how *Second Life* and other virtual phenomena are taking over our real (or First) lives betray anxieties akin to those concerning how musical role-play in video games might one day supplant good old-fashioned forms of musicality. Such are the controversies at the root 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 post in the thread

"ABC—Way to Ruin a Wonderful Music System,"

LOTRO forums (26 August 2008)

Shortly after LOTRO's launch, Turbine's audio director, Geoff Scott, 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" (2007). Players of LOTRO have since championed as well as contested this philosophy of musical utilitarianism. Debates have proliferated 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 capable of virtuosic feats. 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).

Devoted role-players in LOTRO pen detailed profiles for their avatars, adopt Tolkienesque language, and feign ignorance of real-world technologies, traditions, and events. Many of those who uphold this virtual world as a musical democracy further insist on their rights as role-players to reimagine and extend their abilities with the game's music system. As noted in Chapter 1 (concerning 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 are enough to make one's avatar set off an atomic bomb, sing an aria, flee from monsters, or in this case, execute a full-fledged ABC performance. What opponents of LOTRO's ABC system have condemned, of course, is none other than its amplification of musical input and its 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. A notehead is solid if musicians are freestyling but noticeably more transparent if they are executing an ABC file. Any disdain toward ABC does not therefore rest primarily with suspicions of potential deception. Whereas artists who recordsplice, lip-sync, or autotune might aim to conceal their tools of sound manipulation, ABC musicians in LOTRO are not usually attempting to pass as freestylers or otherwise technologically unmediated performers.<sup>13</sup>

Concepts of liveness come up regularly in discussions about the authenticity and merit of ABC performances. As Philip Auslander observes, live performances owe their symbolic capital to connotations of "spontaneity, community, presence, and feedback between performers and audiences" (2008:63). LOTRO players often use the terms "canned" and "live" to describe ABC and freestyle respectively. Implied oppositions between these two modes of performance, however, are more complicated than they appear. For while it's true that player-input is not required to sustain an ABC file once it has begun, performers can nevertheless complement their music with other distinctly live actions. Unlike freestylers—whose fingers are 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 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: Hmm... How about...  
 ALL: NOW! (interview, Reclusiveone, 6 December 2008)

In online gameworlds, human presence is conveyed by prosthetic vocabularies—that is, by preprogrammed avataric animations and sounds that players perform in order to render their surrogate bodies legible as live and living entities (more on this in Chapter 5). Whereas freestylers in LOTRO depend exclusively on the production of music to telegraph liveness, ABC performers can carry out actions that grant this mode of performance its *own* dimensions of liveness. 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 musical performance in its totality is demonstrably live. That music cannot always be taken as the sole—or even central—component of a musical performance unsettles any definitive ontological boundaries one might attempt to draw between the relative liveness of ABC and freestyle.

Debates over the ABC system's utilitarian potential have ample precedents in discourses about technology's democratizing effects on musical production and consumption. Simon Frith states 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).<sup>14</sup> David Sanjek (2003:363), René Lysloff (2003:44), and Paul Théberge (1997:131), moreover, all tentatively use the term "utopian" to describe

DIY musical practices and online filesharing cultures. Timothy Taylor pursues a similar line of thought in remarking on electronic technology's "democratization of musicking" (2001:161) but takes care to stipulate that the fulfillment of egalitarian values depends on one's ability to access requisite technologies in the first place (see also Jenkins, Ford, and Green 2013:188–194, Miller 2012:222, Katz 2012b:248, Jenkins 2008:290, M. Smith 2007:167, Taylor 2001:155, and Turkle 1995:244–245). Characterizations of cyberspace as a democracy stem largely from the optimistic fantasies of individuals who have the luxury of inhabiting these realms and propagating such utopian theories. New technologies do open new channels of engagement and access; at the end of the day, however, it's not just *anyone* who can afford to be a Hobbit virtuoso. While some LOTRO players might recognize that their very entry into virtual Middle-earth signals a socioeconomic advantage, the admission and articulation of this reality can interfere with the seductive ideals of equality offered by the ABC system and by gaming technologies more generally. A promotional slogan such as *Now anyone can be a Guitar Hero!* would lose much of its ring if it were appended with the qualification...*provided you have the means to purchase the game and live in a country where it can be acquired.* Especially since the advent of radio, reports of technology's capacity to democratize music have successfully appealed to specific publics in part by understating democracy's practical, cultural, and geographical limits. In this regard, musical democracies—well before LOTRO and video games—have long been virtual, manifesting as objects of privileged imaginations.

Detractors of ABC commonly argue that the activation of a sound file in LOTRO does not represent musical performance at all. "ABC," Chazcon pronounced in his online thread, "is not *playing music*" (LOTRO forums, 22 July 2008, emphasis added). Most respondents who took issue with this statement ended up expressing either outright indignation (*Yes it is!*) or a music-and-let-music philosophy of laissez-faire (*So what if it isn't?*).<sup>15</sup> Players of LOTRO, after all, knowingly enter what they perceive to be alternate realities precisely so they can simulate actions that they might not otherwise be able or willing to perform. Few players, for instance, would insist that only those with real-life equestrian training should be permitted to mount a steed in LOTRO. For the game's cohabitants, there's clearly something about the simulation of a musical performance that sets it apart from simulations of riding a horse or swinging a sword.

Players who denounce ABC may be frustrated by the fact 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 close to creating a system capable of translating particular musical skills, but as a result of technical shortcomings—laggy servers, 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, Tristriam, 31 October 2008). In most cases, however, even players who freestyle with apparent finesse can have a hard time attracting large and appreciative audiences. As one player notes: "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 that, in a virtual world saturated with (and satiated by) flashy ABC performances, there's little room for live musicianship. Despite being populated with live cohabitants, LOTRO has become a place where canned music prevails and where, furthermore, it can be hard to tell how much anyone is listening. In the end, the ability to download ABC files from the Internet, to pass off any music as one's own, and to steal the thunder of nearby freestylers severely confounds possibilities for an organized system of musical meritocracy.

Recording-based modes of musical performance have historically incited much contention 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 about the expressive potential of 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 accounting for the nonreproducible, unscripted elements of sampling and turntablism—for example, technical glitches, the deejay's bodily gestures, an audience's feedback, and the acoustic vicissitudes of a given space—the soundscapes and experiences of these performances are indeed eminently (read: humanly) variable.<sup>16</sup> Just as inventions of the pianola, the phonograph, and the radio initially sparked controversies about issues of musical authoriality, canned sounds, amateurism, and commercialism, so LOTRO's ABC system and other contemporary technologies are calling attention to the slippery criteria that distinguish active performers from allegedly passive consumer-listeners.<sup>17</sup>

Evidently, the democratization of musical craft in LOTRO has not paved the way for a virtual utopia. Quite the contrary: flames of controversy have been fanned by ABC's equalizing power and its subversion of conventional rubrics pertaining to musical competence and learnedness. Players who favor freestyle seem especially eager to import real-world musical hierarchies into the game-world so as to lay claim to the social distinctions associated with formal musical training and live performance.

Possibilities for a peaceful musical democracy in LOTRO are undermined even more palpably by music's ability to function as a tool of harassment and territorialization. Disputes abound concerning what kinds of musical repertoires and practices qualify as good, tasteful, and appropriate to the gameworld. The fact that player-music in LOTRO is automatically broadcast in a sizable radius around the performer means that any musician can trespass (either intentionally or not) upon a listener's aural range without first obtaining consent. Players who deliberately interrupt or perform over others' music do so to attract attention, to provoke those nearby, and to experiment with the limits of what music can do in this virtual world. Through acts of playful disorderliness, LOTRO musicians are exposing a host of social and ethical issues surrounding the weaponization of sound and 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 creation myth of Middle-earth to see the 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 relations in the cosmos. One of the Ainur, however—the mischievous, overconfident Melko—refuses to play nice, opting instead to fabricate his own competing strains. Ilúvatar eventually triumphs in this noisy battle, while Melko goes on to be the source of all evil in Middle-earth, eventually recruiting minions such as Balrogs, dragons, werewolves, and Sauron.

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 shape the kinds of musical practices that players are inclined to perform and to tolerate? And what is it about musical conflict in particular that distinguishes it from other forms of contention?

Consider, for starters, a player's complaint on a LOTRO forum thread titled "Don't Play Bad Music!" (27 August 2008):

My god, some folks in here must be deaf or lack any intonation. I passed by the 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!

Another player posted an indignant response the next day (28 August 2008):

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 [kinship], 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 before bad-talking people.

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

Official rules for player behavior are outlined in LOTRO's Code of Conduct, which the developers at Turbine drafted as a subsection of the game's End-User License Agreement.<sup>18</sup> 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, were it not for this stipulation, players could try to justify any offensive act by citing the hypothetically ill-mannered dispositions of their alter egos. Yet ultimately it is within the legal purview of Turbine's administrators to discipline

a player's injurious behavior as they see fit. According to the User Agreement, a "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.*). One of the most extreme penalties involves the termination of a player's account, a sort of virtual capital punishment insofar as it entails the deletion of a player's character from Turbine's servers.

Although the Code of Conduct refrains from recommending what types of music should be played in LOTRO, many players choose to perform only musical pieces that they believe accord stylistically with the setting of Middle-earth. Players frequently report 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 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).<sup>19</sup> 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). Attempts to honor musical lore-authenticity in LOTRO, however, can be challenging given that there is no single, unequivocal real-world culture (or historical era) from which Tolkien derived Middle-earth. Historians and literary critics have posited, for starters, a mix of Norse, Celtic, Anglo-Saxon, Welsh, Irish, and Germanic mythologies as Tolkien's sources of inspiration (Caldecott 2008:211–224, Flieger 2005:55–84, Chance 2004: 4–14, and Donnelly 2006:306–316). And while players' imaginations of Middle-earth's soundscape have likely been influenced by Howard Shore's soundtracks for the *Lord of the Rings* blockbuster trilogy, the musical lore of LOTRO remains highly contested. Conflicts in the gameworld arise between players who hold contrasting perspectives on the sorts of actions, linguistic conventions, and musical practices that contribute to compelling social and ludic experiences. 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 communal responsibility.

Seeing as how there's little consensus about the types of music that are conducive to effective role-play, some players try to circumvent questions of musical authenticity altogether by advocating for performances that suit particular events rather than Middle-earth's lore 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, Tristriam, 31 October 2008). When I asked this player what music he would find appropriate for a funeral, he responded: "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.*).<sup>20</sup> The mourners here expressed a sense of duty not to any single Tolkienesque aesthetic but rather to the mounting of a sensitive and solemn performance. They imported into the gameworld their own cultural notions of respectful commemorative music without fretting about its authenticity within the greater context of Middle-earth.

Given the amount of musical activity in LOTRO, it may come as a surprise that none of the thirty-four rules in the Code of Conduct makes reference to music. Such omission might speak to developers' endorsement of in-game musical performances as recreational acts that preclude and resist explicit governance. For while many other forms of misconduct—spamming chat windows, stealing the loot of fellow players, hacking the game code, and so forth—are liable to elicit serious repercussions, I have never heard of (much less met) a LOTRO player who has been formally disciplined for music-related violations. Call it music's ludic alibi, a defense predicated on the relative ease with which musical transgressions can pass as sound play, putatively slipping beyond the reach of (and need for) real admonition.<sup>21</sup>

Musical confrontations in LOTRO become extra fraught when players act out with antagonistic intent. In Internet and gaming communities, the term *griefing* describes behaviors that are deliberately committed to agitate or offend others.<sup>22</sup> Griefers derive pleasure and power from violating implicit codes of conduct. Cohabitants of LOTRO have the capacity to partake in musical griefing by using sound in a disruptive manner. 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, 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 band] 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 dominance.

While Melko, the Ainur's rogue chorister, was the first musical griefer in Tolkien's virtual universe, he obviously wasn't the last. This said, I'll conclude with two tales from the field. In the first case, a lone LOTRO griefer is effectively banished from an outdoor concert through the collaborative efforts of the event's performers and audience members. In the second, six musical griefers appear to emerge victorious when their orchestrated performance of cacophony drives away an entire roomful of disgruntled players.

## 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 6:30 p.m. to review their program and finalize their plans. Having seen announcements for this event on LOTRO's forums, I arrived early to interview the performers. The group leader, a Dwarf Minstrel named Gadowar, informed me that LoJ, though not primarily a music clan, enjoyed putting on concerts whenever its players could find time to do so. All of the music they were about to play, according to Gadowar, would be ABC ensemble pieces arranged by one of the group's members.

At 10:00 p.m. the LoJ performers headed out of the inn to face a rowdy audience of about fifty players. Although dusk had descended, dozens of attendees lit up the area by building campfires and shooting spells into the air. Using emotes (animations executed with text commands), players also made their avatars applaud, cheer, laugh, dance, smoke pipes, and breathe fire (see Fig. 4.6). The server's chat window buzzed continuously with jokes and festive wishes. In 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 "Angels We Have Heard on High" (Video 4.4 .



Figure 4.6. (Left) The Lions of Judah performing in front of the Prancing Pony Inn while (right) audience members light up the evening sky with spells (19 December 2008). Screen captures by the author.

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." LoJ musicians handed out prizes to the players who were the quickest to identify the songs being performed. The overall spirits of audience members were further lifted by the distribution of virtual beer by a Dwarf named Vanthli.

Everything went smoothly until about halfway through the concert, when, somewhere in the crowd, a Hobbit named Dugly began to play freestyle music on a clarinet against LoJ's ABC tunes (see Video 4.5 ). This resulted in 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 next few minutes, multiple players used the *slap* emote to whack Dugly an impressive total of fifty-six times. Such chidings, 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 chat session but received no response.

Since LOTRO does not support a Player vs. Player mode, the audience members at the LoJ concert had no means of restraining or chasing away Dugly with

avataric actions.<sup>23</sup> To this end, LOTRO's developers—perhaps anticipating the kinds of harassment that could proliferate in the gameworld—implemented in the game's initial design a technical countermeasure called “ignore.” This function allows a player to block all incoming music from a specified player while leaving the rest of the gameworld's sounds—including the music of non-ignored players—fully audible. At the Christmas concert, Gadowar and other irritated players repeatedly directed audience members to type “/ignore add Dugly” in their command windows so that they could block out the sounds of Dugly's clarinet and enjoy the unadulterated performance of LoJ's music. Once several audience members confirmed they had “ignored” Dugly, the LoJ performers proceeded with the remainder of their musical program. Dugly, possibly upon realizing that the musical griefing could no longer be heard by surrounding players, left the premises a little later.

To reformulate a familiar philosophical question: if a Hobbit grieves at a Christmas concert—but no one else is listening—does the grieving make a sound? Although LOTRO's “ignore” function 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 all but mute. Measures taken by the performers and audience members at the LoJ concert show that musical censorship in LOTRO is possible through (and only 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). An “ignored” player, in any case, does not become 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 grief on the clarinet (see Video 4.6 ). Consequently, the “ignore” function, despite its name, does not actually allow players to become instantly or blissfully ignorant of a griefer's presence and offensive intentions. One final tale will continue to probe the practical limits of musical censorship, conveying just how forceful sonic griefing can be when it is executed in an organized and premeditated 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 10:00 p.m. 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, at around 10:40 that night, Jimbrosil and five of his friends marched into the Auction Hall with 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 their 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 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. Anyone standing near the center of the room would have been able to hear all six musicians (see Video 4.7  and Fig. 4.7). The group acted like a flash mob, taking everyone unawares with a spectacular stunt. While a few listeners expressed amusement at the performance, most others were less pleased. No one, of course, was a true captive listener: players 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 griefers—though to do so, they would have had to run up to each of the griefers to view their respective names and, subsequently, place these names, one by one, on Ignore lists. Given the burdensome nature of this countermeasure, most players apparently resolved that it would be easier to flee the scene altogether. Within minutes all but one or two listeners vacated the space. The spammers therefore seemed to win the day, disrupting the activities of the Auction Hall's patrons and demonstrating that music can break communities apart just as quickly as it can bring them together.



Figure 4.7. Jimbrosil and five other players (circled) bagpipe-spamming Bree-Town's Auction Hall on 11 November 2008. Screen capture by the author.

This bagpipe spam is a drastic example of how music in LOTRO can function as an instrument of provocation and territorialization. It represented an instance of transgressive musical behavior lying beyond the basic applications of the game's music system. Any player who enters this virtual Middle-earth, granted, will almost inevitably learn about musical griefing either through experimentation or by watching others. LOTRO's musical griefers are, one might say, exemplary ludic virtuosos in the way they push the boundaries of musical performances. Music's simple execution via ABC makes it all the easier to produce noise pollution and sonic rivalries. But it is also arguably during such moments of transgression that the creativity and playfulness of LOTRO's performers are most discernible. For despite its single-click functionality, the ABC system permits players to weave together musical and cultural harmonies as they play, compete, and coexist with one another in a lively and mutable world—harmonies that resound with social significance precisely because the possibilities for discord are always *only* a click away.

## Freedom Rings

In his *Republic*, Plato opens a dialogue about justice and human goodness by invoking the myth of the Ring of Gyges, an artifact capable of turning its bearer invisible. According to Glaucon (through whom 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 *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, inhabitants of LOTRO and other multiplayer games are afforded enormous liberties to experiment with behaviors that they might not be able or willing to enact in real-world settings. Some players may feel especially motivated to take part in musical griefing because it’s one of the only reliable ways to garner 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 follows that some musicians would turn to tactics that are less than courteous.

Musical griefers in LOTRO engage in forms of sound play wherein risks of real harm are relatively low. Their musical offenses are noticeably transgressive without being excessively so—a game within a game, a way of having a little fun,

a social nuisance rather than a genuine threat. Misconduct of a musical nature has become an integral part of this 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 reminds all players—the griefers as well as the grieved—that LOTRO’s gameworld is a privileged place where one can explore these sorts of actions with considerable ease, freedom, and security.<sup>24</sup>

Controversies about music in LOTRO come down to questions of tolerance and cohabitation: how much players will put up with griefers; whether freestylers are willing to respect the musical activities of ABC performers (and vice versa); and what all this might say about the pleasures and discontents of virtual musical communities. Over the last few years, LOTRO’s inhabitants have discovered many ways of using music to forge and fracture social ties in a dynamic universe. To this day, players of the game are driving one another to test and transgress what music can do. These virtual troubadours, in sum, are relentlessly playing with music and, in doing so, uncovering convergences as well as divergences between virtual and real-world musical experiences.

My ethnography of LOTRO offers one starting point for conversations about how the means and effects of music-making are rapidly transforming alongside innovations in video games. The creative potential and limitations of LOTRO’s ABC system in particular can productively inform debates about the very definition of a musical performance in cultures replete with technologies of recording and simulation. For some players, ABC signals an anarchic nightmare in which players mindlessly regurgitate ready-made music with pretensions to artistic agency. For others, this system is the foundation of an exquisite democracy that grants musical wings to all. To negotiate dystopian and utopian conceptions of musical role-play is to mind the gap between musicality’s democratic appeal and elitist realities—put simply, the notion that although everyone is potentially musical, some are more musical than others. What are our incentives for judging authentic musicality and aesthetic worth? Why should we care who is (or gets to identify as) musical? How are the concepts and stakes of musicality changing? These are the basic yet powerful questions that players of LOTRO pose with their daily musical engagements. As the populations of virtual Middle-earth and other online communities continue to grow, it will be vital to attune ourselves to the musical roles that people play across their real and virtual lives.



