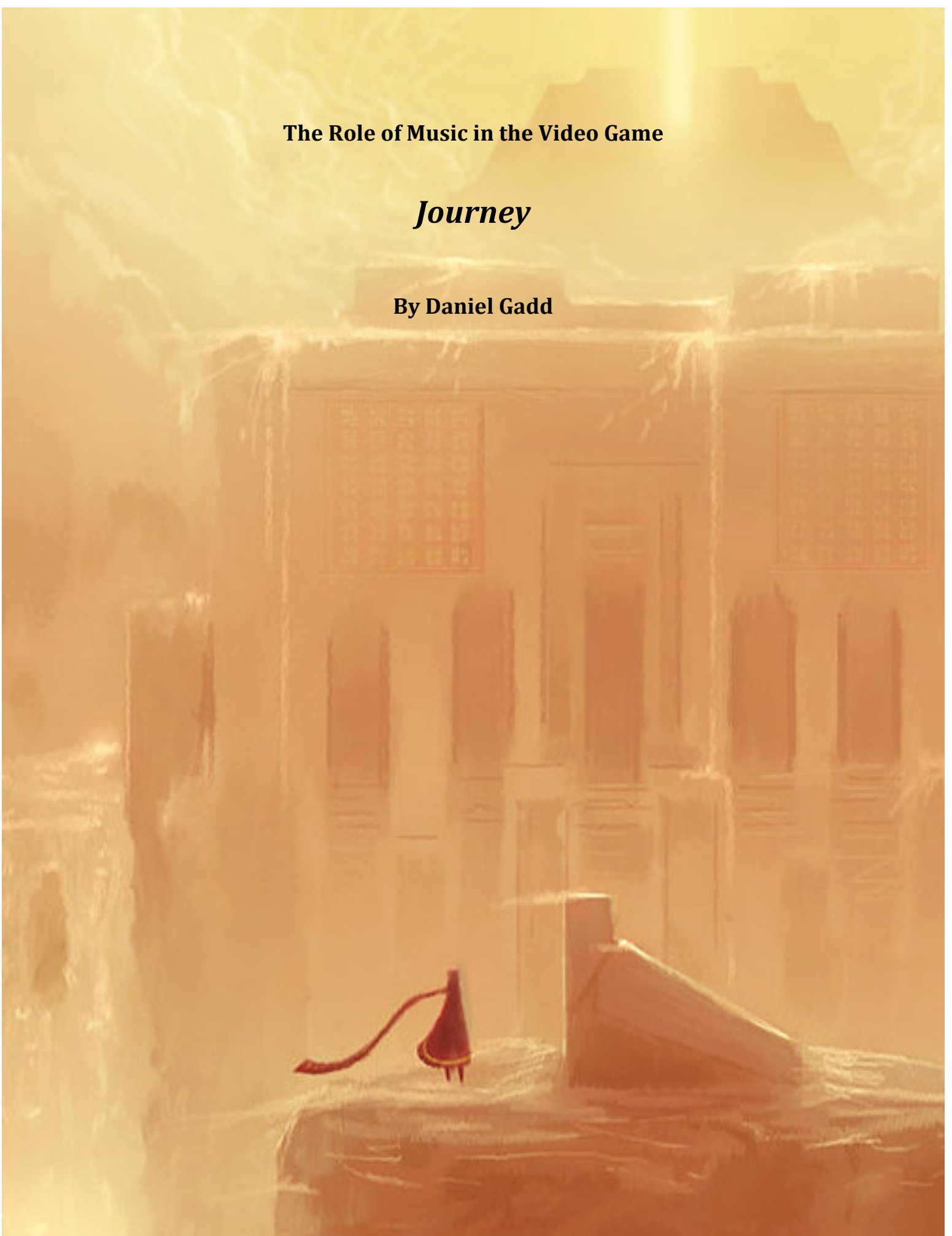


The Role of Music in the Video Game

Journey

By Daniel Gadd



Introduction

Journey is a video game developed by *thatgamecompany*. It was created for the PlayStation 3 platform and was released in March 2012. Since its release, it has received enormously high praise from critics and players worldwide. What is especially significant about this game is that it seeks to provide each player with a unique emotional experience equivalent to that of a painting, piece of music, film, short story, or poem and for this reason it is often cited as an example of a video game functioning as a work of art. The mission statement of *thatgamecompany*, as seen on their official website, is to “create timeless interactive entertainment that makes positive change to the human psyche worldwide” and their philosophy shines through in this delicately crafted game.

