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"You're Getting to be a Habit with Me": Diegetic Music, Narrative, and Discourse in *Bioshock*

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Abstract

This article examines how *diegetic* music in *Bioshock* (2007) is an explicit component of narrative production, game environment creation, and player immersion. The songs from the 1930s-50s participate in the construction of narrative through a constant interplay or negotiation with the video game's other elements—visual, textual, ludic—and thus music ultimately functions as a distinct discourse able to mediate between contesting factors for the protagonist Jack and the player. The discourse diegetic music produces in *Bioshock* operates through a system of musical, cultural, and filmic codes of signification that also incorporates new modes employed and generated by video games—particularly regarding the nature of narrative creation in digital media, and the ludic aspects which must necessarily inform all levels. The author argues that the songs in *Bioshock* not only produce ironic and poignant effects through antithetical juxtapositions of musical mood or expression in relation to the scene or overall story, but the lyrics may speak to the events enacted or depicted, to Jack and the player, or to the very nature of game play itself.

Author Keywords

Bioshock; Music; Narrative; Discourse; Ludology; Film theory; Video Games.

In 2K Games' *Bioshock* (2007) the player, as the protagonist Jack, is thrown into a dystopian, futuristic alternate history of America, where in the early stages of the video game one finds what resembles the iconic Underwood #5 Typewriter—rebranded "Below Tree"—serving as one of the many cues that this is not familiar territory. During the opening first-person-perspective cinematic scene, set somewhere over the mid-Atlantic in 1960, the game provides us with limited background information for Jack. Reclining in a luxurious airplane seat en route to visit cousins in England, he smokes a cigarette while looking at a wallet photo of presu mably himself with his parents. In a voice-over that hints at Jack's true history and foreshadows his crucial role in *Bioshock*'s narrative, he informs us of their parting words: "'Son, you're special, you were born to do great things.' You know what? They were right." Seconds later the airplane crashes into the ocean, leaving Jack stranded near a lighthouse that is the entrance to the decaying underwater city of Rapture. A result of Andrew Ryan's Objectivist dream gone horribly wrong, Rapture was built by the powerful magnate as the place where "the artist would not fear the censor, where the

scientist would not be bound by petty morality, where the great would not be constrained by the small!" Apparently inspired by the writings of Ayn Rand, Ryan's self-interested philosophy asks, is "a man not entitled to the sweat of his brow?" and rejects the answers provided by the dominant ideologies of the 1950s: "'No!' says the man in Washington, 'It belongs to the poor.' … the Vatican, 'It belongs to God.' … in Moscow, 'It belongs to everyone.'" Currently in the throes of a civil war between Ryan and Frank Fontaine (who for the most part pretends to be Atlas, Jack's guide and "friend" in the city), Rapture is a world saturated in music: popular songs from the mid twentieth century; classical-style soundtrack pieces composed by Garry Schyman; characters humming, singing, whistling or playing instruments; musical vending machines; and even the sounds of whales and other creatures all participate in forming a textured soundscape.

The songs from the 1930s-1950s used throughout *Bioshock* recall a real-world cultural environment—a popular music culture which, like the "Below Tree" typewriter, is both comfortably recognizable yet strangely unfamiliar. They occur within the game world and are heard by the player and game characters, and thus the songs are *diegetic* or "*screen music*." As Chion (1994) explains, such music arises "from a source located directly or indirectly in the space and time of the action, even if this source is a radio or an offscreen musician" (p. 80). In *Bioshock*, diegetic music is an explicit component of narrative production, game environment creation, and player immersion. Furthermore, most of the music in *Bioshock* contains a lyrical component capable of producing meaning within and outside of the narrative, and creates a complex intertextuality between fictional and real worlds. It is able to function within the game experience and story, as well as reflect and comment from an external position in direct or allusive ways. Significantly, diegetic music participates in the construction of narrative through a constant interplay or negotiation with the video game's other elements—visual, textual, ludic—and ultimately functions as a distinct discourse able to mediate for Jack/the player between contesting factors via established conventional codes of musical, cultural, film, and now video game signification. *Bioshock*'s use of music initiates a pre-game discourse during installation and prior to every game session in the disc-loading scenes, and this musical discourse is continued throughout the narrative. The story's opening and descent into Rapture further establishes and "naturalizes" the presence of diegetic music as part of the story being told, and as a vital component of the audio-visual environment enhances player immersion. At the same time, these opening instances and subsequent occurrences of diegetic music at significant points in the story demonstrate that music's culturally encoded emotive potential produces ironic and poignant effects, while its lyrical intertextuality generates narratological and ludic commentary in various song/scene pairings.

The distinctive functions of diegetic and non-diegetic sound in video games are not always clearly delineated, and in *Bioshock* specifically the function of diegetic music (rather than the standard use of background music) is complicated by its ability to inform on levels both internal and external to the game. As Jorgensen (2007) argues, even more than in film "a direct transfer of the terms traditionally referred to as diegetic and extradiegetic is problematic in relation to…computer game sound" (p. 117). While the distinction between diegetic and non-diegetic is similarly blurred in film, "computer games go even further and utilize the border between the diegetic and the extradiegetic consciously and for a functional purpose" (p. 117). Jorgensen (2007) proposes and outlines the term *transdiegetic* to account for music "with no source in the game world but [which] still has the ability to inform about events in that world," and to

emphasize the "specific functional aspects of sound in computer games" (p. 105). This is a useful model though it does not discuss the potential trans-diegetic functions of diegetic music. Instead, it focusses on background music's "power to influence diegetic action in computer games," primarily with the example of "extradiegetic background music that informs the player of upcoming dangers" which is specified as "*external transdiegetic sounds*" (p. 110). On the other hand, "*internal transdiegetic sounds*…are diegetic sounds that directly address entities external to the diegesis (typically the player, for example when a strategy game unit says 'all right' when the player gives it an order)" (p. 106-107, 110). This is a limiting approach to the possible function of diegetic sounds, and specifically the diegetic music in *Bioshock* where it is able to communicate game-relevant information to both Jack and the player.

