

DIRECT AND INDIRECT IMPACT:
Player's Choices Impact on Music in *Beyond: Two Souls*

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RIIKONEN HENNA-JUULIA: Direct and Indirect Impact: Player's Choices impact on Music in *Beyond: Two Souls*

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This thesis investigates how the player's choices in the story-centric game *Beyond: Two Souls* (Quantic Dream 2013) impact the game's music. I approach the subject through audiovisual analysis and analytical play. I use terminology that has been established in earlier videogame and film studies. On top of mapping changes and their relationship to the player's choices I also analyse how these choices reflect the game's story and its characters.

The thesis states that the player can impact the music in two ways: directly and indirectly. Player can have a direct impact on the music when they are offered to choose music accompanying the gameplay or have a chance to interact with an instrument whereas the player impacts the music indirectly through choices that do not indicate changes in music. In other words when the player impacts the music directly, they make what Elizabeth Medina-Gray calls musical choices, whereas indirect impact happens while making non-musical choices.

In *Beyond: Two Souls* the player mainly impacts the music indirectly but there are select opportunities to impact the music directly as well. Direct impact in the game is offered through putting on music on a stereo or by the main character playing guitar. Indirectly the player impacts the music by choosing between executing vengeance or doing nothing as well as choosing from dialogue options at select points in the narrative. The thesis also takes a closer look at the ending of the game and how all the different possible scenarios impact the music the player hears.

The intent of this thesis is to add to the earlier videogame research as well as to open up ways to research games that include the player in narrative choices. At the time of the release of this thesis there is not yet much research into how music is incorporated in story-centric games but hopefully this thesis can create academic discussion around the subject.

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Tutkielmani käsittelee sitä, millainen vaikutus pelaajan päätöksillä on tarina keskeisessä pelissä *Beyond: Two Souls* (Quantic Dream 2013). Tarina keskeisillä peleillä viitataan työssä peleihin, joissa pelaajalla on keskeinen asema tarinan muodostumisessa. Tällaisissa peleissä pelaajan on mahdollisuus tehdä päätöksiä, joilla on vaikutus siihen, miten tarina etenee ja miten tarinan hahmot toimivat erilaisissa tilanteissa. Nämä päätökset voivat koskea esimerkiksi tarinan dialogia tai hahmojen tekoja.

Lähestyn tutkimusaihetta audiovisuaalisen lähiluvun sekä analyttisen pelaamisen kautta. Käytän tutkimuksessani hyväksi aikaisempaa pelimusiikin tutkimusta ja sen termistöä sekä myös joitain elokuvatutkimuksen käsitteitä. Lähestyn pelin musiikkia varsinkin sen soundtrackilla esiintyvien teemojen kautta. Sen lisäksi, että kartoitan tutkimuksessa musiikin muutoksia, analysoin myös sitä, miten nämä muutokset kuvastavat pelin tarinaa ja sen hahmoja.

Pelaaja vaikuttaa pelin musiikkiin kahdella eri tavalla: suorasti ja epäsuorasti. Kun pelaaja vaikuttaa musiikkiin suorasti hän on tietoinen valintojensa vaikutuksesta musiikkiin, kun puolestaan epäsuora vaikutus tapahtuu valinnoin, jotka vaikuttavat ensisijaisesti pelin tarinaan. Pelaaja voi vaikuttaa musiikkiin suorasti soittamalla instrumenttia pelissä tai valitsemalla pelin taustalla soivan musiikin. Pelissä *Beyond: Two Souls* pelaaja vaikuttaa musiikkiin suorasti soittamalla kitaraa tai valitsemalla pelitilanteen tilassa soitettavan musiikkityylin stereoista. Epäsuora vaikutus pelissä tapahtuu esimerkiksi valitsemalla dialogin aiheen tai sävyn sekä valitsemalla kostaa tai olla tekemättä mitään tilanteissa, joissa pelaajalla on mahdollisuus kostaa päähahmoa kohdanneet vääryydet. Tutkielmassa käydään läpi myös pelin lopettava epilogi ja kuinka kaikki sen mahdolliset skenaariot vaikuttavat pelin musiikkiin.

Tutkimukseni tarkoitus on lisätä aikaisempaan pelimusiikin sekä tarina keskeisten pelien musiikin tutkimukseen. Tutkimuksen julkaisun aikaan pelien, jotka antavat pelaajan tehdä valintoja pelin tarinaan liittyen, musiikista ei ole juuri tutkimusaineistoa, minkä vuoksi aiheen tutkiminen on tärkeää.

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1. INTRODUCTION

1.1. Background

In a story-centric videogame the story is brought to the level of the gameplay. While in most games gameplay is a tool with which the player reveals the story piece by piece (given that the game has a story to reveal), in a story-centric games the player is a crucial part in creating the story, making decisions about how to proceed in a given situation or how you should talk to the character you are having a conversation with. While some games do feature these types of decisions in story-centric games the decisions have an impact on how the story will turn out and they give the player a feeling that the decisions made make a difference in how the story unfolds.

Stories where the decisions are left to the receiver are not unique to videogames. Branching path narratives, meaning narratives with two or more alternative paths the receiver can choose from, have been around since the 1930's. One of the earliest examples of this is Ayn Rand's play *Night of January 16th* (1936) where members of the audience are picked to form a jury, which will decide the verdict of the trial that the play is about. The play has two different endings, and the jury's verdict is what decides the ending the audience gets. (Aarseth 2010.) In literature, while not first of their kind, *Choose-Your-Own-Adventure* books that were written in the reader's perspective and gave the reader independence to choose alternative paths according to how they wanted to conduct the adventure, were popular through 1980's to the early 90's (Lebowitz & Klung 2012: 183).

The game companies who are best known for their story-centric games are Quantic Dream and Telltale Games. Unlike Telltale games, which future is still uncertain after its assets were purchased by LGC Entertainment, Quantic Dream is still going strong having released their latest game *Detroit: Become Human* in 2018 (Campbell 2019). Because of the scope of this study is limited I decided to concentrate on only one game, Quantic Dream's 2013 release *Beyond: Two Souls*. (Quantic Dream website.) While other games might give the player more freedom to impact the story, the episodic nature of the *Beyond: Two Souls* facilitates the close reading and analysing of the game, that other Quantic Dream's games do not offer.

While writings about these types of narratives in games are not hard to find, the way music is incorporated to these types of games has not gained much attention so far. Therefore, in my thesis I take a look into how music is featured in a game that has multiple narrative outcomes and how changes in the narrative impact the music. Just as it is important to study how music is incorporated in linear narratives it is also important to understand how music works in works that involve the receiver more directly in the construction of the narrative.

On top of this, sound and music are a central feature of audiovisual media and arts but even more so in games. On top of setting the mood and revealing underlying information about the game and its inner environment sound and music are used as a guide and a tool in gameplay. Because game audio has so many functions it makes my chosen subject even more important to study. There needs to be knowledge of how videogame audio takes into consideration both facilitating the player's experience and the alternating paths in the narrative.

1.2. Research Question and Methodology

What impact does the player's choices have on the music of story-centric games? That is my primary research question, that my analysis of the game content works towards answering. I will also look into a few secondary questions. How does the music react to the changes in the narrative? How do the musical changes reflect the story and the characters? To explore answers for these questions I will use audiovisual analysis and analytical play. Since my interest lies in the music accompanying the gameplay and the narrative, I will not be discussing the music that exists outside the narrative in my research. This includes for example music and sounds accompanying logos when starting up the game or credits after the game is finished.

1.2.1. Analytical Play

Tim Summers writes about analytical play in the books *Ludomusicology* and *Understanding Video Game Music* (both published in 2016). According to Summers there are two types of materials that can be used in the analysis: in-game sources and satellite sources. In-game sources entail the game code and engine, different versions of the game and the audiovisual material itself, whereas satellite sources are material found outside the game itself, for example interviews with the game makers, scores, notations, recordings as well as reviews. All this material could be used in the analysis depending what is available. (Summers 2016a: 8-31.)

In order to conduct the analysis of the game and its soundtrack the game must be played, which is why Summers insists that the analyst must be both a player and an analyst at the same time. However, games often require quick reactions from the player, which can be extremely distracting. In his own analysis example, Summers uses both a screen recording application and a separate sound recorder in order to avoid having to analyse the gameplay while trying to proceed in the game. This also allows the analyst to analyse the game in more detail, since they can access the game footage several times. (Summers 2016a: 10-11.)

While gathering material for the analysis Summers encourages playing “against the grain”, by which he means that the analytical player should play against what the game expects the player to do. This type of rebellious gameplay can reveal aspects of the game’s music programming that are not evident with normal exploration such as what type of action triggers a piece of music, how long it plays for and if it is looped. According to Summers it is only after we learn about how the music is triggered in the game that we can start to analyse the messages that the music is putting across. (Summers 2016a: 12; 2016b: 35.)

Summers states that the sonic material should be interpreted together with the visual material. Although Summers admits that it is impossible to make a notation of the entire game that would hold true for each playthrough, because of the interactive nature and possible randomisation of the musical output, he encourages analysts to make notations of certain musical modules that appear in the game. According to

Summers, examining recurring melodies and development of these melodies allows for a more sophisticated and grounded analysis and interpretations of the game music. (Summers 2016a: 15-18.)

1.2.2. Methodology

I am conducting my analysis by playing the game *Beyond: Two Souls* on Playstation 3. This is my only in-game source. Unfortunately, because I conducted my study on a Playstation3, it meant that I had no access to the code or engine of this game. For the sake of being honest, I doubt that my humanities background would suffice to even interpret the technical aspects of the game. To counter this as best as I can, I did several playthroughs of the game to discover how the music functions in the game and how the music changes according to the narrative choices of the player.

The soundtrack of *Beyond: Two Souls* is the most important satellite source used in my study. While I was not able to get my hands on a physical copy, I was able to listen to the soundtrack through Spotify. This helped me in naming and recognising certain themes and motives in the music as well as to transcribe them. Another satellite-source for my study was a website called *Beyond: Two Souls Wiki*, which has a lot of information about the game. I used this website as a guide in order to know how my choices in the game affect the story. Without the guide it would have been extremely difficult to know which choices had a major effect on the overall story and which did not. The website saved me most likely hundreds of hours of investigative gameplay.

My analysis incorporates two types of approaches to the audiovisual material. First there is mapping motivic relationships and thematic development. In chapters 2 I look into the main musical themes of the game and in the analysis chapters. 3 and 4, I will be discussing how the themes are represented differently due to the player's choices. The second approach used in my research is hermeneutic. This approach involves interpreting the music and how the changes in it reflect the game's events and characters. (Summers 2016b: 39-41.)

To record my gameplay, I use a device called Elgato game capture HD. The device is connected between the game console and a computer, where a software records the audiovisual material in real time. I decided to separate the videos according to chapters, in which the game is divided (see figure 1 and appendix 1), so that the videos would be easier to manage. This also facilitates finding the right event in the game while analysing the material.



Figure 1. Timeline of chapters in *Beyond: Two Souls* as seen in the game before the last chapter Black Sun.

1.3. Review of Earlier Videogame Research

The term ludomusicology was coined by Guillaume Laroche and taken up by Roger Mosely. It refers to research that is concerned about the relationship between music and play and at its broadest the term attempts to see our engagement with music as play. Karen Collins' book *Game Sound: An Introduction to the History, Theory and Practise of Video Game Music and Sound Design* (2008) is regarded as having established the field of videogame music research, even though some of the earliest academic articles on the subject were written by Zach Whalen. (Kamp, Summers and Sweeney 2016: 1.)

In the decade since Collins published her book, the study of sound and music in videogames has grown and established important terminology. Even though ludomusicology is starting to establish itself in the field of musicology, it still has not

completely gained freedom from other forms of audiovisual media research. Thus I will discuss the relationship between videogame music and film music research.

1.3.1. Videogame Music vs. Film Music

When researching videogame music, it is almost inevitable that one comes across discussion on the similarities and differences between videogame music and film music. This should not come as a surprise since film music research has been well established for decades. As they are both part of the umbrella term audiovisual media, it is good to recognize their similarities, but it is also essential to understand the differentiative factors that separate videogame music from film music.

As a significantly older form of media, it cannot be denied that films have had a great impact on videogames. Videogames have not been created in a vacuum of cultural influences; therefore, it is granted that films have had a great aesthetic impact on the look and sound of videogames. Therefore, when it comes to the musical scores there are many reasons for videogames to borrow aspects from film music. In his book *Understanding Video Game Music* (2016), Tim Summers lists reasons such as providing historical context, connecting the game with previously established stories or franchises, and asserting narrative genre as a few examples of aspects established in films that are often transferred to videogame music.

Because films have a longer history, the musical styles and cues are better established and easier to recognize and thus have a greater advantage when it comes to making connections between the audio-visual narrative and concepts outside the game. However, Summers points out that films can also borrow musical aspects that are well established in videogames. This commonly happens in films that have a strong connection to the medium of videogames such as *Wreck-It Ralph* and *Scott Pilgrim vs. the World*. According to Summers these example films use sonic cues connecting to ludic events that are well-established in videogame music. (Summers, 2016b: 145-150.)

Some researchers in the field of videogame music use terms such as diegetic and non-diegetic music, which have been established decades ago in the study of film music. Diegetic music refers to music that belongs to the diegesis, the world or the environment that the story or scene is taking place in. Non-diegetic music on the other hand is the opposite of diegetic music, referring to music that does not originate in the world of the characters or the narrative. One common way of separating the two is to consider whether the characters can hear the music or not. Diegetic music originates in the world of the characters and so they should be able to hear the music whereas non-diegetic music is not accessible to the characters of the story. (Gorbman 1987: 3, 22; Jørgensen 2009; Juva 1995: 209.)

While the terminology above might seem useful for studying videogame music, the adopting of these terms, however, is not without problems (Collins 2008: 125). While there are scholars of film music who view the music's relationship with the diegesis not as simple as the terms might suggest, the problems seem to be the transitions between diegetic and nondiegetic or the sounds existence in between the two, whereas in videogames the sounds at times seem to exist in both forms simultaneously (Stilwell 2007; Jørgensen 2009).

