Playing the Sound of Silence

Immersion, Loneliness, and Analysis of Multimodal Intertextuality in 21st Century Video Game Music

Even Ågrimsønn Næss Tekrø



Master Thesis
Department of Musicology
Faculty of Humanities
University of Oslo

© Even Ågrimsønn Næss Tekrø

2018

'Playing the Sound of Silence'

http://www.duo.uio.no

Trykk: Reprosentralen, Universitetet i Oslo

Abstract

This thesis seeks to investigate how music helps the player be immersed in video games. I do this through a multimodal and intertextual analysis, where I consider gameplay, visuals, sound design and music. The goal is to uncover what connotations and associations I bring in to the experience that influences the creating of meaning in the music.

I use a methodology built on the emerging musicological sub-discipline ludomusicology, popular musicology and game studies, which give me a holistic approach for the hermeneutics of the video game music.

I have used the lens of loneliness to give myself a framework to work within. For this thesis I have separated loneliness into three different categories: *solitude*, *loneliness* and *isolation*. I do this to better explore different facets of the experience of being alone in a video game, and how the music affects that experience specifically.

This main part of this thesis is split into three chapters related to discussion around my interpretations. I examine *The Legend of Zelda: Breath of the Wild* (2017), *No Man's Sky* (2016) and *Bloodborne* (2015)

Acknowledgments

First, I need to thank the Department of Musicology, University of Oslo, for giving this popular music student a chance at musicology proper when they accepted me into their master's programme.

I would like to give my sincerest gratitude to my supervisor, Stan Hawkins, who was open to my interests within musicology and made me feel smart enough to pursue them. His bibliography has been a tremendous influence on how I think about popular music, identity and gender, and for that I will be forever grateful.

Thanks to the lecturers and fellow students at the Department of Musicology, University of Oslo, who have made these years so enriching and eye-opening through interesting courses and stimulating class discussions. I especially want to thank Associate Professor Kyle Devine who, through his enthusiasm and insight, made musicology sexy.

Gratitude must be sent to my roommate Fredrik J. Larsen, who never once complained when I sat up late at night and rummaged through the apartment after night-snacks.

I would give thanks to my kitten – Yara, if she had not been such a nuisance.

Finally, I would like to give my deepest thanks to my family and friends who make life worth living. In particular, my mother Ingvild Næss, who has always encouraged me to follow my heart, and my grandmother, Ranveig Synnøve Tekrø, the most radiant and kind-hearted person I know.

I dedicate this to Hans Thorolf Tekrø. I know you're proud, wherever you are.

Even Ågrimsønn Næss Tekrø Oslo, October 2018

Table of Contents

Abstract	iii
Acknowledgments	v
Table of Contents	vii
Table of Figures	ix
1. Introduction	1
Outline	2
2. Methodology	3
Musicological Approach	3
Video Game Music as a Text	5
Analytical Play	11
Model of Analysis	15
Defining Loneliness	22
3. Breath of the Wild: Solitude, Nature and Deconstructive Nostalgia	25
The Symphony of the Wild	28
Memories	35
4. No Man's Sky: Loneliness, Existentialism and Science Fiction	39
Every Atom Procedural	41
The Stillness of the Universe	44
Hello, Darkness	47
5. Bloodborne: Isolation, Dread and Insanity in Cosmic Horror	52
Cosmic Horror	54
Fear the Old Blood	57
Dreadful Noises	60
Ending the Nightmare	63
6. Conclusions and Closing Remarks	68
Bibliography	70
Ludagranhy	78

Table of Figures

Figure 2.1:	
Figure 3.1:	
Figure 3.2:	
Figure 4.1:	43
Figure 4.2:	46
Figure 4.3:	49
Figure 5.1:	58
Figure 5.2:	61

1. Introduction

Video games have increasingly become more common in regular households around the world since its inception as home entertainment. Games have sneaked its way into the hearts of many during their childhoods and for lots of people it is the primary form of entertainment in their leisure time. Since video games have become so ubiquitous in popular culture it stands to reason that it should be scrutinized academically as well.

Video games have a tremendous ability do drag their players into the experience with its interactive nature, and the music helps this process. That is why I want to delve into the concept of immersion in video game music in this thesis, through an analysis of audiovisual aesthetics and the play elements in game. John Richardson and Claudia Gorbman state that "the warp-accelerating technological developments in the digital era and profusion of audiovisual forms and genres that has come with it challenge our ability to keep pace with meaning in our time", which is a statement I agree with. We need to constantly examine the new ways of communication if we are to understand how we derive meaning from them.

Games have an exceptional ability to affect us emotionally, through its visuals, aural and ludic components, which is why I strive for a holistic approach of analysis where I can factor in all these elements. I will focus on how the music affects the immersion and what emotion it evokes in its gameplay context, but the interpretations will delve into a variety of other topics as well.

It has been a joy doing research and writing this thesis, and I hope you enjoy reading it as well.

¹ John Richardson, Claudia Gorbman, and Carol Vernallis, eds., *The Oxford Handbook of New Audiovisual Aesthetics* (Oxford: Oxford Univ. Pr, 2015), 32.

Outline

I seek to investigate how music helps the player be immersed in video games. I do this through a multimodal and intertextual analysis, where I consider gameplay, visuals, sound design and music. The goal is to uncover what connotations and associations I bring in to the experience that influences the creating of meaning in the music.

The methodology section reviews the musicological sub-discipline Ludomusicology, looks into the problems that come with video game music as a text to be read, and explains my model for analysis.

I have used the lens of loneliness to give myself a framework to work within. For this paper I have separated loneliness into three different categories: *solitude, loneliness* and *isolation*. I have done this to better explore different facets of the experience of being alone in a video game, and how the music affects that specifically. I also do this, so I can investigate certain intertextual elements provided by playing. Some are related to feelings, and others are themes or subjects.

This main part of this thesis is split into three chapters related to discussion around my interpretations. Chapter 3 is a close reading of *The Legend of Zelda: Breath of the Wild* (2017), Chapter 4 is analysis of *No Man's Sky* (2016 and Chapter 5 deals with *Bloodborne* (2015)

2. Methodology

Musicological Approach

This paper is written from a musicological perspective, focusing mainly on analysis of the musical and audiovisual aspects of video games. I use an interpretive approach based on the emergent field of scholarship around video game music called *ludomusicology* that draws methods from various fields related to popular musicology and game studies. Video game music and audio scholarship is a fledgling field that really became its own thing in 2008 with the release of Karen Collins's book *Game Sound*,² a giant leap in trying to establish discussions at an academic level around music and sound in conjunction with the play – 'interactive' – element of video games. While research had been done on the relation between screen and sound, by scholars such as Michel Chion,³ video game music had not been given much thought in academia before Collins released her book. Most writings about game audio before then comprised of 'how to' books regarding composing and/or working with audio in the game industry.⁴ A plethora of books, collections and academic articles have since been released with seminal titles, among others, including works by Collins, Mark Grimshaw and William Cheng that expanded the discourse of game audio with new phenomenological and psychological approaches, the role of music in the video game experience, and attempts to connect game music's place to the larger musical culture.⁵ Another defining collection with a more traditional musicological approach is the selection of essays edited by K.J. Donnelly, William Gibbons and Neil Lerner, where the contributors – through a range of case studies – survey video game music aesthetics, hermeneutics and analysis. 6 In 2011 the Ludomusicology Research Group was founded by Michiel Kamp, Tim Summers and Mark Sweeney (and later included Melanie Fritsch) as an inter-university research body dedicated to advancing the

_

² Karen Collins, Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design (Cambridge, Mass: MIT Press, 2008a).

³ Michel Chion, *Audio-Vision: Sound on Screen*, trans. Claudia Gorbman and Walter Murch (New York: Columbia University Press, 1994).

⁴Examples include: Alexander Brandon, *Audio for Games: Planning, Process, and Production* (Berkeley, CA: New Riders Games, 2005); Paul Hoffert and Jonathan Feist, *Music for New Media: Composing for Videogames, Web Sites, Presentations, and Other Interactive Media* (Boston, MA: Berklee Press, 2007); Aaron Marks, *The Complete Guide To Game Audio* (Laurence, KS: CMP Books, 2001).

⁵ Karen Collins, ed., From Pac-Man to Pop Music: Interactive Audio in Games and New Media (Aldershot, Hampshire, England: Ashgate, 2008b); Karen Collins, Playing with Sound: A Theory of Interacting with Sound and Music in Video Games. (Cambridge, Massachusetts: The MIT Press, 2013); Mark Grimshaw, ed., Game Sound Technology and Player Interaction: Concepts and Development (Hershey PA: Information Science Reference, 2011); William Cheng, Sound Play: Video Games and the Musical Imagination (Oxford; New York: Oxford University Press, 2014).

⁶ K. J. Donnelly, William Gibbons, and Neil William Lerner, eds., *Music in Video Games: Studying Play*, 1st ed. (New York: Routledge, 2014).

study of game music, ⁷ and this group created the first annual conference in the world that concentrates on discussions regarding this endeavour. The goal of this group is to further research on video game music through a musicological lens. Thus, giving more focus to the musical facets of games and the intricacies this new digital media affords music as a research topic, compared to the earlier spotlight scholars in game studies have given sound and sound design in games prior. To facilitate this goal the members of Ludomusicology Research Group have published works where they attempt to provide methodologies and musicological case studies of games, such as Tim Summers's monograph *Understanding Video Game Music* and the edited volume *Ludomusicology*, ⁸ which have informed me a great deal in my own methodology. Since the research group was founded, other ludomusicological associations around the world have been established. ⁹ Through this short periphery of the history of this emerging field I hope that I have shown that the study of video game music has really come into its own over the course of the last decade.

In some ways, the history of ludomusicology mirrors that of popular musicology in a sense that both arose partly from a dissatisfaction at the lack of musicological engagement with the subject matter of each field, as Derek Scott's recollection on the scarcity of research on popular music in the young days of popular musicology reveals in his introduction to *The Ashgate Companion to Popular Musicology*. Moreover, both popular music and video games have, at some point in their history, had the status as lowbrow forms of entertainment that was beneath academic scrutiny. In this regard, I believe it is best to see ludomusicology as an endeavour at developing a musicological suburb that better suits what makes game music distinctive from other musical texts, much like what popular musicology in its inception did for popular music, and in turn continues the traditions of contemporary musicology's self-reflective nature about its methods.

Ludomusicology can then be understood as a musicological sub-discipline that researches game music and its related contexts. Where the focal point of inquiry is the musicological examinations of the specificities in the audiovisual medium of video games, with an

⁷ 'About', Ludomusicology, accessed 15 June 2018, http://www.ludomusicology.org/about/.

⁸ Michiel Kamp, Tim Summers, and Mark Sweeney, eds., *Ludomusicology: Approaches to Video Game Music* (Sheffield, UK: Equinox Publishing, 2016); Tim Summers, *Understanding Video Game Music* (Cambridge, United Kingdom: Cambridge University Press, 2016).

⁹ Since 2012 groupings established includes North American Conference on Video Game Music, American Musicological Society Ludomusicology Study Group, Ludomusicology Society of Australia and Society for the Study of Sound and Music in Games.

¹⁰ Derek Scott, 'Introduction', in *The Ashgate Research Companion to Popular Musicology*, ed. Derek Scott (Aldershot: Ashgate, 2009), 1–21.

interdisciplinary approach that takes from sociology, psychology, cultural studies, film studies, game studies, and anthropology. Fields of interests include music analysis, composition, technology, sociological aspects such as fan culture, music video games like *Guitar* Hero (2005) and *Rock Band* (2007) and questions on the effect of immersion and interactivity. In addition to these, the sub-discipline contests the connection and overlap to film music that game music has had in academia. This lens of inquiry differs from prior research on video game music attempted by other interdisciplinary efforts (from game studies, cultural studies and other fields) in that ludomusicologist are foremost *musicologists* using musicological methods.

In researching video game music, Summers says that we need to put "... aside our anxiety about investigating what is supposedly 'low culture'..."¹¹ and to embrace the nature of video games if we are to engage the musical aspects of them critically. However, such a statement raises the question of exactly what separates video games from other audiovisual media.

Video Game Music as a Text

If we want to research video game music as a distinct musical form, there is a certain set of challenges specific to video games that initially needs to be addressed. There is the methodological question, like what analytical methods to use or are best suited for game music. However, there are a few fundamental issues of ontological and epistemological nature that need to be resolved before we can even begin to attempt an analysis. As Kamp, Summers and Sweeney describes in the introduction to *Ludomusicology*, video game music studies are still figuring out how game music can be investigated critically.¹²

First, as a researcher of game music, one needs to decide what musical content of the game is going to be examined. Games commonly include scored music during gameplay and separate tracks for when navigating around in menus or they are paused. They feature non-interactive cutscenes – short cinematic segments that drive the plot forwards – which are experiences more parable to movies. Some games' musical content, such as the football simulator series *FIFA*, heavily consists of contemporary popular music. Should we decide to focus on just the music during gameplay or include everything in the total experience of playing the game. Perhaps one could forego the gameplay and analyse the music in menus, loading screens, and

¹² Michiel Kamp, Tim Summers, and Mark Sweeney, 'Introduction', in *Ludomusicology*, 1–7.

¹¹ Tim Summers, 'Analysing Video Game Music', in *Ludomusicology*, 10.

the other aspects of games that feature what Kamp calls peritextual music (music outside of gameplay and diegesis). What about diegetic music found within the gameworld? Another aspect of video game music that have nothing to do with the actual musical material is that one could survey how the programming or game code affects the music. Where in the game does a particular track appear, or what happens if I stay in one place for an extended amount of time? Does the music change or is it looped indefinitely? As described above, there are a multitude of considerations when deciding what musical content to examine.

After our hypothetical researcher has decided what music to delve into, they need to decide where to collect the musical information from. Should the musicological tradition of studying a score's sheet music be used, or is it best to mimic the popular music scholar and listen to a recording of the soundtrack? Video game music is not experienced with the same temporal linearity as film music (or any other music, for that matter), which makes it rather unique as a musical form. The music reacts to events within the gameworld that can prompt musical changes or transitions. As some concrete examples of this, the game *Banjo-Kazooie* (1998) changes the instrumentation and tempo of the tracks played during gameplay whether the titular characters are above or under water, and, when in Super Mario Bros. (1985) the player dies, the music shifts from the level's theme into a jingle that emphasizes the player's failure. This defining trait of malleability is why Collins uses the term dynamic music as a descriptor of video game music.¹⁴ Moreover, since the nature of game music can be so interactive, Summers posits that the music experienced at each play session of the same game will be slightly different, giving video game music an aspect of multidimensionality as a text, and therefore the totality of a game's music cannot properly be examined by one instance of the game being played. 15 With this in mind, one can understand the musical output of a game as dependent on player engagement, and unique to every 'listener', which makes common musicological methods of reading texts rather unaccommodating when it comes to video game music research.

Another factor to consider, according to Summers, when doing analysis on game music is the technological. ¹⁶ The same game can sound wildly different on separate gaming hardware (this is especially true with older PC games where the music was coded and then read by the sound drives of a player's machine), and even not feature the same soundtrack on releases in

6

¹³ Michiel Kamp, 'Suture and Peritexts: Music Beyond Gameplay and Diegesis', in *Ludomusicology*, 73–91.

¹⁴ Collins, Game Sound, 184.

¹⁵ Summers, Understanding Video Game Music, 25.

¹⁶ Ibid, 27-28.

different regions, as in the racing simulator game Gran Turismo (1997) where the music in the Japanese version featured a commissioned generic 80's rock soundtrack, compared to the collection of songs from well-known artist heard in the variant of the game released in the rest of the world. Additionally, video games are sometimes updated either as remakes or remasters for newer console generations. Some updates, such as the 2011 remaster of *The Legend of* Zelda: Ocarina of Time (1998) for the Nintendo 3DS (2011) handheld console, features the same identical soundtrack as the original, but other games like the remake of survival-horror game Resident Evil (2002) contain completely different compositions from their original. Lastly, games can get fixes and small updates in the form of patches, which can alter the soundtrack of games in different printing runs. The music of the Fire Temple in the first printing run of Ocarina of Time included an Islamic chant from an open-source sound library, which was subsequently removed from later printings and editions of the game, as it conflicted with Nintendo's policy of no 'real-life religious symbolism' in their games. This has obviously made the first run of Ocarina of Time a coveted collector's item among certain fans. The issue of patches is especially true for contemporary video games, as they are regularly updated through the internet to fix glitches and bugs. Many newer games feature some sort of online connectivity which makes these patches compulsory if one wants to play the game. It has also become common for developers to create additions to a game after its initial release, either through paid downloadable content (DLC) or free update patches. The space exploration game No Man's Sky (2016) completely changed the whole game when the developers gave it a huge overhaul with its free NEXT update in 2018. And the massive multiplayer online role-playing game (MMORPG) World of Warcraft (2004) still releases fully developed expansion packs for the game to this day and free updates with new content every few months. Often these revisions bring new music with them which further problematizes the concept of what version of a game one should use in their analysis, and because of the culture of post-release patching in the game industry today, earlier game versions of some video games (like No Man's Sky before its NEXT update) can be difficult or even impossible to access for a game music researcher. As we can see above, there are a lot of considerations regarding the technological factors that can be accounted for when it comes to choosing a game to analyse.

While the idea of a piece of music as a stable and unchanging work is not generally held anymore in music studies¹⁷, and the post-structuralist turn in scholarly analysis has given musicology better understanding of intertextuality and the listener's roles in deriving meaning from music,¹⁸ there is still certain aspects of video games that are unique to them that separates them from other audiovisual media such as film and music videos, which I would like to go a little further into and define for this thesis. The two defining traits that I would posit make games distinct from other media is *immersion* and *interactivity*. Both are vague concepts that can be applied to a variety of subjects, especially if we are talking about experiencing a piece of music. If you listen to a song you have loved for years, you often can reminisce about days from the past where that song feature prominently, and in this way, you interact with the song. The same can be said when creating playlists or mixtapes; that is interaction with the musical material to create a personal collection that can be used later. One could be completely immersed in the performance at a concert, when listening to a music track or reading a book. As we can see, to just use these terms without clarification is not very helpful during an analysis.

I have touched upon the concept of *dynamic music* earlier in this section, but it would best to give the 'interactive' aspects intrinsic in games a proper explanation. In her chapter of *The Routledge Companion to Video Game Studies* on interactivity, Lori Landay explains that the term interactivity has had contested meanings over the years in different fields of scholarship, where it has had specific meanings that informs it. So, to give interactivity a definite definition that will be all-encompassing can be troublesome (even though interactivity is a major part of game studies). ¹⁹ She continues that regardless of disputes of definitions, most ideas of interactivity contains the core tenets from the concept of the feedback-loop first posited by Norbert Wiener, the originator of cybernetics. Interactivity can then be understood as a constant loop of communication and control. Steve Swink elaborates this concept and describes the feedback-loop for playing a game by separating between input and output for both the player and the computer²⁰. Firstly, the player's Senses (input) receive information, then the Brain processes that information, and the Muscles (output) send information to the

¹⁷ A well-known book on this topic is Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon, 1992).

¹⁸ See Richard Middleton, 'Work-in-(g) Practice: Configuration of the Popular Music Intertext', in *The Musical Work: Reality or Invention?*, ed. Michael Talbot (Liverpool: Liverpool University Press, 2000), 59–87.

¹⁹ Lori Landay, 'Interactivity', in *The Routledge Companion to Video Game Studies*, ed. Mark J. P. Wolf and Bernard Perron (New York: Routledge, Taylor & Francis Group, 2016), 173–84.

²⁰ Steve Swink, *Game Feel: A Game Designer's Guide to Virtual Sensation* (Amsterdam: Morgan Kaufmann Publishers/Elsevier, 2009).

computer through the Controller (input), then the Processor handles the information, and lastly, the Display (output) sends out new information to the player that gets picked up by the senses and the loop begins anew. This, of course, only describes the interactivity between the player and the game. However, there are certain games that are highly interactive within themselves in the sense that they allow the player to alter the state of the gameworld, like picking up things and moving them, or giving you free movement inside the world created for a game. And some video games, as in the case of sandbox titles like Minecraft (2011), the player can build practically anything they can imagine within the constraints of the programming of game. Different games offer various degrees of gameplay interactivity as well. For instance, in Middle-Earth: Shadow of Mordor (2014) a press of a button can make the player character, Talion, do amazing manoeuvres like flipping over enemies or complete a flurry of blade strikes, but these awesome moments are automatically calculated the second the player presses the right button at the right prompt, without further participation from the player until the animation is complete, leaving them to stare at the screen while they wait for it to finish. This can be contrasted with a game like Super Mario Odyssey (2017) where the player is directly in complete control of Mario at every moment of gameplay.