In a later paper, Jorgensen (2011) expands and revises her theory, and though the focus remains on the trans-diegetic functions of game sounds rather than diegetic music, she rightly argues for the need to evaluate game sound "on terms other than those used for analyzing film sound" (p. 79). I would further acknowledge the utility of any terms derived from film, literary or other media theory, along with the consideration that video games are themselves a distinct medium whose differences must be accounted for in the course of a critical analysis. Of particular relevance to this paper's analysis of how diegetic music functions in *Bioshock* is the observation that diegetic sounds or music may "work as a bridge between the game world and the player's world" (p. 107). Though Jorgensen does not elaborate this point beyond how these sounds may directly communicate game information to the player, it opens the door to a wider view of the possible ways diegetic music in *Bioshock* may simultaneously function on narrative, discursive, and ludic levels.[1]

The significance of music in *Bioshock* is established prior to game play during disc-loading at the beginning of every session: the sound of a phonograph stylus is heard as it hits a vinyl record followed by the familiar hiss and static, an operatic female voice begins to sing as the sepia-toned image of an ancient gramophone slowly appears, then the "camera" pans and zooms in on the spinning platter which stops as the needle lifts, freezing on the record label. This unfamiliar anthem is actually the first verse of Rapture's ideological call to arms, "Rise, Rapture, Rise," composed by Rapture's premiere recording and visual artist, Sander Cohen, at the behest of Ryan: "Oh rise, Rapture, rise! / We turn our hopes up to the skies! / Oh rise, Rapture, rise! / Upon your wings our dreams will fly." The lines have mythic connotations, suggesting not only a potential triumph but also a hubristic failure like the fall of Icarus. Considering that Jack falls from the sky in an airplane crash, this opening verse is also a pre-game allusion to his eventual role as potential saviour or destroyer of the citizens' hopes. Jack's role is constantly "rewritten" as the story and game mechanics impose alliances—or offer a choice in the guise of free will between contesting options (including Jack and the player's own self-interest)—with partners whose positive or negative status is largely a matter of perspective. Superimposed in white above the label appears "A 2K GAME," but the label itself reads "Boston 2K Recording Co. Australia" on the bottom, while the top part (very faintly) reveals "Not Licensed for Radio Broadcast," which was printed on early 78 rpm records in particular. The "2K" printed in black then slowly transforms into a stark white as variously coloured digitized images of the 2 K logo follow. The ubiquitous presence of antique gramophones throughout Rapture, and their distinctive analogue sound, is normalized for the player during these opening images and music. Furthermore, prior to

game play *Bioshock*'s loading screens establish the primary role of music in the creation of the fictional world, narrative and discourse to follow.

As Lizardi (2014) points out, the "*Bioshock* series contains nuanced, critical and discussion provoking historical representations, despite being a completely fantastical alternate historical construction." The licensed songs in *Bioshock* demonstrate music's transcendent capabilities for the video game medium, as they are actual "historical representations" from the mid twentieth-century which also actively participate in the production of a "fantastical alternate" history. Music's connective and discursive capabilities in *Bioshock* are allowed by what Gorbman (1987) calls "the flexibility that music enjoys with respect to the…diegesis, …how many different kinds of functions it can have: temporal, spatial, dramatic, structural, denotative, connotative…at various interpretative levels simultaneously" (p. 22). Because of the various "types of continuity that music can promote: thematic, dramatic, rhythmic, structural, and so on…music functions as connecting tissue, a nonrepresentational provider of relations, among all levels of narration" (Gorbman, 1987, p. 26). The popular music in *Bioshock* demonstrates a paradoxically natural "right" to exist in both the real and fictional history of the game world. It acts as a bridge with the power to reinforce the fantasy or momentarily disrupt it and provides an array of signification which informs the video game's narratological and discursive elements. For Jack, the music playing on record players and radios in Rapture is emblematic of the surface world culture to which he is presumably accustomed, and therefore provides some relief or comfort as he must navigate through an environment that only at face value resembles topside. For the player, the period music assists in game world immersion by being a product of the era represented along with the art and architecture in Rapture; at the same time its occurrence during key moments in the narrative can also subvert this immersion by instigating external reflection on game play mechanics versus narratological considerations. In *Bioshock*'s case, such thoughts are often tied to the built-in moral dilemmas.

The licensed songs are cultural products from a specific period in American history. Their use in the active creation of the narrative and immersive fantasy world in *Bioshock* successfully overcomes the inherent challenge of employing existing, complete artefacts—or what Wright (2003) calls "a 'prefabricated' element … [where] the options for manipulating it are limited" (p. 9)—in the production of a fictional digital environment. The most direct application available is to access the emotional potential of a song by relying on established conventional modes of musical meaning which the listener immediately recognizes and feels: happy, sad, funny, afraid. Horror films and video games in particular have relied on stock sounds and music as instant signifiers of unease and terror; *Bioshock* in part belongs to the horror or survival video game genre, but takes the use of music to a higher level by both relying on and subverting its traditional role in creating mood or atmosphere. Even when music is "not very consciously perceived," it nonetheless "inflects the narrative with emotive values via cultural musical codes," and these "significations—eerie, pastoral, jazzy-sophisticated, romantic—must be instantly recognized as such in order to work" (Gorbman, 1987, p. 4). The music is able to "evoke—to subtly call to the viewer's mind a related or comparable situation, to act as a shorthand to steer the viewer emotionally" (Wright, 2003, p. 11). Wright (2003) views temporal distance as a possible detraction from achieving the "desired emotional effect" of a musical piece, because he valorizes a song's significance as largely of the moment, where even after a decade "it can be painfully dated" (p. 11). This argument's validity is challenged by western culture's forms of

musical remediation and transmission primarily through radio stations' playing established "classics" in many genres, along with a higher degree of sampling, remixes, genre emulation, and new versions of songs (rather than direct "covers") by contemporary musicians. A greater challenge to claims that a song's effectiveness belongs to its era is how *Bioshock*'s use of older popular music both reapplies and reinvents its potential meaning.

For example, "You're the Top" (1934) plays when Jack reaches Olympus Heights, the highest geographical point in Rapture and where Jack will supposedly "win." The listener is likened to all the "best" things of their kind, including classical works of art, literature, architecture, and historical figures all ironically counterbalanced with references to less highbrow achievements such as "Mickey Mouse," "Ovaltine," "turkey dinner," "cellophane" and "the nimble tread of Fred Astaire's feet." The singer, on the other hand, portrays himself in self-deprecating ways such as "pathetic," "the bottom," or "a toy balloon that's fated soon to pop." Importantly, Olympus Heights is where the significant theme of fate versus free will in the game world is explored, when Jack learns that all along Atlas/Fontaine has been controlling him with the genetically encoded command line, "would you kindly." Bing Crosby's innocent rhapsody "Wrap Your Troubles in Dreams" (1931) occurs early in the game as accompaniment in Painless Dental—the name a ludic hint for the presence of painkillers—while the player searches for medical supplies. Though on the surface it is a hopeful song urging the listener to essentially "cheer up," accept one's lot and escape troubles in dreams, in the world of *Bioshock* the lyrics carry a darker undertone:

> Your castles may tumble, that's fate after all
> Life's really funny that way
> But no need to grumble, smile as they fall
> Weren't you king for a day?
> Just remember that sunshine
> Always follows the rain
> So wrap your troubles in dreams
> And dream, dream your troubles away.