Both the visual art and music were heavily lauded for their beauty and contribution to the overall aesthetic and emotional arc of the game. American composer Austin Wintory composed the musical score, which made history for becoming the first-ever Grammy-nominated video game score.

This paper will take a close look at the various roles of the musical score within *Journey* and discuss the methods by which the composer and the developers worked together to solve the problems inherent in making the music flexible and adaptable to the physical restraints determined by the unique gameplay structure, while still creating the impression of a large, organic piece of music serving to set the tone for

each shifting element of the game. Initially, key elements of the storyline, gameplay and philosophy of *Journey* will be explained in order to better understand the musical instrumentation, form and style choices made by the composer. Following this, there will be a more detailed discussion of the methods used by the composer to create interactive music that serves both a psychological and narrative purpose. Where necessary, techniques and terms specific to video game scoring will be defined and discussed within the context of this particular game. Finally, the primary musical theme will be analyzed, followed by several examples of how this theme is treated and transformed throughout the game.

Story, Philosophy and Gameplay

Story

Journey is described by its developers as an “interactive parable”. The player takes control of a robed figure and begins alone upon a sand dune in a vast desert with no clear sense of direction, but soon sees a mountain in the distance. This provides the player with a destination and in an ingeniously natural and subtle way, without any explicit in-game instruction, the player is given a goal. The steady path to the mountain is divided into several game levels and as the player makes their way through them, they discover ruins and remnants of a lost civilization.

The player navigates through the desert and explores various levels of the remains of a huge ancient city, gradually learning more and more about the civilization that

once inhabited the place, until eventually reaching the foot of the mountain. They then have to begin ascending as the weather becomes cold and unforgiving and they are faced with snow and strong winds. As they desperately but determinedly make their weary way to the peak of the mountain, the player's character collapses in the snow and for a moment it seems as if the journey is over. But figures in white robes appear and revive the player, providing them with a magical energy and in a final, exhilarating section of gameplay, the player flies to the mountain summit and the screen fills with white light.

The game's credits play over a cinematic depicting a shooting star that rises from the mountain peak and flies steadily back along the traveler's path down the mountain and through the ruins and desert, passing other robed figures that are making their way up. The star finally comes to rest at the sand dune where the game began.

Philosophy

There is a universal theme to the game that is highly influenced by Joseph Campbell's "Hero's Journey". This theory describes the monomyth, which is a narrative structure that is common to mythical, religious and folk stories from all over the world and dates back to mankind's earliest recorded history. Put very simply, this myth describes a protagonist who leaves home, overcomes challenges and ultimately returns with newfound power. It is a myth essentially about the process of life transformation. It is about a pilgrimage through the unknown and

about what is lost and gained through adversity and in this way, it is a theme that is universally relatable.¹

It is clear how the setting of a lone character in an empty desert journeying to a distant mountaintop elegantly ties in with this philosophy. There is another interesting philosophical approach taken by the developers that is worth noting. While most video games are designed around giving the player a feeling of power, *Journey* subverts this idea and instead aims at making the player feel small and in awe of the huge world around them. It seeks to instill in the player a sense of wonder. The developers wanted players to feel a genuine loneliness at the outset of the game and have questions about who they are in this strange world – questions that are actually equally pertinent to real life.²

Gameplay

The game was deliberately and skillfully designed to contain no dialogue or language. This means that all storytelling and directional cues are provided either by the visuals or by the audio.³

¹ L. Alexander, 'In-Depth: Journey's rare and magical success', http://gamasutra.com/view/news/163143/InDepth_Journeys_rare_and_magical_success.php, 2012, (accessed 9 July 2014).

² K. Van Ord, 'Journey impressions', <http://www.gamespot.com/articles/journey-impressions/1100-6266636/>, 2010, (accessed 9 July 2014).

³ Ibid.

The gameplay controls are extremely simple. The player has the ability to freely walk and jump as well as control the camera. One button also causes the character to shout, or sing, a musical call.

A fascinating element of the game is that at certain points the player may meet one other player, temporarily connected to the same in-game world via an online connection, who is also heading towards the mountain. This player could be any age, from anywhere in the world but there is no way of identifying them or communicating with them at all outside of the wordless interaction within the game. This creates a connection with another person through exploration rather than talking or fighting. The multiplayer aspect of *Journey* also led to an extremely interesting musical decision that will be discussed later.

The entire game can be completed in just two to three hours.