Kristine Jørgensen has written about how the non-diegetic music that the characters in the game are not supposed to hear often affects the characters' actions. This is explained by player interaction; the player hears the non-diegetic music and acts according to the interpretation of the message that the music relays. For example, when the game avatar approaches an unseen enemy the music on the background may become more threatening and thus signal to the player that their avatar should either hide or get ready for a fight. To combat this problematic aspect Jørgensen has incorporated the term *transdiegetic* audio in her research. (Jørgensen 2009.)

Kristine Jørgensen uses the term *transdiegetic*, to describe music and sounds that do not quite fit the notion of diegetic and non-diegetic. According to her, *transdiegetic* should not be regarded as a space between the two, but as a property of many sounds and music in videogames. (Jørgensen 2009: 106-108.)

Jørgensen divides transdiegetic sounds into external and internal sounds. External transdiegetic sounds exist outside the diegesis but address features in the diegesis. A good example of this would be changes in music when an enemy is near or when all enemies have been defeated. This change communicates to the player that their avatar is either walking towards or away from danger. (Jørgensen 2009: 106-108.)

Internal transdiegetic sounds on the other hand, have sources in the diegesis but instead of addressing other diegetic features they usually communicate directly to the player. According to Jørgensen this type of sounds are often used in strategy games, where the player may command several units. These units often respond to the commands given by the player that exists outside the game. They can also inform the player about events outside of the players view. (Jørgensen 2009: 106-108.)

Transdiegetic audio describes well the communication between the game and the player. Even though diegetic and non-diegetic audio as terms are not always well-suited regarding videogames, Jørgensen does not regard them as completely useless. She still acknowledges that these terms have a place when analysing videogame soundtracks, but because the music and sound have specific uses in games, the lines between the diegesis and the real world are not so easy to draw.

The main reason why film music theory and terminology cannot be used uncritically in the field of videogame music is because of the active participation of the player. This means that the game and the player are in constant interaction with each other, thus making it difficult to separate the world of the game and the real world from each other. Therefore, I am going to take a closer look into how videogame music and the player work together and influence each other.

1.3.2. Interactions between the Player and the Music

In the introduction of the book *Ludomusicology* Kamp, Summers and Sweeney remind the reader that playing a game involves more than passive listening. In order to survive in a game world and to maximise one's effectiveness the player must actively listen and interpret the music. (Kamp, Summers & Sweeney 2016: 1.)

Therefore, videogame music must be easy to understand. According to Isabella van Elferen videogame music is often not very original or complicated because of its functionality in the game. The player must be able to interpret the music easily so that they can react to the changes in the game environment in a correct and speedy manner. (Elferen 2016: 37.)

Because the player influences the music in a videogame, they are an integral part of creating the soundtrack of the playthrough. Ultimately every piece of the sound world is linked to the gameplay and so the sounds depend on the player's performance. This is very different compared to films, where the soundtrack stays the same whether anyone is watching or not. However, videogames require a player to input certain actions for the soundtrack to proceed.

According to Elferen, since the music and sounds are dependent on the way the player chooses to play the game, playing a videogame equals interacting with music. Even an error in the gameplay or a non-musical decision are actions and decisions that start from the player and it is these actions that trigger sound and music in the game. (Elferen 2016: 39.) This highlights the fact that it is not only the player who responds to the changes in the music but that the music responds to the player's actions, whether those actions were intentional or not.

Because each player plays the game differently the soundtrack also changes according to each playthrough. This means that the soundtrack never sounds the same. Even in the most linear games such as the first *Mario Brothers* the players can take different amount of time to pass the levels, and it would be difficult to time each action to take place at the exact same time as the previous playthrough. In other words, even very linear games give players enough freedom to move and act so that the soundtrack will change. In a game that is loosely linear the player can completely skip some side missions, resulting in the accompanying soundtrack of that part not existing in that playthrough.

Whether the player makes decisions based on the soundtrack or not, they still influence the sound and music of the playthrough. Even though the player does not have a say in what the music sounds like, they play a crucial part in triggering it,

whether they do it intentionally or not. Therefore, the game can never be separated from the person that plays it.

1.4. Important Terminology

Videogame music research is a rather new field in musicology but in the recent years it has gained a more theoretical basis. Even though the field is linked with other audiovisual studies, as I established in a previous discussion, there are a few important aspects that differentiate videogames from other audiovisual media. Next, I will go through some important terminology regarding videogame music research as it concerns my thesis.

1.4.1. Modularity: Musical and Non-musical Choices

In videogames the player is often free to take their time exploring the environment inside the game. This creates a problem for the music composer since they cannot tell how long a player will spend in a given game location. In order to solve this problem, videogame music is often modular. Modularity means that the music is constructed from modules that last anywhere from a few seconds to minutes. By building the music from looping modules the game makers can guarantee that there is enough music for the entire exploration and that the music flows throughout the narrative. (Medina-Gray 2016: 53.)

Elizabeth Medina-Gray has studied modularity in videogame music. She divides modular music into a three-part process. The first process consists of modules and rules. In order to play the music, you need the composed material, whether it is in the form of notation or a recording and you need to establish the rules that indicate the order that the modules should be played in. After this comes the process of assembly, where the modules are put in an order that is indicated by the rules. After this the music can be played, resulting in sounding music, which is the third and last part of the process. (Medina-Gray 2016: 55.)

A critical aspect of modularity in videogame music, according to Medina-Gray, is how chance enters into the system. This happens through several separations, first in the separation of the music's composers and those who assemble the music in the game and second in the assembly process itself. The first point alludes to the fact that the music makers create the modules and rules, but they do not have any control over the musical output past this point. Medina-Gray calls this indeterminacy. This type of chance is prevalent in videogames, where the music can be randomized.

Randomization means that the same event in the game can trigger one of several different modules. This prevents the music from becoming too repetitive. Thus, the music is not always the same on each playthrough, even when the events are the same. (Medina-Gray 2016: 56, 60-61.)

The second way chance plays a part in the modular process is through the actions of the players. Videogame music is unique in its modularity because it involves players both in the assembly process and at the receiving end. According to Medina-Gray, in most avant-garde modular music the assembly of the parts is done with the sounding music foremost in mind. Medina-Gray calls these decisions musical choices. In videogames these types of choices, they explain, could be done by playing an instrument, for example. However, players rarely make decisions in the game based on the music (unless playing a music game such as *Guitar Hero*) but based on progress in the game. Medina-Gray calls these type of decisions non-musical choices. (Medina-Gray 2016: 61.)

Medina-Gray also reminds the reader that the choice about music is not always in the player's hands since failure to execute a certain action can also affect the sonic output of the game. Thus, when it comes to videogame music the three-part process is not quite as simple as it is with other modular music. For this reason, Medina-Gray includes many different aspects in the assembly process: rule execution, chance, musical choice, non-musical choice, and error. Also, it is not just the player that impacts the audio output of the game, but the audio also impacts the player's actions in the game by giving cues about the situation at hand. (Medina-Gray 2016: 61-63.)

According to Medina-Gray, the modularity of videogame music is a practical and economical way to create dynamic audio in videogames. Creating the music by using

small modules is a way to ensure that the music is flexible and adapts easily to the gameplay of each individual. (Medina-Gray 2016: 64.)

While the modularity of videogame music creates many possibilities, it also creates problems for those who wish to analyse this type of music. Medina-Gray lists two possible ways to conduct analysis: you can either analyse the modules and rules of the composition or you might rather analyse the music after it has been assembled. There are problems in both approaches, however: the first limits musical analysis to broad observations and the second cannot accurately represent all the individual player experiences. For this reason, Medina-Gray expects most analyses of videogame music to incorporate both styles. (Medina-Gray 2016: 65-66.)

1.4.2. Dynamic Audio

In the *Grand Theft Auto* game series, diegetic music is a distinguishing part of the game. According to Elferen, choosing the music or a playlist in the game series in question is a form of direct musical interaction comparable to music games like *Rock Band*. However, Elferen regards non-diegetic audio that is shaped according to the player's movements and actions more interesting. This type of audio is an example of how music and sounds adapt to the gameplay. (Elferen 2016: 38; Collins 2008: 125-130, 139-165). As an example of this type of audio, Elferen mentions the *Assassin's Creed* game series, where the audio guides the player through the game by musical navigation clues, such as leitmotifs, stingers and stereo effects. (Elferen 2016: 38-39.)

In the book *Game Sound: An Introduction to the History, Theory and Practice of Video Game Music and Sound Design* (2008), Karen Collins introduces the term dynamic audio. Dynamic audio describes changes in the game's music and sound due to both player action and changes in the gameplay environment. Collin's divides dynamic audio into two separate fields: interactive and adaptive audio. Interactive audio reacts to the player's immediate input. An example of this would be the sound a game character makes when ordered by the player to attack or jump. Adaptive audio on the other hand reacts to the changes in the environment of the game, such as

when a day turns into night in the game world or any auditory warnings of the character's low health or of time running out. (Collins 2008: 4 and 139.)

Collins does not view these terms as fixed. In a chapter of the book *Essays on Sound and Vision* (Richardson & Hawkins 2007: 263-298) she gives an example of the music changing from interactive to adaptive in the game *The Legend of Zelda: Ocarina of Time* (Nintendo 1998). In the first part of the game the music in Kokiri Forest only changes when entering a building or encountering an enemy, thus the music is interactive but not adaptive. However, later in the game if the player returns to the forest at night, the music will have faded into silence. Thus, the interactive music has become adaptive. (Collins 2007: 266-267.)

The fact that my study concentrates on audio that changes according to the player's actions and narrative decisions, makes it seem like I am concentrating only in researching the interactive audio of the game, and in a way, I could make that case. However, since the soundtrack often does not respond to just one narrative choice or player action but to a sequence of choices, the separation of whether the music is interactive or adaptive becomes more difficult. The scenes where the player has a choice in the music playing on the background is an example of interactive audio, for certain, but when it takes a sequence of decisions to make a change in the soundtrack it is harder to tell. The music does not respond to a player's input but to several of them. Also, it is rarely just the music that changes but also the whole narrative, so one could say that the music adapts to changes in the narrative. The differentiation is not clear cut so in the rest of my research, I will refer to dynamic audio unless I can make a clear case as to which term I should be using.

1.5. Structure of the Thesis

This thesis is divided into four parts. In this first chapter I have discussed the practicalities of my research as well as previous videogame research and important terminology related to the study. In chapter 2 I discuss the game, *Beyond: Two Souls*, and its soundtrack. In part 2.1. I describe the idea of the game, what it is about and how the game mechanics work and after which I talk about the game's narrative

structure. I also take a look at the volatile relationship between ludologists and narratology and why story-centric games such as the one I chose to write about deserve to be called games rather than interactive films.

In the part 2.2. I turn my attention to the music of *Beyond: Two Souls*. At first, I give details about the soundtrack and the people behind it, as well as discuss the pre-existing music used in the game. After the general description of music in the game I take a closer look of the central music themes featured in the game. The original soundtrack has six integral themes, which I describe and offer transcriptions for. I will also discuss how these themes are used in the game and how they reflect the narrative and its characters.

In the 3rd chapter I start to discuss the findings of my study, starting off with how the player can directly impact the music of the game, giving examples from the game, and explaining how the music changed due to the player's actions. The reporting of my findings continues in chapter 4, but in this chapter, I will discuss the more common way in which the player impacts the music in the game, indirectly. On top of other scenes in the game, I devote much of the chapter to explain the ending, where the scenes are tied to some earlier decisions in the game but where the player is also given many choices to choose how the main character's journey ends.

The 5th and last chapter of my thesis is dedicated to conclusions, first summing up my findings and my thoughts on them. Lastly, I reflect how well I managed to answer the questions presented in this chapter and what steps could be taken in the future to study the music in story-centric games.

2. OVERVIEW OF *BEYOND: TWO SOULS* AND THE SOUNDTRACK

In this section I introduce my research subject, the game *Beyond: Two Souls* and the music it features. I will start by telling about the game *Beyond: Two Souls* and continue by discussing why games like it should not be disregarded as something other than video games. I will end the chapter by explaining how music is featured in the game and introduce the most central musical themes on the soundtrack.

2.1. *Beyond: Two Souls*

For the subject of my study, I chose a game called *Beyond: Two Souls* (Quantic Dreams, 2013), where the player follows the story of Jodie from childhood to early adulthood. Since birth Jodie has been attached to a mysterious entity called Aiden, which possesses psychic abilities such as telekinesis and moving through walls. Aiden has its own will, however, and so he can both help Jodie but also cause trouble. Because of her special abilities Jodie's life is very extraordinary and full of hardships.

The narrative of *Beyond: Two Souls* is nonlinear. The story is divided into chapters, which each contain an event in Jodie's life (see figure 1 in previous chapter or the appendix). The chapters are in mixed order except for the last chapters where Jodie's fate is decided. In an opening cutscene a confused Jodie urges herself to remember her own memories of the life she has lived, which implies that the order in which the chapters are is the order in which the memories come back to her.

Beyond: Two Souls's gameplay works in different ways depending on the situation in the game. The player plays as Jodie's in most scenarios and is able to interact with different items and other characters as long as they are close enough to the avatar. In most situations, while the player is controlling Jodie she can also change into Aiden, which gives the player more options to interact with the game's surroundings. While Jodie's interactions with the surrounding items are usually fairly normal, such as playing with the guitar or reading the cookbook, Aiden can lift heavy objects, heal injuries and even take over a person's body and kill them.

When the player fights enemies in the game, the fight is performed through quick-time events. In quick-time events the player performs attacks by responding to prompts on the screen in a limited period of time, usually only some seconds in length (Rogers 2014: 196). If the player is not able to perform the task given within the short time limit, it can lead to undesirable consequences. In *Beyond: Two Souls* if the player fails a quick-time event, it can lead to anywhere between having to try the action again to missing a part of the story. For an example of a quick-time event see figure 2 below.

As described previously in the thesis, the gameplay also involves the player in many narrative choices. During the game the player gets to choose several times from limited options of what to do in different situations and how to respond in the conversations between Jodie and other characters (see figure 3). These choices affect the narrative in different ways. Most decisions do not have much weight to them regarding the very end of the story, but others do. However, not all choices are necessarily understood to be choices by the player. In my thesis I will also regard failures in the gameplay as choices, even though failures are not often intentional.



Figure 2: The player learns to dodge attacks as Jodie in the tutorial.