# CHAPTER 5

## 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 "mother-fucker" about four times a sentence, except when his mother came into his bedroom to check on him. —Clive Thompson, *Wired* (2007)

Online games in recent years have increasingly supported voice-chat functions that enable players to speak with one another using microphones connected to computers and consoles. Vocal communications greatly assist collaborative and competitive gaming by offering a quick, hands-free means of verbal exchange. Yet even with its obvious utility, 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, emphasis in original)

In August 2007, the introduction of voice chat into *Second Life* incited protests from various residents who worried that the sounds of live human voices would undermine the pseudonymous operations of this virtual world. Anthropologist Tom Boellstorff explains that what "made debates about voice [in *Second Life*]

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).<sup>1</sup> Detractors of voice chat pined for *Second Life's* prelapsarian days, for an era when it had not yet been possible for the grits and grains of human voices to fold excessive reality into their online communities.<sup>2</sup> Many inhabitants 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 refused to do so. Among the outcries were predictions that voice chat would bring about the end of this virtual world by violating what made the world *virtual* in the first place.

Given that the first chapter of *Sound Play* began at the end of another world—with the ruins of the Capital Wasteland—these issues bring us full circle by way of eschatological panic. While human voices did not lead to a literal apocalypse in *Second Life*, they did cause players to question whether this Life was one worth living. At stake in disputes over voice chat were concerns about the power of voices to carry identifying information that one might wish neither to divulge (as a speaker) nor to apprehend (as a listener). In the anecdote that opens this chapter, Clive Thompson describes how voice chat in the online game *World of Warcraft* gave away the wizard (or rather, mage) behind the curtain, revealing a potty-mouthed child whose prior demonstration of gaming expertise made him seem older than he actually was. Thompson goes on to say: "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 father than anyone he recognizes as a 'gamer.' After an hour of this, we politely logged off and never hooked up again" (2007). The ability of disembodied voices to betray bodily identities—no matter how vaguely—gave rise here to an exchange that was apparently 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 *are* in virtual worlds—and what it means to (co)exist in these spaces—are confounded by popular conceptions of video games as playgrounds where performativity and plural identities prevail. Our avatars, ourselves: where do we draw the line? Preceding case studies in this book have noted how players embody, express, and negotiate real and virtual personae through avataric simulations—whether it's the timely press of a detonator

button (Chapter 1), a synthesized aria (Chapter 2), frantic responses to radio static (Chapter 3), or a collaborative musical performance (Chapter 4). All such behaviors are made possible by the graphical and sonic vocabularies built into particular games. Players can articulate these vocabularies in innovative ways, but the gestural units themselves—frames of animations and recorded waves of sound—are dictated by a game’s technical affordances. Even a LOTRO free-styler’s improvised performance, no matter how creative or virtuosic, remains a permutation of canned tones, each one a fixed sample from the game’s audio programming.

Think back to Chapter 2’s quotation of journalist Kirk Hamilton, who lamented the disenchanting effects of voice acting in video games. Voice-acted dialogues, however, are at least scripted, stylized, and recorded ahead of time; players’ own voices (transmitted live with voice chat), by contrast, are in no way restricted to a game’s audiovisual palette.<sup>3</sup> With voice chat, players can say anything they want. It’s for this reason that players’ vocal communications—with their spontaneous expressive potential—serve as palpable embodiments of distinction and transgression in online games. What happens when players drop their masks and introduce their voices into communal gamespaces? How do the sounds of these voices influence players’ actions and relations? What factors bear on players’ proclivities to speak out or stay silent? And what new masks—new fictions of identity—materialize when the voices of players conjure ambiguous, multiplicitous, or duplicitous identities?

The sounds of players speaking through avatars breathe life into these surrogate bodies. An avatar is a prosthesis, serving as a “bodily appendage-cum-psychic extension and therefore as an actual (if not material) part of the person” (Hillis 2009:132). But a player’s own voice also inversely functions like a prosthesis *for* an avatar by fulfilling a purpose that is at once compensatory (enhancing the perceived aliveness of the spoken-for body) and intrusive (sending a too-human sound into a virtual space).<sup>4</sup> Insofar as prostheses play correctional roles, they simultaneously normalize bodies—(re)making them whole and wholly human—while pointing up the contrivances of human normalcy. The standardizing agenda of a visible prosthesis implicitly reproduces its own ambivalence by virtue of the appended body that is perceived as almost normal, but not quite.<sup>5</sup> In online gameworlds, players’ voices likewise accentuate the porousness of the real-virtual divide by registering as objects of phenomenal and somatic excess.<sup>6</sup> These voices, in short, can ring false by telegraphing too many truths about the speaking body.

On 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, *Terra Nova*, 1 March 2007). A concurring forum participant stated: "Text may get messy, but it's pretty democratic—everyone gets a say eventually" (Ace Albion, *Terra Nova*, 1 March 2007). Those who took issue with these views pointed to the online first-person shooter (FPS) as a game genre that benefits enormously from voice chat. As one player put it: "Text (and democracy) are slow. In games with tactical situations, speech is the only way to give orders while fighting" (anonymous, *Terra Nova*, 1 March 2007).<sup>7</sup> Often involving team-based combat, online FPS games require players to cultivate quick reflexes and strategic maneuvers.<sup>8</sup> Voice chat allows players to relay orders to teammates, call for help, and point out enemy positions in the heat of battle. A team's chances for victory hinge on the consistency with which players are able and willing to convey pertinent information to allies during a match.

Vocal transmissions are considerably faster and less cumbersome than typed communications. Since text messages in most online games appear in minuscule chat boxes at the edges of the screen, they can go unread amid the wealth of graphical stimuli competing for a player's attention (see Fig. 5.1). The proper use of voice chat in online shooters therefore carries significant ludic capital, testifying to the speaker's dedication to teamwork and team spirit. "A silent team," a *Halo 3* player quips, "is a dead team" (quoted in N. Taylor 2012:253).

In competitive play, voice chat sometimes proves most expedient when it manifests undemocratically—that is, when not everyone on a team opts to speak at once, or when certain players seize leadership by speaking more loudly and authoritatively than others. In this hierarchy of audibility, female players tend

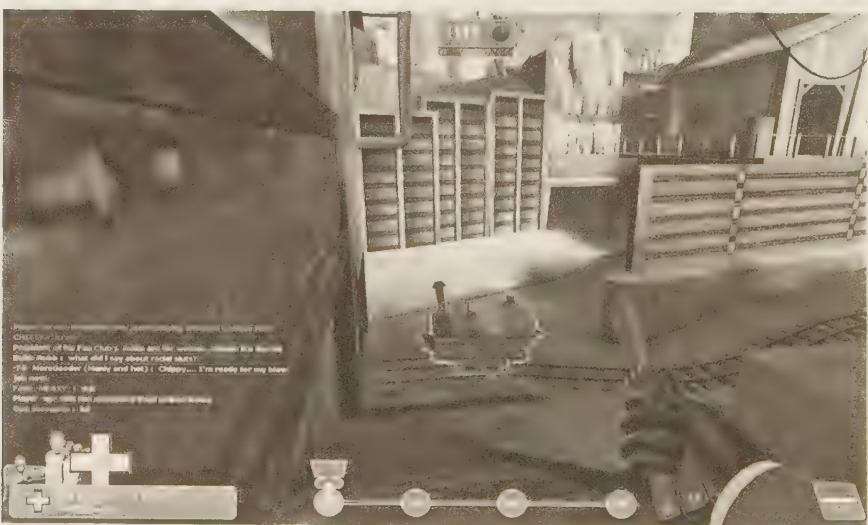


Figure 5.1. Examples of public chat messages in the online FPS game *Team Fortress 2* (see bottom left of display). Screen capture by the author.

not to fare well. Many women report a reluctance to use voice chat in online FPS games out of a fear that the sonic revelation of their real-world sex might prompt male players to respond in an undesirable manner. On an Internet forum, one player says she abstains 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, Kotaku, 20 June 2007). Another player explains: “Throw up a vent [Ventrilo] 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, *Terra Nova*, 28 February 2007). Players who speak in this locker room are by default the ones setting the tone of the gamespace. The prevalence of adult male voices in online FPS games contributes to homosocial soundscapes in which all players are assumed to be men unless a woman vocally outs herself. Female players who participate in mute play can automatically pass as men and escape direct sexual harassment, but such behavior must bargain silence for immunity.

A live female voice can impact the social dynamics of online FPS games in a number of ways. It might lead male players to obsess over the speaker’s identity and, in the process, instigate an explosion of misogynist jokes.<sup>9</sup> It might have a domesticating effect, causing profanity to drop to a minimum and communications to become unusually chivalrous and polite.<sup>10</sup> Or it might have no discernible effect at all. But if, in any case, a female player’s act of speaking in an online gamespace is routinely perceived as one of defiance—as speaking *out* or speaking *against*—then questions also arise as to what women in these environments are really able to say. That the very sound of a female voice is what attracts so much attention means it can easily supersede any verbal content that a woman may wish to convey.

Complicating the sexual politics of voice chat in online games are instances in which voices fail to yield definitively sexed bodies. One notable sexist (and ageist) comment—abbreviated in certain gaming circles along the lines of “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 comparable vocal timbres. Such insults conflate the purported amateurism of women and youths as a way of denying the prerogative of either group to participate in what some (men) would maintain to be a grown man’s game. As one player reported on a video game forum: “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, *Something Awful*, 21 June 2006).

The extent to which disembodied voices evoke accurate human bodies necessarily depends on players’ varying capabilities to deploy and decode these

voices as timbral, registral, and phonetic indices of appearance, age, sex, sexuality, ethnicity, nationality, class, (dis)ability, and other categories of physiological and cultural identity. Although any manner of vocal signification can influence the interactions between players, questions of sex and gender will take center stage in this chapter because the female voice has been an especially powerful magnet for harassment in online FPS games. Drawing on metaphors of the closet, I consider how the coming of voice chat has shaped gaming's politics of assimilation, repression, deception, and revelation.<sup>11</sup> With emphasis on three thorny issues—trolling strategies, vocal androgyny, and voice-changing technologies—I challenge traditional characterizations of voice as a site of authentic and agentic expression. Critiquing the volatility of voice-body relations takes us to the heart of how (and whether) video games afford spaces for safe, anonymous, and liberating play.

## A Chatty Fortress

Between March 2009 and June 2011, I conducted fieldwork on North American English-speaking servers of the online FPS game *Team Fortress 2* (TF2).<sup>12</sup> Released in 2007 by Valve Corporation for Windows PC, Xbox 360, and PlayStation 3, TF2 features team-based tactical combat.<sup>13</sup> Matches involve a Red Team and a Blue Team competing to accomplish the specific objectives of server maps. Match types include Capture the Flag (a variant of the eponymous school-yard game), Payload (with the Blue Team escorting a bomb-strapped cart into the defending Red Team's base), and King of the Hill (which has the two teams vying for control of a designated point on a map). The number of players in a match typically ranges from sixteen to thirty-two. According to Valve's game-distribution platform (called Steam), approximately 60,000 players are active on TF2 servers at any given point in a day.<sup>14</sup>

A player interacts with TF2's gameworld using an avatar belonging to one of nine classes: the Scout, the Soldier, the Pyro, the Demoman, the Heavy, the Engineer, the Medic, the Sniper, and the Spy. Each class has its own moveset and character model.<sup>15</sup> During a match, players can use keystrokes to make their avatars emit canned remarks.<sup>16</sup> The national and regional roots of these characters are connoted by the exaggerated accents and mannerisms of each class's vocal taunts. The Heavy utters ungrammatical English with a thick Russian drawl, the Medic (a caricature of a Mengelesque Nazi doctor) injects German phrases into his insults, and the Engineer keeps an arsenal of southern colloquialisms under his belt. As shown in Table 5.1, several classes have at least one or two taunts that are sexually charged and misogynist.

Table 5.1. Character classes in TF2 and examples of pre-programmed vocal taunts.

Class	Character model	Speech	Examples of taunts
Scout		Bostonian	<p>“I’m runnin’ circles around ya!”</p> <p>“Say goodbye to your kneecaps, chucklehead!”</p>
Soldier		Midwest 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>
Heavy		Russian	<p>“I was told we would be fighting men!”</p> <p>“The entire team is babies!”</p>

(continued)

Table 5.1. Continued

<i>Class</i>	<i>Character model</i>	<i>Speech</i>	<i>Examples of taunts</i>
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?"
Spy		Western European	"Maybe your colleagues will send a man next time." "Good Lord, you fight like a woman!"

Accompanying the characters' sporadic vocal quips are the noises of battle as well as various non-diegetic musical cues that signal states of victory and defeat (see Fig. 5.2 and Video 5.1 ).<sup>17</sup>

Floating conspicuously above all these recorded sounds are the live human voices that players can project into the gameworld. Players activate voice chat by holding down V on the computer keyboard and speaking into a microphone

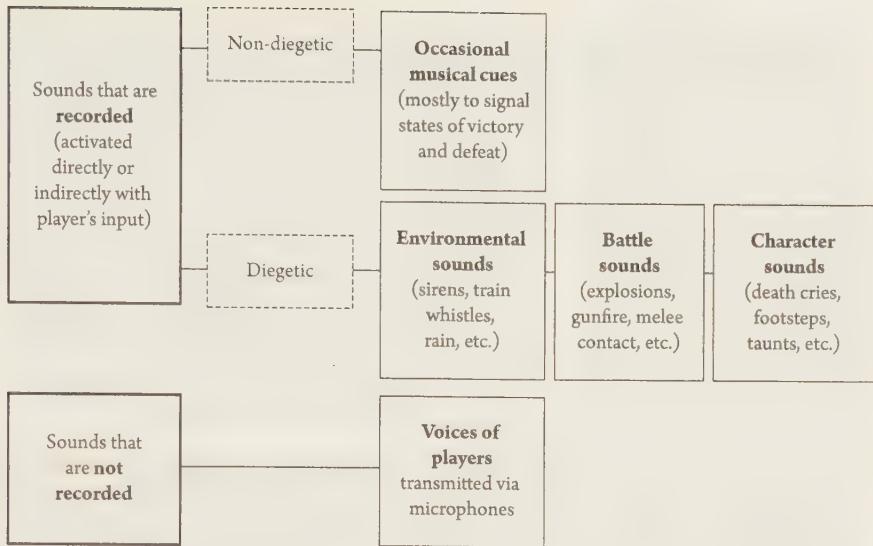


Figure 5.2. A soundscape map of a TF2 match.



Figure 5.3. (Left) An exclamation mark pops up above an avatar's head when a TF2 player holds down V to speak. (Right) The aliases of speaking players are displayed in the bottom-right corner of the in-game display. Screen captures by the author.

(see Fig. 5.3). 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 hear others speak as if everyone were connected by a conference call. TF2's default chat settings permit only players who are on the same team to hear one another (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 players' voices audible across both teams. Although the clarity of vocal communications will vary according to the quality of one's microphones and speakers, the overall staticky timbres of players' voices render them easily distinguishable from the crisp, canned utterances of avatars.

Conversations between players in TF2 can range from intense ludic jargon to informal chatter about topics—weather, news, sports—that have little to do with the game's technical goals. The alternation between strategic and mundane subjects offers relief from the otherwise incessant obligations of simulated combat. Unsurprisingly, the game's competitive nature also fuels plenty of trash-talk. Racist, sexist, and homophobic slurs are heard alongside the word *rape* as a synonym for humiliating defeat (a semantic custom that pervades Internet and gaming lingo).

TF2's atmosphere of male heterosexual energy is bolstered by a preponderance of player-customized *sprays* depicting female figures in pornographic fashion. Sprays are images that players can imprint onto the gameworld's surfaces. Any digital image—whether downloaded from the Internet or created from scratch—can be imported into a player's account and then used in TF2 as a spray.<sup>18</sup> These graphical signatures are flaunted by players as a form of virtual graffiti, which—like unrestrained speech broadcast through voice chat—lies outside the aesthetic bounds of the game's pre-rendered audio-visual content. Many players take advantage of such artistic license by opting for eye-catching and inflammatory images. It's common to see sprays of nude and lewd women in the gameworld and, moreover, to see players staring at these images (see Fig. 5.4).