When it comes to music this interactive element of video games crystallises as dynamic music, which are – like earlier explained – altered by game states, such as death, battles, menus, or start screens. And is also changed by player engagement within the gameworld, like exploring around in a snowy mountain can have a certain track of music playing, and other biomes like jungles can have another more suitable track for that environment.

Traversing by foot or car can feature different musical cues. Some games like *BIT.TRIP RUNNER* (2010) incorporates music directly with gameplay. In that game the levels are built around obstacles that play notes in tune with the soundtrack when avoided. More specifically, *modularity* becomes a part of the music in the sense that the soundtracks arise from a collection of musical modules stored in the games' code. Each module can contain pieces of music fractions of a second or minutes long. Based on the player's actions the programming of the game will bring forth these modules, which then in turn create a unique experience of the soundtrack for the player. Elisabeth Medina-Grey has done research of this modular aspect of game music that has informed me on the distinctive modular components of video game music. With this understanding of 'interactivity' laid out above, I would describe the

-

²¹ Elisabeth Medina-Grey, 'Modular Structure and Function in Early 21st-Century Video Game Music' (Phd. Diss., Yale University, 2014); Elisabeth Medina-Grey, 'Modularity in Video Game Music', in *Ludomusicology*, 53–72; Elisabeth Medina-Grey, 'Musical Dreams and Nightmares: An Analysis of Flower', in *The Routledge*

concept as a constant loop of action and reaction between player and game system during play, with the game giving active agency – as much as the gameplay affords – to the player. So, to truly engage with video game music as a researcher, there must be a degree of active participation involved in the reading.

The other aspect that makes video games unique as an audiovisual experience is the concept of 'immersion'. An idea that can be as loosely defined as interactivity in scholarship. Mark Grimshaw says that the term has been used to describe a wide variety of notions such as presence, being there, involvement and flow within discussions of virtuality.²² Generally, immersion is the idea of being "submerged" in an experience; enveloped by it so completely that one surrenders their own temporal and spatial self in the real world into the experience. It is the state when you forget to eat or what time it is because you are so wrapped up in the narrative of a compelling book. It is when you are "in the zone" when writing a paper. It is when you want to take just one more turn instead of going to sleep when playing the turnbased strategy game Sid Meier's Civilization VI (2016). However, scholarship around virtual realities and games give immersion a different and more concise meaning. ²³ Laura Ermi and Frans Mäyrä have defined the experience of being immersed in relation to video games as "becoming physically or virtually a part of the experience itself", 24 which is an aptly defined description of the phenomenon. However, it is a bit vacuous as it can be used to describe the experiential facets of being deeply engaged in almost every activity from looking at a painting to playing a video game. This interpretation of the concept does not really demarcate the specificity of being immersed while playing games. It also suggests a 'unidirectional plunge' into the experience and therefore a complete exclusion of the external world.

Noticing this prevailing vagueness of the term and focus on "submerging" into games – which can be problematic, Gordon Calleja throws the traditional definition of immersion away in favour of what he calls *incorporation*.²⁵ He explains that rather than viewing immersion in video games as a plunge into the experience, we should see it as an absorption of the game

-

Companion to Screen Music and Sound, ed. Miguel Mera, Ronald Sadoff, and Ben Winters (New York; Routledge, 2017), 562–76.

²² Mark Grimshaw, 'Sound and Player Immersion in Digital Games', in *The Oxford Handbook of Sound Studies*, ed. Trevor Pinch and Karin Bijsterveld (New York: Oxford University Press, 2012), 358.

²³ Discussions on the topic in computer studies, game studies, etc. have revolved around *immersion* as the technologies that enables *presence*, which is the resulting effect.

²⁴ Laura Ermi and Frans Mäyrä, 'Fundamental Components of the Gameplay Experience: Analysing Immersion', in *Changing Views: Worlds at Play. Selected Papers of the 2005 Digital Games Research Association's Second International Conference*, ed. S. de Castell and J. Jenson, Vancouver, 2005.

²⁵ Gordon Calleja, 'Immersion in Virtual Worlds', in *The Oxford Handbook of Virtuality*, ed. Mark Grimshaw (Oxford: Oxford University Press, 2014), 222–37.

environment into our consciousness while *simultaneously* being embodied in that same environment through the player avatar. Calleja defines incorporation as "the absorption of a virtual environment into consciousness, yielding a sense of habitation, which is supported by the systemically upheld embodiment of the player in a single location represented by the avatar,"26 which he argues gives a better theoretical framework for explaining the experience of being deeply involved in a game. He posits that since this concept is conceived as an absorption of immediate surroundings, and not as the removal of the self into another space (that the metaphor of "submerging" offers), incorporation can better include external stimuli when discussing the total experience of playing games. For clarity, incorporation can then be understood as being comprised of two levels working concurrently. The first is the incorporation of the virtual environment into the player's mind. The second is the incorporation of the player themselves (in a sense of embodiment through the avatar) within that environment. Calleja argues that this definition of immersion in the form of incorporation precludes applications to other media, such as movies and books, since those are unable to acknowledge the viewer's or reader's presence and give them agency the same way that games can.

This notion of active participation is why I choose to use the idea of incorporation when talking about immersion. While the mechanics of the concept functions differently from the traditional definition of immersion, the end results are the same: being deeply involved in an experience. However, incorporation can better explain involvement of a player's subjective disposition and intertextuality in an analysis of the immersive experience of play, as it fully considers the player's existence outside the game. As we have discussed, to be immersed in a video game necessitates active involvement compared to other media.

Analytical Play

Through these reviews of the concepts of *immersion* and *interactivity* there should now be obvious that to be able to engage critically with the video game experience requires active participation from the analyst, as games offers an agency to the participant that traditional linear audiovisual media lack. I think Calleja described it best when he said, "the player's role in shaping the experience is essential," when talking about getting immersed in video games. With this is mind, I have chosen to use a play-centric approach when it comes to

²⁷ Ibid. 235.

²⁶ Ibid, 234

reading the musical texts in this paper over other musicological methods, as it enables me to not only include the visual facets of the game, but also the ludic aspect of the experience in my analysis. I work with the idea that to truly engage with a game as a game, it needs to be played. That sentiment is also true for video game music. This reader-centric method of playing the game is described as analytical play by Summers²⁸, who explains it as a method of unveiling a game's musical programming and musical material (and their contexts) through critical play. Depending on what an analysist's goal is, one can either play the game as the developers envisioned it to be experienced, or the analysist can "play against the grain" in what Summers dubs reactionary play. Which is that the analysist deliberately subverts the game's instructions and expectations of the player's actions, like actively going the wrong way, attempting to move the player avatar to where it is clearly not supposed to be, or standing still for an extended length of time in what is obviously a dire high-stakes situation. This method of reactionary play can do much to divine the machinations of a game's musical programming. However, as I in this thesis is less concerned in how a game's musical components work within the game's programming and more with what it does to the experience of playing, I have not partaken in such reactionary play. I have, however, been actively seeking out different game states, gameworld biomes and in-game contexts to give me better understanding of the musical material provided within the games, to better compare or contrast tracks in and between games.

In playing these video games in my analysis, I have chosen to provide myself the common home context that most users of video games experience when they play games; to give myself the authentic real-life situation that the people who play games encounter normally. I have utilized my living room to use game consoles in conjunction with a flat-panel television (which also provided the sound through its speakers) and my personal computer equipped with my "gamer" headset, that has a noise-cancelling features which block out external sounds. These contexts are commonplace among users of video games, and provides what one could call a natural framework for my analysis.

-

²⁸ Summers, 'Analysing Video Game Music', in *Ludomusicology*, 10-13; Summers, *Understanding Video Game Music*, 34-36.

While I have been playing, I – where possible – have recorded sessions of gameplay with a free recording software²⁹ so I could later rewatch them instead of replaying the segments of the game – as that can be more time-consuming. Rewatching gameplay sessions can be helpful in understanding what gameplay or games-states affect the music being played and gives an opportunity the listen back on the musical content in its ludic context. Together with these video recordings, I have further supplemented my research method with satellite sources, such as listening to official released recordings of a game's soundtrack, or reading interviews given by the game designers or composers, and watching reviews and commentary on the games. Building on Gérard Genette's concept of 'epitexts', 30 Summers explain these types of sources as secondary texts outside a game that can inform the understanding of the musical content within it.³¹ While listening to a recording of a game's soundtrack does not uncover much about the music regarding its gameplay contexts, the recordings can reveal the timbral features, harmonic and melodic content, or any other musical devices the composers could have used to create the musical direction envisioned by the game developers. Reading or watching interviews of the game designers or music creators likewise might not bring to light much about the music itself on how it is experienced during play. Reading comments on videos of the game soundtrack can give insight in how the music affects people, yet again it does not necessarily enlighten the music's in-game context. However, such epitextual components can enhance the analyst's understanding of the music itself which is valuable in an intertextual analysis.

Another reason that I have chosen a play-centric method of reading is that by playing a game I also get to experience the ludic and visual elements of the game, and not just the musical – I get do and see what the music accompanies. With playing the games and augmenting my experience with satellite sources, I aim for a holistic approach for the basis of my analytical model. This means that I use an intertextual method, where I am concerned with the audiovisual texts (music, sound and visual), ludic text (gameplay), and epitexts (video and audio recordings, interviews, reviews, commentary, etc) of a game in my method of analysis. Intertextuality can have different meanings based how it is employed, but for the context of this paper I conform to the theory of intertextuality set by Stan Hawkins and John Richardson,

-

²⁹ I used the free and open-source *Open Broadcaster Software (OBS)* that you can download at https://obsproject.com/

³⁰For more on the topic of paratexts, see Gérard Genette, *Paratexts: Thresholds of Interpretation*, trans. Jane E. Lewin (Cambridge: Cambridge University Press, 1997).

³¹ Summers, 'Analysing Video Game Music', 19-24; Summers, Understanding Video Game Music, 44-53.

which defines it as "the state by which it becomes possible for a text to become a text through a network of relations that define it as a text. Moreover, it serves as a methodological tool for identifying the strategies of encoding and decoding a text." This definition highlights the importance of the relation between a text to other texts, and how we can uncover what we derive meaning from within it. With the understanding of intertextuality as such, it is important to realize that texts are also influenced by the reader and what they bring to the interpretation, whether it is their subjectivity or the contexts of the analysis. Roland Barthes proclaimed the 'death of the author', which can be understood as the dismissal of an intrinsic true meaning created with authorial intent within a text. This understanding gives the reader agency over the creation of meaning in a text, which makes it open for a plurality of interpretations, that I will delve further into a little later in this chapter. As I have discussed, my method of reading game music as a source for this thesis is an intertextual play-centric approach as it enables a holistic understanding of the game music and its contexts.

When investigating game music, there is a dimensionality of performance in the process of analysis. Music requires interaction, otherwise the music is unplayed and the sounds unheard. A piano does not play any notes by itself, and a record do not start its song before someone presses play. The same need for external impetus rings true for video games, as noted by Iain Hart.³⁴ John Huizinga also proposed a connection between music and play— as far back in time as 1938,³⁵ and posited that someone who excelled at games can exhibit much of the same nimble qualities in their fingers as a virtuosic instrumentalist. It is with the understanding that playing a game has an element of a performance within it, that I argue for the participatory nature when reading video game music as a text. I think Summers summarised succinctly the predicaments of video game music analysis when he said:

In analysing game music, we are playing with games and complicating the divisions of roles that have traditionally held sway in musical thought – unlike the image of music in the concert hall, here we become the performers, listeners and analysts of the music, all at once. In

_

³² Stan Hawkins and John Richardson, 'Remodeling Britney Spears: Matters of Intoxication and Mediation', in *Popular Music and Society* 30, no. 5 (1 December 2007): 605–29.

³³ Roland Barthes, 'The Death of the Author', in *Image – Music – Text* (London: Fontana Press, 1977a), 142–48. ³⁴ Iain Hart, 'Meaningful Play: Performativity, Interactivity and Semiotics in Video Game Music', *Musicology Australia* 36, no. 2 (3 July 2014): 273–90, https://doi.org/10.1080/08145857.2014.958272.

³⁵ Johan Huizinga, *Homo Ludens: A Study of The Play-Element in Culture* (Kettering, OH: Angelico Press, 2016), 42.

causing the assembly of the musical material, we also gain authorial agency, if not becoming composers in the strictest sense of the term.³⁶

So now that I have established what the texts I am reading are, and the complication they bring to musicological analysis, it should now be pertinent to describe and elaborate my model of intertextual analysis.

Model of Analysis

The participatory play-centric approach I have described enables me to read video game music with the idiosyncrasies they offer, with a consideration for the intertextual convergence of the musical experience. However, to explain how this all fit together as a distinguished model of analysis, I must particularise my thought processes surrounding the different components within it.

Firstly, this method can be understood as being part of the tradition of *close reading* within musicological scholarship. A term that has been used in diffuse and contrasting ways over the years in academia, which in turn have given it somewhat of a bad reputation as a tool for analysis.³⁷ To avoid endangering the risks of tunnel-vision to my analysis, I adhere to the notion of an ecological close reading proposed by musicologist such as Richardson and Hawkins,³⁸ which can be described as reading a musical text with not only the structures of the music as a focal point, but as well the contexts in which the musical text is located. This understanding entails personal investment from the reader, in that they bring their own subjective disposition and cultural context to the analysis.

Having a reader-centric and holistic method of intertextual analysis gives me opportunity to position my interpretation in a wider cultural context. However, using such a method also offers a plethora of localities from where meaning and involvement can coalesce. To better clarify where these meanings can come from, I separate between *gameworld* and *realworld* in my model. A 'gameworld' can be understood as everything that is within the game itself; game-systems, interface, gameplay, narrative content and music. I have built this notion of gameworld upon game scholar Kristine Jørgensen's conceptualisation in her book *Gameworld*

³⁶ Summers, Understanding Video Game Music, 32.

³⁷ John Richardson, 'Ecological Close Reading of Music in Digital Culture', in *Embracing the Restless: Cultural Musicology*, ed. Birgit Abels (Hildesheim: Georg Olms Verlag, 2016), 111.

³⁸ Ibid, 112; Stan Hawkins, *Settling the Pop Score: Pop Texts and Identity Politics* (Aldershot: Ashgate, 2002), 2.

Interfaces, where she describes it as a "... world designed with a particular gameplay in mind that are characterised with game-system information that enables meaningful player interaction."³⁹ She further explains that gameworlds are not only the spaces in which the player can move, but that they include extradiegetic interfaces that are meant to communicate information to the player that enables them to engage in play. Jørgensen also accounts for the fictional components within the gameworlds, and define those as a vital part of concept. 40 Her book delves a little deeper into the concept than I am in my definition, however, my understanding of gameworlds is profoundly inspired by it. In my model a gameworld can then be understood as everything a game itself communicates to the player, be it narrative, music, visuals, tutorials, health bars, and gameplay. Everything that a video game gives to the player which informs and increases their understanding of it. To ensure that my method does not veer to much onto essentialism, I contrast the idea of gameworld with my own concept; the 'realworld', which I describe as everything from outside the game. This is the player's identity and subjective disposition, their cultural contexts and the social framework in which they play the game. This is prior knowledge accrued from living. Everything from real life that can affect the meaning of the music in a game. There is an argument that both notions can overlap in a reading and therefore separating them into two different categories can be superfluous. And, yes, while that is true, I have conceptualised gameworld and realworld with a degree of liminality, so they work in conjunction and influence each other. I adhere to the understanding that to make distinct where something is communicated from will increase clarity in my model. Intertextuality is after all a web of interwoven signs, and thus it can be helpful to demarcate where the intertexts come from; the game or the reader.

I understand music as a vital part of a game experience and in creating immersion. Music in games functions as what Summers called *texture*, which he explains as music being able to create depth, implied detail and rounded contexts to the surface level of gameplay activities.⁴¹ The actions of the player can be contextualised and/or enhanced by the music. A soundtrack comprised of the same heroic connotations found in certain Hollywood films can communicate to the player that they are part of a larger conflict in the narrative, other than just the segmented sections of a level. The music can indicate that what happens on the screen is supposed to be a sorrowful moment. It can blend together segments of extradiegetic loading

-

³⁹ Kristine Jørgensen, *Gameworld Interfaces* (Cambridge, Massachusetts: The MIT Press, 2013), 5.

⁴⁰ Ibid, 70-78

⁴¹ Summers, Understanding Video Game Music, 60.

screens and pause menus with the gameplay, and in this way covers up sudden visual and ludic changes, and then functions as what Claudia Gorbman calls a *suture*. 42

Empirical research by Jørgensen shows that when sound is removed, the emotional impact of gameplay is reduced, and that the intrinsic artificiality of virtuality reveals itself to the player – dragging them out of the experience. This beneficial connection between sound and picture has long been noticed by scholars. Theodor Adorno and Hanns Eisler suggested in 1947 that sound removed the "Ghostly Effect" from moving images that became particularly noticeable when there was no sound accompanying it (mirroring Jørgensen's research),⁴³ and Chion has written and theorised about the "audiovisual contract" in audiovisual media. ⁴⁴ Game theorist Ian Bogost suggest that even though the visual aspects of a videogame can be portrayed in startling vividness and amazing detail, that world is trapped behind the glass of the screen of a television or video monitor. ⁴⁵ I believe, then, that music helps shatter this glass prison and aids the player to be immersed in a game. This is why I understand music to be important to factor in the aural components of an audiovisual experience, as it adds depth and contexts to what is shown on the screen.

So then comes the question of how one can analyse immersion in a video game, and the role of music in that process. When discussing what components give immersion in a game Calleja proposes a model where he distinguish between kinaesthetic, spatial, shared, narrative, affective and ludic game involvement, where the audiovisual elements of a game falls under the category of affective. He does not really elaborate on a game soundtrack's role in this model, and only mention it in passing. Noticing the lack of discourse on music's part in the immersive experience of games, Isabella van Elferen proposes a model of her own to start a discussion in this topic. She submits the concept of the ALI model, when talking about musical involvement regarding immersion. She describes it as a model comprising of musical affect, musical literacy and musical interaction. Three dependent and overlapping components that converge into creating a musical immersive experience. Van Elferen suggests that by analysing how these three interact with each other, one can chart the mechanics of the musical

_

⁴² Claudia Gorbman, *Unheard Melodies: Narrative Film Music* (Bloomington, IN: Indiana University Press, 1987).

⁴³ Hanns Eisler and Theodor W. Adorno, *Composing for The Films* (New York: Oxford University Press, 1947). ⁴⁴ Chion, *Audio-Vision*.

⁴⁵ Ian Bogost, *How to Do Things with Videogames*, Electronic Mediations 38 (Minneapolis: University of Minnesota Press, 2011), 82.

⁴⁶ Gordon Calleja, *In-Game: From Immersion to Incorporation* (Cambridge, Mass: MIT Press, 2011), 43-44.

⁴⁸ Isabella van Elferen, 'Analysing Game Musical Immersion: The ALI Model', in *Ludomusicology*, 32-52.

immersion of a game. 49 Immersion is understood in this context as being deeply involved in the experience, and the feelings and state of mind it provides. She further elaborates that affect can be described as the personal investment in a given situation through emotion, memory and identification. Affect is an inevitable part of the musical experience, listening to music always stir feelings, connotations or identifications. Musical affect can then be a determining factor in creating personal and shared meaning to music. The second component of van Elferen's model is musical literacy, which can be understood not as a proficiency with instruments, but fluency in music as it appears in media. In other terms, it is the ability to hear and interpret music in television, film and advertisement; being able to uncover what they are trying to communicate. If one recognises that a jump scare is about happen in a horror film when the lead character walks down a dark hallway and the music gets silent, that is musical media literacy. It is knowing when music sounds heroic or foreboding. Media literacy can then be defined as processes of media engagement shaped by cultural practices. The last component of the ALI model is musical interaction, which van Elferen describes as the direct connection between a player and a game's soundtrack. The player influences the game's precomposed soundtrack by way of their movement and actions in-game. This is the dynamicity of video game music we have discussed earlier.

