Constructing a model musical idiom for

award-nominated video game soundtracks

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Abstract

My research will attempt to determine how award academies choose their nominations through the analysis of select musical aesthetics. As a trained musician (pianist) and avid gamer, I will bring my two passions together, contributing to the field of ludomusicology (the study of video game music). My research consists of an overview of video game scores spanning a decade (2004 – 2013) with a select sample of three soundtracks per year (a total of thirty soundtracks). The samples will be taken from the *BAFTA*- (British Academy of Film and Television Arts), *VGX*- (formerly known as *Spike*), and *D.I.C.E.* awards (Design, Innovate, Communicate, Entertain). Through engaging a music theory macro analysis, I will discuss melodic themes used in each soundtrack, the setting of the score (instrumental or electronic), and whether the soundtrack samples contain the epic musical idiom. At the end of my dissertation my research reveals what kind of music these award academy panels favour. If the award academies are a reflection of popular taste, my research indicates what the audiences like to hear in video game music.

Keywords

Ludomusicology

Video game music

Music theory

Analysis

Thematicy

Orchestration

Epic music

Award-academies

Hermeneutic aesthetics

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Glossary: Key video game genres

Term	Meaning
Adventure game	An *Adventure Game* is a video game genre in which the player is faced with puzzle-solving problems, usually driven by exploration of the virtual world. While the game usually draws from narrative-based media (such as literature and film), the games in this genre are usually for a single player.
First-person perspective	In the *first-person perspective*, the player sees the action through the eyes of a character (usually playable). The camera setup thus give the player an internal experience. Compare with *third-person perspective*.
First-person shooter	The *first-person shooter* video game genre centres around a gun or weapon combat, while the player sees the virtual world from a first-person perspective.
MMO	A *Massively Multiplayer Online Game* (MMO) is a video game that supports large numbers of players to play together simultaneously in a virtual world via the internet or a LAN (Local Area Network) connection.
Open World	An *Open World* (synonymous with *Sandbox* and *Free-Roaming*) is a video game genre where the player can move in the virtual world with relative freedom. The player can usually approach objectives from various angles.
Real-time strategy	*Real-time strategy* is a genre of s*trategy video games* where the player progresses by playing in turns, inspired by multiplayer board games.
RPG	*Role Playing Game*. In RPG video games, the player controls a character whose attributes (clothing, weaponry and others) can be customized. The game usually involved narrative story-telling and is set in a virtual world.
Strategy video game	A *strategy video game* is a video game genre where the players progress using logical thinking and tactical planning in order to achieve victory. Many games involve economic challenges combined with map exploration and can be played alone (as a single player) or in a multiplayer mode.
Survival horror	*Survival horror* is a video game genre that draws inspiration from horror- fiction and films. Using limitations (such as ammunition or health) the player is emotionally manipulated to feel dread and fear.
Third-person perspective	In the *third-person perspective*, the camera follows a playable character externally, usually from behind. Compare with *first-person perspective.*

Contents

Chapter 1: Introduction

1.1. Introduction

Every year video game developers compete to acquire their share in the billion dollar industry of video games. Sales figures in 2014 estimated US $ 101.62 billion for the global video game revenue, an industry that employs thousands of people worldwide (Statista 2015). Video game developers are divided into two categories: AAA-game companies[1] and independent (also known as 'indie') developers[2]. Since AAA-gaming companies have to sell millions of copies to be able to hire thousands of personnel, formulaic- (tried and tested) and predictable game design ensures commercial success on a global scale. These designs often include long epic narratives, celebrity actors[3], and state of the art game graphics. Since independent companies often consist of a small staff component[4], small businesses can risk creative approaches in their games. Innovative approaches by independent video game developers result in video games that can compete with AAA-studios. In his article *Two Worlds Divided: The Indie and Triple-A*, Sam Paterson (2014) comments: "The shrinking territory of AAA games has opened up niches for the indie world to explore, and further increased the creative freedom of smaller developing companies." This "creative freedom" is the liberty of experimentation that big businesses cannot afford to risk[5].

Each year games and their associated developers are rewarded by awards or nominations from various award academies. Adjudicators on academy panels are often respected personalities[6] in the video game world, usually known for their experience in video games and not their musical knowledge. My initial research did not reveal any prominent musicians, composers, or sound designers on award academy panel[7]. If academy award panels are not known for their musical reputations, how are soundtrack nominations selected? My dissertation will answer this question through analytical discussions that will result in an aesthetical interpretation.

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[1] Pronounced "triple A", a term is used to classify video games with a high development cost and an international scale of promotion.

[2] The concept of independent video game developers can be compared to the independent film industry; both 'independent' mediums are divorced from the pressure and prescriptions of large, domineering studios.

[3] For example: Hollywood actor Liam Neeson played the role of 'James' in *Fallout 3* (Danko 2013).

[4] The 2015 game *Cities: Skylines* was developed by a team of thirteen (Lehto et al. 2015).

[5] Successful experimental indie games include *The Unfinished Swan*, *Braid*, *Journey*, *Fez*, *Abzu*, and others.

[6] Notable personalities on award panels include Nick Button-Brown (*Crytek* for the *BAFTA* awards) and Ken Lobb (*Microsoft* for the *D.I.C.E.* awards)

[7] With the exception of the *G.A.N.G.* (Game Audio Network Guild) awards, whose members are industry sound specialists.

I believe that politics possibly play a role in the selection of video game nominations and awards. George Lucas remarked on the Oscar film awards, saying: "The thing about the academy: it's a political campaign, it has nothing to do with artistic endeavour at all" (Wright 2015). This quote acts as an impetus to my research: Are video game soundtracks recognised for their artistic endeavours? Such an investigation is problematic, since there are no pre-nomination data available to the public that indicates how many games enter for nomination considerations.

My research will attempt to create a general overview of the subjective tastes (aesthetics) of video game award academy panel members. Through a theoretical analysis, I will engage in an aesthetical discussion, creating a model musical idiom that collectively captures the subjective tastes of award academy panel members. Creating a model musical idiom through analysis could indicate what musical aesthetics panels prefer when making nominations. Although category criteria are found on the websites of award academies, it is not public knowledge how individual criteria are judged. Enquiries at the discussed video game award academies were futile since judgement criteria for musical nominations could not be provided. My research will focus on musical aesthetics of video game soundtracks and not the creation of judgement criteria. Other external criteria that could influence the decisions of panel members are technical interaction of the music with the game, such as the use of diegetic music, microscores, soundscape design, and others. This study warrants originality since I could not find any research related to the aesthetical preferences of video game award academy panels or possible musical criteria used by these academies.

1.2. Literature review

1.2.1. Thematic music in a narrative

Ludomusicology is the study of video game audio and music, derived from ludology – the discipline concerned with the study of video games (Frasca 2003: 222; Rapp 2012). Although video game music is associated with an electronic medium, its roots lie in 19th-century Romanticism. Politics and scandal were part of music back then as they are today – every composer wanted to be the musical successor of the 'immortal' Beethoven. According to Maus (2013: 113), Franz Liszt and Niccolò Paganini considered Hector Berlioz to be the musical heir of Beethoven, and that is not without cause. Introducing the concept of the *idée fixe* (the 'fixed idea': a melody that represents a specific person) in his *Symphonie Fantastique*, Berlioz pioneered narrative music as we know it today. Richard Wagner[8] developed this narrative concept with his invention of the *leitmotif*[9] in his operas

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[8] Wagner considered himself to be the heir of Beethoven.

(Chattah 2006: 138). The *leitmotif* continued from opera into motion pictures; already in 1908, the famous French composer Camille Saint-Saëns wrote the first film score for *The Assassination of the Duke of Guise* (Boller 1992: 89). Since Saint-Saëns, film music grew into a respected musical genre, with its own history. The compositional tradition of the *leitmotif* continued through art music into film scores (in movies such as *Star Wars*) and eventually into video game music (in games such as *Tomb Raider*). From Wagner to Williams and beyond, music is used to support diegesis and comment on the drama, creating a richer multi-sensory experience for the viewer; in the case of video games, the player. In both film and video game research disciplines, the term *diegesis* is used to describe a narrative. *Diegetic music* is "source music or real sounds that occur in the diegesis" (music that helps to tell a story) (Collins 2008: 184).

1.2.2. A ludomusicological overview

The Latin word *ludus* (game, play) is the etymological origin of ludology (video game studies) from which ludomusicology (video game music studies) is derived. The discipline has a controversial- and political beginning. Donnelly (et al. 2014: ix) comments on the beginning of ludology, stating:

> *In the 1990s, when game studies was an emerging discipline, several scholars went to war with the concept of games as "interactive narratives" or "interactive cinema". Drawing deep lines in the sand, these ludologists – most prominently Espen Aarseth and Gonzalo Frasca – campaigned tirelessly against what one scholar called "the threat of theoretical imperialism and the colonization of game studies by theories of other fields".*

This view implies that video games should be isolated from other areas of research. Consequently, very little was written about video game music for almost ten years. Ludomusicology broke through the constraints of complaints in the 2000s; concerning the criticism from non-ludomusicological scholars, Donnelly (et al. 2014: ix) writes: "[...] narratological attempts at a game analysis – those focusing on game as a medium with significant aspects in common with traditional forms of storytelling, such as film – were often rejected outright as academic nonsense." The first break-through for ludomusicology started in 2005 when a scholarly interest in this new field began to grow. Ludomusicology has been intertextualised with other research fields, including marketing (Cerrati 2005), music education (DeCastro 2007), psychology (Jørgensen 2008), and history (Collins 2013). Analysing video game music theoretically has growing interest, including current contributions by Tim Summers (Fritsch et al. 2016). My research with a theoretical emphasis is, therefore, in line with contemporary research. My particular interest in analysis grew out of theory

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[9] L*eitmotif*, translated as the 'leading motif': a melodic motif or theme that is associated with a character, concept or situation.

classes with Professor Alexander Johnson while I was studying my undergraduate music degree at the *University of Pretoria*. Combining analysis with video game music steers my research towards analytical ludomusicology.

1.2.3. Analytical ludomusicology

Redner (2011: 1-3) divides film analysis into three categories, also applicable to video game music: an analytical approach that privilege music over film, a score orientated analysis that isolates the score in a vacuum, and finally analysis that draws on film theory. Redner explains the latter:

> […] few film theorists are adequately prepared or equipped to deal with the rigours of music theory, analyses such as these are often sadly ineffectual. What often results from this are discussions of where the music imitates the mise-en-scène or where it does not. Little else of importance is revealed through this methodology and, again, while we learn much about the film, we learn little about the score.

Since scores are not readily available to study, ludomusicologists often rely on aural analysis, thereby excluding score orientated analysis. Analytical ludomusicology emerged in the second half of the first decade in the 21st-century. Tristan Capacchione (*Musical Gamescapes: A study of Unity in Arcanum: Of Steamworks and Magick Obscura*) wrote a ground-breaking undergraduate mini-dissertation that attempted analytical ludomusicology: "As a new field of research, the analysis of video game soundtracks is short on terminology and labels, particularly from a music theoretical perspective" (Capacchione 2007: 3). Cappachione's study surrounds thematic material in selected tracks; analysis is separated from the music examples, with seventeen music examples appearing as an appendix.

Karen Collins combined history and analysis in *Game Sound: An Introduction to the History, Theory, and practice of Video Game Music and Sound Design* (2013), acknowledging the lack of theoretical analysis in ludomusicology: "[…] empirical evidence has not been gathered or researched, and what is available is very scattered. […] Such disagreements [of terminology] […] has at times come at the expense of much-needed empirical research, and threatens to mire the study of games in jargon, alienating the very people who create and use games." Music examples in Collins' book do not serve an analytical purpose but give context to her historical overview. Collins illustrates her book with various musical examples, including a 12 instrument orchestral score for *Final Fantasy VII* (70), and a diagrammatic score transcription from *Russian Squares* (scan 1). This diagrammatic score transcription shows that there are other approaches to musical transcription than notation score transcription.

Scan 1: Music transcription using a graphic interface (Collins 2008: 154).

In *Examining Non-Linear Forms: Techniques for the Analysis of Scores Found in Video Games*, Jason Brame explores the relationship between video game levels and music through diagrams called *real-time game score graphs* (RTSGM). Through these RTSGM diagrams, Brame discusses video game music and link them to the narrative (here, the story progression through various areas in the game) without the need for discussing narrative details relating to characters and direct actions (example 1).

Example 1: Background RTGSG of <u>The Legend of Zelda: A Link to the Past</u> *(Brame 2009: 42).*

Pieter Crathorne wrote a master's degree dissertation titled *Video game music genres and their music* (2010). Since Crathorne's dissertation focus on video game genres, his discussion about music not analytical. Instead, Crathorne recommends selected music genres that could accompany specific video game genres. Crathorne (2010: 2) critique video game music as "an interactive medium does not allow one to analyse the formal structures of music as if they were fixed". Brame (2011: 2-3) counters Crathorne's view in an article entitled *Thematic Unity Across a Video Game Series*. Through Schenkerian analysis, Brame analyses video game music (particularly thematic content) without making diegetic connections. Brame (2011: 16) then defends his non-narrative approach:

> *[…] different [musical] themes can be related through deeper structural relationships. These relationships can be used in conjunction with other parameters to find similar motives on both surface and structural levels to derive similarities between various objects within a video game score. The more these objects can be grouped, the more meaningful a semiological analysis of an entire game score, or even a game series, can be.*

While discussions in Donnelly et al. (2014) focus on various non-musical aspects, analysis by Jason Yu (2016) is entirely theoretical without any reference to the narrative. I conclude that ludomusicology ebbs and flows between music theory, film theory, and ludology; there is no set methodology or model that should be used for ludomusicological discussions, analytical or not. I argue that the three categories of analysis described by Redner are all correct; through Gadamer's lenses (see <u>1.6.1 Philosophical foundation</u>), these different approaches all offer different views of the same topic, the continual covering and uncovering of truth. My particular approach to the aesthetic choices of video game award academies through analysis (a qualitative method) is equally valid as direct interviews with award academy panel members (a quantitative method) since both approaches render valid opinions about the same topic.

1.2.4. The epic music idiom

In poetry, the epic is a long narrative that describes a story, often surrounding heroic- or magnificent deeds that pertain to a particular culture or nation. The term epic was applied to film music in the 1990s, described by composer Thomas Bergensen as "larger than life [...] pushing the limits of the grandiose." Wright (2016). Like many music genres, it is hard to pinpoint where epic music started, or who initiated the genre. *Immediate Music*, who specialises in the composition and creation of trailer music for films, could be considered as possible pilot figures for epic music. I consider Hans Zimmer[10] to be one of the most important composers of epic music. His musical contributions to popular films cemented the presence of epic music with audiences worldwide.

Epic music is pluralist, often combining the orchestra with Japanese taiko drums, synthesisers, and electronic guitars; discussions in chapter 3 (3.4. Epic musical idiom evaluation) will reinforce the orchestration of epic music. Since epic music is pluralist (and by implication postmodern), it is no surprise that the genre is resistant to definition. Thomas Bergensen (in Wright: 2016) comments about nature of epic music:

> *I honestly strongly dislike the whole 'genre' concept. It limits music to the confines of formats and structures for the purpose of classifying music, and it attaches a general identity to it so that people who are not capable of critical thinking can surrender to the masses and let themselves be railroaded.*

Since there is no historical *première* point for epic music I speculate that the very word 'epic' was first used by fans of this idiom, that is, the masses. I argue that musical classification should be encouraged since it acts as a point of reference when discussing music, including epic music. Since epic music is resistant to definition I argue that "the masses" cannot be railroaded; as broad as a possible definition for epic music might be, epic music has definitive musical qualities[11] which cannot be mistaken for other music genres (for example early 20th-century French art music). Although this musical comparison is extreme, I would not be so critical on the mental abilities of the general public; Bergensen himself is also part of this collective. No individual is capable of perfect perception and constant critical thinking; Slovenian philosopher Slavoj Žižek comments: "People are stupid, [...] it's like showing a newspaper [with] Hegel's logic to a cow" (Zizekian Studies 2015).

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[10] Hans Zimmer (1957 –) is an influential German film composer. His score output includes *The Lion King* (1995), *Gladiator* (2001), *Pirates of the Caribbean: Dead Man's Chest* (2005), and *The Dark Knight* (2008).
[11] I will discuss the musical characteristics for epic music in chapter 3.

1.3. Problem statement

Contemporary ludomusicological studies neglect recent soundtracks, focusing on archaic soundtracks of yesteryear. Donnelly (2014: ix) is an example, discussing video game scores including *Donkey Kong* (1981), *Super Mario Bros*. (1985), *Final Fantasy VI* (1994), *Final Fantasy IX* (2000) (in a separate article), and *The Legend of Zelda: The Wind Waker* (2003). Donnelly (2014: xii) makes his bias clear, writing: "Ultimately, we cannot answer the question of who might be video games' Beethoven or Herrmann, but we can at least begin to outline the rough shape of a highly diverse canon of game music." Music from *Super Mario Bros.* (see Brame 2014, Thompson 2012) and the *Final Fantasy* series (see Hatake52 2014, Hulsman 2014) are especially prone to discussion, decades after the game's release. To avoid favouritism (and by implication, the possible creation of a canon), I consciously chose recent soundtracks, only discussing singular soundtrack selections from video game series (such as the *Halo-* or *Harry Potter* video game series).

1.4. Aims

I will limit the scope of my research to privilege the analysis of three aesthetic features in video game soundtracks. These characteristics include melodic themes, what is known as the presence of the 'epic idiom', and the choice and use of instrumentation. These aesthetic features will form the core of my musical model discussed in chapter 3.

In an interview with *DP/30: The Oral History of Hollywood* (2013), the acclaimed film composer James Horner[12] mentioned that he believed that motion picture music gradually became unthematic in the 21st-century. In my research, I will apply Horner's critique of film music to video game music. As a composer myself, I believe that melodic themes are the heart of the composition. My sentiments are echoed by Horner, who believes that audiences should be able to recognise themes and melodies. Horner claimed that film scores today are thematically unrecognisable and composed by formula: "Most composers are looking for action-oriented, pulse-oriented, rhythm-oriented scores that propel the movie, and the whole thing is about propulsion." (DP/30: The Oral History of Hollywood: 2013.) Through engaging a music theory analysis methodology in my research, I determine if melodic themes exist in award-nominated video game soundtracks, and whether or not the use of melodic themes increased or decreased in video game scores over the course of ten years, and what might account for the produced results of my findings.

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[12] James Horner (1953 – 2015) was a famous American composer. His scores include *Braveheart* (1995), *Titanic* (1997), *A Beautiful Mind* (2001), *Avatar* (2009), and *The Amazing Spiderman* (2012).

The dominant film-score idiom that Horner described above is popularly known as the epic idiom, featuring a strong rhythmic drive, usually without strong melodic or thematic content (DP/30: The Oral History of Hollywood: 2013). Although the epic idiom is thematically resistant (according to Horner), I believe that the epic idiom coexists with melodic themes in video game music. (DP/30: The Oral History of Hollywood: 2013). Besides notating the presence of the epic idiom, my research will focus on orchestration in video game music. I will distinguish between instrumental orchestration, electronic orchestration (typically employing synthesisers), and a mixture of instrumental and electronic orchestration. Although many orchestral instruments are synthesised through electronic sample libraries, they can be distinguished from electronic synthesisers whose sound cannot be associated with orchestral ('real') instruments.

1.5. Research Questions

Through analysis, I seek to answer the question:

- Can a musical idiom be derived for award-nominated video game soundtracks? If so, what features would this idiom possess?

Sub-questions that support my research include:

- What musical aesthetics are prevalent in award-nominated video game soundtracks between 2004 and 2013?
- Do award-academy panels favour thematic orientated video game soundtracks?
- Do award-academy panels prefer instrumental or electronic (synthesised) orchestration for video game soundtracks?
- Does the presence of the epic idiom influence the judgment of the nomination committees?
- What is the relationship between thematic material and the epic idiom in award-nominated video game music?

1.6. Methodology

1.6.1 Philosophical foundation

Video games music is a postmodern pluralist genre that combines art- and contemporary music. Karen Cook in Donnelly (2014: 168) comments: "[...] on the one hand, the soundtrack supports the observation of an American hegemonic ideology underlying the game, but, on the other, show that the player's ability to interact with cultural products reveals a distinctly postmodern framework." Pluralism as a product of postmodernism is perhaps the most prominent feature of video game music. In the *Halo 2* soundtrack (discussed in 2.2.1. Halo 2) the orchestra is joined by several bands[13] thereby combining art- and contemporary music. Another example of pluralism is 'Nepal 1' from *Tomb Raider: Legend* (Troels Folmann); here, the Gaelic folk song *Ailein Duinn* is juxtaposed with chanting by a Buddhist monk, all suspended by Electronic Dance Music (also known as EDM). Combining ethnic sounds from the East and West is indicative of postmodern pluralism. Since pluralistic music contains overlapping genres and idiom it is often difficult to categorise.

Since I am considering the subjective tastes of award academy panels, theories concerning aesthetics would be the first logical approach. Aesthetics is a broad theory which questions the nature, meaning, or purpose of an object or subject. Combined with ideology, aesthetics can lead to discussions about interpretation. Since the time of Baumgarten (*Mediationes philosophicae de nonnullis ad poema* pertinentibus - 1735) aesthetics divided objects or subjects into superior ('high') and inferior ('low') categories. These categories are related to the purpose of art, where 'high' art- and culture is associated with the upper classes while 'low' art- and culture corresponded with the lower (uneducated or less educated) classes. Although a division between the two groups continues, the gulf between 'high'- and 'low' art narrowed in the 20th-century. With postmodernism (especially in the 21st-century) there is no division between "art for art's sake" (art music) and commercial products since these two concepts overlap.

Baumgarten saw aesthetics as the science of the beautiful and the science of sensible cognition; his theories fit in with the Enlightenment view of the rational order of nature. The theory of aesthetics was further developed by notable philosophers including Kant, Hegel, Schopenhauer, and Nietzsche. Musical aesthetics reached its climax in the 20th-century with commentary from Adorno, who favoured the 'high culture' of art music above jazz and popular music. (Beard and Gloag 2005: 4 – 6, 133; Kleinman 2013: 160) The first problem with Adorno's aesthetics as a philosophical foundation for this dissertation is the incompatible nature of video game music with his philosophy. Since video

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[13] Bands featuring in *Halo 2* are *Breaking Benjamin*, *Incubus*, and *Hoobastank*.

game music is a product of postmodernism it combines 'high'- and 'low' art (Desmond 2011: 148). Adorno's ideals and philosophies that promote art music exclusively is, therefore, inapplicable to the aesthetics of video game music.

The second problem with aesthetics as a philosophical foundation is the collaborative character of the discourse. *Alla* Adorno, aesthetics will require me to discuss other ideologies of interpretation, including sociology, psychology, linguistics, metaphysics, and others. While many ludomusicologists interact with non-musical theories, I wish to focus my discourse on an analytical ludomusicology, treating video game soundtracks for their autonomous worth. In order for me to have analytical discussions on postmodern entertainment music, I must engage in another an aesthetical approach that allows the study of 'low culture' music.

My philosophical approach to postmodern music will be based on the work of Hans-Georg Gadamer (1900 - 2002). Gadamer was influenced by Heidegger (his teacher), with Gadamer's significant contribution relating to the hermeneutics of aesthetics. Gadamer (1977: 4 – 5) defined hermeneutics as "the experience of alienation of the aesthetic consciousness and the experience of alienation of the historical consciousness." For Gadamer, the aesthetic consciousness regards the validity of judgement: "What we reject has nothing to say to us – or we reject it because it has nothing to say to us." Gadamer claims that the alienation of historical consciousness is a way of dealing with 'witnesses to past life': "the historical consciousness has the task of understanding all the witnesses of a past time out of the spirit of that time, of extricating them from the preoccupations of our own present life, and of knowing, without moral smugness, the past as a human phenomenon. Therefore, the alienation of aesthetic- and historical consciousness opens the window to interpretation, that is, hermeneutics.

Gadamer interpreted truth not as the properties of statements as they stand in relation to the world, but as an event or process through which truth is revealed. For Gadamer, the unconcealment of truth is not about creating an absolute transparency, but the revelation of truth is always dependent on other truths still concealed. Although truth is a continual play between concealment and unconcealment, it can be verified. Gadamer also thought that understanding is influenced by prejudice, the starting point of interpretation. For Gadamer, prejudice is not a bad thing but a possible framework which is foundational for understanding. (Buckingham et al. 2013: 261; Malpas 2015.)

Gadamer's account of aesthetics is not customary rooted in the phenomenological tradition. His magnum opus, *Truth and Method*, expound his main ideas. Gadamer does not debate qualities or concern himself with the problem of aesthetic pleasure but focus on the place of art in our experience of the world. His approach to aesthetic theory is both constructive and deconstructive: Gadamer dismantles elements of the Platonic, Kantian, and Hegelian tradition of aesthetics but still offers a phenomenological reconstruction that provides insights into the relevance of contemporary art. Gadamer is mainly concerned with the cognitive dimension of experience and what art addresses; his approach is flexible and adaptable. (Davey 2015.)

Gadamer's approach to aesthetics is through the concept of *play*. Through play, Gadamer proposes that we interact with aesthetics. Our experience with understanding is therefore as a participant – a player – that interacts within a work itself. For in "analyzing [sic] aesthetic consciousness we recognized that conceiving aesthetic consciousness as something that confronts an object does not do justice to the real situation." Gadamer also proposes that our aesthetic preferences are of secondary importance to the object- or topic at hand, since we (the players) are participants and not the subject(s). (Gadamer 2006: 102 – 103.) Gadamer thought that hermeneutics should be applied to every art form, not only to literature. A 'hermeneutical consciousness' is, therefore, a "comprehensiveness that surpasses even that of aesthetic consciousness". When aesthetics is absorbed into hermeneutics an interpretation that encompasses a variety of traditions permitted. (Gadamer 2006: 157.) With this broad understanding of aesthetics within a hermeneutical framework, Gadamer makes the following claims:

- Aesthetics should not study the subjective pleasure derived from art but what objectively informs our subjective awareness of art.
- Hermeneutical aesthetics takes a closer look at the cultural- and linguistic influences that crystallise in art.
- Hermeneutical aesthetics presumes phenomenological involvement with the subject matter of art instead of detachment.
- Hermeneutical aesthetics regards aesthetics as a vehicle through which real subject matters reveal themselves, thereby bridging the gap between art and reality.
- Hermeneutical aesthetics are dialogical and recognise that interpretation is a means to art's realisation.
- Hermeneutical aesthetics is not a theory of art but practical contemplative notes that enhance the encounter with art. Hermeneutical aesthetics employs theory to deepen the contemplation of artwork instead of categorising their nature.

- Hermeneutical aesthetics respects art's ability to challenge customary expectations. Breaking through ethical and cultural expectations, hermeneutical aesthetics should show the spectator what is different. (Davey 2015.)

In my dissertation, I will apply the hermeneutical aesthetical approach of Gadamer. Although most ludomusicologists closely link video game music with a narrative, my deconstructive approach will isolate the music analysis from the narrative that will allow an analytical music theory reading of the music, thus an analytical approach (see 1.2.3. Analytical ludomusicology). Since narrative accounts have no bearing on my research, it will not be included in my study.

Gadamer's hermeneutical aesthetics will allow me to create a framework that represents my aesthetical preferences and interpretation of video game music. Like Gadamer, the aesthetics I discuss in my study will not examine the phenomenon of pleasure on behalf of various award-academy committees, but objectively discuss which music elements[14] appear in each soundtrack. Although hermeneutical aesthetics investigates cultural and linguistically influences in art (here, music), my study will exclude such pathways for the sake of brevity (allowing macro analysis). Hermeneutical aesthetics enable interpretation as a means to art's realisation; therefore, hermeneutical aesthetics support my choice to isolate the video game's music from the narrative. Through the isolation- and comparison of music, I can crystallise a broad interpretation (macro analysis) of video game music. Hermeneutical aesthetics uses theory to deepen the contemplation of art, supporting my theoretical analysis of video game music. My analysis will categorise the nature (content) of soundtracks, which seems contrary to Gadamer's idea of aesthetics where the nature of art should not be categorised. My aims in categorisation do not serve an organisational function but support analysis with the end goal of soundtrack comparison. Therefore, my analytical categorisation corresponds with hermeneutical aesthetics. Presuming phenomenological involvement in subject matters of art, hermeneutical aesthetics permit me to analyse and interpret video game music from my subjective point of view.

My final philosophical approach is a phenomenological approach: explaining what I believe about the nature of music that will influence my final interpretation of the collected data. A phenomenological exposition is vital to this thesis, granting the reader a contextual foundation. The aims section in this dissertation (1.4. Aims) presented a scholarly motivation for my analytical

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[14] These elements are thematicism, orchestration, and the appearance of the epic idiom.

categories. However, my experience as a composer influenced these selections. As a composer, I am drawn to melodic and thematic content shaping large sections of my own work. I believe a majority of audiences (including video game award-academies panels) worldwide are attracted to the presence of a 'tune' (theme/melody); it remains vital to me that my compositions are melodically memorable. Orchestration is an important aspect of music composition that explores the idea of tone colour (timbre), also linked with the concept of musical *texture*. Orchestration is, therefore, essential to any composer since texture and timbre are two notable elements of the compositional pallet. Although I briefly describe the orchestrational content in my analysis with regards to the orchestra, I am also interested to see how the acoustic instruments interplay with (electronic) synthesisers in video game soundtracks. Finally, I have a personal interest in the epic music idiom. Although Hans Zimmer's soundtrack for the *Pirates of the Caribbean* franchise sparked my interest, Troels Folmann's *Tomb Raider* soundtracks greatly influenced my passion for this musical idiom.

1.6.2. Constructing a generic mould

A full theoretical analysis of thirty soundtracks is not feasible for the purposes of this study, limiting my analysis to macro-analysis. Macro-analysis in my research is anchored by a generic scaffold; by casting analysis into a template, I proceed with my comparative analysis. Each analysed soundtrack will start with a data table containing the full name of the video game, the name- of the developer and publisher, the year the game was released, the genre of the game, the composer of the game, and the awards or nominations that the soundtrack received. I will analyse tracks as they appear on the soundtrack, notating melodic themes (with possible leitmotifs) and describing the orchestration. Compositional aspects (such as orchestration) connected with the epic idiom will be highlighted. Commentary and analysis are linked to the soundtrack using track names, track numbers, and time readings [minute(s): second(s)]. The notation of themes is non-aural evidence of thematicy in the soundtrack, compensating for the lack of printed musical scores. Since no notated scores are available[15], my aural analysis has been used to describe and transcribe music. Music examples also serve as a textual representation of music; thematic material cannot be discussed if the reader does not know what the music sounds like.

Drawing from the analysis charts of Wilkinson (2005) my empirical observations will be gather in a concluding statistic table that describes the following attributes of each track: orchestration type, thematic content, epic qualities. Through the analysis of these musical aesthetics, I identify and

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[15] Most video game soundtracks are rendered from digital sound libraries.

construct a model musical idiom that dominates in award-nominated video game soundtracks. Theoretical analysis, measurable data (quantitative research) is collected from the selected soundtracks. The collected statistic tables are compiled in the conclusion, from which I can extract a subjective interpretation (qualitative research). Utilising both quantitative and qualitative research approaches, my dissertation will employ a mixed-method research approach (Clough and Nutbrown 2012: 21). Example 2 illustrates is a typical generic mould for soundtrack analysis in my dissertation.

Example 2: Generic mould for analysis in Chapter 2

Game title

Table X1: General information for Game Title

Game full title	Game title
Developer	Name of the developer
Publisher	Name of the publisher
Year	Year
Genre	Genre
Composers	Composer's name
Awards	Awards nominated/won

Analysis

Table X2: Game title statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
X	Track name(s)	XX:XX	X	X	X
	Summary	**Total time**	**Orchestration summary**	**X/X**	**X/X**

The samples will be taken from commercially released soundtracks of select video games since unreleased soundtracks are too long and (being unreleased) illegal. Released albums also resolve the problem of "looping" tracks, since many compositions are edited for album release. Because the music is available on hand, the reader does not have to play the game to access the music. Various cues and stingers (musical cues that sound when the player interacts with a particular game dynamics) are included in most compilations. Video games with soundtracks that include popular commercial music (i.e. was not composed specifically for the game) have been excluded from my study. The soundtracks discussed in this study will not be attached to avoid copyright infringement. However, these soundtracks are available on *iTunes* and *YouTube.*

My initial research has revealed that no published scholarship is available on the epic idiom, even though it can be recognised as a diegetic compositional technique in contemporary soundtrack composition. My work also serves as an impetus for a discourse on the epic idiom (albeit from a music theory perspective) in ludomusicology. The final compositional aspect that I analyse is instrumentation. As a pianist and composer, I prefer orchestral and instrumental music (typically used in Western art music). Although video game soundtracks are usually rendered from electronic sound libraries, the orchestration is either instrumental or synthesisers. My research will determine whether "real" acoustic instruments or synthesised electronic instruments are prevalent in award-nominated video game music. As an experienced gamer, trained musician, and having read widely in the field of ludomusicology, I draw on these skills and lived experiences by integrating my knowledge in these areas and writing this ludomusicological commentary.

1.6.3. Approaching award academies

I approached all the video game award academies mentioned in this study and enquired about adjudication criteria; the academies who replied to my emails and phone calls told me that the adjudicators have an *ad libitum* freedom to choose their nominations – there are no criteria. My grail quest is, therefore, to deduce (or at least formulate) how video game award academies make nominations, at least from a musical perspective. Interviewing award-academy panels is futile since my study reviews soundtracks from the past (2004 onwards). Since personal preferences are subjective (and changing constantly), I cannot gather accurate information about past opinions or perceptions of panel members[16]. Although a quantitative approach is also valid it would not allow me to make a predictive projection going into the future.

Through systematic analysis, I can make deductions that could indicate how award-academy panels choose their nominations. The selections are taken from award-nominated video game soundtracks spanning a decade (2004 – 2013), with a sample of three soundtracks per year (a total of thirty soundtracks). These selections form my base sample and case studies. The collected data is categorised and interpreted to describe possible idiomatic characteristics found in award-nominated video game music. Random selections from nominations by the *BAFTA*[17], *VGX*[18], *DCA*[19], and *D.I.C.E*[20]

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[16] I cannot accurately rely on the memories of panel members, let alone request how their opinions and perceptions changed every year between 2004 and 2013.

[17] British Academy of Film and Television Arts.

[18] Formerly known as *Spike*, known as *VGA*, and *VGX* in its final year.

[19] Developers Choice Awards.

[20] Design, Innovate, Communicate, Entertain. This award is hosted by the Academy of Interactive Arts and Sciences.

awards were chosen for this study; I limited my selections to one soundtrack per franchise. These award academies will be discussed as a collective without distinction. *G.A.N.G.*[21] awards are excluded from this study since they represent audio specialists in the video game community; my interest concerns panel members does not specialise in audio. Since subjective judgement influences the decisions of academy panels, and nominations overlap between academies, I argue that award-winning video game soundtracks cannot be considered exclusively; the music quality of award-nominated scores might be equally as good as the winner in the particular category.

1.6.4. Research approaches

Aesthetics is a collection of subjective personal preferences. Although each individual can pinpoint their preferences objectively, the subjective nature of aesthetics will always change. I propose that aesthetics is always in the process of covering and uncovering (after Gadamer) since opinions and tastes often change with a developing worldview and contextualised understanding[22]. Interviewing panel members to determine a musical aesthetic for award nominated video game soundtracks will only grant me the present view of panel members, a view that will change in the future. Only through analysis can I look back into the past to create a projectory into the future. Interviewing panel members that do not possess advance knowledge of music or musical terms might be a direct approach, but not an objective approach; a non-musical lingual expression of musical aesthetics will need to be interpreted, possibly ending in an incorrect, incomplete, or misunderstood reading. Although my research approach seems positivist, my research objective is (if possible) to capture the essence of a subjective topic, that is, aesthetics. Since video game music combines art and contemporary musical styles, there is a possibility that aesthetic preferences for video game music are a present vogue. Twenty- or fifty years from now, video game music could have a completely different sound.

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[21] Game Audio Network Guild.
[22] A personal example of aesthetical change is my own preference for George Crumb, whose music I only understood and appreciated after several theory classes during my undergraduate studies.

Chapter 2: Analysis

2.1. 2004

2.1.1. Beyond Good and Evil

Table 1: General information for <u>Beyond Good and Evil</u>

Game full title	Beyond Good and Evil
Developer	Ubisoft Montpellier
Publisher	Ubisoft
Year	2003
Genre	Action-adventure
Composers	Christophe Héral
Awards	- 2004 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

As a pluralist composer, Christophe Héral blends various musical styles and genres for his soundtrack of *Beyond Good and Evil* (henceforth *BGAE*) (BG&E Myth S.A.). Since the score of *BGAE* is not dominated by melodic themes, my analysis will group tracks with common traits together.

Noisy sound design

Many tracks in *BGAE* features metallic scraping sounds, synthesised shrieks, percussive peculiarities, and other non-musical sounds. These sounds are layered to create a 'noisy sound design', used to induce the feeling of suspense or horror. A pedal point (mostly in the bass) is used to string these sounds together. A popular example of cacophonic texture is the score for the television series *Hannibal* (composed by Brian Reitzell), where aural dissonances reflect the tension on the screen. It is no surprise that Héral includes these non-musical sounds since his experience as a composer includes scoring for television (BG&E Myth S.A.). In *Isle de Noir* (track 6), a tabla rhythmically binds the dissonant sounds to the composition. *Don't Fear The Reaper* (track 11) features dissonant piano sounds, similar to the techniques used in *The Banshee*[23] by Henry Cowell. Other tracks that feature noisy sound design includes *Mineshaft Madness* (track 7), and *Heart of Darkness* (track 20).

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[23] *The Banshee* requires the pianist to perform experimental techniques, including various scrapings of the strings inside the piano.

Electronic Dance Music

Electronic Dance Music[24] is a popular feature in the compositions of *BGAE*. *Dancing with DomZ* (track 2) is the first track to introduce EDM[25], accompanying a small soprano ensemble. Traces of *Jade's theme* (figure 1) can be heard, played on horn (01:10 – 01:23).