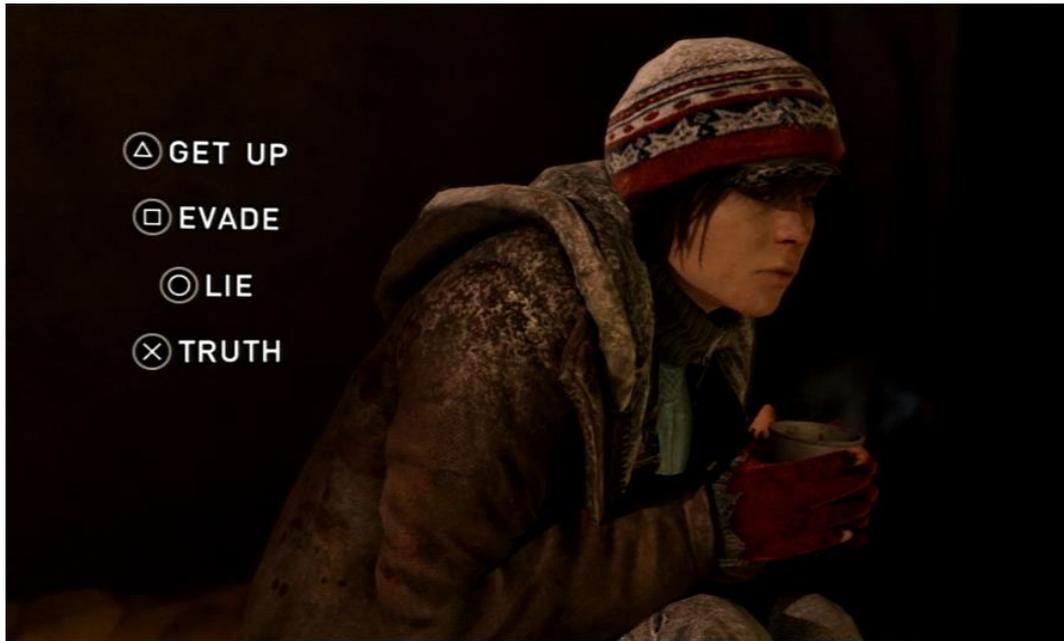


Figure 3: Player's possible choices for how to reply in a conversation.

2.1.1. The Narrative Structure

The type of interactive narrative in *Beyond: Two Souls* is a mix between a multiple-endings and a branching path story. A multiple-endings story is characterised by several possible endings that the narrative can lead to. The ending the player gets is usually based on their actions and choices during the gameplay. Branching path stories, on the other hand, give freedom to the player to choose their own path throughout the story by allowing the player to choose from a pool of limited options of actions to take in several decision points. The chosen options can affect the story in varying ways; minor branches have from no effect to very little, moderate branches change story for a while but eventually return to the main storyline, whereas major branches alter the rest of the story. (Lebowitz & Klung 2012: 149-204)

The reason why *Beyond: Two Souls* is not truly a branching path story is the lack of major branches (Lebowitz & Klung 2012: 187). While there are character fates that alter the ending of the game, there are no decisions that would alter the chapters a great deal. Some choices in the game will alter the outcome of other chapters, but those are few and far between. However, the way in which the game does make

narrative decisions a central game mechanic and gives the player options through which they can make the story their own does resemble a branching path story.

The nonlinear timeline of the story makes the recognition between these narrative structures a bit more complicated. Because the chapters are told in a mixed order, the narrative has to be fixed, otherwise something that happened in an earlier chapter might make no sense in the light of what happens in a later one. The chapters always start the same way, no matter what decisions the player makes. However, the player's actions in a certain chapter can have varying impacts, from altering the ending of the chapter in question to changing the ending of the entire game, as well as having an affect to some events in the later chapters. For example, if Jodie is abused in the chapter *Like Other Girls*, she will not be able to sleep with Ryan in a later chapter, because of the painful memories.

There are countless minor branches and several moderate branches in *Beyond: Two Souls*. Even though many branches change details of the story a little, they hardly have any effect on the main events of the story. Usually the minor branches are decisions made regarding to conversations with other characters. Moderate branches often affect the end of the chapters. For example, in the chapter *Like Other Girls*, where Jodie tries to sneak out the research facility to meet her friends in a remote bar, there are three possible endings. Jodie can get caught before being able to get out of the facility, she can decide to walk out of the bar before the events start escalating or she can stay in the bar, which will lead to men trying to sexually assault her, before she is saved by Aiden. Even though chapters can have multiple different endings, in most cases they do not have a great bearing on the overall story.

The biggest decisions the player makes regarding the story involve the fates of other characters. There is a small pool of characters who can die during the game if the player fails to save them. At the end of the last chapter *Black Sun* the player gets to choose Jodie's fate, whether she will go on living or join her dead loved ones in the beyond. If Jodie decides to live, she gets to choose what she will do with the rest of her life. The earlier death of certain characters limits these choices at the end.

2.1.2. Games or Narratives – Is *Beyond: Two Souls* a Game?

The game developer that created *Beyond: Two Souls*, Quantic Dream, is often accused of making their games as cinematic as possible and therefore their games are sometimes called interactive movies. I cannot disagree with the fact that especially *Beyond: Two Souls* has many links to the film industry; two of the central characters of the story are portrayed by well known Hollywood actors (Ellen Page and Willem Dafoe) and the soundtrack was produced by Hans Zimmer, one of the most famous and prolific film composers in the film industry (end credits). In fact, the game is so cinematic that on top of game conventions *Beyond: Two Souls* was also presented in the Tribeca Film Festival in 2013, the year of the game's release (Astle 2013). However, in my opinion calling games like this "interactive movies" is very misleading.

The battle between established research theories and videogames being recognized as their own form of medium is not new. Since the late 1990's, there has been conflict in academic research between ludology and narratology in how videogames should be regarded. Researchers in the field of ludology argue that games are not stories and even though games may have narrative elements they should not be studied in the same manner as literature or films (Aarseth 2004). Narratology researchers often accuse the other side of radicalism, as if ludologists were to erase any idea of narratives fitting into games. (Eskelinen 2012.) While I do not necessarily agree with using the same narrative theories to research videogames as one would with films or literature, I am also concerned about ludologists downplaying the importance of stories in games.

Because narratives in videogames have so often been regarded dismissively, I find it important to establish that *Beyond: Two Souls*, and other games where the narrative has a central role, should be regarded as purely videogames.

Jesper Juul (2005: 6-7) proposes a classic game model that consists of six features describing essential features of games. These are:

1. A game is a rule-based formal system
2. with variable and quantifiable outcomes
3. where different outcomes are assigned different values
4. where the player exerts effort to influence the outcome
5. the player feels emotionally attached to the outcome
6. and the consequences of the activity are optional or negotiable.

According to Juul, in order to be considered a game an item must have all six features, even though videogames have modified some of them. (Juul 2005: 6-7.) The model is not beyond criticism, however, and it has been suggested by Markku Eskelinen that two of the last points could be dropped because according to him they are weaker compared to the other features and contextually varying. According to Eskelinen the features of rules, goals (or variable outcomes) and player effort as well as assigning different values to the game's outcomes are the most central characteristics of games. (Eskelinen 2012: 243.)

Considering how games have been described by Juul and Eskelinen, I would argue that *Beyond: Two Souls* as well as other products like it fit the criteria for games:

1. Rules:

Just like any videogame the narrative centric games have rules. Even though they might not be clear to the player there still are certain actions that are required in order to advance in the game as well as limitations as to what you can and cannot do.

2. and 3. Outcomes:

There are different outcomes resulting from the player's actions and decisions made in the game. You can fail the game by not accomplishing actions quickly enough and certain actions or non-actions can lead to a more or less desirable ending. Also, since the player has a say in how the story turns out, the outcomes are not just about winning or losing.

4. Effort:

All these games must be interacted with in order to finish them and the player must exert effort in performing the right actions at the right time.

Considering the fifth point in Juul's model, I would also argue that by making the player an integral part in the narrative decisions increases the emotional attachment of the player to the outcome of the game.

In the book *Half-Real* (2005), Jesper Juul also provides a brief and simple description of a videogame. Juul writes that when he discusses videogames in his book he refers to: "a game played using computer power, where the computer upholds the rules of the game and where the game is played by using a video display". Afterwards he also reminds the reader that he uses the term videogame as an umbrella term to describe PC, console, arcade and other digital games. (Juul, 2005: viii.)

Juul's description of videogames makes another important distinction between what can be interpreted as a videogame and what is just a regular game or film: technology. Videogames must be computer powered whereas films do not. This exemplifies why I would not call *Beyond: Two Souls* an "interactive film", since the game was only available for PlayStation until it was published on Microsoft Windows in 2019.

Even though one can do other activities on PlayStation, such as watch films for example, I doubt anyone would buy a PlayStation console for anything other than playing games. Today's smart TVs can accomplish most if not all the additional activities that a PlayStation 4 (and to some extent PlayStation 3) can accomplish, not to mention that one can access additions such as Netflix and Spotify on a computer. While media convergence is narrowing the gap between different forms of media, games still to a large degree need their own hard- and software. The fact that you need gaming hardware to interact with *Beyond: Two Souls* is a good indication that the object of my research is in fact a game and not a film.

To further my argument that *Beyond: Two Souls* is a game, I will also take into consideration the fact that it was made to be sold as a game. The packaging clearly shows that the product is meant to be played on a PlayStation 3 and even though the outside packaging does not refer to the product as a game, the leaflet inside uses the word game in reference to the product as well as the word play in connection to

interacting with it. When it comes to the contents, although very realistic, the visual footage is still fully animated akin to most videogames. Beyond the game footage itself, the product allows the user to save their progress, something that is not necessary for films. Also, the length of the narrative is about 10 hours, 3-5 times the length of the average film.

When you take all these features into consideration it is remarkably clear that *Beyond: Two Souls* and games like it are indeed games and not movies. Even though someone might make an argument that the term “interactive movie” refers to videogames that have cinematic qualities and are more focused on the narrative than the gameplay, I still think that the term is misleading since the term refers rather to an active cinema experience than a game with a strong focus on the story.

It seems I might not be the only one wishing to make this distinction. An IGN article about interactive movies quotes a game developer Rob Fulop as saying about his infamous game called *Night Trap*: "You shouldn't think of an interactive movie as a conventional videogame. *Night Trap* is meant to be an interactive entertainment experience. Comparing it to *Pac-Man* is meaningless." (Nix 2008). While this quote can on its own be interpreted in many ways, it still highlights the problem of the term “interactive movie” in the context of videogames.

The term interactive movie also indicates that there is a limit to how story focused videogames can be. Even though most games have a narrative element to them, it seems as if games with too much focus on the story become movies. This type of thinking seems to arise from the idea that there is a hierarchy between games, that some games are more worthy to be called videogames than others. The game scholarship is contributing to this problem. By claiming that narratives can only be added features in videogames and that they are always inferior to the gameplay, researchers downplay the importance that narratives can have in games. Therefore, it can seem as though games, which have successfully merged the narrative of the game with gameplay mechanics, are not true to the medium. It is important for researchers to understand that while a narrative is not a necessary ingredient it can still rise to be an important feature in a certain genre of videogames.

To conclude, focus on the narrative or cinematic qualities does not necessarily make a videogame less of a game. For this reason, it is necessary to call these types of products narrative focused or story centric games and not interactive films.

2.2. The soundtrack and musical themes

The music of *Beyond Two Souls* consists of the original music composed for the game as well as some previously existing tracks. The original music was composed by Lorne Balfe and produced by Hans Zimmer. All the previously recorded songs, except for two tracks, are credited to Audio Network Limited, a company that offers access and licences to use a library of unknown original music from different styles, artists, and composers (audio network limited website). The two additional tracks are *Angry Guitar*, which was written and performed by Dutch guitarist Joop Wolters, and *Lost Cause*, written and performed originally by Beck Hansen but in the game the song is performed by Ellen Page (Joop Walters website). (End credits.)

Although the original music was credited to Lorne Balfe, some sources say that Quantic Dream's previous composer Normand Corbeil, who composed the music for the company's two previous games, was also working on the soundtrack before his death in January 2013 (Kubba 2013; Nix 2013). In the end credits the game is dedicated to Corbeil's memory but when it comes to the music he is only credited for additional music. It is unknown how much of the game's music Corbeil worked on and how much of his work is featured in the finished product.

The original music by Lorne Balfe is mainly composed for strings and piano although some other instruments are featured. In the end credits only string players are credited, which leads me to assume that other instruments were created using samples or perhaps played by Balfe himself. The idea of sampled instruments does not seem too farfetched when taking into consideration that the music features sounds that are either altered or made entirely by computer. In the game these electric and synthesized sounds mirror the division between our world and the supernatural, which is common in audiovisual media, especially in the science fiction

and horror genres (Stilwell 2003: 70; McLead 2009; Laudadio 2011: 318; Elferen 2015: 228).

The soundtrack for the game was released in 2016 and it contains 16 tracks, of which 8 include their own musical motive. These are Jodie's Suite, Aiden's Theme, Dawkin's Suite, My Imaginary Friend, Beyond, Infraworld, Hunted and Party Revenge. (Spotify.) Because the music of the game is heavily based on variations of a few of these themes, it is important to explain these themes and how they are featured in the game.

From my transcriptions, which are featured below (Figures 4-9), one can see that minor modality dominates the soundtrack. This reflects the dark and tragic story of the game. The game does not shed light on Jodie's happier memories; rather, it concentrates on the more depressing aspects of her life. The melancholy of the pieces is reflected also in the rather slow tempo of most of the themes. Most of the themes I will be discussing below are no faster than 80 beats per minute, the only exceptions being Hunted and Dawkin's Suite. (Hampinen, 2004: 42.)

Of the eight themes, there are two that I will not focus on since they only appear occasionally outside their respective chapters. These two are Party Revenge and Hunted. Hunted is an intense track composed mainly for strings and drums. As the name suggests, the track is used for chase sequences in the game. Party Revenge, on the other hand, is used in context of Aiden using his powers in a destructive but intentional matter. The track is mainly orchestrated for strings and drums but features also electronic sound material to emphasise the supernatural quality of Aiden's powers. In addition to the optional revenge scene in the Party chapter, it is used also in the context of Aiden coming to Jodie's aid, when she is abused by grown men in the chapter Like Other Girls. For these two it is probably sufficient here for the reader to understand in what contexts they are used. For the others, there are two main themes that are featured in almost every chapter and four others that are not featured as heavily but still appear in several chapters of the game.