With the three components defined as such, van Elferen defines game musical immersion as "a blending of different music-specific phenomena afforded by involving sound play," ⁵⁰ where the music-specific elements are musical affect, musical literacy and musical interaction. This model grants a theoretical framework that can provide empirical data regarding musical involvement in immersion, as one can specify exactly which music-specific phenomenon is being triggered in the play experience. In conjunction with other musicological methods of interpretation, the ALI model enables a foundation for theoretical reflections.

The workings of my model of analysis during play is then an understanding that the intertexts from the gameworld and realworld influences the different components of the ALI model, which can trigger them to elicit a myopia of emotions, states of mind and meanings in the player when they hear a piece of game music. This framework gives a reader the possibility to refine their understanding of what exactly incites their reactions and more closely examine those connotations. In-game contexts and real-life work together to stir the associations that

⁴⁹ Ibid, 49.

⁵⁰ Ibid. 49.

the player brings to the experience, which evoke the conditions for immersion in video game music (visualised in figure 2.1).

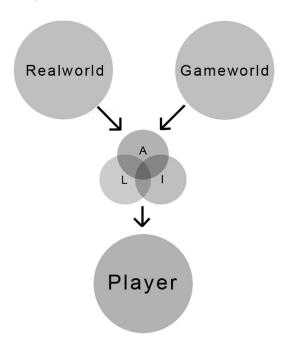


Figure 2.1: Method of analysis during play.

It is important to state that this is a perpetual and interwoven mechanism, and not just a unidirectional process. While it explains how the intertextuality of the music affects the game immersion experience during play, it does not account for when the reader is done with the game session. Someone might later listen to a track from the game they played over the weekend, and then when they hear the song again during play, it might affect the experience in another way. It could be better to picture the intertextual within the realworld and gameworld as two grinding gears in a machine that require each other to make the machine (meaning) they belong to function properly. The web of intertextuality works continuously and can later provoke changes in a reader's understanding of the meaning in a piece of music. However, despite this, I propose that this model is a good starting point for critical interpretations.

A reader has a great deal to offer in the creation of meaning in a musical piece. When I invoked Barthes earlier, I did it for a reason.⁵¹ Musical texts offer *affordances*, which can be understood in the sense that a piece of music has a set range of plausible responses. Allan F. Moore has argued that there is only so many variations of meaning a musical text can afford a

_

⁵¹ Barthes, 'The Death of the Author'.

reader, which narrows down the possible interpretations available to them.⁵² I agree with the general sentiment that Moore posits about there being only so many ways a song can be understood, however, I believe that to be true if one excludes the contexts that the reader brings to the interpretation. I will suggest that this notion is further complicated if the musical text that is being analysed is supported by visual elements; like music videos, commercials and film music. Nicholas Cook claimed that once a relationship between music and visual is formed, meaning becomes unstable and volatile.⁵³ Additionally, in the circumstance of game music – where the interactive and dynamic elements ensure that no one's experience is truly alike – the concept of a certain set of plausible interpretations is a little troublesome. So, in my method of analysis I see the musical material as encoded by the composers with a conceivable amount of meanings within them. The gameworld then provides more possibilities for interpretation through its visual, narrative, gameplay and interface elements. And lastly, the realworld permeates and changes the possible affordances of the music yet again when the reader brings in their cultural contexts and subjectivity into the experience.

For clarity, a gameworld supplies the music affordances with its game context, and the reader supplements and adds to these affordances when they bring their associations into the interpretation. What meanings entail within a piece of game music is ultimately uncovered and formed by the reader. I agree with Hawkins when he claims that "textual readings are spoken by multiple voice in multiple settings through multiple listening; they are repeated over time, yet never appear quite the same...every detail that is interpretative by nature is readable as another detail."⁵⁴ and for the context of this thesis I will use 'meaning' as Hart described it, that it "...should be understood as 'communicative meaning', which I define as a non-intrinsic, receivable, informative, and influential meaning that is (or has been, or will be) communicated."⁵⁵ Therefore, I am sympathetic with Barthes's notion of the "death of the author" in the sense that the authorial intent encoded within a text is inconsequential next to what a reader brings to an interpretation.

In the following chapters I seek to use this model of analysis as a starting point for critical interpretations. I am working after the hermeneutic conventions used in critical theory, and a wide range of musicological methods for interpreting musical texts. What I endeavour to do

5

⁵⁵ Hart, 'Meaningful Play', 275.

⁵² Allan F. Moore, *Rock: The Primary Text: Developing a Musicology of Rock*, 2nd ed. (Aldershot: Ashgate, 2001), 6.

⁵³ Nicholas Cook, *Analysing Musical Multimedia* (New York: Oxford University Press, 1998), 81-84.

⁵⁴ Stan Hawkins, 'Musical Quagmires in Popular Music: Seeds of Detailed Conflict', *Popular Music Online* 1 (2001), http://www.popular-musicology-online.com/issues/01/hawkins.html.

with my interpretations of video game music is to use my antecedent understanding of the subject matter in a way that metamorphoses my knowledge into a new apprehension of the topoi they offer. So, when using my model of analysis to uncover new understanding of a video game's musical content, I am adhering to the hermeneutical principle that Lawrence Kramer calls *open interpretation*. He explains it as a method that "aims to not reproduce its premises but to produce something from them. It depends on prior knowledge but expects that knowledge to be transformed in being used". ⁵⁶

This hermeneutical approach to interpretation and the notions that the making of meaning comes from the reader, make it necessary for me to highlight that the process of analysing and interpreting is subjective in nature. This means that the findings uncovered are coloured by my impressions and appraisals. My age, gender, cultural contexts and socioeconomic background shape my understanding and literacy on multimedia such as video games, film, and their distinct languages. These factors, in turn, influence my interpretations of their musical contents. This method of subjective interpretation then allows me to consider my own assumptions about audiovisual norms and see them through a new critical lens. The hermeneutical approach I have to interpretation is well suited for the multimodal model I am using for this thesis.

It is worth noting that my analysis of video game music does not rely on the application of traditional notation, music theoretical frameworks, or heavy use of their terminology. Instead, I have chosen to use descriptive language to detail the musical, visual and ludic elements of a video game. I aim to describe a picture of how all these are interconnected in creating atmosphere and immersion. I am more interested in how the musical contents and their textures *feel* and are *experienced* when playing games, and how they interact with the other components of this multimodal media to create those effects. I subscribe to the same opinion Robert Walser articulates in that technical terms for musical procedures and details are not necessarily the best way to communicate certain aspects of the musical experience. He says that if we rely too much on technical analysis then "how can we describe, let alone account for, such essential things as compelling qualities of motion or particularly affecting timbres?" To really communicate in a discerning way the experiential aspects of hearing music when playing games, one needs to use language, and that is why I embrace the use of a

_

⁵⁶ Lawrence Kramer, *Interpreting Music* (Berkeley: University of California Press, 2011), 2.

⁵⁷ Robert Walser, 'Popular Music Analysis: Ten Apothegms and Four Instances', in *Analysing Popular Music*, ed. Allan F. Moore (Cambridge University Press, 2003), 23.

descriptive approach when describing these facets. If I have deemed it necessary, I have provided pictures to substantiate the descriptions of the visual and ludic components (see table of figures).

Defining Loneliness

To rein in the topics of my analyses, I have decided to contextualise my readings around the feeling of loneliness. The reason for this exact sentiment is that I noticed when playing different games that some of them, in different in-game contexts, elicits strong moods of being alone. To find out what exactly corroborated these atmospheres intrigued me, and I wanted to explore how music affected those types of game experiences. I observed that there were distinct variations on the effect and severity of loneliness within a wide selection of games in different game genres containing separate themes, content and gameplay types. That is why I have put this framework of loneliness to my model of analysis, so I can examine the musical codes these games offer, and their connotations and associations.

During analytical play I found three distinct categories of loneliness that I could put the different experiences and feelings I had during play into. The first is solitude; a lack of contact with people by one's own volition and relates to the joys of being alone. This is when you want to take a break from other people and give some "me-time" to yourself. The comfort of staying home covered in blankets with a compelling book. The peace of mind that can come when hiking alone in nature. Everything a person do away from the other people in their life to relax and recharge. It can be summarised as enjoying one's own company. Secondly, is loneliness, which is the depressing feeling related to social isolation, when a person craves social interaction but are unable to get enough of it. This can be the feeling of being in a room full of other people and yet still feel alone, or a lack of human contact entirely. This is the sad experience of loneliness. Lastly, isolation; forced physical separation from other people. When a person is locked into a room alone, they are isolated from others. This is a more terrifying variation of loneliness and can be understood as a frightened state where you want to run away from something to the comfort of other people but are unable to, or the sense of loneliness and dread that you feel when you are down in your basement alone at night. This can be understood as the scary aspects of loneliness. By separating the different affects provided by specific game experience, I can use them in a better way as a starting point for interpretation.

For this thesis I am not interested with the bodily effects of loneliness on people; mental, physical or physiological health.⁵⁸ I rather want to explore how the experiential and phenomenological of the different kinds of loneliness are augmented through music, with contexts provided by gameplay and visuals. I seek to unveil what connotations and meanings they can afford, so I use loneliness as a backdrop for my analysis – to give it a lens to look through. I do this to better see what triggers create certain atmospheres or affects in the player. I bring up other state of minds and facets of the musical experience during my analysis, that revealed themselves to me during analytical play and interpretation. Together these other factors either stimulate or enhance the three distinct forms of loneliness I defined earlier. The framework provided by loneliness ensures that my analysis retains a focus to adhere to. This reduces both the risk of myopia that can come with close reading and the directionlessness of a too open field for interpretation, by enabling me to explore factors that contribute to the experiences within this framework of loneliness.

By separating the different kinds of loneliness into distinct chapters, I give myself better potentiality to adapt my methodology and to explore a broader excavation of ideas. This provides a variety of concepts that I can engage with. So, what follows in this thesis is the interpretations of the games I selected to delve deeper into. Chapter 3 discusses the subjects of solitude, nature and nostalgia through an analysis of *The Legend of Zelda: Breath of the Wild* (2017). Chapter 4 is a survey of *No Man' Sky* (2016), science fiction, loneliness and existentialism. Cosmic horror game *Bloodborne* (2015) provides a lens into the music of isolation, dread and insanity in Chapter 5.

I have tried to include different genres of gameplay and thematic content in the games I discuss, as I want to partake in the effort to remove the cultural notion of video games as something of a monolithic entity, and showcase some of the plurality of expressions within the video game industry. As Katherine Isbister described in the introduction of her book *How Games Moves Us*:

We would never lump Hollywood action films, Sundance winners, and nature documentaries together when discussing the impact of film. We see these as different kinds of works, using different techniques, for different audiences, to different ends. We don't hold films from each

_

⁵⁸ For a review on the effects of loneliness, see Louise C. Hawkley and John T. Cacioppo, 'Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms', *Annals of Behavioral Medicine* 40, no. 2 (October 2010): 218–27, https://doi.org/10.1007/s12160-010-9210-8.

of these categories to the same standards as the others. We wouldn't assume Hollywood films represent the full emotional register of filmmaking...⁵⁹

And I adhere to the same sentiments in this thesis, as video games are in a sort of renaissance in current times, where a wide variety of different experiences are being offered to the players, and it would be a disservice to not treat video games with the various qualities they offer.

-

⁵⁹ Katherine Isbister, *How Games Move Us: Emotion by Design*, First MIT Press paperback edition (Cambridge, Massachusetts London, England: The MIT Press, 2017), xv.

3. Breath of the Wild: Solitude, Nature and Deconstructive Nostalgia

It is fitting to begin this thesis in earnest with *The Legend of Zelda* series. The music of Nintendo games is by many considered the "Mozart" of video game music history. Definite classics that over the years have attracted not only recognition and reverence in the gaming audiences, but interests from scholars as well.⁶⁰ Especially the *Zelda* series have had a strong connection with music from its inception to its latest release.

The *Legend of Zelda* games are action-adventure video games where you take control over an elvish-looking character canonically named Link (most of the games allow the player to choose a name they like). Usually the gameplay is a variation on roaming, exploring and fighting monsters in Hyrule, and finding dungeons to delve into that feature puzzles and bosses to overcome. The story of the games commonly revolves around Link needing to rescue Princess Zelda from Ganon, the antagonist. Link can use swords, bows, bombs and an assortment of other items in his quest. The violence portrayed are for the most part cartoonish and whimsical; creatures puff into smoke when they are defeated and there is no blood spilled. All of this have made the *Zelda* games popular family-friendly adventures.

Ever since the first game, most *Zelda* titles have included usable instruments that enables various effects for the player. *Ocarina of Time* (1998) and *Majora's Mask* (2000) features the titular Ocarina of Time, which is a woodwind instrument with magical properties. It can be used to summon your trusted horse companion, control time, heal souls, warp the player to different locations and open secrets in the world. It is played by proxy through the player, whom decides which note to be played with their controller interface. You learn certain melodies that have different effects, like the ones mentioned above. The Wind Waker shares it name with its game of origin *The Wind Waker* (2003), which, similarly to the Ocarina of Time, is a magical baton that the player can use to control the winds and do other enchanted feats. But in *Wind Waker* the player has to conduct music in specific rhythms to get the effects. In *Twilight Princess* (2006) the player can turn into a wolf and howl the melodies from *Ocarina of Time* in certain locations to unlock new abilities. *Skyward Sword* (2011)

_

⁶⁰ For a select few, see Elisabeth Medina-Grey, 'Meaningful Modular Combinations: Simultaneous Harp and Environmental Music in Two Legend of Zelda Games', in *Music in Video Games*, 104–21; Roger Moseley and Aya Saiki, 'Nintendo's Art of Musical Play', in *Music in Video Games*, 51–76; Cuddy, Luke, 'Zelda as Art', in *The Legend of Zelda and Philosophy: I Link Therefore I Am*, ed. Luke Cuddy, Popular Culture and Philosophy, v. 36 (Chicago, Ill: Open Court, 2009), pg. 153-164.

features a harp that player can use, which plays notes that harmonize with the background music. The player has to collect all eight instruments and play the "Ballad of the Wind Fish" to complete *Link's Awakening* (1993). Music and/or musical instruments have been a prominent part of the *Zelda* series; most of its games have a type of instrument the player can use, that are sometimes significant plot devices.

Even with its strong connection with music and musical instruments, the actual musical pieces themselves are what many gamers have fallen in love with. Especially people who grew up playing *Ocarina of Time*, whose music is mostly composed around only the five notes that the player could play with the Ocarina of Time, which give the game simplistic and memorable tunes that easily get stuck in your heard.

However, since its beginning the music of the *Zelda* series has always evoked a kind of adventurous spirit. Koji Kondo, the composer for most of the early games' music, created the now recognizable main theme – which is embedded in gaming and popular culture – almost by chance. He had throughout the development of the original *The Legend of Zelda* intended to use Ravel's "Boléro" as the title track, as he thought the copyright on that piece had expired. In a lucky happenstance, this was not the case and Kondo had to quickly compose the main theme through the night before his deadline.⁶¹

You can clearly hear the classical impressionists' influence in Kondo's work. "Sheik's Theme" from *Ocarina of Time* elicits many resemblances to Claude Debussy's "La fille aux cheveux de lin" (English: Girl with the flaxen hair), whose title foreshadows the seemingly male character Sheik's hidden identity as Princess Zelda. In fact, considerable parts of the music in the *Zelda* games – with its timbral and tonal qualities – convey the same kind of mood and atmosphere that the impressionist created, and together with its stylized visuals these games evoke fantasies of adventure.

Though, the music in the *Zelda* series are not always created with the intent of creating esoteric and beautiful soundscapes. The themes for Hyrule Field in *Ocarina of Time* and *Twilight Princess* borrow many tropes found in Hollywood film music used for conveying heroism. Both pieces feature a galloping rhythm, bombastic melodies played by horns and invigorating strings, like the theme created by John Williams for the film *Superman* in 1978.

⁶¹ Thomas Whitehead, 'An Intriguing Tale of How The Legend of Zelda's Iconic Opening Song Almost Never Happened', Nintendo Life, 24 November 2016,

http://www.nintendolife.com/news/2016/11/an_intriguing_tale_of_how_the_legend_of_zeldas_iconic_opening_song_almost_never_happened.

Equally, in *Wind Waker* the "Great Ocean Theme" borrows the same connotations in its instrumentation. There is a sense of adventure and heroism in the music of *Zelda*, but many pieces have a degree of 'fun' in them as well. For instance, "Saria's Theme" from *Ocarina of Time* has a spirited sound to it, a flute plays notes that jump around in triplets over a lively beat. The theme to Outset Island from *Wind Waker* has a delightful and joyous tone, a rhythm section comprised of a contrabass playing staccato notes, while woodwinds and brass interplay and toy with each other, generating fun incarnated as music.

The Zelda series has an undeniable musical legacy in the video game canon, as seen by the many fans growing up with the games now producing symphonies like the Symphony of the Goddesses and Video Games Live, where they tour the world playing music from the series with giant orchestras. There are now also countless compilations uploaded on YouTube of Zelda music with the intent to help with relaxation or studying that have millions of plays, which say something about how the fans interact with the music outside of the games, the importance of the music in their lives.

Even with all the rich musical history the series has, *Breath of the Wild* – the *Legend of Zelda* game released in 2017 – garnered criticism for its soundtrack. Many fans felt let down by its music at release (reception of the soundtrack has improved over the year after the game's launch), with a section of them objecting that the music included were lacklustre and not memorable as the music of preceding games in the series. The adverse response the fans had to the music is one of the reasons I want look deeper into the sounds of *Breath of the Wild*.

The soundtrack is played by a full orchestra. Some pieces utilize traditional Japanese instruments such as the percussive instruments Taiko and Hyōshigi, which are a type of drum and wooden blocks respectively. They often are used as a shorthand for composers to evoke the feudal era of Japan in their music. The soundtrack also includes the Japanese flute instrument Shakuhachi and its lower variant the Hotchiku, bamboo flutes typically used in Buddhist meditation practices, that have a sort of raw sound to them. And lastly, it features the Koto, the national instrument of Japan, a stringed instrument where the player chooses the pitches of the strings. Though the game's soundtrack has these instruments, nearly all of the music one hears when playing the game is centered around a grand piano. The traditional instruments are used in specific tracks to evoke feelings of mystery and otherness.

The game was released to critical acclaim and are currently of the highest rated games of all time – an honour it shares with several of the other games in the series. However, in many

ways the game broke away from numerous of the conventions in the Zelda series; it had a fully open-world, where you can traverse wherever you like, it did not feature numerous dungeons, opting for smaller-sized puzzles within mystical and ancients shrines. It dropped the traditional Peter Pan-inspired green hat and tunic that Link usually wears for a new blue shirt. The goal was to reinvigorate the series with a new direction, and the game achieved it.

The Symphony of the Wild

Breath of the Wild's Hyrule is a dead world, destroyed a hundred years prior to the game's story in an apocalyptic event known as The Calamity. However, the world is not some dreary wasteland as post-apocalyptic settings tend to be; it is green, vibrant, and full of life. The land is reclaimed by nature with the last vestiges of civilization surviving in small rural villages. The populace of these small congregations seems oblivious to the fact that darkness won and eradicated most of Hyrule and its inhabitants. Content with living out their simple lives, they are unaffected by the post-apocalyptic state of the world, as it is most likely the only way they have known the lands in which they live on.

With most, if not all, of the big cities destroyed and nature's victory over civilization, the lands are mostly empty. Small ruins of what used to be are scattered throughout the countryside, regularly giving the player a stark reminder of that which was lost. Most of *Breath of the Wild*'s gameplay involves trekking through and interacting with the nature. Sometimes the player comes across a camp full of monsters, and can choose to engage the monsters in combat, use the nature around them to distract or destroy their camp, or rather, avoid them entirely. If you choose to defeat them, you get rewarded with treasure. To rout them you can poison their food or wait until they fall asleep, so you can sneak up upon them and attack stealthily.