Figure 1: Jade's theme

Say Cheese, Fellas (track 8) briefly features noisy sound design (00:00 – 00:23), until EDM accompanies synthesised strings playing *Jade's theme* (00:44 – 00:47). In *Fear the Reaper* (track 12), EDM is also heard along with a horn playing *Jade's theme* (00:11 – 00:21; 01:04 – 01:14). *Funky Bar 100* (track 14) also features EDM, along with tabla, various shakers and a trumpet playing a jazz-like melody. *When DomZ Attack* (track 15) also features EDM in a narrative composition. Although a majority of the track consists of noisy sound design, *Sneaky Jade Suite* (track 17) also features EDM (only starting at 02:27). *Jade's theme* is also heard in this track, played on distorted guitar (02:43 – 02:59). *Violent Jade Suite* (track 19) also combines *Jade's theme* with EDM (00:52 – 01:11; 01:31 – 01:53). In *Metal Gear DomZ* (track 20), Héral pays tribute to another popular video game with a similar title: *Metal Gear Solid* (1998). *Jade's theme* can be heard on strings in this track (02:28 – 02:38). After a long noisy sound design introduction accompanied by snare drum (00:00 – 01:00), EDM is heard on *Behind Enemy Lines* (track 23). In *Free Your Mind* (track 24), EDM accompanies a distortion guitar playing *Jade's theme* (00:49 – 01:04). *In Hot Pursuit* (track 29) and *Sins of the Father* (track 30) also features EDM.

New Age Music

Another notable music genre that appears in *BGAE* is New Age Music[26]. Although the opening track (1), *In the Beginning*, is narrative linear music, this track introduces the *Hyllian theme* (figure 2) as played on Ocarina (00:37 – 00:52) accompanied by harp*.*

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[24] Electronic Dance Music is an umbrella term for a broad range of electronic music genres, including Techno, Trance, House, Dubstep, and others.

[25] Since I mention Electronic Dance Music several times in my analysis of *Beyond Good and Evil*, I will be using the abbreviation EDM.

[26] New Age Music is a musical genre intended to inspire calmness and relaxation. Electronic music (such as synth pads), pedal points, and non-Western instruments are often used in New Age Music. Artists include Enya, Era, Vangelis, Yanni, and others.

Figure 2: Hyllian theme
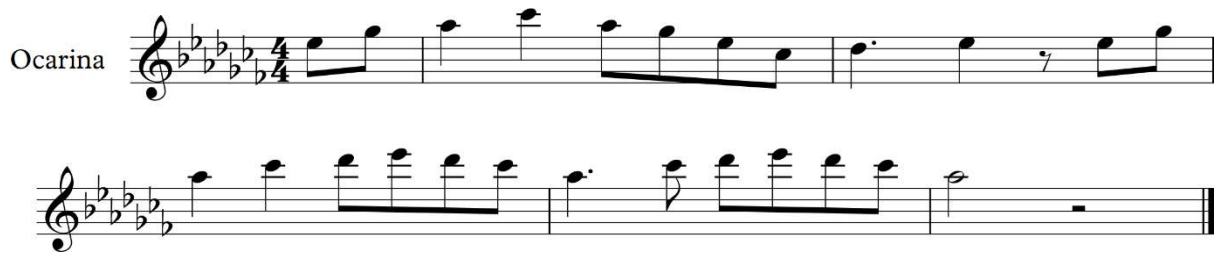
In *Hyllian Suite* (track 3), the *Hyllian theme* is quoted, first played on a recorder (contrasted by violins), and accompanied by marimba and pizzicato bass (00:16 – 01:25). Later in the track, the *Hyllian* theme is played at a slower tempo on recorder (03:30 – 04:37). The accompaniment for the second repetition in this track consists of pizzicato bass, piano, strings and bass. *Home Sweet Home* (track 3) mainly consists of piano, strings, tabla and synthesisers. In *Ancient Chinese Secrets* (track 10), overtone singing is doubled by a synthesiser to create various pedal points, acting as a harmonic foundation for improvisatory playing on ocarina, Arabian violin and harp. *Organic Beauty* (track 18) also employs pedal points in synthesisers. *Thoughtful Reflections* (track 25) bridges New Age music and film music, where minimalistic piano writing is accompanied by synthesisers. The slow tempo of this track is to piano writing commonly used in film music to convey delicate emotions. *Enfants Disparus* (track 26) continues this piano writing, later joined by a solo cello. The cello plays a thematic transformation of *Jade's theme* (figure 3), heard both in this track (01:34 – 02:19) and in U*nacceptable Losses* (track 28) (01:24 – 02:08).

Figure 3: Cello thematic transformation of Jade's theme

Although the orchestration does not reflect New Age music, *Above and Beyond* (track 27) quotes the *Hyllian theme* in the brass (00:12 – 00:41). The *Hyllian theme* is sung by a child's voice and played by oboe in the concluding composition of *BGAE*, Redemption (track 31) (00:49 – 01:21).

Songs

Verse-and-chorus songs are also heard in *BGAE*. Although the lyrics contain a variety of languages, most of the words are nonsensical. *Mammago's Garage* (track 5) is a Reggae song, orchestrated with skank guitars, electric organ, drumkit and a singing ensemble. *Akuda House Propaganda* (track 9) is a rap song representing totalitarian government control: the word "propaganda" is chanted repeatedly in this track. *Fun and Mini-Games* (track 13), is a song in the Salsa style, featuring EDM, guitars and tabla. *Slaughterhouse Scramble* (track 16) is a Metal song, with the only discernable lyric being the screaming of the word "die". *Something Completely Different* (track 22) features a monologue accompanied by strings and a solo electric guitar.

Beyond Good and Evil most likely derives its namesake from Nietzsche, who wrote a book with the same title. Although orchestral instruments are heard in this soundtrack, their function is overshadowed by EDM and synthesised noises. *Beyond Good and Evil* is not the first pluralistic video game soundtrack, but it contains notable compositions that established the link between fantasy games and musical pluralism.

Table 2: Beyond Good and Evil statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	In the Beginning	02:27	Electronic	Yes	No
2	Dancing With Domz	04:36	Electronic	Yes	No
3	Home Sweet Home	02:51	Electronic	No	No
4	Hyllian Suite	04:37	Instrumental	Yes	No
5	Mammago's Garage	02:37	Electronic	No	No
6	Isle de Noir	04:25	Electronic	No	No
7	Mineshaft Madness	02:47	Electronic	No	No
8	Say Cheese, Fellas	01:59	Electronic	Yes	No
9	Akuda House Propaganda	02:41	Electronic	No	No
10	Ancient Chinese Secrets	03:00	Electronic	No	No
11	Don't Fear The Reaper	06:38	Electronic	No	No
12	Fear The Reaper	02:02	Electronic	Yes	No
13	Fun and Mini-Games	01:54	Electronic	No	No
14	Funky Bar 100	02:43	Electronic	No	No
15	When Domz Attack	01:27	Electronic	No	No
16	Slaughterhouse Scramble	02:14	Electronic	No	No
17	Sneaky Jade Suite	03:14	Electronic	Yes	No
18	Organic Beauty	01:55	Electronic	No	No
19	Violent Jade Suite	05:23	Electronic	Yes	No
20	Heart of Darkness	04:35	Electronic	No	No
21	Metal Gear Domz	02:38	Electronic	Yes	No
22	Something Completely Different	01:52	Electronic	No	No
23	Behind Enemy Lines	03:23	Electronic	No	No

24	Free Your Mind	01:20	Electronic	Yes	No
25	Thoughtful Reflections	03:03	Electronic	No	No
26	Enfants Disparus	02:34	Instrumental	Yes	No
27	Above and Beyond	05:44	Electronic	Yes	No
28	Unacceptable Losses	02:08	Instrumental	Yes	No
29	In Hot Pursuit	01:16	Electronic	No	No
30	Sins Of The Father	03:50	Electronic	No	No
31	Redemption	01:53	Instrumental	Yes	No
	Summary	**01:33:58**	**4/31 Instrumental 27/31 Electronic**	**13/31**	**0/31**

2.1.2. Call of Duty

Table 3: General information for Call of Duty

Game full title	Call of Duty
Developer	Infinity Ware
Publisher	Activision
Year	2003
Genre	First-person shooter
Composers	Michael Giacchino
Awards	- 2004 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

Call of Duty (henceforth COD) is composed by Michael Giacchino who describes the *COD motif* as "a very primal and simple thing, not a fanfare […] It's almost as if there's a huge behemoth coming towards you" (Butts 2003). The *COD theme* consists of a chromatic motif (in brackets) repeated three times, ending with two eight notes (figure 4). Since this soundtrack contains many chromatic passages, not all chromaticism should be considered to be thematic. A *tutti* string section opens *Call of Duty* (track 1), repeating the *COD* theme four times (00:00 – 00:16). A long orchestral episode follows, where the *Peace theme* (a theme that counters the chromatic tension of the *COD theme*) is introduced in the strings (figure 5) (01:51 – 02:11; 02:43 – 03:35). After the episode, the *COD theme* is heard again (03:53 – 04:00). A *stretto* follows, where the *COD theme* and *Peace theme* plays together (04:02 – 04:26). During this section, trumpets play the *COD motif* in retrograde (04:04 – 04:09). After the *COD theme* is

played (04:29 – 04:36), the *COD theme* is played by the cellos, accompanied by *sordini* violins and harp arpeggiation (04:37 – 04:58).

Figure 4: COD theme

Figure 5: Peace theme

Through the process of permutation and extension, the chromaticism of the *COD motif* is used to create a new motif: the *Pathfinder motif* (figure 6). Heard in *Pathfinder* (track 2), the *Pathfinder motif* appears in various instruments in this track, including bassoons, clarinets, flutes, strings, and

trumpets (00:31 – 01:44). The *COD theme* is also heard in this track on strings (00:55 – 00:57; 01:19 – 01:21; 01:48 – 01:59). The *Drive motif* is briefly introduced in this track. This four-note motif (C# - D – E – F) has various arrangements in this soundtrack, illustrated by brackets in figure 7. *Drive motif 1* can be heard in this track, appearing the first time in trumpets (02:03 – 02:11; 02:21 – 02:25). Figure 8 is a truncated version of figure 7, featuring all four variations of the *Drive motif* transposed in the same pitch. When transposed, chromatic expansion can be seen between the four different motifs (figure 7 and figure 8).

Figure 6: Pathfinder motif

Figure 7: Drive motif and variations
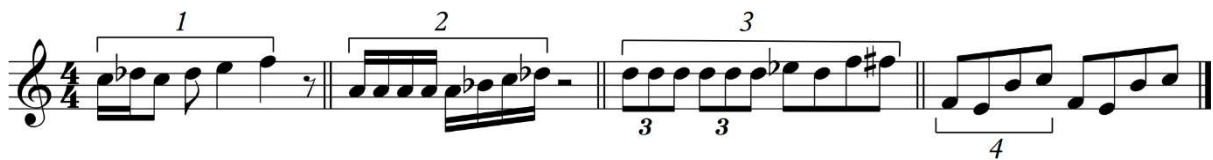
Figure 8: Drive motif truncated and transposed

In *Countryside Drive* (track 3), the *COD theme* is used in a "call and answer" response between strings and an ensemble consisting of woodwinds and brass (00:14 – 00:26). *Drive motif 2* is heard for the first time played by trumpets, answered by marimba. (00:42 – 00:50). The *COD theme* is played by flutes (01:03 – 01:14), followed by the *COD motif* appearing in the cello part (01:24 – 01:34). *Drive motif 3* is heard in the trumpets (01:35 – 01:39; 01:56 – 02:07) followed by a string statement of *Drive motif 4* (02:15 – 02:22). The *COD theme* features once more in this track as played by strings (03:26 – 03:28).

Approaching the Tirpitz starts with a cello and double-bass statement of *Drive motif 4* (00:32 – 00:38; 01:40 – 02:09). The *COD theme* is also heard in strings (01:09 – 01:12; 01:27 – 01:30; 01:34 – 02:01). The *COD motif* is repeated from 02:31 till the end of the track, leading into the next composition, *Below Deck* (track 5), where the *COD theme* is heard in bass strings (00:06 – 00:18). In *Elder Dam* (track 7), the *COD theme* appears in the strings (00:30 – 00:37; 01:49 – 01:56). In *Taking Stalingrad* (track 8), three notes from the *Peace theme* (C – C – D) becomes a motif (the *Peace motif*) that permeates the entire composition. Starting with double-basses playing the *Peace motif* (00:00 –

01:00), the *Peace motif* is heard in horns (00:40) continuing with the entry of the cellos (01:00).
Between the cellos (D major), and horns (D minor), the *Peace motif* is in dissonance (split third
between D major and minor). The *Peace motif* is also heard in trombones (02:03 – 02:22). The *COD
theme* returns in *Breaking Through* (track 9), as played by strings (01:47 – 01:59). In the concluding
track (13), *Pegasus Bridge*, a hymn-like melody features prominently throughout most of the track. A
five-note motif in the cellos from the opening track (02:31 – 02:33) returns in the last track (02:15 –
02:50), linking the *Pegasus Bridge hymn* with the *Peace theme*. Michael Giaccino (in Butts 2003)
comments:

> *In one level of the game, Pegasus Bridge, you're left alone to hold off the enemy. You're on a
> bridge with your squad waiting for reinforcements. For that I thought it would be cool to say,
> here's this guy who's pretty much in the middle of nowhere, far from home, all alone and
> he's told he has to stay here no matter what, even if there are a hundred guys coming
> towards him. For that I thought it might be neat to do a hymn-like piece, a reflection of this
> guy praying for himself.*

The connection between the first and last track makes the *Call of Duty* soundtrack seems cyclic. The
cyclic quality is re-enforced by themes and motifs that are reused in this orchestral soundtrack.

Table 4: <u>Call of Duty</u> statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Call of Duty	04:58	Instrumental	Yes	No
2	Pathfinder	03:09	Instrumental	Yes	No
3	Countryside Drive	04:13	Instrumental	Yes	No
4	Approaching the Tirpitz	02:38	Instrumental	Yes	No
5	Below Deck	01:47	Instrumental	Yes	No
6	Stuka's and Flakvierling's	03:11	Instrumental	No	No
7	Eder Dam	03:26	Instrumental	Yes	No
8	Taking Stalingrad	03:51	Instrumental	Yes	No
9	Breaking Through	02:02	Instrumental	No	No
10	Red Square	01:37	Instrumental	No	No
11	Sewers under Stalingrad	01:54	Instrumental	No	No
12	Tanks a Lot	03:25	Instrumental	No	No
13	Pegasus Bridge	02:50	Instrumental	Yes	No
	Summary	**00:39:07**	**13/13 Instrumental**	**8/13**	**0/13**

2.1.3. Primal

Table 5: General information for Primal

Game full title	Primal
Developer	SCE Studio Cambridge
Publisher	Sony Computer Entertainment
Year	2004
Genre	Action-Adventure
Composers	Andrew Barnabas; 16Volt
Awards	- 2004 *BAFTA* Game Awards: Original music (nominated)

There are two soundtracks for *Primal*: an orchestral score used for cues and cutscenes in the game, and a metal score by the band *16Volt* used during combat. The orchestral score will be discussed since it was this soundtrack that was nominated for a *BAFTA* award. Recorded by the City of Prague Philharmonic Orchestra, the score was performed by an orchestra of 77 players and a 32 member choir. The soundtrack is grouped into five divisions, each corresponding to a level or game area in the world. Mortalis and Nexus prominently feature *Jens-* and *Arella's theme*, while Solum features gongs, brass, percussion and a low choir to present Herne and Jared. Aquis is represented by woodwinds, two harps, high strings and choir, while a solo violin represents the realm of Aetha.

Mortalis/Nexus

The *Opening Credits* (track 1) immediately introduces an ornamented and reduced version of *Jen's theme*, as sung by a soprano (00:00 – 00:32; 00:56 – 01:03). *Timekeeper* (track 2) introduces *Arella's theme* which is first heard in the minor form (hereafter *Arella minor*) on the violins (01:11 – 01:47). The track ends with a major statement of *Arella's theme* (hereafter *Arella major*) (01:48 – 01:55), resulting in a *tierce de Picardie*. In *Arella's theme* (here the name of the third track), the theme has its first full exposition (figure 9). *Arella major* is first heard in strings (00:00 – 00:31), followed by a statement on piano doubled by a flute (00:51 – 01:05). After a solo flute plays *Arella major* (01:07 – 01:22), a piano plays the theme accompanied by choir (01:24 – 01:41).

Figure 9: Arella's theme (in major form)
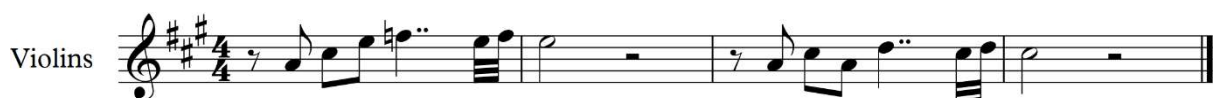
A Love Lost (track 4) alludes to *Jen's theme* on brass and choir (00:35 – 00:43) before a swelling *crescendo* breaks the strings into *Arella major* (00:44 – 01:00). After an orchestral episode, *Jen's theme* is exposed fully for the first time (figure 10), first on strings and then on horns.

Figure 10: Jen's theme

Jen's theme is briefly quoted by a soprano solo (00:00 – 00:11) in *Jen meets Arella* (track 5). This quotation is followed by a string statement of *Jen's theme* (00:32 – 01:06), later doubled by a female choir (01:24 – 02:01). After a solo violin quotes *Jen's theme* (02:02 – 02:13), *Arella major* is heard on the flute (02:13 – 02:31) and on the piano (02:34 – 02:59). The last quotation of *Arella major* in this track is on an oboe and piano (04:05 – 04:27), followed by a solo soprano singing *Jen's theme* (04:27 – 04:50). The arrangement of themes (*Jen – Arella major – Jen*) resembles ternary form. The last track grouped under Mortalis/Nexus is the closing track, *Journey's End* (track 20), where *Jen's theme* is heard on strings (00:00 – 00:23).

Solum

The Demon Awakes (track 7) uses various percussive instruments, notably gongs (01:02 – 01:17). The track ends with the choir singing "Amen" (03:00 – 03:19). Christian related lyrics are continued in *Coliseum* (track 8), where the choir sings "Dies Irae" (01:11 – 01:28). "Amen" returns in *A Prince in Chains* as sung by choir (01:57 – 02:12). Various short brass cues are heard in these tracks, and the strings echo the percussive sound of this game area by playing *col legno*.

Aquis

Like *Arella's* theme, the *Aquis theme* is also heard in major and minor modes (hereafter *Aquis major* and *Aquis minor*). In *World of Water* (track 10), *Aquis minor* is heard for the first time as sung by soprano choir (00:16 – 00:43) (figure 11). A cor anglais echoes *Aquis minor* (01:39 – 02:15), repeating the first four notes of the theme sequentially. The most notable solo for harp in this soundtrack is heard here, where two harps arpeggiate during aleatoric writing (2:50 – 3:13).

Figure 11: Aquis theme (in minor form)

After an oboe solo in *Turbulent Depths* (track 11), the choir partially quotes *Aquis minor* (01:08 – 01:15). Strings and a flute also briefly quote *Aquis minor* (2:45 – 03:30). *Aquis major* appears for the first time in this soundtrack in *A Kingdom Restored* (track 12), played on violins accompanied by harp and choir (00:00 – 00:55). A soprano also sings *Aquis major* accompanied by strings and harp (01:08

– 1:30) before a flute also quotes *Aquis major* (01:41 – 02:03). Strings playing *Aquis major* (02:04 – 02:25) followed by a final repetition of the *Aquis major* sung by soprano (02:36 – 03:00). *Aquis minor* returns in *The Mad King* (track 13) as played by brass (00:32 – 00:46; 01:27 – 01:41).

Aetha

Raum and Empusa (track 6) introduce the most common denominator for Aetha: a solo violin. After the choir sings the word "requiem" (01:36 – 01:50), a solo violin plays a melody (01:50 – 02:03). The solo violin continues in *Mountain of Suffering* (track 14) where the orchestra accompanies the violin in a 3/4 dance (00:05 – 00:27). The violin plays a poignant solo melody (00:50 – 01:03) before the violin is accompanied by orchestra (01:21 – 01:59). In *Devil's Waltz* (track 15), two violins are accompanied by string orchestra and harpsichord in the entire track. Although the solo violin does not feature in *Dark Science* (track 16), there is a notable quotation of *The Blue Danube by* Johann Strauss II. After a few bars, the quotation is recomposed to sound dissonant, before dissolving into a resolution that fits the waltz as Strauss wrote it. In *The Helot* (track 17), the solo violin plays a melody that reflects the sad state of the Helots (00:00 - 00:26; 00:50 – 01:14). From all the violin solos in the Aetha game area is it possible to deduce a theme. Since the violin writing is improvisatory, it is difficult to pinpoint an exact theme since each quotation is different.

Volca

Since the Alto flute represents Volca, I am going to highlight the Alto flute in *Temple of Flames* (track 18). The Alto flute is first heard solo after an oboe solo (00:57 – 01:21). The Alto flute is heard again (02:46 – 02:54; 04:05 – 04:10) before the track comes to a close.

Music by the metal band *16Volt* was used in the soundtrack during fight sequences. Although the metal music contrasts the orchestral score in *Primal*, there is no bridge between these genres, shocking the listener. Although it was not the first soundtrack to be recorded by orchestra for video game, the music of *Primal* remains novel for its time, due to the thematic- and orchestrational complexities involved in the music.

Table 6: <u>Primal</u> statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Opening Credits	01:06	Instrumental	Yes	No
2	Timekeeper	01:55	Instrumental	Yes	No
3	Arella's Theme	01:41	Instrumental	Yes	No
4	A Love Lost	05:20	Instrumental	Yes	No
5	Jen Meets Arella	04:50	Instrumental	Yes	No
6	Raum And Empusa	03:23	Instrumental	No	No
7	The Demon Awakes	03:19	Instrumental	No	No
8	Coliseum	06:05	Instrumental	No	No
9	Prince in Chains	03:45	Instrumental	No	No
10	World Of Water	03:38	Instrumental	Yes	No
11	Turbulent Depths	05:21	Instrumental	Yes	No
12	A Kingdom Restored	03:03	Instrumental	Yes	No
13	The Mad King	02:25	Instrumental	Yes	No
14	Mountain of Suffering	02:25	Instrumental	No	No
15	Devil's Waltz	02:00	Instrumental	No	No
16	Dark Science	03:05	Instrumental	No	No
17	The Helot	01:14	Instrumental	No	No
18	Temple of Flame	04:10	Instrumental	No	No
19	Hall of Gods	02:16	Instrumental	No	No
20	Journey's End	00:23	Instrumental	Yes	No
	Summary	**01:01:34**	**20/20 Instrumental**	**10/20**	**0/18**

2.2. 2005

2.2.1. Halo 2

Table 7: General information for Halo 2

Game full title	Halo 2
Developer	Bungie
Publisher	Microsoft Game Studios
Year	2004
Genre	First-person shooter
Composers	Martin O'Donnell; Michael Salvatori
Awards	- 2005 *DCA*: Best Audio (won) - *Spike* Video Game Award 2004: Best original score (nominated)

Contemporary music and songs

The composers for *Halo 2* approached several contemporary musicians to help them write the music for the soundtrack, including the post-grunde[27] band *Breaking Benjamin*[28], the rock band *Hoobastank*[29], and the alternative rock band *Incubus*. The suite named *The Odyssey* is performed by *Incubus*, divided into four movements[30]. The first movement of this suite is nicknamed "Follow", since the lyrics consist of this a repetition of this one word, contrasted by "yeah". Guitarist Steve Vai played the solos in the game, starting in the opening track for volume one *Halo 2 Theme Mjolnir Mix* (00:20 – 03:40). Although *Unyielding* (volume two track 4) can be described as a piano concerto, *Reclaimer* (volume two track 9) should be described as a concerto for piano and guitar. The latter is an identical copy of the piano concerto, with a virtuosic solo guitar added, as played by Vai.

Halo theme

The *Halo theme* (a Gregorian chant composed by Martin O'Donnell in 1999) was recycled from the previous instalment of the series and is first heard as sung by a lyricless male choir (00:05 – 00:33) in *Halo theme Mjolnir Mix* (volume one track 1). The notes from the first two bars are truncated (E – F# - G – A) as a foundation on which Vai improvise (as described above).

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[27] Grunge is an alternative-rock subgenre that features guitar distortion and fuzz, sharing stylistic elements of punk and heavy-metal. Notable groups include Nirvana, and Pearl Jam. Post-grunge is a "softer" subgenre of grunge that features accessible lyrics and sound qualities that is aimed at a commercial market. Post-grunge bands include Foo Fighters, Matchbox Twenty, and Nickelback.

[28] *Blow me Away*, volume one track 2

[29] *Connected*, volume one track 21

[30] Volume one track 5, 11, 15, and 21

Figure 12: Halo theme

The *Halo theme* is heard again in *Ghosts of Reach* (volume one track 4) as sung by choir (01:54 – 02:22). A choir singing the *Halo theme* (00:00 – 00:26) acts as an introduction in *Follow (1ˢᵗ Movement of The Odyssey)* (volume one track 5). This is an appropriate opening to *The Odyssey* suite since the *Halo theme* will not be heard in this suite after this track. *Never Surrender* (volume one track 9) is a curious composition, since it combines the *Halo theme* (as a Gregorian chant) with Electronic Dance Music, as well as the lyrics 'never surrender'. Chanting continues in *The Last Spartan*, where the *Halo theme* is heard again (01:50 – 02:18). Transposed to D Dorian, the opening notes of the *Halo theme* is used as a foundation for variations in *Remembrance* (volume one track 20). In volume two, the *Halo theme* is heard in the first track, *Prologue*, first sung by choir (00:20 – 00:46). A truncated version of the *Halo theme* follows (figure 13), played sequentially by strings and woodwinds in the lower register (00:48 – 02:36).

Figure 13: Truncated Halo theme

The *Halo theme* is heard briefly as sung by choir (00:33 – 01:03) in *Delta Halo Suite* (volume two track 7). The truncated *Halo theme* is played by horns (00:00 – 01:44) in *Sacred Icon Suite* (volume two track 8). After the horn exposition, the *Halo theme* is sung by choir (01:52 – 02:22). In *Finale* (volume two track 11), the *Halo theme* is sung for the last time in this soundtrack (01:16 – 01:47). While both disks of the *Halo 2* soundtrack paints a musical *chiaroscuro* (synthesised versus instrumental), both volumes are united through the *Halo theme*.

Table 8: Halo 2 statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
		Volume I			
1	Halo Theme Mjolnir Mix	04:11	Mixed	Yes	No
2	Blow Me Away	03:25	Mixed	No	No
3	Peril	02:46	Mixed	No	No
4	Ghosts of Reach	02:22	Mixed	Yes	No
5	Follow (1st Movement of The Odyssey)	04:15	Mixed	Yes	No
6	Heretic, Hero	02:34	Mixed	No	No
7	Flawed Legacy	01:58	Mixed	No	No
8	Impend	02:21	Mixed	No	No
9	Never Surrender	03:35	Mixed	No	No
10	Ancient Machine	01:38	Mixed	No	No
11	2nd Movement of The Odyssey	07:40	Mixed	No	No
12	In Amber Clad	01:39	Mixed	No	No
13	The Last Spartan	02:18	Mixed	Yes	No
14	Orbit of Glass	01:18	Mixed	No	No
15	3rd Movement of The Odyssey	06:40	Mixed	No	No
16	Heavy Price Paid	02:32	Mixed	No	No
17	Earth City	03:06	Mixed	No	No
18	High Charity	01:59	Mixed	No	No
19	4th Movement of The Odyssey	09:07	Mixed	No	No
20	Remembrance	01:17	Mixed	Yes	No
21	Connected	02:39	Mixed	No	No
	Summary	**01:09:28**	**21/21 Mixed**	**5/21**	**0/21**
		Volume II			
1	Prologue	02:36	Instrumental	Yes	No
2	Cairo Suite	09:42	Instrumental	No	No
3	Mombasa Suite	06:42	Instrumental	No	No
4	Unyielding	03:05	Instrumental	No	No
5	Mausoleum Suite	08:11	Instrumental	No	No
6	Unforgotten	02:11	Instrumental	No	No
7	Delta Halo Suite	11:26	Instrumental	No	Yes
8	Sacred Icon Suite	07:26	Instrumental	No	Yes
9	Reclaimed	03:05	Instrumental	No	No
10	High Charity Suite	08:28	Instrumental	No	No
11	Finale	03:11	Instrumental	Yes	No
12	Epilogue	03:48	Instrumental	No	No
	Summary	**01:09:55**	**12/12 Instrumental**	**4/12**	**0/12**

2.2.2. Harry Potter and the Prisoner of Azkaban

Table 9: General information for Harry Potter and the Prisoner of Azkaban

Game full title	Harry Potter and the Prisoner of Azkaban
Developer	KnowWonder; Electronic Arts UK;
Publisher	Electronic Arts
Year	2004
Genre	Action-adventure
Composers	Jeremy Soule
Awards	- 2005 *BAFTA* Game Awards: Original music (nominated)

In the film music world, John Williams does not need an introduction. Williams scored *Star Wars* as well as the first three *Harry Potter* movies (*Prisoner of Azkaban* would be his last). Jeremy Soule scored the music of five video games whose music is associated with John Williams, including *Harry Potter and the Philosopher's Stone* (2001), *Harry Potter and the Chamber of Secrets* (2002), *Star Wars: Knights of the Old Republic* (2003), *Harry Potter: Quidditch World Cup* (2003), and *Harry Potter and Prisoner of Azkaban* (2004) (Internet Movie Data Base 2015a). Since the score for *Prisoner of Azkaban* is entirely orchestral (with few thematic references), I would like to compare Soule's music with the output of Williams.

In his article *5 Orchestration Lessons from John Williams' Flight to Neverland*, Leach (2010) concludes several characteristics that are prominent in the music of Williams. Leach states that percussion should be used for accents, not grooves: "With the exception of the pitched percussion instruments which occasionally play melody lines (or the timpani occasionally supporting the bass), the percussion section is used for accents, fills and flair. There are no driving ostinato patterns or drum-set like beats." With rhythm in mind, Leach writes that a rhythmic pulse is always present in Williams' music, usually in the form of 8th and 16th notes: "there is always a driving energy bubbling beneath it". The rhythm is supported by a compositional device called a filler. Fillers (characterised by rising scales or arpeggiated figures) build tension by propelling the listening into the next phase or section. The scores of Williams are "littered with percussion accents, suspended cymbals, harp glissandos, woodwind runs and other accents and splashes of motion and color." An example of a filler is taken from Leach's study in figure 14. Despite the active orchestration and thick texture, Leach suggests that the complex accompaniments should remain in the background. With the accompaniment of weaker instruments (such as woodwinds), the melody can emerge in stronger instruments (such as strings or brass). A thick texture is also supported with "block chords, arpeggios and scale runs, as opposed to distinct melodies or things that could be heard as particularly attention grabbing." Leach concludes his study, pointing out that all the members of the orchestra

play most of the time. Leach argues that Williams creates a 'large sound' with a *tutti* orchestra playing *sempre*. (Leach 2010.)

Figure 14: A filler example by Williams in Leach (2010).

I have observed that Williams is fond of the keyboard as an orchestral instrument in his scores. His scores for the *Harry Potter* films opens with the most famous celeste solos in film music (*Hedwig's theme*), and the harpsichord is associated with a character named Gilderoy Lockheart in Williams' score for *Harry Potter and the Chamber of Secrets*. (Williams 2002). The score for the *Star Wars Suite* calls for a piano and celeste, and Williams' recent score for *The Adventures of Tintin: The Secrets of the Unicorn* features extensive writing for harpsichord and piano[31] (Filmtracks 2011) (Williams 2009: ii). Since the keyboard is used in Williams' scores for *Star Wars*, *Harry Potter*, and *Tintin*, I would argue that the inclusion keyboard instruments are essential for orchestrational imitation of Williams.

The only thematic composition in this soundtrack is the opening track, *Harry Potter and the Prisoner of Azkaban Main Theme*. After a celeste introduction (that echoes the celeste in William's opening for the Harry Potter films) (00:00 – 00:15), the piano plays the *Prisoner of Azkaban main theme*. As the phrase marks in *figure 15* indicate, the theme consists of a rhythmical pattern (6 notes) that is repeated in various sequences. After the *Prisoner of Azkaban main theme* is heard on the piano

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[31] Two notable tracks that contain harpsichord/piano solos in *The Adventures of Tintin: The Secret of the Unicorn* are "The Adventures of Tintin" (track 1), and "Snowy's theme" (track 2).

(doubled by woodwinds and horns) (00:22 – 00:40), this theme is played by strings (00:40 – 00:58), and sung by choir (00:58 – 01:17), before an orchestral interlude (01:17 – 01:35) pulls us towards the next thematic statements. The *main theme* is then heard in strings (doubled by brass) (01:35 – 01:52), followed by a *tutti* orchestral diversion (including choir), (01:53 – 02:20). A short piano filler (02:20 – 02:22) leads into a final truncated statement of the *main theme*, now heard on a flute (02:23 – 02:30). At the end of the flute solo a celeste can be heard, a reminiscent ending that reflects the celeste opening of this composition.

Figure 15: Harry Potter and the Prisoner of Azkaban main theme

Buckbeak Night Flight (track 2) features melodic content in the strings with the horns answering with countermelodies. This is the first track where the celeste is heard as a filler (01:04 – 01:12). In *Carpe Knight Boss* (track 3), the piano opens the track, accompanied by strings and percussion (00:00 – 00:22). The piano is followed by strings and brass. After an introduction in the lower strings (doubled by woodwinds and brass) the celeste is heard in *Charms Tension* (track 4) (00:12 – 00:14). After a harp solo (00:18 – 00:29) the celeste embellishes a passage scored for horns and strings (00:48 – 01:01). In *Dementor Patronus* (track 5) the piano is heard as a rhythmic support along with the strings in preparation for the entry of the choir at 00:18. *Follow Rain* (track 6) features *pizzicato* strings, piano, and harp as accompaniment for a clarinet (00:17). *Duelling Two* (track 7) is a fast-paced composition opening with a flute flourish (00:00 – 00:05) followed by polyphonic duel between brass and strings. Leading into the next track, *Light Action H and H* (track 8) accompanies combined combat between Harry, Hermione, and an enemy. Horns and trumpets participate in call and answer imitation, with woodwind fillers constituting the first stinger in this track (00:00 – 00:22). The second stinger (00:33 – 00:53) is orchestrated for brass and woodwinds. *Werewolf Fight* (track 9) emphasises Leach's statement "everyone plays most of the time" (Leach 2010). While the brass functions as a rhythmical drive in this composition, the melody is first heard in the horns (00:12), moving to the strings (00:17), oboes (00:28), trombones (00:38), and horns (00:49), ending in the trumpets (00:54).

Extreme Patronus (track 10) starts the composition with singing sopranos accompanied by rising string writing. At 00:31 the entire choir is joined by brass, continuing the string motion towards the end of the track. A trumpet fanfare (00:00 – 00:09) opens *Flying Buckbeak* (track 11), paving the

entrance of the choir (00:10), horns (00:24), trombones (00:38), ending in a trumpet and trombone triumph (00:44). In *Glacius Boss* (track 12), the brass and strings interchange their rhythmic and melodic roles, keeping a steady pulse that propels the composition. *Pizzicato* strings are used to accompany a bassoon (00:07), and a piano (00:13) in *Following Snow* (track 13). The plucking continues to accompany horns (00:31), followed by a melody in the flutes (00:40) with celeste embellishment. Towards the end of the composition, the melody moves to an oboe accompanied by *arco* strings (00:51 – 01:08). *Hogwarts Express* (track 14) starts with a horn melody accompanied by perpetual string and woodwind writing (00:00 – 00:17), moving towards a brass flourish (at 00:17) that moves the melody to the violins. The elongated violin melody is supported with pulsating woodwinds, including celeste support (00:36 – 00:39). The first stinger in this track comes to an end at 00:49, with the next stinger starting at 00:57. The second stinger is scored for brass, strings, woodwinds and piano.

Light Action (track 15) features two stingers (00:00 – 00:07; 00:12 – 01:13). The second stinger is noticeable for extensive piano solos, accompanied by the orchestra. *Marauders Orb* (track 16) starts with brass and string fanfare (00:00 – 00:17), followed by a paced episode scored for tutti orchestra (00:17 – 00:47). The closing track, *End Cut Scene* (track 26) is an exact replica of *Marauders Orb*, with the addition of a choir to the second section of the composition. *Wander Rain* (track 17) features a solo piano accompanied by strings. *Carpe Prison* (track 18) is the only ambient track in this soundtrack that features non-orchestral music. Electronic ambient noises form the backdrop for a solo violin (00:20 – 00:48). *Muggle Robot Boss* (track 19) is a fast-paced composition, scored for *tutti* orchestra. Notable solos in this composition is scored for bassoon and oboe (00:27 – 00:35), piano and clarinet (00:48 – 00:54). Various woodwind fillers can also be heard in this track. Brass (doubled by woodwinds) keeps a constant pulse accompanying the choir in *Patronus Boggart* (track 20). *Wander Snow* (track 21) features an oboe melody accompanied by strings, harp, triangle and celeste. P*izzicato* double-bass and *tremolo* violins accompany a horn and clarinet in *Flying Hedwig* (track 22) (00:00 – 00:19). The melody moves to an oboe (00:20), before a horn (accompanied by strings) carried the melody until the composition ends (00:37 – 01:10). In *Shrieking Shack* (track 23), a piano is accompanied by "wailing" sopranos and high-pitched strings (00:00 – 01:06). A second stinger in this track (01:12 – 01:43) constitutes scoring for lower strings: violas, cellos and double-bass. *Stealth 2* (track 24) is the last fast-paced *tutti*-scored composition in this soundtrack, featuring noticeable solos for cellos (00:10 – 00:17), piano (00:21 – 00:28; 00:35 – 00:40), and celeste (fillers at 00:27 – 00:28; 00:33 – 00:34; 00:36 – 00:37). Choral singing constitutes an entire track, *Choral Ending* (track 25).

Writing for IGN, Butts (2004) write that "The score is Hoolywood-esque [sic] and quite well done." Soule not just surpassed writing a soundtrack *alla* Hollywood, but imitated Williams' orchestration for the film to match the music of the game. Should Soule's score ever be published, pianists and keyboard players should rejoice: there is a part for you in the orchestra.