The Music of Journey

Development and Production

In 2009, three years before the game's release, Austin Wintory met with Jenova Chen, the lead game designer and co-founder of *thatgamecompany*. They discussed philosophical and literary influences, particularly the work of Joseph Campbell. Chen had a concept and he asked Wintory for a musical theme that was able to encapsulate the idea emotionally, establish the game's tone and help the design

team to creatively define the game.⁴ Already, this is an unusual amount of responsibility to give the composer so early on and an unusual understanding of the power of music on the part of a game designer. That same day, Wintory wrote a piece of music that came to serve as the basis for the entire score and helped to define the style of the game itself.

While the concept of Campbell's "Hero's Journey" was certainly a grand one, Wintory felt that the game did not need an epic, massive score to be effective but rather called for something more intimate and personal⁵ and this first piece of music came from Wintory's feeling that the emotional qualities Chen was looking for called for a solo, mournful solo cello. He left a voicemail to himself singing the theme that he envisioned and quickly called his friends Tina Guo and Amy Tatum to play the cello and bass flute respectively. Together they recorded the first version of the main theme that same day, before the game had even really begun to be developed.⁶

From this point on, Chen would regularly call Wintory and describe the section of game that they were working on, always taking care to make clear exactly what

⁴ B. Kuchera, 'Musical DNA: how Austin Wintory wrote the song that helped create Journey', <http://www.penny-arcade.com/report/article/musical-dna-how-austin-wintory-wrote-the-song-that-helped-create-journey#/entry/signin>, 2012, (accessed 9 July 2014).

⁵ A. Wintory, 'A musical journey', <http://blog.us.playstation.com/2012/01/05/a-musical-journey/>, 2012 (accessed 9 July 2014).

⁶ K. Stuart, 'Sound as story: Austin Wintory on Journey and the art of game music', <http://www.hookshotinc.com/sound-as-story-austin-wintory-interview/>, 2012, (accessed 9 July 2014).

emotions he wanted the player to be feeling. Wintory would then sit with a very rough prototype of the game and compose to what he imagined the final product would look and feel like. Sometimes the music would be different to what the developers were expecting, but often for the better – and they would redesign the level based on the emotional experience that Wintory’s music was providing. Often over the course of a scene’s development, there would be an ongoing process of re-writing the music as a scene was being redesigned. Using this reiterative process over such an extended period of time, the music became truly integrated into each and every aspect of the game.⁷

Though much of the score makes use of subtle electronic synth sounds and electronically treated acoustic samples, all orchestral sections and real instrumental solos were recorded live, with real players.⁸ The recording session for the music of *Journey* was a great example of teams working remotely from different locations across the world. The orchestra used was the Macedonia Radio Symphonic Orchestra, conducted by Oleg Kontradenko in Skopje, Macedonia. The composer was based at the mixing stage of Sony’s San Diego Studio, remotely linked with the orchestra. Simultaneously, they were skyping with the game’s core development team in Los Angeles, producer Kellee Santiago in Virginia and lead designer Jenova Chen in Shanghai, China.⁹

⁷ Ibid.

⁸ Kuchera, *Musical DNA*.

⁹ Wintory, *A musical journey*.

Compositional Process

The medium of video games is unique for a composer in that the music is actually able to drive the player's experience. The music in *Journey* is constantly functioning to provide a compelling emotional narrative, while at the same time being highly interactive, almost to the point of functioning as a game mechanic¹⁰ and it was crucial for Wintory to decide from the beginning whether the player is triggering the music or whether the music is functioning narratively and independently of the player.¹¹

As a film composer, Wintory's process is to watch the movie repeatedly in order to fully feel the pacing and rhythm of the film. He takes this same approach to game scoring and believes that the artistry of scoring for games lies in the composer's ability to immerse him or herself in the design process and create something that truly belongs to that project.¹² Also, if a game composer is working ahead of production, the nature of the music can end up influencing the game's design. This was certainly the case with *Journey*, where certain parts of the game were practically designed around the music.¹³

¹⁰ P. Dane, 'Inside the gaming studio – Austin Wintory, first video game composer nominated for the "best soundtrack" Grammy', <http://whatculture.com/gaming/inside-the-gaming-studio-austin-wintory-first-video-game-composer-nominated-for-the-best-soundtrack-grammy.php>, 2012, (accessed 9 July 2014).

¹¹ Kuchera, Musical DNA.

¹² Stuart, Sound as story.

¹³ Dane, Inside the gaming studio.