The sounds of female players' voices in TF2 likewise open opportunities for masculine posturing and demonstrations of male sexual authority. Women who speak draw a lot of attention simply because female voices are rare in FPS matches. Possibilities for different kinds of games—games predicated on aural fascination, raunchy inquiry, and harassment—can all of a sudden erupt upon the introduction of voices that, in whatever capacity, sound like they don't belong. Given that Valve does not release statistics about its players' identities, it is difficult to ascertain the ratio of male-to-female players of TF2. More readily evident is how the infrequency with which female voices are heard reinforces perceptions that most players are male: one player estimated that “there is probably a 20/1 or 30/1 ratio of males to females playing TF2” (interview, Noobinator, 12 June 2011); another suggested that “there's maybe only one or two female players in our server” (interview, Sepharite, 31 May 2011); and yet another 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 2011). Skewing these estimates is the assumption that the paucity of female voices in TF2 is due to the actual scarcity of female players

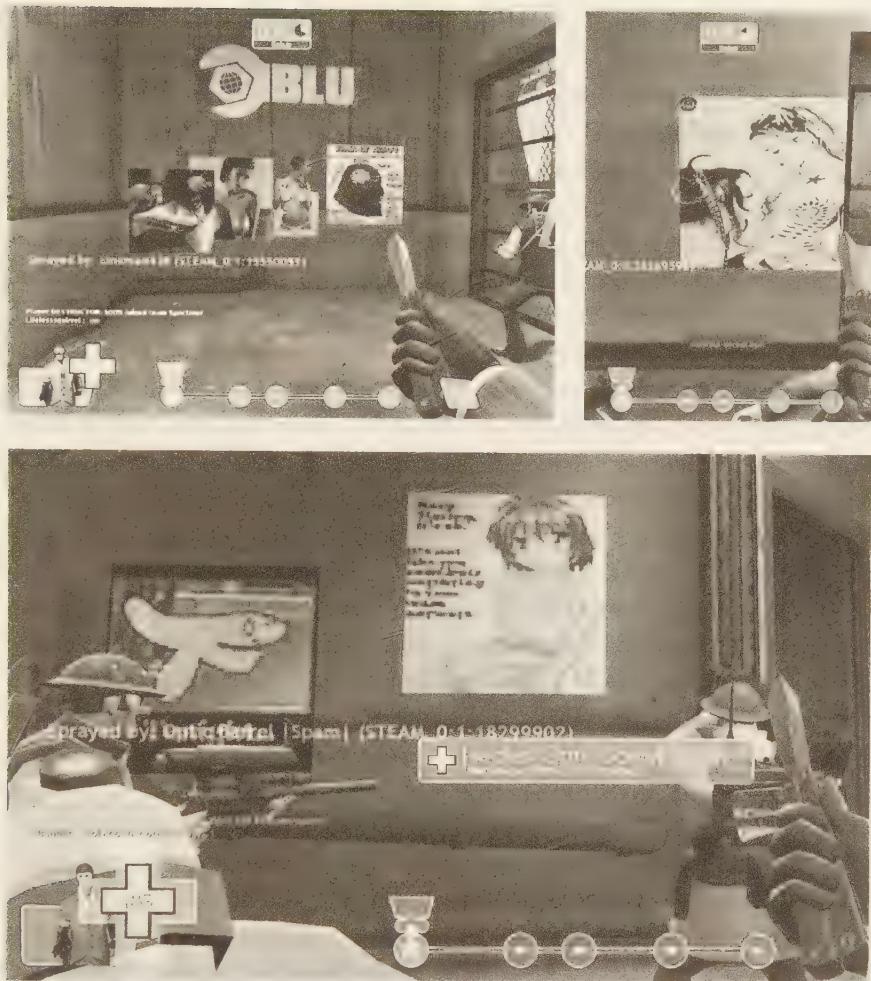


Figure 5.4. Players looking at one another's sprays in TF2. Screen captures by the author.

rather than to these players' disinclination to speak up. Impressions of gender ratios in TF2 matches are constantly regulated by the prevailing voices therein. At play is a politics of audibility whereby 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 nonspeaking women in FPS matches by imagining them as gleefully passing through the ranks of more outspoken players, reveling in role-play as silent soldiers. On the politics of visibility, Peggy Phelan argues for the "real power in remaining unmarked," stating that "the binary between the power of visibility and the impotency of invisibility is falsifying" (1993:6). Linda Schlossberg similarly remarks that even though the act of passing "generally holds larger social hierarchies firmly in place," it can

nevertheless be “a uniquely pleasurable experience, one that trades on the erotics of secrecy and revelation” (2001:3). To construe passing as pleasurable is no doubt appealing for its empowering political orientation. Yet like certain standpoint epistemologies, it risks reinscribing the very power gradients that a deminoritizing discourse would purport to undermine.<sup>19</sup> A danger with 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 notes, 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; cf. Cain 2010:749). Trading silence for impunity comprises a 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 TF2 report that they became more comfortable speaking out after gaining proficiency with the game and getting acquainted with regular patrons of particular servers.<sup>20</sup> One player explained in 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 2011). This time-biding strategy—coming out after purposefully passing—might bring to mind any number of narratives in which the unmasking of a female protagonist, previously disguised as a male warrior, leads to a climactic confrontation that challenges preconceptions of what women can or cannot do. Clorinda in Claudio Monteverdi’s dramatic madrigal *Il combattimento di Tancredi e Clorinda* (1624), Éowyn (the Witch King slayer) in Tolkien’s *The Return of the King* (1955), and the titular character in the Disney film *Mulan* (1998) are just a few such heroines.<sup>21</sup>

The problem, of course, is that a woman should need to gain entry at all, to be *like* one of the guys. This road to validation, in any event, is not one that every female player of TF2 chooses to take. On a forum about voice chat in FPS games, one woman commented:

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 annoy-

ing 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, *Gamer Nation*, 2 June 2008)

Described here is an environment that induces not just fear but also complacency. In an online FPS game, players who decide that the gains of coming out are outweighed by its costs find themselves ensnared in a pacifying culture that thrives on the deflection of blame.

When engaging in TF2 matches, players are scattered across thousands of servers, most of which can accommodate up to just thirty-two players at a time. Any player can join a server as long as it has an available slot and does not require an administrator's password. It is standard for players to hop quickly from one server to another (maybe after completing a match or two on each one) so as to experience different maps and game modes. Unpredictable turnovers in server populations bring together new communities of players who may not be acquainted with one another at the outset of a match. Closets in TF2 therefore lie on perpetually shifting ground. A female player who decides to talk and to come out as a woman would have to do so constantly lest she get mistaken again for a (silent) man by incoming players who haven't yet heard her speak. In an online FPS game, falling silent results in automatic reabsorption into its male homo-social fabric. The only way to stay out is to keep talking. 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 TF2 are nothing if not a point of magnetic return. It is by now a truism, in the views of feminist, queer, and disability theorists and activists, 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.<sup>22</sup> With its revolving doors, the closet is a heuristic home base at best, its ins and outs thoroughly blurred in our everyday imaginations.

## What the Troll Said

What's in a voice? For neo-Barthesians, self-proclaimed opera queens, and theorists of corporeal feminism, there's one answer that says a lot: the *body* is in the voice.<sup>23</sup> 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; cf. Dolar 2006:81 and Agamben 1991:39). The voice, in other (or its own) words, can already say much even when the speaker isn't trying to say anything at all. On the politics of speech, Adriana Cavarero stresses 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" (2005:173, emphasis in original; also see Dohoney 2011). To this point, Jonathan Sterne cautions against "[idealizing] hearing (and by extension, speech) as manifesting a kind of pure interiority" (2003:15).<sup>24</sup> Questions of uniqueness aside, what needs to be resisted are blanket understandings of voice (and the speech it may carry) as somehow capable of conveying a degree of agency or sincerity that lies beyond the expressive potential of gesture, text, and alternate forms of communication. As declared by a *Second Life* resident in 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, *Terra Nova*, 1 March 2007; also see Suler 2004:324–325). Especially with online interactions, it would be presumptuous, even ableist, to say that the articulation of a so-called real or complete identity cannot occur without vocal communication. Denaturalizing voice—stripping away its associations with true identity—opens up conceptual possibilities akin to those extended by well-worn theories of gender performativity. One such possibility might involve understanding voice as performance, as a socially adaptive construct that acquires the guise of coherent, authentic expression via the repetition of stylized speech acts and learned vocal qualities.

Characterizations of voice as a subversive force appear perhaps nowhere more prominently than in discourses on opera and song. Writers have insisted on the power of lyric voices with relation to the erotic cults of diva worship, the sonic interstitialities of castrati and cross-dressed performers, and extralinguistic utterances such as screams, cries, and laughter.<sup>25</sup> Resisting Catherine Clément's (1988) emphasis on women's victimized roles in opera, Carolyn Abbate offers a counternarrative wherein singing heroines could 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, affirming a virtuosic female presence that rages against opera's pandemic of undone prima donnas. She sings; therefore, she survives, transcending corporeal fate and living on through the vibrations of her miraculous voice. The catch with this hermeneutics of material vocal triumph is that it's enabled precisely by voice's relative immateriality and definitional promiscuity. Just as music is often cited for its nonrepresentational and ineffable qualities, so voice tends to get 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" (2004:284).<sup>26</sup> For it is not, in the end, simply the female singing voice that has been lionized as a locus of sensorial fixation, but rather the voice more broadly in all its metaphorical and material forms. As a chameleonic poster child

of subjectivist critique, voice has traditionally been harnessed to say whatever we—as students of music, poetry, and the humanities—have wanted it to say.

Strains of romantic idealism run through the arguments of writers who privilege voice as an acoustic window to the soul. This mindset posits, on the one hand, an inviolable bond between voice and human subjectivity. On the other hand, it displaces agency from the individual onto the autonomous, reified voice. To conceive of voice as somewhere out there—whether it's a diva's postmortem echo or an FPS player's prosthetic signature—is to call into question the naturalness of voice and its relationship to the human subject. Customary practices of role-play in games further obscure what it means for any disembodied voice to sound real, sincere, or authentic to begin with.

There's a gameplay recording that has become well known in the TF2 community. First uploaded to the website 1UP.com on 10 December 2007, the video features an outspoken male player named Ralphie obsessing over the presence of a female teammate during a TF2 match. Toward the beginning of the video, male players on the server tell Ralphie that this female player is a Japanese woman named Asie. As the match progresses, Asie stays silent for the most part but gets treated nonetheless as an object of sexual and ethnic difference by various male players. Below is a transcript of Video 5.2 ♪, a compilation of excerpts from the original recording.

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 2: 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, 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 [... *unintelligible*].

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 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, an episode of GFW Radio (a podcast affiliated with 1UP.com) outed Ralphie as a persona that the game journalist Shawn Elliott had adopted in his endeavor to rile up other players during a TF2 match. One of the podcast hosts opened a discussion of Elliott's stunt by reporting (see Video 5.3 ):

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 controversial stances or behaviors (usually in online contexts) in a deliberate effort to incite vexed responses from members of a community. A troll dangles inflammatory remarks as bait and then takes pleasure in luring others into disputing a view to which this troll might not even truly subscribe. As Judith Donath explains, 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 who cause mischief while concealing their grieving intentions to an extent (cf. Chapter 4).<sup>27</sup> All trolls by definition need to pass first as non-trolls—as genuine adherents to whatever polemical points they are espousing—lest they get ousted as trolls and chastised accordingly (or ignored altogether). A skilled troll knows how to push the right buttons in order to stir up contention for contention's sake. Attention is a troll's nourishment. A troll unfed is a troll no more.

In the case of Ralphie, Shawn Elliott gained recognition through his impersonation of a despicable persona who, in retrospect, represented a clever bid for provocation. Just by watching the video, it is difficult to gauge the degree to which Asie and other players really felt annoyed or harassed by Elliott during that TF2 match. What the footage does convey is that not all players on the server were totally aware of Elliott's trolling agenda. In the GFW Radio episode, Elliott stated that he had indeed been trying to get a rise out of not only Asie but also the other male TF2 players. He then gave a demonstration of the nasal, slurred voice he had used when speaking as Ralphie (see Video 5.4 ):

[*In podcasting voice*] 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 point about male players' macho posturing is an observation that came up regularly in my interviews with TF2 players. One player stated:

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 2011; see also Tucker 2011:84–86)

Acts of chivalry and special treatment tend to be double-edged. Many male players in the Ralphie scenario rushed to defend Asie against Elliott's come-ons but nevertheless made lewd statements *about* Asie via oblique references. Although these players addressed Elliott directly, they used 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," and so on. Elliott's outrageous harassment of Asie, it seems, gave other male players the chance to ascend to their own false pedestals, to seize a relative high ground from which they could take potshots at Elliott and Asie alike.

On the same day that the Ralphie video appeared on 1UP.com, it was uploaded to YouTube, where it has since received close to a half million hits. Most of the comments on this video ended up falling into one of two camps. First, there were the viewers who regarded it as a basic instance of sexual harassment. And second, there were those who ridiculed the gullibility of this first group by pointing out that Elliott was merely trolling. The latter respondents—perhaps out of an eagerness to reap the privilege of being *in* on a joke—were quick to *out* Elliott's subversive ingenuity as a grounds for refuting accusations of sexual harassment at play. Left out of these comments was any discussion about whether the harmless intentions of such behavior render it any less offensive. To excuse misconduct on the basis of its alleged self-consciousness or performativity is to abide by a logic with a slippery slope. At the bottom of this slope lies the dangerous argument that sexual harassment is (always) just a game—sanctioned by humor, flattery, parody, and non-threatening intentions—and that everything can be okay as long as everyone plays along.

For his Ralphie persona, Elliott used a voice that sounded markedly different from his podcasting voice, but this latter voice cannot necessarily be deemed normal, real, or ordinary. People who speak do so, as a matter of course, in multiple voices—voices that vary in speech content, timbre, register, inflection, affectation, loudness, rhythm, and pacing according to the demands and affordances of different social situations. The pseudonymous nature of online interactions promotes and authorizes polyvocality. It is in this authorization that trolls, gamers, and Internet users in general can take refuge. As Ken Hillis

observes, online 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). As described in Chapter 4, expectations of role-play in online games led LOTRO’s developers 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 or otherwise) embodies a double speech act, a manner of free indirect discourse that skirts liability via slippages between impersonation and authentic expression. Players *qua* ventriloquists who displace voices onto alternate entities—avatars, trolling personae, and so forth—retain the flexibility to disavow what they say (when under critical fire) before taking credit for what they have said (as soon as it is opportune to do so). Offenders in online games find safe haven precisely in the ease with which transgressive acts can pass as ostensible forms of role-play.

Once during a TF2 match, I heard a player named Nigel agitate his teammates by using a voice similar to that of Elliott’s Ralphie persona. When I interviewed Nigel, he told me he had in fact been inspired by the video 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.” In paying homage to Ralphie, Nigel occasionally targets female players with his antics. When I asked him whether he considered this offensive, he maintained: “You can’t sexually harass someone in a video game [owing to] 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] chooses not to.” As with musical griefing in LOTRO, vocal trolling at times gets a free pass for its comedic potential. “Sometimes, people will ask an admin to ban me,” explained Nigel, “but the funniest times are when the dude is begging for me to be muted/banned, but the admin won’t because he thinks it’s funny.” In these instances, trolls may be egged on by the impression that their targets, despite outward protestations, secretly enjoy the harassment (see Video 5.5 ). While this belief might be justified in certain gaming contexts, it operates under a line of reasoning that, if taken too far, echoes some of the most popular and pernicious alibis for cases of real-world sexual harassment: she-was-asking-for-it, no-means-yes, and other victim-displacing appeals.

Like the unwitting targets of the LOTRO bagpipe spam, players who get trolled in TF2 are not captive harasses *per se*. In this sense, trolling poses a

nuisance rather than a real threat. What griefing and trolling point up, nevertheless, is a troubling diptych informed by (a) how games facilitate harassment and (b) how harassment—in TF2, on the Internet, in the workplace—too often gets passed off as just a game. Distinctions between stylized and genuine offense are as permeable as the boundaries between role-playing personae and authentic identities. Especially when it comes to real voices in virtual spaces, interpersonal politics are bound to be murky.

## Any Other Name

Trolling sprees of players like Shawn Elliott and Nigel represent conscious performances of alternate voices. Yet virtually all disembodied voices—including those not modified in service of intentional deception—can be misleading as a result of their inability to relay exact, comprehensive, or verifiable information about the identities of speakers. An FPS player's voice can end up telegraphing drastically different bodies to different listeners. When asked if and how they visualize their speaking teammates, TF2 players gave varied responses:

I think I unconsciously associate a voice with someone in my head. Normally it's someone famous, I think, someone who has a voice similar to someone I've seen in movies or on TV. When I actually see a picture of them [the speakers], I'm always caught off guard, and continue to still picture them as I did before. (Interview, Jayrod, 12 June 2011)

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 percent of the time and I find myself wondering what the old lady on the other line looks like. (Interview, YORugly, 31 May 2011)

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 2011)

The human impulse to anchor disembodied voices to imagined bodies became a topic of great interest during the advent of public broadcasting in the 1920s. Researchers at the time conducted experiments on how radio audiences relied on particular qualities of a voice to construct a mental image of the speaker's

disposition and physical attributes.<sup>28</sup> Susan Douglas notes that listeners, “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. [...] 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).<sup>29</sup> What arguably matters most to a listener is not whether the imagined identity associated with a disembodied voice is perfectly accurate, but rather the extent to which a coherent and believable image of this speaker can be sustained in the mind’s eye. Conjured images of speakers are, in effect, avatars—virtual constructs that serve as vehicles for identification and placeholders for the real.

TF2 players, to be sure, rarely inquire into one another’s appearance, class, race, nationality, education, or occupation. Real-life identities of teammates and rivals are usually understood to be privileged information that is irrelevant to the match at hand. Respect for mutual anonymity, however, often goes out the window when female (or sexually ambiguous) voices are heard on a server. It is not uncommon for a speaking woman 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 inquiries are those concerning age, relationship status, and physical attractiveness—all of which are presumably posed with the goal of confirming the female speaker as an admissible and worthwhile object of desire.

Complicating these pursuits of sexual fantasy are instances in which a voice is not discernible as unequivocally female. Low-fi voice communications in TF2 are attended by sound distortion, background noise, and the masking of timbral nuances that might otherwise assist listeners in correctly determining the sex of a speaker. A common question that outspoken female players are asked is thus whether they are women at all. Two adult women who extensively use voice chat describe their TF2 experiences as follows:

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-year-old boy. (Interview, Evillittlekiwi, 3 June 2011)

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 2011)



Figure 5.5. Evillittlekiwi's and YORugly's TF2 profile pictures (reproduced with permission of both players).

Although Evillittlekiwi and YORugly play frequently on select servers and have become well acquainted with the regular patrons therein, they still sometimes encounter harassment and probing inquiries from male players (especially those joining the servers for the first time). Notably, both Evillittlekiwi and YORugly include their faces in their TF2 profile pictures (see Fig. 5.5).<sup>30</sup> They do so in part to assert preemptively that they are in fact women and, as Evillittlekiwi explains, to "stop all the requests for pictures" (interview, 22 June 2011).<sup>31</sup> Since both Evillittlekiwi and YORugly use voice chat and have no qualms about coming out as women in the gameworld, they publicize their identities to head off misconceptions about their sex, age, or appearance.

In TF2, disembodied voices that sound sexually ambiguous can be subversive not least for confounding their own legibility as objects of aural fantasy. If the speaker is an adult woman, then her voice belongs to a target of normative desire for the heterosexual male player. But if the speaker is a child, such fixation becomes steeped in pedophilic taboo. TF2 players 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 2011).

Players of online shooters sometimes type "LOL 12/woman" (or some variant of the phrase) to infantilize and feminize women as well as boys in one fell

swoop.<sup>32</sup> It's an accusation of sexual difference that goads its target to respond, to unveil a male or female identity. But the slash in "LOL 12/woman" also embodies sexual *indifference*, an attitude that forgoes the discretion of either/or for the ambivalence of both/neither.<sup>33</sup> One consequence of such ambivalence is that even female players who choose to speak out in TF2 are by no means guaranteed to establish themselves as female. The casual abbreviation and apathetic tone of a remark like "LOL 12/woman" work to defer and suppress possibilities for a decisively female presence in the gameworld.

Players' tendencies to attribute high-pitched voices to adult women and young boys—while overlooking the category of the young girl—likely owe to assumptions that boys play online FPS games more commonly than girls do. Another idiosyncrasy is the frequent invocation of the twelve-year-old boy as a representative of youths more generally. This can perhaps be explained by players' perceptions 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 of "LOL 12/woman," yet young enough to possess the premature voices that would sustain such an accusation.<sup>34</sup> Boys, as one would expect, often participate in the harassment of women; they are also, however, occasionally mistaken for women and harassed accordingly by adult male players (as well as by other young boys, who themselves get mistaken for women—and on it goes). A boy who takes the initiative to harass might therefore do so as a means of disavowing boyhood, of preemptively asserting that he is a (soon-to-be) man and 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 youths and adolescents, become better positioned to detach themselves from the juvenile image that society still associates with gamers of all ages.