However, most of the fun in the game comes from exploring the lands; finally reaching that mountain top you see in the distance, exploring an old ruin of a colosseum, talking to the denizens that you meet in the world, or just simply following a trail on horseback just to see where it leads to. The game is intentionally designed in a way that will make you always see something interesting in the distance, ⁶² which continually gives you as the player points of

-

⁶² The developers held a talk at the Computer Entertainment Developers Conference, which discussed the design philosophy of the game, you can find an article detailing the talk here: Allegra Frank, 'Breath of the Wild's Brilliant Game Design, Explained - Polygon', https://www.polygon.com/2017/10/3/16412614/legend-of-zeldabreath-of-the-wild-development-game-design.

interest to explore or goals to fulfil. The game also features highly emergent gameplay; you can interact with fire to create forest fires, or rainstorms can suddenly appear and make rock surfaces slippery which makes it harder for you to climb on them. If the rain turns into a thunderstorm, your metallic objects will function as lightning rods, so you have to put away weapons and armour made of metal. Movement around in Hyrule is just fun, since there is a lot you can discover and do in *Breath of the Wild*. Early in the game you are given a Paraglider, which you can use to jump off cliffs and mountain tops to soar through the winds – giving you an extreme sense of freedom. You are specified just one main objective at the beginning of the game; to save Hyrule. How you end up doing that is entirely up to you and your whims. The title sequence features a wide panning shot of the far-reaching lands of Hyrule, giving the player a sense of scale and purview of the landscape (Figure 3.1)



Figure 3.1: The title card sequence in *Breath of the Wild*.

Most open-world games, like *Middle-Earth: Shadow of Mordor* (2014), include an overabundance of markers and side-quests that fill up your map. These can turn into huge to-do lists in a game, and it can be overwhelming to see all the dots on your mini-map that signals stuff you should complete. Completing such a task is often rewarded by some in-game currency or experience points, commodifying the gameplay in a way. Cultural theorist Mark

Fisher hypothesised that we as a society are stuck in a 'capitalist realism', whereas we are unable to imagine any possible world without the idea of value transactions. The maps full of markers and check-lists that tell you what to do and complete in return for a small reward, truly can sometimes be like an amalgamation of neoliberal late capitalism taken from a Marxist's fever-induced nightmare. *Breath of the Wild*'s design philosophy does the opposite; it makes you take a look up from your mini-map and out in the wilderness. It focuses more on the experiential than arbitrary rewards within a game. It encourages exploration.

It is only fitting then, that the soundtrack to this game is carefully designed to elicit emotions of exploration and adventure. The Zelda series is after all famously known for bombastic orchestral music filled with memorable melodies, and a strong sense of adventure and urgency in them. However, in *Breath of the Wild* such orchestral music is almost non-existent. There is not that much music at all. The main instrument throughout the game is a grand piano, which seldom plays anything but some high-pitched melodies reminiscent of the classical impressionists during the late nineteenth and early twentieth century. There are certain events where there is the more traditionally Zelda-like music of course; like when you're in a town, it may appear when you ride a horse, boss fights, the appearance of mythical beings, and many more. Though when you are out in the wilds there is an exceptional lack of music. Instead the soundscape is filled with noise from nature. Birds flying over your head, the winds blowing through the grass, rivers running, the hooves of a team of horses galloping nearby. Most of the time spent playing the game will be teeming with these echoes of wilderness instead of music. You may bump into a wayfaring musician who plays the accordion out in the countryside. The melodies from the instrument is heard from a long distance in the empty lands, inviting you to search for their source. Also, the game may trigger some atmospheric music when you are exploring near a river. Gone is the pompous orchestra and in its void nature has flourished, just like how the wild has reclaimed the land.

This lack of music is intentional. Nintendo has with almost every statement of the game emphasized that their goal is to fill the player with a sense of wanderlust and adventure. And that notion is weaved into every bit of design throughout the game. The essence of adventure is substantiated with focus on open-airiness, from the colour palette of bright and vibrant hues to the nature-filled soundscape of the wind and animal noises. The absence of music was, I mentioned earlier, something that several fans pointed out and criticized, often mentioning the

⁶³ Mark Fisher, Capitalist Realism: Is There No Alternative? (Winchester: O Books, 2009).

series long history of memorable musical pieces as a reason for why the lack of music was a bad thing. Another goal with *Breath of the Wild* was to reinvent what had become known as the Zelda formula, referring to the franchise's overused standardization of game mechanics and themes over the last two decades. With this in mind, *Breath of the Wild*'s split from the series' musical tradition fulfils that goal.

One can interpret that the sounds of the nature are this game's actual musical soundtrack. The grand piano and the orchestra act like mere counter-melodies in the symphony of the wild. Almost everyone has a familiarity with how nature's noises reverberate in our ears. It can seem like the knowledge of natural sounds is a prerequisite for the modern human condition; without this understanding there would be none of that yearning away from the noise and bustle of the cities, so many millennials express. Without the natural there would be no unnatural. Some of us grow up in the rural parts of our world. The sound of air running through the forest or a plain rustling in the chilly autumn evening can be an ordinary part of the soundscapes that fill these upbringings. And others spend their childhoods in more urban towns and in the cities, where the sounds of the metropolis conquer the airspace around them. Car honks, trains and the busy footsteps of busy businessmen and businesswomen exuberate the energetic and exciting lives of those who inhabit the cities. Their familiarity of nature's sounds comes from the over-romanticised depiction of the wild's aural aspects in audiovisual media, and similarly idealized family trips out to Mother Nature.

In both cases, the media continue to perpetuate this venerated idea of the wild that can be described as Hypernatural – an extreme depiction of nature as we want, perhaps even need, it to be. If cities are violent, energetic and full of noise from machines and people, then nature is peaceful, calm and quiet with soothing sounds from animals and flora. This depiction of urban and natural as opposing concepts has parallels in the discourses surrounding authenticity that have been a part of popular music studies for close to half a century. ⁶⁴ In the same vein as the idea of fake and real artists, our understanding and wish for a nature that is genuine has blurred the line between realism and fantasy. Like the fashion industry distorted the idea of beauty, so has media with our view of the natural. Showing us depictions of nature that is supposed to be so *real* that they have become more construed fantasies than realistic

_

⁶⁴ See Allan Moore, 'Authenticity as Authentication', *Popular Music* 21, no. 02 (May 2002), https://doi.org/10.1017/S0261143002002131; Ray Pratt, 'The Politics of Authenticity in Popular Music: The Case of the BBlues', *Popular Music and Society* 10, no. 3 (January 1986): 55–78, https://doi.org/10.1080/03007768608591250; Hugh Barker and Yuval Taylor, *Faking It: The Quest for Authenticity in Popular Music*, 1st ed (New York: W. W. Norton, 2007).

depictions of the untamed places of our planet. A good example of this is Peter Jackson's Lord of the Rings films use of New Zealand's beautiful nature to depict the fantastical world of Middle-Earth. Widespread mountain ranges, far-reaching forests and wild rivers resides within these films. The cinematography is done in a way that makes us visualize in our heads a configuration of an idealized version of nature that may not even exist.

Breath of the Wild wholeheartedly embraces the idea of the Hypernatural. Nintendo was not concerned in realistic representations of nature, instead drawing from our idealized version of nature to bring forth a desire to explore. The game's art style is reminiscent of Hayao Miyazaki and his Studio Ghibli's animation films (which also often romanticize nature), rather than the photorealistic style often found in big-budget games, enabling Nintendo to depict nature not as we see it, but how we picture it. And in the same vein, they do something equivalent with the sounds of nature, creating an aural image of how the deep wilds should sound like according to our idea of nature. Bird chirps, the wind blows and the grass bustles in this romanticized wild in a way that never occurs in real life. Though it sounds like an authentic representation, nature itself seldom evokes this large amount of tranquillity. Both the visual and the auditory exaggeration corroborate this fantastical world, and with its beauty shepherds us onto a journey of wonder and, perhaps, self-discovery. Such a hyperbolic state helps the game act as a substitute for the escapism and self-examination sought after in globetrotting and hikes, that many increasingly have less time for as their lives get busier.

So, with this widespread idea of what nature should sound like and the contrary notions of urban and rural, we can start to examine how the symphony of the wild functions. As you move Link around the wild, one could argue that as a player you function as a composer. One key aspect of video game music that is generally agreed upon is separate from other media, is the fact that it can innately be *dynamic*. That the music changes based on player input. It can be as easy as playing a victory fanfare after completing a level, battle or race. Or as complex as multifaceted layers of 3D spatial audio that changes depending on where the player avatar resides within the virtual world. *Breath of the Wild* errs more on the latter example, with the sounds of nature at your disposal. Ready to blare out their parts as you give them their cues when you move around the wilds. The sounds of gentle footsteps on snowy hills, twitters from a snowbird that is nearby and the howl of the cold winds paints a picture of an unforgiving mountain range, and it all came to be after the player decided to scale a summit. When the eerie elongated synth notes finally fade in, with its icy timbre that induces

mysticism and menace, the scene is aestheticized in a complimentary way, much like how listening to music with headphones alters mundane settings like streets and train rides.

Music is never in the forefront when the player is in the wild; it seldom evolves into fully fledged compositions, and rather flatters the already beautified natural sounds with little phrases or texture-like pads. It can be easy to write off the murmurs of the wild as just sound design and not music, as often these types of noises are relegated to exactly that. However, given how sparse the musical contents in the wild are, and how they seem to fit and compliment the natural sounds, one could interpret that the intent of the game's main composer Manaka Kataoka is to let the nature take up the aural space, just like how the wild reclaimed Hyrule. She even stated that she wanted the main theme to represent and complement the environments within Hyrule. There is a break in the middle of the main theme, that sort of shifts the song from a soothing piece, to a more traditional 'Zeldaesque' composition. She intended this the signal a break from the game series' past. In showing restraint with the bombastic music and famous themes to key moments or locations in the game, she has created a soundtrack that fits the theme of exploring a long dead world, with the musical content acting as atmospheric echoes of the kingdom that was lost.

There are certain other factors that substantiate this prominence of nature. Most of the promotional material accompanying the game's release focused on the world of Hyrule. The first half of *Breath of the Wild's* reveal trailer featured nothing but visuals of the numerous environments you could find in the game. Hyrule has been included in almost all the promotional art, either positioning Link in such a way that they get to showcase the scale of the world, or the beauty of it. Nintendo really wanted to sell the idea of Hyrule and its wilderness to the general public (Figure 3.2)

-

⁶⁵ Translation of the official developer blog from Japanese by Lite_Agent, 'The Legend of Zelda: Breath of the Wild – Latest Official Blog Post (Main Theme)', *Perfectly Nintendo* (blog), 12 June 2017, https://www.perfectly-nintendo.com/the-legend-of-zelda-breath-of-the-wild-latest-official-blog-post-main-theme/.



Figure 3.2: Key promotional art for Breath of the Wild.

The music that do appear in the Wild are esoteric and are tonally ambiguous; it can be hard to define what key the songs are in. When riding horses, a piano play lively notes reminiscent of Debussy's "Arabesque No. 2". When a thunderstorm occurs, all sounds except for the storm dies out, and when the sun finally reappears the player are greeted with a hopeful fanfare signalling the conclusion of the storm. Inside the ancient shrines, when trying to complete puzzles, the music is otherworldly and full of synthesizers; in stark contrast to the grand piano and orchestra that embellished the nature above them. The music of the ancient, but weirdly scientifically advanced, ruins of the olden Sheika clan, distinguishes and brings the wilderness further into the forefront. The typically scored music of the towns further demarcates them from the forests and plains. All of this evokes the sense of beauty that nature offers - untouched and wild.

The story of *Breath of the Wild* may tell a sombre tale of the apocalyptic end of the world; the hero failed, and civilization destroyed. Yet, the wilderness and the music that characterize it, are anything but solemn.

Memories

I want to examine two specific incidents in the game where certain music does occur. One is after you have ridden on a horse for a while, and the other is when you are in Rito Village, one of the few towns in the game. The reason I want to delve into these two examples is that the music related to each event draws heavily from past games in *The Legend of Zelda* series. This section describes experiences that a player may have if they have prior familiarity with the franchise and how knowledge of the earlier games might help immerse a player by triggering musical affect and literacy with the help of nostalgia.

For instance, if we take the first example, once you have ridden for a certain distance you start to hear playful piano music. The way the notes are played sounds much more like someone is just having fun with a piano rather than playing a careful composed musical piece. Even though there is structure in the playing, the musical figure of the piano is looped endlessly, with no clear cadence and direction. The playing, in conjunction with how the piano is reverberated to sound distant, evokes a sense of adventure, that there is something lingering just behind the horizon worthwhile to explore. Once you have travelled a little while on your horse, violins subtly join the instrumentation, playing round and long notes on the verge of being rubato. The violins perform so slowly that they do not really play a discernible melody, yet the notes they sound conjure an atmosphere of remembrance. In this moment the violins play "Zelda's Lullaby", a classic theme from the series, so slow that you might even miss the fact that it is a part of the "Riding (Day)" piece. If sped up, there is no mistaking that the piece is actually "Zelda's Lullaby" deceptively concealed. Not a part of the arrangement all the time, the violins glide intermittently in and out of the soundscape as you ride along a trail, bringing some variation to the musical piece as you explore Hyrule on horseback. By weaving in a theme that is a staple of the series in this way, the music may invoke the nostalgia of series veterans, even though the players might not explicitly know why.

Rito Village, the other example I wanted to dwell on, is not as subtle with its call back to earlier entries in the franchise as the riding theme, opting to use the exact same melody, chords and structure as a piece that appeared in an earlier game. The Rito is a species of anthropomorphic birds that have, as of writing, been a part of two mainline *Zelda* games; the most recent *Breath of the Wild* and *The Wind Waker* (released in 2003 on the Nintendo GameCube console). Their look and culture vary a lot from each game, with the only common factor being that they are bird-like. However, as mentioned, the games use the same theme for both avian races, namely "Dragon Roost Island". The song is named after the island

on which the Rito of *Wind Waker* lives, where a dragon perches on top of the isle. When you first see Rito Village in *Breath of the Wild*, all you encounter is a strange looking rock formation in the middle of a lake, far off in the distance. As you move closer to the village, the piano that is so ever present in the game plays a short melody, before a flute and an acoustic guitar enters the soundscape. When crossing a bridge and about to enter the village, the flute and guitar is joined by a whole orchestra with rich vibrant strings and horns that swell up and climaxes right when you take your first step into the town, and then begins the "Dragon Roost Island theme." This prelude that prefaces the Rito Village theme works as a suture, melding together the quiet sounds of the wilds into the bustling life of a small town. It also functions as a fake out for fans of the series, starting with a new and strange melody that the player has not ever heard before. Then, together with the build-up of the orchestra, the reveal of the "Dragon Roost Island" theme may amplify the musical affect experienced by the sudden presence of nostalgia.

These examples show how Breath of the Wild elicit nostalgia through its music in two distinct ways, explicitly and implicitly. As in any series that has been around as long as Zelda, individuals can form strong connections to the media they love. Developers can be use this as nostalgic capital they can spend. This can be employed to elicit strong emotions from a listener that can favourable shape an experience, for instance when entering Rito Village. The marketing for Star Wars: The Force Awakens of the newest Star Wars-trilogy was highly effective at using well-known musical pieces from the franchise to create hype for the new movie. In the same way, the Zelda games reuse old themes in almost all of their games. However, in Breath of the Wild most of the famous songs are either hidden away or reharmonized to new pieces that are barely recognizable. "The Song of Time" from Ocarina of Time is a renowned piece that was featured prominently as a narrative device. In Breath of the Wild you can discover this song in the ruins of the Temple of Time, where – much like "Zelda's Lullaby" – it is played slowly by a grand piano. It does not really sound musical; fragmented notes spread rhythmically unhurried. The only way to identify the song is to speed up a recording of the song or the game. "Epona's Song" from Ocarina of Time is hidden melodically in the theme of the stables, tying the memory of Link's horse from Ocarina of Time into Breath of the Wild.

It would be so easy for the musical team of *Breath of the Wild* to just use the standard *Zelda* songbook, but they chose to hide the series' musical legacy. Svetlana Boym talks about two

kinds of nostalgia, restorative and reflective.⁶⁶ 'Reflective nostalgia' can be understood as fond reminiscence of special periods of your life (or culturally an epoch). This is the feeling of looking at a photo of you and your friends when you were young and thinking back on how you felt, the friends you had, the summer flings. Whereas 'restorative nostalgia' is when you want to return to that imagined "better" period of your life. It is the notion of trying to fix the current by returning to how things were in the past. Culturally, many variations on nationalism is rooted on this type of nostalgia; trying to make a country or people great again, as if they somehow have become worse. Film critic Lindsay Ellis posits a third variation of nostalgia to add to these two already established by Boym.⁶⁷ Ellis proposes that when we look back at certain periods we should also consider the bad and problematic aspects of them, and use the past to improve the future. She calls this notion 'deconstructive nostalgia'.

The music of *Breath of the Wild* elicits such feelings of deconstructive nostalgia. The soundtrack acknowledges the rich musical history of the *Zelda* series, but it also urges the player to move on. The games changed for the future, and they did not bring everything from their past with them. Almost all the aspects in *Breath of the Wild* is fresh for a *Zelda* game, from the open-world with free movement, the lesser focus on dungeon and bosses, the inclusions of more roleplaying elements. Nintendo has really pushed to narrative that the *Zelda* series are changing direction going forward, and the music really helps with this story. The pieces of the soundtrack are mostly new, but a few fan favourites remain – hidden. The composers communicate that this is still a *Zelda* game, even with all its changes. It would have been easy for Nintendo to just use the famous themes from past games to spend the fans' nostalgic capital. However, they made the choice to be bolder with the music – just like the rest of the developers were with the game – creating a smaller, but airier soundtrack that perfectly complements the visuals and brings the wilderness to the forefront of the experience.

Narratively, this concealment of the celebrated songs of the *Zelda* games makes sense. A key factor to uncover what happened 100 years prior when the world got destroyed, is to discover and find the hidden memories belonging to Link. These memories give the player flashes of the chain of events that lead up to the Calamity. The apocalypse happened before the game began, the nature reclaimed the world during Link's 100 years long hibernation. Old ruins of temples and cities submerged under an overgrowth of grass and trees. The musical legacy of

-

⁶⁶ Svetlana Boym, *The Future of Nostalgia* (New York: Basic books, 2001).

⁶⁷ Lindsay Ellis, 'Stranger Things, IT and the Upside Down of Nostalgia - YouTube', accessed 29 August 2018, https://www.youtube.com/watch?v=Radg-Kn0jLs.

The Legend of Zelda series lies a under musical overgrowth in a similar way as the ruins. It emerges through creaks here and there, but never completely reveals itself. The music of Breath of the Wild, through its mere scarcity and subtle homages, creates the soundtrack to a world reclaimed by the wilderness.

4. No Man's Sky: Loneliness, Existentialism and Science Fiction

In 2013 at the VGX Awards⁶⁸ the first trailer for *No Man's Sky* (2016) was released to the world. The words "All footage captured in real-time" appeared on the screen. A character is revealed, shown through first-person perspective. The character is underwater, and rises to shoreline to expose a vibrant world of colours and dinosaur-like creatures. The trailer's imagery peaked the audience with its world full of saturated colours and weird creatures. Guitar-driven music with electronic drums and synths accompanied what were shown on the screen, creating a palatable pulse in the watchers. Then the character entered a small spaceship and lifted off the ground and flew seamlessly into the space above, unveiling a vast universe that awaited to be explored. The promise of a procedurally-generated galaxy that one could move freely within was made to the public.

This trailer came out of nowhere; no one had heard about *No Man's Sky* before this reveal. Hello Games, the developers, are a small indie team of sixteen people that had only created the *Joe Danger* series (side-scrolling racing/platformer) before this seemingly gargantuan game. That it was featured as a segment in one of the biggest celebrations of the video game industry perplexed many industry pundits. However, the trailer stole the show and quickly *No Man's Sky* – and its promise of a galaxy that one could freely explore – quickly got extraordinary amounts of hype in the video game community. Finally, gamers could get the space game they had always wished for, a game where one could travel seamlessly between planets and solar systems, forming galactic federations with other players and vying for control of certain sectors of the galaxy. They would be able to create trade empires and colonize planets for resources, becoming filthy rich tycoons. Another universe with infinite possibilities.