Some of the themes are associated with a specific character in the game. This is extremely evident when looking at the names of the tracks on the soundtrack; the

first three tracks, Jodie's Suite, Dawkin's Suite and Aiden's theme, are named after characters in the game. Also, the usage of these themes indicate that they function as leitmotifs, musical representations of the character in the soundtrack. Although this Wagnerian practice has been used in film music for decades, it has a special functionality in video games. Not only do leitmotifs help the player to identify aspects such as characters, moods, environments and objects in the game, they also make the game easier to understand and decreases the time needed to learn about the game by new players (Collins 2008: 130).

As mentioned, the musical score also features several pre-existing tracks from the company Audio Network Limited. These feature many different styles and genres, from many different artists. These tracks are used to provide context to the given situation. The music might refer to the location, like when Middle Eastern music is played in an embassy, or to the event that is taken place, such as contemporary pop music playing at the birthday party. The guitar track by Walters and the song Lost Cause will be discussed further in the section Direct Impact (pages 38-39). Next I will take a closer look at the themes on the soundtrack released on Spotify.

2.2.1. Jodie's Suite

Jodie's Suite (see figure 4) is the most recurring theme in the game. The melody is featured in most of the chapters and it appears in many variations. The track is also used as an undercurrent for other music in the soundtrack and sometimes the theme appears only in harmony, without the melody. In the soundtrack, Jodie's Suite is the first track and the melody is sung by the female vocalist Tori Letzler.

Jodie's Suite is predominantly different compared to many of the other themes in *Beyond: Two Souls*. The time signature is three-four time whereas all the other themes are in common time. It is also the only theme on the soundtrack that has a vocalist singing the main melody throughout the piece. However, in the game the theme appears with different instrumentations.

The theme consists of phrases of two bars with a repeating rhythm. The first bar consists of two quavers followed by a dotted crotchet and another quaver, after which the second bar consists only of a minim and a rest. The only exception to this repetition is the very last phrase which consists of three bars. The two bars stay the same but between the two another bar is added featuring a dotted crotchet accompanied by a quaver and a crotchet. Since this is the most played theme in the game, it is like the repeating rhythm is reflective of the structure of the story, which is divided into chapters, sections of story that come one after another, just not in the right order.

Except for the last phrase the melody on the first bar goes up or dips first by a major second before climbing up. The second bar of the phrase always drops lower than its preceding notes, except for the fifth phrase where it goes up by a major second. The last phrase starts by going up, first by a major third and on the second bar by a major second, before going down a pure fifth and a pure fourth respectively. The first bar continues to drop by another major second, but the second bar ends on E, which continues to the third bar and ends the melody.

The upward progression which nearly always comes down with the last note reflects the many tragic events in Jodie's life. Often while the events start with a good momentum by the time the chapter ends the character is dragged back down to the dumps. However, you could also say that the melody reflects all the hardships that Jodie gets through during the story.

The piece has a wide ambitus, the lowest note being b and the highest being d². Especially compared to another frequently used theme in the game, Aiden's Theme (ambitus of which is only between f¹ sharp and a¹ sharp), the theme takes a lot more room on the staff and has quite a bit of movement. All of this reflects Jodie's story. The wide ambitus mirrors the dramatic aspect of the story, the highs and lows, and the forward movement reflects the ongoing story.

Jodie's theme is often used in situations that have high emotional intensity. The emotions connected to this piece range from negative to positive. In the chapter Homeless, Jodie attempts suicide by throwing herself from a high altitude down onto

a highway with constant traffic, but before she falls Aiden stops her, saving her life. Afterwards Jodie's theme plays while she cries to Aiden in desperation, complaining of how she wishes to take her own life. Yet, later in the chapter, after she has helped deliver Tuesday's baby, the theme plays while Stan tells Jodie that she is a miracle (see appendix 2 for Stan and Tuesday). These are two scenes that have a very different emotional impact, yet the same theme is chosen for both occasions.

The instrumentations most used in Jodie's Suite are vocals, piano and on occasion the melody is played by strings or other instruments. Tori Letzler's voice is not classically trained and is in no way overpowering. On the soundtrack while the melody is first presented completely by Letzler's voice, already on the first repetition her voice is matched by the strings and not brought to the forefront. This gives Letzler's vocals a fragile quality and reflects Jodie's vulnerability. Notable is also that Letzler adds increasing amount of melismas to the melody on each repetition, the introduction of the melody having none but the second repetition having already one or two per phrase. Taking in consideration how the music swells in epic proportions in this final repetition, this adding of melismas seems indicative of Jodie's growth during the story and how towards the end she breaks the mould of letting others decide what she should do, to taking her own path.

While Jodie's Suite is played during very emotional scenes, the alterations in the theme gives each scene the nuance that is required to establish different outcomes. While the theme functions as a leitmotiv for the character, the instrumentation of the theme highlights different aspects of the events taking place, for example how these events affect Jodie emotionally and whether her abilities are in any way responsible for what has happened.

The theme often appears in sung form when the scene in question is impactful for Jodie and is highly emotional. For example, at the end of chapter Dragon's Hideout, Jodie has a conversation with Ryan about how Ryan previously lied to Jodie about a mission, and he confesses his feelings to her; all the while they are expecting to die in the freezing winter temperature having just come out of water. While the player can choose to either tell Ryan that Jodie feels the same way towards him or that she does not, Jodie's Suite appears sung both times. The music was also sung on a

previous chapter, *The Mission*, just after Jodie has found out about Ryan's betrayal and has left the CIA. The theme plays in the background while a highly emotional Jodie calls to Nathan Dawkins in the rain to tell him about the situation.

Jodie's Suite appears in sung form also when the scene is more connected to the supernatural aspects of Aiden and her. Chapters *The Party* and *Alone* emphasise this connection by changing the theme's instrumentation based on choices the player makes. In the first example Jodie has been treated badly by the other teens at a birthday party and the player gets to decide on whether they want to take revenge on the other kids. If the player takes revenge, the theme playing at the end of the chapter is sung but if they decide to leave instead, the theme will be played on the piano. In the chapter *Alone* Jodie's foster parents are saying their final goodbyes to Jodie who will stay at the research facility indefinitely. While the parents are walking out of the room, Aiden can attempt to strangle Jodie's foster father. If the player decides to take this opportunity, the theme will afterwards appear sung, but if they let the parents walk out the theme will be again played on the piano. I discuss these two scenes in length as the chapter *Indirect Impact* (page 41). Here I just want to highlight the connection of the theme when sung to Jodie's abilities.

While Jodie's Suite appears in emotional scenes in other instrumentations as well, these instrumentations give it a slightly different connotation. The theme when played on a piano or a keyboard is usually linked to a context where other people are involved. For example, in the chapter *Old Friends*, Jodie's Suite is played on the piano when Jodie meets Cole (see appendix 2) after being separated for many years. The theme is also played on the piano at the end of the chapter 16 *The Dinner*, where Jodie has a date with Ryan. The date can end either by the two spending the night together or by Ryan leaving early either because Jodie rejects his advances or because Aiden intimidates him. Whatever the end turns out to be, the ending always features Jodie's Suite played on a piano. Thus, the theme on piano can be linked to both Jodie's relationship with others as well as the absence of friends and loved ones. In the chapter *My Imaginary Friend*, the theme is played several times when Jodie walks around the house and tries to find something to do in order to alleviate her loneliness. Thus, the theme emphasises Jodie's loneliness, her wish to belong and to find connections and be loved.

The difference in the meaning of the two instrumentations is well illustrated by scenes where Jodie is saying goodbye to other characters. In chapters Navajo and Separation the goodbyes are said while Tori Letzler sings the Jodie's Suite, but while the parents are saying goodbye in the chapter Alone the theme is played on an instrument that sounds like a layered sound of piano and celeste. The theme when sung highlights the importance of the characters to Jodie in the chapters, whereas the piano like sound in the chapter highlights Jodie's loneliness, knowing that her parents are leaving her for good.



Figure 4. Transcription of Jodie's Suite

2.2.2. Aiden's Theme

Another important musical theme in the game is Aiden's theme (see figure 5). Unlike Jodie's Suite, which has a distinct melody and a clear structure, Aiden's Theme is very stagnant and does not really change during the entire game. The whole theme consists of four long notes that are repeated in the same order throughout the track. This minimalistic track expresses the mystery that is Aiden; who is he and why is he linked to Jodie?

On the soundtrack the piece is seemingly in G harmonic minor. I say seemingly since the track's key is not entirely easy to pinpoint. While G harmonic minor is fitting to the melody itself, it does not fit every aspect of the track. Towards the end of the piece cello's start playing a pattern of c – b – c, of which the note b is quite short, giving the impression of the c just briefly dipping to b before returning to c. However, the note b is rather problematic when considering the theme to be in G

minor. It is almost as if the theme is confused about whether it is supposed to be major or minor.

If one considers the major scale to be associated with positive connotation and minor with negative, this slight ambiguity between major and minor key is rather fitting for Aiden. While Aiden is often in the game seen as a negative influence, causing destruction as well as rifts between Jodie and others, he also has some redeeming qualities. He saves Jodie's life several times and even offers compassion in times of need. Aiden is not just a malevolent spirit, but he is Jodie's twin brother who also cares for her. While Aiden's actions often result in trouble, the player on occasion finds out through Jodie that his intentions are not always malicious but that at times he misreads the situation. Yet there are also times when Aiden acts according to his own negative emotions such as jealousy or anger.

Just like Jodie's Suite, Aiden's theme at times changes instrumentation but this happens far less than in the case of Jodie's Suite. The theme is played a couple times on the piano, in few occasions on bass but in majority of the cases the theme is played by strings. This adds to Aiden's mysterious nature. While Jodie's Suite's instrumental changes tell about the characters emotions and point of view, the fact that we do not have many changes to Aiden's theme reflects the fact that we seldom get to know about Aiden's thoughts regarding to what is happening on the screen.

Aiden's theme is closely related to another theme on the soundtrack called Infraworld (see figure 6). The Beyond: Two Souls Wiki describes Infraworld as a place where souls and other entities reside. While the nature of Infraworld is not made entirely clear in the game, it seems to be a parallel dimension, which can only be accessed through rifts. The problem with the rifts is that not only does it grant an access to the Infraworld but also offers evil entities a path to our own world. The opening of rifts often ends in death and destruction. (Beyond: Two Souls Wiki.)

Even though Infraworld and Aiden's Theme are in different keys, the Infraworld being in B minor while Aiden's Theme is in G minor, the melody has a very similar pattern. They both start with a semitone descent and then rise, Aiden's theme by two whole-tones and Infraworld by one and half. After that, they both descend, but where

Aiden's theme returns back to the tonic that it started from, Infraworld descends a whole tone from its first note and then returns to the tonic, which happens to be the second note, leaving the first note without repetition. Where Aiden's theme ends there, Infraworld has another cycle, only this time the third note ascends a whole tone, which is the only difference between the two parts.

On the soundtrack, the Infraworld track starts by imitating the instrumentation of Aiden's theme in the beginning, at first being rather quiet, and the sound of the violins has an unsonorous quality. This sound of the violins is ghostly, almost mimicking the airy sounds of the Aiden itself. The similarities between the themes in the beginning clearly reflect the connection between Infraworld and Aiden. Because Aiden is an entity by all logic, he should reside in the Infraworld but because of his connection to Jodie he cannot. Both Infraworld and Aiden are part of the same phenomenon and therefore it makes sense for the themes to be very similar as well. While Infraworld is the place from where the entities originate, Aiden is still remarkably different from the entities coming out of there. Just like entities from the Infraworld, Aiden can also be unpredictable and violent, but this is often a reaction to threat and danger while other entities seem to lash out at all living creatures.

Still, as I described above, there are differences to the two themes. On the soundtrack, unlike Aiden's Theme Infraworld grows, adding more instruments and layers to the theme. While Aiden's Theme has also layers, compared Infraworld the layers are minimalistic, consisting only of the repetition of one or two notes. The richness of the themes tells about the depth of information the story gives about these two. Like stated before, very little is known about Aiden and why he is connected to Jodie. Even though studied by scientists, there are still many unknown aspects to Infraworld too. Infraworld, however, represents many things to different people; for Jodie it represents death and destruction to the army it represents an opportunity for triumph over other countries and new creative weaponry. Also, there are aspects that are known about the Infraworld, whereas Aiden beyond his capabilities is a complete mystery before his identity is revealed in the end of the game.



Figure 5. Transcription of Aiden's Theme



Figure 6. Transcription of Infraworld

2.2.3. Dawkin's Suite

Aside from the two main characters, Jodie and Aiden, Nathan Dawkins is the only one to get his own theme in the game. While on the soundtrack there is a piece called Norah (see appendix 2), it can hardly be called an independent theme, since the melody is based on Jodie's Suite and this piece is only featured in the chapter of the same name.

Dawkin's Suite (see figure 7) is played in A minor and has a slow-moving melody containing only three quavers and most of the notes are minims with a few crotchets sprinkled in between. The melody of four phrases stays in the range of one octave throughout. This stability in the theme reflects the character's stability. For Jodie Nathan was the first to really care about her and he practically represented a father figure to her.

The minor key reflects the trauma of the character. During the game Nathan's family dies in a car accident and by the end of the game his grief pushes him to desperate measures in trying to be reunited with his family, which in the end results in his death. The desperation and the end of stability is also seen towards the end of the theme in the increasing amount of shorter notes (there are only two in the first two phrases while the last two has eight) and by the melody's rising ambitus, which also makes the theme slightly more dramatic.

On the soundtrack the melody is played primarily by cello or violins with the exception of an oboe playing half of the melody towards the end and the very last repetition which features the vocalist Tori Letzler, who accompanies the violins in the melody. The addition of the vocalist clearly demonstrates in the music how the fates of Jodie and Dawkins are intertwined. In parts the melody is also accompanied by a sound similar to a choir, which also gives a more human feel to the sound.

It is noteworthy that from all the characters featured in the game Nathan would get his own musical theme on the soundtrack. In a sense, it says something about how central the character is in Jodie's life; after all Nathan is the one Jodie calls whenever she is having a rough time. On top of this, Nathan was the first person who did not abandon Jodie because of the issues surrounding her and her abilities but provides care and affection as well as some form of safety.