Table 10: Harry Potter and the Prisoner of Azkaban statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Harry Potter and the Prisoner of Azkaban Main Title	02:40	Instrumental	Yes	No
2	Buckbeak Night Flight	01:34	Instrumental	No	No
3	Carpe Knight Boss	00:53	Instrumental	No	No
4	Charms Tension	01:10	Instrumental	No	No
5	Dementor Patronus	01:09	Instrumental	No	No
6	Follow Rain	01:10	Instrumental	No	No
7	Duelling Two	01:13	Instrumental	No	No
8	Light Action H and H	01:00	Instrumental	No	No
9	Werewolf Fight	01:06	Instrumental	No	No
10	Extreme Patronus	01:33	Instrumental	No	No
11	Flying Buckbeak	01:03	Instrumental	No	No
12	Glacius Boss	01:17	Instrumental	No	No
13	Follow Snow	01:08	Instrumental	No	No
14	Hogwarts Express	02:26	Instrumental	No	No
15	Light Action	01:17	Instrumental	No	No
16	Marauders Orb	00:54	Instrumental	No	No
17	Wander Rain	01:16	Instrumental	No	No
18	Carpe Prison	01:20	Mixed	No	No
19	Muggle Robot Boss	01:11	Instrumental	No	No
20	Patronus Boggart	01:22	Instrumental	No	No
21	Wander Snow	01:10	Instrumental	No	No
22	Flying Hedwig	01:20	Instrumental	No	No
23	Shrieking Shack	01:59	Instrumental	No	No
24	Stealth 2	01:08	Instrumental	No	No
25	Choral Ending	01:29	Instrumental	No	No
26	End Cut Scene	00:54	Instrumental	No	No
	Summary	**00:34:54**	**25/26 Instrumental 1/26 Mixed**	**1/26**	**0/26**

2.2.3. Hitman: Contracts

Table 11: General information for Hitman: Contracts

Game full title	Hitman: Contracts
Developer	IO Interactive
Publisher	Eidos Interactive
Year	2004
Genre	Stealth
Composers	Jesper Kyd
Awards	- 2005 *BAFTA* Game Awards: Original music (won)

The entire soundtrack for *Hitman: Contracts* consists of ambient sounds and electronic dance music. The opening track (1: *White Room & Main Title*) is an Electronic Dance Music composition, featuring a synthesiser that plays the *Hitman: Contracts main theme* (figure 16) (01:03 – 01:35; 03:47 – 04:21). Except for the first track, I could not find any other melodic themes in the soundtrack. Even though there is little to say about the music of *Hitman: Contracts*, I decided to retain this soundtrack as part of my research. Even though I selected this soundtrack on account of merit (winning a *BAFTA* award), the quality of the samples should be consistent. I cannot allow my preference for thematic soundtracks influence the consistency of the samples.

Figure 16: Hitman: Contracts main theme
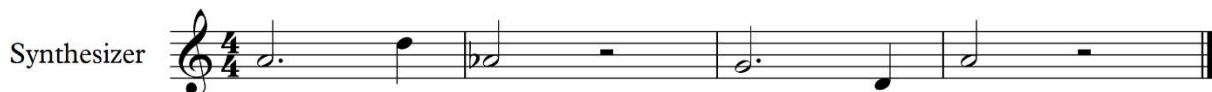
Table 12: Hitman: Contracts statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	White Room & Main Title	05:31	Electronic	Yes	No
2	Weapon Select Beats	01:40	Electronic	No	No
3	Double Ballers	02:36	Electronic	No	No
4	47 Detected	03:09	Electronic	No	No
5	Invader	03:42	Electronic	No	No
6	Sanitarium	04:29	Electronic	No	No
7	SWAT Team	03:58	Electronic	No	No
8	Slaughterhouse	06:13	Electronic	No	No
9	Slaughter Club	08:51	Electronic	No	No
10	Winter Night	03:34	Electronic	No	No
11	Beldingford Manor Ghost	02:14	Electronic	No	No
12	Budapest Bath Hotel	05:23	Electronic	No	No
13	Streets of Hong Kong	06:39	Electronic	No	No
14	Hong Kong Underground	04:43	Electronic	No	No
	Summary	**01:01:14**	**14/14 Electronic**	**1/14**	**0/14**

2.3. 2006

2.3.1. Bully

Table 13: General information for Bully

Game full title	Bully
Developer	Rockstar Vancouver
Publisher	Rockstar Games
Year	2006
Genre	Action-adventure
Composers	Shawn Lee
Awards	- 2006 *VGA*: Best original score (nominated)

Most tracks in *Bully* contain a melodic motif or guitar riff that comprises the theme for each track. *Bully Main Theme* (track 1) opens with a motif on glockenspiel solo (figure 17) (00:00 – 00:22), accompanied by *pizzicato* violins and a bass guitar riff. An accordion (doubled by harpsichord) comprises the next section of this track (00:22 – 00:39). The glockenspiel motif returns (00:40 – 01:02). The track winds down with another glockenspiel solo, followed by the bass guitar riff leading the listener towards the end of the composition.

Figure 17: Bully main theme - glockenspiel solo

Figure 18: Bully main theme – accordion solo

In *Punishment* (track 2), a guitar melody playing the *Punishment theme* (figure 19) is heard almost entirely throughout the composition (00:00 – 02:26), acting as a melodic and harmonic device. The addition of a drumkit, bass guitar, and *tremolo* violins thickens the texture (00:08 onwards), while a glockenspiel (01:37 – 01:48) and choir (01:48 – 02:11) can also be heard.

Figure 19: Punishment theme

Help Gary (track 4) starts with a synthesiser (*Help Gary theme*) accompanied by tabla and piano (00:00 – 00:19). The tabla is joined by an acoustic guitar (playing a riff), together with a zither and a pedal point in the strings. The *Help Gary theme* is heard again twice before the end of the track (00:37 – 00:44; 01:14 – 01:47).

Figure 20: Help Gary theme

Comic Klepto (track 5) starts with a glockenspiel solo (*Klepto theme*) (figure 21) that is later joined by synthesised drums and a bass guitar riff (00:08). After several loops, the ensemble is silenced while the drums play solo (01:36 – 01:44). The glockenspiel rejoins the drums at 01:44, followed by the re-entry of the bass guitar at 01:53 – both are silenced at 02:27 while the drums end the track solo.

Figure 21: Klepto theme

Synth drums, timpani, bass guitar and piano are employed to create a throbbing rhythm in *Beach Rumble* (track 6). A melody in the cellos (figure 22) (00:30 – 00:39) induces a brief tonicization in the dominant key (G minor) before returning to the tonic (C minor). After another tonicization by the piano (figure 23) (00:57 – 01:14) in the sub-dominant (F minor), violins (figure 24) (01:24 – 01:40) play the third notable melody in the tonic key. After a brief coda on the glockenspiel (01:41 – 01:48), a bell (b)rings the composition to an end (01:55).

Figure 22: Beach Rumble celli melody

Figure 23: Beach Rumble piano melody

Figure 24: *Beach Rumble violin melody*

Vendetta Nerds (track 11) features a melody on a synthesiser (figure 25), accompanied by synth drums and another synthesiser.

Figure 25: *Vendetta Nerds theme*

Synthesised drums opens *Vendetta Greasers* (track 12) before a guitar plays the *Greasers theme* (*figure 26*) (00:05 – 00:29) accompanied by a bass guitar riff. From 00:52 onwards, the guitar plays improvisatorily.

Figure 26: *Greasers theme*

Vendetta Preps (track 13) open with a drum kit solo before a bass guitar riff (figure 27) accompanies the rest of the composition (00:03 – 00:30; 00:45 – 01:14; 01:43 – 02:11). A distortion guitar and synthesiser can also be heard in this track.

Figure 27: *Vendetta Preps bass guitar riff*

Cheating Time (track 14) features two notable melodies: a bass guitar riff (figure 28), and the *Cheating Time theme* (figure 29) played on an electric organ. The bass guitar riff opens the piece, continuing when the *Cheating theme* joins at 00:17 (– 00:52). An episode (starting from 00:53) features bass guitar, drum kit and a synthesiser. The bass guitar riff rejoins the composition at 01:11, accompanying a melody on the accordion (figure 30) before the *Cheating Time theme* returns at 01:30. During this last repetition of the *Cheating Time theme*, a glockenspiel joins the ensemble.

Figure 28: Cheating Time bass guitar riff

Figure 29: Cheating Time theme

Figure 30: Cheating Time accordion melody

Defending Bucky (track 15) opens with a bass guitar riff (figure 31) that is the melodic foundation for the surrounding instruments: two rhythm guitars, synthesiser, drum kit, cowbells and tambourine.

Figure 31: Defending Bucky bass guitar riff

A drummer playing an open hi-hat and cymbals lead towards a vibraphone chord (00:18 – 00:21) in *Hattrick vs. Galloway* (track 17). A *pizzicato* double-bass ostinato follows (00:25 onwards), accompanying vibraphone chords, brass chords, and glockenspiel solos with the help of finger snaps.

Figure 32: Hattrick vs. Galloway double-bass ostinato

Shop Class (track 18) consists of a synthesiser melody (figure 33) accompanied by another synthesiser and synthesised drums.

Figure 33: Shop class synthesiser melody

Fighting Johnny Vincent (track 21) is built upon the twelve-bar blues model. An electric guitar (figure 34) plays the famous guitar riff through the entire track, accompanying other guitars with the support of a drum kit.

Figure 34: twelve-bar blues guitar riff in <u>Fighting Johnny Vincent</u>

A distorted electric guitar plays a riff that sustains the rhythm of the entire track in *Vendetta Dropouts* (track 22). The riff is supported by drums, accompanying electric guitar improvisations.

Figure 35: <u>Vendetta Dropouts</u> guitar riff

Final Showdown (track 23) recycles the *Beach Rumble* celli melody (figure 22). Instead of cellos, the melody is heard on bass guitar doubled by piano. A male choir sings a counter-melody (00:20 – 02:11), while another guitar plays the *Beach Rumble* violin melody (figure 24), now transposed to G minor (00:38 – 00:46). *School's Out* (track 25) features a drum and guitar introduction before an electric organ plays a melody (figure 36) (00:21 – 00:50; 01:06 – 01:38). An accordion, several guitars and Latin percussion instruments can also be heard in this track.

Figure 36: <u>School's Out</u> electric organ melody
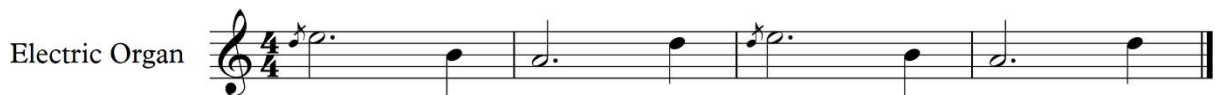
Welcome to Bullworth (track 26) cleverly refers back to the first track (*Bully Main Theme*) by placing the melody in the glockenspiel, giving the soundtrack a cyclic feel. The *Bullworth theme* can be heard on a solo glockenspiel, before two guitars join at 00:15. Drums and an electric organ also participate (00:31 – 00:48), until humming male singers join (00:48 – 01:04). The *Bullworth theme* returns to the glockenspiel (01:04 to the end), joined by guitars, electric organ, and bells.

Figure 37: Bullworth theme

A contemporary musical idiom dominates in the music of Shawn Lee, revealing his experience with the contemporary music industry. Ensembles consisting of guitars with a drum kit (or synthesised drums) comprise most tracks in *Bully*. With memorable guitar riffs comprising the thematic component, the *Bully* soundtrack appeals to a younger generation.

Table 14: Bully statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Bully Main Theme	01:59	Mixed	Yes	No
2	Here's to you, Ms. Phillips	01:49	Mixed	No	No
3	Punishment	02:56	Mixed	Yes	No
4	Help Gary	01:57	Mixed	Yes	No
5	Comic Klepto	02:45	Mixed	Yes	No
6	Beach Rumble	01:58	Mixed	Yes	No
7	Chase Adult	01:01	Mixed	No	No
8	Chase Prefects	01:49	Mixed	No	No
9	Sneaking on A Date	02:09	Mixed	No	No
10	Defender Of The Castle	02:08	Mixed	No	No
11	Vendetta Nerds	02:33	Mixed	Yes	No
12	Vendetta Greasers	01:35	Mixed	Yes	No
13	Vendetta Preps	02:15	Mixed	Yes	No
14	Cheating Time	02:27	Mixed	Yes	No
15	Defending Bucky	02:02	Mixed	Yes	No
16	Chase Police	01:21	Mixed	No	No
17	Hattrick vs. Galloway	03:21	Mixed	Yes	No
18	Shop Class	03:45	Mixed	Yes	No
19	Russell in the Hole	02:18	Mixed	No	No
20	Vendetta Jocks	02:09	Mixed	No	No
21	Fighting Johnny Vincent	03:02	Mixed	Yes	No
22	Vendetta Dropouts	02:27	Mixed	Yes	No
23	Final Showdown	02:15	Mixed	Yes	No
24	Carnival Date	02:08	Mixed	No	No
25	School's Out	02:48	Mixed	Yes	No
26	Welcome to Bullworth	02:05	Mixed	Yes	No
	Summary	**00:59:02**	**26/26 Mixed**	**17/26**	**0/26**

2.3.2. Shadow of the Colossus

Table 15: General information for Shadow of the Colossus

Game full title	Shadow of the Colossus
Developer	Team Ico
Publisher	Sony Computer Entertainment
Year	2005
Genre	Action-adventure
Composers	Ko Otani
Awards	- 2006 *BAFTA* Game Awards: Original music (won)

Introduction

Prologue – To the Ancient Land – (track 1) opens with a zither (possibly Guzheng) introduction accompanied by a choral pedalpoint on D (00:00 – 00:05). After interplay between choir, zither, and flute (00:00 – 00:58), the violins plays a descending melody (00:58 – 01:09). The choir returns with a call and answer singing dialogue corresponding between the female and male division of the choir (01:10 – 01:40). The descending violin melody returns, with violas answering polyphonically responding *alla* call and answer (01:40 – 02:17). The choir returns, accompanied by strings and zither (02:24 – 03:26). *Prohibited Art* (track 2) is scored for strings, flute, zither, and percussion (bells). After an introduction on strings, flute, and zither (00:00 – 00:21), a section featuring polyphonic call and answers are heard, as played by violins and cellos (00:21 – 00:33). Violins and violas join homophonically to play chords that accompany a flute melody (00:33 – 00:48). The closing section of this composition (00:48 – 01:53) is performed on strings, while bells and an organ can also be heard. *Commandment* (track 3) is scored for synth flute with various synthesisers joining the ensemble. *Black Blood* (track 4) is scored for synth pan flute, accompanied by various synthesisers and computer generated noises. *Resurrection* (track 5) features a choir, accompanied by organ and bells.

Cutscenes

The End of the Battle (track 9) opens with a choral introduction (00:00 – 00:22). While the choir rests on a D major chord, the strings join in, moving towards a perfect cadence (G major) without the choir (00:22 – 00:24). The remainder of the track is scored for a string orchestra (00:24 – 01:42). *Idol Collapse* (track 10) is a short cue featuring an organ solo accompanied by synthesised noises. *Wander's Death* (track 17) is another short cue scored for a pair synth flutes accompanied by various synthesisers. *Prayer* (track 26) is, in essence, a composition for piano solo, although various synthesised noises (*alla* overtones) can be heard. *Swift horse* (track 27) starts with pulsating strings that accompanies a woodwind melody (00:00 – 00:23). Timpani and snare drum accompanies the entire piece, keeping the pulse as the orchestration changes. Two symbiotic melodies are heard

during the second section of this composition, played on trumpets and violins respectively (00:24 – 01:45). *A Pursuer* (track 31) is scored for various synthesisers. The organ returns as solo instrument in *Premonition of Revival* (track 32). Besides the organ, various computer generated noises can be heard (wind sounds, hammering sounds). The composition (in C minor) ends on a *tierce de Picardie* (in C major) (00:38 – 00:50).

World exploration

Sign of the Colossus (track 6) opens with a melody (played by cellos and violins) suspended over a double-bass pedal point (00:00 – 00:40). After the introduction, all melodic material is featured in the strings, with various instruments entering and leaving the ensemble. Between 00:40 and 01:52, these instruments can also be heard: zither (00:40 – 00:55), piano (00:57 – 01:06), timpani (01:13 – 01:20), upper woodwinds (01:24 – 01:32), and pan flute (01:33 – 01:41). *Green Hills* (track 11) is scored for three pan flutes, doubled by an "overtone" synthesiser. *Lakeside* (track 14) features a synthesised harp with other "overtone" synthesisers. Solo zithers first playing a melodic section (00:00 – 01:00) opens *The Farthest Land* (track 18). Although zithers continue to play the remainder of the piece, a pan flute doubles the main melody (01:01 – 03:23). *Sky Burial* (track 22) opens with a dissonant string chord (00:00 – 00:05) before a clarinet is accompanied by a harp (00:05 – 00:24). The harp continues to accompany violins (doubled by a flute) (00:24 – 00:43), synthesised xylophone and bassoon (00:43 – 01:02), and finally violins and synthesised flutes (01:02 – 01:45). *A Closed-off City* (track 23) is scored for synth flute and drum. The orchestration for *Sanctuary* (track 29) is entirely synthesised.

Fighting colossi

All action sequences involving colossi are marked "X – Battle with the Colossus –" (where X is the name of the track) on the soundtrack. In the following analysis, I shall remove the suffix above from the track names for the sake of brevity. These tracks can further be subdivided into slow tempo tracks and tracks with a fast pulse. I shall analyse the three slow tracks first.

Silence (track 15) ironically contains a lot of sound – music. The track opens with a violin melody above an E pedal point (00:00 – 00:07), followed by a violin melody below the pedal point (00:07 – 00:14). The melody below becomes a second pedal point (on A, a fifth below E), whereafter violas play the third melody underneath the two pedal points (00:14 – 00:22). After the violas become a pedal point, the first and second violin sections move melodically. This interplay between upper

strings, melodies and pedal points continues for the rest of the track until the lower strings are also heard. The composition comes to a close while a bell and a harp can be heard (01:22 – 01:49). *Creeping Shadows* (track 19) is scored for strings with "overtone" synthesisers featuring as well. *Demise of the Ritual* (track 30) features strings, choir, organ, cor anglais, and rumbling electronic sounds.

The fast paced colossi tracks are all orchestrated similarly. They all feature brass, string, percussion (timpani, bells – and cymbals in every track) with choir *ossia*. These tracks include *Grotesque Figures* (track 7), *The Opened Way* (track 8), *A Violent Encounter* (track 12), *Revived Power* (track 13), *In Awe of the Power* (track 16), *A Messenger From Behind* (track 20), *Counterattack* (track 21), *Liberated Guardian* (track 24), *A Despair-filled Farewell* (track 25), and *Gatekeeper of the Castle Ruins* (track 28).

End credits

Epilogue – Those who Remain – (track 33) is the longest composition in this soundtrack (07:08). The orchestration for this extended cutscene includes strings, brass, various percussion instruments (including bells), organ, and choir. The descending violin figure from *Prologue* (track 1) returns in this piece, giving the soundtrack a cyclic feeling (00:36 – 01:13; 04:23 – 04:49). *Hope* (track 34) a piano composition overlayed with 'overtone' synthesisers. *The Sunlit Earth* (track 35) opens with piano triplets that accompany various synthesisers.

Bonus tracks

Since the bonus tracks do not appear in the game, I shall only briefly describe their orchestration for data collecting purposes. *Memories* (track 36) is scored for solo piano – the only solo piano piece with no added synthesisers or 'overtone' sounds. *Wilderness* (track 37) features a guitar accompanied by synthesised sounds. *Voice of the Earth* (track 38) consists of drums accompanying melodies on synthesisers. *Marshlands* (track 39) consists of synthesised zither and other electronic instruments. *Anger* (track 40) is scored for the same instruments as the preceding track. *Final Battle* (track 41) is scored for orchestral instruments: strings, brass, cymbals, and snare drum. *Farthest Land (Reprise)* (track 42) is a repetition of track 18.

Shadow of the Colossus has no identifiable themes, although there are a few motifs that might be repeated. The length and repetition of these motifs are too short to function as thematic material.

Table 16: Shadow of the Colossus statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Prologue (To the Ancient Land)	03:26	Instrumental	No	No
2	Prohibited Art	01:53	Instrumental	No	No
3	Commandment	01:54	Electronic	No	No
4	Black Blood	02:03	Electronic	No	No
5	Resurrection	01:54	Mixed	No	No
6	Sign of the Colossus	01:52	Instrumental	No	No
7	Grotesque Figures – Battle with the Colossus	02:05	Instrumental	No	No
8	The Opened Way – Battle with the Colossus	01:57	Instrumental	No	No
9	The End of the Battle	01:42	Instrumental	No	No
10	Idol Collapse	00:34	Mixed	No	No
11	Green Hills	00:33	Mixed	No	No
12	A Violent Encounter – Battle with the Colossus	01:57	Instrumental	No	No
13	Revived Power – Battle with the Colossus	02:18	Instrumental	No	No
14	Lakeside	00:26	Electronic	No	No
15	Silence – Battle with the Colossus	01:49	Instrumental	No	No
16	In Awe of the Power – Battle with the Colossus	02:12	Instrumental	No	No
17	Wander's Death	00:45	Electronic	No	No
18	The Farthest Land	03:23	Instrumental	No	No
19	Creeping Shadow – Battle with the Colossus	01:47	Mixed	No	No
20	A Messenger from Behind – Battle with the Colossus	01:52	Instrumental	No	No
21	Counterattack – Battle with the Colossus	02:04	Instrumental	No	No
22	Sky Burial	01:45	Mixed	No	No
23	A Closed-off City	00:30	Mixed	No	No
24	Liberated Guardian – Battle with the Colossus	02:07	Instrumental	No	No
25	A Despair-filled Farewell – Battle with the Colossus	02:13	Instrumental	No	No
26	Prayer	01:51	Mixed	No	No
27	Swift Horse	01:45	Instrumental	No	No
28	Gatekeeper of the Castle Ruins – Battle with the Colossus	02:03	Instrumental	No	No
29	Sanctuary	00:32	Electronic	No	No
30	Demise of the Ritual – Battle with the Colossus	02:20	Mixed	No	No
31	A Pursuer	00:30	Electronic	No	No
32	Premonition of Revival	00:50	Mixed	No	No
33	Epilogue (Those Who Remain)	07:08	Instrumental	No	No
34	Hope	02:09	Mixed	No	No
35	The Sunlit Earth	01:31	Mixed	No	No
36	Memories	01:21	Instrumental	No	No
37	Wilderness	00:28	Mixed	No	No

38	Voice of the Earth	00:27	Electronic	No	No
39	Marshlands	00:30	Mixed	No	No
40	Anger	01:52	Mixed	No	No
41	Final Battle	00:54	Instrumental	No	No
42	The Farthest Land (Reprise)	03:21	Instrumental	No	No
	Summary	**01:15:52**	**21/42 Instrumental 7/42 Mixed 14/42 Electronic**	**0/42**	**0/42**

2.3.3. Tomb Raider: Legend

Table 17: General information for Tomb Raider: Legend

Game full title	Tomb Raider: Legend
Developer	Crystal Dynamics
Publisher	Eidos Interactive
Year	2006
Genre	Action-adventure
Composers	Troels Folmann
Awards	- 2006 *BAFTA* Game Awards: Original music (won)
	- 2007 *DCA*: Best Audio (nominated)

My undergraduate mini-dissertation[32] involved a study on *Tomb Raider: Legend*. Entitled *Unifying elements in the Tomb Raider Trilogy game soundtracks*, my study included the following compositional features that were found in three games of the *Tomb Raider* franchise: themes and melodies, rhythms, orchestration and instrumentation, the usage of Latin lyrics, and the usage of various unifying sounds.

Main Theme – Croft Manor Theme (track 2) combines two tracks, *Main Theme* and *Croft Manor Theme* respectively. The track opens with a duduk quoting the *Tomb Raider Main Theme Motif* (figure 38) in retrograde (00:00 – 00:07). An Arabian violin follows, playing the *Legend Theme* (figure 39) (00:08 – 00:24). After a Gaelic singer quotes the lament *Ailein Duinn* (00:25 – 00:45), the *Legend Theme* receives a full exposition by choir and orchestra. Another extract from *Ailein Duinn* is sung before the track comes to a close (01:58 – 02:10). All these sections are strung together by Electronic Dance Music and taiko drums. At 02:11, the *Croft Manor Theme* starts, which can be subdivided into two sections: a piano (02:11 – 03:04) plays the *Tomb Raider Main Theme Motif* (02:11 – 02:31) and the *Legend Theme* (02:37 – 03:03), before a duduk plays a melody (03:05 – 04:14). Both piano and duduk sections are accompanied by Electronic Dance Music. (Smal 2013: 13, 19, 20, 21.)

Figure 38: Tomb Raider Main Theme in Smal (2013: 12)

Figure 39: *Legend Theme in Smal (2013: 19)*

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[32] The mini-dissertation included discussions on thematic material, preceding the conception of this study.

South America Theme (track 2) opens with brass quoting the *Legend Theme* (00:02 – 00:13). Electronic guitars, choir, drums, and various synthesisers can also be heard in this track, accompanied by Electronic Dance Music. *Bolivia* (track 3) opens with a female choir chanting the words 'Agnus Dei' (00:00 – 00:47) while melodic content is in the brass. The track ends with a brass quotation of the *Legend Theme* (04:11 – 04:44). *Bike Ride Theme* (track 4) quotes *Ailein Duinn* (00:29 – 01:42)*,* accompanied by Electronic Dance Music. In *Flashback* (track 5), a clarinet quotes the *Tomb Raider Main Theme Motif* (00:40 – 00:47) before the *Legend Theme* is quoted by brass (01:31 – 01:53). Woodwinds later quote the *Legend Theme* (02:50 – 02:58) before a synthesised flute repeats the *Legend Theme* (03:47 – 04:56). The final statement of the *Legend Theme* in this track is by an oboe (05:03 – 05:43). *Tokyo* (track 6) opens with taiko drums (00:00 – 00:15) before Electronic Dance Music occupies the rest of the track (00:16 – 05:06). Although there is not much to say about this section based on the model for my generic scaffolding, it is notable that a synthesiser quotes the *Legend Theme* (02:36 – 02:59). *Himalaya* (track 11) quotes *Ailein Duinn* again (00:24 – 01:10; 01:36 – 02:18), accompanied by Electronic Dance Music. (Smal 2013: 13, 19, 21, 22, 33.)

Tomb Raider: Legend is one of the earliest video game soundtracks to employ the epic idiom, with notable usage of the taiko drums. Although thematic content does not abound, Electonic Dance Music combined with a diversity of musical influences (such as the juxtaposition of the duduk, Arabian violin, and Gaelic singer in the opening track) keep the listener captivated.

Table 18: Tomb Raider: Legend statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Main Theme – Croft Manor Theme	04:14	Mixed	Yes	Yes
2	South America Theme	02:31	Mixed	Yes	No
3	Bolivia	04:44	Mixed	Yes	Yes
4	Bike Ride Theme	02:24	Mixed	Yes	Yes
5	Flashback	05:43	Mixed	Yes	Yes
6	Tokyo	05:06	Mixed	Yes	Yes
7	Amahlin	05:12	Mixed	No	No
8	West Africa Theme	02:03	Mixed	No	Yes
9	Vehicle Theme	02:21	Mixed	No	No
10	Arthur's Grave – Somewhere Theme	05:09	Mixed	No	No
11	Himalaya	04:15	Mixed	Yes	No
12	Credits Theme	01:12	Mixed	No	No
	Summary	**00:44:59**	**12/12 Mixed**	**7/12**	**6/12**

2.4. 2007

2.4.1. God Of War II

Table 19: General information for God Of War II

Game full title	God Of War II
Developer	SCE Santa Monica Studio
Publisher	Sony Computer Entertainment
Year	2007
Genre	Action-adventure
Composers	Gerard Marino; Ron Fish; Mike Reagan; Cris Velasco
Awards	- 2008 *BAFTA* Game Awards: Original music (nominated) - 2008 *DCA*: Best Audio (nominated) - 2008 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated) - 2007 *VGA*: Best original score (nominated)

After listening to the entire soundtrack, it is difficult to name any aural highlights, since most tracks sound the same. The composers use clever composition tools to emphasise rhythm, including brass swells, and *crescendo* timpani that leads to the first beat of a bar (or a phrase). Singular extended brass notes (especially in the lower registers) are also frequently heard in this soundtrack. Another stereotypical orchestration that the composers employ is a repeated rhythmical pattern in the strings that accompanies a melody in the brass. While the majority of the tracks are purely orchestral, the composers of *God Of War II* decided to add three odd tracks whose musical idioms clash with the rest of the score. These tracks are *Junkie XL Colossus Remix* (track 25) (Electronic Dance Music), *Blood of Destiny* (track 26) (Heavy Metal), and *God-like* (track 27) (Rap). Although the fast-paced score of *God Of War II* works well with gore, the musical content of this soundtrack is not strong on its own. Writing for IGN, Spence D (2007) summarises the soundtrack:

> *Additionally there is no doubt that the score itself is perfectly befitting the nature of the game, its storyline, and aggressive battle tactics and game play. That said, the score never really lets up and is definitely more attuned to being part of the overall gaming experience of God Of War II than as a stand alone musical experience. Of course those who are enraptured by the game will no doubt disagree and wish to own it for themselves.*

Table 20: God Of War II statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Main Theme	02:57	Instrumental	No	Yes
2	The Glory of Sparta	03:08	Instrumental	No	Yes
3	The Way of the Gods	02:13	Instrumental	No	Yes
4	Colossus of Rhodes	02:06	Instrumental	No	Yes
5	The Bathhouse	02:05	Instrumental	No	No
6	Death of Kratos	04:04	Instrumental	No	Yes
7	The End Begins	01:55	Instrumental	No	Yes
8	Typhon Mountain	03:16	Instrumental	No	Yes
9	Waking the Sleeping Giant	01:50	Instrumental	No	Yes
10	Battle for the Skies	02:16	Instrumental	No	Yes
11	Exploring the Isle	02:19	Instrumental	No	No
12	The Isle of Creation	03:20	Instrumental	No	Yes
13	The Summit of Sacrifice	02:33	Instrumental	No	Yes
14	An Audience with Cronos	02:07	Instrumental	No	Yes
15	The Barbarian King Returns	02:01	Instrumental	No	Yes
16	Bog of Lost Souls	02:21	Instrumental	No	No
17	Battle in the Bog	02:02	Instrumental	No	Yes
18	Crossing the Lowlands	02:04	Instrumental	No	Yes
19	Atlas	03:36	Instrumental	No	Yes
20	Palace of the Fates	02:46	Instrumental	No	No
21	Phoenix Rising	02:10	Instrumental	No	Yes
22	Ashen Spire	01:02	Instrumental	No	Yes
23	Athena	00:58	Instrumental	No	Yes
24	The Battle for Olympus	03:11	Instrumental	No	Yes
25	Junkie XL Colossus Remix	04:12	Mixed	No	No
26	Blood of Destiny	02:46	Electronic	No	No
27	God-Like	02:16	Mixed	No	No
28	Atlas Remembers	04:11	Instrumental	No	Yes
29	Kratos and Atropos	01:33	Instrumental	No	Yes
30	Pursuing Destiny	03:36	Instrumental	No	Yes
31	Theme of Fates	02:11	Instrumental	No	Yes
	Summary	**01:19:20**	**28/31 Instrumental 2/31 Mixed 1/31 Electronic**	**0/31**	**24/31**

2.4.2. Mass Effect

Table 21: General information for Mass Effect

Game full title	Mass Effect
Developer	BioWare
Publisher	Microsoft Game Studios
Year	2007
Genre	Role-playing game
Composers	Jack Wall; Sam Hulick; Richard Jacques; David Kates
Awards	- 2008 *DCA*: Best Audio (nominated)
	- 2007 *VGA*: Best original score (nominated)

Mass Effect is mostly scored for analogue synthesisers, occasionally incorporating orchestral instruments. The soundtrack evokes the musical styles of movies from the 1980s, including *Escape from New York*, *The Running Man*, and *Blade Runner*. It is proposed that the German electronic music scene influenced the soundtrack, and contemporary influences from *Tangerine Dream*, *Vangelis*, and Klaus Schulze has also been suggested. (Damigella 2008.) After a pulsating synthesised introduction, the *Mass Effect main theme* (figure 40) is heard (01:09 – 02:21) in the opening track, *Mass Effect Theme* (track 1). This theme is first heard in horns (01:09 – 01:33), doubled by strings and a trumpet (01:33 – 01:57), before the theme returns to the brass *senza* strings (01:58 – 02:21).

Figure 40: Mass Effect main theme

The notes of the *Mass Effect main theme* (A – B – C – D – C– D – G) will be the foundation for several thematic transformations. *Saren* (track 5) consists of a synthesiser with a pulsating reverb, as if the notes are repeating. This echoing melody is derived from the *Mass Effect theme* – the opening notes A-B-C are permutated as A –C –B (–A), now repackaged as *Saren's theme* (figure 41) (00:00 – 01:10). This theme is also interesting, fluctuating between 6/4 and 10/4 time. During the second half of the composition, *Saren's theme* is transposed from A minor to D minor (1:11 – 02:00). Here, *Saren's theme* is first heard on a synthesised violin (01:11 – 01:32) followed by a statement in lower brass (01:36 – 02:00).

Figure 41: Saren's theme

The Citadel (track 6) is scored for synthesiser, strings, brass, and choir. The first three notes of the *Mass Effect main theme* (A –B –C) are the foundation for a thematic transformation, namely the *Citadel theme* (00:06 – 01:44).

Figure 42: Citadel theme

The C – D – C motion of the *Mass Effect main theme* is evoked in *The Presidium* (track 7), where a thematic transformation called the *Presidium theme* consists of the notes E – F – E – D# (figure 43). Accompanied by harp and flute, the cellos first play the *Presidium theme* (figure 43) (00:01 – 00:09), whereafter the theme is doubled by violins (00:10 – 00:39). A female choir joins the ensemble (00:45 – 01:23) before the composition comes to an end.

Figure 43: Presidium theme

The Wards (track 8) opens with a three-note synthesiser ostinato (D-C#-A) (00:00 – 00:54). This ostinato is an introduction to the *Wards theme* (figure 44), as heard on a synthesiser (01:40 – 02:26). We can trace this theme as a thematic transformation of the *Mass Effect main theme*, where A-B-C-D becomes D-A-D-C#-Bb. The last three notes of a selected sequence of the *Mass Effect main theme* is retrograded, and D-C-B is chromatically altered to become D-C#-Bb. This chromatic adjustment serves the key of D harmonic minor.

Figure 43: Wards theme

The *Wards theme* is quoted in the consecutive track, *Criminal Elements* (track 9) (00:00 – 01:56). The *Mass Effect main theme* is quoted by brass (00:22 – 01:40) in *Spectre Induction* (track 10), accompanied by strings. *Liara's World* (track 11) does not quote any significant melodic themes, but the C-D-C-D notes in the *Mass Effect main theme* inspire a stepwise movement in the harmony, specifically a harmonic fluctuation between C and B (both minor) (00:00 – 01:04). This exchange between two notes is repeated in *Protecting The Colony* (track 14), where trumpets play E – F, accompanied by synthesisers (00:53 – 01:11). Likewise, a synthesiser alters between C – Db in *The Thorian* (track 15). In *The Secret Labs* (track 17), a thematic transformation based on the first three

notes of the *Mass Effect main theme* appears. The *Secret Labs theme* is permutated with the notes F-Ab-C, played on a synthesiser (figure 44) (00:59 – 02:33).

Figure 44: Secret Labs theme

Transposed from A- to D minor, *Saren's theme* returns on synthesiser (00:19 – 01:24) in *Saren's base* (track 20). *Breeding Ground* (track 21) features the first four notes of *Saren's theme* (D – F – E – C) as a violin *ostinato* accompaniment to *Saren's theme* played on lower brass. Choir also joins the ensemble towards the end of the track (03:24). *Virmire Ride* (track 22) opens with a D-C synthesiser ostinato that accompanies a synthesised violin exposition of *Saren's theme* (00:13 – 01:40). Like *Breeding Ground*, a string ostinato based on *Saren's theme* accompanies a brass exposition of *Saren's theme* (00:45 – 01:38) in *Exit* (track 23). *Sovereign's Theme* (track 28) is played on double-bass doubled by trombone (figure 45) (00:14 – 01:14). *Sovereign's theme* is a thematic transformation based on the opening notes of the *Mass Effect main theme.* Choir (00:30) and upper strings (00:36) join the ensemble, growing towards a climactic ending.

Figure 45: Sovereign theme

Uplink (track 29) also contains a thematic transformation of the *Mass Effect main theme*. Heard on the tuba (00:09 – 00:32), the *Uplink theme* is based on the rising sequence of the *Mass Effect main theme*. Timpani and snare drum accompanies the track until Electronic Dance Music start at 00:34.

Figure 46: Uplink theme
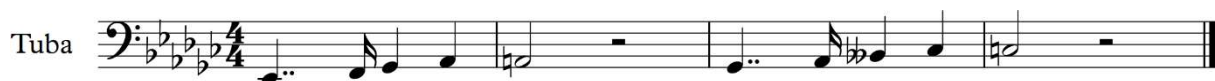
Battling Saren (track 30) opens with a brief quotation of *Saren's theme* on a synthesiser (00:00 – 00:18). *Saren's theme* is also quoted (00:44 – 00:52) in the following track, *In Pursuit of Saren* (track 31). *Infusion* (track 32) features the *Infusion theme* (figure 47)*,* a thematic transformation based on the first three notes of the *Mass Effect main theme*. The *Infusion theme* is heard on brass doubled by violins (00:35 – 01:29).

Figure 47: Infusion theme
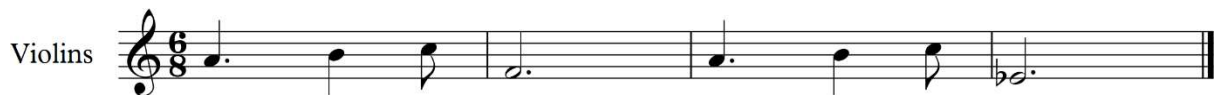
The *Infusion theme* is heard synthesiser doubled by male choir (00:20 – 02:01) in *Final Assault* (track 33). *Victory* (track 34) contains two repetitions of the *Uplink theme*, starting with a horn statement (00:00 – 00:22) followed by the *Uplink theme* played on horns, doubled by strings and choir (00:22 – 00:50). *From the Wreckage* (track 35) contains the *Wreckage theme,* a repetition of four notes based on the opening notes of the *Mass Effect main theme*. First heard in horns and brass (00:00 – 00:43), the *Wreckage theme* is also heard on piano (00:43 – 01:01) and violins with brass (01:02 – 01:18), before *tutti* orchestra breaks into the *Mass Effect main theme* (01:19 – 01:54).

Figure 48: Wreckage theme

The *Mass Effect main theme* also appears in *The End (Reprise)* (track 36), as played by brass, strings and choir (00:42 – 01:09). The final composition that plays during the credits is a song by the Canadian band called *Faunts*. Entitled *M4 Part II* (track 37), this piece features "some haunting guitar and synth interplay mixed with a dash of 80's new wave vocals" (Damigella 2008).