The hype got out of control, mostly because of Hello Games's lack of proper communication of what the game would in actuality be. The audience had to fill in the blanks from what they could gather from official sources, who more often than not were vague and generalized. The gameplay description provided by Hello Games, such the ambiguous concepts like exploring, trade, fighting and surviving, gave the anticipating game crowd much ground to try and extrapolate what the developers were meaning.

When the game released in 2016, the critical response was mostly negative from the gaming audience. Notions of being lied to with misinformation of what the game was, arose within

_

⁶⁸ The predecessor to the contemporary The Game Awards, a sort of Academy Awards for video games.

certain groups of people. Some even went as far as to demand a refund for the game, as it was not the experience they were promised. There was no possibility to create galactic-sized associations or wage war against each other, no method of colonizing planets. The game was simply not what many had hoped it would be. At release, there we no multiplayer component to the game other than that you could see who had discovered what in the galaxy. The release of *No Man's Sky* became a catalyst in the gaming press for a discussion about hype for game releases, and a sort of case study of where things can go wrong if unfettered hype is not managed. Sean Murray, the founder of Hello Games, became a target for massive vitriol by groups of let-down individuals, as he had been the face of the company during the game's promotion cycle.

No Man's Sky may not have been the massive multiplayer online space opera that many believed it to be, but it was not a bad game for that reason. What No Man's Sky offered was a smaller and personal journey in the vast cosmos Hello Games had created, rather than the bombastic second life many had hoped for. A science fiction adventure a little more like 2001: A Space Odyssey and a little less Star Wars in essence. The experience was meditative and relaxing rather than frenetically filled with action. Offering the player large amounts of quiet moments and awe-inspiring flashes of the grandeur of the universe. These elements of the game have given No Man's Sky a cult following that continues to grow long after its launch.

Continually since the release Hello Games, has been updating the game regularly for free and now features many of the elements that people had wanted when the game first launched. Some prominent patches were the *Atlas Rises* update, that added a thirty hour long narrative that the player can engage with, and *Next* which drastically changed the procedural formula the game uses to create its worlds, added the option of playing in third-person perspective, and added full multiplayer functionality. It is now possible to build a base, enabling the possibility of colonizing a planet. You can own a massive freighter which you can use to travel between solar systems as a giant trade hub. You can now meet other random players out in the galaxy (even though the possibility of that is astronomically low), or even team up with up to four friends to play together. All these updates have increased the game's active

-

⁶⁹ For examples, see Jason Schreier, 'The No Man's Sky Hype Dilemma', Kotaku, 2016, https://kotaku.com/the-no-mans-sky-hype-dilemma-1785416931; Tyler Wilde, 'The Anatomy of Hype: How No Man's Sky Became the Best and Worst Game Ever', *PC Gamer* (blog), 15 August 2016, https://www.pcgamer.com/the-anatomy-of-hype-how-no-mans-sky-became-the-best-and-worst-game-ever/; Wesley Yin-Poole, 'No Man's Sky Changed the Video Game Hype Train Forever', *Eurogamer* (blog), 27 December 2016, https://www.eurogamer.net/articles/2016-12-20-no-mans-sky-changed-the-video-game-hype-train-forever.

player base and Hello Games has not (as of fall 2018) indicated that support for the game will end anytime soon. Even though the developers have added many features that was requested by the player base, I want to focus on the smaller and more personal journey the game offers, which was originally envisioned by the team at the launch of the game.

Every Atom Procedural

No Man's Sky is a rather exceptional game, the developers claim that there are 18 quintillion planets that the players can explore. They have reached such a gargantuan number of planets by using procedural generation; a technology that uses math to randomly create unique results from an algorithm. Hello Games has used this to procedurally generate No Man's Sky's planets, fauna and flora from the physics and periodical table they have created themselves, giving close to an infinite number of different animals, plants, terrains and planets one can discover in its galaxy.

The vast amount of different configurations of creatures and worlds within the game give a player high likelihood of seeing and experiencing something that no one else on Earth ever will. Some planets are arid, some frozen, others have been destroyed completely by some unknown apocalyptic event. You might find Earth-like worlds that are teeming with life, or you might find creatures living on planets where none should be able to; radioactive wolf-like creatures roam around a nuclear wasteland or birds flying around in -200 Celsius. Some planets might be completely covered in water and all life exist deep down in the oceans. The game features insurmountable variations on what the player can discover within it.

You play as the Traveller, and the game begins with you waking up next to a crashed spaceship. The gameplay in *No Man's Sky* mostly revolves around gathering resources and managing your spacesuit and spaceship. Planets can have harsh environments that slowly deteriorate the shielding of your outfit. You use a mining laser to gather up the resources you need to reinforce and enhance your vessel or exosuit. You constantly need new resources to refill the energy of your suit, mining lasers and handgun, or fuel and ammunition for the spaceship, as those are expended the more you use them. The early moments of *No Man's Sky* are spent accumulating enough materials, so you can repair the engine of the crashed spaceship and get sufficient fuel to launch the vessel into space.

After you have reached the outer atmosphere of the planet, your radio makes noises and a being called Artemis tries to contact you. You are given two options for progression; follow

the Atlas Path and the narrative of the game, or try to reach the galactic core. Either alternative requires that you land on new planets to gather resources and return to trade stations where you can trade them in for Credits (the currency used in-game), which you can use to buy new parts for you ship, weapon or suit. These new items can help you reach further into the Galaxy, or give you better shielding when travelling the planets by foot.

At the trade stations you can interact with the three sentient races that inhabit this galaxy: the warmongering Vy'keen, the mercantile Gek and the science-minded Korvax. However, they speak in languages that you cannot understand, represented on screen as gibberish text. You can learn those languages by bribing them money or discovering ruins of their settlements. Nevertheless, it takes a long time to learn enough of their languages before you can understand portions of what they are saying. This adversarial method of communication with the game's non-playable characters presents *No Man's Sky* with a feeling of loneliness in the massive outer space.

The *Foundation* update made it possible for players to create their own bases on planets. That way they can create homes on planets they particularly enjoy. It also made it possible for players – if they can accumulate enough Credits – to buy mighty freighters; giant spaceships that can function as homes out in vast cosmos. Both these additions give a new dimensionality to *No Man's Sky*'s gameplay, the nomadic lifestyle that the game encourages is now not the only means of enjoying the game. You can settle down, keep upgrading your base and explore your self-designated home planet and find all its secrets.

The core gameplay loop of gathering resources and selling them to upgrade parts of your inventory or build embellishments to your base, provides most of the play experience of *No Man's Sky*. In that sense, this game does not distinguish itself that much from other survival games like *Minecraft* (2009) and *ARK: Survival Evolved* (2017). They too have similar gameplay where you collect resources and build bases. However, *No Man's Sky* stand out from other games with its mesmerizing scope and outstanding science fiction aesthetics. Hello Games have stated that they wanted the game to look like a science fiction book cover came to life.⁷⁰ They have managed this by using a saturated and vibrant colour scheme, with colour combinations that can be borderline psychedelic at times. Purples, greens, reds and blues fill up the screen as you traverse the planets. The spaceships' designs are heavily stylized and

42

⁷⁰ 'The Art of No Man's Sky: No Man's Sky', accessed 17 September 2018, https://www.nomanssky.com/2016/04/art-of-no-mans-sky/.

invoke exhilarating space adventures rather than scientifically accurate vessels (see figure 4.1).



Figure 4.1: Spaceship approaching a fleet of freighters.

The sentient races, and the creatures you can discover, look cartoonish and weird. The terrain of the planets can sometimes be otherworldly; impossible geometry or floating islands can be fragments of it. Planets made entirely of metal can be discovered. All of this creates a sense of wonder when floating through space.

Even though you can be met with fantastical sights and creatures, most planets in the game are desolate or empty of life. You can spend hours travelling to mundane and non-descript planets before you behold anything noteworthy: this makes the game slower paced than other space action games, like *Mass Effect* (2007) or *Halo* (2001). The designs of creatures, races and terrains make *No Man's Sky* visually grandiose and exciting, but what really makes the game distinct from common science fiction adventures in media, is its soundtrack.

The Stillness of the Universe

The music in *No Man's Sky* breaks from the traditions of science fiction in many ways.⁷¹ Space adventures like *Star Wars* have been accompanied by the orchestral Neo-Romantic music of John Williams and *2001: A Space Odyssey* features a wide variety of pieces from classical music's history. The space horror film *Alien* was scored by the famous film composer Jerry Goldsmith, whom scored countless science fiction movies in his career. Conventionally, the musical backdrop of science fiction (especially regarding space) is orchestral and induces impressions of adventure and heroism. In that type of music, the universe is inviting and full of possibilities. The galaxy may be gigantic, but the musical indicates that it is within the reach of the characters. The comfort of hearing orchestral music, which we are so familiar with, makes the universe alluring and invites a sense of marvel in us; that whatever is out there must truly be astonishing.

No Man's Sky's music does not have the science fiction staple of sensuous orchestral music. In its place, the game's soundtrack is composed by British experimental band 65daysofstatic, who is mostly known for their progressive, heavy, and guitar-driven post-rock. What this band brings into the music abandons completely from what frequently accompanies science fiction in audiovisual media. Distorted guitars, grainy synth pads and decisive drum beats paint the aural landscape of No Man's Sky. While the typical progressive rock music the band is known for appears during play – like combat with space pirates or the loading screens – most of the musical content in the game are more restrained. Typically, the music creates surfaces of measured synth pads, pianos or ethereal vocal choirs, with lots of noise in the timbre of the instruments. It can sound like the music is glitching in and out of existence.

Certain tracks evoke heavy connotations to the music of Brian Eno. Tranquil synth pads that almost sound like wind is interspersed with something granular. A guitar's feedback is harmonized with pianos. The music creates feeling of odd serenity when walking around lush planets or lifeless moons, giving a texture to the experience of play. There is a notion of melancholy in all the tracks. Hello Games's decision to have 65daysofstatic score the game gives *No Man's Sky* a recognizable and unique soundtrack in the science fiction canon.

_

⁷¹For a summery of modes in film music, see Timothy E. Scheurer, 'John Williams and Film Music since 1971', *Popular Music and Society* 21, no. 1 (March 1997): 59–72, https://doi.org/10.1080/03007769708591655; David Bordwell and Janet Staiger, 'Since 1960: The Persistence of a Mode in Film Practice', in *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960*, by David Bordwell, Janet Staiger, and Kristin Thompson (London: Routledge, 1985), 367–77; Kathryn Marie Kalinak, *Settling the Score: Music and the Classical Hollywood Film* (Madison: University of Wisconsin Press, 1992).

The distorted, noisy and quiet music of *No Man's Sky* establish another wholly different set of moods than the orchestral pieces found in science fiction media. While the timbre and harmony of an orchestra gestures the amazement and magnificence of space, the music of *No Man's Sky* achieves the same goal but from the opposite end. 65daysofstatic's score makes you feel tinier and lonelier in the vacuum of the cosmos. Everything becomes massive, more distant and out of reach. The music embellishes the visuals in a way that removes the inspiring notions of exciting escapades in space, and replaces it with a smaller individual journey through the darkness. The score characterizes the experience of play to a lone trek through the aether.

Sometimes other beings try to contact you over radio. Communication through radio is a common device in video games. *Firewatch* (2016) is a game where you play as Henry, who takes a job as a lookout to escape from his normal life, where one of the principal mechanics is that you have dialogues with your supervisor, Delilah, through a radio which are Henry's only means of communication. In *Bioshock* (2008) one of the only ways to communicate with friendly characters are through a radio acquired at the start of the game. And in the mystery thriller *Oxenfree* (2016), enigmatic apparitions speak to the main character Alex through an old radio. While communication through radio is a good way to establish distance between characters; the disembodied voices create a real sense of separation from the player, expressly in a hostile environment. However, *No Man's Sky* adds to this by the complicating factor of not being able to understand the languages of those who try to contact you. You might be able comprehend a few words, but it can be hard to decode the meaning of what they are say. You are met with the hiss of the radio and gibberish. It can be hard to discern if they are threatening you, or are offering to trade with you as a friend.

The means of how you learn these languages in some ways mimics how it is experienced to learn a new one in real life, picking up a few words here and there. The fact that Hello Games added a language barrier into the gameplay further exasperates the feeling of being a outsider alone in the galaxy.

It is not that the music of *No Man's Sky* lacks the same sense of the wonder and admiration of the universe that the other science fiction evokes, however, its perspective is different. Rather than being outward-looking or inducing an audacious enthusiasm, it looks inwardly and constructs a smaller, melancholic soundscape. The distorted and synthesized sounds

performed by 65daysofstatic sound inhuman and unnatural compared the familiarity of the orchestra, like the soundtrack of *No Man's Sky* never quite *become* music as we know it.

Even though the visuals are vivacious and full of colour, they are contrasted with the solemnity of the music; a sort of juxtaposition of a fantastical adventure and an individual self-reflective pilgrimage. When you are flying through space, the quiet and forlorn music creates an overwhelming sensation of being alone, adrift in a sea of stars.

When traversing a planet that is mostly empty, looking for a specific resource so you can hyperdrive away to the next solar system, the music conjures severe feelings of loneliness. No other sentient being is in proximity to yourself, and even if it was, you would not be able to communicate with them. The melancholic sounds of 65daysofstatic's score makes what should be a pleasant slow-paced exploration of the terrain a sombre journey. A low granular synth growls – barely audible, while a reverberated piano solemnly plays over it. Producing a blanket of dejection over what you witness. The acute feeling of being completely alone sweeps over you as you reach a hilltop and the view revealed by this new vantage point discloses more empty terrain ahead of you (figure 4.2).



Figure 4.2: Exploring a snow-filled planet.

All this together makes *No Man's Sky*'s soundtrack full of sentiments of being alone in a vast, unfilled universe, drifting through the void to one dull planet to another. With the music being melancholic in tone it leads to envelope the player in a sort of contemplative headspace.

Hello, Darkness

How *No Man's Sky*'s music causes you to feel small in turn forces the universe the game offers to seem vast and imposing. The grand scale of its galaxy can be awe-inspiring and can produce the same feeling as when you look up into the starlit night sky here on Earth and wonder what exists out beyond the observable stars. The music paints a universe with a promise full of discovery and wonder, but it is a small and personal journey through the cosmos, and not some thrilling adventure.

In conjunction with the somewhat repetitive nature of the gameplay of gathering and selling resources, the wandering around empty planets and flying around in the dark can create moments of meditative trances. The kind of Zen moments in gameplay that Ian Bogost describes as opportunities that enables a player to focus on oneself, and elicit calm.⁷² The sort of menial tasks that is required of the player during *No Man's Sky*, like refuelling their spaceship or recharge the battery of their mining lasers, creates a rhythm that puts the player in a headspace where they can perform deep considerations. After a while, as you trudge from empty planet to empty planet and the grand expanse of the cosmos begins the reveal itself, all ultimately begins to feel meaningless.

The music's dejected tone and harmonies coat these moments and reinforces them with their melancholy. It delivers the notion of the vast and unfathomable emptiness of space, and produce awe and humility in the player. Through the slow and arduous journey to the centre of the galaxy, the soundtrack colours the unending nihilistic darkness of the cosmos. It gives the player moments of contemplative experiences where they can revaluate the nature of their own existence. These types of experience are rare in video games, seldom do they evoke so much humbleness and existentialism in the player. Video games most of the time offer twitchy and high energetic action rather than solemn occasions of the self-reflective variety, which *No Man's Sky* provides to the players through its sheer scale and menial gameplay aspects.

_

⁷² Bogost, *How to Do Things with Videogames*, 93.

These moments of downtime are why I think a lot of players thought the game was bad at launch. It was not an explosive space opera that many had hoped for, and the smaller, personal experience that Hello Games intended to offer the players went underappreciated amidst all the hype surrounding the game's release. Games that are not filled up to the brim with content and quests to accomplish, are not common in the game industry. In recent years there have been discussions in gaming culture of what exactly constitutes a 'game'. The sometimes pejorative term "walking simulator" has been used to describe games that eschews any gameplay type (like combat) except movement and environmental interaction.⁷³ Games like Gone Home (2013) and What Remains of Edith Finch (2017) are by many gamers deemed as not 'true' video games. Such value statements reveal what gameplay many in the gaming audience appreciate, and it define video games to a set category. Games should gratify and give you something to keep you interested constantly, the focus is on commodified gameplay and not on the experiential they can offer (I touched on this in Chapter 3). No Man's Sky is a slower and more chill experience, further in line with the walking simulators even though it has a plethora of gameplay available. It offers a private and contemplative experience.

Many science fiction games feature a galaxy the player can explore, but those are most often strategy games, like *Stellaris* (2016) and *Endless Space* 2 (2017) that features a top-down perspective of the cosmos. The galaxy is represented as a map that you can move your fleets of spaceships around in to colonize planets, and it is all seen from the "outside." The space flight simulator *Elite Dangerous* (2014) features a 1:1 replica of the Milky Way and a first-person perspective, which give a sense of grandeur to the galaxy. But neither of these examples provide the same appreciation of the grand scale of the expanse that *No Man's Sky* offers. The key difference is that you can exit your spaceship and walk around planets and moons, explore every square meter they contain and see the suns of the solar system you visit from the ground level. The music of *No Man's Sky*'s ability to make you feel small and insignificant within the cosmos really helps with the sense of scale, creating an honest representation of the vastness of space. The distorted synths and reverb-drenched guitars of

_

⁷³ For a discussion around "walking simulators", see Colin Campbell, 'The Problem with "walking Sims" - Polygon', accessed 19 October 2018, https://www.polygon.com/2016/9/28/13076654/the-problem-with-walking-sims; Nicole Clarke, 'A Brief History of the "Walking Simulator," Gaming's Most Detested Genre | Salon.Com', accessed 19 October 2018, https://www.salon.com/2017/11/11/a-brief-history-of-the-walking-simulator-gamings-most-detested-genre/.

the game's soundtrack bathes the stunning visuals of observing a planet from its moon, creating a fierce sensation of marvel and astonishment (figure 4.3).



Figure 4.3: Exploring a moon with the rings of a Saturn-like planet in the background.

The sense of scale that the audiovisual presents the player carry awe and a sense of wonder, and through its exciting colours and melancholic soundtrack, the game can evoke moments where the player can contemplate on the nature of their existence within the cosmos. However, the colour scheme, visual designs and granularity of the music create a sort of artificiality in *No Man's Sky*. It is a game after all, and not real life.

If you follow the narrative of the Atlas Path, the game reveals at the end that the whole galaxy that you have been exploring is just a mere simulation crated by an entity called Atlas. You, as the Traveller, is just a creation of Atlas to explore its computer simulation. Every other sentient being you have encountered, every creature and planet discovered, everything you ever witnessed was just part of Atlas's program. This revelation complicates the diegetic nature of the music in *No Man's Sky*, the question arises of you as the player character actually hearing all the music when you are playing.

The gritty, distorted and aesthetical nature of the music begin to make sense. The pulsing rhythm of a synth that sounded unnatural, unhuman – artificial. The overwhelming noisy post-rock that sometimes underscores the warp drive to another solar system made you feel engrossed in the experience, and now you have the sudden realization that it was by design. The jingle tune that played every time you reached a milestone such as meeting a set number of different beings or discovering a quantity of planets, that made feel like you stepped over a threshold now seems trite and arbitrary.