The reference to "king for a day" highlights how Jack (and the player) frequently reaches a pinnacle of success only to have it whisked away by fate, or more accurately the built-in game mechanics for level/story progress. Therefore, telling the listener to escape one's "troubles in dreams" and explicitly supporting a theory of predestined outcomes we are powerless to challenge, "that's fate after all," while collecting painkillers in a dental office, is not only an early instance of musical irony and narrative poignancy but also ludic commentary. One can argue that in video games no true free will exists for the player; perhaps more accurately, the degree of or illusion of free will is determined by the game parameters. *Bioshock* complicates this notion further by providing one the guise of choice in the narrative, but foregrounding the fact that Jack/the player are essentially controlled throughout by Atlas (game mechanics). As will be discussed later in detail, that the game's ending is determined by the player's decision at crucial point early in the game, and that nothing one does after that point will effectively change the story, highlights the illusive nature of free will or agency in *Bioshock* and narrative-based video games in general.

Recent game studies examine *Bioshock* as an artistic "interactive fiction" from the perspective of aesthetic philosophy (Tavinor, 2009, p. 105)—but exclude the topic of music despite it being an aesthetic/artistic production—or attempt to "demonstrate how Aristotle would have admired…*BioShock*…in the same way he admired Sophocles' award winning *Oedipus Tyrannus*" (Owen, 2010, p. 207), yet do not discuss how music is a significant component of classical narrative as exemplified by the Chorus in Sophoclean Tragedy. While Kromand (2008) accounts for Jorgensen's (2007) concept of trans-diegetic sounds, his analysis does not move beyond ambient sounds and background music in *Bioshock*—typically serving the typical ludic function of alerting the player that a boss-fight is in progress, with the music's termination signaling the battle's end —and makes no reference to the diegetic music or its possible functions. Gibbons (2011), though, analyzes some of the licensed songs heard during game play and argues that *Bioshock*'s "nuanced use of popular music as a narrative element represents a step in a new direction for the inclusion of pre-existing music in games." Gibbons elaborates that "the importance of *Bioshock*'s music goes much deeper" as songs "comment on the atmosphere of dystopia that permeates Rapture and actually refer obliquely [usually ironically] to the situations in which players find themselves," and that "[t]his second function in particular represents an innovative step forward in the inclusion of popular music into videogame narratives."[2] More importantly though is how in *Bioshock*, just as in a film, the diegetic songs occur at essentially the same moment and place in the narrative and on every subsequent replay (viewing) with only minor variations. The licensed songs thus have a strong degree of signification by forming an integral part of *Bioshock'*s story as well as the discourse regarding game play and the issues raised regarding free will, power, desire, and morality. That is, they occur at scripted key moments as part of the game's story—they "tell" part of the story—but music is also its own complete "text," and therefore carries a range of meaning outside of the main narrative.

Gibbons' (2011) methodological approach to *Bioshock* rightly—and due to the audio-visual nature of video games necessarily—points to "the possibilities for in-depth analysis of game music from a film-music perspective, and hopefully opens the door for similar studies in the future," but his analysis does not incorporate traditional literary inquiries or other relevant approaches to seek wider-reaching realizations regarding the role of music. Indeed, studies of music's narrative role in film and literature are intrinsically bound together, with film initially borrowing heavily from literary narratology then vice versa. Gorbman (1987) outlines the specific ways that music may signify in films, including but not limited to its narratological role, and this provides a useful model for examining how *Bioshock* and other video games employ diegetic music:

> We may see music as 'meaning,' or organizing discourse, on three different levels … [1] the functioning of *pure musical codes*, generating musical discourse; music on this level refers to the structure of the music itself. … [2] in its cultural context; it refers to *cultural musical codes* (and elicits enculturated reactions). [3] Third, music in a film refers to the film—that is, it bears specific formal relationships to coexistent elements in the film. The various ways in which it does shall be called *cinematic musical codes*.
>
> p. 12-13

In the case of *Bioshock*, a fourth level of discursive organization arises that may be called *video game musical codes*. This notion essentially adopts Gorbman's (1987) model, but must account for the application of new elements, as well as the reinvention of traditional ones, that are distinctive to video games: interactive game play; and the incorporation of textual, audio, visual, and ludic aspects. Most importantly, the various codes of musical signification (individually or in combination) provide music's capacity to mediate "between levels of narration (diegetic/non-diegetic), between narrating agencies (objective/subjective narrators), between viewing time and psychological time, between points in diegetic space and time (as narrative transition)" (p. 30). Related to this perspective of musical mediation, recent film criticism looks at:

> music not as a scarcely noticed background or an interpolated entertainment that sometimes delivers ideological messages while creating mood or atmosphere, but as an agent, a force, and an object engaged in ongoing negotiations with image, narrative, and context.
>
> Inglis, p. 3 (2003)

Alongside this notion of agency is the observation that while the music "follows a narrative track, like the events of a story…it also tends to take on a life or identity of its own, like the discourse that frames the story," and that this "discursive dimension" may function "beyond the soundtrack" (p. 3). In *Bioshock,* diegetic music may mediate for Jack/the player between the historical real world and the unfamiliar habitat that is Rapture, by acting as the sole supposedly stable cultural element. In this respect it also calls attention to itself, inviting us to look (or listen) further.

Though Gibbons (2011) analyzes various diegetic licensed songs in *Bioshock*, he does not examine the one piece of non-diegetic music that is heard only during the installation process on the PS3 platform[3] : a slow instrumental jazz version of "You're Getting to be a Habit With Me" performed by Buddy Rich and Harry 'Sweets' Edison (1955). Those familiar with one of the many vocal versions of the song, most famously recorded by Frank Sinatra in 1956, will know that its lyrics employ the metaphor of drug addiction to explore the dysfunctional need and power struggles of a sexually based relationship:

> Every kiss, every hug
> Seems to act just like a drug
> You're getting to be a habit with me
>
> Let me stay in your arms
> I'm addicted to your charms
> You're getting to be a habit with me
>
> I used to think your love was something I could take or leave alone
> But now I couldn't do without my supply
> I need you for my own
>
> Oh, I can't break away
> I must have you every day

> As regularly as coffee or tea
> You've got me in your clutches and I can't break free
> You're getting to be a habit with me

The song's refrain, "You've got me in your clutches and I can't get free / You're getting to be a habit with me," becomes, even before playing the game itself, an integral part of the musical discourse that runs throughout *Bioshock*'s story, toying with the notion of being 'addicted' to the game itself. More directly, lines like "seems to act just like a drug," "I'm addicted to your charms," and "couldn't do without my supply," speak to other in-game representations of addiction to plasmids and gene-tonics, as well as "addiction" to abstract concepts such as power, love, and self-interest. In fact, the lyrics to many of the songs have strong themes of love which are expressed in terms of unattainable desire, yearning, need, and escapism/dreams that reflect the underlying malaise of addiction.