Mass Effect is scored for a blend of synthesisers and orchestral instruments. Elements of the epic idiom can be traced, but it does not fit the orchestral template associated with the genre because of the use of synthesisers. Synthesisers abound in most tracks except four that are purely orchestral.

Table 22: Mass Effect statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Mass Effect Theme	02:21	Mixed	Yes	Yes
2	The Normandy	01:35	Electronic	No	No
3	Eden Prime	01:34	Electronic	No	No
4	Battle at Eden Prime	01:22	Electronic	No	No
5	Saren	02:00	Mixed	Yes	No
6	The Citadel	01:44	Mixed	Yes	Yes
7	The Presidium	01:31	Instrumental	Yes	No
8	The Wards	03:13	Electronic	Yes	No
9	Criminal Elements	01:56	Mixed	Yes	No
10	Spectre Induction	01:54	Mixed	Yes	Yes
11	Liara's World	02:35	Electronic	No	No
12	A Very Dangerous Place	02:40	Electronic	No	No
13	Feros	01:34	Electronic	No	No
14	Protecting the Colony	01:55	Mixed	Yes	No
15	The Thorian	03:12	Mixed	Yes	No
16	Noveria	02:13	Mixed	No	No
17	The Secret Labs	02:38	Mixed	Yes	No
18	The Alien Queen	01:44	Mixed	No	Yes
19	Fatal Confrontation	01:08	Mixed	No	No
20	Saren's Base	01:37	Electronic	Yes	No
21	Breeding Ground	03:46	Mixed	Yes	Yes
22	Virmire Ride	01:40	Electronic	No	No
23	Exit	01:54	Mixed	Yes	Yes
24	Love Theme	01:54	Mixed	No	No
25	Uncharted Worlds	01:16	Electronic	No	No
26	Ilos	01:38	Electronic	No	No
27	Vigil	01:44	Mixed	No	No
28	Sovereign's Theme	01:18	Instrumental	Yes	No
29	Uplink	01:12	Mixed	Yes	No
30	Battling Saren	01:38	Mixed	Yes	Yes
31	In Pursuit of Saren	01:37	Mixed	No	No
32	Infusion	01:29	Mixed	Yes	No
33	Final Assault	02:01	Mixed	No	No
34	Victory	00:50	Instrumental	Yes	Yes
35	From the Wreckage	01:54	Instrumental	Yes	Yes
36	The End (Reprise)	01:09	Mixed	Yes	Yes
37	M4 Part II	08:17	Mixed	No	No
	Summary	**01:16:13**	**4/37 Instrumental 22/37 Mixed 11/37 Electronic**	**20/37**	**10/37**

2.4.3. Splinter Cell: Double Agent

Table 23: General information for Splinter Cell: Double Agent

Game full title	Splinter Cell: Double Agent
Developer	Ubisoft Shanghai; Ubisoft Montreal; Ubisoft Milan
Publisher	Ubisoft
Year	2006
Genre	Stealth
Composers	Michael McCann; Cris Velasco
Awards	- 2007 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

Like *Hitman: Contracts*, the soundtrack of *Splinter Cell: Double Agent* mainly consists of Electronic Dance Music. *Main Menu Theme* (track 1) was composed by Cris Velasco, while Michael McCann wrote the rest of the soundtrack (Iqbal 2008). In an interview with *Cinema Blend* (Usher 2009), McCann stated that the soundtrack of *Splinter Cell: Double Agent* contained "much less music, and the music was also very melodic which in my opinion made things easier to put together." Since most of the music is ambient-like with melodic motifs (that never crystallise into melodic themes), there is little to say about the soundtrack. The orchestration can perhaps be best described in McCann's own words: "The soundtrack is a hybrid of electronic and acoustic elements – blending world, electronic, roots, blues, trip-hop and traditional orchestra." (McCann 2015).

Table 24: Splinter Cell: Double Agent statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Iceland Extraction Theme [Part 2 & 3]	03:11	Mixed	No	No
2	Main Menu Theme	02:13	Mixed	No	No
3	New York: Ambient [Part 1]	04:24	Mixed	No	No
4	Kinshasa: Ambient & Stress [Part 2]	05:36	Mixed	No	No
5	Iceland: Combined Theme	04:56	Mixed	No	No
6	Okhotsk: Ambient	05:52	Mixed	No	No
7	New York: Ambient [Part 2]	03:45	Mixed	No	No
8	Iceland: Fight Theme [360]	03:30	Mixed	No	No
9	Kinshasa: Fight Theme [360]	04:22	Mixed	No	No
10	Shanghai: Ambient	04:47	Mixed	No	No
11	Headquarters: Combined Themes	05:03	Mixed	No	No
12	Okhotsk: Combined Themes	04:45	Mixed	No	No
13	Teammate Revive [Wii – PS2]	00:31	Mixed	No	No
14	New York: Combined Themes [Wii – PS2]	03:41	Mixed	No	No
15	Ellsworth Prison: Ambient	06:47	Mixed	No	No
16	Ellsworth Prison: Timed Escape	01:51	Mixed	No	No
17	Cozumel: Fight Theme [360]	03:26	Mixed	No	No
18	Final Combat Theme [PS2 – XBOX]	01:51	Mixed	No	No
19	Conzumel: Ambient	04:39	Mixed	No	No

20 Iceland: Ambient	01:53	Mixed	No	No
Summary	**01:17:12**	**20/20 Mixed**	**0/20**	**0/20**

2.5. 2008

2.5.1. Bioshock
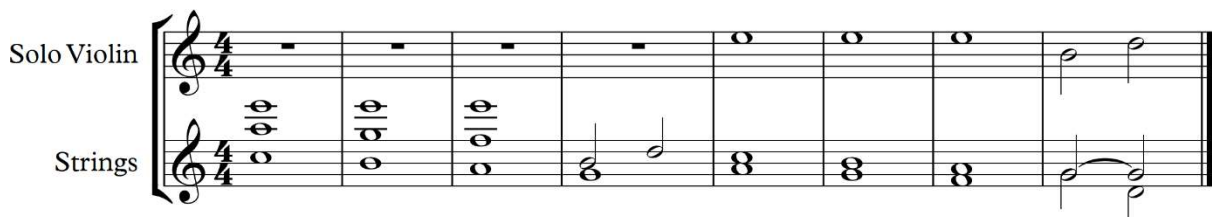
Table 25: General information for BioShock

Game full title	BioShock
Developer	2K Boston; 2K Australia
Publisher	2K Games
Year	2007
Genre	Action-adventure
Composers	Garry Schyman
Awards	- 2008 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (won) - 2008 *DCA*: Best Audio (won) - 2007 *VGA*: Best original score (won)

There are several versions of the *BioShock* soundtrack. *BioShock: Sounds of Rapture* also include radio messages and audio diaries, while *I am Rapture: Rapture is Me* was released on vinyl record. Licensed music was used to immerse the player, although these tracks were never released on a compilation album. Licensed music included songs sung by Mario Lanza, Cole Porter, Billie Holiday, Bing Cosby, *The Andrews Sisters*, Django Reinhardt, and others. I shall analyse the *BioShock Orchestral Score.*

The soundtrack opens with *BioShock Main Theme: The Ocean on his Shoulders* (track 1). After an introduction containing aleatoric string writing and a synthesiser (00:00 – 00:16), the *BioShock main theme* is heard, first in the upper string section followed by a statement on a solo violin (figure 49) (00:17 – 01:42). The track ends with strings sliding down to a percussive accent (01:43 – 01:50).
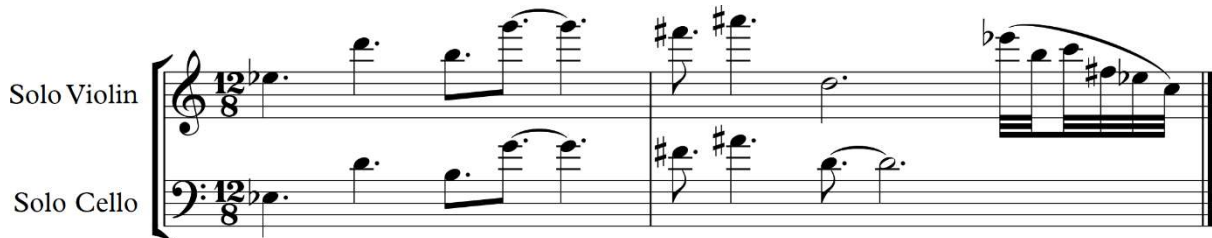
Figure 49: BioShock main theme

Welcome to Rapture (track 2) opens with a solo violin playing arpeggios (in C minor), accompanied by string, celesta, and timpani (00:00 – 00:12). As the accompaniment continues, a solo cello plays the *Rapture theme* in Eb minor, doubled by the violin (figure 50) (00:12 – 00:24). The violin returns to playing arpeggios (00:25 – 00:36) until an orchestra plays a bridge leading to F# minor. The solo

violin, playing the *Rapture theme*, is now doubled by the violin section (00:46 – 01:00). The composition moves back to C minor, where the violin section plays a high C pedalpoint that suspends over celeste solo, lower strings and celeste (01:00 – 01:11). The last violin solo (01:11 – 01:52) is accompanied by orchestra, leading to a climax at (01:34). The composition ends in the dominant key (G minor).

Figure 50: Rapture theme

Dr. Steinman (track 3) solely consists of aleatoric string writing. The violins move up (00:00 – 00:04) towards a dissonant pedal point (00:04 – 00:20). Lower strings play a repeating ostinato while the violins ascend again (00:21 – 00:43), until the violins fade away into another dissonant pedalpoint (00:48 – 01:00). Aleatoric string writing returns in *The Docks* (track 4), accompanying an accordion playing a 3/4 dance. Only snippets of the accordion recording ebb in and out of the composition, making it impossible to determine what sea shanty is being played. *The Dash* (track 5) opens with tremolo strings (00:00 – 00:05), until brass and percussion are heard (00:06 – 00:25). *Step Into My Gardens* (track 6) opens with aleatoric violins sliding down, suspended over high violins and double-bass pedalpoint (00:00 – 00:13). While the high violins and double-bass pedalpoint continue throughout the entire composition, violins playing chords (00:14 – 00:22) patching the way for a solo cello melody (00:22 – 00:47). As the cello ends, the violins play chords that end the composition (00:47 – 01:10). *Dancers on a String* (track 7) opens with a brief string introduction (00:00 – 00:08). A piano plays the *Dancers theme* (figure 51), while a solo cello and a solo violin play countermelodies (00:09 – 00:47). The entire violin section eventually plays the *Dancers theme* (00:51 – 01:21).

Figure 51: Dancers theme

Cohen's Masterpiece (track 8) is a solo piano piece also known as *Cohen's Scherzo No. 7: "Andante con Fuoco".* After an arpeggiated introduction (figure 52) (00:00 – 00:10), *Cohen's theme* (figure 53) can be heard (00:10 – 00:28). A virtuoso showpiece, *Cohen's Scherzo* deserves to be analysed bar by bar – an undertaking that I shall not attempt in this dissertation[33].

Figure 52: Introduction of Cohen's Masterpiece
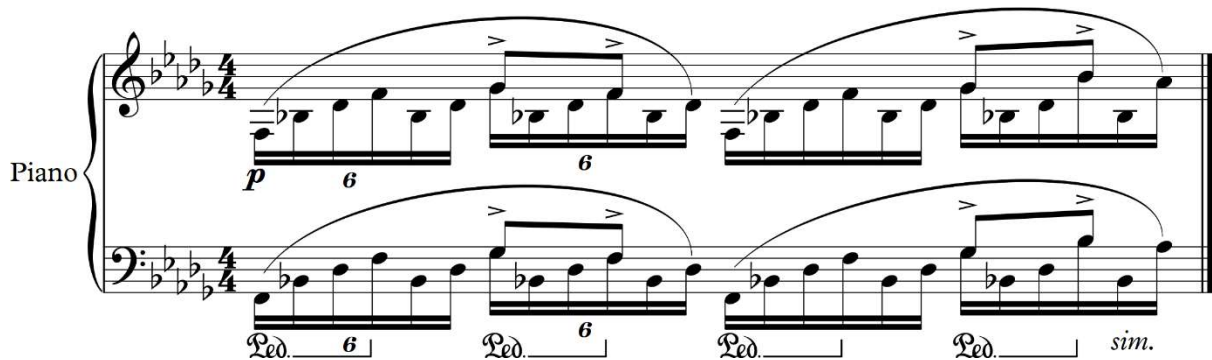
Figure 53: Cohen's theme

The Engine City (track 9) opens with aleatoric strings (00:00 – 00:08) before a drum is heard in 4/4 time. After a trombone solo (00:13 – 00:33), double-bass and trombones play briefly in 3/4 time (00:37 – 00:47). The rhythm returns to 4/4 time with an outro solo violin (00:47 – 01:08). *Empty Houses* (track 10) consists of chordal string writing, although a solo violin and solo cello can be heard (00:53 – 01:44). *This Is Where They Sleep* (track 11) consists of aleatoric string writing, working towards a climax at 01:02. The track ends with a double-bass pedalpoint arching over a French horn. *All Spliced Up* (track 12) is scored for aleatoric strings, pulsating brass and percussion.

Aleatoric string writing is prominent in the soundtrack of *BioShock*, creating aural dissonance that fits the sentiments of a dystopian society. Despite the abundance of aleatoric string writing (often associated with the horror genre), Schyman wrote a soundtrack whose high standards can be

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[33] As a reminder, the purpose of this study is macro analysis.

compared with film music. *BioShock*'s game design (with the accompanying philosophical critique) is a milestone in video game history, having a soundtrack that measures up to the same standard. In an interview with Christopher Coleman (2007a), Schyman expresses the importance of his music:

> *What I would hope, perhaps in some small way, is that [the soundtrack of] BioShock might influence some game developer's thinking process about music in video games. Maybe they will recognize a paradigm shift in game music. […] For me, there's only a hope that a change like this could be the outcome.*

Table 26: *BioShock statistical summary table*

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	BioShock Main Theme: The Ocean on his Shoulders	01:56	Instrumental	Yes	No
2	Welcome to Rapture	01:52	Instrumental	Yes	No
3	Dr. Steinman	01:00	Instrumental	No	No
4	The Docks	00:53	Instrumental	No	No
5	The Dash	00:35	Instrumental	No	No
6	Step Into My Gardens	01:10	Instrumental	No	No
7	Dancers on a String	01:29	Instrumental	Yes	No
8	Cohen's Masterpiece	02:53	Instrumental	Yes	No
9	The Engine City	01:08	Instrumental	No	No
10	Empty Houses	01:44	Instrumental	No	No
11	This Is Where They Sleep	01:21	Instrumental	No	No
12	All Spliced Up	01:04	Instrumental	No	No
	Summary	**00:17:10**	**12/12 Instrumental**	**4/12**	**0/12**

2.5.2. Everyday Shooter

Table 27: General information for Everyday Shooter

Game full title	Everyday Shooter
Developer	Queasy Games
Publisher	Sony Computer Entertainment
Year	2007
Genre	Arcade shooter
Composers	Jonathan Mak; Shaw-Han Liem
Awards	- 2004 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

Everyday Shooter (also known as *Riff: Everyday shooter* in Europe) does not have a story, nor does it have a soundtrack, because it cannot have a soundtrack. *Everyday Shooter* is an arcade shooter that depends on the soundtrack. In classic arcade shooters the player is a spaceship that attacks alien capsules using space bullets, rockets or lasers. In *Everyday Shooter*, the player assumes a glowing pixel on the screen (that represents a spaceship), shooting down various identifiable (or unidentifiable) flying objects, such as floating eyes, giant caterpillars and geometric shapes. Some enemies also move in synchronisation to the rhythm of the music. The soundtrack consists solely of a consort of electric guitars. Mak (2008) describes his game:

> *Everyday Shooter is an album of games exploring the expressive power of abstract shooters. Dissolute sounds of destruction are replaced with guitar riffs harmonizing over an all-guitar soundtrack, while modulating shapes celebrate the flowing beauty of geometry.*

Each level has a specific track allocated to it. These 'backtracks' have allocated time limits to each track, limiting the playtime of each level. Unlike other arcade shooters, *Everyday Shooter* does not contain diegetic game sounds – these are replaced with guitar stingers. When a larger enemy explodes, a stinger (usually tonally connected to the root key) plays, blending in with the rest of the soundscape. Clements (2007) note that some players would not like a guitar soundtrack. Since the player has the ability to shoot down enemy objects at free will, the integrated soundtrack for *Everyday Shooter* is a consolidated experience. *Everyday Shooter* is a dynamic score that should be played, not only listened to.

2.5.3. Lair

Table 28: General information for Lair

Game full title	Lair
Developer	Factor 5
Publisher	Sony Computer Entertainment
Year	2007
Genre	Flight adventure
Composers	John Debney
Awards	- 2008 *BAFTA* Game Awards: Original music (nominated) - 2008 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

Both Christopher Coleman (2007b) and James Southall (2014) agrees that the orchestration of *Lair* pays tribute to John Williams, especially acknowledging the influence of the *Star Wars* prequel trilogy. Since additional orchestration detail is not needed, my analysis of *Lair* shall focus on thematic elements. *Lair Main Title* (track 1) introduces us to a theme with two variations: *Loden's theme*. Both themes are variations based on the same set of notes (Bb – Db – C – Bb – Ab – C – Bb). Although *Loden's theme 1* is heard first (figure 54) (00:00 – 00:26), its rhythm is more intricate than *Loden's theme 2* (figure 55) (01:03 – 01:19). *Loden's theme 1* is unlikely to be a thematic transformation of *Loden's theme 2*, since it is heard before *Loden's theme 2*. If *Loden's theme 2* is a thematic transformation of *Loden's theme 1*, it is a truncated transformation. Because of the controversial nature of these themes, I shall not call either of them thematic transformations. The opening track also introduces the *Conflict theme* (figure 56) (00:46 – 01:02), the *Mokai theme* (figure 57) (01:23 – 01:39), and the *Hero theme* (figure 58) (01:40 – 01:50) to the listener.

Figure 54: Loden's theme 1

Figure 55: Loden's theme 2

Figure 56: Conflict theme

Figure 57: Mokai theme

Figure 58: Hero theme

Main Menu (track 2) opens with the *Hero theme* (00:12 – 00:39), played by string orchestra. The *Conflict theme* also makes its appearance (00:45 – 01:05) in this track. *Diviner's Battle* (track 3) features two brief snippets of the *Conflict theme* (00:00 – 00:24), before the *Conflict theme* is played by trombones (00:36 – 00:55) and violins (00:59 – 01:17). The final statement of the *Conflict theme* in this track is played by horns, trumpets and strings (03:23 – 03:42). *Funeral Pyre* (track 4) states a theme unheard until now: the *Funeral theme* (figure 59) (00:02 – 00:31). *Rohn's theme* is partially quoted (00:32 – 00:47), and will be discussed at *Rohn's theme* (track 7).

Figure 59: Funeral theme

Civilization theme (track 5) consists of two statements of the *Civilization theme* (figure 60), including the theme's exposition on solo violin (00:00 – 00:35), followed by statements on strings (01:11 – 01:43).

Figure 60: Civilization theme

Blood River (track 6) contains *Loden's theme 2* (00:07 – 00:20), a brief quotation of the *Conflict theme* (02:08 – 02:50), followed by another statement of *Loden's theme 2* (02:36 – 02:50). *Rohn's theme* (track 7) opens with a statement of *Rohn's theme* (figure 61) on flute and strings in D minor (00:00 – 00:35). *Rohn's theme* is similar to *Loden's theme* (either 1 or 2), being based on the same descending and rising movement (F – E – D – C – E – D). We hear vocalist Lisbeth Scott sing for the first time in this track, vocalising *Rohn's theme* in G minor (00:36 – 01:10). After modulating, Scott sings *Rohn's theme* one last time (01:11 – 01:50).

Figure 61: Rohn's theme

Darkness theme (track 9) opens with Scott singing the *Darkness theme* (figure 62) (00:00 – 00:41). After an orchestral exposition of the *Darkness theme* (00:42 – 01:16), this theme is repeated four times by Scott (01:17 – 02:24; 02:33 – 03:03; 03:06 – 03:06; 03:03 – 03:41).

Figure 62: Darkness theme

Firestorm (track 10) opens with a brass setting of the *Funeral theme* (00:05 – 00:28). Scott is heard vocalising the *Mokai theme* (00:54 – 01:19) before the *Hero theme* is heard (01:20 – 01:32). *Loden's theme 1* (01:45 – 01:58) is heard before the *Funeral theme* returns (02:04 – 02:26). The *Mokai theme* is repeated (with Scott vocalising) (02:52 – 03:18) before the track ends with a quotation of the *Hero theme* (03:18 – 03:30). *In Elegy* (track 11), the *Darkness theme* is heard sung by choir, accompanied by strings (01:02 – 01:58). *Diviner's theme* (track 12) contains exactly what is indicated in the track title: the *Diviner's theme* (figure 63).

Figure 63: Diviner's theme

Breaking the Ice (track 15) opens with a brass statement of the *Mokai theme* (00:09 – 00:27). Throughout the rest of the composition snippets of the *Mokai theme* are quoted. *Deadman's Basin* (track 16) contains *Loden's theme 1* (00:39 – 00:46) as well as the *Conflict theme* (02:19 – 02:25). Like so many themed tracks before, *Mokai theme* (track 17) centres on the said theme. Scott is heard in this track again, vocalising the *Mokai theme*. *Return to Mokai City, Pt. I* (track 18) opens with the *Mokai theme* (00:09 – 00:45), moving towards a choral setting of the *Hero theme* (00:47 – 01:04). In *Ruins of Mokai* (track 20), the *Funeral theme* is heard, played by brass (00:07 – 00:38). The *Conflict theme* makes it long awaited reappearance (00:07 – 00:26) in *Bridge of the Ancients* (track 21). *Loden* (track 22) does not quote both variations of *Loden's theme*, but *Loden's theme 2* is heard in

throughout this track. *Battle for Asylia* (track 23) contains several statements of *Loden's theme- 1* and *2* (notably at 00:06 – 00:12; 01:10 – 01:23; 01:42 – 02:01). The orchestra and choir build towards a climax, breaking into the *Mokai theme* (03:07 – 03:32), followed by an exposition of the *Hero theme* (03:33 – 04:10). *Epilogue* (track 24) opens with Scott vocalising the *Mokai theme* (00:09 – 00:41), followed by an orchestral statement of the *Mokai theme, senza voce* (00:41 – 01:39). This concluding track ends with tutti presentation of *Rohn's theme* (01:47 – 02:45). *Bridge Battle* (track 25) is an amalgamation of several themes, including *Conflict theme* (00:02 – 00:14; 01:47 – 01:57), *Loden's theme 2* (00:14 – 00:29), *Rohn's theme* (00:48 – 01:10; 02:27 – 02:49), and the *Diviner's theme* (01:14 – 01:21; 01:58 – 02:11).

Lair is a monumental soundtrack, scoring many melodic themes with colourful orchestration. Although many sweeping tracks are in the style of Williams, Southall (2014) also names Alfred Newman and Miklós Rózs as possible influences. Lambertson (2007) appreciates *Lair*, but is harsh in his criticism, writing: "[…] while the score to Lair might be bold, thrilling, orchestral and epic, it is also one of the least original works in the career of a composer who specializes in unoriginality."

Table 29: Lair statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Lair Main Title	02:16	Instrumental	Yes	Yes
2	Lair Main Menu	02:33	Instrumental	Yes	No
3	Diviner's Battle	04:16	Instrumental	Yes	Yes
4	Funeral Pyre	00:53	Instrumental	Yes	No
5	Civilization Theme	03:58	Instrumental	Yes	Yes
6	Blood River	03:32	Instrumental	Yes	Yes
7	Rohn's Theme	02:06	Instrumental	Yes	No
8	Serpent Strait	02:24	Instrumental	No	Yes
9	Darkness Theme	04:04	Instrumental	Yes	No
10	Firestorm	03:57	Instrumental	Yes	Yes
11	Elegy	03:27	Instrumental	Yes	No
12	Diviner's Theme	02:08	Instrumental	Yes	Yes
13	The Last Straw	02:40	Instrumental	No	No
14	Lost	02:12	Instrumental	No	No
15	Breaking the Ice	01:31	Instrumental	Yes	Yes
16	Deadman's Basin	02:58	Instrumental	Yes	Yes
17	Mokai Theme	02:17	Instrumental	Yes	No
18	Return to Mokai City, Pt. I	01:51	Instrumental	Yes	Yes
19	Return to Mokai City, Pt. II	03:36	Instrumental	No	Yes
20	Ruins of Mokai	01:04	Instrumental	Yes	No
21	Bridge of the Ancients	01:32	Instrumental	Yes	Yes
22	Loden	01:52	Instrumental	Yes	Yes
23	Battle for Asylia	04:10	Instrumental	Yes	Yes

24	Epilogue	03:21	Instrumental	Yes	Yes
25	Bridge Battle	03:34	Instrumental	Yes	Yes
26	Bridge Attack	02:06	Instrumental	No	Yes
	Summary	**01:10:22**	**26/26 Instrumental**	**21/26**	**17/26**

2.6. 2009

2.6.1. Dead Space

Table 30: General information for Dead Space

Game full title	Dead Space
Developer	Visceral Games
Publisher	Electronic Arts
Year	2008
Genre	Survival-Horror
Composers	Jason-Graves
Awards	- 2009 *BAFTA* Game Awards: Original music (won) - 2009 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated) - 2009 *DCA*: Best Audio (won)

There is little to say about the *Dead Space* soundtrack. The *Dead Space Theme* (track 1) only contains a three-note (C – Eb – D) motif that is never realised into a theme. *Dead Space* does not need melodic themes – this horror game deserves a dissonant soundtrack. Elchlepp (2011) wrote an excellent commentary, naming Gyorgy Ligeti and Krzystof Penderecki as possible influences on this dissonant soundtrack. His description of the soundtrack and its orchestration coincides with my opinion about the music for *Dead Space*:

> *[…] the music is devoid of melody, harmony, tonality or chord progression. Instead, the orchestra goes berserk, with the various sections of the orchestra going into several different directions at the same time. Several layers of percussion, often playing syncopated and/or independent rhythms, bombard the listener with a barrage of sound that's complemented by enormous brass clusters and strings that frantically whir away in the background, whine during dissonant glissandi or add chaotic, aleatoric pizzicati. During other passages, the string players are required to tap with their fingers on their instrument's body.*

Table 31: Dead Space statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Dead Space Theme	03:33	Instrumental	No	No
2	Welcome Aboard the U.S.G. Ishimura	05:20	Instrumental	No	No
3	The Necromorphs Attack	05:49	Instrumental	No	No
4	Fly Me to the Aegis Seven Moon	04:54	Instrumental	No	No
5	Severed Limbs Are Hazardous Waste	04:54	Instrumental	No	No
6	Nicole's Farewell	02:49	Instrumental	No	No
7	I Left My Heart in Med Lab 3	02:17	Instrumental	No	No
8	The Leviathan	03:16	Instrumental	No	No
9	Cyanide Systems Offline	03:15	Instrumental	No	No
10	Entering Zero-G	01:59	Instrumental	No	No

11	I've Got You Devolving Under My Skin	03:08	Instrumental	No	No
12	Manual Survival Mode Seen	04:54	Instrumental	No	No
13	Plasma Cutters Are Your Friend	03:12	Instrumental	No	No
14	The Cost of Living Is on the Rise	04:03	Instrumental	No	No
15	Do Not Vomit – Do Not Shout	02:41	Instrumental	No	No
16	The Hive Mind	02:35	Instrumental	No	No
17	Escape from the Planet of the Red Marker	01:58	Instrumental	No	No
	Summary	**01:00:24**	**17/17 Instrumental**	**0/17**	**0/17**

2.6.2. Left 4 Dead

Table 32: General information for Left 4 Dead

Game full title	Left 4 Dead
Developer	Turtle Rock Studios; Valve Corporation
Publisher	Valve Corporation
Year	2008
Genre	Survival horror
Composers	Mike Morasky
Awards	- 2009 *DCA*: Best Audio (nominated)

Left 4 Dead never received an official soundtrack. The soundtrack has been extracted from the game and is available on YouTube (see the footnotes). My analysis will divide the music into three categories: *Opening and miscellaneous tracks*, *Campaign opening tracks*, and *Uncommon Infected tracks.*

Opening and miscellaneous tracks

Left 4 Dead Main Menu Theme[34] opens with a synthesiser playing a three-note motif, the *Left 4 Dead Motif* (figure 64) (00:00 – 00:04). A singer vocalises the *Main Menu Theme* (figure 65) (00:05 – 01:25), which also contains the *Main menu motif* (in brackets). A piano, synthesisers and "white noises" are also heard in this track.

Figure 64: *Left 4 Dead Motif*

Figure 65: *Main Menu Theme*

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34 https://www.youtube.com/watch?v=sD2vCbc0jIo

Left 4 Death[35] consists of two stingers: 00:00 – 00:12; 00:12 – 01:04. The first stinger is heard when the player died in single player mode, or when all the players died in multiplayer. The second stinger is only heard in multiplayer mode – when the player has died, this cue will play until the player is respawned (a multiplayer term similar to "resurrect") by another player. The first stinger is scored for brass and piano, playing a truncated version of the *Main menu motif* (the bold letters are played: **Eb** – Db – **Bb –** C **– A**). At the end of the first stinger, a synthesiser can be heard playing the *Left 4 Dead Motif* (00:07 – 00:12). The second stinger opens with a Soprano and Alto choir melody (00:12 – 00:43). A solo female singer vocalises the *Main menu motif* and two bars that precede this motif (see figure 64) (00:43 – 01:04).

Campaign opening tracks

Every campaign (not to be confused with every map within a campaign) opens with a musical stinger. Together with synthesiser noises, *No Mercy*[36] opens with a piano solo (figure 66) (00:01 – 00:16). The *Left 4 Dead* is heard for the first time, played on violins (figure 67) (00:17 – 00:47). The remainder of the track is a louder statement of the *Left 4 Dead theme*, accompanied by Electronic Dance Music (00:47 – 01:20). Since this louder statement recurs in other tracks, I will call it the *Louder variation*.

Figure 66: No Mercy piano introduction

Figure 67: Left 4 Dead theme

Death Toll[37] follows the same formula as the previous track: a synthesiser introduction (now with cymbals) (00:00 – 00:16), violins playing the *Left 4 Dead theme* (00:17 – 00:47), ending with the *Louder variation* (00:47 – 01:22). *Dead Air*[38] opens with two violins playing a dissonant duet until a

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[35] https://www.youtube.com/watch?v=4BySyQ1pu0U
[36] https://www.youtube.com/watch?v=3HdqIR9G6To
[37] https://www.youtube.com/watch?v=AiQT40y_Fvk
[38] https://www.youtube.com/watch?v=objwBnHrs08

cello joins the ensemble at 00:17. The trio now plays the *Left 4 Dead theme* (00:17 – 00:47) until the *Louder variation* is played (00:47 – 01:21). *Blood Harvest*[39] opens with two soprano ensembles singing a dissonant melody (00:00 – 00:16), until the *Left 4 Dead theme* is played by violins (00:16 – 00:46). Like the tracks before, the *Louder variation* ends the composition (00:47 – 01:20).

Uncommon Infected tracks

When an Uncommon Infected is close by, a stinger will warn the player. The warning stinger for the Boomer is played by a piano, followed by a repetition on the double-bass (figure 68). The warning stinger for the Hunter is first played on a piano, and then repeated on violins (figure 69). The warning stinger for the Smoker is played on a piano and then repeated on a synthesiser (figure 70). All these stinger are available online[40]. The warning stinger for the Witch[41] (figure 71) is vocalised by a female choir.

Figure 68: Boomer warning stinger

Figure 69: Hunter warning stinger
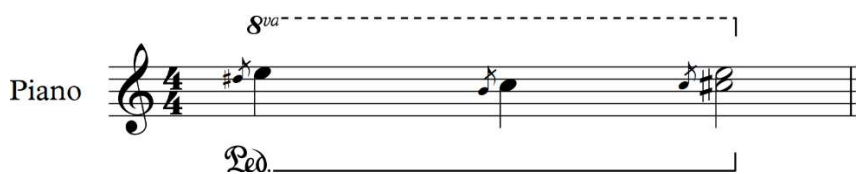
Figure 70: Smoker warning stinger
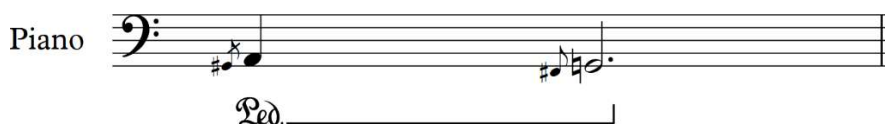
Figure 71: Witch warning stinger

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[39] https://www.youtube.com/watch?v=t3qTYebcIzs
[40] https://www.youtube.com/watch?v=qIEs5DPf70U
[41] https://www.youtube.com/watch?v=M7kmM7vMCxk

The stinger used for the Tank[42] is the only cue that quotes thematic music associated with the main theme. Scored for woodwinds, brass, choir, percussion, and strings, the entire track is built around the *Main menu motif*.

Left 4 Dead is a melodic thematic soundtrack that blends horror aspects (such as dissonant sounds) with both orchestral and synthesised writing. Where the *Main menu motif* or *Left 4 Dead theme* is not heard, motifs associated with Uncommon Infected remains in the subconscious of the player. Like many other video game soundtracks, *Left 4 Dead* draws inspiration from the art composers; in an interview with Bryan Dyck (2012), composer Mike Morasky said:

> *When we first sat down to discuss music for <u>Left 4 Dead</u> it seemed that since there were mobs of "infected" in the game that choral pieces would be a great choice for integral representations of certain aspects of both the monsters and their disease. Ligeti, being both a master of 20th-century choral writing as well as an essential part of the cinematic vocabulary was indeed very influential.*

Table 33: <u>Left 4 </u>Dead statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
	Left 4 Dead Main Theme	01:25	Mixed	Yes	No
	Left 4 Death	01:04	Mixed	Yes	No
	No Mercy	01:20	Mixed	Yes	No
	Death Toll	01:22	Mixed	Yes	No
	Dead Air	01:21	Mixed	Yes	No
	Blood Harvest	01:20	Mixed	Yes	No
	Boomer – Pukricide	00:16	Mixed	Yes	No
	Hunter – Exenteration	00:19	Mixed	Yes	No
	Smoker – Tongue Tied & Asphyxiation	00:31	Mixed	Yes	No
	Tank	00:52	Instrumental	Yes	No
	Witch	01:12	Mixed	Yes	No
	Summary	**00:11:06**	**1/11 Instrumental 10/11 Mixed**	**11/11**	**0/11**

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[42] https://www.youtube.com/watch?v=WhiGnj7QX2A

2.6.3. World of Warcraft: Wrath of the Lich King

Table 34: General information for World of Warcraft: Wrath of the Lich King

Game full title	World of Warcraft: Wrath of the Lich King
Developer	Ubisoft Montpellier
Publisher	Ubisoft
Year	2003
Genre	Action-adventure
Composers	Christophe Héral
Awards	- 2009 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

In the opening track *Wrath of the Lick King* (track 1), the *World of Warcraft main theme* (figure 72) can be heard (00:39 – 02:01) played on trombones.

Figure 72: World of Warcraft main theme

The rest of the soundtrack is intentionally unthematic. Even though the orchestration is diverse, containing many epic qualities (that accompanies the grandeur of a "hero attitude"), melodies morph into new sections before any specific themes could be established. Jayson Napolitano (2008) writes: "As one would expect from the harsh lands of Northrend, the score ranges from abstract and sparse to warm and epic." Writing for *Engadget*, Justin Olivetti (2013) comments:

> *While there are epic chants and the like that are to be expected from WoW,*
> *there's also a lonely, savage feel to the music that represents these far-off lands.*
> *There's also a lot of blowing wind that segues between tracks if you listen to the*
> *album straight through, and if that doesn't make you envision a snow-blasted*
> *landscape, I don't know what would.*

Both reviewers came to the same conclusion: the music of *WotLK* (like all the other *WoW* game and expansion pack soundtracks) can be described in subjective (emotional) terms, but it is difficult to pinpoint thematic intricacies. *WotLK* is a beautiful soundtrack, even though thematic material is scarce.

Table 35*: World of Warcraft: Wrath of the Lich King statistical summary table*

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Wrath of the Lich King	08:56	Instrumental	Yes	Yes
2	Dragon's Rest	03:07	Mixed	No	No
3	Arthas, My Son	03:12	Mixed	No	Yes
4	Path of Tears	07:15	Mixed	No	Yes
5	Crystalsong	01:52	Electronic	No	No
6	Dalaran	03:26	Instrumental	No	No
7	God Hunters	03:34	Mixed	No	No
8	Forged in Blood	05:34	Instrumental	No	Yes
9	Mountains of Thunder	05:55	Mixed	No	No
10	Secrets Long Forgotten	02:28	Mixed	No	No
11	The Kalu'ak	02:23	Mixed	No	No
12	The Eye of Eternity	01:56	Mixed	No	No
13	Garden of Life	03:28	Mixed	No	No
14	The Culling	03:42	Mixed	No	Yes
15	Howling Fjord	02:59	Mixed	No	No
16	Rise of the Vrykul	01:22	Instrumental	No	Yes
17	Borean Tundra	01:58	Mixed	No	No
18	Totems of the Grizzlemaw	05:36	Mixed	No	No
19	The Wrath Gate	03:53	Instrumental	No	Yes
20	Angrathar's Shadow	02:55	Mixed	No	No
21	Assault on New Avalon	02:15	Instrumental	No	Yes
	Summary	**01:17:57**	**6/21 Instrumental 14/21 Mixed 1/21 Electronic**	**1/21**	**8/21**

2.7. 2010

2.7.1. Batman: Arkham Asylum

Table 36: General information for Batman: Arkham Asylum

Game full title	Batman: Arkham Asylum
Developer	Rocksteady Studios
Publisher	Eidos Interactive; Warner Bros. Interactive Entertainment
Year	2009
Genre	Action-adventure
Composers	Nick Arundel; Ron Fish
Awards	- 2010 *BAFTA* Game Awards: Original music (nominated) - 2010 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

A Plan Revealed (track 1) is the introductory track for *Batman: Arkham Asylum*. The cellos and double-basses play a pedal point on C, while the upper strings plays a permutation of the notes C – Db – Eb. Although these notes do not constitute a theme yet, they hint towards the creation of a theme in the next track.