On the afternoon of 2 December 2010, I participated in a thirty-two-player TF2 match on a server called No Heroes. Shortly after the match commenced, a few players remarked on the high-pitched voice of a chatty teammate named xxsnipergodxx. When asked about his or her identity, this player said that s/he was "in eleventh grade" but refused to divulge additional information.<sup>35</sup> Although teammates eventually began expressing suspicions that xxsnipergodxx was using a voice-changer, most continued to address this mysterious individual as if s/he were a young boy. Several male players—particularly one named Youngfamous—teased xxsnipergodxx relentlessly.

But something strange happened as the game went on. I started hearing a reversal in the power dynamics between players and xxsnipergodxx—namely, whenever the latter threatened to leave the server. In these instances, many players (again, none more insistently than Youngfamous) implored xxsnipergodxx to stay for additional rounds of the game. On multiple occasions, Youngfamous even tried to appease xxsnipergodxx by offering tradable in-game hats (cosmetic

items that can be used to customize TF2 avatars).<sup>36</sup> Below is a transcript of Video 5.6 , a collection of excerpts from my recording of this match.

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*].

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. [*xxsnipergodxx exits server*]

By the end of this match, Youngfamous was begging *xxsnipergodxx* not to leave, even though he had been pelting this enigmatic player with insults just moments earlier. Youngfamous's desperate offering of hats, moreover, signaled 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* opened up possibilities for a social game alongside the TF2 game proper. While other players could not know for sure whether *xxsnipergodxx* was using a voice-changer, the mere suspicion that a voice-changer could have been in play was enough to generate enthusiastic dialogue. Some players did choose to address *xxsnipergodxx* as if s/he were a young boy, but if they believed that a voice-changer was being used, then they must also have understood, on some level, that this individual's identity could not be discerned with any certainty. A degree of indeterminacy comes with any disembodied voice; speculations about a voice-changer, in this case, simply boosted players' awareness of epistemic limitations. A recognition that *xxsnipergodxx* could have been anyone—say, a white, middle-class, heterosexual, able-bodied, male-identified adult trolling for laughs—in no way stopped other players from celebrating and commenting on the entertainment value of the voice itself. What intrigued players was the very idea of otherness, the prospect of deviance residing in cryptic vocality.

## Beneath the Pyro's Mask

Back in 2010, the topic of this chapter came up while I was having a round of late-night drinks with a friend. I summarized my plans for the case study as best as I could, describing players' anxieties about voice chat, the sexual politics of passing and coming out in TF2, and so on. Before I could bring up the Ralphie trolling video, my friend—who, until this point, had been nodding silently along— chimed in with a solution to problems of sexual harassment in online games. His suggestion had to do with voice-changers, which, he reasoned, could eliminate bigotry and social hierarchies if the technology were integrated into games and made available to all players. The ubiquitous use of voice-changing devices, in his view, would muddy the crosshairs of potential harassers and give heart to shy players who might otherwise hesitate to speak. The argument seemed to be that the widespread (and ideally obligatory) use of voice-changers could lead to a paradise regained, a cyber-utopia where wizards may return behind the curtain,

where *Second Life* residents would have no more cause to protest, and where closets could be everywhere and, consequently, nowhere.

These measures are technically possible, but chances are that adding vocal camouflage would not be enough to prevent discrimination from seeping into online spaces.<sup>37</sup> For while it is true that someone using a voice-changer in TF2 might escape harassment by passing as a normatively voiced adult male (whatever one imagines this to sound like), deeper problems lie in the structures of repression that compel women, adolescents, 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. In any event, among the TF2 players whom I interviewed, few reported ever having used a voice-changer. Several players in fact responded defensively, stating they would never go for such a technology because they did not feel like they had anything to hide. One player additionally said he found it “silly to go the extra mile to be anonymous on the Internet” when the medium already offers a layer of concealment and security (interview, Sepharite, 31 May 2011). For some players, the ability to speak with one’s own voice provides a happy compromise between total obscurity and excessive disclosures of identity—a means of reclaiming a sonorous glimmer of the purportedly real self amid online interactions.

Players of TF2 have a running joke about the Pyro, one of the game’s nine character classes. Wielding a flamethrower and other incendiary weapons, the Pyro is outfitted with a gas mask and a fire-retardant suit. The fact that the Pyro’s face and body are covered by full-length attire has ignited dozens of online threads devoted to speculations about the identity—and in particular, the sex—of this avatar (see Fig. 5.6). Articles titled “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 with comments such as the following:

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. (OMGWTBBQ32, 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)



Figure 5.6. The Pyro in TF2. Screen capture by the author.

1. Download GCFscape  
 2. Use it to open 'team fortress 2 content.gcf'  
 3. Open "tfscripts\global\_actors.txt"  
 4. Be amazed.

ravens02 For the lazy:

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

Figure 5.7. A player's instructions (on Gamespot forums) for locating the scripts of TF2's character classes.

Players have also floated all kinds of conjectures about the Pyro's race and ethnicity. Unlike the other eight character classes, whose stereotypically inflected taunts hint at their respective origins, the Pyro only makes muffled, unintelligible utterances through a gas mask. Some players have attempted to affirm the Pyro's sex by pointing out that the person who recorded the character's garbled

speech (the voice actor Dennis Bateman) is male. One perseverant player even rummaged through TF2's game script to show that the Pyro's "actor" is designated as "male" at the level of code (see Fig. 5.7). Yet such arguments—despite being advanced in the guise of authoritative evidence—have done little to extinguish the controversy. Most players, it appears, are not looking for (or willing to be mollified by) hard facts and incontrovertible proof. They seem more interested in the pleasures of speculation than in settling on an answer to the question being asked.

That the Pyro's sex is unknowable has evidently not deterred players from participating in conversations about its unknowability. Rather, players' preoccupation with what lies beneath the Pyro's suit has persisted largely as a result of the topic's infinite disputability. In the end, it is these limits of knowing that inform our epistemologies and acoustemologies of closets. As with the voice of *xxsnipergodxx* (or, really, any disembodied voice), the Pyro is a repository for players' fascination with identities that are undecidable: identities shrouded in tantalizing but inadequate clues, identities that have little bearing on the game's technical goals and yet provoke endless inquiry anyway. Of course, irresolvable dialogues about the Pyro—much like the words of trolls and griefers—are more than just idle chatter.<sup>38</sup> These exchanges are integral to multiplayer games and, for that matter, to any online platform that encourages the adoption of alternative, contrarian, and pluralist personae.

In multiplayer gameworlds, players' voices carry considerable powers of communication, imprinting prosthetic stamps of selves into realms of pre-rendered sprites and sounds. Coloring these voices are practices of oppression and passing that call for investigation 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. It is to struggle with knowing nothing about those who don't speak, while bracing for the possibility of finding out too much—or sometimes, still not quite enough—about those who do.

# Epilogue

Palais Garnier in Paris, France  
17 March 2004

Entering the opera house through its double glass doors, you take care to walk not too fast, not too slow. Security officers, maintenance workers, and a throng of gaudy tourists pay you no heed as you make your way across the lobby to the coat check. You hand a red ticket to the man behind the counter. He gives you a coat. Feeling inside the coat pockets, you discreetly pull out a gun—an antique World War I Mauser pistol. An unconventional choice of weapon: small clip, modest firepower, unwieldy. But since your handler insisted earlier that it could be useful, you tuck the gun into your suit jacket. Doesn't look like anyone saw.

Faint voices stream out of the Palais Garnier's inner auditorium. Rehearsals are under way for the Paris Opera's upcoming production of Giacomo Puccini's *Tosca*. Recall the tragic conclusion of this three-act Italian opera. The heroine, Tosca, thinks her lover, Cavaradossi, is facing a fake execution. Before the firing squad arrives, she tells him to feign death convincingly so that the two of them can subsequently flee the city. Due to the treachery of the villain Scarpia, however, the riflemen end up killing Cavaradossi for real. Following the volley of shots, Tosca is at first elated by what she believes to be persuasive acting on Cavaradossi's part. Only after a few moments of blissful innocence does she realize her lover is dead.

A virtual death turned real: a twist so cruel and melodramatic that it could surely only happen on a stage. It's a heartbreak story. Yet as you walk through the opera house, taking note of its routes and personnel, you do not 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 sing the role of Cavaradossi. Right now he is at this opera house rehearsing the final scene of *Tosca*. But taking him out won't be easy. Every entrance leading into the auditorium looks sealed and closely guarded. With so many civilians and officers milling about, minimizing collateral damage will be

a challenge. You're a professional hitman, not a monster. This cannot be a run-and-gun mission.

A disguise will help. Seeing a maintenance worker go into a nearby restroom, you follow him in. Once you are sure no one else is around, you sneak up and put the worker in a chokehold. He passes out in seconds. After slipping on his denim jumpsuit and hiding the unconscious body in a linen bin, you exit the bathroom and proceed to the basement of the opera house, winding through underground hallways, all the while calibrating your proximity to the auditorium by the sounds of the orchestra and singers. You eventually come to a row of 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, probably indicating that the performers are about to take a short break. With little time to spare, you duck into what you assume is d'Alvade's dressing room. You conceal yourself inside a tall antique armoire and equip a lethal syringe.

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.

It's not d'Alvade. Rather, from the looks of his costume, he plays one of the riflemen from the firing squad. You're in the wrong room.

Your first instinct is to confront the performer and knock him out. But what would that accomplish? It's risky. He could cry out. A guard might hear the scuffle. Too much could go wrong. You therefore stay hidden, waiting and watching until, moments later, this performer leaves the room. He's probably getting back to rehearsal, which means d'Alvade is likely returning to the stage as well, once again heading behind locked doors, sending you back to square one.

You step out of the armoire, frustrated at your own mistake. As you prepare to leave the room, however, something on the dressing table catches your eye. A prop gun. A replica World War I Mauser. Your pulse quickens. Your handler came through after all. But there's not much time; the performer will be back any second to retrieve the item. So you seize this prop and replace it with your own loaded Mauser, then leave the room just in time to see the performer coming out of a restroom at the far end of the hallway. As he shuffles lazily toward you, back to his dressing room, you avoid eye contact. You saunter past him, then past a couple of security guards, before brushing shoulders with none other than d'Alvade, who's making his way to the auditorium.

The rehearsal bell rings. Sounds like they are running the final scene again. You stroll through the basement corridors and back to the entrance of the opera house. Upon reaching the lobby, you take care to walk not too fast, not too slow. Before leaving through the double glass doors, you prick up your ears—and yes, there it is: a timpani roll, a gunshot, a really oblivious cry of joy.

Recounted here is a mission from the stealth-action game *Hitman: Blood Money*, developed by IO Interactive and published by Eidos in 2006. The events don't make for a relaxing night at the opera, but as noted in Chapter 2, such backstage intrigue typifies what we have come to expect from embedded spectacles in films, video games, and other media. For brevity's sake, my summary of the mission cuts short various details, including alternate assassination strategies, additional options for disguise, and the game's curious depiction of d'Alvade as a pedophile. The player also has a second target: Richard Delahunt, a wealthy former Massachusetts governor who, as a stereotype of an opera queen, is obsessed with d'Alvade and attends his every performance. Death by chandelier, in *The Phantom of the Opera* fashion, incidentally ranks as the most effective way to make Delahunt's death look like an accident.

This vignette of the *Hitman* mission fortuitously ties together some major themes explored in *Sound Play*. Offing d'Alvade against a backdrop of operatic singing produces a perverse muddling of the nasty and the nice, reminiscent of the clashes between atrocious actions and upbeat radio tunes in *Fallout 3* (Chapter 1). In line with Mengèle's whistling and other unsettling music-violence pairings, the character of d'Alvade yields a portrait of someone capable of trafficking children in the day, then singing the part of Cavaradossi at night. As for other instances of sound-cum-conflict, we could think of the battle with Ultros in the opera sequence of *Final Fantasy VI* (Chapter 2), oppressive and territorializing noises in *Silent Hill* and *The Lord of the Rings Online* (Chapters 3 and 4), and words that wound in *Team Fortress 2* (Chapter 5).

The opera mission in *Hitman* draws on familiar economizing strategies of game design. Developers, for starters, had ample incentives to feature a rehearsal of *Tosca* instead of a performance of the full work. A rehearsal makes repetitiveness believable: as d'Alvade and his fellow NPCs run the final scene again and again, the player receives multiple chances to observe their actions and to hatch an ideal plan. For a looping rehearsal, the developers needed to include only a brief recorded segment of *Tosca* to accompany the mission, thus minimizing potential licensing costs, demands on hardware memory, and overall production efforts. Recall comparable conceits in game audio: how Agatha and Three Dog in *Fallout 3* justify the repetitive programming of their respective radio stations (Chapter 1); how Setzer's abduction of Celes conveniently curtails the *Final Fantasy VI* opera sequence (Chapter 2); and how Yamaoka's repetitious industrial tracks in *Silent Hill* are excusable (and even desirable) for the way they feed survival-horror's atmosphere of repression and traumatic fixation (Chapter 3). Relying on a rehearsal in *Hitman* additionally eliminated the need to render extensive stage props or an audience in the auditorium (see Fig. 6.1). This affords a measure of technical relief, not unlike how the use of fog and darkness in *Silent Hill* can terrify players while, as a bonus, reducing the workload of graphic



Figure 6.1. Sparsely populated auditorium of the Palais Garnier in *Hitman: Blood Money*. Screen capture by the author.

designers. That d'Alvade and his castmates are rehearsing only the final scene of *Tosca* also means that a player does not need to sit through two hours of singing before the perfect window of opportunity—Cavaradossi's execution—comes up. And finally, since this isn't a full performance, it is plausible for d'Alvade and other NPC actors to take breaks in their dressing rooms, where the player can hide and carry out sneaky plans.

The opera mission in *Hitman* offers an expedient window into matters of agency—its stakes and definitions, its realities and illusions. NPCs rehearsing *Tosca* will, if left to their own devices, enact the same series of actions without end, accompanied by the same musical snippet on each occasion. The rehearsal's repetitiveness stands to be particularly noticeable given that players have reason to let it run its course multiple times (so as to have the opportunity to scope out the floor plan, learn the performers' break schedules, and memorize the patrol routes of the guards). As with Agatha's violin demonstrations (Chapter 1), Celes's aria performance (Chapter 2), and even the ABC-executing avatars of LOTRO players (Chapter 4), there's an automatonic quality to these NPCs' identical performances of *Tosca*'s final minutes. Such static choreographies, on the one hand, bring our own agencies into sharp relief, pointing up just how much choice and improvisatory potential we, as players, possess by comparison.

On the other hand, the actions of NPCs hold up a mirror to our habituated and rule-based means of living in worlds both virtual and real. Facing uncanny automata, we may see and hear reflections of ourselves—alien yet familiar, human but not quite. AI characters who simulate musical performances are liable to be especially visible and audible in their automation: with repeating gestures and sounds, they can lead us to contemplate how certain aspects of human musicianship are scripted and constrained in their own right.

How much agency do we experience, embody, and display when detonating the Megaton bomb (Chapter 1)? When picking lines for Celes to sing (Chapter 2)? Getting Harry to flee from whatever threat his staticky radio augurs (Chapter 3)? Or executing an ABC performance (Chapter 4)? Now and then, we might sense we are thoroughly in control; other times, it can feel as though we are just following orders, playing out the stock roles set before us. Even with voice chat (which technically lets players utter whatever they wish), the words we do or don't say are always potentially molded by what is being said by others, by peer pressure, and by the co-constructed social dynamics of online game-worlds (Chapter 5). As with the most vexing human quandaries, these concerns boil down to questions of ludic, aural, verbal, bodily, interpersonal, and hermeneutic control—its pleasures and virtues, its delusions and grievances.

When negotiating agencies of gameplay, we grapple persistently with the experiential continuities, tensions, and fractures between the real and the virtual. The mission at the Paris Opera exemplifies how dizzying things can get when multiple levels of fiction collide.<sup>1</sup> In Puccini's opera, the character Tosca believes she is watching a fake execution of Cavaradossi when it is actually a real one. Within the game *Hitman*, the woman who plays Tosca likewise believes she is watching d'Alvade act out a fake-turned-real execution when in fact it is a real death by assassination. And in the so-called real world (the one inhabited by us, the players), d'Alvade's fake-turned-real-turned-real death is still not really (really) real because, well, it's happening in a video game.

The line doesn't stop here. As each case study in *Sound Play* has emphasized, the virtual is constituted by its potential to impact, reflect, and correlate with facets of the real. It is in these crossovers where some of the most stimulating controversies arise: about virtual violence, misconduct in online worlds, and all the aesthetic, cultural, and political messages that games may convey. Consider historical examples of violence at the theater turning real—when, for instance, someone set off tear gas and shot up a movie theater at a film premiere (a terrible act that some viewers, at first, reportedly mistook for an opening-night special-effects publicity stunt); when a singer threatened to kill his costar onstage for real during an opera's murder scene if she did not perform up to his standards; or when a suicide scene in a play went wrong because the dulled prop knife had been mysteriously replaced with one that was razor-sharp.<sup>2</sup> What is so disturbing

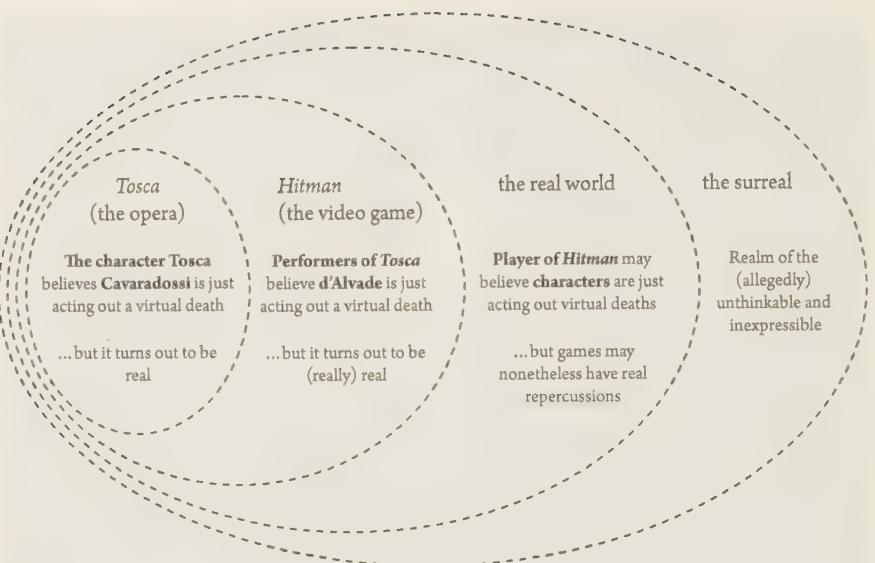


Figure 6.2. Embedded realms showing virtual violence several times removed.

about these tragedies is not simply how the virtual turns real, but also how audiences might fail to realize what's going on until it's too late. A convincing stage death, after all, can look and sound very much like a real one. Under certain circumstances, we may not be as good at separating real from virtual as we think. When verisimilar violence turns real during a show, it jolts us from our reveries in mediated spectacle, rendering reality surreal, hyperreal (see Fig. 6.2).