The city of Rapture itself is filled with culturally sanctioned (at least in 1960) addictive substances that Jack can consume and, for the most part, enjoy to his benefit: bottles of wine, spirits and beer; cigarettes and pipes; coffee; junk food. While nicotine, caffeine, and sugary snacks provide instant benefits to Jack's health or Eve with no negative consequences, in the case of alcohol Jack can suffer temporary deleterious effects from overindulging. On one hand it is a mere ludic trick as the player can be lulled into letting Jack imbibe too much in an attempt to regain health points; once the "positive" limit is reached Jack becomes temporarily drunk, disoriented and thus vulnerable to enemies. At the same time this serves as an implicit game-play warning over the dangers of plasmid addiction, and as an important device that foreshadows the eventual realization of how Rapture's socioeconomic system of proscribed technological addiction has destroyed its citizens' mental and physical health, along with Jack's/the player's own continued complicity. More significantly, ideological "addictions" such as Judeo-Christian Religion, to paraphrase Marx, are the only ones actively restricted in Ryan's self-reliant (and self-interested), unrestricted vision for humanity. Ryan's political solution, as we have seen, outright rejects American capitalism, the church, or communism and instead promotes an "anything goes" socioeconomic and moral system. This explains why the smuggled bibles found crated and strewn about the city are emblematic of the philosophical and political power struggle between Ryan and anti-Ryan (Fontaine/Atlas) forces. The lines "Oh, I can't break away…You've got me in your clutches and I can't break free," may refer not only to the literal enemies from which Jack must escape, but also the ideological forces fighting for his control.

Music in *Bioshock* provides an added layer of potential meaning that drives the narrative and the player—even if only subconsciously through culturally encoded musical representations of emotion, mood, and tone. In his discussion of Reinhardt's instrumental versions of "La Mer" and "Please be Kind," Gibbons (2011) notes that "players familiar with the lyrics of the song are rewarded for being 'in the know,' catching subtle musical commentary that other gamers might miss." *Bioshock*'s story-driven nature often slows the pace down in terms of on-screen action, or plays certain songs only after events are resolved in order to provide a relatively quiet moment for the music to be heard. Much of the power in this audio dynamic depends on the player and his/her game style. Importantly, "La Mer" is the first song heard by Jack after escaping the ocean crash site and entering the lighthouse. Without the expectation of diegetic music or depiction of its origin, the player at first assumes this is—as is usually the case in most games—background

soundtrack. Only after moving deeper and down the lighthouse stairs does one realize that the music is getting louder and emanates from somewhere inside, until the source—a radio inside the bathysphere to enter Rapture—is discovered. "La Mer" functions as an opening theme-song of sorts, a role traditionally handled by non-diegetic music, easing Jack/the player into this new world as it moves (at least in our consciousness) into the diegetic, thus contextualizing as well as normalizing the existence of licensed music in *Bioshock*. Yet the unheard lyrics also express themes of wistful longing mixed with a dream-like hope of meeting one's love "Somewhere beyond the sea," and the certainty that at that place "Happy we'll be … and never again I'll go sailing." A deep level of irony arises with Rapture's location within the ocean rather than "beyond" it—and in this case "beyond" may also suggest "beneath" as in beyond the surface of the water—as the song leads Jack down the lighthouse like a long-lost lover, towards a place that is anything but "happy."

When initially heard, the majority of the diegetic music as well as the various game character songs or vocalizations—singing, humming, whistling, and playing instruments—are, like the example of "La Mer," *offscreen sounds*. Offscreen sound is the term developed for film "sound whose source is invisible, whether temporary or not," while "*onscreen sound* [is] that whose source appears in the image, and belongs to the reality represented therein" (Chion, 1994, 73). In *Bioshock* the use of offscreen sound—whether music, singing, whistling, or screams of the murdered—heightens the sense of fear, foreboding, and uncertainty; it can increase rather than diminish the shock of the eventually visible source by significantly raising the level of tension up to that moment. This is a technique drawn from film, where it is usual to "see evil, awe-inspiring, or otherwise powerful characters introduced through sound before they are subsequently thrown out to the pasture of visibility" (p. 72). The first music heard by Jack in Rapture proper occurs during a "scripted event,"[4] while he is trapped in the bathysphere upon arrival. From inside, Jack hears a slow morbid humming as a man pleads for his life—he later turns out to be Johnny, sent by Atlas to see who has arrived—then a Splicer named Rose brutally attacks him, presumably to harvest his residual ADAM.[5] While Rose murders Johnny she hums a wistful love tune called "If I Didn't Care" (1939). Typical of most of *Bioshock*'s licensed music the lyrics express an anxious yearning, love/desire and loneliness, often with religious imagery or terminology whose resolution always seems beyond reach:

> If I didn't care more than words can say
> If I didn't care would I feel this way?
> If this isn't love then why do I thrill?
> And what makes my head go 'round and 'round
> While my heart stands still?
>
> If I didn't care would it be the same?
> Would my ev'ry prayer begin and end with just your name?
> And would I be sure that this is love beyond compare?
> Would all this be true if I didn't care for you?

The words carry several meanings within the context of *Bioshock*'s world and story, exploring common themes of truth and reality versus illusion and dreams, and in particular its rhetorical ploy of posing a succession of unanswered questions suggests multiple responses that remain

unexpressed, even while it implies emotional sincerity. Just as *Bioshock*'s primary narrative invites a more complex game experience surrounding mystery or puzzle solving rather than an unequivocal opposition/resolution dynamic, many of the songs' lyrics clearly echo and support the game's ambiguity over what is right or wrong, what is the truth or reality, who is a tyrant or saviour. At the start of the game, Jack is forced by the story and game mechanics into trusting and following Atlas, which immediately sets him against Ryan. The game also presents Jack potential comrades like Dr. Tenenbaum, the Little Sisters, or the imposed relationship with Cohen. Atlas counsels Jack not to trust Tenenbaum or save the Little Sisters whom he calls "monsters," but rather seek a utilitarian approach to further their/Atlas's cause. These characters subvert Jack's/the player's trust of Atlas and raise the question of who is really the monster in the game. At the end of the game, Ryan is easily defeated—it as an automatic defeat presented in a cinematic scene where the player has no agency and watches Jack club his father to death—while Atlas literally transforms into a monster until killed by the Little Sisters in another cinematic scene where Jack/the player is a spectator.