The revelation of the artificiality of *No Man's Sky*'s simulation breaks the 'magic circle' that Huizinga proposed. You get dragged out of the immersion. However, you do not necessarily get removed from the immersion of *No Man's Sky*, instead you are dragged out of the simulation that the game presented itself as. You always knew that you were playing a game about space exploration, but now the veil has been lifted about its pretence and its true nature has been revealed. You were in a simulation within a simulation. The game is still enjoyable after finishing the narrative, but the ontology of its universe changes. The reveal of the Traveller's existence as a program raises questions of determinism and free will. Hello Games has managed to create a hyperreality within the game, that the player gets engrossed in. The sort of experience that Jean Baudrillard would call 'more real than real'. A true "desert of the real itself". 75

While *No Man's Sky* has been updated to include many more features since its release, the small and personal journey the game originally offers when travelling through the aweinspiring grand scale of its galaxy, provides an experience where you can contemplate your own existence. Not only does the vastness of space allow for moments of silent introspection, the philosophical nature of the reality of the game also opens up questions of realities and narrative diegesis, ontology and determinism.

If you should reach the galactic core, the nihilistic notion of the meaninglessness of existence is further exasperated. After warping through the core in a splash of psychedelic colours, another whole new galaxy reveals itself. An additional new set of marvels and experiences awaits.⁷⁶

⁷⁴ Huizinga, *Homo Ludens*.

⁷⁵ Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Faria Glaser (Ann Arbor: University of Michigan Press. 1994). 1.

⁷⁶ There are 255 galaxies in total within *No Man's Sky*.

So, after all this exploration, these discoveries, and the knowledge of the nature of reality of the game. The best thing to do when playing *No Man's Sky* is to load up the game, let it wash you with the visuals of all the solar systems in the galaxy, get enveloped by 65daysofstatic's soundtrack, and enjoy the simulation.

5. Bloodborne: Isolation, Dread and Insanity in Cosmic Horror

This chapter discusses certain aspects of the music in horror games, but before we can delve into that it would be beneficial to go through the history of horror in games.

The allure of the frightening and unsettling have long been a considerable part of video game history. The successes of classic horror games such as *Sweet Home* (1989) and *Alone in the Dark* (1992) show that even back when graphical fidelity, gameplay capabilities and sound quality were substantially less advanced, there was still an interest in getting spooked through the video game medium. While horror was still a niche genre in video game's infancy, that would later change with the rise of the survival horror games of the late 1990's. *Resident Evil* (1996) and *Silent Hill* (1999) cemented themselves through their commercial and critical successes as essential series in the video game canon, that experienced a slew of equally favourable sequels. Inspired by the earlier horror games mentioned, they codified the gameplay that would define the survival horror genre; being alone, isolated in a hostile locale with limited supplies – like ammunition and items that heals the player character – and deemphasized violence in favour of puzzle solving and exploring different subject matters.

The early 2000's followed with games as *Fatal Frame* (2001), *Obscure* (2004), *Siren* (2004) and handful of sequels to *Resident Evil* and *Silent Hill*, but by the middle of that decade survival horror's popularity declined and eventually petered away. The release of *Resident Evil 4* (2005) shifted the genre's emphasis on lack of combat in favour of running away or avoiding enemies, when it changed the formula of the *Resident Evil* series into more action-oriented gameplay with focus on shooting and defeating enemies. Together with the success of *F.E.A.R: First Encounter Assault Recon* (2005) – a first-person shooter focused on cinematic action with moments inspired by Japanese horror – this spelt the end for the survival horror boom that started in the 90's.

A radical change had occurred in the game industry, and now publishers and developers were creating games with some horror elements added, rather than horror games themselves. Popular action horror games in the latter half of the decade such as *Dead Rising* (2006), *Bioshock* (2007), *Dead Space* (2008), *Left 4 Dead* (2008) and *Metro 2033* (2010) were more concerned in exhilarating gameplay and power fantasies than the sense of helplessness invoked in earlier horror games. The truly scary games, without high-octane action, were deemed uncommercial – or even completely dead – by the big publishers in gaming.

However, the rise of the indie scene in game development that occurred during the early 2010's has reignited the popularity of traditional horrors games. Two games that were developed by indie developers, *Amnesia: The Dark Descent* (2010) and *Slender: The Eight Pages* (2012), especially saw massive success after several popular YouTube gaming personalities played them on their channels and spread exposure of these two games to their fans. This re-emergence of horror games in the indie scene has made it so that horror became a significant part of contemporary gaming culture. These new games brought back many of the elements that made the early horror games so effective; a deemphasis on combat, creating highly compelling settings and atmospheres, and a focus on psychological horror.

Musically, horror video games draw on a lot from the musical tradition of horror films. The music is often concerned with creating ominous atmospheres, and a sense of dread and isolation. Most horror games feature a protagonist alone – sequestered from others – in a hostile location, trying to uncover a deeper plot, or even just to survive the horrific encounters they have stumbled into. In the assigned task of creating music that help add these sentiments to those visuals and gameplay, the composers of video game music heavily build upon the modernist avant-garde topoi that horror film music incorporated into itself from the chamber hall music of the twentieth century. Atonality, unresolved dissonances and timbral experimentation have become characteristically stylistic qualities of horror music. These musical devices are highly effective at creating a sense of "otherness" in the music, particularly because they break away from the traditional Western music's heritage of harmonic and melodic resolution. Sudden bursts of musical stingers can emphasize jumpscares and the elongated notes of a string-quartet can create suspension in a scene. It is beneficial to examine what makes certain musical scores so effective at creating uncomfortable feelings in the listener. Neil Lerner describes the relation between music and the other components of horror films in this way, "frightening images and ideas can be made even more intense when accompanied with frightening musical sounds, and music in horror film frequently makes us feel threatened and uncomfortable through its sudden stinger chords and other shock effects,"⁷⁷ which is why I want to focus on horror this chapter.

The music in horror video games features much of the same connotations of isolation and dread in their music, the score of *Silent Hill 2* (2001) by Akira Yamaoka – with its industrial, metallic dissonant sounds and intertwining melancholic rock tracks – is a good example of

⁷⁷ Neil William Lerner, 'Preface: Listening to Fear/Listening with Fear', in *Music in the Horror Film: Listening to Fear*, ed. Neil William Lerner, Routledge Music and Screen Media Series (New York: Routledge, 2010), ix.

how the music of a game can be a pervasive aspect and key in the creation of atmosphere in a game. A common subject matter of modern horror games is the mental state of the player character and the following deteriorating effects on the psyche after it is exposed to trauma. It is particularly this psychological part of horror games, in conjunction with dread and isolation, I want to deliberate and how the music within these games represents and enhances them, especially regarding the subgenre cosmic horror.

Cosmic Horror

The subgenre of horror fiction that can be referred to as cosmic horror has its genesis in the writings of famous American author Howard Phillips Lovecraft from the early 1900's. He is so instrumental to the popularization of this type of horror stories that the genre is often, in common parlance, called Lovecraftian horror. Inspired by authors such as Edgar Allan Poe, Algernon Blackwood and Lord Dunsany, Lovecraft during his lifetime created philosophically nihilistic short stories that dealt with themes of misanthropy and insanity. Common topics in his fiction are forbidden knowledge, ancient cities and pre-human entities. His protagonists often meet with indescribable celestial beings beyond human comprehension, like in the stories *The Call of Cthulhu* and *At the Mountain of Madness*. Often, they would go mad after gaining the knowledge of the existence of these beings. The realization that reality hides as a thin veil the true nature of the cosmos strains the mental state of the characters, and showcases Lovecraft's nihilistic belief that, in the grand scheme of things, humans are insignificant. The cosmic beings in his fiction do not care about humanity or they prey on them. He posits a lack of a teleology of the universe created with humanity in mind. Many of his stories are set in New England – where he lived most of his life – but depicts fictional towns and cities like Arkham and Innsmouth, and settings are often filled with thick fog and pungent odours much like the gothic fiction he was inspired by. His prose is full of adjectives like 'stygian', 'putrid' and 'eldritch' which give his writing a texture where you can almost smell what he describes. It should be stated that some characterizations of certain groups of people elicit problematic factors with his writing. While they are not necessarily explicable racist, they do reveal Lovecraft's white supremacist worldview and can be uncomfortable to read in our time.⁷⁸ Still, there is no denying Lovecraft's influence on

_

⁷⁸ David Barnett, 'HP Lovecraft: Horror Visionary, Reactionary and Racist', The Independent, 27 June 2017, http://www.independent.co.uk/news/long_reads/hp-lovecraft-horror-writer-racist-cthulhu-remember-novels-fiction-fantasy-aliens-gods-a7810151.html (accessed September 25, 2018).

horror fiction throughout the twentieth century. We can observe certain works in popular culture continue Lovecraft's themes of unfathomable beings or supernatural forces beyond comprehension disturbing humanity. The work of manga artist Junji Ito deals with forces unknowable to humans, especially his seminal *Uzumaki*, where the denizens of a town are being plagued by a supernatural curse involving spirals. The science fiction horror film *Event Horizon* tells the story of a crew of a spaceship that, in the proximity of a black hole, opens a gate to "hell" and unleashes *something* onto the spaceship. What horror exactly constitutes as "Lovecraftian" is tricky to define humans this thesis I will state it as horror containing feelings of dread, unfathomable beings and a bleak-world view in which humans do not matter. Lovecraft's fiction has given a significant contribution to horror over the years by stirring the imaginations of creators wanting to explore cosmicism.

The short stories of Lovecraft have had profound influence on video games as well. Not only by adaptions of his work such as The Call of Cthulhu: Dark Corners of the Earth (2005), but mechanically and thematically as well. Insanity and psyche are common topics in video game horror and are often entwined in narratives and gameplay. The cult classic *Eternal Darkness*: Sanity's Requiem (2002) distinguished itself from other games from that period with its 'sanity effects'. In that game, if a character's sanity is strained, certain occurrences would happen that were aiming to bother the player. Some effects were minor such as skewing the camera angle and unsettling noises. More severe happenings could be entering through a door to find yourself within a room with Non-Euclidian geometry to then later realize you never exited the room you supposedly left, visions of bleeding on the walls or even a sudden death of the avatar. Additionally, the game could sometimes break the fourth wall by faking technical problems with the game console or "turning down" the volume on the television. The monsters in Silent Hill 2 are representations and personifications of the different aspects of protagonist James Sunderland's guilt and psyche. Contemporary horror games include similar gameplay mechanics or themes, Amnesia also have sanity meter that the player needs to manage if not to face visions of horrific imagery. The plot of *Layers of Fear* (2016) revolves around an unnamed painter's descent into madness as he attempts to create the perfect painting. In a similar vein, the plot of P.T. (2014) deals with cyclical mental anguish caused by alcoholism and disintegrating family bonds. Insanity is not a patented feature of

_

⁷⁹ Junji Itō, *Uzumaki: Spiral into Horror* (Shogakukan, 1998).

⁸⁰ Paul W.S Anderson, Event Horizon (Paramount Pictures, 1997).

⁸¹ For a discussion on the troubles of defining Lovecraftian, see Carl H. Sederholm, 'H. P. Lovecraft, Heavy Metal, and Cosmicism', *Rock Music Studies* 3, no. 3 (September 2016): 266–80, https://doi.org/10.1080/19401159.2015.1121644.

Lovecraft, but how some games deal with madness has a distinct semblance to his fiction. The game Slender: The Eight Pages has the protagonist go madder every time they collect one of the titular pages, which is expressed in the game with more severe audiovisual glitches and increased possibility of getting caught by game's antagonistic force – Slenderman. Amnesia's plot revolves around the effort to try and figure out the reasons why Daniel, the protagonist, took the decision to erase his memory. Both these games mimic Lovecraft's theme of forbidden knowledge that drives one mad when acquired. Dead Space deals with an artefact left by an unknown entity found on an alien planet, turning the crew of a spaceship hysterical and to murder each other, and later the corpses turn into terrifying horrors called Necromorphs by the design of the same entity. Even if we look at some non-horror games we can find the notion of cosmic horror, such as *The Legend of Zelda: Majora's Mask* (2000) where the mask in question is created by an ancient tribe and imbued with unquantified power beyond understanding. The antagonist of the game, Skull Kid, begins to drag the moon down to the earth with the mask's magic in an attempt to destroy the world, and to stop this happening the player has to rescue and get the aid from four gargantuan and godlike creatures known as the Giants, whose enormous size make them able to stop the descending moon with their bare hands. The classic arcade game Space Invaders (1978) has an overwhelming sense of inevitable oblivion and futility as the alien attackers slowly increase their pace of encroachment until you, at last, are not able to defend the Earth anymore. These sentiments are particularly enhanced by the descending four notes that is repeated over and over with increased tempo as the space invaders come closer.

As we can see from this short survey into the topic of video games and cosmic horror, games can deal with unknowable horrors outside of human imagination that influence mankind, that drive them mad with knowledge of the truth of the cosmos, and exhibit an utter lack of hope in that humans can alter their destinies in the face of nameless gods. The musical example brought forth by *Space Invaders* provides a good starting point in the musical question I want to ponder on in this chapter. How music can emphasize the themes and sentiments inherent in cosmic horror. There are certain games that are good at eliciting this type of horror through their music. *Darkest Dungeon* (2016), a dungeon crawler where you send mercenaries into different assignments and you must maintain their mental well-being or else they might go insane, has a marvellous soundtrack full of throbbing rhythms and a mix of orchestral and synthetic sounds that really create a notion of isolation and dread. *Sunless Sea* (2015), where you take the role of a captain of a ship in a mysterious ocean, similarly has great music that

provides these sentiments. While these two games are fine examples of Lovecraftian horror, I do not think they express the themes and atmospheres in cosmic horror that well through their soundtracks. So, I have chosen to explore cosmic horror through a recent game whose music I believe best represents Lovecraft's legacy.

Fear the Old Blood

FromSoftware is a Japanese video game developer that is best known for being the creators of *Demon's Souls* (2009) and the *Dark Souls* (2011-2016) games, which comprise what is commonly referred to as the *Souls* series. Directed by Hidetaka Miyazaki, these are exceedingly hard action-roleplaying games in a dark fantasy setting that expects the player to fail and die a lot before they gain any mastery of them. The slogan often used in advertisement of these games is "prepare to die," which highlights the borderline masochistic notion of the punishment found in the gameplay. Known for tough and challenging bosses and esoteric lore delivered piecemeal through vague item descriptions, the *Souls* series has become classics within contemporary gaming culture. Particularly with a certain section of the hardcore gaming crowd who often mockingly asserts to players asking for advice that they just need to get good at the game, or as they say "git gud." However, FromSoftware took this gameplay formula away from a dark fantasy setting to a gothic cosmic horror one with the release of *Bloodborne* in 2015.

Bloodborne is a game that, much like the Souls series, places a considerable focus on difficult boss battles. The gameplay is rather similar as well, however Bloodborne's combat features a more offensive and fast-paced approach that engenders less passivity and encourages the player to engage more aggressively with the enemies – compared to the other Souls games. The game also has what the developers call a Rally system where if the player is hit they can – within a small window of time – regain some of the lost health by attacking an enemy, which gives Bloodborne a risk-and-reward aspect to its combat. Even with a more fast-paced combat system that the other Souls games, every attack the player activates has a weight to it, a sense of deliberation behind every swing. There is a wound-up time before the player avatar makes its attack, which opens the possibility of being hit by an enemy. This gives the combat in Bloodborne the necessity of consideration before you make an attack. When enemies are slain they drop, in addition to certain randomized items, Blood Echoes; a currency which is used to buy new weapons, armour or to level up the player character. The player can equip

two different weapons, each with unique attack speed, damage and range, and additionally use an assortment of items such as Rifles, Blunderbusses, Molotov Cocktails, Throwing Rocks and Lanterns. There is a multiplayer component involved where you can choose to open yourself up to other players, who then can come into your game session and either help you in your quest or attack you in an attempt to kill you. Other players can also leave notes with cryptic hints about traps, treasure or different other tips, and sometimes a spectral visage that shows how another player died may appear to warn you to proceed with caution. *Bloodborne* also has its own sanity system in the form of Insight, which represents the depth of inhuman knowledge the player has. It functions as a currency that can be used to summon other players into the player's world or to buy extra potent items and armour. When accruing Insight, the player can start to hear whispers.

What really sets *Bloodborne* apart from other games is not just its gameplay. The game features a striking gothic aesthetic that really elicits atmospheres in the works of gothic literary classics such as Bram Stoker's *Dracula* and *The Fall of the House of Usher* by Edgar Allan Poe. The game's location is the city of Yharnam, a labyrinthine and imposing ancient city with Victorian and Gothic architecture. There is pervasive heavy fog in the streets and a shimmering full moon looms above the sprawling city (shown in Figure 5.1).



Figure 5.1: Yharnam illustrates the commonly used gothic atmosphere in cosmic horror games.

The story begins long before the events of the game. At one in point in time, the Healing Church of Yharnam discovered 'The Old Blood', a substance extracted from an ancient being found deep within the ruins of the metropolis, and the Church subsequently began to transfuse this liquid into the citizens of Yharnam after it was revealed to have healing properties. However, these blood ministrations would later turn those who had injected the Old Blood into themselves into lycanthropic beasts that would terrorize the city. To keep this under control and hidden from the general populace, the Church established The Hunters; a group of trained individuals whose task it was to hunt down and kill these beasts every full moon when the transformation of the infected occurred, or in what would later be called The Night of the Hunt. The rumour of a substance that could heal any ailment spread throughout the lands and many came to Yharnam to seek this miracle cure over the years.

When the player character enters the story decades later, the city has fallen to disarray with no more pretence of hiding the effects of the Old Blood. Most of the citizens are in various stages of the transformation, driven mad and skulking around the streets looking for prey. The player arrives at Yharnam to seek the fabled cure in hopes of curing an undisclosed disease. A mysterious figure offers to give the player character some of the blood in return that they partake in the Hunt as a new Hunter, and so the player is dragged into the narrative of the game. At the start of *Bloodborne*, the player character is extremely weak and almost anything can kill them with a few attacks. The early game involves learning the combat mechanics and trying to overcome and defeat the enemies to get Blood Echoes, so one can level up the avatar

Bloodborne features two distinct modes in its gameplay. The first one is to traverse around in Yharnam, exploring the maze-like architecture of the city and killing lowly beasts. These sections are comparatively calm, yet they still need the player to be acutely aware of any unseen enemies or traps, lest they fall prey to the skulking beasts. The second mode of gameplay is the boss fights. Here the player faces horrendous and grotesque monsters in secluded and closed-off sections who can kill the player if they make one little mistake. To defeat these monstrosities the player needs to learn their attack patterns, movements and weaknesses, but to uncover all of those require many attempts and trial-and-error from the player. It is this dichotomy of gameplay I want to touch upon in this chapter, and especially how the music enhances these different sections of gameplay.

Dreadful Noises

When roaming around Yharnam there is a lack musical content. Only the noises of the city and the character's own sounds. Roaring fire from braziers and torches, ominous church bells, howling winds and distant bellows from beasts far away fills the soundscape. When walking around the streets, one can hear noises from those inside certain buildings hiding and trying to weather out the Night of the Hunt – an acousmêtre fleshing out the sonic landscape of the game. The moaning of those not yet transformed but still driven insane by the Old Blood echoes through the streets. This lack of music resembles the one found in Breath of the Wild (chapter 3), but misses the soothing and calming noises of nature and the musical ornamentation to it. The serene sounds of fauna and flora is replaced by a metropolitan hellscape. This eerie silence builds up suspense, like there is something awful bound to happen at any time. One dreads to turn around the next corner as if there is a certainty that something truly horrific exists there. A Gamasutra article focusing on gathering empirical data through biometrics to find out what makes a game scary, revealed that 'implied danger' from audible and unseen enemies was a key cause for scariness rather than the confrontation with the monster itself, 82 and in the same way the wails of distant creatures in Yharnam create suspense when traversing the city.

The fact that the unplagued denizens of Yharnam will not let you in if you knock on their doors, lends a certain feeling of isolation. The soundscape embellishes this feeling of being alone in your quest with no one to help you. There is only you alone with the ravaging beasts and maddened humans of Yharnam over the duration of the night. The fleshy thud of successfully hitting a beast with your weapon and the subsequent commotion when it hits the ground, are the only reprieve in this gothic nightmare. Other than that moment of reinvigoration, one must listen to the maddening sounds of Yharnam and the bloodlust of its citizens, with the overwhelming sense of isolation that brings.