Of course, unlike a film, the pacing and rhythm of a game are variable from player to player and it is important when scoring for games to see everything from a player's point of view and to understand that different players will interact with the same space in different ways. When scoring *Journey*, Wintory would try to visualize two points in a player's progress, A and B. As a composer, it was his job to emotionally capture the experience of moving from point A to point B and then allow the music to naturally change into the next scene. The challenge of this lies in the fact that the player could do anything between those two points. They could run through as quickly as possible, or run around exploring and take their time. Wintory's solution to this was to play through the scenes over and over, timing himself with a stopwatch. In this way he could find out the shortest way to get from A to B and use the information to make compositional decisions. For example, if an area lends itself to a player's meandering exploration, perhaps the best solution is to create a composition that loops. Wintory is not averse to using loops, but he believes that looping is simply a tool to be used in the right situation. In fact, there are many areas of the game where, rather than looping, Wintory simply uses a one-off cue that lasts for the most likely approximate time that a player will be in the area. If they stay longer, the music simply runs out and they play in silence. This allows the cue to end like a real, organic piece of music. However, every cue is treated according to its context and some cues do loop, while others make use of layering and branching techniques.¹⁴ Often, a one-off musical phrase will serve as a beat-synchronous transition between two cues.

¹⁴ Ibid.

Many of the open-ended areas of the game, such as the initial bridge level in the desert, make use of layering. As the player progresses through stages of a puzzle and reaches certain landmarks, another instrumental layer will be added to the music. This is often so subtle that it goes unnoticed, but it serves to create a sense of interest and progression in the music that unconsciously contributes to the player's experience.¹⁵ The stems of each instrumental layer here are also constantly branching. In this particular level, the initial electronic pad is joined by pizzicato cello followed by a bass flute layer. The cello and bass flute play fragmented melodies, often very long. Several of these phrases were composed, and the game engine randomly determines which order they are accessed and heard in game. This musical branching means that there are many different interplays between different layers that are possible at any given time. Every playthrough will therefore yield different musical results. The composition is constantly writing itself. When the puzzle has been solved and the bridge is completed, the player triggers a musical change into a faster, more energetic piece. This transition is seamless and demonstrates the ability of the game's music engine to synchronize the player's actions and the music with extreme accuracy.

Care was taken to make sure that each second of every moment of the game was accompanied in an organic and natural-feeling way, and whichever technique gave

¹⁵ J. Broomhall, 'Heard about: Journey', <http://www.develop-online.net/analysis/heard-about-journey/0117627>, 2013, (accessed 9 July 2014).

the best result was used.¹⁶ The developers would always provide Wintory with precise instructions regarding the implementation of each piece of music and as a gamer with a programming background, communicating ideas was not problematic. Wintory would place mockups into the game and then begin the continuous process of tweaking and refining each piece of music and its relationship to the game's system.¹⁷ The three years working on the project gave him the time needed to try different things and discover what worked and what did not.

The approach to the scoring of the multiplayer aspect of the game is also amazing and worth mentioning. The harp and viola soloists only enter when another player is present and serve to create an emotional bond between players. However, there is no way to predict when two players will encounter one another. Layers and branches of harp and viola parts therefore had to be written over almost the entire score, so that they could be accessed by the game's engine when needed, if ever.¹⁸ As some players might choose to play single-player, this is an entire aspect of the musical score that may never even be heard and while the musical experience is still just as good in single player mode, it is yet another available variation that demonstrates the huge amount of work that went into creating a truly interactive score.

¹⁶ Dane, Inside the gaming studio.

¹⁷ Nofi, 'Interview: Composer Austin Wintory on Journey', <http://www.thesixthaxis.com/2012/03/15/interview-journey-composer-austin-wintory/>, 2012, (accessed 9 July 2014).

¹⁸ J. Broomhall, Heard about: Journey.

Instrumentation

With regards to the instrumentation choices, Wintory's goal was to make the music feel organically linked with exactly wherever the player is hearing it in the game.

This may be a completely subjective choice, but the most important thing is that the intention is there. In the first level of the game, the player steps into the desert and sees the mountain and a meteor in the sky. The music is a gentle wave of electronics followed by a bass flute solo. The bass flute has a spacious, open sound, with a lot of reverb. Wintory explains in an interview how a dry, brittle sound could also have suited the desert landscape, but he chose the former sound for its spiritual, ringing quality. Although this was just one musical choice of many, it was still of the utmost importance to make the sound seem as if it belonged.¹⁹ It was also always important to maintain the right tone. The music should never be exactly sad, but always have a solemn, lonesome quality to it.