Here the contrast between Rose's humming a love song while she viciously kills is an example of what Gibbons (2011) locates as one of the frequent functions of licensed music in *Bioshock*—that of ironic commentary or impact on the current or overall situation:

> The irony inherent in these optimistic songs effectively underscores not only the literal destruction of Rapture, but also the gradual erosion and eventual collapse of the ideological framework that created the city. The city and its citizens, we infer, were as naïve as the music they listened to.

In *Bioshock*, the timing, location or context of such songs as "Bei Mir Bist du Schön" (1937), "How Much is that Doggie in the Window?" (1966), and "The Best Things in Life are Free" (1947) greatly affects their ironic or emotional impact. Smith (2001) elaborates that this "may be viewed as a particular configuration of postmodern culture, where a very self-conscious mode of textual address is situated within a larger network of intertextual references," and that "the use of popular music in such ironic modes has become an ever more important part of cinematic signification (pp. 407-8).[6] Smith (2001) points to *American Graffiti*'s (1983) emergence "as one of the dominant models for using popular music in films," because of its "use of pop records both as a network of intertextual references and as a source of authorial commentary" and its impact on future filmmakers to incorporate songs into the screenwriting process (p. 410). Drawing on these filmic conventions, *Bioshock* employs music in ways that may directly comment on a scene and/or the encompassing narrative (past, present, and future), while simultaneously pointing to a larger socio-cultural intertextual framework that includes "authorial commentary" on story and game-play aspects. As such, *Bioshock* establishes a standard for using music in ways that include and exceed its film applications and contributes to an emerging system of signification in narrative-based video games that accounts for luddology, multimedia forms of story-telling, and a larger cultural map not restricted by artistic, popular, or historical categorizations.

During the encounter with Rose upon his arrival in Rapture, music (humming) is significantly the first thing Jack hears. Two further examples that involve characters singing in *Bioshock* illustrate how diegetic music's narratological effects may include irony, poignancy, shock and

surprise—often all or some effects are possible results in some cases. As will be discussed in detail later, the song "God Bless the Child" also proves insightful as to how inherent dichotomies or contesting forces can be effectively employed as a discursive element of diegetic music. On Level 1 Jack (and most importantly the player) is presented with the first moment of moral versus ludic uncertainty and singing plays a vital part in tandem with visual and cultural iconographic forms of meaning. A masked female Splicer leans over a baby carriage; their shadows cast a doppelganger performance on the concrete wall as she sings a morbid lullaby: "When your daddy's in the ground, mommy's gonna sell you by the pound. When your mommy's up and gone, you're gonna be the lonely one. When you are the lonely one, no one will be there to sing this song." Though expressed in the usual rhyming sing-song melody of children's lullabies, the lyrics belie the dark history and present of Rapture. Most of its citizens are long dead and, excepting the case of Dr. Tenenbaum as possibly the sole sane character left, those that remain are murderous and insane. The lyrics also speak to Jack's/the player's situation as the "lonely one," who must ultimately rely on his/her own abilities to survive the ludic elements of the game itself, and piece together the narrative "truth" through a process of experience and revelation. The Splicer finishes her song, and as she speaks to the carriage an image of the past and present develops: "Hush now…Mommy's gone…and daddy too. Wait…this is happening before and not…why aren't you here? Why is it today and not then when you were warm and sweet? Why can't mommy hold you to her breasts and feel your teeth? Oh no, no no no no …." Other than the Little Sisters, no children remain alive in Rapture—they are all presumably dead or evacuated—and inside the baby carriage lies no baby but a revolver instead. Should the player be duped by the initial motherly singing into a defensive or passive role rather than the constant attack necessitated by first-person-shooters, then Jack faces attack and possible death. Though the apparent ludic lesson of this encounter is to shoot first and listen later, *Bioshock* regularly supplies the player with characters and scenes designed to trick by playing on human emotion and music plays a vital role.

Along similar lines, one of the recurring Splicer models is a religious zealot of sorts who quotes the Bible or spouts mangled biblical derivations while attempting to kill Jack, including overtly ironic comments about obeying the Ten Commandments. He is identifiable by a spiritual theme song where he announces that "Jesus loves me, this I know; for the Bible tells me so. Little ones to Him belong; they are weak, but He is strong!" In this instance the lyrics of "Jesus Loves Me" (1860) become a mockery/perversion of traditional Christian notions of God protecting the weak and point to the fact that in Rapture only the strong or powerful will survive. Their meaning is explicitly sacrilegious in the context of their violent singing, and the killing Jack is forced to commit for basic survival and game progression. Diegetic music forms part of this discourse surrounding moral game play, and the ludic requirements to win, or more accurately in the case of *Bioshock*, for narrative completion. Cheng (2014) points out that "[c]ombinations of music and violence have abundant historical precedents and manifestations, in everything from wartime newsreels and V-discs to horror soundtracks and sonic torture" (p. 41). One particularly striking historical example is that of Nazi doctor Joseph Mengele whistling his favourite classical music "while he selected victims for the gas chamber," which raises "disturbing questions about the meaning of music and its relationship to human feelings" (p. 39). *Bioshock* is rife with musical/violence interactions that involve characters whistling, humming, or singing while go they about their murderous work.[7] While arguably such pairings have become conventional forms of cultural representation, their potential to shock or unsettle and thus initiate or direct

discourse is no less diminished when, as in the case of *Bioshock*, they are effectively employed in narrative production and to effect multiple meanings.