So how real and how high, ultimately, are the stakes of playful sonic engagements in gameworlds? Detonating a virtual atomic bomb while listening to American anthems cannot be facilely equated with wounding and whistling in the real world (Chapter 1). Celes's suicide attempt and Kefka's apocalypse remain aestheticized representations of heartbreak and terror (Chapter 2). Industrial noises that delude us into thinking they are coming from inside our house certainly up the ante, but frightened players who can't handle it retain the option of turning off the game or not playing it in the first place (Chapter 3). Musical grieving in an online auction hall does not take listeners captive in a literal sense (Chapter 4). And while verbal sexual harassment in an online FPS game can prove troubling and hurtful, it might not seriously bother players who accept trash-talking and trolling as mere games in themselves (Chapter 5).

Even with these mitigating considerations, the stakes of sound and play in games are always potentially real. At their most profound, our interactions with music, games, and alternate worlds speak volumes about the terms and conditions of human coexistence. I say this with recourse to a few premises. First, that how we approach human-controlled as well as AI characters in virtual worlds

may reflect (and even affect) how we approach people in the real world, how we compete and cooperate, how we pass and transgress. Second, that the ways we listen to music in real and virtual worlds may likewise inform the care with which we listen to one another. And lastly, that how we relate to sound more broadly—how we use, abuse, preserve, manipulate, aestheticize, exploit, perceive, heed, ignore, share, sell, consume, study, and talk about it—may provide clues into how we (should) treat other human beings in daily life. If there's the slightest truth to any of these analogies, then students of music and games have important roles to play indeed.

\* \* \*

*Sound Play* has underscored how games and game audio resonate with social, cultural, material, and ideological significance reaching far beyond the graphical enclosures and sonorous envelopes of simulated worlds. To this point, I'll close with a brief anecdote, one that moves out of the virtual opera house and into a real-world concert space. The venue is Boston Symphony Hall, which, on 7 October 2012, hosted a nearly sold-out performance by the Video Game Orchestra (VGO). The ensemble featured a seventy-person classical symphony orchestra, a sixteen-voice choir, and a five-member rock band. VGO's founder, Shota Nakama, served double duty as lead guitarist and the evening's emcee. The audience skewed younger (though not by much) than the usual crowds I have seen at classical music concerts. Four distinguished Japanese game composers—Noriyuki Iwadare, Hitoshi Sakamoto, Yoko Shimomura, and Kinuyo Yamashita—were in attendance.

After the orchestra played the first two pieces on the program, Nakama stopped to make an announcement. He began by praising the venerable Symphony Hall and telling us that VGO was founded in Boston. He then quipped: "As you can see, this isn't your ordinary orchestra concert!" As audience members chuckled at the obviousness of his remark (there were, after all, electric guitars and amplifiers on the stage), Nakama insisted that everyone should feel free, through the rest of the performance, to clap and cheer, to make any sound for any reason. Without missing a beat, people erupted in applause, whistles, and shouts. And just like that, the space and soundscape of the concert hall underwent palpable transformation, exuding all manners of behavioral and sonorous miscellany that had been kept under wraps until this point.

Upon receiving license to holler, audience members went on to initiate spontaneous back-and-forth with onstage performers. One memorable exchange occurred during a *Final Fantasy VII* medley (always a crowd-pleaser), when the orchestra played a discreet, rhythmically augmented fragment of the "Chocobo Theme" to transition between two lengthier themes. Despite (or precisely owing to) the veiled nature of this musical fragment, it was greeted with knowing



Figure 6.3. VGO performance in Boston Symphony Hall on 7 October 2012 (with conductor Yohei Sato). On the left, the emcee and lead guitarist Shota Nakama smiles and points a finger at cheering audience members.

laughter from a small group of listeners on the balcony. Their outburst caught the attention of Nakama, who, with a wink and a smile, pointed a gratified finger back at these discerning audience members, as if to say, “You got it!” This gracious gesture from the stage won further applause in turn. Fan service delivered, delivery signed and confirmed: a dialogue without words, all in the wink of an eye (see Fig. 6.3).

At no point in the concert did performer-audience banter grow more lively than during the encore—a rendition of “Still Alive,” the multi-award-winning song that accompanies the end credits to Valve’s 2007 puzzle-platformer *Portal*.<sup>3</sup> At this performance, scores of audience members knew the words by heart and sang along with the onstage soloist Ingrid Gerdes, who encouraged participation by pointing her microphone toward the crowd every so often. A couple minutes into the piece, Gerdes initiated a rapid call and response as follows: “Maybe you’ll find someone else to help you. / Maybe (*Gerdes directs microphone toward audience, with her other hand cupping one of her ears*) Black Mesa! / (*she and the audience laugh; she brings the microphone back to her mouth*) That was a joke! / (... and points it toward the audience) Haha! Fat chance! / (... and then back to herself again) Anyway, this cake is great, / It’s so delicious and moist!” Audience members didn’t always wait for Gerdes’s go-aheads to sing or speak. Right before the verse quoted above, Gerdes’s demure utterance of the line “Don’t ever leave me . . .” elicited a resounding “Never!” (not in the song’s lyrics) from a reassuring fan. Hurrahs promptly followed.

Audience members at this concert, to be clear, were not boisterous the whole time. During some of the orchestra’s more contemplative, slow-paced numbers,

listeners kept still, conjuring a silence amplified by its contrast against the evening's otherwise rowdy milieu. As I took in the noisy and intimate moments alike, I was reminded of the playful sonic engagements that games make possible. Like a video game, this concert was extraordinarily interactive. Its attendees, like the imaginative inhabitants of gameworlds, were taking full advantage of their permission to play, experimenting loudly and proudly with speech, noise, and song. None of this behavior, of course, would raise an eyebrow at a pop music concert. But as far as performances in Boston Symphony Hall go, it was unusual. Just by virtue of taking place in this historic venue, the event laid claims to high-brow Western music traditions. At the same time, it was subverting and transforming these traditions from within, redrawing the prescripts of a concert hall that on most occasions plays host to considerably more subdued spectators. Just as video games may embolden individuals (designers, composers, performers, players, scholars) to think and act outside the box, so Symphony Hall, on that night, offered a sound space in which audience members felt free to speak and sing out, to give voice to fantasy and fandom.

It was like stepping into a different world.

From wastelands and opera houses to the darkest of alleyways, from spirited pubs to a fortress of chatty trolls, we have come a long way. Yet if there's one thing that games and gamers can teach us, it's that there is always farther to go: between worlds, beyond ends, across imaginations light and dark—journeys full of life, echoing with people, music, sound at play.



## NOTES

### Foreword

1. Roland Barthes, "Dare to Be Lazy," in *The Grain of the Voice: Interviews, 1962–1980*, trans. Linda Coverdale (New York: Hill & Wang, 1985), 340, thought about this; as he charmingly put to himself the challenge to be lazy he felt obliged to wonder: "There are moments when I would really like to rest. But, as Flaubert said, 'What do you want me to rest at?'"
2. Bruno Bettelheim, *The Uses of Enchantment: The Meaning and Importance of Fairy Tales* (New York: Vintage, 1976).
3. Leo Tolstoy, *The Kreutzer Sonata*, in *The Kreutzer Sonata and Other Stories*, trans. David McDuff and Paul Foote (Harmondsworth: Penguin Books, 2008), 167.
4. Roland Barthes, "Listening," in *The Responsibility of Forms: Critical Essays on Music, Art, and Representation*, trans. Richard Howard (Berkeley and Los Angeles: University of California Press, 1991), 245–260.
5. Rick Altman, "The Material Heterogeneity of Recorded Sound," in *Sound Theory, Sound Practice*, ed. Rick Altman (New York: Routledge, 1992), 23. Altman clarifies: "Or rather, it [every hearing] concretizes a particular story among the many that could be told about that event" (*ibid.*).
6. Michel Chion, *Film, A Sound Art*, trans. Claudia Gorbman (New York: Columbia University Press, 2009), 166.

### Introduction

1. 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" (2008a:4). Collins groups both types of audio into the broader category of "dynamic audio," which "reacts both to changes in the gameplay environment, and/or to actions taken by the player" (*ibid.*; see also Collins 2013:4–13).
2. All forms of media, of course, are "interactive" in that they constitute meaningful products of creation and consumption. Yet video games, by demanding consequential tactile feedback from players, strongly blur the conventional boundaries between creator and consumer, between actor and spectator. On the challenges of defining interactive media, refer to Egenfeldt-Nielsen, Smith, and Tosca (2013:216–222), Galloway (2012:3–10), Zimmerman (2004:158–159), and Manovich (2002:55–61). Espen Aarseth has used 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 are classifiable as ergodic

media, a book or newspaper would be “nonergodic literature, where the effort to traverse the text is trivial, with no extranoeumatic responsibilities placed on the reader except (for example) eye movement and the periodic or arbitrary turning of pages” (*ibid.*:1–2; cf. Newman 2002).

3. On fantasy, fancy, fairy tales, and modalities of imaginative literary engagement, see Zipes (2012), Saler (2012), Smyth (2010), Tatar (2009), and Thomas (2001). For cognitive, anthropological, and sociological work on imagination, pretense, counterfactual thought, and make-believe (often contextualized within youth cultures and child’s play), see Nichols (2006), Byrne (2005:1–14), Ryan (2001:105–114, 286–287), Harris (2000:97–117), Nichols and Stich (2000), Goldman (1998:100–144), and Walton (1990:13–21, 67–69).
4. See T. L. Taylor (2012:35–84) for an exploration of e-sports and professional gaming. In *Sound Play*, for the most part, I use the terms “gamer” and “player” interchangeably (as many writers do) and for the sake of variety. When referring to someone engaging a specific game, I say “player” almost exclusively. In industry lingo, “gamer” can connote a hardcore and professional player of games, but my use of the term does not necessarily suggest this.
5. On the therapeutic and educational potential of music and games, see McGonigal (2011), Wästerfors (2011), Cerenoglu (2010), Haas and Brandes (2009), Freddolino and Blaschke (2008), and Squire (2002). On trance and flow, see Custodero (2012), Becker (2004), Csikszentmihalyi (1990), and Rouget (1985). On the metaphors and means of transportative engagements with music, literature, and virtual worlds, see Hoeckner (2007:164–168) and Ryan (2001:93–99).
6. On the problematic pleasures of music and play, see Cheng (2013), Calleja (2010), Harker (2008:337–343), Karnes (2008:13–14), Bogost (2007:vii–viii), Korsyn (2003:64–66), and Leppert (1993:27–28).
7. Moseley poses these questions under the rubric of “ludomusicology,” which he designates as not simply the study of video game music (or music video games), but moreover, the exploration of “the musically playful and the playfully musical” (2013:283).
8. Game developers and theorists 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 2008:3).
9. On (explicitly) political, subversive, critical, and activist games and gaming practices, see Juul (2013:108–111), Lauteria (2012:paras. 22–30), Meades (2012:199–208), Bogost (2011), Dyer-Witheford and de Peuter (2009:97–122), Flanagan (2009:223–249), Sicart (2009:43), Brown (2008:67–77), Galloway (2006:107–126), and Frasca (2004).
10. Marilyn Motz emphasizes the importance of examining belief not as a reified construct but rather as an active and effortful “practice or process” (1998:349).
11. James Newman uses the term “superplay” to describe virtuosic gaming practices, which “may be oriented around completing games in the fastest possible time [a.k.a. speedruns], or by tackling the challenge in a ‘pacifist’ mode dispatching only those enemies that actually bar progress and cannot be avoided. [Superplay] may seek to use as few additional capabilities or weapons as possible, and it may involve exploring as much or, indeed, as little of the gameworld as possible by engaging in ‘complete’ or ‘low percent’ runs to completion” (2008:123).
12. Recent scholars have extensively deconstructed Huizinga’s “magic circle” (1955), framing it as a permeable, vague, and even misleading construct (Collins 2013:44–45, Consalvo 2009, Tavinor 2009:102–109, Arsenault and Perron 2009, Taylor 2006:151, and Salen and Zimmerman 2004:95).
13. See N. Taylor (2012:268–270) on conventions of voice chat and trash-talk in online shooters.
14. On disinhibition, freedom, and transgression in games, see Tavinor (2009:150–171), Flanagan (2009:260–262), Chun (2006:2–3), and Suler (2004).

15. In theorizing the pain and pleasure of failure in video games, Jesper Juul declares that he “would like to excise from the English language the phrase ‘just a game,’ because it pretends something that is not true, that failure is neutral as long as it happens in a game. [...] We must accept that this shiny surface of harmlessness creates a space where we can struggle with our failures and flaws” (2013:123–124).
16. See Samuels, Meintjes, Ochoa, and Porcello (2010:338) for a concise critique of epistemic dilemmas born of music’s alleged ephemerality and immateriality.
17. For other statements to this effect, see Collins (2013:6–7), Banks (2013), Miller (2012:32–37), and Taylor (2011:376–378).
18. Patrick Crogan and Helen Kennedy have called for an emphasis on “technicity” in game studies—that is, for approaching “gameplay as an event where contingent and dynamic processes coalesce in and through which both human and nonhuman agents come into being in their very interactions” (2009:112).
19. Sterne uses the phrase “bundle of affordances” with regard to music’s technologization, commodification, and status as a thing. Recent theories of affordances grew out of the work of James Gibson (e.g., 1977:67–68). Elaborating on this concept, Ian Hutchby stresses the importance of understanding “how the relationship between user and technology is bounded not so much by a politics of speakership and representation, but by ordinary practices interfaced with material enablements and constraints” (2001:453; cf. Miller 2012:12–13, Kavoori 2011:12, Chemero 2003:184–186, and Greeno 1994:338–341). See Hung (2011:72–76) for a discussion of affordances in the context of video games.
20. On actor-network theory, see Whittle and Spicer (2008), Latour (2005), and Law and Hassard (1999). Discussions of thing theory can be found in articles from the Autumn 2001 special issue of the journal *Critical Inquiry*. On related attempts to unsettle the givens of human agency, consult Bogost (2012:3–19), Bennett (2010:vii–xiii, 1–19), Butler (2005), Harman (2002), and Hayles (1999).
21. One of many correctives to hard technological determinism is the popular notion of co-construction, which focuses on “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 2012b:9; cf. Banks 2013 and Taylor 2001:31–38).
22. On game avatars’ potential to exceed (or even undermine) players’ controls and expectations, see Miller (2012:42–45), Cogburn and Silcox (2009:1–15), Gregersen and Grodal (2009:66–67), and Bolter and Grusin (1999:78).
23. Esther MacCallum-Stewart and Justin Parsler point out that the “act of role-playing can seem a curious pastime to the outsider. Unlike the main thrust of the game, it offers no tangible rewards: levels are not gained, better equipment not found. [...] We feel that role players see role-playing in a number of ways: as a testing of personal ideals; as morally challenging, involving issues of teamwork and conflict resolution (or not); as mentally or physically demanding; as opportunities to act out characteristics or beliefs they might not usually express; as granting a sense of agency that encourages feelings of influence, control, and power; as engrossing; and finally, as escapist” (2008:227; see also Brown 2008:138–144).
24. While Du Bois theorized “double consciousness” with reference to identity politics and social oppression, media scholars’ adaptation (or appropriation) of the concept has not always been explicitly political as such.
25. Scholars have explored the concept of immersion with reference to theoretical precedents and analogs such as Mihaly Csikszentmihalyi’s ideas of psychological “flow” and “optimal experience” (Perron 2009:137), Richard Wagner’s *Gesamtkunstwerk* (M. Smith 2007:163–169), Samuel Taylor Coleridge’s “willing suspension of disbelief” (Hillis 2009:186), and technologies of stereoscopy since the early nineteenth century (Huhtamo 1995:160–174). For more on immersion and games, see Grimshaw (2012:356–363), Wood (2007:116–132), Ryan (2001:120–162), and Murray (1997:99).
26. On resonances and distinctions between animism, fetishism, idolatry, totemism, and vitalism, consult Mitchell (2005:145–168) and Pels (1998).

27. The term “pathetic fallacy” was coined by the English art critic John Ruskin (1856: 157–172).
28. See Zipes (2009:45–68) on the potential “dangers” of fantastic literature and narrative media more generally.
29. A number of writers use the terms “virtual music” and “virtual sound” with general reference to any music mediated by computer technologies (Duckworth 2005, Vanhanen 2003, Cope 2001:3–32, and Bianchini and Cipriani 2000).
30. See Boellstorff (2008:16–24) for discussions of the problematic deployment (and vague spatial demarcations) of *virtual*, *digital*, *real*, and *actual*. For additional considerations of the real-virtual dichotomy, also see Boellstorff (2010a:126), Lehdonvirta (2010), Bell (2008:2–4), Ryan (2001:25–47), Miller and Slater (2000:7), Hillis (1999:164–199), and Poster (1995:85–86). In place of “real” and “real world,” scholars have recommended the adoption of terms such as “non-virtual” (Waggoner 2009:163), “actual world” (Boellstorff 2008:21), and “Primary World” (Saler 2012: 32). Proposed alternatives to “virtual world” include “imaginary world” (Saler 2012:28–30), “Secondary World” (Saler 2012:31), “synthetic worlds” (Castranova 2005:4–9), and “possible worlds” (Punday 2005 and Ryan 2001:99–105).
31. 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).
32. Reflecting on his fieldwork in *Second Life*, Tom Boellstorff observes that “indexicalities, influences, and references” between virtual-world 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). Boellstorff further 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.*).
33. See Turkle (2011:4–5, 59–62) for observations to this effect. On reality and hyperreality, also see Jean Baudrillard’s classic text *Simulacra and Simulation* (1994b).
34. On social anxieties about violent video games, see Brown (2008:61–67), Boellstorff (2008:176–178), Jenkins (2006:187–225), and Castranova (2005:64–65, 277–278).
35. Despite hundreds of empirical, psychological, and philosophical studies to date, scholars are far from reaching any consensus about whether (or how) violent video games exert demonstrable societal effects (see Schulzke 2010, Sample 2008, Waddington 2007, Coeckelbergh 2007, Carnagey, Anderson, and Bushman 2007, Galloway 2004, and McCormick 2001).
36. Nick Dyer-Witheford and Greig de Peuter observe that, since the early 1970s, “scholars can be said to have responded to this young medium [of video games] with one of three broad stances: condemnatory, celebratory, or critical, positions whose popularity and influence have approximately followed a chronological sequence” (2009:xxiv). A critical approach to game studies would seek to “temper both knee-jerk condemnation of, and celebratory euphoria about, virtual games” (*ibid.*:xxvi). Explicit efforts to critique utopian-dystopian polarities can be found in *Utopic Dreams and Apocalyptic Fantasies: Critical Approaches to Researching Video Game Play* (2010), edited by Wright, Embrick, and Lukács.
37. As noted by Kiri Miller, single-player games provide “shared reception frames [...] bounded territories that engender shared experience [...] [and] separate but parallel performances of particular stories in particular places” (2007:405). Miller declares, for example, 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 similar practices by nineteenth-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. [...] 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).