William Cheng wrote about the effectiveness of minimalism in sound design and its disturbing results in horror games. He posits that a gameworld's soundscape can transgress the game's status as an idle medium, which he describes like "...its grotesque soundscape manifests as a sentient antagonist, an invisible yet omnipresent force that seethes and convulses as it plays mind games with the player." The same can be said of Yharnam's eerie

 ⁸² Joel Windels, 'Gamasutra - Scary Game Findings: A Study of Horror Games and Their Players', Gamasutra,
 2011, https://www.gamasutra.com/view/feature/6480/scary_game_findings_a_study_of_.php?print=1.
 83 William Cheng, Monstrous Noise: And the Aesthetic Economies of Fear (Oxford University Press, 2013),

bttps://doi.org/10.1093/oxfordhb/9780199757640.013.016.

soundscape; it is highly effective at creating a sense of underlying dread in its gameworld during play. The noises of the city travel out of the television and into your living room, extending Yharnam's confines from within the gameworld into your own bodily proximity. You can locate the direction of sound source with a degree of certainty. This blurring of the realities of Yharnam and your own establish a connection between the two that immerse you into the gothic horror of *Bloodborne*.

Most musical content in *Bloodborne* occur during the boss fights, and are intensely fierce orchestral pieces fitting the monsters you try to defeat. When engaging bosses in the game, you are enclosed by a magical fog that disables the possibility to run way, so you are a stuck with whatever monster you are trying to vanquish; either it or the player must die before the encounter is over. To better detail how the music of these boss battles is experienced I want to examine a specific piece that reappear multiple times during the game, namely "Cleric Beast." This track is playing during two different boss encounters; the titular Cleric Beast and Vicar Amelia, members of the Church of Healing corrupted by the Old Blood into giant lupine monsters with horrendous horns, extended arms and enormous claws (pictured in figure 5.2)



Figure 5.2: The Cleric Beast exemplifies the nightmarish monster design in *Bloodborne*.

Both these abhoriations shriek constantly with cries that sound like horrid agony, like their very existence is a never-ending state of pain and torture – the transformation to beasthood excruciating. When either of these bosses are engaged in combat, the music is introduced by a low growly and scratchy female voice groaning before a harsh choir starts the piece in full. The choir can be described as a grisly perversion of a Gregorian chant, revealing the connection to the clergy these bosses have. If one listens closely, it is possible to hear a warped and beastly voice within the choir. When the chant is finished, sonorous strings and brass enters the soundscape. The strings play five staccato notes over a triplet rhythm and the horns embellish this with its own off-beat countermelody. All this increase in severity until the high violins begin the main melodic section of the piece. The melody is frenetic and keeps escalating the ferocity of the music, and is later joined by more horns playing elongated and frightening notes underneath the melody. The music reaches a climax, then it calms down and the choir is reintroduced, but this time the ghastly voice blended in with the other voices is more prominent. When the melodic part returns, the male singers of the choir continue with their own countermelody. Everything blends into a sort of violent cacophony of orchestra and choir by the end, and when the piece hits it final climax, the music starts over and repeats itself. This piece loops until either the player dies, or the monstrous horror is vanquished, as is often the nature of video game music. As long as the fighting is continued, this overwhelming wash of music maintains the consternation of that dreadful situation.

The realization that it is impossible to escape from these boss battles (at least without a special item), in conjunction with the ferocity of the music and the shrieks of these monsters, creates a feeling of intense terror and isolation in the player. After a while of playing, when walking around Yharnam in total musical silence and that stillness is suddenly interrupted by music, you panic as you have understood that music means that there is a boss fight.

Sometimes just entering a random room can trigger a boss battle without you knowing it beforehand. This feeling of dread is intensified by the intensity of the music; the timbre of every instrument sounds almost unnatural for an orchestra because of the strength of the notes. "Cleric Beast" showcases the qualities that create unnerving feelings of wanting to get away from something but being unable to. The ghastly voice within the choir is a subtle, but highly effective method of giving the player uncanny notions of there being *something* wrong with what is heard. The music signals to you that you need to face whatever abhorrent creature you have encountered or perish. The primeval flight-or-fight reflex is activated. The music tells you that you face an overwhelming foe with low chance of surviving.

It becomes obvious after fighting a few bosses that the music is conceived to stir feelings of terror and dread, rather than the eerie unsettling creepiness common in horror media; to substantiate the direful in the terrifying monstrosities encountered. K.J Donnelly posits that music in horror tend to retain a visceral focus on brute effect and gaining a reaction from the audience, as music's role in media is often sensual rather than necessarily of communicative nature. With its violent orchestra and the constant horrifying shrieks of the bosses, the sound team behind *Bloodborne*'s soundtrack has managed to evoke the primal feelings of dread one could experience when faced with unimaginable horrors. The looped nature of the music during boss fights, locks the player in perpetuity to a state of constant consternation and anxiety. Claire King proposed that looping music in horror can create a "struggle against the continuity of time...", so and in that sense, the repeating nature in the score of *Bloodborne*'s boss fights creates the experience of being stuck in a never-ending nightmare with monsters of unconceivable abominations.

Ending the Nightmare

The player can escape the nightmares of Yharnam by travelling to Hunter's Dream, a pocket universe which functions as a hubworld where you can buy items and upgrade weapons, armour or the player character. The Dream is a replica of an old Victorian-styled workshop with surrounding gardens, fountains and floral arrangements. Beyond the confines of the Dream one can see endless clouds with pillars arising from them. It is inhabited by two friendly characters: Gehrman, the First Hunter, who functions as a mentor figure for the player; and The Doll, a magically transformed toy made into a human-sized companion by some sort of eldritch spell, who level up the player if they bring her enough Blood Echoes. The dichotomy between the nightmarish Yharnam and the Hunter's Dream should be obvious. The Dream offers a respite from the monsters and the terror they accompany; a chance for the player to take a short breath and create a new course of action to proceed through the game.

The ontology of the Dream is unclear, questions like who created this other reality and what are its functions are only given answers by esoteric and speculative sources in game. The

_

⁸⁴ K. J. Donnelly, 'Hearing Deep Seated Fears: John Carpenter's The Fog (1980)', in *Music in the Horror Film*,

⁸⁵ Claire King, 'Ramblin' Men and Piano Men: Crises of Music and Masculinity in *The Exorcist*', in *Music in the Horror Film*, 120.

Hunter's Dream resembles Lovecraft's Dreamlands which was featured or mentioned in many of his stories, a vast dimension that can only be entered through dreams. To enter the Hunter's Dream the player needs to rest at specific lanterns in Yharnam, and it is implied that the player character goes to sleep to enter this pocket dimension.

Another facet that separates the Dream from Yharnam, is that this area features a musical theme that is played when inside it. The theme to the Hunter's Dream begins with a soft and barely audible high-pitched violin section that holds the same pitch throughout extended periods during the piece. The violins are joined by a beautiful and lustrous cello, who provides much of the melodic material in the piece. The cello weave melancholic notes together using legato and soft articulation. The melody dances around the violin pad slowly and soothingly. Later in the piece one can hear a distant reverberation of something that cannot be defined, and the violins starts to shift their pitch up chromatically and incrementally giving a sense of uneasiness in the music. At the midway point of the piece a female voice joins in, harmonizing with the violins in extended notes that almost leaves the singer out of breath. The singer use vibrato at the end of their notes, giving a sense of exasperation in the tonal quality of their voice. The timbre of the female vocal resembles that of the speaking voice of The Doll, complicating the music's non-diegetic nature. The same ghastly voice effect used in "Cleric Beast" can be heard in certain parts of the song. Donnelly states that playing around with micro-pitches creates sense of disharmony in the music which gives it a disturbing effect. 86 All these musical devices provide what should be the soothing music of Hunter's Dream an uncanny quality; they reinforce the notion that this place is just a dream.

The fact that this is one of the few non-hostile places in the game where there is music also creates an eerie atmosphere. The silence that the player has become accustomed to becomes broken in this place, creating a sense of there being something wrong. Mark Fisher described this aspect of eerie as a 'failure of absence', which can be described as the sensation of wrongness that can be experienced when there is something present when there should be nothing.⁸⁷ The presence of music in the Dream further enhances its dreamlike nature, but the incremental chromaticism in the violins and the acousmatic ghastly voice also provides an underlying feeling of there being something *wrong*.

_

⁸⁶ Donnelly, 'Music in the Horror Film', 163.

⁸⁷ Mark Fisher, The Weird and the Eerie (London: Repeater Books, 2016), 61.

Lovecraft's story *The Music of Erich Zann* tells the story of a narrator who finds himself in a pocket dimension manifested as the street Rue d'Auseil. He lives in a building on the street and one of the other tenants is the titular Erich Zann, a cellist, who lives in the apartment on the top floor. Every night the narrator hears Zann play music from upstairs, describing it as strange melodies never heard before. The narrator later befriends Zann and learns that he has discovered melodies, harmonies and rhythms of a seemingly otherworldly nature. Zann plays this music every night to keep away unknown horrors from his apartment. One night, Zann fails to keep the unseen creatures at bay and is seemingly killed, the narrator runs away and can never find Rue d'Auseil again or even anyone who has ever heard of the street.

The reason I bring up this story is that at the halfway point of *Bloodborne*'s progression (or by gaining enough amounts of Insight), it is revealed that ancient celestial and godlike beings have been manipulating the events of Yharnam. The veil is lifted, and the game goes from being a gothic horror to completely Lovecraftian. The full moon turns blood red in the night sky, and the Great Ones, as they are called, and their minions become visible to the player. What their intents are or what they want to achieve, are incomprehensible to humans.

The music in the Hunter's Dream changes after this revelation, to a piece called "Moonlit Melody." Sonically it is quite similar the Hunter's Dream's theme, but the prominence of the melodic instruments has switched from the cello to the female voice. Now the singing is in the forefront, and the cello appears to be trying to break through before it is overwhelmed by the female voice and put back where it came from. Thematically, this mimics *The Music of Erich Zann* in that the cello in the Hunter's Dream theme has kept the unknowable horrors away (also that both occur in a pocket dimension). This is foreshadowed in the chromaticism of the violins and the ghastly otherworldly voice hiding behind the thin façade of the female singer. But this musical change also signifies the player character's creeping madness as they gain more Insight of the events of Yharnam. The lanterns that the player can use to enter the Dream begin to sing in an uncanny manner, and it is possible to hear babies cry in the distance.

The notion that the music within the Hunter's Dream thematically represents repelling some unknown evil, and the breaking of the player character's sanity, is solidified when revealing the true end boss of *Bloodborne*. If certain criteria are met, it is possible to summon and face the Moon Presence within the Hunter's Dream at the end of the game – one of the Great Ones. This horror is a tentacled and skeletal monster that resembles the vague descriptions

Lovecraft had of his eldritch abhorrations. It thrashes and skitters around in an abnormal manner, and creates a guttural growl that rings through the Hunter's Dream. The music of this boss fight reveals that the melody found in "Moonlit Melody" is the Moon Presence's theme. The opening bars of the Moon Presence's theme begins with the melody from "Moonlit Melody" before it erupts into an extremely ferocious orchestra with a monotonous throbbed rhythm underneath. Rumbling brass blow deep notes, exasperating the dread of being in the face of a nameless god. The choir returns but this time every other chord they sing end with an upwards atonal slide. Strings that resemble the music from the famous murder scene in Alfred Hitchcock's *Psycho* dances around like something from the avant-garde. The immensity of the music is overwhelming during this boss fight, in conjunction with the atonal aspects within the music, it feels like the purest representation of the terrifying and maddening experience of battling a being of unimaginable horror. The pulsating rhythm of the music strengthen the feeling that an impending mental collapse could occur at any moment, that the heart will burst and the body falter. You have no chance to compete with the insurmountable power of this being. The music truly feels like the end of a long arduous sludge through a dreadful hellscape, where you can end it all by defeating this one last foe. When the Moon Presence in slain, the screen is filled with the message "Nightmare Slain" compared to the "Prey Slaughtered" that usually fills the screen after a boss has been defeated, further emphasizing the end of the dreamlike nature of the Hunter's Dream and the nightmarish experience of Yharnam.

The music of *Bloodborne* is extremely effective at creating terror, dread and anxiety in the player during the boss fights. The soundtrack of the total experience, with the visuals and frenetic gameplay, really gets the player immersed in the world of Yharnam. The violent intensity of the musical pieces and the high stakes of failure in the gameplay really evoke the feeling of dread when facing the bosses. The player feels trapped alone with the beasts you are trying to vanquish. The music really portrays the hopelessness and isolation felt fighting these beasts one on one. The non-musical sections create anticipation and uneasiness leading up to the boss fights with its sound design, and together the music and sound augment the visuals and gameplay of *Bloodborne*, and deliver an aural component to the game that establishes the feeling of being alone in a frightening world.

The atonality, velocity and use of acousmatic non-diegetic voices construct a sense of looming insanity and 'otherness' in the music. At least as the game progresses and the use of these musical devices are heightened to represent the increasing madness of the player

character; as they dwell deeper into the forbidden knowledge of the Great Ones, the music changes to intensify that. As the game progresses to its end, the music connotates the increasingly distraught predicament the player character finds themselves in, and in the end represents the resulting insanity of the experience of dealing with incomprehensible beings.

The sheer terror that the music of *Bloodborne* arouses and the sense of lunacy within some of the tracks, are why I think *Bloodborne* best represents Lovecraft musically. There are many other Lovecraft-inspired games with notions of dread and madness in their music – like *Darkest Dungeons* and *Sunless Sea* – but none of them encapsulate the kind of horror that Lovecraft crafted so well as *Bloodborne*. The music accompanies the horrendous monsters FromSoftware have created for Yharnam exceedingly well, giving them a soundtrack that matches their horrific and frightening designs.

Bloodborne is a great representation of Lovecraft's horror with its music that creates feelings of isolation, dread and insanity that really immerses the player in the nightmarish world of Yharnam.

6. Conclusions and Closing Remarks

Throughout the process of writing this thesis I have learned that the music of video games is extremely varied. Narrowing down games to examine was difficult for me because I wanted to analysis so many of them. However, ended up with those I felt gave me the best options of subjects to cover. I have presented different topics based on my interpretations of the play experiences I had.

There are some topics I think would be interesting to look into in regarding video game music, like how the music can be gendered or how they portray notions of group identities for fictional communities or characters. This is something I will look into later.

My findings and interpretations have been discussed in the different chapters, but there are somethings that became clear to me that was out of the scope of this thesis, which could be of interest to research later.

For instance, the looping nature of music can be really effective at immersing someone into certain game situation, and the same can be said for rhythm. Pulsing rhythms can really give the player a feeling of anxiety and a drive to continue on with their task, or the lack of a rhythm can create soothing and calming atmospheres. Rhythm have been researched extensively by musicologist. However, even though there have been done much studies on the modular and dynamic elements of video game music and Isabella van Elferen's ALI model is a good attempt at revealing what triggers create musical immersion, there seems to be not that much discourse on how the rhythmical and temporal aspects of video game music affect the immersion of games.

I also found that radio and pre-recorded messages are used as a communication method in a lot of games, which I thought was interesting. The disembodied voices they offer create a distinct atmosphere of loneliness and separation in certain games. It would be interesting to delve into the history of those in video games and how they became a video game trope, and theorize around that.

A facet of horror music that came to my attention, is the fact that even though horror film has developed a characterizable language for representing mental illness (skewer camera angles, disembodied laughter), I could not find that much discussion on how mental illness is represented in the music. There have been done a lot of research in the connection of mental

illness and artists in popular musicology, but not excessively on how music represents these in media, other than the horror film traditions of borrowed from modernist avant-garde music.

The last thing I thought was fascinating was the fact that a lot of video games dealt with old, antique and destroyed ruins of civilizations. The three games I discussed in this thesis all had a variation of old, decrepit rubble from ancient and mighty civilizations that somehow disappeared with time. I think this fascination with old empires and kingdoms, shares similarities with the phenomena 'hauntology' – a cultural longing for a lost future that never came, that are starting to get interest by certain critical theorists. Hauntology is the notion, that were popularized by Mark Fisher⁸⁸, that we are haunted by the past; we recycle cultural artefacts and stories instead of creating new futures to strive for. The fascination with extinct civilizations falls into that category.

In finishing this thesis, I have gained so much more knowledge about different subjects I never thought I would have. I understand music, audiovisuality and media in a completely different way than way I started my master's degree.

These past few years have been absolutely amazing for me. I have learned so much, yet so little at the same time. A whole world of academia has revealed itself to me and I cannot wait to dig further into it.

⁸⁸ Mark Fisher, Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures (Alresford: Zero Books, 2014).

Bibliography

- 'About'. Ludomusicology. Accessed 15 June 2018. http://www.ludomusicology.org/about/.
- Abrams, J.J. Star Wars: The Force Awakens. Walt Disney Studios Motion Pictures, 2015.
- Anderson, Paul W.S. Event Horizon. Paramount Pictures, 1997.
- Barker, Hugh, and Yuval Taylor. Faking It: The Quest for Authenticity in Popular Music. 1st ed. New York: W. W. Norton, 2007.
- Barnett, David. 'HP Lovecraft: Horror Visionary, Reactionary and Racist'. The Independent, 27 June 2017. http://www.independent.co.uk/news/long_reads/hp-lovecraft-horror-writer-racist-cthulhu-remember-novels-fiction-fantasy-aliens-gods-a7810151.html.
- Barthes, Roland. 'The Death of the Author'. In *Image Music Text*, 142–48. London: Fontana Press, 1977a.
- Baudrillard, Jean. *Simulacra and Simulation*. Translated by Sheila Faria Glaser. Ann Arbor: University of Michigan Press, 1994.
- Beard, David, and Kenneth Gloag. *Musicology: The Key Concepts*. Second edition. Routledge Key Guides. New York, NY; Abingdon, Oxon: Routledge, 2016.
- Bogost, Ian. *How to Do Things with Videogames*. Electronic Mediations 38. Minneapolis: University of Minnesota Press, 2011.
- Bordwell, David, and Janet Staiger. 'Since 1960: The Persistence of a Mode in Film Practice'. In *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960*, by David Bordwell, Janet Staiger, and Kristin Thompson, 367–77. London: Routledge, 1985.
- Boym, Svetlana. The Future of Nostalgia. New York: Basic books, 2001.
- Brandon, Alexander. *Audio for Games: Planning, Process, and Production*. Berkeley, CA: New Riders Games, 2005.
- Calleja, Gordon. 'Immersion in Virtual Worlds'. In *The Oxford Handbook of Virtuality*, edited by Mark Grimshaw, 222–37. Oxford: Oxford University Press, 2014.
- Campbell, Colin. 'The Problem with "walking Sims" Polygon'. Accessed 19 October 2018. https://www.polygon.com/2016/9/28/13076654/the-problem-with-walking-sims.

- Cheng, William. *Monstrous Noise: And the Aesthetic Economies of Fear*. Oxford University Press, 2013. https://doi.org/10.1093/oxfordhb/9780199757640.013.016.
- ——. Sound Play: Video Games and the Musical Imagination. Oxford; New York: Oxford University Press, 2014.
- Chion, Michel. *Audio-Vision: Sound on Screen*. Translated by Claudia Gorbman and Walter Murch. New York: Columbia University Press, 1994.
- Clarke, Nicole. 'A Brief History of the "Walking Simulator," Gaming's Most Detested Genre | Salon.Com'. Accessed 19 October 2018. https://www.salon.com/2017/11/11/a-brief-history-of-the-walking-simulator-gamings-most-detested-genre/.
- Collins, Karen, ed. From Pac-Man to Pop Music: Interactive Audio in Games and New Media. Aldershot, Hampshire, England: Ashgate, 2008.
- ... Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design. Cambridge, Mass: MIT Press, 2008.
- ——. Playing with Sound: A Theory of Interacting with Sound and Music in Video Games. Cambridge, Massachusetts: The MIT Press, 2013.
- Collins, Karen, Bill Kapralos, and Holly Tessler, eds. *The Oxford Handbook of Interactive Audio*. Oxford: Oxford University Press, 2014.
- Collins, Karen, Bill Kapralos, Holly Tessler, Natasa Paterson, and Fionnuala Conway. 'Engagement, Immersion and Presence'. In *The Oxford Handbook of Interactive Audio*, edited by Karen Collins, Bill Kapralos, and Holly Tessler. Oxford University Press, 2014. https://doi.org/10.1093/oxfordhb/9780199797226.013.016.
- Cook, Nicholas. Analysing Musical Multimedia. New York: Oxford University Press, 1998.
- Cuddy, Luke. 'Zelda as Art'. In *The Legend of Zelda and Philosophy: I Link Therefore I Am*, edited by Luke Cuddy, pg. 153-164. Popular Culture and Philosophy, v. 36. Chicago, Ill: Open Court, 2009.
- Donnelly, K. J. 'Hearing Deep Seated Fears: John Carpenter's The Fog (1980)'. In *Music in the Horror Film: Listening to Fear*, edited by Neil William Lerner, 152–67. New York: Routledge, 2010.
- Donnelly, K. J., William Gibbons, and Neil William Lerner, eds. *Music in Video Games: Studying Play*. 1st ed. New York: Routledge, 2014.