In *Bioshock*, contradictory music/scene pairings not only have an ironic effect, but also illustrate how similar to film the "combination of carefree music with the suggestion of a horrific scene is ludicrous because of its bravura, [and] also gives rise to a feeling of shame" (Verstraten, 2009, p. 158).[8] The song itself, and by implication Jack/the player, seems indifferent to the violence or suffering that is witnessed, and thus the "cheerful music becomes 'complicit' with the malicious actions" (p. 158). Chion (1994) calls this type of music in film "anempathetic," where this "juxtaposition of scene with indifferent music has the effect not of freezing emotion but rather of intensifying it, by inscribing it on a cosmic background" (p. 8). Empathetic music, on the other hand, tends to "directly express its participation in the feeling of the scene," but it is the "anempathetic impulse in…cinema [that] produces those countless musical bits…whose studied frivolity and naivety reinforce the individual emotion of the character and of the spectator, even as the music pretends not to notice them" (pp. 8-9). In this sense, one can argue that in *Bioshock* "the supposedly easy-going tune loses its 'innocence' in relation to the scene" (Verstraten, 2009, p. 158). In Jack's first experience of Rapture, before even stepping out of the bathysphere, he (and therefore the player) loses his "innocence" along with the song Rose hums. It is both a literal and figurative innocence lost: figurative in the musical and emotional sense as all subsequent songs will now carry the potential to subvert their own surface intentions, but literal in the sense of the violence Jack witnesses and will soon be forced to commit.

While Jack loses his own musical and moral innocence in this first scripted event, the accompanying song is a seemingly external commentator and a character/participant within the scene—particularly with the first-person narration and repetition of "I" or "my" in every line—and this function participates alongside the wider musical discourse and agency exhibited by the presence of licensed songs at all levels of the narrative. Many of the songs in *Bioshock* contain the possibility for a multiplicity of narratological functions: ironic and reflective modes; intertextual capacities for meaning within the songs and the game itself; speeches "on the game's action…spurring players to reflection without removing them from control" (Gibbons, 2011); or detached yet involved commentators whose words seem to speak to the situation at hand, and to possible resolutions or warnings about Jack's origin, present reality, and ultimate destiny. As the preceding and following examples demonstrate, an intertextual range of possible meanings exist along cultural, narratological, and ludological lines, as the licensed songs form a musical discourse regarding the current situation as well as the larger framework of encompassing narrative, game play, and real-world ideology. Thus, music can be seen as an active narratological agent of change affecting both the real world (player/game culture) and the fictional game world (Jack/narrative).

After Ryan releases a poisonous gas that kills all the trees and vegetation in Rapture, Billie Holiday's sweet and sad rendition of "Night and Day" (1939) begins to play:

> Night and day under the hide of me
> There's an, oh, such a hungry yearning burning inside of me
> And its torment won't be through

> ‘Till you let me spend my life making love to you
> Night and day, day and night.

The song reflects and comments on the literal “burning” and figurative physical “torment” of the anthropomorphized trees, while its main theme of sexual desire and loneliness is, like “You’re Getting to be a Habit with Me,” expressed in metaphors of addiction’s constant (“day and night”) “hungry yearning burning inside,” whose endless “torment” can only be relieved by having access to that drug/person “Night and day.” The lyrics express a direct relevance to *Bioshock*’s depictions and enactments of plasmid and gene tonic addiction—mainly in the deleterious physical and mental repercussions seen in the Splicers, but also Jack’s own inevitable and continued reliance on gene-altering drugs—then also spin back to Holiday’s own real-life struggle with heroin addiction and unhealthy relationships, creating a further weave of intertextuality and musical discourse.

As the game reaches its tragic finale, where Jack discovers his true identity and life history and kills Andrew Ryan, the player must construct a special bomb in order to overload Hephaestus Core’s security and power controls and progress to the next level. However, before Jack reaches the Core he finds a Gatherer’s Garden—essentially vending machines where players spend ADAM to purchase plasmid/gene upgrades—and the song “It’s Bad for Me” (1955) is heard:

> oh it’s bad for me it’s bad for me
> the knowledge that you’re going mad for me …
>
> and when you say you’ll do all you could for me
> it’s so good for me it’s bad for me …
>
> it’s so sweet for me it’s swell for me
> to feel that you’re going through hell for me
> yet no matter however appealing
> I still have a feeling it’s bad for me.

At first the listener is seduced by Rosemary Clooney’s sugary vocals and their superficial reference to the plasmids being “bad” for Jack, despite all the “swell” things “you could [do] for me;” but the references to “hell,” “mad” and that certain types of “knowledge” are repeatedly “bad for me” serve as warnings about the narrative mysteries revealed in *Bioshock*. Revealed piecemeal in the form of audio diaries, recurring flashbacks and ghostly apparitions, and directly from characters as the narrative progresses, Jack’s true story and its relation to the past, present and future of Rapture is complicated and tragic. Jack, it turns out, is the son of Ryan and showgirl Jasmine Jolene—in a sad and gruesome episode Jack discovers the dead body of Jolene and learns that Ryan brutally murdered her. Fontaine, with the help of Tenenbaum, convinced Jolene to sell the foetus, which then was genetically altered for quickened growth (four years to maturity) and the encoded command line. Jack was then placed on the surface as a sleeper agent and released at the beginning of the game. Jack’s inherent advantage and utility for the Fontaine cause is that he possesses Ryan’s DNA, which diminishes the effectiveness of Rapture’s security systems. The music in this instance has a multilayered role that directly comments on surface events, while simultaneously implicitly warning Jack that many things and people in Rapture

which seem "appealing" are in reality "bad." The song in this instance is an active participant in the story that expresses its warnings based on an emotional reaction, or simply the "feeling it's bad for me." In this sense the music in *Bioshock* may occasionally be seen to adopt the role of one of the characters, albeit a figurative one, participating in the narrative more directly or empathetically and expressing distinctive emotions and thoughts via the lyrical and intertextual content. For Jack, the music that emanates from radios, record players, and battered jukeboxes is the only cultural and emotional connection to the world from which he has been torn, providing a form of emotional and cultural stability that helps minimize the constant physical, mental, and emotional shocks to his system.

Key musical moments in the game may be missed depending on player style, but within the game's general cacophony *Bioshock* provides several "quiet" moments where the music is highlighted, and indeed most of the songs can be fully heard if the one chooses so. In an important early scene, Jack encounters an unprotected Little Sister and faces his first—and narratologically most important—decision whether to "harvest" the girl for immediate ludic benefit in the form of more ADAM (a process which kills her), or "rescue" her for less immediate game rewards but the promise of special "thank you" gifts from the saved girls. There are essentially two available endings in *Bioshock*, and it is at this point that the narrative paths diverge towards their conclusions. Immediately following this story and game-altering decision is the first instance Jack battles one of the Little Sisters' constant protectors, a Big Daddy, and faces the harvest/rescue dilemma for a second time. Gibbons draws particular attention to the use of Billy Holiday's "God Bless the Child" (1941) which, depending on how fast the player moves Jack, usually begins to play just before or at the start of the battle. For Gibbons (2011) the song's dual-layered lyrics seem to respond to the events regardless of which outcome the player instigates, and "for a moment *Bioshock* seems to reach the 'interactive cinema' ideal." This notion derives from the goal of narrative-based video games to incorporate a film environment as the visual expedient for digital story-telling, yet still provide player immersion and interactivity. Gibbons' point would be stronger if the song was explicitly commenting on the first incident. By the second decision it is essentially immaterial what the player chooses because the narrative die has already been cast: if the first girl was harvested then saving the second one changes nothing other than mitigating the degree of the "bad" ending—in this case no duality of meaning occurs.