38. For recent scholarship that conceptualizes games (and technology more generally) along these lines, see Wood (2012:96–102), Henricks (2010:31), Coleman (2010:496), Sicart (2009:87–89), Krzywinska (2008:123–128), Brown (2008:21–37), Burrill (2008:45–60), Jones (2008:3–18), Bogost (2007:1–64), Théberge (2005:400–402), Aarseth (2004:47–48), Hayot and Wesp (2004:405–409), Jenkins (2004:121–124), and Grint and Woolgar (1997:70–71). Early years of video game studies witnessed overdrawn (albeit occasionally productive) oppositions between narratological and ludological approaches. In brief, scholars who subscribed to the former sought to understand video games as traditional narratives, while those favoring the latter emphasized the need to analyze foremost the medium's rules, formal structures, variable outcomes, and (exceptionally) interactive dimensions (see Simons 2007, Juul 2005, Frasca 2003, Eskelinen 2001, Aarseth 1997, and Murray 1997). Of course, social theories of play preceded the advent of video games and digital technologies; influential scholars included Sutton-Smith (1997), Caillois (1961), and Huizinga (1955). Recent decades have also given rise to rigorous studies of leisure, recreation, and sports (see articles in the journal *Leisure Studies*, which launched in 1982).
39. This isn't to say that fieldwork and hermeneutics are oppositional or mutually exclusive in principle. See, for example, endeavors in interpretive anthropology (Clifford 1998:138–139, Geertz 1973:3–30) and recent ethnomusicological forays into hermeneutic phenomenology (Rice 2008:55–58, and Titon 2008:28–29).
40. On aspects of work, play, and pleasure in scholarly discourse, see Moseley (2013:285–287), Vilhauer (2010:xi–xix), Currie (2009:171–192), Maus (2004:18–19), Gadamer (2004:102–110), and Ryan (2001:176–199).
41. See, for example, the work of Pasdzierny (2013), Lerner (2012), Moseley (2012), Gibbons (2009), Carlsson (2008), Payne (2008), Fenty (2008), and Collins (2008a).
42. See Moseley (2013), Collins (2013), Miller (2012), and Shultz (2008).

## Chapter 1

1. See Fahey (2008) for *Fallout 3*'s initial sales estimates. The North American version of *Fallout 3* shipped with five language options: English, Spanish, French, German, and Italian. Subsequent localized versions added more language packs for both text and voice.
2. Other games in the series include *Fallout* (1997), *Fallout 2* (1998), *Fallout Tactics* (2001), and *Fallout: New Vegas* (2010). *Fallout 3* has five official expansion packs: *Operation: Anchorage* (January 2009), *The Pitt* (March 2009), *Broken Steel* (May 2009), *Point Lookout* (June 2009), and *Mothership Zeta* (August 2009).
3. According to the lore of the *Fallout* series, the gameworld's counterfactual timeline diverged from our real-world timeline shortly after the end of World War II. The exact year of divergence remains a point of debate among fans of the franchise. Derrick Rowan notes how the game offers a pervasive sense of "retrofuturism" by "invoking a world that is, in calendar date and in some forms of technology, ahead of our own, but that still retains an overall flavor of the United States during the 1950s" (2012:para. 8).
4. See Hicks (2008) on the voice acting in *Fallout 3*. Celebrity voice actors for the game include Liam Neeson (the protagonist's father), Malcolm McDowell (John Henry Eden), and Ron Perlman (narrator).
5. Film scholar Claudia Gorbman defines "diegesis" as the "narratively implied spatiotemporal world of the actions and characters" (1987:21). Isabella van Elferen (2011), Kristine Jørgensen (2009:97–116), and Karen Collins (2008a:125–127) have noted the challenges of differentiating between diegetic and non-diegetic audio in video games (cf. Winters 2010 and Smith 2009 for similar discussions about film).

6. A few other radio signals in *Fallout 3* have smaller broadcast radii and feature minimal (mostly non-musical) content. These signals include the Recon Craft Theta Beacon (5,000-meter radius), the Chinese Radio Beacon (3,000-meter radius), and the People's Republic of America Radio (16,000-meter radius). At the beginning of the game, the player can also tune in to the Vault 101 radio station, which loops three instrumental swing tracks adding up to about eight minutes of material.
7. In the game's Options menu, players can adjust the respective volumes of the radio music, soundtrack, sound effects, and voiced dialogue. On default settings, the diegetic tunes on the radio will mostly cover up the quieter ambient soundtrack.
8. Concerning radio's production of community, see Greene and Porcello (2005:247–257), Douglas (2004:3), and Lacey (1996:109); cf. Benedict Anderson's (1983) seminal treatise on imagined communities.
9. Repetitive tunes on the in-game radio could be likened to Muzak and its generic kin, approximating an extreme form of soporific wallpaper music—heard-but-not-listened-to audio matter that serves, for better or for worse, as an anesthetic against the turmoil of post-war climates. See Lanza (2004:41–67), Sterne (2003:316–345), and Radano (1989:451–453); cf. Leppert (2011:54, 60–61).
10. As William Gibbons explains, the “effective use of popular music in video games has been a sort of holy grail for sound designers since the early 1990s. [...] When CD- and later DVD-based games first allowed soundtracks to include popular tracks precisely as they would sound on a CD, game designers leapt at the opportunity to include a song or two (though seldom much more, due to space restrictions)” (2011). As early as the 1980s, some games have employed licensed music in part for purposes of synergistic marketing (see Miller 2012:74, Gibbons 2011, and Collins 2008a:111–122). Pre-ordered copies of *Fallout 3* shipped with a CD containing three GNR songs and two original tracks by Inon Zur. A lengthier album, released in 2011 by XS Music Group, featured twenty-five songs from *Fallout: New Vegas*.
11. Scholars across disciplines have invoked eschatology in studies of destiny, teleology, damnation, transcendence, evolution, revolution, social progress (or its termination), and aspects of death and dying. In musicology and ethnomusicology, eschatology has come up in investigations of globalization (Bohlman 2002), worship songs (Ingalls 2011), nostalgia (Rehding 2011), and compositions by Hector Berlioz, Gustav Mahler, Alexander Scriabin, and Olivier Messiaen (Sholl 2007, Taruskin 1997:349–359, and Roman 1980).
12. See Morrison (2012), A. Newman (2008), Gorenberg (2000), Weber (1999), Baumgartner (1999), Baudrillard (1994a), Fukuyama (1992), Niethammer (1989), Heidegger (1977:369), and Bell (1967).
13. See Hedges (2010), Hainge (2007), Belton (2002), Heartfield (2002), Lebrecht (1997), Barthes (1977), and Nietzsche (1882).
14. See, for example, Kyriakides (2005:442–443), Baer (2000:294), Ezrahi (1996:260), and Ziolkowski (1977:135–136). Adorno's presumed stance has circulated over the last half-century as a compressed two-word motto: *nach Auschwitz* (see Rothberg 1997:47). Rather fitting is how the sloganization of this phrase symptomizes the very sorts of atomized listening—or, in this case, atomized reading—against which Adorno vehemently railed in his criticisms of the culture industry. Granted, some have said that Adorno himself was not above sloganizing. Slavoj Žižek remarks on the hypocrisy 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).
15. See Hägglund (2008:1–12) for philosophical meditations on this point (via critique of Jacques Derrida).
16. Examples of other games set in postapocalyptic worlds 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).

17. While many of Galaxy News Radio's songs were written and/or performed by black musicians (e.g., Roy Brown, Billie Holiday, and the Ink Spots), matters of race *qua* skin color barely come up in *Fallout 3*. In this gameworld, "racism" manifests primarily as conflicts between healthy and irradiated survivors. As in other fantasy and sci-fi franchises (e.g., *Star Trek*, *Battlestar Galactica*, and *Harry Potter*), discrimination involves not skin color but rather fictionalized Others: extraterrestrial species, Cylons, pure-blooded wizards (vs. half-bloods and Muggles), and so forth. In these cases, there's something sublimatory about the ethnic diversity of the actors/characters; it's as if no one within the fictions even registers the skin colors of others, perceiving instead only the particularized traits of Otherness prescribed by the lore.
18. Besides big band and swing music, V-Discs featured marches, anthems, and classical repertoire. See Fauser (2013:116–118), Young and Young (2010:39–41), Starr and Waterman (2003:142–146), Erenberg (1996:151–153), and Sears (1980); cf. Baade (2012:182).
19. Laura Wiebe Taylor (2009:229) offers a similar reading of American popular songs in the horror films *House of 1000 Corpses* (2003) and *The Devil's Rejects* (2005).
20. On the uses and ideological baggage of classical music in video games, movies, and other media, see Gibbons (2009:40–41), Long (2008:1–4), and Kramer (2007:67–69).
21. See Miller (2012:61) for comparable observations about players' relations to radio music in *Grand Theft Auto: Vice City*.
22. Players have devised mods that add songs to the playlists of *Fallout 3*'s radio stations. On a blog post, a player named Eseell promoted 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>). It's notable that many player-made mods for *Fallout 3* adhere to the stations' established musical styles and genres. Instead of adding rock and roll or techno to Galaxy News Radio, for example, most modders select songs that conform to the station's mid-century big band repertoire. Although such mods present attractive content, the majority of players, especially in initial playthroughs of the game, are unlikely to know about (or to take time to implement) these additions. For a study of players' externally substituted music for *Operation: Anchorage* (the first *Fallout 3* expansion), see Wharton and Collins (2011); see also Collins (2013:131) and Milner (2012:228–42).
23. Original audiences of big band songs, of course, also likely picked up hints of dark humor in the lyrics, which were often laced with direct references to (or oblique commentary on) the sociopolitical strife of the 1930s and '40s. "The sound of the music was a big factor in which songs were chosen [for the game]," *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).
24. Scholars use the term "anempathetic music" to describe film music that "exhibit[s] conspicuous indifference to the situation, by progressing in a steady, undaunted, and ineluctable manner" (Chion 1994:8; see also Tompkins 2010:106–110, Taylor 2009:229–233, and Gorbman 1987:159–161). In film, anempathetic music can manifest in a number of ways: through non-diegetic accompaniment that sounds affectively detached from the onscreen action (see Coulthard 2009:1–3); 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 use of music boxes, phonographs, and other mechanical devices that play recorded tunes, commonly deployed to eerie ends in the horror genre (see Link 2010:46).

25. In recent years, the events of 11 September 2001 have also become a popular point of reference for discussions of music and violence (see Fisher and Flota 2011, Ritter and Daughtry 2007, and Tommasini 2001).
26. Sympathetic attitudes toward “music itself” have analogs in other media. W. J. T. Mitchell has remarked on how images elicit our sympathy when they are defaced, cut, burnt, or “offended” by 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). Concerning how people feel sympathy toward toys and robots, Sherry Turkle likewise notes that “[e]ven those who do not think a Furby [an electronic toy] has a mind—and this, on a conscious level, includes most people—find themselves in a new place with an upside-down Furby that is whining and telling them it is scared. They feel themselves, often despite themselves, in a situation that calls for an ethical response. [...] We are at the point of seeing digital objects as both creatures and machines. A series of fractured surfaces—pet, voice, machine, friend—come together to create an experience in which knowing that a Furby is a machine does not alter the feeling that you can cause it pain” (2011:45–46).
27. In 2007–2008, three academic music organizations—the American Musicological Society, the Society for Ethnomusicology, and the Society for American Music—passed individual resolutions condemning the practice of musical torture. But as Suzanne Cusick has noted: “Some critics have dismissed these resolutions as ineffectual vainglory, ‘feel good’ gestures that served only to substitute public sanctimony for real political action” (2008:paras.12–13).
28. In literature, drama, and film, there’s no shortage of villains who love classical music. Well-known examples include Alex in *A Clockwork Orange* and Hannibal Lecter in *The Silence of the Lambs*. A bit of trivia: in Stanley Kubrick’s *A Clockwork Orange*, Alex is played by a young Malcolm McDowell, who also happens to be the voice actor for President John Henry Eden in *Fallout 3*.
29. Music’s harmful potential abides in not only its forced reception but also its forced production. Shirli Gilbert has described the terrors of compulsory singing in Nazi concentration camps, where a “song would be announced, and the men [prisoners] would be required to sing together in precise, military fashion, often for hours at a 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).
30. Video game localization, as described by Rebecca Carlson and Jonathan Corliss, refers to “the translation of text and voice-work within a game [...] [and] a wide range of activities designed to adapt products to the perceived differences between local markets” (2010:165). On Japan’s censorship of American video games (especially with regard to depictions of violence), see Kelly (2010:150–154).
31. In the localized Japanese version of *Fallout 3*, Mr. Burke does not appear in Megaton’s saloon. Disarming the bomb is therefore the player’s only course of action (apart from ignoring the device altogether).
32. By a full playthrough, I mean the successful completion of the game’s main story (and not necessarily all the sidequests, which easily offer dozens more hours of playtime). My first playthrough took thirty hours; the second took just over twenty-two.
33. Some video game scholars (especially those who identify as ludologists) might object to the notion that an action can exist in a game without a player’s engagement. Debates about this tree-falling-in-forest ideal, of course, are not confined to interactive media. Questions

of whether meaning and events can reside *in* texts—or, alternatively, whether metaphysical properties are constructed solely through human intervention and interpretation—go to the heart of literary, aesthetic, and musical inquiry (see Tavinor 2009:106–108).

34. “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” (Arendt [1963] 1994:276, 287–288, 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 history’s most notorious “desk killers.” What readers have found so enticing about Arendt’s report on the banality of evil, observes David Cesarani, was how 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).
35. In March 2012, the phrase “Fallout 3 Megaton explosion” brought up approximately two thousand search results on YouTube (with “Fallout 3 Megaton” yielding close to ten thousand). A notable subgroup of these videos features players attacking Mr. Tenpenny and Mr. Burke. The videos sport titles such as “The Many Ways to Kill Mr. Tenpenny” or “Killing Tenpenny... 16 Different Ways.” In some of these morbid clips, players detonate the Megaton bomb anyway; in others, players spare the town, exacting vengeance solely on Mr. Burke and Mr. Tenpenny for issuing the atrocious order in the first place.
36. In *Fallout 3*, a player gains or loses Karma through certain actions (see Schulzke 2009). The player begins 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 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. Sainthood, demonic notoriety, and true neutrality all offer their own ludic perks and drawbacks in the Capital Wasteland. A player’s Karma influences the social reactions of NPCs, the available dialogue options, and the ease with which particular locations in the Wasteland can be accessed. No single moral path in the game, however, is unequivocally more advantageous than another.
37. In October 2011, I presented an early draft of this chapter at a lunch talk in the Harvard Department of Music. 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 would detonate the bomb if they were playing the game. About half the people in the room raised their hands (some hesitantly, others more confidently). After launching *Fallout 3* on my laptop and loading a save file—one that showed my character standing in front of the pulsing detonator button on 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 to the front of the room, hit the E key on my laptop, and set off the virtual bomb, causing the detonation for everyone 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 go through with the quest. “I felt like everyone [i.e., the audience] was judging me,” she remarked, “even though the people [the Megaton residents] weren’t real!” (correspondence with author, 21 October 2011).
38. See Pinch and Bijsterveld (2012:14) on monitorial, diagnostic, exploratory, and synthetic modes of listening. See Kassabian (2013:1–19) on the concept of ubiquitous listening.
39. See Price (2011:25–33) for a sustained endeavor to problematize the social, intellectual, and institutional privileging of rhetorical ability.
40. Some games seemingly protest violence by presenting scenarios in which the only way to “win” is not to play at all (see Bogost 2007:88). Action games that provide the option of total pacifism are becoming more common; recent well-known examples include *Dishonored*

(2012), *Mirror's Edge* (2008), and—with the exception of boss battles—*Deus Ex: Human Revolution* (2011). Nonviolence, in its own right, has become a transgressive and virtuosic way of engaging games, with players nowadays attempting “pacifist runs” that pose greater challenge than relying on standard combat (see Dougherty 2012 and J. Newman 2008:123).