While it certainly would have made sense to make instrument choices based on ancient civilizations due to the setting of the game, Wintory deliberately tried to avoid suggesting or referencing specific cultures, but rather focused on creating a score that could be universally appreciated and understood.²⁰

There are five solo instruments that feature prominently in the game: cello, flute, viola, harp and serpent (an ancient brass instrument). All of these instruments have

¹⁹ Dane, Inside the gaming studio.

²⁰ Nofi, Interview: Composer Austin Wintory on Journey.

their own definite meaning within the game and their use in the score is always deliberate.

The cello is used to symbolize the player's character throughout the game.

Essentially the game is all about the player: their interaction with the world, with other people and with themselves. This ideology is perfectly mirrored by the form of the score, which can be seen as a huge cello concerto. The player is the soloist and the world and other players around them are the orchestra.²¹ The bass flute features almost as prominently as the cello. It has a definite spiritual symbolism and is often heard in connection with the white-robed ancient people that appear in visions. The serpent is the only brassy sound in the score and is used very sparingly. It features prominently in the underground cave level of the game, where the score becomes alien and detached from the rest of the music, mirroring the sudden change of environment and disorientation in the game. Even the ever-present cello disappears. Here Wintory overdubs the serpent into a five-part brass chorale to beautiful effect – even when scary or hostile, the world is still beautiful. The harp and viola feature heavily as soloists in the multiplayer aspects of the game, and the interplay between them serves to create a subtle, even unconscious connection between the two players.

The other instrumentation used in the score includes a full string section as well as recorded percussion and gentle synthesized pads. The instrumentation of the score

²¹ Ibid.

changes as the game progresses. At the outset of the game, a giant orchestral crescendo follows the solo cello theme and builds up into nothingness, wiping the emotional palette clean. The player is left with a blank canvas. The musical score then begins with gentle, buzzy electronics and some solo bass flute melodies. The orchestra is not heard again until the second half of the game. Slowly, more instruments and layers are introduced as the player makes their way through the world. The introduction of new instruments is linked with the character's growth and transformation. By the time the final level is reached, we are hearing the theme with the full orchestra behind it.

Sound Design

One further aspect that must be considered in video game music, as with film music, is the sound design and Wintory worked very closely with sound designer Steve Johnson over the course of *Journey's* development. While the music is functioning as a narrative device, good sound design is crucial to making the world feel real and believable to the player.²² The snowy mountain area of the game is a great example of the sound and music working together. The music is highly textural, with aleatoric string tremolos, while the sound of the wind and thunder is rising and dropping in level and the sound and music are in a constant state of flux. In this level, things are becoming legitimately threatening and the world is threatening to overpower the music. The singing and shouts of the player character were also very carefully designed. Wintory provided musical and vocal samples, which Johnson

²² Ibid.

combined with processed bird chirps. Variations of these sounds were then used for the player character as well as the companion character in multiplayer and the sounds were organized in pitch sets so that they could harmonize with the score at any given time. The music and sound always had to compliment each other and fit the aesthetic of the game.²³

The Theme

In *Journey*, Wintory sought to create one central theme that could act as the DNA for the full score. In creating a memorable theme that recurs and is transformed over the course of the game, he is mirroring the philosophical theme of the game and allowing the player to experience their own sense of progression and transformation as they move forward.²⁴



The main theme in its purest form, as heard by the solo cello at the outset and end of the game.

This beautiful melody is heard throughout the entire game, and it is only through great skill that the composer never allows it to seem repetitive or boring. The constant fragmentation and variation of this simple melody creates interest while

²³ Broomhall, Heard about: Journey.

²⁴ Dane, Inside the gaming studio.

The transcriptions found in Appendix A and B²⁵ represent the treatment of the theme at the outset of the game and at the end. They are entitled *Nascence* and *Apotheosis* respectively. *Nascence* states the theme and introduces the character and desert environment perfectly, while *Apotheosis* is heard in the final level of the game, as the hero is flying towards the summit of the mountain and is a variation of the theme filled with excitement and joy.

Conclusion

For Wintory's musical score to be fully integrated into the game, it had to be able to be broken down into stems and phrases that could be scripted to accompany player decisions and lead to a truly interactive experience. At the same time, it had to sound like a real, organic music performance and function linearly. These are two seemingly contradictory ideas: modularity and linearity. Wintory wanted players to be able to have the benefit of feeling real musicians giving a performance as they played the game, but achieving these two goals is far from easy.²⁶

Journey proves to me that it is most definitely achievable, and the effect is incredible.