Enter the Asylum (track 2) introduces the *Batman theme* (figure 73). This theme always starts with the *Batman motif* (in brackets). Throughout the soundtrack, most statements of the *Batman theme* start with the *Batman motif*, but the notes that follow varies from track to track. Can these statements be interpreted as the *Batman motif* plus a variable melody? No – in most statements, the notes that follow the *Batman motif* uses the same rhythmical pattern as the *Batman motif* (a half note + two quarter notes). Since the *Batman motif* and the sequential notes that follow shares the same rhythmical pattern, 'variations' on the *Batman theme* can be devised. Since the endings of the *Batman theme* often modulates to other keys (with different melodic material), it is often difficult to establish where the *Batman theme* ends. Even so, I will attempt to give possible theme endings in my time readings. In *Enter the Asylum*, the *Batman theme* is stated several times (00:00 – 00:23; 01:12 – 01:30; 02:48 – 03:05; 03:09 – 03:33). An Electronic Dance Beat can be heard from 00:57 onwards, and aleatoric rising strings are also present (01:00 – 01:09).

Figure 73: Batman theme and Batman motif

In *Joker Escapes* (track 3), the *Batman motif* is extended with a few notes [+ (F – Gb – F – F)] into the *Joker motif* (figure 74). The Joker motif is heard in two sections in this track (00:11 – 00:25; 00:43 – 00:58), always played by strings. The *Joker motif* also appears in *Thug Ambush* (track 5), played by the string section (00:01 – 00:25).

Figure 74: Joker motif

The *Batman theme* is heard in *Only Three* (track 4), played in the lower string section (00:03 – 00:19). *Venom Attack* (track 6) opens with Electronic Dance Music before the *Batman theme* is played on horns (00:11 – 00:23; 00:28 – 00:39). The *Batman motif* is stacked to create a clusterchord (C – Db – Eb) (00:01 – 00:23) in *Whiskey trail* (track 7). A bassoon playing the *Batman theme* (00:02 – 00:35) opens *Eddie's Tale* (track 8). The *Batman theme* is also heard in this track played by strings (00:35 – 00:51), duduk (00:57 – 01:10) and double-bass doubled by a bass clarinet (01:14 – 01:30). In *Predator* (track 9) opens with a bassoon exposition of the *Batman theme* (00:04 – 00:40), followed by a statement on trombones (00:43 – 01:07). The *Batman theme* obviously appears in *In The Batcave* (track 10), played on strings (00:20 – 00:36). *Where's Jim* (track 11) opens with a *tremolo pianissimo* strings playing the *Batman theme* (00:01 – 00:14). Aleotoric violins also accompany a permutation of the *Batman motif* (played on a bassoon) in this track (00:15 – 00:28). In *Batmobile attack* (track 12), tremolo strings (figure 75) play an ostinato based on the rearranged notes of the *Batman motif* (00:07 – 00:33). The *Batman theme* is also heard in the violins (00:33 – 00:47) accompanied playing cellos and violas playing a stacked version of the *Batman motif* (similar to *Whiskey trail*, track 7).

Figure 75: Batman motif tremolo ostinato

In *Bombs Around Gotham* (track 13), a long cello melody (00:08 – 00:49) precedes the appearance of the *Batman motif* (00:49). With the melody ending at 00:59, we can argue that the melody was composed "backwards", ending with the *Batman motif*. In *Crackin' Heads* (track 14), horns playing the *Batman theme* (01:07 – 01:21; 02:16 – 02:30) is accompanied by a violin ostinato, taiko drums, and Electronic Dance Music*. Deserted Corridors* (track 15) features three statements of the *Batman motifi*: on a bassoon (00:07 – 00:19), and two statements on strings (00:23 – 00:29; 00:29 – 00:35). In *Eternal Glide* (track 16), the *Batman theme* is played by bassoon, doubled by double-bass (02:18 –

02:33). The *Batman motif* only makes a brief appearance in *Finger Prints* (track 17), as played by double-bass (05:33 – 01:01). Likewise, the *Batman motif* only appears once in *In The Gardens* (track 18), played on horns (00:53 – 00:57). *Harley Fights Back* (track 20) quotes the *Batman motif* trice, always by a brass ensemble (00:33 – 01:02; 01:08 – 01:21; 01:47 – 02:04).

In *The Armoury* (track 24), the *Batman motif* is used to start melodies (in the brass and strings) that interplay polyphonically (00:09 – 00:40). The *Batman theme* is also heard in this track, played by the brass section (01:12 – 01:22). *Asylum Cells* (track 25) opens with a section (00:00 – 00:34) that contains multiple statements of the *Batman theme*. In this section, every musical phrase starts with the *Batman motif*. The track ends with prominent aleatoric string writing (00:38 – 01:31). The last track in this soundtrack, *Playful Joker* (track 27), is the most contrasting composition in this score: a scherzo. Synthesised flutes can be heard playing the *Batman theme* in this track (00:24 – 00:39).

Batman: Arkham Asylum is littered with statements of the same idea: the *Batman motif.* Although synthesisers are not prominent in this soundtrack, Electronic Dance Music often accompanies the orchestra. Elements of the epic idiom also appear in this soundtrack, including a rhythmical use of percussion, taiko drums, and ostinato patterns repeating in string accompaniment.

Table 37: *Batman: Arkham Asylum statistical summary table*

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	A Plan Revealed	00:55	Instrumental	No	No
2	Enter the Asylum	04:40	Mixed	Yes	No
3	Joker Escapes	01:13	Instrumental	Yes	Yes
4	Only Three	01:18	Instrumental	Yes	No
5	Thugs Ambush	01:01	Instrumental	Yes	Yes
6	Venom Attack	01:17	Mixed	Yes	Yes
7	Whiskey Trail	01:14	Mixed	Yes	No
8	Eddie's Tale	01:39	Instrumental	Yes	No
9	Predator	02:22	Mixed	Yes	Yes
10	In the Batcave	01:23	Instrumental	Yes	No
11	Where's Jim?	01:29	Mixed	Yes	No
12	Batmobile Attack	01:31	Mixed	Yes	Yes
13	Bombs Around Gotham	01:51	Instrumental	Yes	No
14	Crackin' Heads	03:18	Mixed	Yes	Yes
15	Deserted Corridors	01:23	Mixed	Yes	No
16	Eternal Glide	02:55	Instrumental	Yes	No
17	Finger Prints	01:59	Mixed	Yes	No
18	In the Gardens	01:47	Mixed	Yes	No
19	Garden Predator	02:13	Mixed	No	Yes

20	Guard Murder	00:50	Mixed	No	No
21	Harley Fights Back	02:04	Mixed	Yes	Yes
22	Ivy's Theme	00:44	Mixed	No	No
23	Mr. Zsasz	00:43	Mixed	No	No
24	The Armoury	02:14	Mixed	Yes	Yes
25	The Asylum Cells	01:31	Mixed	Yes	No
26	Venom Factory	01:05	Mixed	No	No
27	Playful Joker	02:02	Mixed	Yes	No
	Summary	**00:46:53**	**8/27 Instrumental 19/27 Mixed**	**21/27**	**9/21**

2.7.2. Dragon Age: Origins

Table 38: General information for Dragon Age: Origins

Game full title	Dragon Age: Origins
Developer	BioWare
Publisher	Electronic Arts
Year	2009
Genre	Role-playing
Composers	Inon Zur
Awards	- 2010 *DCA*: Best Audio (nominated)

Dragon Age: Origins (track 1) opens with a horn playing the *Dragon Age theme* (00:02 – 00:12) (figure 76). Aubrey Ashburn sings the *Origins theme* (figure 77) (00:12 – 00:55). Since all the lyrics in this game is in the game's fictional Elvish language, I shall not include the lyrics or possible translations of the text. After a brass and taiko drum episode (00:55 – 01:16), the *Origins theme* is sung in *stretto* with the *Dragon Age theme* on a flute (01:17 – 01:32). After another brass and taiko drum episode (01:33 – 01:52), the *Dragon Age theme* is played by a *tutti* orchestra (01:53 – 02:47).

Figure 76: Dragon Age theme

Figure 77: Origins theme

I Am The One (High Fantasy Version) (track 2) features Ashburn singing another song. The final track in this soundtrack, *I Am The One (Dark Fantasy Version)* (track 35), has the same melody (figure 78) set to different orchestration and a minor mode harmonic progression.

Figure 78: I Am The One melodic theme

The *Dragon Age theme* returns in *The Chantry's Hubris* (track 3) (01:35 – 02:10), played by horns (01:35 – 01:39), and strings (01:39 – 02:10). The rising sequence of notes in the *Dragon Age theme* (see figure 77) can be divided into sub-sequences, notably F – G – A (implying F major) and D – E – F (implying D minor). These sub-sequences I will call the *Dragon cell,* on which other melodies are built upon, similar to the usage of the *Batman motif* in the previous soundtrack analysis. *Elves At The Mercy of Man* (track 4) is reminiscent of Ravel's setting of Mussoursky's *Pictures at an Exhibition: The Castle*. In 6/8 time, both pieces have bass introduction followed by a melody in the lower register (compare figure 79 with figure 80). Ravel's saxophone solo is replaced by a melody in the clarinet (figure 81). This rising sequential melody can be linked to the *Dragon Age theme*, continuing throughout the entire duration of the track.

Figure 79: Pictures at an Exhibition: The Castle in Ravel (S.A.:20)

Figure 80: Introduction for Elves At The Mercy of Man

Figure 81: Elves At The Mercy of Man clarinet melody

The *Dwarven Nobles* (track 5) contains the *Dwarven Noble theme* (figure 83), only heard in this track. After a trombone introduction (figure 82) (00:00 – 00:09), the *Dwarven Noble theme* is played by trombones, accompanies by snare drums, taiko drums, and choir (00:14 – 01:07). The usage of the *Dragon cell* is also notable in the third bar of both the *Dwarven Noble-* introduction and theme.

Figure 82: Dwarven Noble introduction

Figure 83: Dwarven Noble theme

Mages in Their Chantry (track 6) contains a chromatic theme, the *Mages theme* (figure 83). The introduction features a horn repetition of D – Eb – D – C# (00:06 – 00:18), the *Mages theme* (00:33 – 00:46) is heard in the horns. Trombones also play the *Mages theme* (00:59 – 01:13), accompanies by choir, harp, double-bass, and chimes. The final statement of the *Mages theme* is played by clarinet and horns (01:26 – 01:40).

Figure 83: Mages Theme

According to *Encyclopaedia Brittanica* (S.A.b), "the term dwarf (Old Norse: *dvergr*) denotes a species of fairy inhabiting the interiors of mountains and the lower levels of mines". Associating mines with dwarves, Inon Zur (the composer) uses anvils throughout *The Common Dwarf* (track 7). The use of anvils as a rhythmic force is used to differentiate between the common dwarf and the dwarf noble (assuming that the dwarf nobles are not directly involved with mines or labour's tools). The *Common Dwarf theme* (figure 85) is played by bassoon (00:11 – 00:40), accompanies by strings, anvil, and taiko drums. Although the melody does not centre on the root note, the harmonic accompaniment in the strings is in E minor, not G major.

Figure 84: Common Dwarf theme

Although a theme for *Human Nobility* (track 9) is not entirely distinguishable, horn calls (E – B) appears throughout the track. These fifth leaps links with the *Dragon Age theme,* which (transposed to E minor) opens with the notes B – E. *The Ruins of Ostagar* (track 10) contains the *Ostagar theme*, which is built upon the E – B fifth leap (figure 85). A second fifth leap follows (A – E), resolving into the third leap downwards (E – B). The melody continues stepwise (using the *Dragon cell*), until another fifth leap is heard (bars 3 – 4, D – A). The *Ostagar theme* is first played by horns (00:08 – 00:39), followed by a statement on violins (00:40 – 01:18).

Figure 85: Ostagar theme

Trombones playing an inverted form of the *Dragon Cell* opens *Darkspawn in the Wild* (track 11). The *Darkspawn theme* opens with the *Dragon cell* (figure 87) (00:09 – 00:17). The *Dawkspawn theme* is also played by violins in this track (00:57 – 01:10).

Figure 86: Darkspawn theme

The *Dragon cell* is played in short strokes in *Battle of the Darkspawn Hordes* (track 16), creating the *Horde Battle motif*. This motif appears throughout the track, hear on strings, horns, and choir.

Figure 87: Horde Battle motif

The Endless Wave of Hurlucks (track 17) opens with a tuba playing the *Horde Battle cell* (00:12 – 00:28). The *Darkspawn motif* is also heard played by trombones and horns (00:39 – 00:52). *Urn of Sacred Ashes* (track 19) contains the *Ashes theme* (figure 88), built upon the *Dragon Cell*. This theme is heard throughout the track, played on tuba, trombones, strings, and choir.

Figure 88: *Ashes theme*
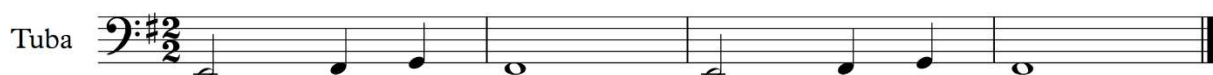
The *Dragon Cell* is inverted in *Attack On Denerim* (track 22). Although the notes G – F# – E – B is played throughout the track (on horns), the usage of these notes are more motivic than thematic. The string melody in *The Dungeons of Landsmeet* (track 23) also features fifth leaps, but a discernable theme never crystallises. The *Origins theme* is quoted in *Ferelden At War* (track 27) (00:11 – 00:43). Suspended over a string pedal with taiko drums driving the rhythm, the *Origin theme* is overlaid with an echo. *Lelianna's Song* (track 28) is sung by Ashburn, accompanied by harp. *To Kill an Ogre* (track 32) opens with a trombone quotation of *Dies Irae* (figure 89) (00:05 – 00:16), accompanied by taiko drums and timpani. Another statement of *Dies Irae* follows, orchestrated for a fuller brass sound (00:21 – 00:33).

Figure 89: Dies Irae

Frequently using taiko drums, choirs, and loud brass, Zur's interpretation of the epic idiom is a unique blend that incorporates chimes, anvils, and ethnic instruments. IGN (2009b) complements the soundtrack, writing:

> *With a powerful original score recorded by the acclaimed Northwest Sinfonia Orchestra, Inon Zur's dramatic soundtrack to Dragon Age: Origins is the perfect complement to the game's epic, cinematic qualities, full of soaring melodies and lush, emotional orchestrations.*

Table 39: Dragon Age: Origins statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Dragon Age: Origins	02:49	Instrumental	Yes	No
2	I Am The One	04:03	Instrumental	Yes	No
3	The Chantry's Hubris	03:16	Instrumental	Yes	Yes
4	Elves At The Mercy Of Man	01:21	Instrumental	Yes	No
5	The Dwarven Nobles	01:07	Instrumental	Yes	Yes
6	Mages In Their Chantry	02:01	Instrumental	Yes	No
7	The Common Dwarf	01:24	Instrumental	Yes	Yes
8	The Dalish	01:18	Instrumental	No	No
9	Human Nobility	01:21	Instrumental	No	No
10	Ruins Of Ostagar	01:18	Instrumental	Yes	No
11	Enter The Korcari Wilds	01:06	Instrumental	No	No
12	Darkspawn In The Wilds	01:13	Instrumental	Yes	Yes
13	Join The Grey Wardens	01:53	Instrumental	No	Yes
14	The Betrayal	03:01	Instrumental	No	No
15	The Party Camp	00:44	Instrumental	No	No
16	Battle The Darkspawn Hordes	01:05	Instrumental	Yes	Yes
17	The Endless Wave of Hurlocks	01:06	Instrumental	Yes	Yes
18	The Dalish Elves Encampment	01:18	Instrumental	No	No
19	Urn Of Sacred Ashes	01:01	Instrumental	Yes	No
20	Haven!	01:07	Mixed	No	No
21	Battle For The Urn	01:06	Instrumental	No	Yes
22	Attack On Denerim	01:06	Instrumental	No	Yes
23	The Dungeons Of Landsmeet	01:12	Instrumental	No	Yes
24	Dungeons and Dungeons	01:13	Instrumental	No	Yes
25	Howe	01:08	Instrumental	No	No
26	The Battle Of Lothering Village	02:18	Instrumental	No	Yes
27	Ferelden At War	02:57	Instrumental	Yes	No
28	Leliana's Song	02:33	Instrumental	Yes	Yes
29	King Endrin	01:31	Instrumental	No	Yes
30	The Deep Roads	01:20	Instrumental	No	Yes

31 Battle The Blight	01:05	Instrumental	No	Yes
32 To Kill An Ogre	03:09	Instrumental	Yes	Yes
33 Challenge An Arch Demon	03:12	Instrumental	No	Yes
34 The Coronation	01:03	Instrumental	No	Yes
35 I Am The One	04:09	Instrumental	Yes	No
Summary	**01:02:51**	**34/35 Instrumental 1/35 Mixed**	**16/35**	**18/35**

2.7.3. Uncharted 2: Among Thieves

Table 40: General information for Uncharted 2: Among Thieves

Game full title	Uncharted 2: Among Thieves
Developer	Naughty Dog
Publisher	Sony Computer Entertainment
Year	2009
Genre	Action-adventure
Composers	Greg Edmonson; Carmen Rizzo
Awards	- 2010 *BAFTA* Game Awards: Original music (won)
	- 2010 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (won)
	- 2010 *VGA*: Best original score (nominated)
	- 2013 *DCA*: Best Audio (won)

Uncharted 2: Among Thieves opens the soundtrack with *Nate's Theme 2.0* (track 1). The track is divided into four sections: a drum introduction (00:00 – 00:07), *Nate's theme* (00:07 – 00:41) (figure 90), a brass and string episode[43] (00:42 – 01:07), and a continuation of *Nate's theme* (part 2) (figure 91) (01:08 – 01:45). *Nate's theme* opens with a horn melody starting on E – F# – G, while the second part is played on strings, playing the opening notes in reverse (G – F# – E).

Figure 90: Nate's theme

Figure 91: Nate's theme (part 2)

The City's Secret (track 2) opens with a melody based on *Nate's theme*. The duduk melody starts on the notes D – E – F – A (00:06 – 00:27), which is also the opening of *Nate's theme* (transposed to D minor). *Bustin' Chops* (track 3) is orchestrated for strings, brass, and percussion (including taiko drums). Ostinato patterns in this track in the strings are stylistic of the epic idiom. Even though there is no prominent thematic material in this track, violins play the sequence G – A – Bb – D (01:26 – 01:34), which refers to *Nate's theme* (transposed to G minor). *Breaking and Entering* (track 5) does not have any prominent thematic melodies. However, an accompanying string ostinato playing the notes D – E – F link this melodic line to *Nate's theme*. Starting with an anacrusis, *Desperate Times* (track 6) opens with a violin melody that recalls *Nate's theme* (D – E – F) (00:03 – 00:20). This melody

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[43] The episode is reminiscent of a Russian Orthodox idiom, with reference to Tchaikovsky's 1812 Overture.

is echoed by a double-bass melody containing the same material (00:21 – 00:29). A horn melody later in the track also employs the opening notes of *Nate's theme* (01:56 – 02:01). *Helicopter and Tank* (track 7) briefly quotes an altered version of *Nate's theme* (figure 92) (01:26 – 01:34). While both melodies are played on horns, they are both strikingly similar. The brackets and arrows in the figure indicate the relationship between *Nate's theme* and *Helicopter and Tank*.

Figure 92: <u>Nate's theme</u> versus <u>Helicopter and Tank</u>

A horn also plays a partial quotation of *Nate's theme* in *A Rock and a Hard Place* (track 19) (01:26 – 01:34). According to composer Greg Edmonson, "Uncharted 2 was an expansive and more panoramic setting and cried out for a bigger sound and a more thematic approach" (Damigella 2010). However, most tracks are notably unthematic. Although there are interesting melodies with colourful orchestrations, few of the melodies manifests into recognisable (or repeated) themes. The last track (20: *The Road to Shambhala*) contains Electronic Dance Music. Interesting ethnic instruments include the Tibetan temple horns, gyaling, guzheng, erhu, and taiko drums.

Table 41: <u>Uncharted 2: Among Thieves</u> statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Nate's Theme 2.0	01:45	Instrumental	Yes	Yes
2	The City's Secret	03:32	Instrumental	Yes	No
3	Bustin' Chops	02:07	Instrumental	Yes	Yes
4	Reunion	01:41	Instrumental	No	No
5	Breaking and Entering	03:13	Instrumental	Yes	No
6	Desperate Times	03:27	Instrumental	Yes	No
7	Helicopter and Tank	02:06	Instrumental	Yes	Yes
8	Marco Polo	01:31	Instrumental	No	No
9	The Monastery	04:09	Instrumental	No	No
10	Refuge	02:10	Instrumental	No	No
11	Warzone	02:13	Instrumental	No	Yes
12	Trainwrecked	03:06	Instrumental	No	No
13	Cat and Mouse	02:21	Instrumental	No	Yes
14	Cornered	03:36	Instrumental	No	Yes
15	The Gates of Shambhala	03:16	Instrumental	No	Yes
16	Broken Paradise	02:28	Instrumental	No	No
17	Brutal Combo Mambo	02:24	Instrumental	No	Yes
18	Among Thieves	01:39	Instrumental	No	Yes

19	A Rock and a Hard Place	03:43	Instrumental	Yes	Yes
20	The Road to Shambhala	05:14	Mixed	No	Yes
	Summary	**00:55:50**	**19/20 Instrumental 1/20 Mixed**	**7/20**	**11/20**

2.8. 2011

2.8.1. Bastion

Table 42: General information for Bastion

Game full title	Bastion
Developer	Supergiant Games
Publisher	Warner Bros. Interactive Entertainment
Year	2011
Genre	Action-adventure
Composers	Darren Korb
Awards	- 2012 *DCA*: Best Audio (nominated)
	- 2012 *VGA*: Best original score (won)

The soundtrack for *Bastion* contains various songs, accompanied by guitar riffs. My analysis will highlight guitar riffs as melodic themes and quote lyrics. In an interview for *Game-OST*, composer Darren Korb describes the instrumentation: "The guitars, basses and ukuleles are live, pretty much everything else is either a loop or a sample. I actually just used the libraries and soft instruments that come with Logic 8 out of the box." (Naumenko 2012.). Without dismissing the content or quality of Logic 8, my analysis for *Bastion* will not focus on the orchestration of the soundtrack. *Get Used to It* (track 1) is not sung, but the spoken words set the tone for the rest of the soundtrack:

> *Listen, all this takes a lot of gettin' use to,*
> *And you do get used to it... after a while*
> *There's three things I'll always miss though*
> *One, not havin' to watch my step all the time*
> *Two... Ah... forget about two*
> *And three... I miss the songs*
> *Folks from Caelondia knew how to carry a tune*
> *Sure, we've got some songs on the old gramophone*
> *But tryin' to imagine what they sounded like*
> *Playin' to a room full of fine people*
> *Unwindin' at the Sole Regret right after a hard day's work*
> *Those were the days*

A Proper Story (track 2) opens with a guitar riff (figure 93) that is heard along with strumming and Electronic Dance Music.

Figure 93: A Proper story guitar riff

In Case of Trouble (track 3) does not have any notable qualities. An accompanying guitar strums a repetition of the chords i – IV, and violins feature a two-second figure that breaks the tension of extended pedal points (01:51 – 01:53; 02:32 – 02:34). *Bynn the Breaker* (track 4) opens with a synthesised double-bass pedal accompanying the introductory guitar melody (figure 94) (00:09 – 00:28). *Bynn's theme* (figure 95) follows, played on a synthesised violin (00:28 – 00:48; 00:57 – 01:07; 01:16 – 01:26; 01:36 – 02:04). Each statement of *Bynn's theme* is interrupted by a ukulele melody. The guitar introduction returns as an *intermezzo* (02:14 – 02:33), before *Bynn's theme* returns (02:33 – 02:53; 03:02 – 03:11; 03:21 – 03:31; 03:40 – 04:09). A distorted electric guitar is also heard twice in this track (01:36 – 02:02; 03:40 – 04:06).

Figure 94: Bynn the Breaker guitar introduction

Figure 95: Bynn's theme

Twisted Streets (track 6) features a bass guitar riff that accompanies a synthesised flute melody called *Street theme* (figure 96) (00:16 – 00:31; 01:11 – 01:43; 02:15 – 02:31; 03:10 – 03:29). Although the percussion and bass guitar indicates a 3/4 metre, the *Street theme* is in 6/8 time that causes rhythmical *hemiolas*.

Figure 96: Street theme

Terminal March (track 7) features the *Terminal theme* (figure 97), played on a veena (00:26 – 00:37; 01:04 – 01:09; 02:29 – 02:39). Between each statement of the *Terminal theme*, veena melodies are interchanged accompanied by Electronic Dance Music.

Figure 97: *Terminal theme*

Percy's Escape (track 8) contains the *Escape theme* (figure 98), played on a synthesised violin (00:06 – 00:48; 01:15 – 01:41). This chromatic melody is accompanied by tabla and Electronic Dance Music.

Figure 98: Escape theme

Slingers Song (track 11) is a misnomer since this composition does not contain a vocal part. The *Slinger theme* (figure 99) is played on an electric banjo (00:00 – 00:59; 01:58 – 02:57; 03:12 – 03:27; 03:41 – 03:57), accompanied by a bass guitar, distorted acoustic guitars, various percussive sounds, and Electronic Dance Music.

Figure 99: Slinger theme

Build that Wall (Zia's theme) is the first singable song on this soundtrack. The sheet music for all the songs on the *Bastion* soundtrack is available for free download on the developers' website[44]. The lyrics are as follows:

> *I dig my hole, you build a wall*
> *I dig my hole, you build a wall*
> *One day that wall is gonna fall*
>
> *Gon' build that city on a hill*
> *Gon' build that city on a hill*
> *Someday those tears are gonna spill*
>
> *So build that wall and build it strong*
> *'Cause we'll be there before too long*
>
> *Gon' build that wall up to the sky*
> *Gon' build that wall up to the sky*
> *Someday your bird is gonna fly*
>
> *Gon' build that wall until it's done*
> *Gon' build that wall until it's done*
> *But now you've got nowhere to run*
>
> *So build that wall and build it strong*
> *'Cause we'll be there before too long*

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[44] Supergaint Games: http://store.supergiantgames.com/

Figure 100: Zia's theme
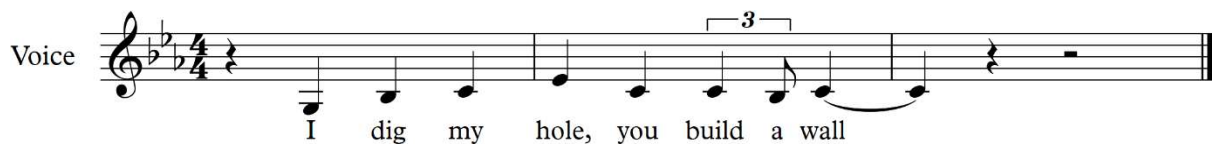
Spike in a Wall (track 13) is an instrumental composition based on *Zia's theme* (G – Bb – C – Eb – C). The *Spike theme* (figure 101) is played on a bass guitar (00:00 – 00:35; 00:41 – 00:47; 01:18 – 01:29; 02:11 – 02:17; 02:35 – 02:47), accompanied by banjo, distortion guitar, and Electronic Dance Music.

Figure 101: Spike theme

What's Left Undone (track 14) consists of a male singer vocalising *Zia's theme*. *Brusher Patrol* (track 15) do not contain any notable themes, although a banjo melody (figure 102) played throughout the track is memorable (00:33 – 00:56; 03:00 – 03:23).

Figure 102: Brusher Patrol banjo melody

Mother, I'm Here (Zulf's Theme) (track 17) is the second notable song in the *Bastion* soundtrack. The lyrics are sung:

> *I set my sail*
> *Fly the wind, it will take me*
> *Back to my home, sweet home*
>
> *Lie on my back*
> *Clouds are making way for me*
> *I'm coming home, sweet home*
>
> *I see your star*
> *You left it burning for me*
> *Mother, I'm here*
>
> *Eyes open wide*
> *Feel your heart and it's glowing*
> *I'm welcome home, sweet home*
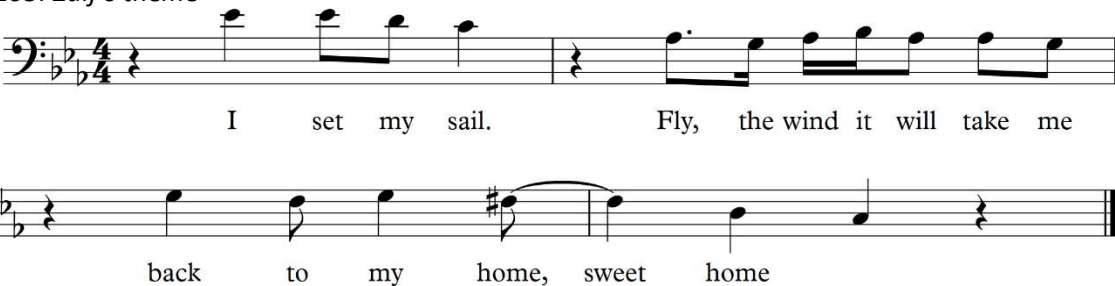
I take your hand
Now you'll never be lonely
Not when I'm home, sweet home

I see your star
You left it burning for me
Mother, I'm here

Figure 103: Zulf's theme

Voice: I set my sail. Fly, the wind it will take me back to my home, sweet home

Setting Sail, Coming Home (End theme) (track 21) combines *Build that Wall (Zia's theme)* and *Mother, I'm here (Zulf's theme)*, resulting in a polyphonic texture. The closing song is named *The Pantheon (Ain't Gonna Catch You)* (track 22).

Gods ain't gonna help ya son
You'll be sorry for whatcha done
Then gods gonna hurt ya son
When you play with a loaded gun
When you play with a loaded gun

They ain't gonna catch you when you fall
You'll be pleadin' while you're bleedin'
They ain't gonna heal ya son
Don't care 'bout whatcha done

They ain't gonna help ya son
You'll be sorry for whatcha done
Be sorry for what you done

Old Pyth, cranky old bull,
Make you sorry for whatcha done
Hense in a black veil
Gonna prick yer for whatcha done
Roathus gotcha empty
Gotcha weepin' for whatcha done
Micia Mother
Lonely old gal
Tear your heart out for whatcha done
Tear your heart out for whatcha done

They ain't gonna catch you when you fall
You'll be pleadin' while you're bleedin'

Gods ain't gonna help ya son
You'll be sorry for whatcha done
Then gods gonna hurt ya son
You'll be sorry for whatcha done
You'll be sorry for whatcha done

Figure 104: The Pantheon

Gods ain't gon-na help you son, you'll be   sor-ry for what you've done

Bastion does not contain any orchestral elements connected with the epic idiom. Guitars are mixed with electronic elements, resulting in mixed orchestration. Korb's experience with contemporary music results in well-written songs for an intimate indie game. Writing for *Kotaku*, Hamilton (2011a) comments on the relationship between *Bastion* and its soundtrack:

> *It was a remarkably holistic game, especially in its presentation. Everything was of a piece: Jen Zee's breathtaking painterly artwork, Greg Kasavin's mysterious, ever-unfolding story, Logan Cunningham's throaty, Tom Waits-y narration. And tying it all together, Darren Korb's wonderfully trippy, six-string-fueled [sic] musical score. Bastion had one of my very favorite [sic] video game soundtracks of the year.*

The soundtrack for *Bastion* combinesexcellent song-writing with Electronic Dance Music, guitars, synthesisers, a "western vibe", and foreign (Middle Eastern/Asian) instruments (Ross 2013). As a postmodern pluralist soundtrack, the score for *Bastion* is an extraordinary achievement for indie developers.

Table 43: Bastion statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Get Used to It	00:54	Mixed	No	No
2	A Proper Story	01:09	Mixed	Yes	No
3	In Case of Trouble	02:56	Mixed	No	No
4	Bynn the Breaker	04:09	Mixed	Yes	No
5	The Sole Regret	02:27	Mixed	No	No
6	Twisted Streets	03:29	Mixed	Yes	No
7	Terminal March	04:06	Mixed	Yes	No
8	Percy's Escape	01:41	Mixed	Yes	No
9	Faith of Jevel	01:31	Mixed	No	No

10	Mine, Windbag, Mine	03:06	Mixed	No	No
11	Slinger's Song	04:06	Mixed	Yes	No
12	Build That Wall (Zia's Theme)	02:45	Mixed	Yes	No
13	Spike in a Rail	02:54	Mixed	Yes	No
14	What's Left Undone	00:22	Mixed	Yes	No
15	Brusher Patrol	04:32	Mixed	Yes	No
16	The Mancer's Dilemma	02:01	Mixed	No	No
17	Mother, I'm Here (Zulf's Theme)	02:16	Mixed	Yes	No
18	Pale Watchers	04:28	Mixed	No	No
19	The Bottom Feeders	04:44	Mixed	No	No
20	From Wharf to Wilds	01:22	Mixed	No	No
21	Setting Sail, Coming Home (End Theme)	02:54	Mixed	Yes	No
22	The Pantheon (Ain't Gonna Catch You)	02:27	Mixed	Yes	No
	Summary	**01:00:30**	**22/22 Mixed**	**13/22**	**0/22**

2.8.3. Heavy Rain

Table 46: General information for Heavy Rain

Game full title	Heavy Rain
Developer	Quantic Dream
Publisher	Sony Computer Entertainment
Year	2010
Genre	Action-adventure
Composers	Normand Corbeil
Awards	- 2011 *BAFTA* Game Awards: Original music (won) - 2011 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (won)

Heavy Rain was the last completed soundtrack by composer Normand Corbeil (1956 – 2013), who died of pancreatic cancer while working on another video game, *Beyond: Two Souls*. Known chiefly as a composer for film and television, Corbeil's scoring experience in these mediums influenced his orchestration pallet for *Heavy Rain*. *Ethan Mars' Main theme* (track 1) introduces two themes on which the entire composition is build: *Ethan's theme* (figure 112) (00:01 – 00:24; 03:00 – 03:31) and the *Drama theme* (figure 113) (00:24 – 00:53; 01:39 – 02:45). *Ethan's theme* reappears with variations in the soundtrack, bearing a resemblance to the opening theme of *Cards on the Table* (figure 114). A television adaption of Agatha Christie's *Poirot* book series, the score for *Cards on the Table* (Season 10 Episode 2) was composed by Stephen McKeon. The *Cards on the Table main theme* is played by an oboe, while *Ethan's theme* is played by a cor anglais; both share similar string accompaniment. Although the rhythmical patterns of these themes are different, these themes share the same melodic movement; *Ethan's theme* can be reduced to F – E – F – D (D minor), while *Cards on the Table main theme* opens with Eb – D – Eb – C (C minor). As *Ethan's theme* is quoted throughout the soundtrack, the longer note values become shorter. Another coincidence is both themes were written by composers known for their film and television experience. (Internet Movie Data Base 2015b; Kubba 2013; McKeon 2015.)

Figure 112: Ethan's theme

Figure 113: Drama theme

Figure 114: Cards on the Table main theme

Beyond *Ethan's theme* and the *Drama theme*, there are no other distinguishable themes. "Main theme" tracks for other characters[45] are closer to cinematic character piece (*Charakterstück*) than thematic compositions. Writing for *Giant Bomb*, reviewer *RecSpec* (2013) comments: "The theme that accompanies Shelby [and other characters] is quiet, and barely there. That's not an insult to the song [sic], just a comment on how well it fits." Since the central character is Ethan, it is no surprise that his theme should reprise in the soundtrack. *In Norman Jayden's Main Theme* (track 2), the *Drama theme* reappears (01:26 – 01:46), played by violins. *Ethan's theme* returns in *Before the Storm* (track 2), played by piano (00:00 – 00:13), and clarinet accompanied by piano (00:14 – 00:35). The *Drama theme* returns, played in the violin section doubled by piano (00:36 – 01:03). The orchestra convulse into a *forte tutti* playing the *Drama theme* (02:14 – 02:55). In *Madison Paige's Main Theme* (track 4), a piano is heard playing the first three notes of the *Drama theme* (02:35 – 02:40).

Painful memories (track 7) are composed for solo piano. The composition opens with the *Drama theme* (00:00 – 01:01), closing with *Ethan's theme* (01:02 – 01:29). *Redemption* (track 9) starts with lower strings playing *Ethan's theme* (00:00 – 00:42), before playing the *Drama theme* (00:43 – 01:39). *Last Breath* (track 18) opens with a piano playing *Ethan's theme*, before fading into aleatoric strings (00:00 – 00:40). The dissonant string writing resolves as the piano re-enters, playing *Ethan's theme* (02:01 – 03:00).

Minimalistic piano writing is a common composition device used in film scoring to portray sentiment and sensibility. Corbeil chiefly uses this device in connection with *Ethan's theme*. In an interview with Jeraiska (2010) for *Gamasutra*, Corbeil explained his orchestration for *Heavy Rain*, writing:

> *For Ethan, we focused on the piano. The theme is something very human, fragile but strong at the same time. For Madison there is a chamber orchestra with a smaller setup, both strong and emotional. Jayden is an investigator and researcher in a sad and crazy world, so his theme is dark. There it's the opposite,*

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[45] Norman Jayden's Main Theme (track 2), Madison Paige's Main Theme (track 4), Scott Shelby's Main Theme (track 5), Lauren Winter's Main Theme (track 6)

a symphony orchestra. Shelby's theme is drawing on French film noire from the 60's: cop stories, a bit jazzy, brass and flutes.

Table 47: <u>Heavy Rain</u> statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Ethan Mars' Main Theme	03:31	Instrumental	Yes	No
2	Norman Jayden's Main Theme	04:42	Instrumental	Yes	No
3	Before the Storm	02:55	Instrumental	Yes	No
4	Madison Paige's Main Theme	03:31	Instrumental	Yes	No
5	Scott Shelby's Main Theme	06:01	Instrumental	No	No
6	Lauren Winter's Main Theme	03:07	Instrumental	No	No
7	Painful Memories	01:29	Instrumental	Yes	No
8	The Chase	01:25	Instrumental	No	No
9	Redemption	01:39	Instrumental	Yes	No
10	The Bulldozer	01:43	Instrumental	No	No
11	High Tension	01:16	Instrumental	No	No
12	The Fight	01:31	Instrumental	No	No
13	The Hold Up	01:28	Instrumental	No	No
14	Looking for Shaun	01:36	Instrumental	No	No
15	Countdown	01:33	Instrumental	No	No
16	Last Breath	03:00	Instrumental	Yes	No
	Summary	**00:40:18**	**16/16 Instrumental**	**7/16**	**0/16**

2.8.2. Fable III

Table 44: General information for <u>Fable III</u>

Game full title	Beyond Good and Evil
Developer	Lionhead Studios
Publisher	Microsoft Game Studios
Year	2003
Genre	Action-adventure role playing
Composers	Russell Shaw
Awards	- 2011 *BAFTA* Game Awards: Original music (nominated) - 2011 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

The *Fable III* soundtrack opens with *Fable III Theme* (track 1). After an introduction featuring an oboe solo, brass, and strings (00:00 – 00:47), the *F3 theme*[46] (figure 105) is played on woodwinds and violins (00:47 – 01:12). The track ends with a solo violin cadenza (02:35 – 02:54).