## Chapter 2

1. The name Kefka evokes Franz Kafka, author of stories that feature unsettling existentialist themes. See Prymus (2009) for an interpretation of Kefka's nihilism through the philosophies of Friedrich Nietzsche and Michel Foucault.
2. *Final Fantasy VI* came out under the title *Final Fantasy III* (1994) in North America because, at the time, the Japanese version of *Final Fantasy III* (1990)—an altogether different game—had not yet been released outside Japan (see Kohler 2005:116–120). To avoid ambiguity, I will refer to *Final Fantasy VI* solely by its original title.
3. In his book on MP3s, Jonathan Sterne similarly notes how he aims to explore the “big questions that live inside a diminutive format” (2012:17), emphasizing that “MP3s are particularly striking because they are so small but circulate on such a massive scale” (*ibid*:225).
4. While narratives of creative overcoming make for compelling histories of video games and game audio, they are liable to get caught in snares of technological determinism. As noted by Karen Collins concerning early game sound: “[T]he relationship between technology and aesthetics is one of symbiosis rather than dominance. [...] [W]hile some choices may be predetermined by technology, creative composers have invented ways in which to overcome or even to aestheticize those limitations” (2008b:210).
5. Allucquère Rosanne Stone further explains how the sound of fire in radio dramas was 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).
6. James Manning has traced the “graphic conventions and associated physical humor” of early animated cartoons to the techniques of vaudevillian performers, for whom “stereotype, caricature and its associated level of visual shorthand” were crucial to the impact of their comedic routines (2012:45).
7. Well-known examples of nonverbal vocal soundbites in video games include Q\*bert's gibberish in *Q\*bert* (1982), Lavos's cry in *Chrono Trigger* (1995), and the ReDead's scream in *The Legend of Zelda: Ocarina of Time* (1998).
8. As far as vocal emissions go, laughter is a funny thing. As Jacob Smith writes: “[T]he spasmodic and nonsemantic nature of laughter makes it seem an unlikely carrier of meaning, [but] it has played an ongoing role in the presentation of the authentically human in mass-mediated texts, notably on early genres of phonographic recordings and the broadcast laugh track” (2008b:15). Laughter, if understood as a momentary lapse in bodily control, conveys authentic expression, a “flooding out” of gesture and emotion (*ibid*:20; also see Garrett 2011:246). In the case of Kefka, his synthesized laugh occupies an uncanny middle ground because it sounds both out of control (dementedly so) and perfectly controlled (an electronic sample reproduced with the utmost precision).
9. See Collins (2008a:38–40) for more on speech synthesis in video games. Games aside, speech synthesis and talking machines date back several centuries. For critical histories of these technologies (the Sonovox, the Voder, Faber's Euphonias, and automata of all kinds), see Smith (2008a:186–192), Sterne (2003:70–81), and Lastra (2000:24–36).
10. As Keith Stuart has remarked, there are “fundamental differences between voice acting in a videogame and voice acting in linear artforms such as radio plays and animated movies. Due to the interactive nature of games, actors can't be given a standard film script from which they're able to gauge the throughline of their character and a feel for the dramatic development of the narrative. Instead, lines of dialogue need to be isolated into chunks so they can be accessed and triggered within the game in line with the actions of each individual player. Consequently, the performer will usually be presented with a

- spreadsheet jammed with hundreds of single lines of dialogue, with little sense of context or interaction” (2010).
11. There are many websites devoted to reminiscing about and poking fun at the audio dialogues of video games from past decades. A writer on one such site notes that some early games had voice acting “so bad, you can’t help but love it” (Sutton 2011).
  12. “Bad” voice acting in video games (especially in the early 1990s) could be explained, in part, as an aesthetic holdover from the stilted synthesized dialogues of older games. That is, voice actors and game directors may have opted for “bad” voice acting because they were accustomed to (and sufficiently satisfied with) the so-bad-it’s-good, mechanical-sounding speech of games from the previous era.
  13. Silent protagonists are common (controversially so) in video games. Some protagonists have player-selectable texted dialogue but do not speak out loud. Others, more curiously, neither speak out loud nor have texted dialogue (e.g., famously, Chell in the *Portal* series, Gordon Freeman in the *Half-Life* series, and Link in *The Legend of Zelda* series); see Young (2013) and Tavinor (2009:121).
  14. See, for instance, discussion by Koestenbaum (1993:185–192).
  15. Other recent examples of singing video game characters include Elizabeth in *Bioshock Infinite* (2013), Zelda in *The Legend of Zelda: Skyward Sword* (2011), Zia in *Bastion* (2011), Mordin in *Mass Effect 2* (2010) and *Mass Effect 3* (2012), and Leliana in *Dragon Age: Origins* (2009). Games such as *Portal* (2007), *Metal Gear Solid 3: Snake Eater* (2004), and *Final Fantasy VIII* (1999) have well-known recorded songs that play during opening cinematics, cutscenes, and/or credits.
  16. See Juul (2010) on the “casual revolution” in gaming.
  17. Although FFVI was developed in Japan, its localized North American release has garnered an enormous Western fan base. In researching Western gamers’ relationships to Japanese games and anime, Mia Consalvo writes: “[Many individuals] often did not even realize that the games they were playing (or anime they were watching) were foreign in any way. Indeed, some of the games or cartoons they watched were so localized that it would be difficult to ‘see’ any Japaneseness within them, unless one was intentionally looking. [...] But for [other] players I talked with, their interests instead widened at this point, as they sought out more games, more popular culture artifacts, and then more exposure to Japan as a society, with a distinct language, culture, and way of life. These individuals have moved beyond banal cosmopolitanism, embracing a deeper interest in Japanese culture. [...] And for all at this point, there is a discourse of virtual travel at play—as players seek the mobility of exploration through games, through virtual exposure to another culture. For others, there is the mobility not simply of virtual travel via media, but physical travel, as many players have spent time in Japan, either through formal study abroad programs via their universities and colleges, or through their own independent travel” (2012:202, 211).
  18. The game compositions of Uematsu vary greatly in style. He has cited diverse musical influences, including Tchaikovsky, the Beatles, Elton John, progressive rock, and Japanese pop (see Mielke 2008).
  19. These are the titles of the opera scenes designated on the FFVI original soundtrack (with individual track durations in parentheses). In the game, the length of each scene will vary according to the time it takes for a player to complete the required actions.
  20. While the sprites for the Narrator and Impresario are identical (thus giving the impression that the former is played by the latter), the Impresario can be seen on the balcony—maybe implausibly—between scenes of the opera.
  21. Unless specified otherwise in this chapter, the English text quoted from the opera comes from the 1994 North American localized SNES version of FFVI.
  22. A player has a total of four tries to get the entire opera performance right. In the event of four failed attempts (during any scene), a Game Over screen appears, with the cheeky message (ostensibly from the Impresario): “You don’t have enough acting ability to convince

- your own mama!" Subsequently, the player must restart from the last save point. I'm grateful to Ryan Thompson for testing and confirming the fail-states.
23. These comments are noteworthy not least owing to the absence of comparable responses by viewers identifying as women or female.
  24. Henry Jenkins, Sam Ford, and Joshua Green similarly remark on how fans' circulation of "materials associated with retrogames [...] [is] educating a new public that comes to recognize previously unsuspected value in the past" (2013:99–100).
  25. Of course, fans' creation and dissemination of retrogame content extend well beyond music and audio. "On YouTube," notes Bob Rehak, "users enshrine and deconstruct retrogames through videos that range from the nostalgic to the pragmatic, such as 'best of' compilations and play-throughs making ample use of screen captures and motion graphics recorded from MAME [Multiple Arcade Machine Emulator] or from kludged versions of the original cabinets and consoles. Users also share video tours of their classic gaming set-ups and inventories of their collections" (2013:para. 8).
  26. On chipmusic cultures, see Collins (2013:113–118), Pasdzierny (2013), and Driscoll and Diaz (2009).
  27. The fact that the simulated singing in the FFVI opera sounds like nonsensical vowels also meant that it could be easily recaptioned with any text in any language—an allowance that, over the years, must have proven convenient for producing translated and updated versions of the game.
  28. See, for comparison, David Gelernter's notion of "machine beauty" (1998:2–10).
  29. Refer to Thompson (2013) for additional observations about operatic plot conventions in FFVI.
  30. See Grey (2008:93–97) and London (2000:89–90) on the indexical and expressive capacities of leitmotifs in opera and film.
  31. There's extensive literature on how instrumental melodies—in films, operas, symphonies, songs, and so on—may speak as/for/through characters *qua* authorial personae. On music's potential to envoke, embody, and narrate, see, for example, Cheng (2011b:137–138), Levinson (2004:437–438), Newcomb (1997:133–134), Berger (1994:424–446), and Abbate (1991:19–29).
  32. These captions also resemble supertitles displayed above an opera stage.
  33. Before Celes leaps off the cliff, she reflects on Cid's words, which appear as faded captions. In the original Japanese version, this text suggests that many previous inhabitants of the island were driven to suicide by grief and madness. But in the English version, the text (translated from Japanese by Ted Woolsey) reads: "Those others who were here—when they were feeling down they'd take a leap of faith from the cliffs up north. Perked 'em right up!" The 2007 English-language GBA port of FFVI de-censored this scene to an extent; the text, translated from Japanese by Tom Slattery, reads: "The other people who were here with us all gave up hope. One after the next, they flung themselves from the northern cliffs in despair." See Kelly (2010:152–153) for a discussion of American censorship of suicide scenes in Japanese-developed games.
  34. The concluding FFVI medley brings to mind the "leitmotivically saturated orchestral epilogue" of Richard Wagner's *Götterdämmerung* (1876), with its "feast of musical nostalgia or, better, a pageant: motives from throughout the epic hail us one last time as they float by in the universal deluge" (Grey 2008:114).
  35. The Tour de Japon's six performance locations were Yokohama, Tokyo, Sapporo, Nagoya, Fukuoka, and Osaka.
  36. While Hamaguchi's arrangement offers narrative closure by resolving the duel between Draco and Ralse, it ultimately—maybe necessarily—strips the larger storyline to its bare bones. The absence of a narrator, for one, means that there's no one to introduce character roles, set the scene, and provide backstory about the war between the West and the East. At no point is the name Ralse even uttered by any of the singers. Hamaguchi's adaptation is loosely based on the 1994 *Game Music Concert 4* orchestral performance of the FFVI

- opera, arranged by Kosuke Onozaki and featuring the Tokyo Symphony Orchestra. In this version, Draco likewise triumphs in the duel and reunites with Maria.
37. This concert featured conductor Arnie Roth, the Royal Stockholm Philharmonic Orchestra, and vocal soloists Emma Wetter, Fredrik Strid, and Johan Schinkler.
  38. Hamaguchi's arrangement increasingly received performances in English following the Tour de Japon. Most of these performances have used a text based on the captions from the 2007 North American Game Boy Advance (GBA) port of FFVI. Whereas the opera in the original 1994 English SNES version contained more or less a word-for-word translation of the Japanese libretto, the English GBA game opted for a looser translation, one with end rhymes and regular poetic meters. GBA's version further tailored its captions so that the number of syllables in each line matched the number of discrete notes in the synthesized vocal melody. Given that syllabic declamation can facilitate singers' articulation as well as listeners' comprehension of a text, it makes sense that the GBA captions have been the go-to source for English-language renditions of the opera.
  39. In the original game version of the opera, Draco's synthesized voice falls in a bass range, while Ralse sounds like a tenor or baritone. In Hamaguchi's arrangement, the voice ranges of these two roles are reversed, presumably to follow nineteenth-century opera's conventions of tenor heroes and bass (or baritone) villains.
  40. In a recent FFVI opera arrangement that premiered in the Final Fantasy 25th Anniversary concerts in 2012, a narrator recites the backstory during the orchestral overture and interludes. The conductor Arnie Roth, in an interview, described this new arrangement as follows: “[Nobuo Uematsu] always wanted to do what he called the ‘more perfect version’ of *Maria and Draco*. His idea of that was that it would have the battle music that was implied in the opera. ‘A battle was raging outside the castle walls’—and he actually had written some battle music for it, but it never ended up getting used in the game, so he always wanted to kind of complete the opera scene that we play live with some battle music in there. So there’s about two minutes of new music that’s in the opera that we’ve orchestrated. And then there’s also another new thing—and that is that we added the chorus into the opera. So we have the three vocal soloists: Ralse and Draco and Maria. But then we also have the chorus, and now we’ve also added the narrator. So there’s a narrator position which is similar to the information that used to pop out in the game” (transcribed from “Interview with Arnie Roth, Distant Worlds: Chicago, the Celebration,” <http://www.youtube.com/watch?v=FGWjXxF6W8o>, uploaded by user Christian Ponte on 26 November 2012, accessed 4 March 2013).
  41. The Symphonic Odysseys concert featured conductor Arnie Roth, solo pianist Benjamin Nuss, and the WDR Radio Orchestra.
  42. It could further be argued that we rarely, as a matter of course, perceive *any* music as exclusively instrumental or vocal (despite, for classificatory convenience, descriptions to this effect). Via colorful metaphors, high-flown theories, and everyday parlance, listeners frequently report traces of singing and speaking voices in the sounds of instruments. On the flip side, some manners of singing can verge on cries so pure that they purportedly slip through the bonds of voice and language altogether.
  43. On apophenia and patternicity, see Hubscher (2007) and Shermer (2008). From an evolutionary perspective, the ability to hear and see into things is a survival skill of sorts, one that helps us detect camouflaged predators, retain mnemonic data for navigation, and more (see Taleb 2008).

## Chapter 3

1. On the genealogy of survival-horror, see Perron (2012:17–26), Therrien (2009), McRoy (2005), and Hand (2004). Recent survival-horror games and franchises include *Outlast* (2013), *Slender: The Eight Pages* (2012), *Lone Survivor* (2012), *Amnesia: The Dark Descent* (2010), *Dead Space* (2008), *Eternal Darkness: Sanity's Requiem* (2002), and *Fatal Frame*

- (2001). A growing emphasis on action and combat in horror games has led recent writers to question whether the survival-horror genre still exists in its “purest” form (Alexander 2008).
2. Subsequent games in the *Silent Hill* series include *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). The films are titled *Silent Hill* (2006) and *Silent Hill: Revelation 3D* (2012). See Mundhenke (2013) for a discussion of the first film’s sound design.
  3. As noted by 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* (1990–1991). See Oxford (2013) regarding the possible impact of Stephen King’s novella *The Mist* (1980) on the story and themes of *Silent Hill*.
  4. Many J-horror films center on the homicidal powers of devices such as cell phones (*One Missed Call*, 2003), computers (*Pulse*, 2001), video cassettes (*Ringu*, 1998), and video games (*St. John’s Wort*, 2001). As remarked 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 (primarily US) military and cultural imperialism” (2005:6). On J-horror’s thematic conventions, see Balmain (2008:128) and Goldberg (2004:371–373). On mutual influences between Japanese and American horror media, see Picard (2009), Balmain (2008:26), and McRoy (2005:114).
  5. In a similar vein, scholars have interpreted disaster and horror films as texts that work to aestheticize, sublimate, and critique historical traumas and other social maladies (see Blake 2008 and Lowenstein 2005).
  6. One reviewer of *Silent Hill* summarized Harry’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” (Reyes 1999).
  7. Like Krzywinska, Aylish Wood notes that a video game cutscene reduces “the degree of agency for gamers, relocating them as viewers who are able to actively excavate it for relevant narrative information” (2007:128; see also Kirkland 2007a). Will Porter’s study (2011) suggests that the purported lack of (input) agency during a conspicuously noninteractive cutscene can be offset by a player’s agentic understanding that there is no possibility for ludic failure (that is, a Game Over scenario). The predetermined nature of cutscenes, in other words, relieves the savvy player of any pressure to perform in the first place.
  8. A number of games feature scripted “failure” in the form of unwinnable boss battles. Classic examples include the initial encounter with Vile in *Mega Man X* (1993) and the first end-game battle with the Cloud of Darkness in *Final Fantasy III* (1990).
  9. See Grimshaw (2009) on horror game audio and the uncanny valley.
  10. According to Yamaoka, his musical influences include punk, techno, metal, and British New Wave rock bands such as Depeche Mode, Ultravox, and Visage (see Kalabakov 2002).
  11. Various studies of horror films and gothic fiction highlight thematic resonances between medium and subject matter. James Heffernan notes that “film versions of *Frankenstein* implicitly remind us that filmmaking itself is a Frankensteinian exercise in artificial reproduction” (1997:139; cf. Spadoni 2007:107). Judith Halberstam similarly remarks that Bram Stoker’s *Dracula* “assembles a writing machine from letters and journals, dictaphones and phonographs; it [...] 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; cf. Twitchell 1985:165–167).
  12. In *Silent Hill*, the music accompanying the introductory and concluding full-motion videos is in a style that’s more lyrical, tonal, and rhythmically regular than the noise-based tracks

- heard during gameplay. Yamaoka has acknowledged that this lyrical aesthetic was influenced in part by the music composed by Angelo Badalamenti for *Twin Peaks* (see Perron 2012:89 and Kalabakov 2002).
13. Like industrial music, the broad genre of noise music is informed by countercultural and anti-aesthetic ideologies (see Novak 2013:14–15, Kelly 2009:210–282, Toth 2009:25–37, and Hegarty 2007:133–165).
  14. See Brown (2011:2–3) regarding designers' strategic blurring of soundtrack and sound effects in survival-horror games. On the likewise unsettling effects of “[u]nidentifiable, unlocatable sound” in film, see Stilwell (2007:188).
  15. In *Silent Hill: Shattered Memories* (2009) for the Wii, an even more disturbing compression of real-virtual space can arise when noises are projected from the speakers embedded in the player's Wiimote (this console's wireless controller). When the protagonist receives a phone call in the game, the ringing sound will come not from the television's speakers—presumably several feet away from the player—but instead from the Wiimote clutched in the player's hands.
  16. While fourth-wall-breaking 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 Psycho Mantis claims to have psychic powers. Upon instructing the player to lay the game controller down on a flat surface, this boss declares that he will proceed to move the controller with his mind. 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 telekinesis by triggering the rumble pack inside the PlayStation controller, synchronizing its vibrations with each animated wave of the boss's arms.
  17. See Kirkland (2007b:411) on the breaking of the fourth wall in *Silent Hill*. Also see Collins (2013:138–141) and Harpold (2006).
  18. Examples of fourth-wall-breaking ploys in cinema include the publicity stunts of the horror filmmaker William Castle, who sought to “create the perception that the horror had escaped the screen and entered the space of the auditorium. For example, publicized as being filmed in ‘Emergo,’ during the screening of *House on Haunted Hill* (1959), a glow-in-the-dark skeleton attached to a wire appeared over the audience, as if emerging from within the screen; in *The Tingler* (1959), which was filmed in ‘Percepto,’ one of the creatures (that attaches itself to the human spine) escaped the film and entered the space of the theater, whose seats were fitted with buzzers that shocked select audience members who were also encouraged to scream for their lives” (Ndalianis 2012:166–167).
  19. See Link (2004) on the use of anempathetic music in horror films. On the anempathetic effects of minimalist music in film more generally, see Eaton (2008:97–121, 186–251) and Chion (1994:9).
  20. Csikszentmihalyi's (1990) influential notion of flow locates possibilities for pleasure in immersive activities that contain just the right amount of challenge (not too hard, not too easy).
  21. Gadamer is writing about play here primarily with reference to the ontologies of art and the vicissitudes of aesthetic interpretation.
  22. Kiri Miller offers a 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 precedents or subtly alter them, gradually creating new traditional narratives, musical canons, embodied performance techniques, and cultural ideologies” (2012:226).
  23. As Robert Fink states, a “true cultural hermeneutic of minimal music [...] must attempt to make its emptied-out formal language *signify*” (2005:18, emphasis in original).

24. Or, as John Cage famously declared: “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).
25. *The Rest Is Noise* is the title of a blog and book by the music critic Alex Ross (2008).
26. As described by Jonathan Sterne, the domestication of noise can involve either foregrounding or backgrounding it: that is, “either to render it useful—in environments like manufacturing, avant-garde music and sound art, dentistry, or office work—or irrelevant, as was the case in communication engineering” (2012:94–95).
27. The monster (as interstitial construct) also appears in representations of disability and non-normative bodies. On the metaphorization and stigmatization of impaired individuals as pathological terata, see Garland-Thomson (1996), Weinstock (1996), Grosz (1994), and Bogdan (1988). On the deployment of monsters in feminist and posthuman discourse, see Haraway (1991:21–22).
28. This resonates with Jeffrey 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, italics in original).
29. Harry’s constant blackouts and hallucinations additionally explain (away) his teleportation between distant locales at several instances in the game (see Therrien 2009:31 and Kirkland 2009:75). Over the course of the player’s adventure, Harry voices an awareness of his mystifying teleportation. After one particular mid-game cutscene fades to black, he is shown waking up in an unfamiliar place. As Harry picks himself off 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 the steering wheel of his car, implying that he had already died in the crash at the beginning of the game, and that none of the subsequent events ever took place. A twist on this twist occurs at the end of *Silent Hill: Shattered Memories* (2009).
30. Concerning the survival-horror game *Resident Evil* (1996), Tom Bissell similarly observes how a lack of data (and a limited interface) can be unsettling in gameplay: “This zombie [...] had no health bar. Neither do you [the character], properly speaking. What you do have is an electrocardiographic waveform that is green when 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).
31. Amnesiac 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 about an amnesiac’s quest to recover lost memory include *Fallout: New Vegas* (2010), *Amnesia: The Dark Descent* (2010), and *Planescape: Torment* (1999).
32. For more on the sound design, fandom, budget, and marketing of *The Blair Witch Project*, see Ndalianis (2012:170–173), Coyle (2009), and Jenkins (2006:103–105). See Carter (2010) on the transgressive appeal of based-on-a-true-story exploitation films.
33. This extreme profitability, of course, manifests not just in the horror genre but also in exploitation cinema (Weiner 2010:41, Schaefer 1999:2) and paracinema (Sconce 2000:372). David Rodowick has 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).
34. An electronic transmission device serving as a monster detector (radio, walkie-talkie, phone) has appeared in most *Silent Hill* games to date.
35. A player can view an icon of the radio by entering Harry’s inventory, but the device is at no point shown on Harry’s avatar during gameplay.