Mainly because the title of the song refers to a "child," Gibbons' (2011) interpretative strategies focus on the Little Sister, and how Jack's decision literally affects her ending. Thus, if one saves the Little Sister, the song at face value validates the player's actions, adding emotional weight and content to the scene so that the line "God bless the child" supports the decision. If the little sister is killed, then the song takes on the more common role of irony or poignancy through the juxtaposition with events, the lyrics taking on a sadder connotation or chiding tone that "blesses" the harvested child. Jack is only four years old himself, and genetically manipulated by Atlas/Fontaine in order to function as a pawn in his war against Ryan. Thus, the lyrics also speak directly to Jack and the player regarding the protagonist's morally murky role and actual history, ultimately pointing to the game-play requirements of self-reliance and survival with warnings about accepting charity/help and economic power politics:

> Them that's got shall have
> Them that's not shall lose

> So the Bible said and it still is news
> Mama may have, Papa may have
> But God bless the child that's got his own
>
> "God Bless the Child" (1941)

The song explicitly describes greed, strength, weakness, and ownership—all elements that connect to *Bioshock*'s arching themes surrounding who is in power, who "owns" whom, who can be trusted, and the realization that ultimately Jack must rely on himself. Accompanying the literal surgical splices and grotesque alterations that take place in *Bioshock*, diegetic music functions as the figurative "connective tissue" between the narrative and discourses surrounding the nature of game play and larger questions regarding ethics and power dynamics. This observation directly connects to how songs in *Bioshock* employ these contesting elements—moral versus pragmatic, hope versus doom, narrative development versus ludic achievement—as part of a larger musical discourse surrounding the story itself and game-play desire. *Bioshock* forces the question of morality on the player by incorporating it as a ludic aspect of the game in the dilemma over the Little Sisters. Yet once a certain path is chosen, that does not mean an end to moral dilemmas encountered in the game, as seen in the part of the story involving Sander Cohen.

Tavinor (2009) explores art, aesthetics, philosophy and narrative innovations in *Bioshock* that "bear out its unique artfulness as a game" and outlines the cultural panorama from which it is formed:

> *Bioshock* draws on the architectural motifs and cultural themes of 1930s and 1940s America. Portrayals of decaying art deco facades, faded Hollywood socialites, and echoes of Hearst, Hughes, and *Citizen Kane*, are combined with period music and philosophical and literary references to produce a coherent artistic statement.
>
> p. 92

However, *Bioshock*'s central *artiste* Sander Cohen, Ryan's sometimes de facto right-hand man and a sort of minister of propaganda, whose "art" and music permeates Rapture, is left out of Tavinor's analysis. Though the player does not know this at first, it is Cohen's composition "Rise, Rapture, Rise" that is heard on the gramophone in the opening credits and which functions as a propagandizing anthem of sorts. He has also released an album, "Why Even Ask?", with printed and radio advertisements, and posters for his various musicals appear throughout Rapture. Likely lured by Ryan's promise that Rapture is the place where "the artist would not fear the censor" nor "be bound by petty morality," Cohen's artistic, mental, and sexual status is darkly, if sometimes comically, portrayed. As his opening words to Jack demonstrate, Cohen does not align himself with either of Rapture's dominant powers/ideologies (Ryan or Fontaine/Atlas). Instead, he situates himself within an aesthetic realm outside the limits of conventional ethics—free to pursue his artistic "duty"—where humans are no longer art's potential subjects but its production materials. Examples of Cohen's "art"—victims in various dying poses encased in plaster—are found by Jack prior to their meeting, though the player at first assumes these are sculptures. Atlas warns Jack by providing this ominous summary:

"Cohen's an artist, says some. He's a Section Eight, says I. I've seen all kinds of cutthroats, freaks, and hard cases in my life, but Cohen, he's a real lunatic, a dyed-in-the-wool psychopath." Nonetheless, in order to proceed in the game and retrieve the key to the next level, Jack must interact with Cohen and collaborate on his morbid masterpiece. This involves killing some of Cohen's previous disciples, photographing their corpses, then framing the image as part of his masterpiece.

When Jack enters Fort Frolic, Cohen takes over the radio controls and sinks the bathysphere, stranding Jack and thus forcing his artistic and murderous complicity. He who controls the radio in Rapture, though, not only manipulates access to information, ideology or communication but also music selection: "Ah, that's better. Atlas, Ryan, Atlas, Ryan, duh duh, duh duh duh. Time was you could get something decent on the radio. The artist has a duty to seduce the ear and delight the spirit, so say goodbye to those two blowhards, and hello to an evening with Sander Cohen!" Jack then watches while Fitzpatrick, one of Cohen's disciples, is forced to play the complicated and dissonant "Cohen's Scherzo" on the piano as the composer critiques until becoming frustrated and burning Fitzpatrick alive. As Jack proceeds to fulfill his grotesque requirements by killing, photographing, and framing the victims' images, Cohen makes an eerie observation on Jack's abilities: "You flutter all around the Fort, taking life as you go. You're not a moth, you're an angel." Angel, in this context, does not suggest "saviour" or otherwise, as implied when one of the Little Sister's calls Jack an angel near the game's beginning, and as some of the songs imply. Instead, it is a clear allusion to an angel of death, making Jack (and the player) doubt his role as heroic. The moral uncertainty is continued, and apparently "written" into Jack's facial response as he proceeds in his ghastly chore and Cohen notices: "That's three of four ... what's that look? You don't like it, do you? I don't need to be judged by you...by anyone! Screw you! Screw all you fucking doubters! Here's what I say to all of you!!" Jack's apparent distaste precipitates angry retaliation, and Cohen sends out a few Splicers to attack. As the battle ensues, Cohen plays a recording of Tchaikovsky's "Waltz of the Flowers" (1892) over the radio, which gives the jumping and flipping Splicers the appearance of violent dancers as the whole scene becomes a macabre ballet. The classical ballet music in combination with the choreographed attack of the dancing Splicers, is unsettling (and distracting) because Tchaikovsky's piece recalls culturally encoded expectations of gentle ballerinas rather than grotesque maniacs, yet also natural and to some degree clichéd in respect of the aforementioned classical music/violence combinations in our cultural history. Once the Splicers are defeated, Cohen seems to calm down and blames the artistic process itself, likening the creation of art to the creation of a life: "I'm sorry for that outburst. You'll have to forgive an old fool his artistic temperament. The birth is so close now. The labor pains can blur the judgment and drive the passions of even the finest spirits." The notion of likening art to an offspring is not a new one, though in *Bioshock* this connects to wider themes of technological creation, manipulation, and alteration. On one hand the comment comically highlights Cohen's ambiguous sexuality and artistry, but it carries a heavier signification when it is revealed that Jack himself is but a relatively recent artistic and scientific creation. The power struggle between Ryan and Fontaine/Atlas is also a battle of paternity or true parentage, as each man has a claim to be Jack's father. Ryan's claim is from a biological stance, and Fontaine argues—right before his death at the hand of the Little Sisters—for the right of creator, for having made Jack what he is through genetic programming and enhancement.