There could be an argument made, however, that both Ryan and Cole could have had their own theme's instead of or among Nathan, since by the end of the game these two characters seem to have meant more to Jodie. However, Nathan has a distinct storyline that is somewhat independent from Jodie's. While Ryan and Cole are important characters, their storylines in the narrative only work to push Jodie's story forwards, where Nathan is more separate as a character and has his own motives. Also, the fact that the game developers have chosen a highly regarded actor to play the role does say something about the centrality of the character to the narrative. In the end, the reason why the game concentrates more on Ryan and Cole at the end of the game has more to do with Nathan's final moments, his betrayal of Jodie's trust, rather than him not being a central character in the game.

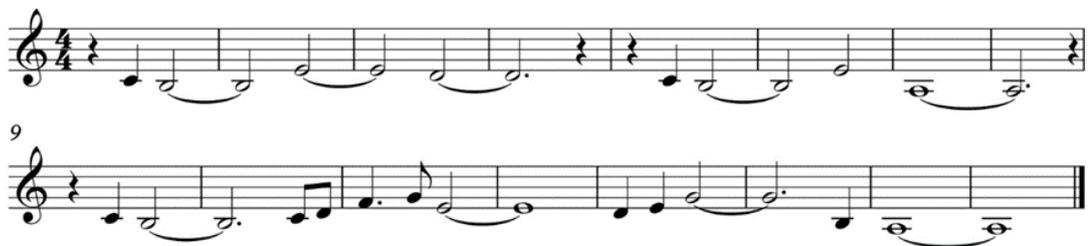


Figure 7. Transcription of Dawkin's Suite

2.2.4. Beyond

In the soundtrack *Beyond* (see figure 8) starts as a descending C minor in minims played by an electric guitar or similar sounding instrument. A lot of echo is added to the guitar sound, which creates the feeling of distance and space in the track. The scale is repeated after which it is joined by violins playing a pattern of dotted crotchets and a quaver which is either a second higher or lower compared to the previous dotted crotchet. After this the C minor scale is repeated twice on its own accompanied by bass. Like an explosion, the violin pattern takes over the piece and repeats four times accompanied by a drum beat and rather aggressive cello and bass backing. The first repetition is played some octaves lower, after which it returns to the original pitch for the rest of the repetitions. After this the music winds down and repeats the C minor scale twice at half the speed. On the second repetition the violin pattern reappears and repeats twice, accompanied by drums and an electric bass line, after which the piece finishes.

This theme is used sparingly in the game. The most recognizable feature of the theme is the descending C minor scale, which at times is featured only in part. The theme is mainly used in connection to Jodie's abilities and the CIA, giving the indication that the theme has more to do with how Jodie's abilities are being used. When it comes to the CIA Jodie's abilities are useful in gaining intel and sabotaging other countries plans to gain more independence or power. The army also represents a violent use of these abilities. The theme can also be connected with death, because the biggest decision at the end of the game is between Life and Beyond, which will reunite Jodie with her dead loved ones. Yet this theme is also used in connection to Zoey, which seems to take Jodie's place at the end of the game, given that the player has chosen a certain ending.



Figure 8. Transcription of *Beyond*

2.2.5. My Imaginary Friend

My Imaginary Friend (see figure 9) is a theme that plays mainly during the chapter with the same name. Outside of the chapter the theme is used in various contexts, such as Aiden's explorations in the chapters Hunted and Dragon's Hideout as well as in a few occasions in the chapter Homeless.

The theme includes four phrases, three phrases of four bars and the last one consisting only of two. Unlike the other themes, however, in My Imaginary Friend the phrases weave into each other seamlessly, making it hard to clearly distinguish where one phrase starts, and one ends. This seamlessness mirrors the relationship between Jodie and Aiden in their childhood. While Jodie knows that Aiden is a separate entity (Jodie's childhood drawings show Aiden and her being connected with a cord), many of Aiden's actions are interpreted as her doing by Jodie's foster parents and the neighbourhood children.

The ambitus of My Imaginary Friend is bigger compared to any of the other themes, being two octaves. The theme ends an octave lower compared to where it starts, so that if the theme would continue onwards it would be played an octave lower than in the beginning. This mirrors Jodie's unstable childhood, having to be connected to an at times violent entity, being attacked by other entities at night, having parents who do not understand her condition and who end up leaving her in the care of Nathan, when they are not able to deal with the issues surrounding her.

In the soundtrack recording, the melody is played at first in layered sounds of celeste and vibraphone, which is reminiscent of what a music box usually sounds like. In the chapter Separation there is a scene, where touching a music box during an experiment, Jodie sees that it used to belong to Nathan's daughter. Therefore, it is easy to interpret this melancholic theme as representing the innocent but tormented childhood that Jodie experiences with Aiden. Later in the track the melody is taken over by violins with the sound of celeste and vibraphone staying in the background.

The theme is in the Phrygian mode in G \sharp , which is a scale similar to the minor scale, but instead of a whole tone between the first two notes it features only one. This

makes the mode feel more claustrophobic and makes even the tonic lose its normal status as the piece's resting place (Walser 1993: 47). The Phrygian mode has been found to be the "least happy" mode and the case has been made that Phrygian inflections represent death in music (Temperley & Tan 2013: 255; Kimmel 1980).

It seems almost diabolical to use Phrygian mode for a theme that is heavily connected to a character's childhood. Yet it works well with the chapter of the same name. During most of this chapter childhood Jodie walks around the house, trying to find something to do. Most of her attempts of play are interrupted by Aiden or at some occasions even a more dangerous entity. The restless and unsatisfying Phrygian mode describes Jodie's frustration of the situation, not being able to find any meaningful activity to make the time go faster and being forced to spend time with Aiden because of their connection, at the same time as she is not allowed to spend time with the neighbourhood kids.



Figure 9. Transcription of My Imaginary Friend

3. DIRECT IMPACT

During the research I found two ways in which the player can impact the music of the game: directly and indirectly. The way this happens is through the choices that the player makes throughout the game. At times only one action is all that is needed to trigger the music but at other times the player must succeed in one or several quick-time events for the sequence to continue and the music to play.

By making choices that the player knows will have an immediate impact on the music featured in a game, the player has a direct impact on the music. This can vary from choosing a specific song or a style of music to choosing to play an instrument as the character in the game. This phenomenon has been described by other researchers as well. As mentioned previously in the part 1.4.1 Medina-Gray calls choices and actions which are made in connection to sounding music by the player musical choices (Medina-Gray 2016: 61). Elferen, on the other hand, writes about musical interaction, which describes a direct connection between the player and the soundtrack (Elferen 2016: 37-38).

Both previous researchers are talking about the same issue, but they are emphasising a slightly different viewpoint. While Elferen's concept of musical interaction is closest to what I am studying in my thesis, my own investigation involves only the player's impact on the soundtrack and not the other way around. Therefore, the word interaction could be slightly misleading.

In *Beyond: Two Souls* the player has some opportunities to impact the music of the game directly. In two chapters the player gets to choose a genre of music they feel best suits the situation and there are also three chapters where the player can choose to interact with an instrument.

3.1. Playing Guitar

If the player does a little exploring, they can notice from the second chapter onwards that Jodie has practised playing the guitar since a young age. In the beginning of the second chapter, the Experiment, Cole comes to take approximately 6 – 8-year-old Jodie from her room to the experiment she is to take part in. While the player gets to walk around Jodie's room, among other items they can interact with a small toy guitar that is on the floor. If the player takes this opportunity, Jodie will pick up and strum the guitar a few times (see the leftmost picture on figure 10). At this point of the game the guitar seems like another toy for Jodie because it is evident from the inactivity of the left hand that she likely has no training in playing the instrument.

This scene could hardly be considered a musical interaction if it were the only time in which Jodie plays an instrument. However, the option to play a guitar comes up in two more chapters and through these interactions the game also describes Jodie's mood and situation in the given chapter.

The second interaction with a guitar happens in chapter 10, Homeless, in which the player is trying to collect money on the streets of a small run-down town. One way for the player to accomplish the task is to borrow a guitar from another homeless man and play a song. At first the player must tune the guitar through quick-time events and after that trigger the start of the song (see the middle picture on figure 10).

The song Jodie sings and plays on the guitar is a short version of Beck's song Lost Cause. The mood surrounding the song is very melancholic and the lyrics echo this. The song is about a person who is deemed a lost cause, someone who struggles to keep relationships and has no clear goal in life. The lyrics could be applied to Jodie's situation, who is at her lowest point. Her desperation was depicted just moments before this scene, when she articulated to Stan, a homeless man who saved her life in the beginning of the chapter, that she would have preferred to be left on the street to die.

The next time the player gets to pick up a guitar is in the chapter 12, Like Other Girls. This time Jodie is a teenager and the small toy guitar has become an electric

guitar. The player gets to pick up the guitar and by completing quick time events they will hear Jodie seemingly improvise some heavy metal riffs while the player executes the prompts on the screen (see the rightmost picture on figure 10).

In this scene Jodie is livid, because Dawkins has forbidden Jodie from meeting her school friends outside the research facility. By playing the guitar Jodie expresses her emotions of anger and frustration at the situation, but also hopes to annoy Cole, who is monitoring Jodie and her actions from the room behind the wall. The style of music also indicates Jodie being a rebellious teenager, which her guitar playing and her escape attempt from the facility clearly support.

This scene differs from the other guitar playing scenes because this is the only time that the player gets to play the guitar by succeeding in quick-time events. If the player fails, Jodie will throw the guitar on the floor in frustration. While in the chapter Homeless failing the quick-time event will make the player start the tuning of the guitar from the start, in this chapter there is no option to try playing the guitar again after a failure. So, if the player does not succeed in pressing the right buttons, they do not get to hear the rest of the riff.



Figure 10. Jodie playing guitar in chapters (from the left) 2, 10 and 12.

3.2. Put on Some Music

In addition to the player choosing to play an instrument, there are three other instances in which the player can make a direct choice about the music. This time the player can choose what type of music will play on the background of the gameplay.

The first of these opportunities is in Chapter 4, The Party, where Jodie is asked to take care of the music as the teenagers make their last preparations to get the party started. When the player goes to the stereo, they are given four options to choose from: pop, rock, disco, or country (see the picture on the left on figure 11). The player can first play around with the options and listen to each genre before making the final choice. Any choice the player makes, however, lasts only for a few seconds, because one of the other girls always approaches the stereo and changes the music to contemporary dance music. This happens even if the player never interacts with the stereo. In this case, the same girl will wonder why there is no music and automatically puts on the music of her choice. By undermining Jodie's choice of music, the narrative highlights Jodie's status as an outsider and reflects on her lack of friends of the same age. Spending most of her time with Nathan and Cole, she is not aware about what type of music her peers usually listen to, making her seem slightly odd to the rest of the teenagers.

The other instance where the player is allowed a choice regarding the music is in the chapter 16, The Dinner. In this episode's first half Jodie prepares herself and her apartment for a date with Ryan. If the player walks to the stereo, they are offered three choices of music: jazz, lounge and romantic (see the picture on the right on figure 11). All the options given are rather serene music played on acoustic instruments, something one might hear in a fancy restaurant. None of these options affect the results of the chapter, but the music chosen by the player, except for the very end, plays in the background for the remainder of the chapter. If the music is chosen at the earliest possible moment, the player might hear around four or five pieces of music by the end of the chapter. So, unlike the previous instance, this time the choice will have a greater impact on the playing experience. Turning the stereo on is however optional, and the player might either decide not to put the music on or might not even be aware that the option exists.

There is still one more instance in the game where the player can affect the music on the background, only in this instance the player is not given a choice about the style of music. In the chapter 12, Like Other Girls, if the player manages to get to the bar where Jodie is supposed to meet up with her friends, they can choose to interact with some of the machines near the counter, after which one of the men in the bar will

approach Jodie and ask her to play a game of pool with him. Few of the machines are arcade games such as flipper, but one of them is a jukebox.

When the player arrives at the bar, a country song is playing on the jukebox (Just Me and the Open Road by Dan Skinner, Adam Skinner and Randall Breneman) but when the song ends there is no more music on the background. If the player decides to interact with the jukebox Jodie will choose another country song (She's Gone by Pete Masitti and Julie Saucke) that will play until the men in the bar start abusing Jodie. If the player instead decides to play with one of the arcade games, the chapter will go on without music.

An observation one can make based on these examples is that in *Beyond: Two Souls* the direct interactions with music are always optional. Even though the player is instructed to choose the music in the Party scenario it is not forced on the player and all the interactions with a guitar involve exploring all the optional interaction possibilities that the game offers. Even if it is likely that the player will notice at least some of these choices, which are not hard to find if one plays “against the grain” as Summers instructs, a less exploration-oriented player could play through the game without noticing any of them (except for the party scene) (Summers 2016a: 12; 2016b: 35). The interaction with the jukebox in the chapter Like Other Girls is very easy to miss, because the player has the option to take this opportunity at a very specific point in the chapter, after which the story goes forward and the option is not offered anymore.



Figure 11. Choosing the genre of music in chapters 4 and 16.

4. INDIRECT IMPACT

More often than affecting the music of the game directly, the player's impact on the music is indirect. The music can be affected indirectly when the player makes a choice based on the story or dialogue, to which the music responds to accordingly. This corresponds to what Medina-Gray calls non-musical choices. According to her these types of decisions are far more common than musical choices in video games and they may or may not result in changes in the musical environment. (Medina-Gray 2016: 61.)

Medina-Gray also reminds the reader that while an error in the gameplay might not fall under deliberate choice, it may still influence the soundtrack. (Medina-Gray 2016: 61.) In my thesis possible failures in the player's actions fall under the indirect impact, because even though in most cases failure is not a planned action, it still has an impact on the music and, unless the player has failed several times, the impact on the music can not be foreseen.

In this part of my analysis, I want to go through some scenes where the player's decision has an indirect impact on the music of the game. I will only take a look into those non-musical decisions in *Beyond: Two Souls* where different options lead into different musical outcome. I will describe the scene before the choice, what the player's options are, and how each choice affects the game's story as well as how the music changes in each scenario. I will also analyse what changes in music say about the scenes and what type of information the music adds to the scene.