36. Studies of musical manipulation, music in everyday life, violence, and sound ecologies have variously emphasized the ability of acoustic phenomena to act on, inhibit, and control human thought and behavior (Goodman 2010:5–13, Cusick 2008, Martin 2006, North and Hargreaves 2006, and DeNora 2000).
37. Another example of subtle creative labor would be the two hundred different footstep samples that Akira Yamaoka reportedly used for *Silent Hill 2* (see Kalabakov 2002).
38. The fact that Jack's encounter with Andrew Ryan unfolds as a “noninteractive” cutscene complicates things 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 in the first place (see Sicart 2009:154–163; cf. Van den Berg 2012:18–29).
39. *Silent Hill* does not feature extensive branching paths or sidequests, 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.
40. The post-9/11 Velvet-Strike movement consisted of a group of gamers who sought to express pacifist 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 with the aim of making artistic, social, and political statements (see Bogost 2007:125 and Schleiner 2002; cf. discussion of “hush play” in *Call of Duty* by Snider, Lockridge, and Lawson 2012:295).
41. On masochism in horror film spectatorship, see Powell (2005:47), Clover (1992:222), and Carroll (1990:158–214).

## Chapter 4

1. The full name of the base-game is *The Lord of the Rings Online: Shadows of Angmar*. Four expansion packs—*Mines of Moria* (2008), *Siege of Mirkwood* (2009), *Rise of Isengard* (2011), and *Riders of Rohan* (2012)—supplied additional content to the game and broadened its geographical scope. Shortly after launch, LOTRO's servers opened up to various additional countries with corresponding language packs. In 2010, LOTRO went free-to-play. In 2012, Turbine released a Mac client beta for the game.
2. LOTRO's four playable races are Man (a.k.a. Human), Hobbit, Elf, and Dwarf. Selectable classes include Burglar, Captain, Champion, Guardian, Hunter, Lore-Master, Minstrel, Rune-Keeper, and Warden.
3. As noted by Michael Saler, readers of Tolkien's fictions in the mid-twentieth century engaged in 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 [readers] shared was Middle-earth: it was their communal home, uniting them despite their differences” (2012:189).
4. For insights into the technical and social workings of multiplayer online role-playing games, see Nardi (2010:52–93), Taylor (2006:49–52), Castranova (2005:1–22), and Kelly (2004:24–45).
5. Other online worlds with player-music systems include *Star Wars Galaxies* (active 2003–2011), *Asheron's Call 2: Fallen Kings* (2002–2005), and *Second Life* (2003–present). See Collins (2013:92–96) and Harvey (2009:151–167).
6. LOTRO contains a soundtrack featuring both synthesized music (by Stephen DiGregorio) and recorded orchestral and choral music (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 option to adjust in-game audio settings, which include the Master Volume, Player Music Volume, Sound Effects Volume, Ambient Sound Volume, and Combat Sound Volume.
7. Players have no means of altering the volume of individual pitches during a freestyle performance but 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*).

8. 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-to-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).
9. On musicality's connotations of social distinction, see Cheng (2011a:62–66), Bigenho (2008:29–32), Brett (2006:11), Kingsbury (1988:59–84), and Blacking (1973:4–11).
10. For case studies, see Katz (2010:177–210), Gillespie (2007:1–20), Lysloff (2003:47–54), Taylor (2001:117–135), and Théberge (1997:214–241).
11. See, for example, Lukács (2010:192–196), Boellstorff (2008:79–86), Lysloff (2003:24–28), Kendall (2002:233–246), and Turkle (1995:321–324).
12. See Moseley (2013) and Miller (2009) on criticisms that writers have lodged against the virtual virtuosity enabled by *Guitar Hero* and *Rock Band*.
13. On these technologies of sonic production and intervention, see respectively Hecker (2008), Auslander (2008:73–127), and Katz (2010:50–52).
14. In a study of sampling technologies, Alan Durant proposes three conditions for 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).
15. Christopher Small coined the concept of “musicking” to describe, in inclusionary fashion, “[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).
16. For additional considerations of how sampling invites reexaminations of distinctions between performance and recording (and between human and machine), see Schloss (2004:46) and Porcello (1991:75).
17. See Katz (2012a:462–476 and 2010:56–79), Goodman (2011), Rehding (2005), Douglas (2004:20–25, 328–346), Sterne (2003:291), Taylor (2001:5–8, 161–164), Morton (2000:48–73), and Théberge (1997:29).
18. LOTRO's Code of Conduct can be found on the game's official website (<http://www.lotro.com/support/policies/1033-coc>) as well as in the instruction manual that ships with hard copies of the game.
19. LOTRO players can set their avatars' statuses to indicate whether or not they are role-playing so as to inform others how they wish to be approached in the game.
20. Composed by Howard Shore, Annie Lennox, and Fran Walsh, the melancholy farewell song “Into the West” (originally recorded by Lennox) plays over the closing credits of Peter Jackson's film *The Lord of the Rings: The Return of the King* (2003). The song was a tribute to the Auckland filmmaker Cameron Duncan, who passed away from bone cancer in 2003. It won Best Original Song at the Seventy-sixth Academy Awards in 2004.
21. 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).
22. Regarding online griefing practices, see Dibbell (2009:11–12), Bakiroglu (2009), Tavinor (2009:107–109), Boellstorff (2008:187–198, 220–225), J. Smith (2007), and Ludlow and Wallace (2007:89–107). In his seminal book on cultures of play, Johan Huizinga used the comparable 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). On distinctions between “cheaters” and “griefers,” see Consalvo (2007:109).
23. Player vs. Player (PvP) mode, common in online role-playing games, allows players to attack and inflict hit-point 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 designated PvMP-sanctioned zones—can temporarily assume the role of a high-level Monster and engage in combat with non-Monster players. These zones, however, do not tend to be situated in civil areas such as Bree-Town.

24. As Evan Snider, Tim Lockridge, and Dan Lawson put it, griefing isn't merely "antisocial behavior," but a meaningful and imaginative type of "ideological activity [...] that challenges culturally prescribed notions of play" (2012:278). Griefing is conceivable as a "form of rule-play: griefers will exploit bugs and other technological rules that the social world of the game should not allow; they will feign ignorance of social and technological game rules; they will exploit the rules of the gameworld to disrupt other players' activities; they will even posit alternative rules that call attention to the often tacit rule-based structure of the gameworld" (*ibid.*:291).

## Chapter 5

1. Greg Wadley and Martin R. Gibbs describe how "[v]oice-haters [in *Second Life*] 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 edifices], 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 debates about voice chat in *Second Life*, see Llewelyn (2007), Combs (2007), Prokofy (2007), and Hunter (2006).
2. Regarding the "ludic leakages" of voice chat, Karen Collins explains that "[f]amily members in a nearby room can overhear a [player's] private conversation, for instance, which means adjusting vocal volume and often regulating language. When players can freely swear, share secrets with strangers, and otherwise engage in behavior not appreciated by other members of their physical family, they may be embarrassed by talking out loud and prefer text. [...] Likewise, the voices of family members who speak to or near the player may be picked up by the microphone and enter the game" (2013:81).
3. As noted by Edward Castranova: "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 2008:140–141).
4. Literary theorists, sociologists, philosophers, linguists, and disability scholars in recent years have applied concepts of prostheses to poststructuralist critiques of identity and agency. 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 of prostheses' cultural and discursive valencies, see Nelson (2001:304–305), Mitchell and Snyder (2000), Jain (1999:31–54), Lury (1998), and Wills (1995).
5. Theories of posthumanism regard "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 more on prostheses and constructions of personhood, see Garland-Thomson (2009:128–129), Wilson (1995:239–259), and Tanenbaum (1986:63–65).

6. The metaphor of the prosthesis has been invoked in a few musical studies to date. Tia DeNora likens 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 describe turntablism as “an instance of media as technological extension/prosthetic” (2006:225). Jennifer Iverson frames 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).
7. These three comments were posted on a forum titled “The Inevitability of Voice,” [http://terranova.blogs.com/terra\\_nova/2007/02/the\\_inevitability.html](http://terranova.blogs.com/terra_nova/2007/02/the_inevitability.html) (accessed 15 June 2008); cf. Kramer (2010).
8. Most competitive online games of the last decade have launched with built-in voice-chat support. Console players in particular benefit from voice chat since they tend to use game-pads (with which text input can be especially arduous) instead of the default mouse and keyboard configurations of computer games.
9. The website *Fat, Ugly or Slutty* (<http://www.fatuglyorslutty.com>) has an archive of offensive, comical, and outrageous comments that (mostly male) gamers say or write to (mostly female) gamers.
10. On gender politics in video games, see Jenkins and Cassell (2008), Taylor (2006:98–102), Kendall (2002), Sherman (1997), and Edwards (1990).
11. Writers have characterized online environments as queer(ed) spaces that stimulate subversive performances of plural, liminal, and transgressive identities. On gender masquerade and passing online, see Huh and Williams (2010), Nardi (2010:152–175), Dumitrica and Gaden (2009), White (1999), Roberts and Parks (1999), and Turkle (1995:212). For similar discussions pertaining to race and ethnicity, see González (2009 and 2000), Nakamura (2008), Chun (2006:129–170), Kolko (2000), Sharpe (1999), and Bailey (1996). Various scholars have noted the importance of resisting idealistic depictions of cyber-communities as domains in which identities and social hierarchies can be effortlessly reconfigured or altogether transcended (see Hillis 2009:203–260, Campbell 2004:84, Chatterjee 2002:202, Wakeford 2000, O’Brien 1999, and Vaid 1996).
12. Given the fast-paced nature of TF2, there was no way for me to interview players during matches, at least not without seriously disrupting their gameplay. My TF2 fieldwork thus consisted of observing players across dozens of servers (over the course of thousands of matches), and engaging in instant chat with many players outside the game (using the PC Steam client). Although players on particular servers eventually came to know me as an ethnographer, I chose not to announce my role as a researcher when joining a public server (out of the concern that doing so would alter the social dynamics at hand or even lead players to stop speaking altogether).
13. TF2 can be downloaded on 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 TF2 is also available on consoles, most people who play this game do so on the computer.
14. This statistic was taken in August 2013. To view live statistics of player activity in TF2, see [store.steampowered.com/stats](http://store.steampowered.com/stats).
15. Across online forums, there have been debates over whether Valve should release female skins for TF2 avatars. It has been argued that adding a female counterpart to each character model would compromise the ease with which the game’s nine classes can be visually identified during a match. Having a total of eighteen instead of nine silhouettes, many players note, would demand too much extra attention amid fast-paced gameplay. Although some players have created their own mods for female skins, very few servers put these to use. See Manning (2012:57–58) for a comparable discussion.
16. Avatars also speak automatically when they are led to perform certain actions in the game. The voice actors for TF2’s characters are Nathan Vetterlein (Scout), Gary Schwartz (Heavy)

- and Demoman), Rick May (Soldier), Dennis Bateman (Pyro and Spy), Grant Goodeye (Engineer), Robin Downes (Medic), and John Lowrie (Sniper). The Announcer/Administrator is voiced by Ellen McLain.
17. See Grimshaw (2008) for a study of the soundscapes and acoustic experiences of shooter games.
  18. A player's TF2 account can retain only one uploaded spray at a time. Importing a new spray results in the automatic deletion of the existing one. In addition, a player cannot imprint more than one copy of a spray at a time within a TF2 environment; attempting to spray a second copy will cause the first image to disappear. These limitations presumably serve to prevent players from spamming large areas of a map with multiple copies of their sprays. When players leave a server (or when a server changes maps), sprays in that map disappear.
  19. On the advantages and limitations of feminist standpoint epistemologies, see Walby (2001), Hekman (1997), and Harding (1993).
  20. TF2 players can add one another to their Friends lists and subsequently engage in instant chat outside the game. Online social platforms for TF2 include Steam (Windows PC and Mac), Xbox Live (Xbox 360), and PlayStation Network (PlayStation 3).
  21. For more on disguised female soldiers in historical perspectives (notably during the American Civil War), see Blanton and Cook (2002:25–44, 107–129), DePauw (1998:104–109, 147–151), and Hall (1993).
  22. On coming out as an exercise in repetition, see Halberstam (2005:52–53), Samuels (2003:237), Kleege (2002), Butler (1997b:302), Tyler (1994:222), and S. Phelan (1993:774).
  23. See, respectively, Barthes (1977:179–189), Koestenbaum (1993), and Grosz (1994). In his influential essay on the grain of the voice, Barthes uses the terms “geno-song” and “pheno-song” to distinguish 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.”
  24. Also consult Sterne (2012:243–245) for a more recent engagement with Cavarero's ideas.
  25. See Huebner (2006), Bronfen (1996), Leonardi and Pope (1996), Robinson (1994), Castle (1993), Morris (1993), Poizat (1992), and Friedheim (1983:63–70). Ethnomusicological studies about the impact of women's songs and singing on cultural production (Magrini 2003, Du Perron 2002, Sugarman 1997, Koskoff 1993, and Vander 1988) have appeared alongside many edited volumes containing essays that emphasize women's voices as instruments of authoriality and empowerment (Austern and Naroditskaya 2006, Feldman and Gordon 2006, Bernstein 2004, Smart 2000, Barkin and Hamessley 1999, and Dunn and Jones 1994); cf. Shelemay (2009).
  26. On music's alleged ineffability, see Jankélévitch (2003).
  27. Although trolls can be classified as a subcategory of griefers, the slipperiness of these labels allows the reverse to hold true as well. E. Gabriella Coleman describes griefers as “one particular subset of troll, who roam in virtual worlds and games seeking to jam the normal protocols of gaming” (2012:110). “Troll” and “griefer” are indeed sometimes used interchangeably in Internet parlance and academic discourse alike.
  28. 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 *American Telephone Journal* article, the critic C. E. McCluer commended female telephone operators for their “traits of domesticity, patience, courtesy, and contentment,” remarking 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 Lana Rakow, spoke in voices that were thoroughly “commodified, controlled, and restrained for business purposes” (1988:224). Writers at the time praised female operators as obedient aides whose feminine dispositions and willingness to accept low wages made them more conciliatory job candidates 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 an article for the *Musikblätter des Anbruch*, Theodor Adorno 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” (1928:54; see also Engh 1994:120–135). Experiments conducted at the Bell Laboratories in the 1920s actually concluded that the high register of a woman’s voice rendered it “equal to men’s in loudness, but significantly less intelligible” (McKay 1988:187)—although, as Amy Lawrence points out, the alleged technical crises concerning the transmission of women’s voices grew out of “a tangle of technological and economic exigencies, each suffused with ideological assumptions about [a] woman’s ‘place’” (1991:32). Contemporary surveys showed a 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).

29. Regarding mid-twentieth-century attitudes toward female voice-overs and voice-offs in cinema, Kaja Silverman writes 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” (1988:164; see also Dusman 2000, Flinn 1992:51–69, and Doane 1991).
30. Few players of TF2 use photos of themselves as their profile pictures. Most players choose instead to use animated figures, abstract symbols, video game icons, celebrities’ faces, graphical cyber-memes, or other anonymizing images.
31. YORugly also describes how she uses her physical attractiveness to her 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, 1 June 2011).
32. Regarding early modern discourses on femininity, age, and sexual maturity, Linda Phyllis Austern explains how “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).
33. In a separate discursive context, Teresa de Lauretis has likewise used the term “sexual indifference” to probe notions of lesbian identity and the psychoanalyticics of self-same desire (1988:155–177; see also Hope 1994).
34. The topic of vocal androgyny has received much attention from music scholars with particular regard to the singing voice, which, as Judith Peraino remarks, “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, one illustrating listeners’ fascination with voices that transcend gender categories (Ashley 2009, Braga-Pinto 2002, Miller-Frank 1995:84–117, and Dame 1994). Naomi André describes the voice of the castrato as one of “neither man nor woman in an exclusive sense, but [...] 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 as a lost ark of musical beauty, the castrato's voice is eminently suited to modern psychoanalytic studies and rigorous hermeneutic display. Only in more recent years have writers begun in earnest to normalize the castrato, rescuing this oft-fetishized figure from the brink of mystical and dehumanizing alterity (see, for example, Freitas 2009; for comparable queer and disability discourses aiming to destigmatize transsexual, intersexed, impaired, and otherwise non-normative individuals, see Valentine 2007, Heyes 2003, Preves 2002, Davis 2002, and Garland-Thomson 1996).

35. Although I refer to xxsnipergodxx with gender-binaristic pronouns ("s/he"), I do not know whether this player identifies as either/both male or/and female. Since xxsnipergodxx declined to be interviewed, I was unable to obtain information about this player's identification preference(s).
36. In a study of TF2's economy, Christopher Moore explains that "hats for player avatars were introduced in May 2009, eighteen months after [TF2's] 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 TF2's online store with real-world currency. Some hats, however, remain extremely rare and can only be found via randomized unboxings. Players have established unofficial markets for buying and selling these rare items. In mid-2011, the most sought-after hats were being sold on eBay for upward of \$3,000.
37. In 2009, the developers of *Second Life* announced plans to introduce voice-changing technologies into the virtual world (see Linden 2011 and Seiler 2009). Residents of *Second Life* received the option to purchase voice fonts to alter their speaking voices. Most games to date, however, do not have built-in support for voice-changing capabilities.
38. In virtual environments, as Sherry Turkle concisely puts it, "words are deeds" (1995:15, emphasis in original). On comparable notions of speech as act, see Felman (2003:6–11), Powers (2003), Munt, Bassett, and O'Riordan (2002:128–129), and Butler (1997a).

## Epilogue

1. See Cheng (2011b:118–119) on the theatrics of *mise-en-abyme*.
2. The first case refers to the shooting that took place at a screening of *The Dark Knight Rises* in Aurora, Colorado on 20 July 2012 (Muskal 2012 and Pilkington 2012). The second is about how Manuel Garcia allegedly told his daughter Maria Malibran that he would murder her onstage during their performance of Gioachino Rossini's *Otello* if her singing (as Desdemona) didn't satisfy him (Clément 1988:11 and Fitzlyon 1987:39–41). The third involves the actor Daniel Hoevels, who, on 6 December 2008, nearly killed himself while acting out a suicide scene in Friedrich Schiller's play *Mary Stuart* (Pearse 2008).
3. "Still Alive" was composed by Jonathan Coulton and recorded by Ellen McLain, who sings it in the stylized voice of the *Portal* villain GLaDOS.



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