Bioshock's musical discourse demonstrates a capacity to operate within and outside of the narrative framework and becomes a distinct entity or force expansive in its reach that is nonetheless interwoven with all the elements that comprise the game. Music courses throughout the story and, like the theme of genetic manipulation central to the game, affects or alters everything with which it interacts. Music has literal or direct functions: historically it contextualizes and situates the game/story; it participates in the creation of atmosphere, mood, and theme; and visually/aurally it justifies its diegetic presence in the opening scene and becomes a constant part of the audio-visual landscape. Primarily by being diegetic and thus part of the "scene," music participates in story creation via a dynamic interplay with all the other game components: visual, aural, textual, ludic. The discourse diegetic music produces in *Bioshock* operates through a system of musical, cultural, and filmic codes of signification that also incorporates new modes employed and generated by video games—particularly regarding the nature of narrative creation in digital media, and the ludic aspects which must necessarily inform all levels. As this paper shows, the songs in *Bioshock* not only produce ironic and poignant effects through antithetical juxtapositions of musical mood or expression in relation to the scene or overall story, but the lyrics may speak to the events enacted or depicted, to Jack and the player, or to the very nature of game play itself.

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[1] Important contributions to the study of sound in computer games, but which do not directly address diegetic music, include K. Jorgensen's *A Comprehensive Study of Sound in Computer Games: How Audio Affects Player Action* (2009), and the extensive anthology *Game Sound Technology and Player Interaction: Concepts and Development* (2011), edited by M. Grimshaw. As Grimshaw outlines in his preface, "Sound FX, rather than game music is the topic, other than where the music is interactive or otherwise intimately bound up with playing the game" (xiv). Though Grimshaw is mainly referring to the uses of non-diegetic or soundtrack music, the latter part of this quote is particularly relevant to this paper as I attempt to demonstrate the various ways that diegetic music is "intimately bound up with playing" *Bioshock*.

[2] *Fallout 3* (2008) and the *Grand Theft Auto* (1997-present) series are also notable for their use of diegetic popular music, but different than in *Bioshock* the songs are not pre-scripted, inherent components of a largely linear narrative. Instead, the musical genre is selected through some form of player-controlled radio device, and the songs play in pre-established loops on each individual station. Though nonetheless occasionally effective, the narrative and player impact of such songs is largely random and arbitrary. See Cheng (2014, pp. 20-54) for a chapter on *Fallout 3*, and Kiri Miller (2007) on *Grand Theft Auto*.

[3] Gibbons played *Bioshock* on the original Xbox 360 version that lacked the additional song, although this information was available at the time of his publication.

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[4] As the official *Bioshock* Wikia page explains, “Scripted Events are deliberate situations created by the game designers that occur throughout Rapture, and serve to advance the narrative. During these events, the characters may perform unique actions or say original dialogue separate from the normal character models.” Different than the cinematic cut-scenes commonly used in video games for story transition or to highlight significant moments (often battles or finales) where the player is no longer in control of his character and is relegated to the mere passive role of a spectator, a scripted event allows a higher degree, or at least perception, of continued interactivity and therefore agency with the game narrative.

[5] ADAM is the highly addictive, genetically-altering raw material that socio-economically fuels Rapture, and Splicers are the deranged remaining citizens who depend on it via the use of injected plasmids. ADAM is an unstable substance that “causes the cosmetic and mental damage to people who use it habitually” (bioshock.wikia).

[6] As a counterpoint argument, Cheng (2014) questions the current ironic music potential for consumers:

> 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?
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> pp. 41-42

Considering that such “disjunctions between music and image” have been effectively used since early twentieth century cinema (such as Gorbman’s Hitchcock example below) until the present-day with various films and television, and now video games like *Bioshock*, Cheng’s question is valid only if creators of narrative-based video games fail to innovate or reinvigorate any traditional practice into new media modes of storytelling. As with the application of any beneficial component in story-telling art, less is best for ultimate effectiveness; a few select ironic pairings can be highly charged within their narrative context, whereas if *every* instance of diegetic music is an ironic one then its effectiveness is diminished or eliminated altogether.

[7] See Stanley Kubrick’s film adaptation (1971) of Anthony Burgess’s *A Clockwork Orange* (1962) for its innovative and powerful blends of violence and music as an inherent part of the script and narrative. A particularly effective moment of diegetic singing occurs when the protagonist (and narrator) Alex with his vicious gang of Droogs, whose attire and masks look eerily similar to some of the Splicers in *Bioshock*, prey on the good faith of a writer and his wife to gain entry into their home. In a gleeful and gruesome homage to Gene Kelley’s famous screen performance of “Singin’ in the Rain” (1952), Alex sings and dances while he sadistically beats the man—punctuating kicks or blows to the rhythm and words of the song—then rapes his wife.

[8] To illustrate his point regarding the potentially ironic juxtaposition of licensed music in tandem with violence, Verstraten (2009) uses the now popular example from Quentin Tarentino's *Reservoir Dogs* (1992) where a main character turns on a radio that plays a light-hearted, happy 1970s pop song, while he proceeds to sadistically cut off his victim's ear. See Philip Powrie (2005) for a recent critical analysis of music's ironic/reflective role in this *Reservoir Dogs* scene. Gorbman (1987) locates this practice at a much earlier point in cinema's history, with the example of how "Alfred Hitchcock creates outlandish ironies using diegetic music," including a man getting killed to the sound of a dance tune, or a church organ playing during a life/death fight (p. 23).