4.1. To Revenge or Not?

In the chapter The Party Jodie attends to a birthday party of Nathan's colleague's daughter. Unfortunately, after a while the birthday girl and her friends turn against Jodie and lock her in a closet under the stairs. After Jodie gets out with Aiden's help, the player gets to decide to either get their revenge by causing havoc with Aiden or to leave the house quietly.

If the player chooses to leave without taking revenge, Jodie walks out and takes a last look at the house, seeing the window behind which the birthday party continues without her. In the background, the player can hear the melody of Jodie's Suite playing on what seems like an overlaid sound of piano and celeste with added reverb and delay effects. Alongside the melody violins are playing a wall of sound on the background. This cutscene ends the chapter.

However, if the player decides to take revenge on the other kids, Jodie gives Aiden the go ahead. Aiden returns to the living room where the other kids are eating the birthday cake and, at first, he will only scare them slightly by destroying the cake, blinking the lights, causing static on the television, among other things. This has the desired effect and while the teenagers attempt to leave the room, they discover that the door to the hall is locked after which they start to look for other ways to get out of the house. Aiden can then terrorize the kids in many different ways and the end results vary from the kids being knocked out to the house catching fire.

Whatever the player does as Aiden, all the scenarios lead to Jodie looking at the house from outside with the birthday girl's mom returning home to discover the mayhem caused. The teens are either unconscious inside the house or they have made it outside, in which case the birthday girl blames Jodie of trying to kill them. In the end of all the revenge scenarios, Jodie's theme is being sung in the background, again with the added effect of reverb and so much delay that one could think they are listening to a broken record.

What is rather remarkable is that the choice of taking revenge is what makes the difference in the music. Even though taking revenge can lead the player to slightly different outcomes, the theme in the background stays the same. However, if the player decides to leave, they will hear Jodie's suite, but with a different instrumentation. Since the player cannot go through both outcomes in the same playthrough, what is the reason for having a different instrumentation for the outcome of the chapter?

Chapter 13, Alone, has a very similar choice with rather similar outcomes. Here Jodie's foster parents, Philip and Susan, come to say their final goodbyes to Jodie,

who now lives in the research facility, under the pretence that they have to relocate for work reasons. The player sees the entire scene from Aiden's perspective, which gives the player the freedom to move around during the scene. Once the foster parents are leaving the room the player has a chance to strangle Philip, or let him leave uninjured. On previous chapters Philip has been the one who has rather aggressively pushed for Jodie's institutionalization and the couple's leaving Jodie to Nathan's care, to which Jodie's foster mother, Susan, eventually gives in reluctantly. This is why Jodie's and Aiden's anger is directed to Philip rather than Susan.

This scene has two possible outcomes for the player. If Philip is left unharmed, the foster parents leave, and Nathan tells Jodie that he and Cole will always be there for her. However, if the player uses Aiden to strangle Philip before the parents leave, Nathan will beg Jodie to stop while Susan looks over her husband in horror. In a moment Aiden will release Philip, who then accuses Jodie of trying to kill him and calls her a monster, after which Susan will look at Jodie with a horrified expression. After the couple leaves Nathan tells Jodie that she made the right decision.

The only theme that is heard during this short chapter is Jodie's Suite. It starts at the very beginning of the scene and ends briefly when Susan gives Jodie a kiss on the nose before she starts to walk towards the door. The melody is played on a mid-range piano and violins start to play the melody alongside the piano a while later. On top of these instruments there are occasional clean electric guitar sounds as well as some high-pitched sounds that are reversed, which makes pinpointing the instrument on those sounds very difficult if not impossible.

After the pause on the music Jodie's Suite returns either after the foster parents have left or after the strangling of Philip, when Susan looks at Jodie in horror. If the parents have left unharmed the player hears the same music that plays in the no-revenge option in the previous example: the theme played on what sounds like the sounds of piano and celeste overlaid, with violins on the background. If the player has decided to strangle Philip, however, the player hears the same theme, but the melody is played by yet again the mid-range piano with Tori Letzlers vocals. There are not added harmonies to the melody in this option.

In both of these chapters the choice that the player is asked to do is to make a decision between taking revenge, to express their anger and frustration of the situation, or to be the bigger person and let the others be. While the latter would be the morally better choice, it leaves the player without a satisfactory resolution.

While the sounds of the instrument playing the melody of the no-revenge choice is not the same as in the track *My Imaginary Friend*, the high-pitched celeste-like sound does represent the innocence of the young character. When the player decides not to take their revenge the music indicates that this innocence is left intact whereas when you decide otherwise, this innocence has been replaced by guilt, because after all she ends up also hurting others than just the intended target. In the party chapter the person, who gets unintentionally hurt, is the mother of the birthday girl, who wanted to invite Jodie to the party in order for her to get to know other kids of her own age, and in the chapter *Alone* it is Susan, who before the incident did not see Jodie as a possible threat to Philip or herself.

The vocals on the revenge route highlight a more human side of Jodie. There is no question that Jodie has been treated badly and unfairly by the people she targets, and the feeling of anger is completely justified. Also, the route she takes in taking her revenge is quite understandable when taking into consideration that she is a child and has no power over these people. That being said the damage and hurt caused by her and Aiden's actions is greater than expected and like I mentioned above, also those Jodie would not want to hurt get hurt by these actions. The actions are understandable, but it is the consequences of these actions that Jodie must live with.

Another change that happens between the themes in the different scenarios is the lack of supporting harmonies in the revenge scenes. This can be taken quite literally; after Jodie has done what she has done she loses the support of other characters. This is rather evident in the chapter *Alone*. If the player takes no revenge in the chapter, Dawkin's expresses that he and Cole will be there for her and gives her a warm hug. In the other scenario, however, while he looks compassionate, he only comments on her choice to let Philip live, and Jodie walks off on her own. It is evident that in taking revenge against Philip, she is more alone than if she had not done so.

In the scene after the party revenge the music in the background also indicates that what has happened has truly impacted Jodie in a very fundamental level. The added delay to the Jodie's Suite makes the theme sound choppy and fragmented which makes the theme sound less human. The birthday girl calls Jodie a devil and perhaps Jodie is starting to internalise this idea of her being something evil and otherworldly. In chapters that in a linear order would appear before the party she has been called both a monster and a witch. After all the destruction this might be how she feels about herself.

4.2. What Is Your Reply?

Another scene that I want to discuss is one in which deciding about how Jodie should talk to Ryan has an impact on the music played on the background. In the short chapter called the Briefing Jodie is receiving instructions from the CIA about a mission she is about to take. However, she is not to go alone; she is to take with her a small team of three agents, one of whom is Ryan, Jodie's ex-boyfriend. The last time she saw him they fought about him lying to her about a previous mission, after which she felt so betrayed by him and the CIA that she ended up leaving, resulting in her being constantly hunted by the government.

Taking all the previous context into consideration, it is easy to understand that the idea of working with Ryan is not the most pleasant for Jodie. Once the briefing is finished Ryan approaches Jodie and tries to open up a conversation by telling her that he is glad to see her. At this point the player is given four choices of how to reply: distant, aggressive, curt or cold (see figure 12). All these choices lead to a different dialogue and might also lead to a different response in the music accompanying the scene.

There are two themes which appear in the background of the conversation after player has made their choice: My Imaginary Friend and Aiden's Theme. The choices offered to the player are evenly divided between the themes. If the player chooses either distant or curt, they will hear My Imaginary Friend, but if they choose aggressive or cold, they will hear Aiden's theme instead.

The same version of My Imaginary Friend is heard in both the options distant and curt. The melody is played on a piano with a very quiet but stable backing that sounds like a synthesized choral sound. In both options Jodie expresses her anger towards Ryan and denies him an opportunity to apologise or explain his previous actions. The theme has some added notes played at the same time as the long ones, which makes it sound slightly dissonant, and thus adds an ominous feeling to the track, while otherwise no threat is expressed by the characters.

Unlike My Imaginary Friend, the versions of Aiden's Theme are different between the choices aggressive and cold. In the aggressive path Aiden's Theme is an excerpt from the track on the soundtrack; the violins play the melody and there is a piano note repeated alongside the melody. On the cold path, however, the theme is played on a sound that is very likely a piano with distortion added to it. There are also two rising notes leading to each of the four notes of the melody.

What is common to the scenes followed by the choice of either aggressive or cold, is that in each Jodie refers to Aiden and the possible danger he poses for Ryan. The slight difference between the scenes is that in the cold route Jodie at least says that she is going to try to keep Aiden from killing him "for the mission sake" although she also says that she cannot promise that it will not happen. In the aggressive route she only warns Ryan to keep his distance and she does not even allude to trying to keep Aiden at bay. The high-pitched violins and the mechanic sounding repetition of one piano note reflect this ominous warning.

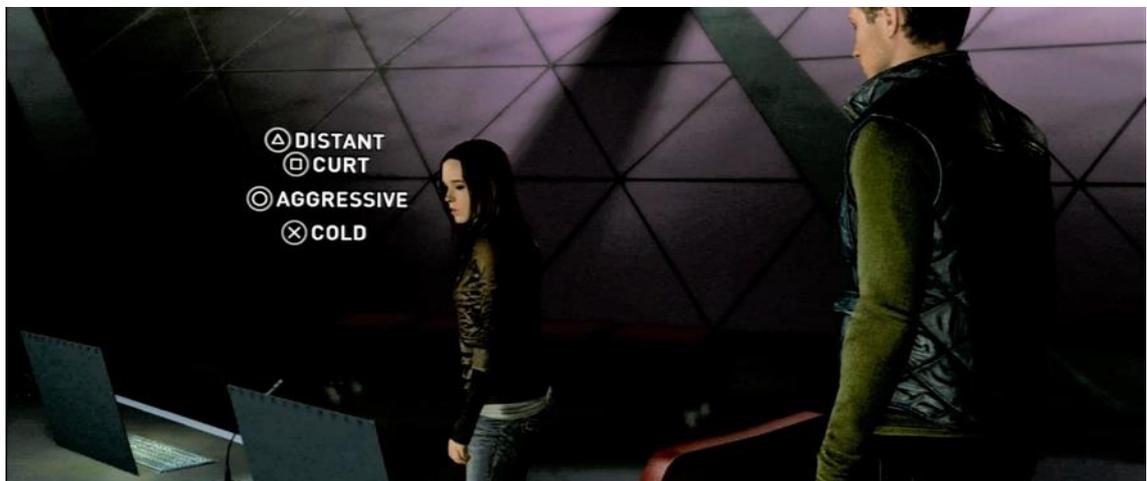


Figure 12. Player gets to choose a reply to Ryan's greeting.

4.3. The End

Finally, I want to discuss the ending of the game and how the many choices made in the last chapter impact the music. While most of the ending is dependent on the player's actions, in the last chapter there are a few choices earlier in the game, which impact the amount of options given to the player at the very end. The game offers three main endings: Death, Beyond and Life. What happens within the ending depends on the fate of certain characters. Death is the only exception to this since it leads only to one cutscene before the end credits. I have made a table that demonstrates the endings and the relationship between the different events that impact which ending the player gets (see figure 13).

I will start by discussing the ending, which I have named Death, since it has no connection to any earlier choices. After that I will discuss the two other endings, Beyond and Life, by dividing them into parts and discussing how these parts vary from each other. Both of these epilogues can be divided into five parts, but before getting to the epilogue I have to discuss the ending of the final chapter, Black Sun.

Epilogue choice	End of Black Sun	Epilogue part 1: Aftermath	Epilogue part 2: Loved ones	Epilogue part 3: Looking forward	Epilogue part 4: Life continues		Epilogue part 5: The Future
Beyond	Ryan alive	Beyond	All alive: Ryan, Norah, Cole	Beyond	Zoey		Zoey
	Ryan dead		All dead: Jay				
Life	Ryan alive	Jodie at a cabin	Cole scene	Final decision at the cabin	Talking to Ryan	Zoey	Jodie with Zoey
						Alone	Jodie
	Jay						
	Ryan						
Ryan dead	Final decision at the graveyard	Zoey	Jodie with Zoey				
		Alone	Jodie				
		Jay					
Death	Infraworld has taken over						

Figure 13. Table of all possible endings, colour coded based on their relationship

4.3.1. Death

One of the few times that the player can fail in the gameplay is very near the end of the last chapter when Jodie is making her way to the condenser to activate the self-destruction manually. As Jodie is approaching the condenser she is hindered by souls or entities that are latching onto her legs, trying to overwhelm her and stop her from proceeding. The player can fight them off by succeeding in quick-time events where the player must push a certain button in a fast repetition. Failing to do so will lead to the ending I have named Death.

This epilogue starts with Jodie's monologue of what followed her failure to get to the condenser. She tells the player that the Infraworld has overwhelmed our world and the only things left of what used to be is death and destruction. She describes how she is consumed by the guilt of not being able to save the world, playing all the events in her head wondering what she could have done differently. This ending is one of the only instances when the game expresses that the player has failed and could have come to a different conclusion in the game had they done something different. The picture does not show the player anything concrete, just a moving image of some bright lights against a dark background with passing shadows and ripples of orange, as if the world is on fire.

The music in this ending is very fragmented and lacks melody. The only theme in the scene is a brief excerpt of Infraworld when Jodie mentions that it has taken over. The music of the scene is mostly a collage of different sounds played on stings or a synthesizer. Towards the end the violins play a crescendo, after which the music drops out. Before the music stops the picture has already faded to black and after a pause of a few seconds, the credits start rolling as the track Infraworld from the soundtrack plays. The music underlying the end credits is not affected by any of the endings, but this is the only ending where the track has not started before the credits, so the track starts rather abruptly from 50 seconds into the track.

The ending clearly depicts the destruction of the world and referring to only Infraworld highlights the fact that it is the only thing that exists in the world anymore. However, even the reference to Infraword is only a two-note sequence

from the beginning of the theme so the player does not hear any proper melodies during the ending. This means that there is no satisfactory conclusion to the story and no melody to alleviate or compensate for the abrupt or failed ending of the game.

The game tells the player in a very matter of fact that perhaps they should try to play the last chapter again and that this clearly was not the ending that the makers of the game have intended for the player to experience. It seems that this ending has been included in order to add stakes to the gameplay, so it does not seem as if there are no consequences for the player's actions or in this case inactions.