Figure 105: F3 theme

Escape (track 5) contains a five-note motif, the *Escape motif* (figure 106). This motif appears as a string ostinato throughout the entire track, repeated at different speeds throughout the track. Subtle rhythmical and melodic variations of the *Escape motif* appear throughout the track, but they transform into new material.

Figure 106: Escape motif

According to *Encyclopaedia Brittanica* (S.A.a), the Hungarian *Csárdás* is divided into a slow section (*lassu*), followed by a fast section (*friss*). Possibly inspired by Vittorio Moti's *Csárdás*, *The Dwellers* (figure 107) (track 8) contains an improvisatory solo violin melody accompanied by strings. The composition remains in a slow tempo, *senza friss*.

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[46] *Fable III theme*, named *F3* to avoid confusing the theme with the title of the track and the game's name.

Figure 107: The Dwellers violin melody

Sanctuary (track 9) is a composition for synthesiser recycled from the previous games; this track is known as *Temple of Light* in *Fable* (the original game), and known as *Marcus Memorial* in *Fable II*.

Figure 108: Sanctuary

Brightwall (track 11) is a waltz featuring the *F3 theme* played on woodwinds (00:39 – 01:07). The accompaniment consists of *pizzicato* violins with *arco* pedal points in the lower strings. In *Reliquary* (track 12) an organ pedal suspends over the entire composition, accompanying a choir (figure 109).

Figure 109: Reliquary

Music Box (track 13) consists of a music box playing the *F3 theme*. *Reaver Mansion* (track 15) is divided into two sections, quoting several famous compositions. The guitar section (00:00 – 00:00) quotes *Are you going to Scarborough fair?* (00:00 – 00:53), J.S. Bach: *Minuet in G* from the *Anna Magdalena Book* (00:53 – 01:18), *Fable II theme* (figure 110) (02:14 – 02:39), and F. Carulli: *Andante* (02:40 – 03:41). Harpsichord (doubled by piano) constitutes the second section of the track, quoting J.S. Bach: *Prelude no. 12 in F minor* from *The Well-Tempered Clavier Book I*. (04:10 – 06:38), J.S. Bach: *Aria* from the *Goldberg Variations* (06:40 – 08:34), and J.S. Bach: *Prelude no. 11 in F major* from *The Well-Tempered Clavier Book II*. (08:38 – 11:13)

Figure 110: Fable II theme

Desert (track 17) features the *Desert motif* played on an Arabian violin (figure 111). This motif never develops into a theme, but is repeated throughout the soundtrack (01:14 – 01:25; 01:47 – 01:56; 02:17 – 02:27; 02:45 – 02:57). Between 01:30 and 03:43, a darbuka (goblet drum) and tambourine can be heard. *Kalin* (track 18) continues with *alla Arabian*: after a female singer vocalise a large section of the composition (00:09 – 03:33), the *Desert motif* appears in this track as well (03:35 – 03:46; 03:51 – 04:04).

Figure 111: Desert motif

Although most tracks in *Fable III* are orchestral, synthesisers are employed as well. Even though Russel Shaw assembled a solid score, reviews were lukewarm. Masalar (2010) thought that the *Fable III* soundtrack "simply fails to deliver the kind of vibrant, compelling music that seems necessary for this kind of game", while Tilnes (2015) wrote: "Fable III is the most generic of the scores [in the series] so far."

Table 45: Fable III statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Fable III Theme	02:54	Instrumental	Yes	Yes
2	A Hero Awakes	02:23	Instrumental	No	No
3	Keyhole	02:54	Instrumental	No	No
4	Elise	01:16	Instrumental	No	No
5	Escape	05:00	Instrumental	Yes	No
6	Theresa	01:05	Instrumental	No	No
7	Fight or Flight	02:42	Instrumental	No	No
8	The Dwellers	04:19	Instrumental	Yes	No
9	Sanctuary	03:52	Electronic	Yes	No
10	Sabine	01:19	Instrumental	No	No
11	Brightwall	02:55	Instrumental	Yes	No
12	Reliquary	04:57	Instrumental	Yes	No
13	Music Box	00:39	Instrumental	Yes	No
14	Driftwood	02:23	Electronic	No	No
15	Reaver Mansion	11:13	Instrumental	Yes	No
16	Shadelight	03:18	Instrumental	No	No
17	Desert	04:54	Mixed	Yes	No
18	Kalin	04:59	Mixed	Yes	No
19	Coronation	00:55	Instrumental	No	Yes
20	Logon's Trail	02:27	Instrumental	No	No
21	Execution	01:23	Instrumental	No	No
22	Death of Walter	02:47	Instrumental	No	No
23	Farewell Walter	00:56	Instrumental	No	No

24	Finale	00:45	Instrumental	No	No
	Summary	**01:12:30**	**20/24 Instrumental 2/24 Mixed 2/24 Electronic**	**10/24**	**2/24**

2.9. 2012

2.9.1. Deus Ex: Human Revolution

Table 48: General information for <u>Deus Ex: Human Revolution</u>

Game full title	Deus Ex: Human Revolution
Developer	Eidos Montreal
Publisher	Square Enix
Year	2011
Genre	Action-adventure
Composers	Michael McCann
Awards	- 2012 *BAFTA* Game Awards: Original music (nominated) - 2011 *VGA*: Best original score (nominated)

Like *Splinter Cell: Double Agent*, there is little to say about *Deus Ex: Human Revolutions*. McCann wrote another unthematic, electronic soundtrack, saying: "Because we approached the music more as atmosphere – relying more on harmony, rhythm and mood than melody, it meant trying to find the emotional core in a very dense wall of sound. It becomes a much more ambient and immersive experience". (Usher 2009.)

Table 49: <u>Deus Ex: Human Revolution</u> statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Icarus: Main Theme	03:41	Mixed	No	Yes
2	Opening Credits	02:15	Mixed	No	Yes
3	Main Menu	01:50	Mixed	No	No
4	First and Last	03:14	Mixed	No	Yes
5	Detroit City Ambient (Part 1)	02:03	Mixed	No	No
6	Detroit Marketplace	03:45	Mixed	No	No
7	The Mole	02:24	Mixed	No	No
8	Barrett Boss Fight	02:49	Mixed	No	Yes
9	Home	02:17	Mixed	No	No
10	Jewel of the Orient	01:03	Mixed	No	Yes
11	Lower Hengsha Ambient (Part 1)	02:21	Mixed	No	No
12	Singapore Ambient (Part 2)	02:24	Mixed	No	No
13	After the Crash	04:03	Mixed	No	No
14	The Hive	03:56	Mixed	No	No
15	Harvesters	02:57	Mixed	No	No
16	Hung Hua Brother	03:17	Mixed	No	No
17	Everybody Lies	04:40	Mixed	No	No
18	LIMB Clinic	01:44	Mixed	No	No
19	Penthouse	01:36	Mixed	No	No
20	Hengsha Daylight (Part 1)	04:25	Mixed	No	No
21	Entering TYM	01:54	Mixed	No	No
22	Return to Hengsha	02:43	Mixed	No	No
23	And Away We Go	01:17	Mixed	No	Yes

24 Namir	02:30	Mixed	No	Yes
25 Endings	02:10	Mixed	No	No
Summary	**01:08:01**	**25/25 Mixed**	**0/25**	**7/25**

2.9.2. inFAMOUS 2

Table 50: General information for inFAMOUS 2

Game full title	inFAMOUS 2 [stylised as inFAMOUS 2]
Developer	Sucker Punch Productions
Publisher	Sony Computer Entertainment
Year	2011
Genre	Action-adventure
Composers	Jim Dooley
Awards	- 2004 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (nominated)

Two versions of the soundtracks are available, reflecting your moral choices in the game: *The Blue Soundtrack* (good) and *The Red Soundtrack* (evil).

The Blue Soundtrack

Cole MacGrath (track 1) opens this soundtrack with *Cole's motif* (figure 115). This motif can be reduced to four notes: E – C – B – E. *Cole's motif* is first heard in violas, repeated at different tempos in entire string section[47]. This repetition results in a polyphonic motivic permutation (00:00 – 01:33). *Cole's motif* is heard in repetition throughout the entire track.

Figure 115: Cole's motif

Cole's motif is quoted on solo violin and solo viola (02:15 – 02:29) in *Get Bertrand* (track 2). *Cole's motif* is also heard in *Lucky Kuo* (track 5), played on violin (00:05 – 00:25; 02:31 – 02:32). *Bertrand* (track 8) contains a new motif, *Bertrand's motif* (figure 16). This motif is based on a chromatic movement, down and up (B – A# – B). This theme is played by violins (00:38 – 00:57; 02:06 – 03:44) but is also heard in trombones doubled horns (02:28 – 03:44).

Figure 116: Bertrand's motif

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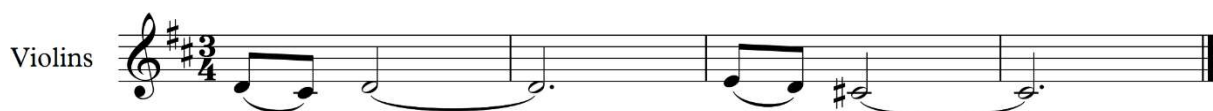
[47] The double-bass section do not play *Cole's theme*, but has its own bass-line.

Rescue Wolfe (track 12) contains *Cole's motif*, played on violins and accompanied by bass guitar, drums and strings (01:09 – 01:37; 01:54 – 02:01). *Cole's motif* is played by cellos (00:06 – 00:14; 00:18 – 00:29; 01:11 – 01:46) in *Empire* (track 14). *The Beast* (track 17) quotes *Cole's motif*, played on cellos (00:12 – 00:21). Horns also repeat *Cole's motif* (01:36 – 02:02) accompanied by strings, percussion and trombones. The final statement of *Cole's motif* appears on trombones (02:52 – 02:56; 03:38 – 03:41). The last appearance of *Cole's motif* on this disk is in The Decision (track 22), played by violins (01:10 – 01:17).

The Red Soundtrack

In *Special Delivery* (track 3), *Cole's motif* is reversed (D – A – Bb – D), repeated on a cello as an ostinato (00:34 – 01:57). *Cole's motif* is also heard in *George Corpse* (track 16), first played by a solo cello (00:12 – 00:28), followed by a statement of *Cole's motif* by *tutti* cellos (00:32 – 00:50). *Plant Monster* (track 18) features *Cole's motif* played by horns (00:28 – 00:39) and cellos (00:56 – 01:00). *The Final Piece* (track 22) places *Cole's motif* as a string ostinato (00:03 – 00:13; 00:20 – 00:27). *Cole's motif* is also played on horns (00:56 – 01:12), preparing for the re-appearance of *Bertrand's motif*, played on trombones (01:44 – 02:11)

inFAMOUS 2 is scored for different combinations of musicians: a famous rock drummer (Bryan Mantia), a New Orleans Funk band (Galactic), orchestra, and string quintet (violin, viola, two cellos, double-bass). Jim Dooley (composer), Tim Davies (orchestrator), and Jonathan Meyer (music editor) exploited experimental instrumental techniques in the soundtrack, including the orchestral indication *f.t.s.* ("fuck this shit"). These radical approaches were pushed by the developers, who asked for "brutal" music. (Heather Frank 2014.)

Table 51: inFAMOUS 2 statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
		The Blue Soundtrack			
1	Cole MacGrath	03:30	Mixed	Yes	Yes
2	Get Bertrand	03:24	Mixed	Yes	No
3	7th Ward	05:11	Mixed	No	No
4	Plight	02:19	Mixed	No	No
5	Lucky Kuo	03:19	Mixed	Yes	No
6	Swamp Blockade	03:29	Mixed	No	No
7	Overcharge	03:42	Mixed	No	No
8	Bertrand	03:44	Mixed	Yes	Yes
9	Origin Stories	02:59	Mixed	No	Yes

10	The Freaks Are Everywhere	02:22	Mixed	No	No
11	Powered Down	03:28	Mixed	No	No
12	Rescue Wolfe	02:53	Mixed	Yes	Yes
13	Meet Nix	03:17	Mixed	No	No
14	Empire	02:00	Mixed	Yes	Yes
15	Pushing and Shoving	03:06	Mixed	No	No
16	Karma	03:13	Mixed	No	No
17	The Beast	04:06	Mixed	No	Yes
18	Unfinished Business	03:42	Mixed	No	No
19	Hardcore Parkour	03:07	Mixed	No	No
20	La Roux	02:35	Mixed	No	No
21	Shoot the Messenger	03:40	Mixed	No	No
22	The Decision	01:55	Mixed	Yes	No
23	Fade Away	03:42	Mixed	No	No
	Summary	**01:14:53**	**23/23 Mixed**	**7/23**	**6/23**

	The Red Soundtrack				
1	Abducted	02:46	Mixed	No	No
2	Junction	04:24	Mixed	No	No
3	Special Delivery	02:45	Mixed	Yes	No
4	The Flood	03:20	Mixed	No	No
5	Tasso	03:39	Mixed	No	No
6	The Swamp	04:13	Mixed	No	No
7	Cypress Madness	04:42	Mixed	No	No
8	Shotguns and Gasoline	04:08	Mixed	No	No
9	Gris Gris	04:05	Mixed	No	No
10	1916	02:28	Mixed	No	No
11	Flood Town Plague	03:01	Mixed	No	No
12	No Surrender	03:48	Mixed	No	No
13	Ascension Parish	05:46	Mixed	No	No
14	And I thought I was a Pyro	03:36	Mixed	No	No
15	Monster Ranch	02:10	Mixed	No	No
16	Gorgeous Corpse	04:06	Mixed	Yes	No
17	Gas Lamp Gas Tank	02:25	Mixed	No	No
18	Plant Monster	03:41	Mixed	Yes	Yes
19	Burned Down	03:42	Mixed	No	No
20	The Railyard	03:13	Mixed	No	No
21	Closing Time	03:12	Mixed	No	No
22	The Final Piece	02:43	Mixed	Yes	Yes
	Summary	**01:17:59**	**22/22 Mixed**	**4/22**	**2/22**

2.9.3. The Elder Scrolls V: Skyrim

Table 52: General information for The Elder Scrolls V: Skyrim

Game full title	The Elder Scrolls V: Skyrim
Developer	Bethesda Game Studios
Publisher	Bethesda Softworks
Year	2011
Genre	Action-adventure
Composers	Jeremy Soule
Awards	- 2012 *BAFTA* Game Awards: Original music (nominated) - 2012 *DCA*: Best Audio (nominated)

The Elder Scrolls V: Skyrim (hereafter *Skyrim*) was released on a four compact-disk (CDs) compilation. Covering 53 tracks, my analysis will focus on thematic material. Although the score is predominantly orchestral, synthesisers are also used. Jeremy Soule uses extended pedal points in many of his compositions, stretching simple harmonies into extended harmonies. Ambient tracks in *Skyrim* do not always include ambient sounds, but they function as a harmonic background to the game (without melodic material).

Disk 1

Dragonborn (track 1) is based on the *Elder Scrolls theme* (figure 117) which Soule first composed for *The Elder Scrolls III: Morrowind*. Game director Todd Howard requested Soule to write music, saying: "[...] the music for *Skyrim* would be the *Elder Scrolls theme*, but sung by a barbarian choir." The choir ends with a soprano vocalising the *Skyrim motif* (figure 118)*.* (Vata 2011.)The lyrics are as follow:

Table 53: Dragonborn lyrics

Dovahkiin, Dovahkiin, naal ok zin los vahriin, *Wah dein vokul mahfaeraak ahst vaal!* *Ahrk fin norok paal graan fod nust hon zindro zaan,* *Dovahkiin, fah hin kogaan mu draal!* *Huzrah nu, kul do od, wah aan bok lingrah vod,* *Ahrk fin tey, boziik fun, do fin gein!* *Wo lost fron wah ney dov, ahrk fin reyliik do jul,* *Voth aan suleyk wah ronit faal krein* *Ahrk fin zul, rok drey kod, nau tol morokei frod,* *Rul lot Taazokaan motaad voth kein!* *Sahrot Thu'um, med aan tuz, vey zeim hokoron pah,* *Ol fin Dovahkiin komeyt ok rein!*	*Dragonborn, Dragonborn, by his honor is sworn,* *To keep evil forever at bay!* *And the fiercest foes rout when they hear triumph's shout,* *Dragonborn, for your blessing we pray!* *Hearken now, sons of snow, to an age, long ago,* *And the tale, boldly told, of the one!* *Who was kin to both wyrm, and the races of man,* *With a power to rival the sun!* *And the voice, he did wield, on that glorious field,* *When great Tamriel shuddered with war!* *Mighty Thu'um, like a blade, cut through enemies all,* *As the Dragonborn issued his roar!*

Dovahkiin, Dovahkiin, naal ok zin los vahriin, *Wah dein vokul mahfaeraak ahst vaal!* *Ahrk fin norok paal graan fod nust hon zindro zaan,* *Dovahkiin, fah hin kogaan mu draal!*	*Dragonborn, Dragonborn, by his honor is sworn,* *To keep evil forever at bay!* *And the fiercest foes rout when they hear triumph's shout,* *Dragonborn, for your blessing we pray!*
Ahrk fin Kel lost prodah, do ved viing ko fin krah, *Tol fod zeymah win kein meyz fundein!* *Alduin, feyn do jun, kruziik vokun staadnau,* *Voth aan bahlok wah diivon fin lein!*	*And the Scrolls have foretold, of black wings in the cold,* *That when brothers wage war come unfurled!* *Alduin, Bane of Kings, ancient shadow unbound,* *With a hunger to swallow the world!*
Nuz aan sul, fent alok, fod fin vul dovah nok, *Fen kos nahlot mahfaeraak ahrk ruz!* *Paaz Keizaal fen kos stin nol bein Alduin jot,* *Dovahkiin kos fin saviik do muz!*	*But a day, shall arise, when the dark dragon's lies,* *Will be silenced forever and then!* *Fair Skyrim will be free from foul Alduin's maw!* *Dragonborn be the savior of men!*
Dovahkiin, Dovahkiin, naal ok zin los vahriin, *Wah dein vokul mahfaeraak ahst vaal!* *Ahrk fin norok paal graan fod nust hon zindro zaan* *Dovahkiin, fah hin kogaan mu draal!*	*Dragonborn, Dragonborn, by his honor is sworn,* *To keep evil forever at bay!* *And the fiercest foes rout when they hear triumph's shout,* *Dragonborn, for your blessing we pray!*

Figure 117: Elder Scrolls theme in Skyrim

Figure 118: Skyrim motif

Awake (track 2) opens with the *Awake horn theme* (figure 119) that includes the *Skyrim motif* in retrograde, played with string accompaniment (00:11 – 00:53). The horn solo is followed by a solo cello melody that starts with the three-note *Skyrim motif* (00:54 – 01:15).

Figure 119: Awake horn theme

From Past to Present (track 3) starts with a violin introduction that scrambles the order of the *Skyrim motif* (D – F – E) (00:00 – 00:25). The *Past theme* (figure 120) is played on an oboe, accompanied by strings (00:25 – 00:53). The *Present theme* (figure 121) contains the *Skyrim motif* in retrograde (F – E – D), sung by choir and doubled by violins (00:53 – 01:22). A flute is also heard playing the *Past theme* (01:35 – 02:02), although the theme statement is completed by an oboe (02:02 – 02:29). The *Past theme* is repeated on a harp (02:29 – 02:56) before the violin introduction is repeated (02:57 – 03:23). The *Past theme* is now heard in the cello section (03:24 – 03:50), before the choir repeats the present theme (03:50 – 04:16).

Figure 120: Past theme

Figure 121: Present theme

Unbroken Road (track 4) opens with the *Unbroken theme* (figure 122) played on a horn (00:00 – 00:57). The orchestra swells into the *Road theme* (figure 123), played by the violin section (00:58 – 01:36). The *Unbroken theme* is then repeated *alla stretto* with the *Road theme* (01:48 – 02:44). The solo horn plays the *Unbroken theme* again (02:58 – 03:56), while a choir sings (03:18 – 03:56). Both come to an end as the choir swells into the *Road theme* again (03:55 – 04:34). The track comes to a close with violins playing the *Road theme* softly (04:54 – 05:50), followed by the final statement of the *Unbroken theme* (05:56 – 06:16).

Figure 122: Unbroken theme

Figure 123: Road theme

Ancient Stones (track 5) has a synthesiser introduction, leading to a zither playing the *Ancient theme* (figure 124) (00:23 – 00:52). The zither accompanies an oboe melody (00:53), joined by a horn and string (01:08). The *Ancient theme* is repeated several more times (similar to the two preceding tracks already discussed). For the sake of brevity (*Skyrim* has a long soundtrack) I shall not mention theme repetitions in each track, since the composition structure of most tracks are similar to the two preceding tracks. An honourable mention is the reappeance of the *Awake horn theme* (03:17 – 03:40).

Figure 124: Ancient theme

The *City Gates* (track 6) consists of a two-bar theme, the *City Gates theme* (figure 125), repeated several times on cello (00:00 – 00:09), violins (00:09 – 00:17), *tremolo* violins and oboe (00:17 – 00:32), and so forth. The double-basses never double with the ensemble but play a bass-line that creates a harmonic foundation.

Figure 125: City Gates theme
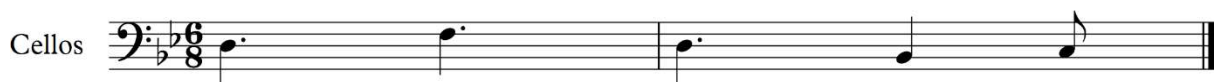
The first "combat track" (with music that accompanies an enemy skirmish) that appears in this soundtrack is *Tooth and Claw* (track 9). The *Claw motif* (figure 126) is a rhythmical motif (reduced to four notes) that repeats as an ostinato throughout the entire composition.

Figure 126: Claw motif

Death or Sovngarde (track 11) is the second combat track in this soundtrack. Like the preceding combat track, *Death or Sovngarde* features a rhythmical motif (figure 127) that repeats as an ostinato through the composition.

Figure 127: Death or Sovngarde motif

A string introduction indicates the key for a men's choir (figure 128) in *Masser* (track 12).

Figure 128: Masser male choral

Distant Horizons (track 13) opens with the *Distant oboe theme* (figure 129) (00:20 – 00:58). This theme contains a melodic pattern repeated twice (indicated by brackets) with slightly different rhythms.

Figure 129: Distant oboe theme

Dawn (track 14) contains the *Dawn violin ostinato* (figure 130) that is heard accompanying female choir.

Figure 130: Dawn violin ostinato

The Jerall Mountains (track 15) opens with the *Jerall theme* (figure 131), played on horns (00:04 – 00:13) repeated on solo cello (00:17 – 00:27), and played as a string ostinato (00:29 – 01:06). The *Jerall theme* is also heard on a flute (01:24 – 01:40).

Figure 131: Jerall theme

Steel on steel (track 16) is the third combat track in *Skyrim*'s soundtrack. The violins play an ostinato pattern that repeats throughout the composition. The *Skyrim motif* can also be heard in retrograde (00:38 – 00:50), played on violins.

Figure 132: <u>Steel on Steel</u> violin ostino
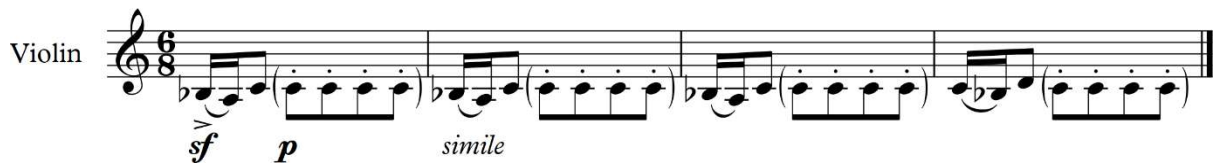
Secunda (track 17) opens with a harp ostinato (figure 133) accompanying the *Secunda theme* (figure 134), played on piano (00:17 – 00:49).

Figure 133: <u>Secunda</u> harp ostinato
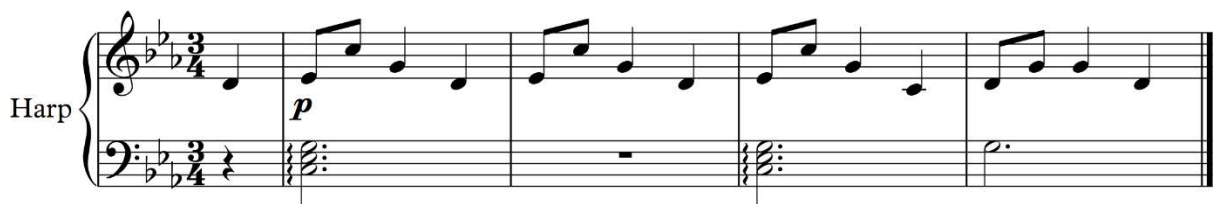
Figure 134: Secunda theme

The ambient tracks on Disk 1 are *Silent Footsteps* (track 7), *Dragonsreach* (track 8), and *Under An Ancient Sun* (track 10).

Disk 2

Unbound (track 5) quotes the *Skyrim motif* (00:11 onwards) in strings and choir. The quotations of the *Skyrim motif* are permeated with an echo effect, resulting in a "blended effect". *Far Horizons* (track 6) gained fame outside of *Skyrim*, being rerecorded by the *London Philharmonic Orchestra* for their album *The Greatest Video Game Music Vol. 2*. The *Far Horizons theme* (figure 135) is heard on a solo horn (00:00 – 00:32), violins (00:33 – 01:02), and violins doubled by choir (01:03 – 01:32).

Figure 135: Far Horizons theme

A Winter's Tale (track 7) is scored for lute, alto flute, drum, and shaker.

Figure 136: A Winter's Tale

The Bannered Mare (track 8) is scored for two lutes, borrowing from the traditional English folk song *Greensleeves*. Figure 137 compares *The Bannered Mare* with *Greensleeves*.

Figure 137: The Bannered Mare compared to Greensleeves
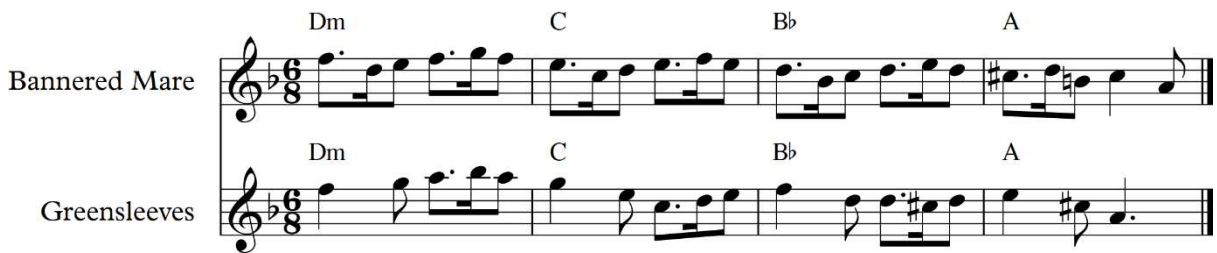
Streets of Whiterun (track 9) opens with a minimalistic piano writing, accompanied by strings. The *Whiterun theme* (figure 138) is played by a solo cello while the piano repeats an E pedal point.

Figure 138: Whiterun theme
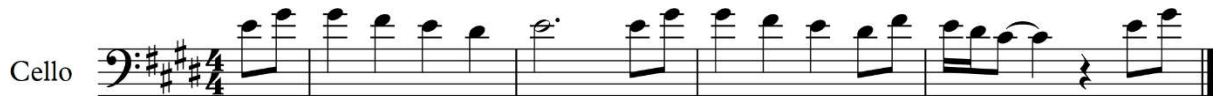
One They Fear (track 10) reprises the *Elder Scrolls theme*, at a slightly faster tempo, while the choir sings the dragonborn lyrics. *The White River* (track 11) features the *River theme* (figure 139), played *ad libitum* by a horn.

Figure 139: River theme

Journey's End (track 16) is the concluding track for this disk, featuring strings playing the *End theme* (figure 140).

Figure 140: End theme

The ambient tracks on Disk 2 are *Frostfall* (track 1), *Night Without Stars* (track 2), *Intro Darkness* (track 3), *Kyne's Peace* (track 4), *Silence Unbroken* (track 12), *Standing Stones* (track 13), *Beneath the Ice* (track 14), and *Tundra* (track 15).

Disk 3

A Chance Meeting (track 2) features two Appalachian flutes accompanied by drums, shaker, and guitar.

Figure 141: A Chance Meeting

Out in the Cold (track 3) features a melody scored for lute.

Figure 142: Out in the Cold

Around the Fire (track 4) is arranged for flute, guitar, two violins, and drum.

Figure 143: Around the Fire

Caught Off Guard (track 6) is the fourth combat track in the *Skyrim* soundtrack. The violin double-stopping continues throughout the track, although the rhythm changes later in the composition.

Figure 144: Caught Off Guard

Blood and Steel (track 8) is the fifth combat track in the *Skyrim* soundtrack. The most common factor in this composition is not thematic content, but the rhythm played by the bass drum (figure 145).

Figure 145: Blood and Steel bass drum part

Watch the Skies (track 12) is the sixth combat track in the *Skyrim* soundtrack. A male choir (figure 146) sings the *Skies theme* accompanied by brass, strings, and percussion.

Figure 146: Skies theme

Sovngarde (track 17) is an alternate setting of the *Dragonborn lyrics* (table 53) (Figure 147). This setting is for male choir and drum *senza* orchestra.

Figure 147: Sovngarde
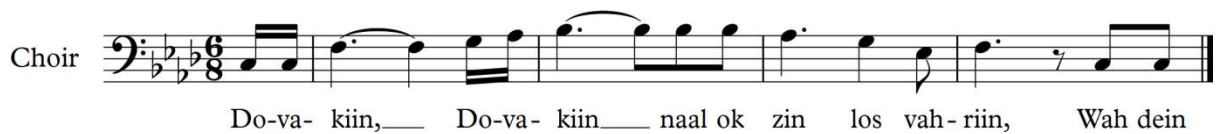
The ambient tracks on Disk 3 are *Before the Storm* (track 1), *Shadows and Echoes* (track 5), *Aurora* (track 7), *Towers and Shadows* (track 9), *Seven Thousand Steps* (track 10), *Solitude* (track 11), *The Gathering Storm* (track 13), *Sky Above, Voice Within* (track 14), *Death in the Darkness* (track 15), *Shattered Shields* (track 16), and *Wind Guide You* (track 18).

Disk 4

Disk 4 consists of one track: *Skyrim Atmospheres* (track 1). The track consists of natural sounds (birds, insects, rain, water sounds, wind, and others) layered with pedal points (mostly played on synthesisers).

The music of *Skyrim* is rarely epic in the idiom pioneered by Zimmer. The influence of Romanticism in palpable in Jeremy Soule's sweeping scores. In an interview with Paul Dean (2013), Soule names Bach, Beethoven, Richard Strauss, and John Williams as inspirations. Writing for *Kotaku,* Kirk Hamilton (2011b) comments: "Soule's work on the *Skyrim* soundtrack is bold and supremely confident, and is inextricably tied to the game it accompanies. More so than any game yet (even

Deus Ex: Human Revolution), listening to these tracks makes me want to fire up the game right now and start playing." Ittensohn (2011) also praises *Skyrim*'s soundtrack, writing: "Soule's contribution to the latest *Elder Scrolls* title is as vast and enticing as the world it was written for [...] it is essentially more of the best in game music, today."

Table 54: The Elder Scrolls V: Skyrim statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
		Disk 1			
1	Dragonborn	03:57	Instrumental	Yes	Yes
2	Awake	01:34	Instrumental	Yes	No
3	From Past to Present	05:06	Instrumental	Yes	No
4	Unbroken Road	06:26	Instrumental	Yes	No
5	Ancient Stones	04:47	Mixed	Yes	No
6	The City Gates	03:48	Instrumental	Yes	No
7	Silent Footsteps	02:53	Mixed	No	No
8	Dragonsreach	02:23	Instrumental	No	No
9	Tooth and Claw	01:50	Instrumental	Yes	No
10	Under An Ancient Sun	03:43	Mixed	No	No
11	Death or Sovngarde	03:02	Instrumental	Yes	No
12	Masser	06:06	Instrumental	Yes	No
13	Distant Horizons	03:54	Instrumental	Yes	No
14	Dawn	03:59	Mixed	Yes	No
15	The Jerall Mountains	03:21	Instrumental	Yes	No
16	Steel on Steel	01:45	Instrumental	Yes	No
17	Secunda	02:05	Instrumental	Yes	No
18	Imperial Throne	02:22	Mixed	Yes	No
	Summary	**01:03:11**	**13/18 Instrumental 5/18 Mixed**	**15/18**	**1/18**
		Disk 2			
1	Frostfall	03:28	Mixed	No	No
2	Night Without Stars	00:43	Mixed	No	No
3	Into Darkness	02:54	Mixed	No	No
4	Kyne's Peace	03:51	Mixed	No	No
5	Unbound	01:34	Mixed	Yes	No
6	Far Horizons	05:33	Instrumental	Yes	No
7	A Winter's Tale	03:21	Instrumental	Yes	No
8	The Bannered Mare	02:30	Instrumental	Yes	No
9	The Streets of Whiterun	04:06	Instrumental	Yes	No
10	One They Fear	03:16	Instrumental	Yes	Yes
11	The White River	03:31	Instrumental	Yes	No
12	Silence Unbroken	02:23	Mixed	No	No
13	Standing Stones	06:38	Instrumental	No	No
14	Beneath the Ice	04:16	Mixed	No	No
15	Tundra	03:51	Instrumental	No	No
16	Journey's End	04:09	Instrumental	Yes	No
	Summary	**00:56:13**	**9/16**	**8/16**	**1/16**

			Instrumental 7/16 Mixed		
		Disk 3			
1	Before The Storm	01:09	Mixed	No	No
2	A Chance Meeting	03:11	Instrumental	Yes	No
3	Out of the Cold	03:04	Instrumental	Yes	No
4	Around The Fire	03:12	Instrumental	Yes	No
5	Shadows And Echoes	02:21	Mixed	No	No
6	Caught Off Guard	01:12	Instrumental	Yes	No
7	Aurora	07:23	Mixed	No	No
8	Blood And Steel	02:12	Instrumental	No	No
9	Towers And Shadows	02:23	Mixed	No	No
10	Seven Thousand Steps	01:08	Mixed	No	No
11	Solitude	02:12	Instrumental	No	No
12	Watch The Skies	02:22	Instrumental	Yes	Yes
13	The Gathering Storm	02:55	Instrumental	No	No
14	Sky Above, Voice Within	03:58	Mixed	No	No
15	Death in the Darkness	02:37	Mixed	No	No
16	Shattered Shields	02:40	Mixed	No	No
17	Sovngarde	03:38	Instrumental	Yes	No
18	Wind Guide You	09:05	Mixed	No	No
	Summary	**00:56:51**	**9/18**	**6/18**	**1/18**
			Instrumental 9/18 Mixed		
		Disk 4			
1	Skyrim Atmospheres	42:34	Mixed	No	No
	Summary	**42:34**	**1/1 Mixed**	**0/1**	**0/1**

2.10. 2013

2.10.1. Assassin's Creed III

Table 55: General information for Assassin's Creed III

Game full title	Assassin's Creed III
Developer	Ubisoft Montreal
Publisher	Ubisoft
Year	2012
Genre	Adventure game
Composer	Joel Corelitz
Awards	- 2013 *BAFTA* Game Awards: Original music (nominated)
	- 2013 *DCA*: Best Audio (nominated)

Assassins Creed III introduces the main- theme and cell in the first track: *Assassins Creed III Main Theme*. Each phrase in the *AC3 main theme* (figure 148) starts with the *AC3 cell* (in brackets), first introduced by violas and cellos (00:17 – 00:31). After the *AC3 cell* is presented as an accompaniment on *tremolo* violas (00:32 – 00:45) (figure 149), a full exposition of the *AC3 main theme* is heard on the violins (00:46 – 01:14). The tremolo treatment of the *AC3 cell* returns in full string writing (01:14 – 02:01) until the composition ends with a final statement of the *AC3 main theme* (02:01 – 02:58).

Figure 148: AC3 motif

Figure 149: Tremolo violas

In *An Uncertain Present* (track 2), the notes of the *AC3 cell* are transposed to C minor (Ab – G – C) and rearranged (Ab – C – G) as the foundation for a synthesiser *ostinato*; the *Uncertain Present ostinato* (figure 150) is grouped in triple time (as indicated by the note stems), being heard throughout the entire duration of this composition. The *Uncertain Present ostinato* is also heard in *Temple Secrets* (track 19) (00:26 – 01:34). The *AC3 cell* is rearranged a second time in this track (Ab – G – C) (figure 151), resulting in a thematic transformation: the *Uncertain Present theme* (figure 151); this theme is first heard on synthesised brass (00:10 – 01:53). The *Uncertain Present theme* is also heard in *Modern Assassin* (track 14) on violins (00:42 – 00:54; 01:54 – 02:18).

Figure 150: Uncertain Present ostinato

Synthesizer

Figure 151: Uncertain Present theme

Synthesized brass

 The *AC3 cell* is transposed to G Aeolian and then rearranged: G – Eb – D becomes Eb – D (Bb) – G (figure 152). Grouped in notes of seven (see the note stems), this variation of the *AC3 cell* is used as an accompanying string *ostinato* in *Welcome to Boston* (track 4) (01:16 – 02:20), and in *Freedom Fighter* (track 5) (00:00 – 00:20).

Figure 152: String ostinato in Welcome to Boston and Freedom Fighter

Violas

A Bitter Truth (track 6) features a variation of the *AC3 cell* as well as the *AC3 main theme*. The *AC3 cell* is transposed to the dominant relation (D) of G Aeolian and rearranged (D – Bb – A becomes Bb – A – D) as a string *ostinato* (figure 153) (00:15 – 01:20). The *AC3 cell* interval of a sixth (D – Bb) forms the third and fifth of a triad, supporting the tonic pedal (G) that sustains the harmony. The *AC3 main theme* also appears in this track, played by violins (00:48 – 01:20).

Figure 153: A Bitter Truth ostinato

Harpsichord

The root note may be removed from the melodic line of the *AC3 cell* and be incorporated as harmonic support in a bass pedal; transposed to D minor, Bb – A of the *AC3 cell* is all that remains after the root note (D) is moved to the bass as a pedal. Two versions of the truncated *AC3 cell* are used in this soundtrack: *Through the Frontier* (track 7) (02:04 – 02:36) (figure 154) and *The Battle of Breed's Hill* (track 12) (00:00 – 1:53) (figure 155).