- Donner, Richard. Superman. Warner Bros., 1978.
- Eisler, Hanns, and Theodor W. Adorno. *Composing for The Films*. New York: Oxford University Press, 1947.
- Elferen, Isabella van. 'Analysing Game Musical Immersion: The ALI Model'. In *Ludomusicology: Approaches to Video Game Music*, edited by Michiel Kamp, Tim Summers, and Mark Sweeney, 32–52. Sheffield, UK: Equinox Publishing, 2016.
- Ellis, Lindsay. 'Stranger Things, IT and the Upside Down of Nostalgia YouTube'. Accessed 29 August 2018. https://www.youtube.com/watch?v=Radg-Kn0jLs.
- Ermi, Laura, and Frans Mäyrä. 'Fundamental Components of the Gameplay Experience: Analysing Immersion'. Edited by S. de Castell and J. Jenson. *Changing Views: Worlds at Play. Selected Papers of the 2005 Digital Games Research Association's Second International Conference*, 2005.
- Felluga, Dino Franco. *Critical Theory: The Key Concepts*. London; New York: Routledge, Taylor & Francis Group, 2015.
- Fisher, Mark. Capitalist Realism: Is There No Alternative? Winchester: O Books, 2009.
- ——. Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures. Alresford: Zero Books, 2014.
- ——. The Weird and the Eerie. London: Repeater Books, 2016.
- Frank, Allegra. 'Breath of the Wild's Brilliant Game Design, Explained Polygon'. Accessed 30 September 2018. https://www.polygon.com/2017/10/3/16412614/legend-of-zelda-breath-of-the-wild-development-game-design.
- Genette, Gérard. *Paratexts: Thresholds of Interpretation*. Translated by Jane E. Lewin. Cambridge: Cambridge University Press, 1997.
- Gibbons, William. 'Wrap Your Troubles in Dreams: Popular Music, Narrative, and Dystopia in Bioshock'. *Game Studies* 11, no. 3 (2011).
- Goehr, Lydia. *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music.* Oxford: Clarendon, 1992.
- Gorbman, Claudia. *Unheard Melodies: Narrative Film Music*. Bloomington, IN: Indiana University Press, 1987.
- Grimshaw, Mark, ed. *Game Sound Technology and Player Interaction: Concepts and Development*. Hershey PA: Information Science Reference, 2011.

- ——. 'Sound and Player Immersion in Digital Games'. In *The Oxford Handbook of Sound Studies*, edited by Trevor Pinch and Karin Bijsterveld, 347–66. New York: Oxford University Press, 2012.
- Hart, Iain. 'Meaningful Play: Performativity, Interactivity and Semiotics in Video Game Music'. *Musicology Australia* 36, no. 2 (3 July 2014): 273–90. https://doi.org/10.1080/08145857.2014.958272.
- Hawkins, Stan. 'Musical Quagmires in Popular Music: Seeds of Detailed Conflict'. *Popular Music Online* 1 (2001). http://www.popular-musicology-online.com/issues/01/hawkins.html.
- ——. Settling the Pop Score: Pop Texts and Identity Politics. Aldershot: Ashgate, 2002.
- Hawkins, Stan, and John Richardson. 'Remodeling Britney Spears: Matters of Intoxication and Mediation'. *Popular Music and Society* 30, no. 5 (1 December 2007): 605–29. https://doi.org/10.1080/03007760600881359.
- Hawkley, Louise C., and John T. Cacioppo. 'Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms'. *Annals of Behavioral Medicine* 40, no. 2 (October 2010): 218–27. https://doi.org/10.1007/s12160-010-9210-8.
- Hitchcock, Alfred. Psycho. Paramount Pictures, 1960.
- Hoffert, Paul, and Jonathan Feist. *Music for New Media: Composing for Videogames, Web Sites, Presentations, and Other Interactive Media.* Boston, MA: Milwaukee, Wis: Berklee Press; Distributed by H. Leonard, 2007.
- Huizinga, Johan. *Homo Ludens: A Study of The Play-Element in Culture*. Kettering, OH: Angelico Press, 2016.
- Isbister, Katherine. *How Games Move Us: Emotion by Design*. First MIT Press paperback edition. Cambridge, Massachusetts London, England: The MIT Press, 2017.
- Itō, Junji. Uzumaki: Spiral into Horror. Shogakukan, 1998.
- Jackson, Peter. Lord of the Rings. New Line Cinema, 2001.
- Jørgensen, Kristine. Gameworld Interfaces. Cambridge, Massachusetts: The MIT Press, 2013.
- Juul, Jesper. 'A Clash Between Game and Narrative'. Accessed 17 June 2018. https://www.jesperjuul.net/text/clash between game and narrative.html.
- Kalinak, Kathryn Marie. *Settling the Score: Music and the Classical Hollywood Film*. Madison: University of Wisconsin Press, 1992.

- Kamp, Michiel. 'Suture and Peritexts: Music Beyond Gameplay and Diegesis'. In *Ludomusicology: Approaches to Video Game Music*, edited by Michiel Kamp, Tim Summers, and Mark Sweeney, 73–91. Sheffield, UK: Equinox Publishing, 2016.
- Kamp, Michiel, Tim Summers, and Mark Sweeney. 'Introduction'. In *Ludomusicology: Approaches to Video Game Music*, edited by Michiel Kamp, Tim Summers, and Mark Sweeney, 1–7. Sheffield, UK: Equinox Publishing, 2016.
- ———, eds. *Ludomusicology: Approaches to Video Game Music*. Sheffield, UK: Equinox Publishing, 2016.
- King, Claire. 'Ramblin' Men and Piano Men: Crises of Music and Masculinity in The Exorcist'. In *Music in the Horror Film: Listening to Fear*, edited by Neil William Lerner, 114–32. Routledge Music and Screen Media Series. New York: Routledge, 2010.

Kramer, Lawrence. Interpreting Music. Berkeley: University of California Press, 2011.

Kubrick, Stanley. 2001: A Space Odyssey. Metro-Goldwyn Meyer, 1968.

- Landay, Lori. 'Interactivity'. In *The Routledge Companion to Video Game Studies*, edited by Mark J. P. Wolf and Bernard Perron, 173–84. New York: Routledge, Taylor & Francis Group, 2016.
- Leitch, Vincent B., William E. Cain, Laurie A. Finke, John McGowan, T. Denean Sharpley-Whiting, and Jeffrey J. Williams, eds. *The Norton Anthology of Theory and Criticism*. Third edition. New York; London: W. W. Norton & Company, 2018.
- Lerner, Neil. *The Origins of Musical Style In Video Games*, 1977–1983. Oxford University Press, 2013. https://doi.org/10.1093/oxfordhb/9780195328493.013.015.
- Lerner, Neil William. 'Preface: Listening to Fear/Listening with Fear'. In *Music in the Horror Film: Listening to Fear*, edited by Neil William Lerner, viii–xi. Routledge Music and Screen Media Series. New York: Routledge, 2010.
- Lite_Agent. 'The Legend of Zelda: Breath of the Wild Latest Official Blog Post (Main Theme)'. *Perfectly Nintendo* (blog), 12 June 2017. https://www.perfectly-nintendo.com/the-legend-of-zelda-breath-of-the-wild-latest-official-blog-post-main-theme/.
- Lovecraft, H. P. Necronomicon: The Best Weird Tales of H.P. Lovecraft. London: Gollancz, 2008.

Lucas, George. Star Wars. 20th Century Fox, 1977.

Marks, Aaron. The Complete Guide to Game Audio. Laurence, KS: CMP Books, 2001.

- McDonald, Hal. 'The Two Faces of Nostalgia'. Psychology Today, 23 June 2016. https://www.psychologytoday.com/us/blog/time-travelling-apollo/201606/the-two-faces-nostalgia.
- McGonigal, Jane. Reality Is Broken: Why Games Make Us Better and How They Can Change the World. London: Vintage Books, 2012.
- Medina-Grey, Elisabeth. 'Meaningful Modular Combinations: Simultaneous Harp and Environmental Music in Two Legend of Zelda Games'. In *Music in Video Games: Studying Play*, edited by K. J. Donnelly, William Gibbons, and Neil William Lerner, 1st ed., 104–21. New York: Routledge, 2014.
- ——. 'Modular Structure and Function in Early 21st-Century Video Game Music'. Phd. Diss., Yale University, 2014.
- ——. 'Modularity in Video Game Music'. In *Ludomusicology: Approaches to Video Game Music*, edited by Michiel Kamp, Tim Summers, and Mark Sweeney, 53–72. Sheffield, UK: Equinox Publishing, 2016.
- ——. 'Musical Dreams and Nightmares: An Analysis of Flower'. In *The Routledge Companion to Screen Music and Sound*, edited by Miguel Mera, Ronald Sadoff, and Ben Winters, 562–76. New York, NY; London: Routledge, 2017.
- Mera, Miguel, Ronald Sadoff, and Ben Winters, eds. *The Routledge Companion to Screen Music and Sound*. New York, NY; London: Routledge, 2017.
- Middleton, Richard. 'Work-in-(g) Practice: Configuration of the Popular Music Intertext'. In *The Musical Work: Reality or Invention?*, edited by Michael Talbot, 59–87. Liverpool: Liverpool University Press, 2000.
- Moore, Allan. 'Authenticity as Authentication'. *Popular Music* 21, no. 02 (May 2002). https://doi.org/10.1017/S0261143002002131.
- Moore, Allan F. *Rock: The Primary Text: Developing a Musicology of Rock.* 2nd ed. Aldershot: Ashgate, 2001.
- Moseley, Roger, and Aya Saiki. 'Nintendo's Art of Musical Play'. In *Music in Video Games: Studying Play*, edited by K. J. Donnelly, William Gibbons, and Neil William Lerner, 1st ed., 51–76. New York: Routledge, 2014.
- Phillips, Winifred. *A Composer's Guide to Game Music*. Cambridge, Massachusetts: The MIT Press, 2014.
- Pinch, Trevor, and Karin Bijsterveld, eds. *The Oxford Handbook of Sound Studies*. Oxford Handbooks. New York: Oxford University Press, 2012.

- Pratt, Ray. 'The Politics of Authenticity in Popular Music: The Case of the BBlues'. *Popular Music and Society* 10, no. 3 (January 1986): 55–78. https://doi.org/10.1080/03007768608591250.
- Richardson, John. 'Ecological Close Reading of Music in Digital Culture'. In *Embracing the Restless: Cultural Musicology*, edited by Birgit Abels, 111–42. Hildesheim: Georg Olms Verlag, 2016.
- Richardson, John, Claudia Gorbman, and Carol Vernallis, eds. *The Oxford Handbook of New Audiovisual Aesthetics*. Oxford: Oxford Univ. Pr. 2015.
- Roberts, Rebecca. 'Fear of the Unknown: Music and Sound Design Un Psychological Horror Games'. In *Music in Video Games: Studying Play*, edited by K. J. Donnelly, William Gibbons, and Neil William Lerner, 1st ed., 138–50. New York: Routledge, 2014.
- Roepke, Martina. 'Changing Literacies: A Research Platform at Utrecht University'. Accessed 11 June 2018. https://mmroepke.files.wordpress.com/2010/03/cl-working-paper-1-voor-boekje.docx.
- Roux-Girard, Guillaume. 'Sound and the Videoludic Experience'. In *The Oxford Handbook of Interactive Audio*, edited by Karen Collins, Bill Kapralos, and Holly Tessler. Oxford University Press, 2014. https://doi.org/10.1093/oxfordhb/9780199797226.013.008.
- Ruud, Even. Musikkvitenskap. Universitetsforlaget, 2016.
- Scheurer, Timothy E. 'John Williams and Film Music since 1971'. *Popular Music and Society* 21, no. 1 (March 1997): 59–72. https://doi.org/10.1080/03007769708591655.
- Schreier, Jason. 'The No Man's Sky Hype Dilemma'. Kotaku, 2016. https://kotaku.com/the-no-mans-sky-hype-dilemma-1785416931.
- Scott, Derek. 'Introduction'. In *The Ashgate Research Companion to Popular Musicology*, edited by Derek Scott, 1–21. Aldershot: Ashgate, 2009.
- Scott, Ridley. Alien. 20th Century Fox, 1979.
- Sederholm, Carl H. 'H. P. Lovecraft, Heavy Metal, and Cosmicism'. *Rock Music Studies* 3, no. 3 (September 2016): 266–80. https://doi.org/10.1080/19401159.2015.1121644.
- Stoker, Bram. Dracula. Ware: Wordsworth Editions, 1993.
- Summers, Tim. 'Analysing Video Game Music'. In *Ludomusicology: Approaches to Video Game Music*, edited by Michiel Kamp, Tim Summers, and Mark Sweeney, 8–31. Sheffield, UK: Equinox Publishing, 2016.

- ——. *Understanding Video Game Music*. Cambridge, United Kingdom: Cambridge University Press, 2016.
- Sweet, Michael. Writing Interactive Music for Video Games: A Composer's Guide. Upper Saddle River, NJ: Addison-Wesley, 2015.
- Swink, Steve. *Game Feel: A Game Designer's Guide to Virtual Sensation*. Amsterdam: Morgan Kaufmann Publishers/Elsevier, 2009.
- 'The Art of No Man's Sky: No Man's Sky'. Accessed 17 September 2018. https://www.nomanssky.com/2016/04/art-of-no-mans-sky/.
- The Complete Tales and Poems of Edgar Allan Poe. New York: Barnes & Noble, 2007.
- Trainer, Adam. 'From Hypnagogia to Distroid Postironic Musical Renderings of Personal Memory'. In *Oxford's Handbook of Music and Virtuality*, edited by Sheila Whiteley and Shara Rambarran. Oxford University Press, 2016.

 http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199321285.001.0001/oxfordhb-9780199321285-e-25.
- Walser, Robert. 'Popular Music Analysis: Ten Apothegms and Four Instances'. In *Analysing Popular Music*, edited by Allan F. Moore, 16–38. Cambridge: Cambridge University Press, 2003.
- Whitehead, Thomas. 'An Intriguing Tale of How The Legend of Zelda's Iconic Opening Song Almost Never Happened'. Nintendo Life, 24 November 2016.

 http://www.nintendolife.com/news/2016/11/an_intriguing_tale_of_how_the_legend_of_zelda_siconic_opening_song_almost_never_happened.
- Wilde, Tyler. 'The Anatomy of Hype: How No Man's Sky Became the Best and Worst Game Ever'. *PC Gamer* (blog), 15 August 2016. https://www.pcgamer.com/the-anatomy-of-hype-how-no-mans-sky-became-the-best-and-worst-game-ever/.
- Windels, Joel. 'Gamasutra Scary Game Findings: A Study of Horror Games and Their Players'.

 Gamasutra, 2011.

 https://www.gamasutra.com/view/feature/6480/scary_game_findings_a_study_of_.php?print=1.
- Wolf, Mark J. P., and Bernard Perron, eds. *The Routledge Companion to Video Game Studies*. New York London: Routledge, Taylor & Francis Group, 2016.
- Yin-Poole, Wesley. 'No Man's Sky Changed the Video Game Hype Train Forever'. *Eurogamer* (blog), 27 December 2016. https://www.eurogamer.net/articles/2016-12-20-no-mans-sky-changed-the-video-game-hype-train-forever

Ludography

Title (developer/publisher, year)

Alone in the Dark (Infogrames, 1992)

Amnesia: The Dark Descent (Frictional Games, 2010)

ARK: Survival Evolved (Studio Wildcard, 2017)

Banjo-Kazooie (Rare/Nintendo, 1998)

Bioshock (Irrational Games/2K Games, 2007)

BIT.TRIP RUNNER (Gaijin Games/Aksys Games, 2012)

Bloodborne (FromSoftware/Sony Computer Entertainment, 2015)

Dark Souls (FromSoftware/Namco Bandai Games, 2011)

Dark Souls II (FromSoftware/Namco Bandai Games, 2014)

Dark Souls III (FromSoftware/Namco Bandai Games, 2016)

Darkest Dungeon (Red Hook Studios, 2016)

Dead Rising (Capcom, 2006)

Dead Space (EA Redwood Shores/Electronic Arts, 2008)

Demon's Souls (FromSoftware/Sony Computer Entertainment, 2009)

Elite Dangerous (Frontier Developments, 2014)

Endless Space 2 (Amplitude Studios/Sega, 2017)

Eternal Darkness: Sanity's Requiem (Silicon Knights/Nintendo, 2002)

Fatal Frame (Tecmo, 2001)

FIFA (EA Sports, 1993-2018)

Firewatch (Campo Santo, 2016)

Gone Home (The Fullbright Company, 2013)

Gran Turismo (Polys Entertainment/Sony Computer Entertainment, 1997)

Guitar Hero (Harmonix/RedOctane, 2005)

Halo (Bungie/Microsoft Game Studios, 2001)

Joe Danger (Hello Games, 2010)

Joe Danger 2: The Movie (Hello Games, 2012)

Layers of Fear (Bloober Team/Aspyr, 2016)

Left 4 Dead (Valve South/Valve Corporation, 2008)

Link's Awakening (Nintendo EAD/Nintendo, 1993)

Mass Effect (BioWare/Microsoft Game Studios, Electronic Arts, 2007)

Metro 2033 (4A Games/THQ, 2010)

Middle-Earth: Shadow of Mordor (Monolith Productions/Warner Bros. Interactive Entertainment, 2014)

Minecraft (Mojang, 2011)

No Man's Sky Hello (Games, 2016)

Obscure (HydraVision Entertainment/DreamCatcher Interactive, 2004)

Oxenfree (Night School Studio, 2016)

P.T. (Kojima Productions/Konami, 2014)

Resident Evil (Capcom, 1996)

Resident Evil (Capcom, 2002)

Resident Evil 4 (Capcom Production Studio 4/Capcom, 2005)

Rock Band (Harmonix/MTV Games, 2007)

Sid Meier's Civilization VI (Firaxis/2K Games, 2016)

Silent Hill (Team Silent/Konami, 1999)

Silent Hill 2 (Team Silent/Konami, 2001)

Siren (Project Siren, SCE Japan Studio/Sony Computer Entertainment, 2004)

Skyward Sword (Nintendo EAD/Nintendo, 2011)

Slender: The Eight Pages (Parsec Productions, 2012)

Space Invaders (Taito, 1978)

Stellaris (Paradox Development Studio/Paradox Interactive, 2016)

Sunless Sea (Failbetter Games, 2015)

Super Mario Bros. (Nintendo Creative Department/Nintendo, 1985)

Super Mario Odyssey (Nintendo EPD/Nintendo, 2017

Sweet Home (Capcom, 1989)

The Call of Cthulhu: Dark Corners of the Earth (Headfirst Productions/Bethesda Softworks, 2005)

The Legend of Zelda: Breath of the Wild (Nintendo EDP/Nintendo, 2017)

The Legend of Zelda: Majora's Mask (Nintendo EAD/Nintendo, 2000)

The Legend of Zelda: Ocarina of Time (Nintendo EAD/Nintendo, 1998)

The Legend of Zelda: Ocarina of Time 3D (Grezzo/Nintendo, 2011)

The Legend of Zelda: Wind Waker (Nintendo EAD/Nintendo, 2003)

Twilight Princess (Nintendo EAD/Nintendo, 2006)

What Remains of Edith Finch (Giant Sparrow/Annapurna Interactive, 2017)

World of Warcraft (Blizzard Entertainment, 2004)