4.3.2. Beyond and Life

If the player successfully performs the quick-time events while Jodie is trying to reach the condenser, they will arrive to a control desk and when Jodie places her hand on a switch the player gets to watch a cutscene where Aiden's origins are finally revealed. After this the game cuts back to Jodie in the real world and she pulls the switch, which initiates the self-destruction of the condenser. Along with Jodie the player is taken to a scene where the screen is divided into two, with Jodie standing in the middle. On the other side is life and on the other is beyond (see figure 14). Will Jodie stay with the living or join those that she has lost during her journey?

When contemplating the decision, the player is offered a glance into what the options entail. Looking to the beyond the player is showed all the people that are waiting for Jodie on the other side. Only one of the people is there no matter how the player has succeeded in the game, this being Shimasani from the chapter Navajo, whose death is unavoidable. Other possible characters to be included are Paul from the same chapter, Jimmy and Walter from the chapter Homeless, Jodie's biological mother Norah, as well as Cole and Ryan, who, based on the player's actions may have died previously in the final chapter (see appendix 2 for character details). Interestingly enough, Dawkins does not show up among these people. While the composition of people in the scene does not affect the music at this point, the people who have died or lived makes a difference a little bit later.



Figure 14. Player gets to choose Jodie's faith.

4.3.2.1. End of Black Sun

After the player has made their choice between Beyond and Life the player sees Jodie walk to the side of her choice. If this choice was Life, Jodie will start running away from the control desk and when the explosion happens, she will dive to the floor. If Ryan is still alive, she will dive into his arms and they both end up lying on the floor. If the player has chosen Beyond, they either see Ryan sitting on his own before the explosion and being pushed to the ground by the shockwave or just the explosion, if Ryan has died earlier in the chapter.

Whether the player has chosen beyond or life, the game continues to a cutscene in which the music does not change, but the story is accommodated by what has previously happened in the narrative. The scene takes place in the rubble of the condenser in a big hall that was previously filled by the Black Sun. If the player has chosen Beyond and Ryan is still alive, Ryan finds Jodie dead and cries over her body, asking her desperately to wake up. If Ryan has died previously in the last chapter, we see soldiers arrive while the souls of Jodie and Ryan embrace each other.

If the player has chosen Life, Jodie wakes up alive, with or without Ryan depending on his fate that has been determined earlier in the chapter. She gets up and calls for Aiden several times before falling to her knees crying, indicating to the player that she has lost her connection to Aiden, which is later confirmed in the epilogue. If

Ryan is still alive, he first exclaims how they are alive, but seeing Jodie's despair, goes to hold her while she cries.

Whatever the player's previous choice was, they will hear Beyond played on an electric guitar with strings playing an accompanying pattern during the entire scene. After this the camera zooms out and the picture fades to black, after which the epilogue starts.

4.3.2.2. Epilogue Part 1: Aftermath

In choosing beyond the epilogue takes the player first to the spirit world while Jodie speaks. She tells about what exists after death, how there is a whole universe around us that we do not see, and which she now gets to explore. From her description the player gets the idea that this world is not bound to the laws of physics. Jodie describes how she can be everywhere or nowhere, become whole or dissolve into nothing, merge her soul with others or be more alone than anyone has ever been. While Jodie recounts her experiences in the other world, the player sees this almost water-like world of light blue and some green with lights and moving shapes. Some of these shapes are walking humans, some look like jellyfish or manta-rays. The camera keeps moving in this world and the picture is constantly moving.

The music playing during this scene is composed of strings with no melody. The only recognisable theme in the scene is Aiden's Theme, which plays while Jodie talks about merging her soul with others. On top of the violin the player can hear occasional sound of static.

If the player has chosen Life, the epilogue starts with a cutscene of Jodie spending time in a remote cabin while Jodie's Suite is played on different instruments. The music played during this part is featured on the soundtrack as a track called Jodie's Story. At first there is no melody, only violins playing a harmony which cellos join in the fifth phrase. This harmony usually accompanies the melody of Jodie's Suite, which has yet to appear.

In the beginning Jodie narrates off screen how the time she spent in the Black Sun affected her memories, which have started to disintegrate. She does not know the right timeline of her memories anymore, which has driven her to write them down on paper. This also explains the nonlinear order of the chapters. When the camera pans up to show Jodie writing on a desk, bass starts the melody of Jodie's Suite from the beginning, cutting off the last phrase of the theme from the previous harmony that the strings were playing. However, during the long notes My Imaginary Friend's first phrase is played on a piano, mixing the two themes and in this way the track illustrates Jodie's confusion in the music and connects the current scene to Jodie's childhood.

After this Jodie speaks about how she struggles to live without Aiden's presence. During this part, at first a piano plays Jodie's Suite without any accompaniment from other instruments, but the melody is soon taken over by violins while accompanied by other string instruments, making the music reflect on the depression that Jodie is going through. Close to the end of the scene the piano returns, and the scene ends with the piano playing the melody alone. The lack of accompaniment while the piano is playing highlights Jodie's loneliness, just as it has done earlier in the game. Also notable is the absence of Aiden's theme, which adds to the physical absence of the entity and also makes his presence more obvious in the fifth part of the Life epilogue, given that the player has taken a route where he returns to see Jodie

4.3.2.3. Epilogue Part 2: Loved Ones

In the second part of the epilogue the player gets to see some of Jodie's friends who are still alive at the end of the game. In the epilogue for Beyond Jodie talks about how she still looks after those she loved and would like to tell them that she is okay. Which characters the player sees depends on the choices they have made regarding the fate of certain characters. If the player managed to save all the characters that could be saved during the game, the player will first see Ryan, then Norah and last, they will see Cole. However, in the case that all of these characters are dead the player will see Jay (see appendix 2) instead.

The music behind all these short scenes is to an extent the same. There is vocalizing, from which at least some is synthetically created choral sounds, in the background. In the case of Norah's scene, the vocalising is the only music there is. In the other cases there is also the melody of Jodie's Suite on what sounds like an detuned piano. For Ryan and Jay, the music is the same, whereas for Cole the pitch of the piano is higher, and the melody starts a bit later compared to the vocalising. Thus, it seems that the vocalizing and the piano melody are not part of the same track but rather two tracks layered on top of each other. These differences might have been made in order to not play the same track multiple times in a row. By changing the pitch and position of the layered tracks, the people responsible for the audio were able to create changes to the track to prevent the player from getting bored of the repetition. This resembles randomization; however, it is more likely that the music is fixed.

Also, in the case of the Life epilogue the scenes change according to who is alive. If Cole is alive the player sees him walking to a mailbox on a suburban neighbourhood. He takes out the post and opens an envelope, out of which comes a child's drawing of a princess. He looks around smiling and the scene fades to black. However, If Cole died in the last chapter, Jodie goes to his grave and puts the drawing next to his tombstone. Cole used to call Jodie a little princess, which makes the childhood drawing meaningful.

To make everything slightly more complicated, Ryan's fate also changes the outcome of the ending. If Ryan is alive at the end of the game, he is not mentioned at this part of the epilogue but he is featured in a scene after player makes their final decision about what Jodie is to do with the rest of her life. If Ryan is dead, however, there is a scene where Jodie visits his grave and narrates of screen how she misses him and how she now understands Nathan's pain after his family died. When this scene takes place is dependent on Cole's fate. If Cole is alive, the player sees first the scene where he gets the drawing from Jodie, but if he is also dead, Jodie visits his grave after she has been to Ryan's grave. This change in order does not seem to influence the music.

The music on the background is constructed from vocalising that goes on for 40 seconds at which point piano starts playing Jodie's Suite. The vocalising and the

piano are the same as in the Beyond route, though while in that scenario the music seemed to start anew in every scene, here the music is continuous. In the second part of the Life epilogue the music continues all the way to the next part of the epilogue.

4.3.2.4. Epilogue part 3: Looking Forward

After the scenes featuring Jodie's friends, in the Beyond epilogue the picture returns to the world beyond ours where Jodie speaks about how she will stay in this form of existing for some time longer before she will move forward to what exists beyond it. On the background the player can hear the melody of Infracworld, only instead of starting from B the theme starts from A flat. Because the A flat is sustained for about 5 seconds, it can fool the listener to think that the theme that follows would more likely be Beyond instead of Infracworld. While Beyond does not start from A flat but from C (the theme being in C minor key as previously discussed), A flat is still part of the theme, third note to be exact. There is no other note to indicate that the reference has been planned, but the combination of these two themes would be very fitting to the scene, because both themes represent the supernatural side of the story as well as what comes after death in the world of the game.

Continuing the Life route, Jodie is either back at the cabin, on the shore of the river throwing rocks, or at the graveyard. She narrated off screen that one day she woke up and knew it was time to move on. Whatever the scenery, the music continues from the previous part, which means that the player hears either vocalising or vocalising and Jodie's Suite on piano. If Jodie previously only visited Cole's grave, the piano has hardly time to start playing before the music fades and the player is provided the last choice of the game.

After the player has made their decision out of the possible three or four options (see figure 15), the scene continues. No matter what the player chooses, Jodie will always say the same monologue about how the choice was obvious and how she needed the silence to hear how she was feeling. Then the scene ends.



Figure 15. Player gets to choose who Jodie will return to at the end of the game.

4.3.2.5. Epilogue part 4: Life continues

In the Beyond epilogue the scene moves on to meet Zoey, Tuesday's child whose birth Jodie helped with in the chapter Homeless. At first, we see Tuesday and Stan on a sofa (as well as Jimmy and Walter if they are alive) watching tv. The player can hear a melody, a four-note sequence lifted straight from the trumpet solo of the James Bond theme, first normally and a second time slightly higher, clearly indicating that they are watching a 007 film. Stan glances into another room where we see red-haired Zoey sitting on the floor, looking towards a wall. In this epilogue Zoey is a teenager, which indicates that several years have passed since the events of the last chapter and Jodie's death.

After this the player watches scenes in which Zoey stares into space and narrates about the phenomena she experiences. She starts by saying how she can spend hours looking at images in her mind, things that really happened. It is heavily suggested to the player, that she has some extraordinary skills, similar to those that Jodie had. She speaks about how she can see colours around people and can travel to far-away places by only closing her eyes. She also hears whispers and sees things moving in the dark. She says that she listens to a voice inside her head, using the third person pronoun she, indicating to the player that the voice she hears could be Jodie's, since the voice tries to teach her about the phenomena she experiences.

The scene starts with strings creeping in with a slow crescendo while the camera moves towards Zoey. When the picture transitions to the next vision of her lying on

the floor we hear the descending melody of Beyond played by the violins. While there is no earlier connection between the theme and Zoey, there have been earlier indications in the game music that she might have supernatural powers, to which this theme also refers to. In the chapter Homeless after Stan and Jodie have broken into a supermarket to get supplies for Tuesday and the baby, Aiden's theme plays on the background while the pair make their way to an empty apartment where the others are waiting. On top of this, while Tuesday is giving birth the player can hear a more intense version of My Imaginary Friend. Both themes indicate that the baby perhaps has some paranormal abilities similar to Jodie's. I believe that Beyond was picked to represent Zoey in the epilogue because other themes connected to the paranormal, such as Aiden's theme and My Imaginary Friend, work as leitmotifs for Aiden and Jodie's childhood, while the usage of Beyond has been rather vague throughout the game.

The fourth part of the Life epilogue is impacted by whether Ryan is alive or not. If Ryan is alive and the player has chosen any of the other options besides him, the player must watch a scene where Jodie talks to Ryan in a park while she narrates off screen about their conversation. According to her Ryan was very understanding when she told him that she could not see a future with him and that he said he would wait for her. Jodie tells the player how she did feel something towards him, just not strongly enough to spend the rest of her life with him. During this scene with Ryan, strings play a mid-range harmony.

Here I am going to separate the four options from the fourth part of the epilogue into separate sections. These scenes all have different music, that does not change based on any decisions that the player has made before choosing how Jodie will spend the rest of her life with. The only aspect of these scenes that changes based on earlier events is the amount of characters the player gets to see again when Jodie returns to them. This, however, applies only to two of the endings which are Zoey and Jay.

Life option 1: Zoey

When the scene starts, the viewer sees Jodie standing in front of a door, which seems to be on one of the upper floors of a block of flats. The violins come in with a crescendo while she rings the doorbell and astonished Stan opens the door and hugs

Jodie. He ushers Jodie in and calls the others to see her. If the player has saved Jimmy and Walter, the two will be at the apartment with Tuesday and Stan. Off screen Jodie tells the viewer about the group's current situation, how while they are not living a lavish life, they have turned things around and are making ends meet. This narration changes depending which characters are alive. On the background while Jodie is greeted by her friends Beyond plays on the violins and the dialogue between the characters can be heard, although it is rather quiet.

After Jodie has greeted everyone the group takes her to see Zoey. Jodie narrates that she could immediately tell that Zoey was different and that while they have never talked about it, they have something in common. This indicates that Zoey has supernatural abilities, which we know to be true from what is seen in the epilogue of Beyond. After Jodie's and Zoey's first meeting the picture fades to black and the music fades away after a few seconds of darkness on the screen.

This is the only one of the options that does not feature Jodie's Suite nor Aiden's theme. I believe this is because in this ending the focus is transferred from Jodie to Zoey. The game has been about Jodie and now that the game is ending, in a way so is her part as the main character, and perhaps if there was a sequel, based on this epilogue, the main character might be Zoey. This choice features the track Beyond partly for the same reasons it is featured in the Beyond epilogue. It seems as if at the end of the game Beyond has become the theme to represent Zoey and her abilities.

Life option 2: Alone

When the scene starts the viewer hears Jodie's Suite sung by Tori Letzler and sees Jodie walking in the rain on a remote road at night-time, trying to lift a ride from cars driving by. She narrates off screen about how after all she has been through, she does not see herself living a normal life anymore but instead she decided to "take to the road". The picture then transitions to a town where Jodie walks the dark streets while speaking about how she has seen rifts to the other side and places with paranormal activity during her travels. She accounts that entities are everywhere around us, lurking in the shadows. While she walks the streets, the player can see souls of dead people watching her walk by.

Jodie's Suite on vocals gives this epilogue a more personal touch. It echoes Jodie's independence and along the narration creates empowerment for the character, since it seems that she has finally come to terms with her supernatural abilities. The wordless singing by Tori Letzler also creates a slightly ghostly feel together with the souls appearing along Jodie's journey through the town.