Figure 154: AC3 cell truncation in <u>*Through the Frontier*</u>
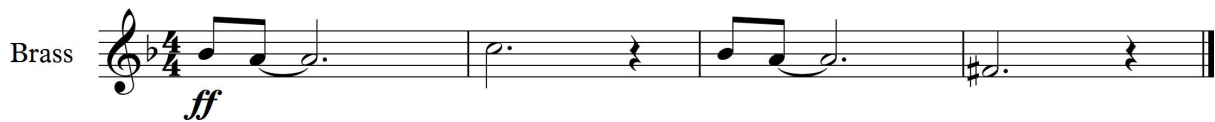

Figure 155: AC3 cell truncation in The Battle of Breed's Hill

In *Connor's Life* (track 8), the *AC3 main theme* appears on violins (02:03 – 03:39). The *AC3 cell* is truncated (the root, G, is in the bass) in *Trouble in Town* (track 9) (00:11 – 02:15) (figure 156); the role of the sixth (G – Eb) is almost ornamental, since the D (the third note in the *AC3 cell* sequence in G minor) is the central sustaining note in the melody.

Figure 156: Trouble in Town
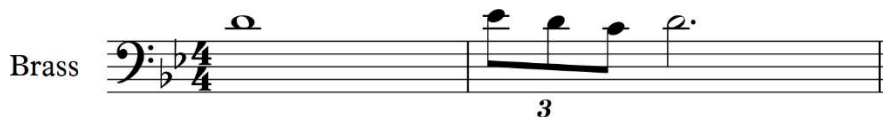
The final appearance of the *AC3 main theme* is in the closing track (25): *Assassin's Creed III Main Theme Variation*. Here, the *AC3 main theme* first appears in low brass (00:32 – 00:47) followed by a statement in strings and horns (00:50 – 01:05). Although the orchestration is varied in comparison with the first track, the melodic content is similar.

The use of synthesisers in *Assassin's Creed III* serves a stylistic purpose: electronic instruments lend the game a technological (21st-century) feeling, contrasting with the 18th-century orchestral instruments. Besides several compositions which feels like folk dances (for example *Beer & Friends* – track 20), the orchestration of *Assassin's Creed III* do not fit music from the Enlightenment; instead, the music is orchestrated for very large ensembles, linking the soundtrack with epic music. String *ostinato's*, loud brass melodies, and dense use of percussion (notably the taiko drums) are all features of epic orchestration, featuring in more than half of the compositions in this soundtrack.

Table 56: Assassin's Creed III statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Assassin's Creed III Main Theme	03:06	Mixed	Yes	Yes
2	An Uncertain Present	02:10	Mixed	Yes	No
3	Escape in Style	02:15	Mixed	No	Yes
4	Welcome to Boston	02:34	Mixed	Yes	Yes
5	Freedom Fighter	02:16	Mixed	Yes	Yes
6	A Bitter Truth	01:36	Mixed	Yes	No
7	Through the Frontier	03:02	Mixed	Yes	Yes
8	Connor's Life	04:56	Mixed	Yes	No
9	Trouble in Town	02:25	Mixed	Yes	Yes
10	Farewell	01:05	Mixed	No	No
11	HomeStead	03:02	Mixed	No	No
12	The Battle of Breed's Hill	02:18	Mixed	Yes	Yes
13	Speck of Dust	02:52	Mixed	No	No
14	Modern Assassin	03:05	Mixed	Yes	Yes
15	Desmond's Destiny	01:38	Mixed	No	No
16	The Aquila	02:18	Mixed	No	Yes
17	Fight Club	02:05	Mixed	No	No
18	Eye of the Storm	02:07	Mixed	No	Yes
19	Temple Secrets	01:41	Mixed	Yes	No
20	Beer and Friends	01:10	Mixed	No	No
21	Battle at Sea	04:02	Mixed	No	Yes
22	Breaching the Walls	03:32	Mixed	No	Yes
23	Wild Instincts	02:44	Mixed	No	Yes
24	What Came Before	04:11	Mixed	No	No
25	Assassin's Creed III Main Theme Variation	01:33	Mixed	Yes	Yes
	Summary	**1:03:43**	**25/25 Mixed**	**12/25**	**14/25**

2.10.2. Journey

Table 57: General information for Journey

Game full title	Journey
Developer	ThatGameCompany
Publisher	Sony Computer Entertainment
Year	2012
Genre	Adventure game
Composer	Austin Wintory
Awards	- 2013 *BAFTA* Game Awards: Original music (won)
	- 2013 *DCA*: Best Audio (won)
	- 2013 *D.I.C.E* Awards: Outstanding Achievement in Original Music Composition (won)
	- 55th Annual Grammy Awards: Best Score Soundtrack for Visual Media (nominated)- 2012 VGA: Best original score (won)

Since *Journey* only has one objective (*journey*ing to the mountain summit), the music also only has one theme – the Journey theme – which manifests in various variations in the game. Composed in 2009, *Nascence* ("birth") is the opening track for *Journey*. A solo cello (Tina Guo) presents the *Journey theme* (figure 157) to the listener (00:00 – 00:30), with a repetition on the bass flute (Amy Tatum) accompanied by a synthesised harp (00:35 – 01:00). The track closes with a final repetition of the *Journey theme* on the cello (doubled by the standard C flute), two octaves higher than the first presentation (01:04 – 01:32). Having heard the *Journey theme* three times already, the listener should be able to recognise the theme when it appears in the rest of the game. (Wintory 2013.)

Figure 157: Journey theme
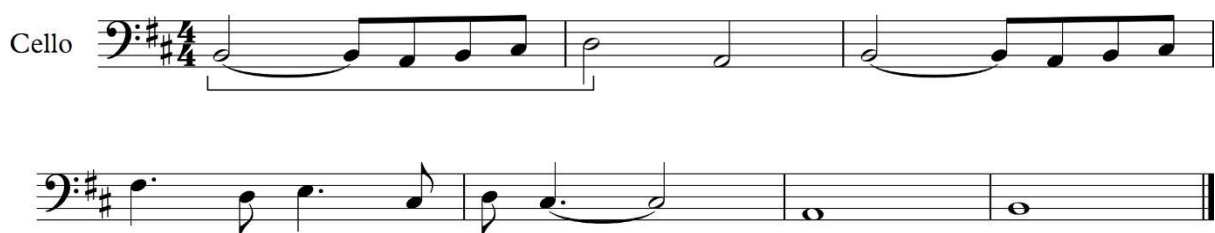
The *Journey theme* is also heard in *The Call* (track 2) played on the cello, accompanied by strings (Macedonia Radio Orchestra). Like *Nascence,* the cello is followed by the bass flute, playing the *Journey motif* (see figure 1) at a slow tempo (01:19 – 01:25) (02:20 – 02:39). The track ends with a cello repeating the *Journey motif* several times (02:51 – 03:16). *First confluence* (track 3) features the bass flute playing the *Journey motif* as an opening to an improvisatory Aeolian modal melody (00:10 – 01:20), accompanied by a tonic pedal point in the bass and various synthesised sounds. A harp (Charissa Barger) and bass flute engage in "call and answer" imitation in *Second Confluence* (track 4), repeating sequences of the *Journey motif* during the entire span of the track. *Threshold* (track 5) features the *Journey motif* altered to fit a triple meter time (figure 158) and is transposed to F#

Aeolian mode (as opposed to B Aeolian in *Nascence*). The *altered Journey motif* is played by the cello and the C flute, accompanied by harp and viola (played by Rodney Wirtz) (00:13 – 00:18; 00:25 – 00:28; 02:03 – 02:09; 02:19 – 02:25). After the C flute plays the *Journey motif* solo (02:51 – 02:55), the cello augments the note values of the *altered Journey motive* (figure 159) (03:21 – 03:40). (Wintory 2013.)

Figure 158: Altered Journey motif as heard in Threshold

Figure 159: Augmentation of the altered Journey motif in Threshold

The Road of Trails (track 7) features a thematic transformation of the *Journey motif;* when the *Journey motif* is transposed to A Aeolian (figure 160), we can trace the notes A – G – A – B – C (red) in the transformation as it appears in this track (figure 161).

Figure 160: The Journey motif transposed to A Aeolian

Figure 161: The Road of Trails thematic transformation

The Road of Trails thematic transformation is heard the first time as played by the solo cello doubled by harp (00:00 – 00:14), followed by a presentation of the transformation on the C flute (00:15 – 00:27). Besides a brief quotation of the *Journey motif* on the cello (E – D –E –F# – G, transposed a fifth above the tonic, which is A Dorian mode) (01:28 – 01:31), *The Road of Trails* consists of several statements of *The Road of trails thematic transformation*. *Temptations* (track 9) include an interesting variation on the *Journey motif*; the cello plays the notes A – G – A – Bb –C, leading to an F, giving the impression that we are in F major. The melody moves through this modal deception, from F through a passing note into D Aeolian (figure 162) (01:20 – 01:34).

*Figure 162: Development of the Journey motif in Temptations*

Cello

Descent (track 10) briefly quotes a variation of the *Journey motif* (figure 163), as played on tremolo violins (02:25 – 02:27).

Figure 163: Tremolo violins playing a variation of the Journey motif

Violins

Fifth Confluence (track 11) features a fragmentation of the *Journey theme;* when the *Journey theme* is transposed from B Aeolian mode to D Aeolian, the ending of the *Journey theme* can be heard as played by the solo cello (00:26 – 00:33). The C flute also quotes the *Journey Motif* in this track (00:44 – 00:50).

Figure 164: Journey theme extract as used in First Confluence
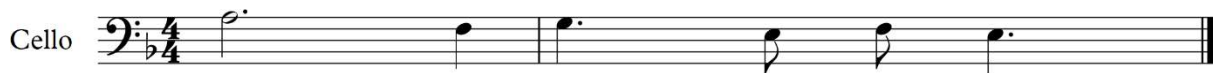
Cello

Transposed to D Aeolian, the motion of the notes **D – C – D** (– E – F) of the *Journey motif* is used as the foundation for a thematic transformation **E – D – E** – D – A (figure 165) in *Atonement* (track 12). The cello plays the *Atonement thematic transformation* for the first time at 00:27 – 00:30, repeating the motif (in brackets) as a basis for several variations in this track. The *Journey motif* appears twice in this track, as played by the cello (F – E – F – G – A: 01:13 – 01:21) (D – C – D – E – F: 04:42 – 04:54).

Figure 165: Atonement thematic transformation

Cello

Final Confluence (track 13) grows towards a climax as the *Journey motif* is repeated *alla stretto*, until the violins play the *Journey motif* at the pinnacle. (01:10 – 01:15). The *Journey motif* is heard on the cello in the E Phrygian mode in *The Crossing* (track 14) (00:00 – 00:05), followed by a statement of the *Journey motif* in the G Ionian mode (00:10 – 00:18). The *Journey motif* in the G Ionian also appears in the following track (15), *Reclamation* (01:57 – 02:05). In *Nadir* (which means "lowest

point" – the opposite of zenith) (track 16), the *Journey motif* is heard on a synthesiser, not in a mode but in E minor (01:50 – 02:02) accompanied by aleatoric strings. A solo cello is also heard, playing the *Journey theme* in its original form (B Aeolian mode) (02:36 – 02:47). In the penultimate composition, *Apotheosis* (meaning: to elevate to the status of divinity) (track17), the *Journey theme* is rhythmically stretched on a solo cello (figure 166) (01:20 – 02:50). While the violins play a long, slow melody, the C flute is heard playing the *Journey motif* as a counter melody (02:54 – 03:16). The violin section plays the stretched *Journey theme*, a similar statement to figure 10 (03:16 – 04:44). The last statement of the elongated *Journey theme* is played by the cello (05:37 – 07:06).

Figure 166: Elongated Journey theme in Apotheosis

The credits song (sung by Lisbeth Scott) is almost entirely based on material from the *Journey theme. I was born for this* (track 18) quote famous extracts from several authors (Wintory 2013). Taken from a translation by Ookami (2012), the table below illustrates the lyrics for this track:

Table 58: I was born for this lyrics

Lyrics	Author	Book	Language	Translation
Stat sua cuique dies	Virgil	Aeneid	Latin	To each his day is given
C'est pour cela que je suis née	Joan of Arc	–	French	I was born for this
Maél is mé tó féran	Unknown	Beowulf	Old English	Tis time that I fare from you
ὤλετο μέν μοι νόστος	Homer	Illiad	Greek	Lost is my homecoming
この道や / 行く人なしに / 秋のくれ	Matsuo Bashô	Haiku	Japanese	Along this road / Goes no one / This autumn eve

Wintory described his soundtrack as a "cello concerto", a worthy description considering how often the solo cello performs the *Journey- theme* and *motif* (Spotter5 2012). Most compositions in this soundtrack make use of various non-instrumental sounds; many pedal points (mostly in the bass) consist of various synthesised electronic sounds. Wintory blends the synthesisers well with the solo- and orchestra instruments, resulting in a soundtrack with mixed orchestration.

Table 59: Journey statistical summary table

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	Nascence	01:46	Instrumental	Yes	No
2	The Call	03:38	Mixed	Yes	No
3	First Confluence	01:40	Mixed	Yes	No
4	Second Confluence	02:19	Mixed	Yes	No
5	Threshold	06:04	Mixed	Yes	No
6	Third Confluence	01:40	Mixed	No	No
7	The Road of Trials	04:16	Mixed	Yes	No
8	Fourth Confluence	01:06	Mixed	No	No
9	Temptations	04:13	Mixed	Yes	No
10	Descent	02:40	Mixed	Yes	No
11	Fifth Confluence	01:22	Mixed	Yes	No
12	Atonement	06:10	Mixed	Yes	No
13	Final Confluence	02:06	Mixed	Yes	No
14	The Crossing	01:57	Mixed	Yes	No
15	Reclamation	02:16	Mixed	Yes	No
16	Nadir	03:36	Mixed	Yes	No
17	Apotheosis	07:06	Mixed	Yes	No
18	I was Born for This	04:40	Mixed	Yes	No
	Summary	**58:44**	**1 Instrumental 17 Mixed**	**16/18**	**0/18**

2.10.3. The Unfinished Swan

Table 60: General information for <u>The Unfinished Swan</u>

Game full title	The Unfinished Swan
Developer	Giant Sparrow
Publisher	Sony Computer Entertainment
Year	2012
Genre	Adventure game
Composer	Joel Corelitz
Awards	- 2013 *BAFTA* Game Awards: Original music (nominated)

The Unfinished Swan employs a four-note figure as a cell (as opposed to a motif) due to its developmental nature. The *Swan cell* is first heard on the celesta (figure 167) in *The Unfinished Swan* (track 1) (00:00 – 00:10). When the a*cciaccatura* and *echappée* ornamentation is removed, the *Swan cell* appears in its simplest form: the four notes Eb – Db – C – Bb. After the celesta introduction, a harp retrogrades the motif (not an exact retrograde since the pitches are changed: C – Db – Eb – F) (00:14 – 00:27). A synthesised keyboard repeats the harp retrogradation accompanied by *staccato* strings (00:35 – 00:40), followed by a violin statement of the retrograded cell (00:52 – 01:32).

Figure 167: The <u>Swan cell</u> (with ornamentation)

Figure 168: The Swan cell (without ornamentation)

Palace Minuet (track 2) features a thematic transformation of the *Swan cell*. The four-note descending figure is transposed to C major and preceded by the second note in the sequence, resulting in a new motif (*Palace Minuet motif*) that is used as the building block of the entire composition (figure 169). The *Palace Minuet motif* is heard on a synthesised harpsichord, accompanied by *pizzicato* and *arco* string. The 32th notes resembls ornamentation typically used in baroque harpsichord writing, supported by two perfect cadences (C: I – V – I) (00:24 – 00:27; 01:09 – 01:12). The harpsichord and string orchestration, supported by functional harmony and baroque ornamentation, creates a regal impression.

Figure 169: Palace Minuet motif

In *Monroe's Story* (track 3) (figure 170), the *Swan cell* appears in 8th notes as part of a descending scale (00:12 – 00:16)

Figure 170: The Swan cell in Monroe's Story

The Watchtower (track 5) continues the illusion of "royal music"; after a synthesised virginal plays an introductory solo in C minor, (00:00 – 00:14), a solo violin plays the *Swan cell* in retrograde as the foundation for *The Watchtower thematic transformation* (figure 171). The virginal continues to accompany the solo violin, with synthesised strings supporting the harmonic structure. The *Watchtower thematic transformation* appears twice in this track (00:14 – 00:26; 01:36 – 01:47).

Figure 171: *The Watchtower thematic transformation*

In *New Growth* (track 6), the *Swan cell* is heard in retrograde on a synthesiser in F# major (03:07 – 03:19). Through permutation, the *Swan cell* is reorganised to create the *Reverie ostinato* in *Palace Reverie* (track 9) (figure 172). Although the pitches of the *Swan cell* remains the same (Eb – Db – C – Bb), *Palace Reverie* is in the key of Ab major (as opposed to Eb Aeolian in track 1). The *Reverie ostinato* is played on harpsichord doubled by a synthesiser throughout the entire track. The pitches of the *Swan cell* is varied, reappearing on the harpsichord as the *Reverie theme* (figure 173) (00:15 – 00:28; 00:43 – 00:56; 01:25 – 01:38).

Figure 172: Reverie ostinato

Figure 173: Reverie theme

In Labyrinth (track 11), the *Swan cell* is transposed to D Dorian (D – C – B – A) and the notes shuffled (D – A – B – C) to create the *Labyrinth ostinato* (figure 174). A synthesised metallophone plays this *ostinato* figure from 00:06 till the end of the track.

Figure 174: Labyrinth ostinato

The Deluge (track 12) features the *Swan cell* transposed and permutated: Eb – D – C – Bb is rearranged as C – Bb – C – D – Eb. First heard on an electric guitar solo (00:09 – 00:23), the *Deluge ostinato* (figure 175) is later doubled by strings (00:24 – 01:07; 01:52 – 02:36). Due to the excessive use of percussion, as well as a strong rhythmic drive, this composition could be labelled as an "epic" track.

Figure 175: Deluge ostinato

Statue Garden (track 13) features an interesting variation on the *Swan cell*; the transposed (C major) descending sequence of G – F – E – D is altered to G – F – E – C, a change that creates a stronger impression of a triad (C – E – G). The *Garden cell* is first heard on a clavichord (figure 176) and forms the melodic and rhythmic foundation for the entire track.

Figure 176: Garden cell

Although the succession of notes on the piano could be dismissed as a scale extract in *Lights Out* (track 14), the *Swan cell* is pivotal in a statement and retrograde, between the peak (Bb) and nadir (Db) (00:04 – 00:09) (figure 177).

Figure 177: The <u>Swan cell</u> in <u>Lights out</u>

The Unfinished Swan comes to a close with *The Monument Falls* (track 15). The *Swan cell* makes its final appearance, starting with a retrograde statement on the violins resulting in the *Monument Falls Theme* (00:59 – 01:20) (figure 178). The theme is echoed on a piano (01:52 – 02:02) before a synthesiser recalls the *Palace Minuet theme*.

Figure 178: Monument Falls Theme

The instrumental orchestration is used to create an emotional score, while the synthesised electronic sounds result in a counter "playful" feeling. Combined, *The Unfinished Swan* has a mixed orchestration score that "acts as a lens into Monroe's state of mind" (Taljonick 2012).

Table 61: <u>The Unfinished Swan</u> statistics

#	Track name	Track time	Orchestration	Thematic track	Epic qualities
1	The Unfinished Swan	02:05	Mixed	Yes	No
2	Palace Minuet	01:13	Mixed	Yes	No
3	Monroe's Story	04:15	Mixed	Yes	No
4	Empty City	03:00	Mixed	No	No
5	The Watchtower	02:14	Mixed	Yes	No
6	New Growth	04:18	Mixed	Yes	No
7	The Laziest Giant Who Ever Lived	00:56	Mixed	No	No
8	The King's Dream	02:03	Mixed	No	No
9	Palace Reverie	01:59	Mixed	Yes	No
10	Spider Forest	04:06	Mixed	No	No
11	Labyrinth	03:05	Mixed	Yes	No
12	The Deluge	03:51	Mixed	Yes	Yes
13	Statue Garden	03:06	Mixed	Yes	No
14	Lights Out	03:52	Mixed	Yes	No
15	The Monument Falls	03:23	Mixed	Yes	Yes
	Summary	**44:14**	**15/15 Mixed**	**11/15**	**2/15**

2.11. Analysis summary

The summary table below compiles the summaries of all the statistic tables that I assembled in this chapter (2.1. – 2.10.).

Table 62: Summary table of all 30 discussed soundtracks

#	Total#	Soundtrack name	Total time	Orchestration	Themes	Epic
			2004			
1	31	Beyond Good and Evil	01:33:58	4/31 Instrumental 27/31 Electronic	13/31	0/31
2	13	Call of Duty	00:39:07	13/13 Instrumental	8/13	0/13
3	20	Primal	01:01:34	20/20 Instrumental	10/20	0/18
			2005			
4	21	Halo 2 (Vol. I)	01:09:28	21/21 Mixed	5/21	0/21
	12	Halo 2 (Vol. II)	01:09:55	12/12 Instrumental	4/12	0/12
5	26	Harry Potter and the Prisoner of Azkaban	00:34:54	25/26 Instrumental 1/26 Mixed	1/26	0/26
6	14	Hitman: Contracts	01:01:14	14/14 Electronic	1/14	0/14
			2006			
7	26	Bully	00:59:02	26/26 Mixed	17/26	0/26
8	42	Shadow of the Colossus	01:15:52	21/42 Instrumental 7/42 Mixed 14/42 Electronic	0/42	0/42
9	12	Tomb Raider: Legend	00:44:59	12/12 Mixed	7/12	6/12
			2007			
10	31	God Of War II	01:19:20	28/31 Instrumental 2/31 Mixed 1/31 Electronic	0/31	24/31
11	37	Mass Effect	01:16:13	4/37 Instrumental 22/37 Mixed 11/37 Electronic	20/37	10/37
12	20	Splinter Cell: Double Agent	01:17:12	20/20 Mixed	0/20	0/20
			2008			
13	12	BioShock	00:17:10	12/12 Instrumental	4/12	0/12
14	N/A	Everyday Shooter	N/A	N/A	N/A	N/A
15	26	Lair	01:10:22	26/26 Instrumental	21/26	17/26
			2009			
16	17	Dead Space	01:00:24	17/17 Instrumental	0/17	0/17
17	11	Left 4 Dead	00:11:06	1/11 Instrumental 10/11 Mixed	11/11	0/11
18	21	World of Warcraft: Wrath of the Lich King	01:17:57	6/21 Instrumental 14/21 Mixed 1/21 Electronic	1/21	8/21
			2010			
19	21	Batman: Arkham Asylum	00:46:53	8/27 Instrumental 19/27 Mixed	21/27	9/21
20	35	Dragon Age: Origins	01:02:51	34/35 Instrumental 1/35 Mixed	16/35	18/35
21	20	Uncharted 2: Among Thieves	00:55:50	19/20 Instrumental 1/20 Mixed	7/20	11/20

			2011			
22	22	Bastion	01:00:30	22/22 Mixed	13/22	0/22
23	24	Fable III	01:12:30	20/24 Instrumental 2/24 Mixed 2/24 Electronic	10/24	2/24
24	16	Heavy Rain	00:40:18	16/16 Instrumental	7/16	0/16
			2012			
25	25	Deux Ex: Human Revolutions	01:08:01	25/25 Mixed	0/25	7/25
26	23	inFAMOUS 2: Blue Soundtrack	01:14:53	23/23 Mixed	7/23	6/23
	22	inFAMOUS 2: Red Soundtrack	01:17:59	22/22 Mixed	4/22	2/22
27	18	The Elder Scrolls V: Skyrim (Disk 1)	01:03:11	13/18 Instrumental 5/18 Mixed	15/18	1/18
	16	The Elder Scrolls V: Skyrim (Disk 2)	00:56:13	9/16 Instrumental 7/16 Mixed	8/16	1/16
	18	The Elder Scrolls V: Skyrim (Disk 3)	00:56:51	9/18 Instrumental 9/18 Mixed	6/18	1/18
	1	The Elder Scrolls V: Skyrim (Disk 4)	00:42:34	1/1 Mixed	0/1	0/1
			2013			
28	25	Assassin's Creed III	1:03:43	25/25 Mixed	12/25	14/25
29	18	Journey	00:58:44	1 Instrumental 17 Mixed	16/18	0/18
30	15	The Unfinished Swan	00:44:14	15/15 Mixed	11/15	2/15
	717	**Summary**	**33:44:59**	**318/717 Instrumental 329/717 Mixed 70/717 Electronic**	**282/717**	**319/717**

Chapter 3: Conclusion

3.1. Introduction

Employing a random sampling technique, I have analysed 30 soundtracks for this dissertation. The analysis summary table in chapter 2 (table 62) will be interpreted in this chapter, focusing on thematic evaluation, orchestration, and the appearance of the epic idiom. In this concluding chapter I will answer my research questions, which are:

- Can a musical idiom be derived for award-nominated video game soundtracks? If so, what features would this idiom possess?

The sub-questions are:

- What musical aesthetics are prevalent in award-nominated video game soundtracks between 2004 and 2013?
- Do award-academy panels favour thematic orientated video game soundtracks?
- Do award-academy panels prefer instrumental or electronic (synthesised) orchestration for video game soundtracks?
- Does the presence of the epic idiom influence the judgment of the nomination committees?
- What is the relationship between thematic material and the epic idiom in award-nominated video game music?

3.2. Thematic evaluation

According to the chart 1, the relationship between thematic and non-thematic tracks runs in a cycle of three or four years; the closest relations between thematic and non-thematic tracks were in 2004 (31 thematic, 33 non-thematic), 2008 (25 thematic, 13 non-thematic), and in 2011 (30 thematic, 32 non-thematic). Composers in 2005, 2006, 2007, and 2012 wrote more non-thematic music for their soundtracks, while thematic music dominated in 2008, 2010, and 2013. The linear trendline in chart 1 also suggests that thematic material in video game soundtracks is increasing, although tracks that contained thematic material only comprised 29% of the entire sample pool (chart 2). The low thematic/non-thematic ratio is contributed to ambient tracks and non-thematic soundtracks (such as *Hitman: Contracts*).

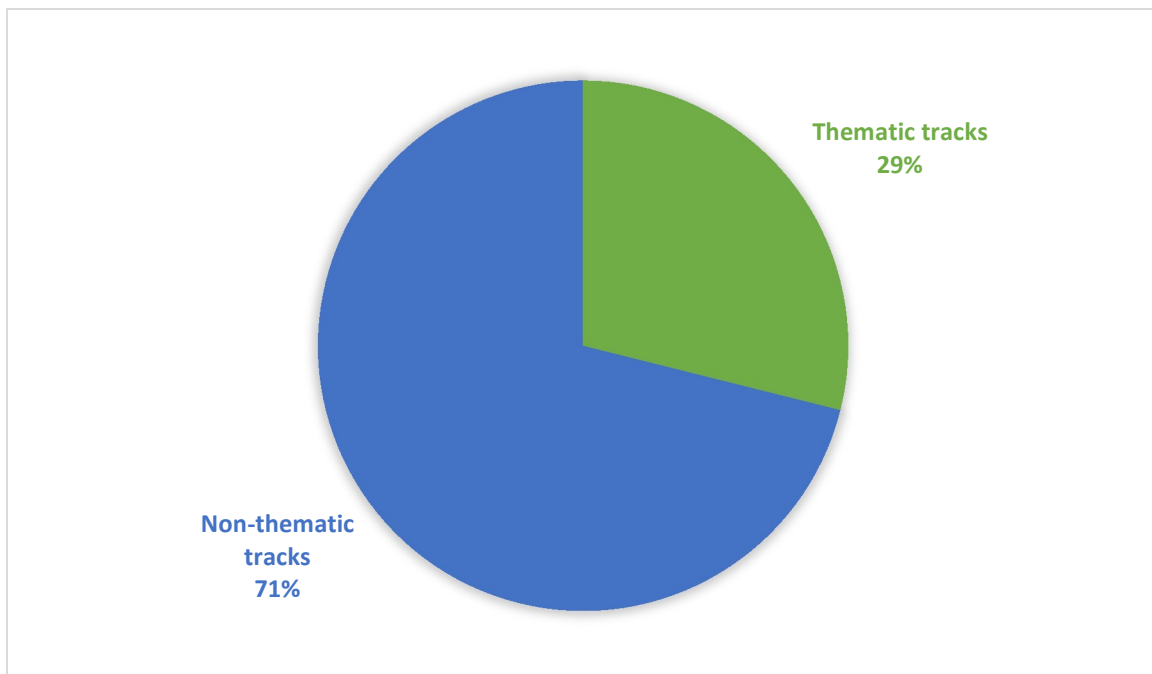*Chart 1: Thematic track count: 2004 – 2013*

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Thematic tracks	31	11	24	20	25	12	50	30	40	39
Non-thematic tracks	33	62	56	68	13	37	32	32	83	19
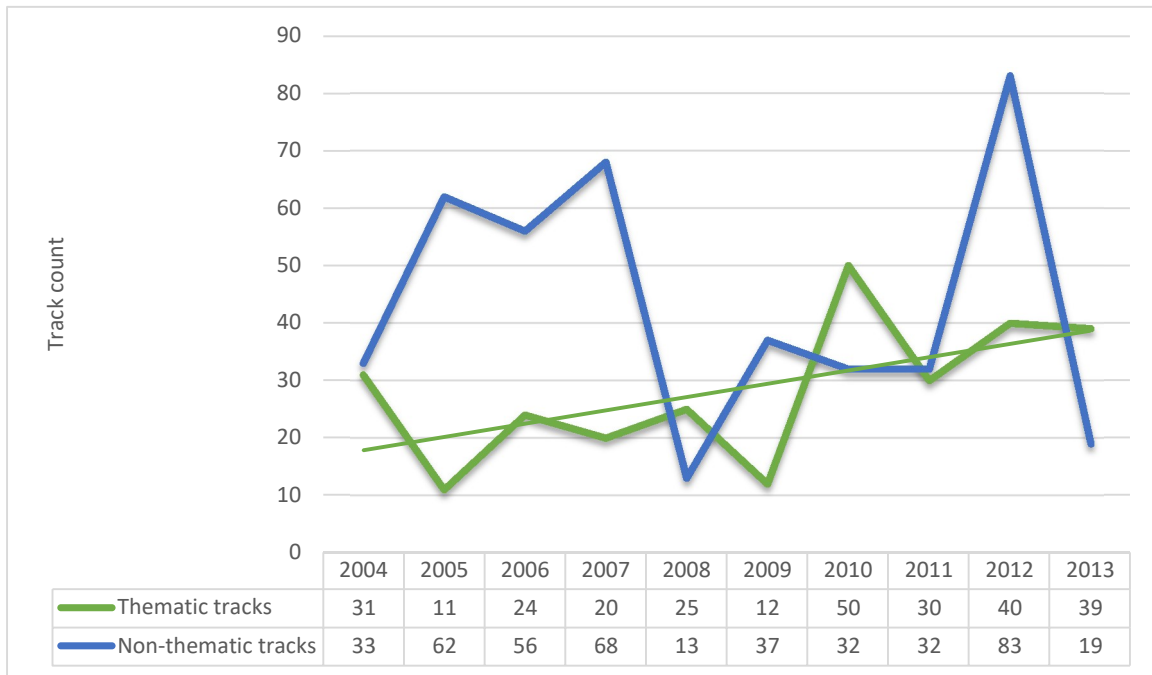
Chart 2: Thematic and non-thematic track ratio: 2004 – 2013

Thematic tracks 29%

Non-thematic tracks 71%

Soundtracks that contribute to thematic dominance include *BioShock*, *Lair*, *Batman: Arkham Asylum*, *Dragon Age: Origins*, *Assassin's Creed III*, *Journey*, and *The Unfinished Swan*. If thematic and motivic music is "an aural code created by the composer to connect to the audience", I would recommend the soundtracks mentioned above as credible models towards the composition of thematically driven video game soundtracks (Rothbart 2013: xvii). By using motifs in the score, thematic unity is retained throughout the soundtrack without distracting the player from the gameplay. I recommend *Batman: Arkham Asylum*, *Journey*, and *The Unfinished Swan* as comprehensive examples for their use of motivic manipulation in video game scores.

3.3. Orchestrational evaluation

According to chart 3, instrumental orchestration remained in use until 2011. After peaking in 2010, instrumental orchestration was increasingly mixed with ambient sound, synthesisers, or Electronic Dance Music. The only year that exclusively employed instrumental orchestration was 2008 (*BioShock*, *Lair*). Although *Everyday Shooter* (2008) contained mixed orchestration (guitars and synthesisers), no data was available for statistical purposes. Electronic orchestration deteriorated[48] until 2007, although *Left 4 Dead* (2009) and *Fable III* (2011) used synthesisers[49]. From 2008[50] onwards, the sound quality of sample libraries increased to the point where distinguishing between real- and electronic instruments became problematic to the untrained ear. The quality of samples used today cannot be mistaken to be "synthesised" instruments anymore[51]. The linear trendline in chart 3 suggests that the use of mixed orchestration will increase in video game music, while instrumental orchestration will decrease. Despite the growth of mixed orchestration, instrumental orchestration spiked to a climactic point in 2010. Chart 4 illustrates the ratio between the orchestration models that I studied: 44% of video game tracks contains instrumental orchestration, 46% mixed orchestration, and 10% electronic orchestration.

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[48] 2004: 27 tracks; 2005: 14 tracks; 2006: 14 tracks; 2007: 12 tracks.
[49] *Left 4 Dead* had one electronic track, whilst *Fable III* had two.
[50] 2008 is a reference to the orchestration methods of selected video game soundtracks in my study. This should not to be confused with any technological events that took place in the audio industry in 2008.
[51] Unless the soundscape design of the game soundtrack is intentionally electronic.

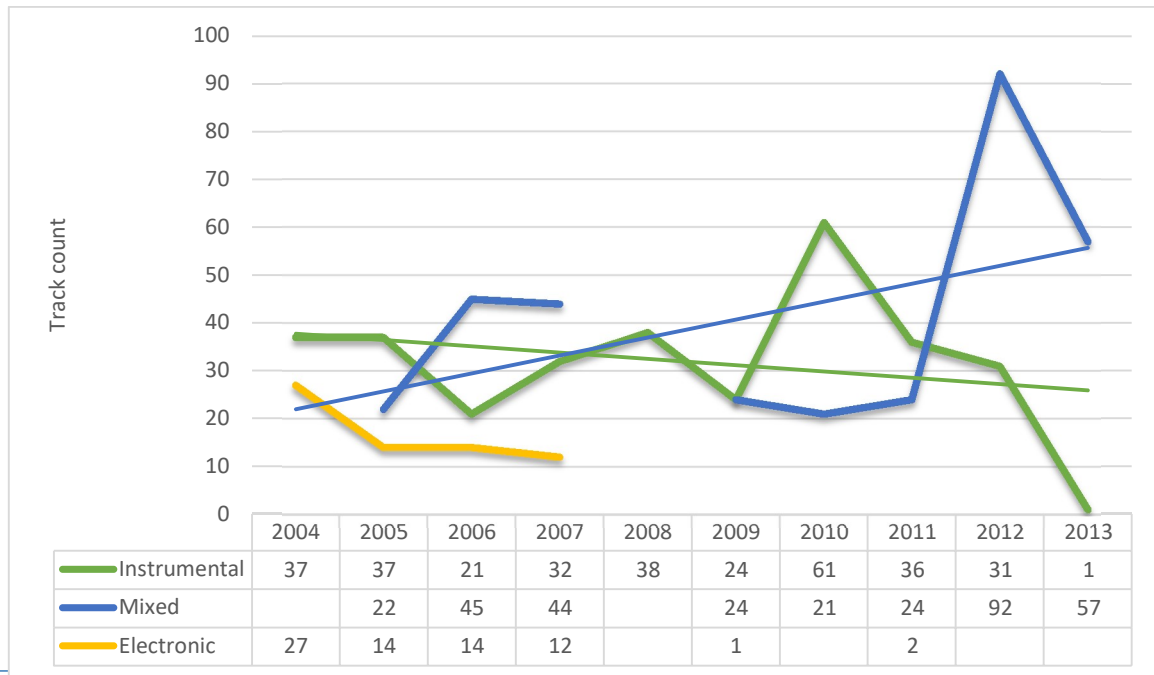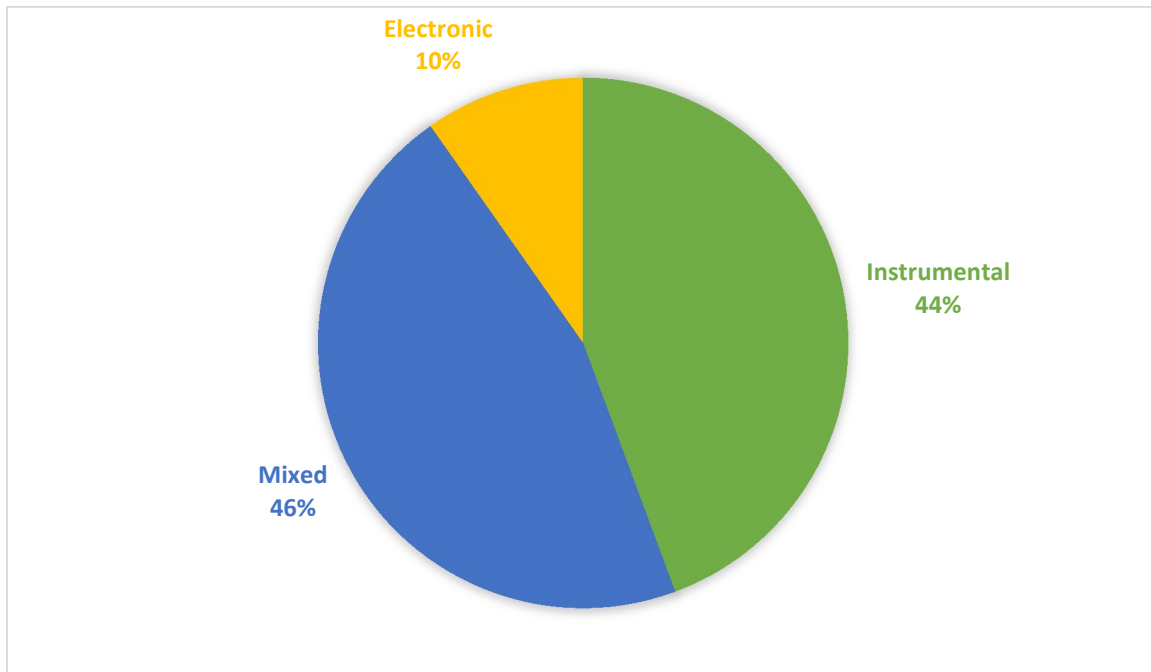*Chart 3: Orchestration models: 2004 – 2013*

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Instrumental	37	37	21	32	38	24	61	36	31	1
Mixed		22	45	44		24	21	24	92	57
Electronic	27	14	14	12		1		2		

Chart 4: Orchestration model ratio: 2004 – 2013

Electronic 10%

Instrumental 44%

Mixed 46%

3.4. Epic musical idiom evaluation

In my study, the epic musical idiom made its first appearance in the 2006 soundtrack for *Tomb Raider: Legend* (chart 5). The epic idiom gained an almost six-fold popularity[52] in 2007, while the soundtrack for *Lair* in 2008 bridged the closest gap between epic- and non-epic music in my study. The year with the biggest cavity between epic- and non-epic music was in 2012, which can be attributed to *The Elder Scrolls V: Skyrim*'s soundtrack; *Skyrim*'s soundtrack is large (4 disks) and contains more sweeping orchestral music than music fixed on the epic idiom. Although James Horner suggested that the epic idiom is not compatible with thematic material[53], my research (chart 7) found that thematic material and the epic idiom are compatible [54] (DP/30: The Oral History of Hollywood 2013). Horner's interpretation might be applicable to film music, but his commentary is inapplicable to video game scores. Data from soundtracks containing the epic idiom was compared in chart 7, illustrating the connections between epic the idiom and thematic material. The strongest connections between the epic idiom and thematic tracks were in 2010, featuring *Batman: Arkham Asylum*, *Dragon Age: Origins*, and *Uncharted 2: Among Thieves*. The linear trendline in chart 7 suggests that the epic idiom will become more popular in the music of future video games. After conducting my research, I defined the epic musical idiom as follow:

Table 63: Definition of the Definition of the Epic musical idiom

Epic musical idiom: (*Noun*) A style of diegetic music used predominantly in film, television, and video games that started in the 1990s. Hans Zimmer (who popularised the epic musical idiom with film audiences) made important contributions to this genre. As a pluralist postmodern musical genre the epic musical idiom is resistant to definition. However, common orchestration characteristics include slow (often heroic) brass melodies accompanied by ostinato string patterns that are propelled by a percussive force (notably bass- and taiko drums). Choral melodies (possibly inspired by Carl Orff's *Carmina Burana*) could also join the ensemble.