When a game can fully immerse a player in an experience and that experience is perfectly accompanied by music, it is a truly great achievement by the composer.

²⁵ Audio files of Appendix A and B are attached with this document.

²⁶ Stuart, Sound as story.

Austin Wintory spent three years working on the music for *Journey*, constantly revising and personalizing the music to each new stage of design over the course of the game's development. I honestly believe that the dedication and genuine, heartfelt investment into the integrity of the music and the game is what makes this project a work of art. *Journey* is clearly a labour of intelligence, skill and love on the part of everyone involved in its development and the results can clearly be seen in the reactions of those who have played it and been deeply affected by it. For me, it is inspiring to see that projects like *Journey* are being created and allowing for music and art to move forward in new, interesting and genuinely moving directions.

Appendix A

Nascence Except from *Journey*

Transcribed by Daniel Gadd

Austin Wintory

♩ = ca. 70

The musical score is arranged in a system with the following parts from top to bottom:

- Bass Flute:** Treble clef, key signature of two sharps (F# and C#), 4/4 time signature. The staff contains four measures of whole rests.
- Triangle:** Percussion clef, 4/4 time signature. The staff contains four measures of whole rests.
- Harp:** Two staves, both with bass clefs, key signature of two sharps, and 4/4 time signature. Both staves contain four measures of whole rests.
- Solo Violoncello:** Bass clef, key signature of two sharps, 4/4 time signature. The tempo is marked "Freely" with a quarter note equal to approximately 70 beats per minute. The dynamics are *mf* and *molto espressivo*. The melody consists of a series of eighth notes in the first two measures, followed by a half note in the third measure, and a quarter note followed by an eighth note in the fourth measure. A slur covers the first two measures.
- Violin I:** Treble clef, key signature of two sharps, 4/4 time signature. The staff contains four measures of whole rests.
- Violin II:** Treble clef, key signature of two sharps, 4/4 time signature. The staff contains four measures of whole rests.
- Viola:** Alto clef, key signature of two sharps, 4/4 time signature. The staff contains four measures of whole rests.
- Violoncello:** Bass clef, key signature of two sharps, 4/4 time signature. The staff contains four measures of whole rests.
- Double Bass:** Bass clef, key signature of two sharps, 4/4 time signature. The staff contains four measures of whole rests.

5 $\text{♩} = 70$

Tri. *pp*

Hp. *mp*

Vc. $\text{♩} = 70$

Db. *pizz.* *p*



10

B. Fl. *p* *mp*
espressivo

Tri.

Hp.

Db.

15 Change to C Flute

B. Fl. *p*

Tri.

Hp.

Vc. *p* *mp* *mf*
div.

Vla. *p* *mf*
div.

Vc. *pp* *p* *mf*

Db.

Appendix B

Apotheosis

Extract from *Journey*

Transcribed by Daniel Gadd

Austin Wintory

$\text{♩} = 108$

Gentle Synth p

Violin II $\text{♩} = 108$
 mp
sempre staccato

Viola
sempre staccato
 mp

Violoncello

4

Hp.

Vln. II

Vla.

Vc. mf
espressivo

7

Hp. Vln. II Vla. Vc.

Detailed description: This system covers measures 7, 8, and 9. The Harp (Hp.) part has a whole rest in measure 7 and a chord in measure 9. The Violin II (Vln. II) part plays a continuous eighth-note pattern. The Viola (Vla.) part plays a similar eighth-note pattern. The Violoncello (Vc.) part has a long note in measure 7, a half note in measure 8, and a long note in measure 9.

10

Hp. Vln. II Vla. Vc.

Detailed description: This system covers measures 10, 11, and 12. The Harp (Hp.) part has a whole rest in measure 10, a whole rest in measure 11, and a chord in measure 12. The Violin II (Vln. II) part continues with eighth notes. The Viola (Vla.) part continues with eighth notes. The Violoncello (Vc.) part has a long note in measure 10, a half note in measure 11, and a long note in measure 12.

13

Hp. Vln. II Vla. Vc.

Detailed description: This system covers measures 13, 14, and 15. The Harp (Hp.) part has whole rests in measures 13 and 14, and a whole rest in measure 15. The Violin II (Vln. II) part continues with eighth notes. The Viola (Vla.) part continues with eighth notes. The Violoncello (Vc.) part has a long note in measure 13, a half note in measure 14, and a long note in measure 15.

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