In the second scene Jodie is sitting on a bed in a small apartment, watching baseball on television. Suddenly the lights in the room start to flicker and the television malfunctions. The room goes dark and the television stops working, showing only static. Jodie looks around her and gets up from the bed and at this point Aiden's theme starts playing on the background. Words appear on the tv screen: STILL HERE. Jodie smiles and utters Aiden's name and gets an answer in a ghostly voice. She tells him how much she has missed him and while she turns back to look at the words on the television the picture fades along with the music and the last part of the epilogue starts.

In this scene and the other options where Aiden returns to see Jodie, the Aiden's Theme is not what it has been previously in the game. The melody appears the same, but the harmony lacks the previous dissonance that was present in the track. The piece is played entirely by the strings and creates a feeling of reassurance to the player, that Aiden still exists and seems to have found peace on the other side.

Life option 3: Jay

The scene starts with a view of the farm from the episode 14 Navajo. The boys, Jay and Cory (appendix 2), are out taking care of their daily chores. At first there is no music, only sounds of the nature, such as the wind blowing and birds chirping, before the strings start to play a slow melancholy harmony. While brushing the horses Jay starts to hear a distant rumble. Jodie drives in front of the house with the motorcycle she got from the family when she left the farm previously. Jodie gets off the bike and Jay, who was taking care of the horses, runs to Jodie, who meets him halfway. The two embrace each other, and on the background the viewer can see Cory, and Paul if alive, watching the reunion of the two lovebirds.

We cut to another scene where Jodie is laying on a bed with Jay, who is sleeping. At this point the music of the previous scene transitions to the harmony accompanying Jodie's Suite, but no melody is featured. Jodie gets up from the bed and walks in front of a mirror. Suddenly her breath is steaming, indicating that the air has turned cold. The music fades away while Jodie dries tears from her cheeks. The camera transitions to Aiden's perspective and Aiden's Theme starts to play. When she hears his ghostly voice, Jodie looks around her and words appear on the mirror: STILL HERE. Seeing this Jodie starts laughing and the scene fades to black.

This is the only one of the four options without any off-screen narration from Jodie. The choice to leave this ending without any explanation into why Jodie decided to go back to Jay is rather confusing, given that all other choices feature Jodie's narration. Also, while the epilogue has Jodie's Suite's harmony in it, it is the only one of the epilogues, except for the first option, that does not include neither the melody nor Tori Letzler's vocals. The lack of narration and the vague inclusion of Jodie's Suite makes one wonder why Jodie made the decision to return to Jay. While he is Jodie's love interest in the game the lack of Jodie's personal touch to this epilogue when compared with the others almost creates a feeling that this ending might not be one of those that the game's creators intended for Jodie.

Life option 4: Ryan

The scene starts with Jodie sitting in front of a house just when Ryan gets out of a car to arrive home. Jodie narrates off screen how she finally realised how much she loved Ryan. Seeing Jodie, he drops the brown paper bag he was carrying and the two meet halfway to the house. They look at each other smiling and kiss. The camera dollies out before fading to black. The entire scene has the same melancholy harmony on the strings as was in the first scene with Jay. Thus, the two romantic interests of Jodie are linked in the epilogue through music.

Next the picture transitions to a sunny ocean or sea view. While the strings play the harmony of the Jodie's Suite, just like in the option with Jay, a sailboat is sailing through the water. Jodie narrates off screen how she and Ryan travelled as far away as they could and how she had to learn to live again. We see Ryan at the helm while Jodie sits near him, dressed in a blue bikini. She narrates that they never talked about

what happened previously, presumably indicating the events of the chapter Black Sun, as if this type of event could never happen again. The picture fades and a few seconds after Jodie stops talking, the music fades away as well.

The scene changes yet again, and this time the player sees the camera moving above what seems to be the coast of an island during a sunset. The coast is made of a sandy beach with some palm trees, and Ryan's sailboat is anchored nearby. The strings creep in slowly with a crescendo and Tori Letzler sings the melody of Jodie's Suite. The picture changes to show Jodie and Ryan lying and kissing on the sand while a campfire burns behind them. Ryan gets up to attend to the fire and Jodie walks a bit further from him towards the water.

While Jodie sits on the sand and watches the sun setting a coconut suddenly rolls next to her. At this point Letzler's singing has stopped but the violins still play the same stable notes. Jodie looks at Ryan who is still next to the fire and while she is wondering about the coconut the first five notes of My Imaginary Friend play on the piano. She sees the words forming on the sand: STILL HERE. The strings come back in slowly with Aiden's theme. Jodie smiles and Aiden's ghostly voice is heard. The camera dollies out and the music fades away before the picture does the same.

This epilogue has three pieces of music that have already been featured in other epilogues. First it has the music from the third option with Jay: the continues harmony that plays through the first transition. Second is Jodie's Suite sung by Tori Letzler and finally Aiden's Theme, both of which were featured in the second option Alone. This indicates that the ending with Ryan may be the most rewarding to the main character; it seems like she gets to both travel and spend time with the one she loves. Even when Aiden comes back to see her, she does not react to it as much as she does on the other epilogues but only smiles. This indicates that while she is happy to have Aiden there, she had already found happiness with Ryan, and is not as overjoyed as in the other epilogues.

4.3.2.6. Epilogue part 5: Future

The last scene of the epilogue takes place in what looks like an apocalyptic future. At first the picture is concentrating on feet, that are making their way up a hill, which seems to be made of earth, rocks, and the rubble of what seems like a destroyed building. The character that is walking depends on the choices made by the player. If the player has taken the Life route, Jodie will always be in the scene, narrating how she sees terrifying things at night that she believes are not nightmares but scenes from the future. When Jodie stops walking and the picture pans up to show the viewer a city with high rise apartments, some which are on fire, with entities flying above the buildings, behind which a huge Black Sun shines. This indicates that people have kept trying to study and contain the Infraworld but this time they have failed even worse than before. After the whole scenery has been revealed to the player the picture fades to black and we here Jodie's last words in the game, telling us that she is not afraid of death anymore.

There are a few versions of this ending in the game. What I described above is the ending that the player gets if they have chosen Life and decided to go to anyone else except for Zoey. If the player chose Zoey at the fourth part of the epilogue, she will be there alongside Jodie. Jodie's monologue also changes to accompany this ending. In this version Jodie states that she needs to prepare Zoey for the future because she is the only one who can save the world. Also, instead of saying that she is not afraid of death anymore, her last words are about how these scenes are not nightmares but what is about to happen.

If the player has chosen Beyond, instead of Jodie (who is dead in this scenario) Zoey will be facing the threats of the future on her own. Her narration echoes some of the same themes as Jodie's. She says that she has recurring dreams and she believes them to be a premonition of what is going to happen in the future. She ends the monologue by saying that there is only one thing that she can be certain of and that is that she will never be alone again.

No matter which version the player opts for, the theme is always the same: Infraworld. However, the track from the soundtrack is adjusted to the length of the scene. The

ending where only Zoey is present (*Beyond* epilogue) is about 15-20 seconds shorter than the ending with Jodie or both Jodie and Zoey. The ending with Jodie alone is the longest of the three, and unlike the other endings, which only play half of the theme, this ending plays the theme one bar further. The short length of the ending with only Zoey can be clearly heard in the music. While in the ending with just Jodie the theme has time to breath, in the ending where Zoey stands alone the theme almost feels a little claustrophobic. It fits the narration, since according to Zoey she does not have much more time to prepare for the scenario. Compare this to Jodie, who has been in the centre of incidents with previous condensers and has been trained by the CIA not to mention that she must be about twenty years older than Zoey. The timespan of the theme reflects this difference in the characters' level of preparedness.

The ending of *Beyond: Two Souls* is a great example of the many different ways that music can be incorporated in a story-centric narrative. Most alternative scenes have different music track but there are alternative scenes that have the same music, as long as they occupy the same part of the epilogue. For example, the ending of the chapter *Black Sun* has the same music in each scenario. Similarly, the last part of the epilogue, *the Future*, always incorporates the same music, but the length of the track is adjusted to match the length of the scene. This means that the game developers have had to consider, whether to incorporate different tracks to a scene or whether the same track will suffice with a few alterations.

5. Conclusions

I set out to discover how the player's choices impact the music of the game *Beyond: Two Souls*. In my research I found two ways in which the music can be impacted: directly and indirectly. While I have chosen to research a story-centric game in my thesis, I see no reason why the idea of direct and indirect impact could not be easily applied to other types of videogames. After all, similar ideation has already been applied more universally to videogames by Elferen and Medina-Gray.

The player's indirect impact on the music in *Beyond: Two Souls* mimics the narrative structure of the game. Just like Lebowitz and Klug describe the different branches in a branching path story most decisions in the game do not have any effect on the music, there are decisions which alter the music somewhat and a small amount of choices which completely change the music played on the background (Lebowitz & Klug 2012: 186-187). While most players will never notice that the music changes based on their decisions, the knowledge that the player has an impact to the music creates importance around the narrative choices. *Beyond: Two Souls* might not represent the branching path story in a strong manner, but the player's choices are respected enough to create different scenarios for the player to travel through.

Most changes in the music of the game work to enhance the narrative changes and at times, the music even foreshadows aspects about the game which are revealed later in the narrative. The character's story is reflected at times through changes in the arrangements of certain themes and at other times by changing the theme completely. Because the musical changes can be difficult to detect even with several playthroughs, it can be said with confidence that the changes are not done just to prevent the player's fatigue towards repetition in music. This alone indicates that the changes in music have deeper meaning behind them when they happen in connection to the player's actions and thus the music is able to highlight certain consequences of the player's actions, even though the choice would not have a far-reaching impact in the narrative. The subtle changes in music between some of the different outcomes show that the music is not just an afterthought; it is used to encourage the player to experience the desired emotions, but it is very meticulously thought through and

reflects the main character's inner turmoil and her relationships with other characters.

While the direct impact on music in *Beyond: Two Souls* is optional and makes very little difference in the narrative, there is no reason why it could not be made a more impactful part of the game. For example, the choice of music could impact the result of the date between Jodie and Ryan or perhaps there could be further reaching consequences to the player's ability to play the guitar through quick-time events. In this way music could be accommodated to the gameplay and the player decisions would become even more consequential.

Although I have found answers to how the music of *Beyond: Two Souls* can be impacted by the player, some questions remain unanswered. I have mainly concentrated in the musical themes and I have only discussed the choices that I considered to have the most impact in the music. Because of the limited amount of space available in this thesis, I could not have given a completely inclusive list of all the changes that affected music in the game. Also, I have not considered decisions which have no effect on the music, which could be a study of its own.

Of course, the most obvious direction to take next is to look into other similar games and study whether those games show a similar relationship between the music and the player's choices as *Beyond: Two Souls*. The other games could be from the same company, Quantic Dream, which would shine a light on development in the company's practices, or they could be from other companies such as Telltale Games, which would highlight differences and alternative practices in the use of music in narrative centric games. Especially research on games with less of a reliance on leitmotifs might reveal interesting differences in the way music is incorporated in these games.

Research material

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Soundtrack: Balfe, Lorne 2016. *Beyond: Two Souls*. <<https://open.spotify.com/album/6SCstolTyQVCCtJEEM6DXR>> (accessed June 7th, 2020).

Music notation (figures 4-9) transcribed by the author based on the soundtrack.
Sibelius score by Ben Cook.

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Appendix 1: *Beyond: Two Souls* Chapters in the Original Order

Prologue

1. Broken
2. The Experiment
3. The Embassy
4. The Party
5. First Interview
6. Welcome to the CIA
7. Hunted
8. My Imaginary Friend...
9. The Condenser
10. Homeless
11. First Night
12. Like Other Girls
13. Alone
14. Navajo
15. Separation
16. The Dinner
17. Night Session
18. The Mission
19. Old Friends
20. Norah
21. Briefing
22. Dragon's Hideout
23. Hauntings
24. Black Sun

Epilogue

Appendix 2: Information on Minor Characters

Cole: Nathan Dawkins' assistant who takes care of Jodie alongside Nathan at the research facility and helps Jodie in finding her biological mother. Depending on the player's actions he may die during the last chapter, Black Sun. Cole is a part of most of the epilogues.

Jay and Cory: Paul's sons and Shimasani's grandsons. These two appear in the chapter Navajo and depending on the player's choices they may appear in the epilogue. Jay is one of Jodie's love interests during the game and is one of the possible choices in the end of the Life epilogue. Just like Paul and Shimasani, Jay and Cory are Navajo (Native Americans).

Jimmy and Walter: Two homeless men who live under the bridge with Stan and Tuesday. Jimmy is a drug addict and Walter an alcoholic. Depending on player's actions one or both can die before the end of the chapter in question. If alive they appear in the apartment with Stan and Tuesday during the Beyond epilogue and in the Life epilogue if player chooses Zoey.

Norah: Jodie's biological mother. Appears in the chapter of the same name and in a few flash backs. Just like Jodie she also had supernatural abilities. Jodie was taken away from her after the birth and given to foster parents, which upset Norah so much that in order to keep her sedated the CIA put her to a mental hospital and gave her neuro acid to keep her in a permanent coma. After finding out that there is nothing to do to her mother's state the player can choose to disconnect Norah from life support, which will kill her.

Paul and Shimasani: Jodie comes across Paul and Shimasani in the chapter Navajo, when Paul gives Jodie a room to stay in on his range. He lives with his sons, Jay and Cory, and his mother Shimasani. The whole family are Navajos (Native Americans). Both Paul and Shimasani can die during the chapter, but Shimasani is the only character in the entire game whose death is not preventable.

Stan: A homeless man who saves Jodie's life in the beginning of the chapter Homeless, and takes her to stay with him, Walter, Jimmy, and Tuesday under the bridge. Stan has been homeless since his wife died and he became too depressed to hold a job. Later he turns his life around and gets an apartment with Tuesday and Zoey. If Walter and Jimmy are left alive, they all live together.

Tuesday: A homeless woman who lives with Stan, Walter, and Jimmy under the bridge. She is at final stages of pregnancy when Jodie comes to stay with the group. Jodie helps to deliver her baby, Zoey, who is revealed to have paranormal abilities at the end of the game if the player chooses Beyond or Life and Zoey. Tuesday appears in both before mentioned endings and also at the side of Life when making the decision between Beyond and Life, if Ryan has died previously.