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[52] The appearance of the epic idiom increased from 6 tracks in 2006 to 34 tracks in 2007
[53] In the context of film music.
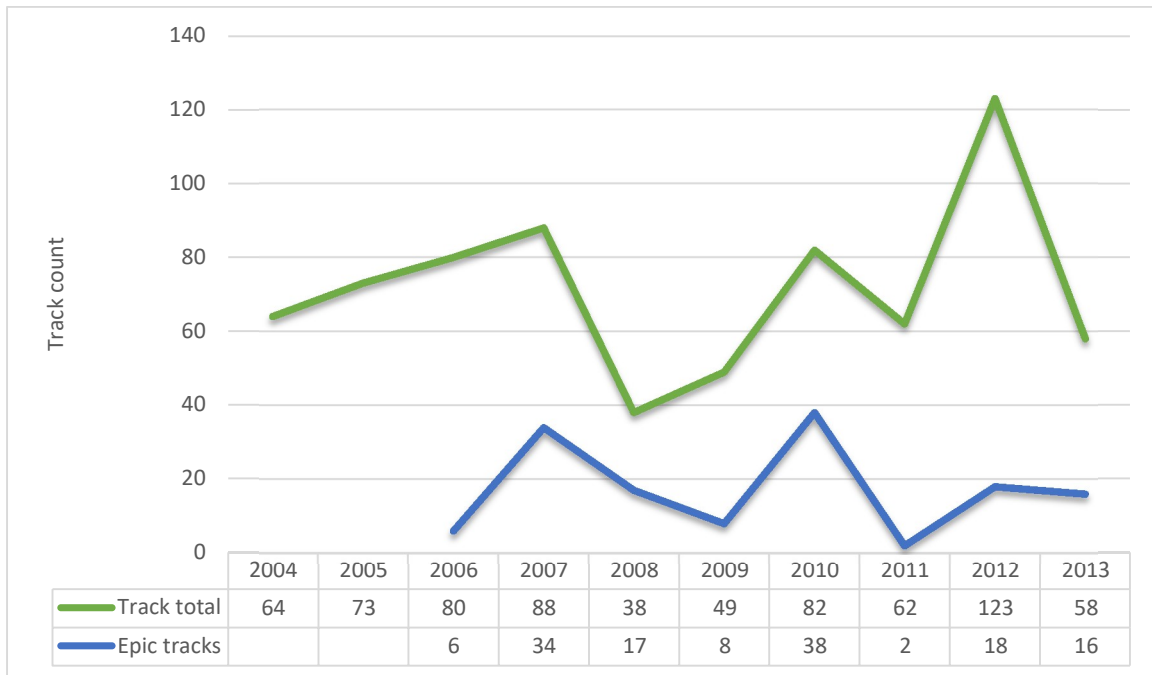[54] In the context of video game music.

Chart 5: Epic tracks

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Track total	64	73	80	88	38	49	82	62	123	58
Epic tracks			6	34	17	8	38	2	18	16

Chart 6: Epic and non-epic track ratio (2006 – 2013)

Epic tracks
24%
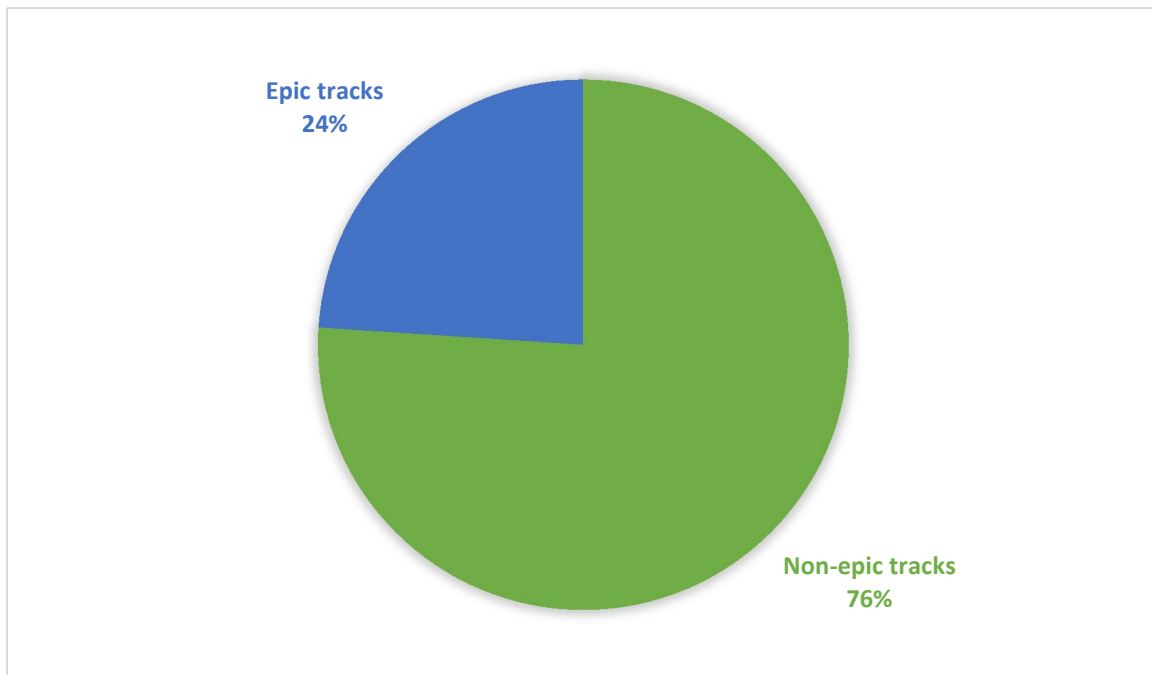
Non-epic tracks
76%

Chart 7: Soundtracks containing epic- and thematic tracks (2006 – 2013)

	2006	2007	2008	2009	2010	2011	2012	2013
Thematic tracks	6	34	17	8	38	2	18	16
Epic tracks	7	20	21	1	44	10	40	23
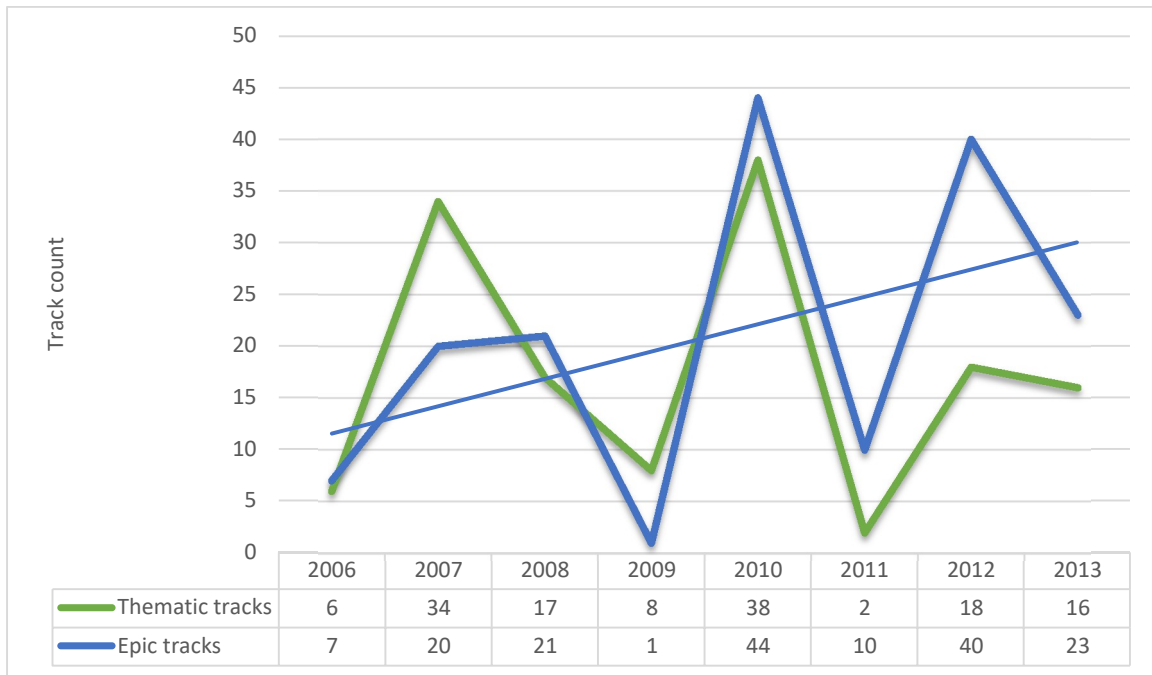
3.5. Constructing a model musical idiom for video game soundtracks

After analysing thirty soundtracks, I came to the conclusion that it is not possible to construct one singular musical idiom for award-nominated video games. Only 43% (13 soundtracks) of my study won awards, which did not feature constant musical features or values[55]. Each game video (and each individual track) has different musical requirements. Although I cannot predict the exact formula that will ensure any award nomination (let alone an award), I can make suggestions towards an award-nominated video game musical idiom based on my research. My analysis in chapter 2 investigated musical aesthetics prevalent in video game soundtracks between 2004 and 2013. As discussed earlier in this chapter, I found that the analysed soundtracks favour melodic thematic material, mixed orchestration, and the usage of the epic musical idiom. With these musical attributes are gaining popularity[56], I can now argue that these musical aesthetics contributes to the success of soundtracks at academy-award prize ceremonies. The constructed model named the *Video game award academy musical idiom model* is illustrated in table 64. Since the model condenses my research, the model is a representation of the soundtracks as a whole and the associated award academies. I, therefore, argue that the model collectively represents the award academies and their musical preferences. As an embodiment of the award academies, I believe my model exemplifies a popular (and prevalent) musical preference, shared between the award academies and a majority of the players; developers hire composers to create soundscapes according to a specific vision that will accommodate the game and the player. Since my model represents what adjudicators and audiences prefer to hear, I argue that my model can be used as possible music criteria for award academies. Although the model summarises the musical attributes contained in this dissertation, it should be noted that the usage of the epic music idiom could be superfluous[57] subject to the soundscape- and game design.

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[55] Whilst both *Hitman: Contracts* and *Journey* won *BAFTA* awards, their musical value cannot be matched. When compared, *Hitman: Contracts* does not feature the orchestral and thematic intricacies of *Journey*.

[56] As seen in the ascending trendlines in charts 1, 3, and 7.

[57] Example: the epic music idiom was irrelevant for *The Unfinished Swan*, which was aimed at a young market.

Table 64: Video game award academy musical idiom model

Award-nominated video game music is typically characterised by three musical characteristics: the usage of themes and motifs, mixed orchestration (blending electronic synthesisers with orchestral instruments) and the inclusion of the epic music idiom. These musical attributes have no set hierarchy; the composer should judge the variables (decision squares) depending on the needs of each track. The *Video game award academy musical idiom model* could also be considered to be a possible criterion by which award academy panels select music nominations.

Now that a model has been constructed, I will create a flowchart that illustrates the usage and implementation of the model. Constructing the audio aspects for any video game requires a soundscape[58], determined by the creative director. Sanders Huiberts (2010: 25 – 29) created the *IEZA model* (figure 179) that illustrates the different types of sound used in video games. Divided between four quadrants[59], the IEZA model starts with the *Interface* domain that represents sounds outside of the game world, such as sounds associated with the main-menu interface. The *Effect* domain signifies sounds heard as result of the players' interaction with the game world, including sounds such as footsteps, and breathing. The *Zone* domain embodies environmental sounds in the game world, such as weather sounds[60]. The *Affect* domain represents sounds that emotionally influence the player, notably music. Writing a soundtrack, the composer has to ensure his score collaborates with the different sounds created by the audio department.

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[58] A soundscape is the collective sum of all the audible sounds used in an immersive environment. Traux (2001: 11) writes that "a soundscape is not engaged in a passive type of energy reception, but rather is part of a dynamic system of information exchange."
[59] Diegetic/non-diegetic/setting/activity.
[60] For example wind, thunder, or rain.

Figure 179: IEZA model

IEZA Framework for game audio
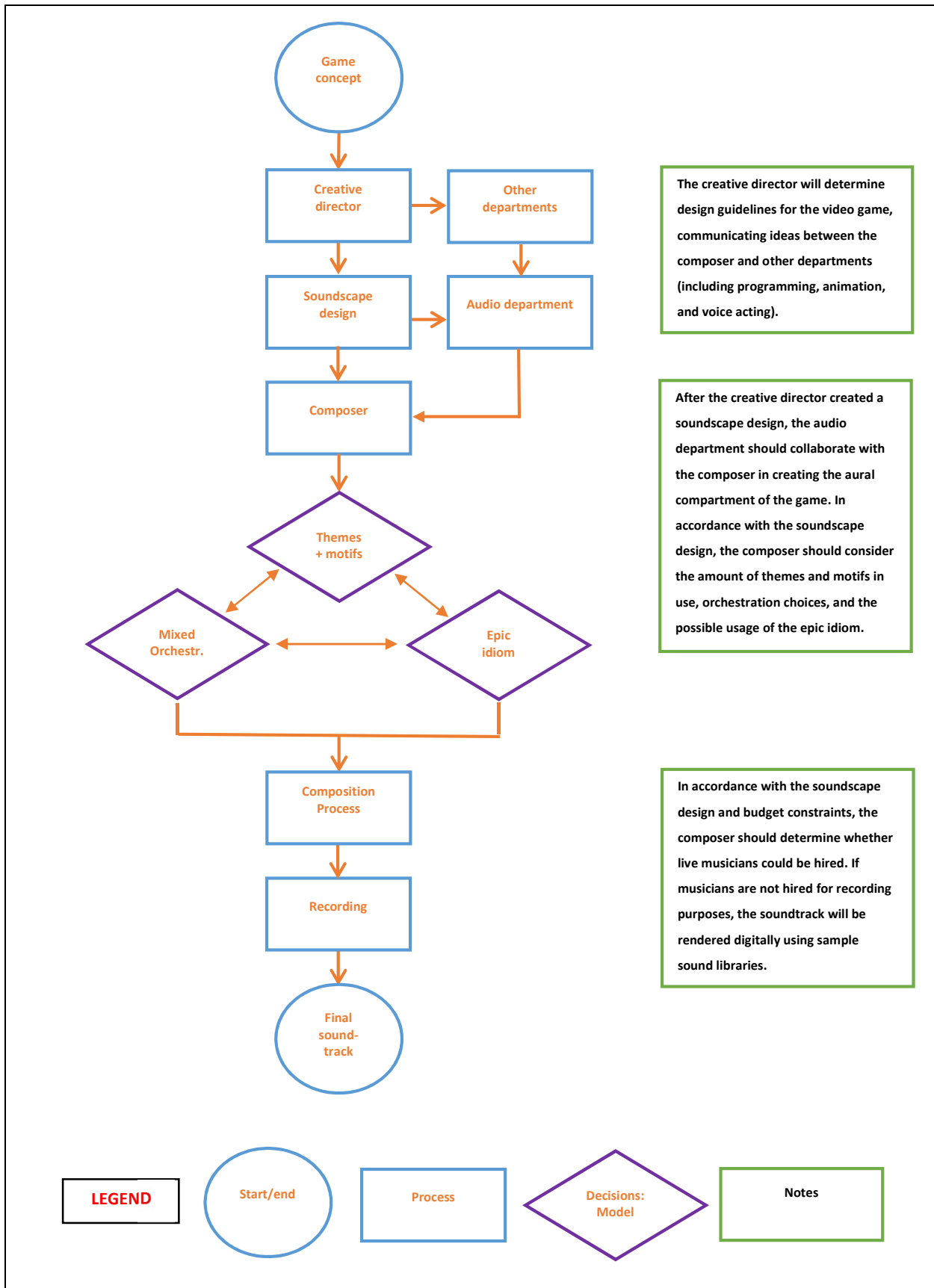
(Huiberts 2010: 25.)

Chart 8 demonstrates the implementation of the model in a soundtrack, where the model is indicated by purple decision boxes (see the legend at the bottom of the chart for the meaning of the other boxes). The notes on the right-side of the table (in green boxes) provide a textual explanation of the illustration.

The creation process illustrated in chart 8 is a possible interpretation of reality. In some cases[61] the creative director might not be involved with sound/music, focusing their attention on other aspects. In many cases creative directors have no interested in the audio aspect at all, resorting to "last minute" composers to create a soundtrack[62]. Games designed without an audio vision are unlikely candidates for any sound nominations, unless the composer is lucky/gifted and is granted free reign. I recommend that all creative directors (AAA and indie alike) create a soundscape and hire a composer at the start of the project. A creative director without an encompassing vision for a game should reconsider their position in the company.

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[61] The staff size of indie studios could exclude a creative director; a lead programmer often includes a directing role.

[62] Composer Jeff Ball comments on his experience in the industry: "[…] music is usually side-lined as a last minute addition that gets contracted out to people who work from home, unless you got lucky" (Greening 2014a).

Chart 8: Implementing the Video game award academy musical idiom model

The creative director will determine design guidelines for the video game, communicating ideas between the composer and other departments (including programming, animation, and voice acting).

After the creative director created a soundscape design, the audio department should collaborate with the composer in creating the aural compartment of the game. In accordance with the soundscape design, the composer should consider the amount of themes and motifs in use, orchestration choices, and the possible usage of the epic idiom.

In accordance with the soundscape design and budget constraints, the composer should determine whether live musicians could be hired. If musicians are not hired for recording purposes, the soundtrack will be rendered digitally using sample sound libraries.

3.6. Responsibility: Creative director and Composer

Most reviewers chastised composer Russel Shaw for the "disappointing" soundtrack of *Fable III*. Although the composer has a certain amount of responsibility, the music of any video game is determined by the lead designer or creative director (which in the case of *Fable III* is Peter Molyneux[63]). Another prominent example is the soundtrack for *Tomb Raider: Underworld*, where creative director Eric Lindstrom asked Troels Folmann and Colin O'Malley to write an "ambient, emotional type of score" (Coleman 2008). The musical ideas presented by composers to the lead designers may be rejected if the music does not fit the production vision. I am reminded of an interview with composer Christopher Gunning in the documentary *Being Poirot* (2013), where the composer's ideas were inappropriate:

> […] I presented Brian Eastman with four different tunes. And he rang me up the next day and said: 'Well, I've listened to all four of them, and number four is my favourite.' And I was mighty disappointed because number one was mine [Gunning's favourite]. […] And of course, he was right and I was wrong.

The creative director cannot be expected to have a perfect vision for the music of a video game or film, unless he/she is a trained musician. Aspiring developers (especially smaller independent studios who might have limited experience in the industry) should look to award-academies and respected video game soundtracks for guidance. Many game developers deem music irrelevant to the creative process, resulting in countless incidents[64] where composers were hired during the final stages of game development. If musical ideas are not implemented into game design from the beginning of development, the composer cannot be expected to write an astounding score in a matter of days[65]. It is in the developers' best interest that music- and sound production should be implemented at the start of development, resulting in artistic integration instead of a last-minute impediment.

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[63] Peter Moleneux (1959 –) is a notable English video game designer.

[64] Example: Greening (2014b) reports how composer Norihiko Hibino (1973 –) (日比野 則彦) was hired at the "last minute to create 90 minutes of music" for *Metal Gear Solid 4: Guns of the Patriots*.

[65] Although unreasonable, many successful film- and video game scores were composed shortly before the public premiere.

3.7. Award academies and politics

Except for a few soundtracks, I thought to be especially forgetful[66] (non-thematic), most soundtracks selected by award academy panels feature memorable thematic material and interesting orchestration. Despite the odd choices here and there, I can now argue that award academies nominate video games based on musical merit. Even though the selected committees may not be trained musicians, their nominee selections are based on musical merit. Despite budget limitations, the production value for the music of independent games are rising – and award academies are taking notice. My sample pool included four soundtracks of independent games, including *Everyday Shooter* (2008), *Bastion* (2011), *Journey* (2013), and *The Unfinished Swan* (2013). Since award academies consider the soundtracks for independent video games as part of the nomination process, my findings in my research confirm that award academies are not biased in favour of AAA- or independent developers.

Recently, an esteemed music panel chose the participants for a local music competition[67]. The selection of musicians was doubtful, including virtuosic and feeble musicians. Only a few students of a certain renowned teacher were selected as participants, which passed through the mediocrities into the final round. One possible explanation is that this teacher only had a few prized students. My counter-narrative suggests that the competition panel limited the entries of students who studied under the celebrated teacher, thereby encouraging students from other teachers to participate in the competition as well. Many participants would be discouraged from entering the competition if a majority of the competition candidates comprised of students who studied under the famous teacher. Since sub-standard musicians were allowed to compete with virtuosi[68], I suggest that the competition panel was *political* in the participant choices, accommodating a wide range of teachers and their artistic egos. Likewise, I argue that award academies are political in their nominations. I will illustrate political nominations using *Skyrim* as an example.

Skyrim won numerous awards in 2012, receiving nominations in almost every category. It is no surprise that *Skyrim* did not win any music awards; award panels carefully calculate their choices with regards to prestigious games. Although I believe that *Skyrim* should have won[69] music awards

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[66] *Hitman: Contracts*, *Splinter Cell: Double Agent*, *Deus Ex: Human Revolutions*.
[67] The name of this competition will remain anonymous for the protection of my own interest.
[68] A competitor pool comprising a range of talents (or the lack thereof) could be considered to be quasi-democratic.
[69] The soundtrack for *Skyrim* was more thematically diverse than *Deux Ex: Human Revolutions* or *inFAMOUS 2*.

for Jeremy Soule's impressive four disk soundtrack, I comprehend that award academies have to keep the gaming developer community content, providing every game an equal opportunity to win an award. The gaming- and developer community would have reacted negatively if *Skyrim* won awards in most categories.

3.8. The role of indie music in academy award nominations

My study included four soundtracks for indie games: *Bastion*, *Everyday Shooter*, *Journey*, and *The Unfinished Swan*. All four of these soundtracks offer interesting musical choices that set them apart from AAA titles: *Bastion* had a few songs (with guitar accompaniment comparable with popular contemporary music), *Everyday Shooter* consisted solely of different guitar timbres, *Journey* was described as a "cello concerto", and *The Unfinished Swan* musically emulated the playful innocence of a child through a score that "acts as a lens into Monroe's state of mind". These indie scores are conceptually different from the production value associated with AAA video game soundtracks; indie video game soundtracks represent the "creative freedom" suggested by Sam Paterson (2014).

Furthermore, these indie games break away from the narrative represented by AAA games. While AAA games explore large-scale production values (see 1.1. Introduction), indie games break away from consumer-oriented entertainment, moving toward artistic endeavours. The narrative of *The Unfinished Swan* is seen through the eyes of a child, while the story of *Journey* is told without words. Narrative disappears completely in *Everyday Shooter*, reminiscent to the early non-narrative video games, such as *Space Wars* (1977). AAA titles cannot be accused of being unartistic, but Paterson is correct in suggesting that indie games (and subsequently, their soundtracks) have more creative freedom than their AAA competitors. Composers can afford to make unusual musical choices for the sake of artistic freedom. In the recent (2015) indie video game *Everybody's Gone to the Rapture*, composer Jessica Curry used religious (Biblical) texts as lyrics. Curry's unusual choice of religious texts in a secular video game is an artistic liberty not regularly seen in AAA games. Curry's composition *The Light We Cast* in *Everybody's Gone to the Rapture* is a rare appearance in video game scores: an acapella choral song. (Smal 2016.)

Curry continued to win various awards for her score for *Everybody's Gone to the Rapture*, including a *BAFTA* award (2016). If both *Journey* and *Everybody's Gone to the Rapture* won various video game awards for their soundtracks then we can deduce that the award academies do take artistic merit into consideration. *Monument Valley* (2014) is another indie game that won a *Unity Award* (2014) in the category "Best 3D Graphics". *Monument Valley* was an interesting nomination since it is a mobile

video game (as opposed to a computer/console video game with higher rendering capabilities). This further supports my claim that video game award academies do take artistic merit into consideration. Although the artistic merit of AAA games is still a topic of debate which warrants further research, Indie games and their corresponding soundtracks has the ability to lead award nominations for artistic merit.

3.9. Philosophical implications

Using the philosophical concepts established by Gadamer (see 1.6.1 Philosophical foundation) I must determine what the implications are of using his philosophy in my dissertation. As mentioned earlier, Gadamer (1977: 4 – 5) described hermeneutics as "the experience of alienation of the aesthetic consciousness and the experience of alienation of the historical consciousness". If the adjudicators are general field experts (instead of musical experts, see 1.1. Introduction), does their musical knowledge suffice to make informed nominations? A historically-informed knowledge of video game music is a necessary requirement for panel members that adjudicate video game music, since it (in part) determines their view of the aesthetic and the artistic.

Since I cannot interview adjudication panel members (see 1.6.3. Approaching award academies) I made phenomenological deductions through analysis (the *Video game award academy musical idiom model*); through analysis I came to truth (or an interpretation of it) which is substantiated through my research questions. Although my model exemplified the musical preferences of video game award academies, it cannot answer the question 'How do video game award academies make musical nominations?' Are the nominations based on a popular aesthetic or are there other factors at play as well? Non-musical factors that could be considered include sound integration[70] in the game, popular opinion, and sales figures. If musical attributes are not the sole consideration of award academy adjudicator panels then musical nominations possibly shift from artistic merits to popular opinion. When award academies make a musical nomination for the best soundtrack, what does 'best' mean? The most artistic or the most popular? Award academies occasionally make odd choices, such as the nominations for *Hitman: Contracts* and *God Of War II*[71]; these nominations may be aesthetically pleasing, but they are not innovative or memorable[72]. These questionable

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[70] Sounds intergration in the context on video game includes the way the game's source- sounds and music responds to the player's interactions within the context of the game.

[71] As Spencer D (2007) commented about *God Of War II*: "[…] the score never really lets up and is definitely more attuned to being part of the overall gaming experience of God Of War II than as a stand alone musical experience. Of course those who are enraptured by the game will no doubt disagree and wish to own it for themselves."

[72] See my analysis of these soundtracks in Chapter 2 (2.2.3. Hitman: Contracts, 2.4.1. God Of War II).

nominations may be indicative of popular opinion instead of artistic merit. If video game award academies wish to maintain the highest standards they must be transparent about the nominations and the nomination process.

I suggest that award academy panel members should be field specialists and not general experts. Select adjudicators should judge specific categories. With a profound knowledge of selected fields (music and other fields alike) adjudicators can make informed selections. When the historic consciousness of adjudicators reflects years of accumulated knowledge then nominations (along with criticism) will arise that compel developers towards excellence. The popular choice may not always be the most artistic choice, since art [according to Gadamer (1977: 104)] is "a shattering and a demolition of the familiar", a "frightening shock […] [that] says to us 'Thou must alter thy life!'"

Gadamer's hermeneutic aesthetics could strengthen the nomination process of video game award academies. Adjudicators should not solely rely on aesthetics but also include an analytic approach. Through the combination of aesthetics and analysis adjudicators can make artistic decisions that recognise hermeneutics as means to art's realisation. Beyond the popular opinion (that is, ethical- and cultural expectations) hermeneutic aesthetics has the ability to demonstrate to worldwide audiences why and how video game award academies make nominations. Video game music should be judged by panel members who have knowledge (and better yet, experience) with the creation process of video game music. An individual with historic knowledge and first-hand experience of video game music should be a promising adjudicator. I further suggest that adjudicators should be able to link their nominations with analysis that interacts with diverse discourses and theories. An interdisciplinary approach to nominations beyond ludo- and musicology will further strengthen the nomination value of award academies. Gadamer's debate on hermeneutics is especially applicable to the adjudication process by video game award academies:

> The genuine researcher [and adjudicator] is motivated by a desire for knowledge and by nothing else. And yet, over against the whole of our civilization that is founded on modern science, we must ask repeatedly if something has not been omitted. If the presuppositions of these possibilities for knowing and making remain half in the dark, cannot the result be that the hand applying this knowledge will be destructive?

(Gadamer 1977: 10.)

3.10. Recommendations for further study

When I initially started my research, I thought most ludomusicologists dwelled back to old games since they might be old-fashioned and outdated. After my first year as a post-graduate student, I realise that most researchers do not have sufficient time to play new games and research relevant soundtracks. The "publish or perish" attitude of tertiary institutions forces many authors to write about the games (and their corresponding soundtracks) that they are already familiar with. Speaking about my research at a postgraduate conference at the University of Pretoria, I was not surprised that only two hands were raised when I asked the question: "How many of you [the audience] play video games?" With lecturing duties, student appointments, and endless meetings, many researchers do not have sufficient time to play- and research new video games. As a fulltime student, I was privileged to have the time to research and discuss the music of recent video games. While conducting my research, I came across a host of questions and unexplored ideas relating to the soundtracks that I analysed. These queries could be fleshed out for further research.

Ubisoft rehired composer Christopher Héral to create pluralist soundtracks for *Rayman Origins* (2011) and *Rayman Legends* (2013). Héral's musical idiom for these games fit the music of an earlier instalment in the *Rayman* series: *Rayman 2: The Great Escape* (Eric Chevalier). Although Chevalier's soundtrack for *Rayman 2* (1999) was only composed a few years before *Beyond Good and Evil*, Chevalier and Héral's idioms are remarkable similar. Beside the company that unifies these composers (Ubisoft) and their shared nationality (French), the graphic style for the *Rayman* series and *Beyond Good and Evil* are notably "cartoonish". Further research could link the musical motives (reasons) with the graphic design choices, especially since all fantasy games do not employ musical pluralism; *World of Warcraft, Dragon Age*, and *Skyrim* relies on epic- and orchestral music to evoke the outlandish.

Where the unthematic soundtrack of *God Of War II* was an epic orchestral adventure, the music for *Hitman: Contracts*, *Splinter Cell: Double Agent*, and *Deus Ex: Human Revolutions* are notably monotonous. It bothered me why award-academies would nominate such forgettable soundtracks that featured little melodic material. I suggest the panels saw a futuristic connection between the score and the narrative of the three games mentioned above. *Hitman: Contracts*, *Splinter Cell: Double Agent*, and *Deus Ex: Human Revolutions* all featured government conspiracies and human augmentation, possibly referring to a hypertechnological dystopia. In 1972, Stockhausen

commented that electronic music is part of the human evolution[73] towards the super-human (Barboza 2013). If Stockhausen was correct, the featureless electronic soundtracks of the three games mentioned above are perfect companions to their related games. Concerning *God Of War II*, Spencer D (2007) wrote: "[…] the score never really lets up and is definitely more attuned to being part of the overall gaming experience of *God Of War II* than as a stand alone musical experience." If *God Of War II* is not successful on its own (even though it had more musical substance than the three futuristic scores mentioned above), Spencer D affirms what James Horner (and) I believe: diegetic soundtracks[74] needs melodic and thematic material to be memorable.

A few tracks in *Shadow of the Colossus* (*Track 18*: *The Farthest Land* for example) have commercial musical features, such as repeated harmonic structures similar to popular (Pop) music. The *Final Fantasy* soundtracks (composed by Nobuo Uematso[75]) contain similar music (such as *Tifa's Theme* from *Final Fantasy VII*). Further research could establish the connection between Japanese video game music and the popular music idiom, possibly combining ludomusicology and ethnomusicology.

The music of futuristic role-playing games set in the stars (in my study, *Mass Effect* and *Halo 2*) possibly drew inspiration from *The Planets* (Gustav Holst) and *Star Wars* (John Williams). Further research could establish if the composers of stellar futuristic games are influenced by the two celestial composers mentioned above. The obvious exclusion here is the soundtrack of *Dead Space*, since it draws more on horror music. Commenting on the music for *Dead Space*, Elchlepp (2011) writes: "[…] dissonance was nothing new to Western video games — Michael Giacchino's *Call of Duty* and Gary Schyman's *BioShock* had deployed non-melodic sounds frequently – but none of them to the degree that *Dead Space* does." The difference between these scores is that *Call of Duty* and *Bioshock* contains memorable thematic material, while the dissonance *Dead Space* is almost incomprehensible. According to Morasky (in Dyck 2012) the soundtrack for *Left 4 Dead* was inspired by Ligeti[76]. Although *Left 4 Dead* contains aleatoric writing, the motifs associated with the Uncommon Infected zombies imprints repetition and familiarity in the player's subconscious.

The composition quality of *Cohen's Masterpiece* (*BioShock*) can be compared to art music, *alla virtuoso*. Another video game piano showpiece that features high composition value is Nobuo

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[73] Stockhausen mentioned "a terrestrial mutation".
[74] Film- and video game soundtracks.
[75] Nobuo Uematso (植松 伸夫) (1959 –) is a Japanese composer known for his musical contributions to the *Final Fantasty* video game series.
[76] Ligeti's influence here might refer to micropolyphony associated with aleatoric string writing.

Uematso's *For Those Who Fight* (*Final Fantasty VII*). A bar by bar theoretical analysis of both these pieces would be worthwhile, revealing the underlying compositional and theoretical structures of the music.

Inon Zur's main theme for *Dragon Age: Origins* corresponds with the main theme he wrote for *Prince of Persia* (2008): both main themes have female vocalists singing. The idea of a "video game theme song" is a popular trend at the moment, with song including *Zia's theme* and *Zur's theme* (*Bastion*), *Fear not this Night* (*Guild Wars 2*, composed by Jeremy Soule), the choral *Soviet March* (*Red Alert 3*), *Mad World* (*Gears of War*), *Little Girl* (*The Walking Dead Season 2*[77]), and *I was born for this* (*Journey*). Research and analysis could provide a link between these "theme songs" and popular contemporary music.

Although the final model could be considered possible criteria for award academies, the model is not an absolute representation of criteria. Since the main goal of my research was to create a model musical idiom, a set of criteria is not constructed beyond the model that I created. Further research could directly interview award academy panels and explore the academies from within, possibly constructing a model for award criteria. Such an investigation could also reveal what award academy panels expect from the audio department, especially regarding technical details and the implementation of music in a video game (such as looping and stingers).

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[77] The game should not be confused with the television series.

3.11. Final word

Although it is impossible to formulate an absolute model musical idiom for award-nominated video game soundtracks, it was possible for me to propose idiomatic musical suggestions towards the construction of an award-nominated video game soundtrack based on my research. Although published material on the composition of video game music exists (Childs 2007; Phillips 2014), no scholarship has been done on idiomatic intricacies of video game music composition. My research has shown that melodic themes, mixed orchestration, and usage of the epic musical idiom are popular compositional devices recommended to be used in the construction of video game soundtracks. Through scattering melodic motifs in compositions, musical familiarity remains in the player's subconscious without distracting the player from the game. When I started my research for this dissertation, there was no literature clearly explaining what the epic musical idiom is. After finishing my analysis, I was able to construct, define, and describe the epic musical idiom.

During research towards writing my literature review, I struggled to find credible resources that explore video game music for its autonomous worth: analysis of the music itself. Since most soundtracks are rendered electronically, it is difficult (if not impossible) to find sheet music for video games, let alone original arrangements by the composer. Through aural analysis, it is possible to create sheet music and notated music examples for video game soundtracks. Since the individual tracks of video game soundtracks often have mysterious or esoteric names[78], it is not always possible to connect tracks with events in the game. Using notated music examples, I was able to associate seemingly disconnected compositions to central melodic themes used in the video game's soundtrack, thereby unifying an understanding of the soundtrack. With an abundance of notated music examples, I dissected and discussed the music of video game soundtracks in isolation from the game. Notated music examples also gave the reader a preview of the soundtrack without playing the game or listening to the music.

My main research question, "Can a musical idiom be derived for award-nominated video game soundtracks? If so, what features would this idiom possess?" was answered and substantiated through sub-questions. The constructed music model (see 3.5. Constructing a model musical idiom for video game soundtracks) described a musical idiom and its related music features associated with award-nominated video game soundtracks. Although little is known about the nomination process and non-musical influences that influence music nominations, my *Video game award*

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[78] Example: *Dead Space* contains a track named "I've Got You Devolving Under My Skin". The title of this composition has no relation to events in the game, although the title is a possible pun referring to the song "I've got you under my skin", composed by Cole Porter (1891 – 1964).

academy musical idiom model describes a general aesthetic preferred by video game award academies. This model can be used as a guideline for composers who wish to write video game music in a prevalent (popular) idiom. Although my model cannot promise a video game award academy nomination, my model fits within a dominant aesthetic preferred by video game award academies.

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