

The Journey of a Hero:  
Musical Evocations of the Hero's Experience in *The Legend of Zelda*

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## ABSTRACT

Jillian Wyatt: The Journey of a Hero  
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The research in this study explores concepts in the music from select games in The Legend of Zelda franchise. The paper utilizes topic theory and Schenkerian analysis to form connections between concepts such as adventure in the overworld, the fight or flight response in an enemy encounter, lament at the loss of a companion, and heroism by overcoming evil. This thesis identifies and discusses how Koji Kondo's compositions evoke these concepts, and briefly questions the reasoning. The musical excerpts consist of (but are not limited to): The Great Sea (Windwaker; adventure), Ganondorf Battle (Ocarina of Time; fight or flight), Midna's Lament (Twilight Princess; lament), and Hyrule Field (Twilight Princess; heroism). The article aims to encourage readers to explore music of different genres and acknowledge that conventional analysis tools prove useful to video game music. Additionally, the results in this study find patterns in Koji Kondo's work such as (to identify a select few) modal mixture, military topic, and lament bass to perpetuate an in-game concept. The most significant aspect of this study suggests that the music in The Legend of Zelda reflects in-game ideas and pushes a musical concept to correspond with what happens on screen while in gameplay.

**Keywords:** *Topic theory, modes, musical concept, adventure, battle, lament*

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*Don't only practice your art, but force your way into its secrets,  
for it and knowledge can raise men to the divine.*

Ludwig Van Beethoven

When it comes to the topic of music in video games, it can be difficult to ascertain the relationship between the experience of the player and music for casual listening. Some studies argue that music in games can break immersion, and while this may be true in special cases, my analyses present just the opposite. I argue that the inclusion of musical topic within video game music, specifically in The Legend of Zelda series, can enrich the overall experience of the game. Tools of analysis in music theory seek to understand composition and meaning. In an interview with online game magazine USGamer, composer and sound director Koji Kondo once said, “There’s a lot of homework involved. We play the game again and again, and we try to think of music that would be right for it, and maybe we go out and listen to different kinds of music and instruments. Trying to find what we think is the right match for that game, it’s tough and challenging...and we really enjoy doing that.”<sup>1</sup>

Kondo is speaking on the matter of composition and world building in the context of a video game. Kondo’s choices are by no means accidental, and he has gone on record to speak of the research that he and his team undergo to achieve the sound they feel best fits the game. Though many games have striking and memorable music (*Skyrim*, *Final Fantasy*, *Fallout*...), the atmosphere and strong sense of an immersive world in *The Legend of Zelda* (hereafter LoZ or Zelda) is unique. LoZ can make a player feel that he/she is truly on a journey. Multiple elements contribute to this effect, and perhaps the most vital component of concept portrayal is in the

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<sup>1</sup> US GAMER, *Super Mario's Maestro: A Q&A with Nintendo's Koji Kondo*. Dec. 10, 2014.

music. Kondo's team is filled with artists who not only enjoy creating immersive environments in video games, but also understand the role music plays in any creative multi-media. Music can enrich the experience one undergoes in various forms of media including movies, TV, and/or video games. In my opinion, music can serve a primary role in enhancing an entertainment experience.

In *The Legend of Zelda*, the player undergoes a "hero's experience," in which he/she progresses through dungeons, traverses lands, and becomes stronger. I divide the hero's experience into four categories: adventure, battle, lament, and heroism. Since its debut in 1986, the franchise has released more than thirty games. Thus, I approach three games (rather than thirty) that have advanced MIDI technology and recordings: *Ocarina of Time* (1998), *The Windwaker* (2003), and *Twilight Princess* (2006).<sup>2</sup> Within each category, I define salient musical characteristics that evoke the respective stages of the hero's experience. Figure 1.1 lists these topics and their corresponding pieces.

(Figure 1.1)

<b>1) Adventure</b>	<b>2) Fight or Flight/Battle</b>	<b>3) Despair/Lament</b>	<b>4) Heroism</b>
Ocean Overworld – <i>The Windwaker</i>	Boss Battle Themes – <i>TP, WW, Ocarina of Time</i>	Midna's Lament – <i>Twilight Princess</i>	Hyrule Field – <i>Twilight Princess</i>
Hyrule Field – <i>Ocarina of Time</i>	Guardians – <i>Breath of the Wild</i>	Elegy of Emptiness – <i>Majora's Mask</i>	Main Theme – <i>Ocarina of Time, Multiple Selections</i>
Gerudo Desert – <i>Ocarina of Time, Twilight Princess</i>	Ganondorf's Theme – <i>Multiple Selections</i>	Farewell Hyrule King – <i>Windwaker</i>	

<sup>2</sup> That is, in the beginning of the Zelda creation (1980's), 8-bit production was the medium by which music was created. The Nintendo Entertainment System (and likewise SNES) only had an 8-bit sound processor, and sound engineers could only record a certain level of frequency with different waves such as square, sine, and triangle. With the more recent games (1994 – 2006) that I discuss, instruments in MIDI are in use in the tracks. Thus, there is a bit more to draw from as far as analysis is concerned with the inclusion of actual instruments (such as woodwinds, brass, strings).

My analysis explores mode mixture, tonal structure, orchestration, and rhythmic figures. The methods of analysis I will employ, and consequently terms I will use, primarily feature that topic theory and Schenkerian analysis.<sup>3</sup> My analyses engage these tools in order to demonstrate the ways in which Kondo's music evokes each part of the hero's journey. Because this music is more recent and may not follow older conventions, some adaptations are necessary for the use of Schenkerian analysis. I recognize Schenkerian techniques such as voice exchange; I offer many voice leading analyses and I use the concept of structural hierarchy. The questions in this thesis discuss the LoZ series on a deeper level, and explore what causes the musical features evoke adventure, fight or flight response, lament, and heroism. How are these concepts evident in the score from *The Legend of Zelda*? In addition to reporting the evidence of these musical ideas, I aim to enrich the reader's perspective on video game music and encourage further research. I seek to prove the usefulness of conventional analysis methods to explain music beyond that of the classical or romantic era—and use those distinctions to better show the correlation with various concepts.

### *Research*

Scholarly research on the topic of video game music comes from papers either presented at the North American Conference on Video Game Music, or theses and dissertations. Jason Brame's "Thematic Unity Across a Video Game Series," is vital to the explanation on the topic of music in video games and suggests the cohesion seen across the video game as he/she progresses through different levels or dungeons. Concerning the *Legend of Zelda* franchise, Brame presents the unity that can be sensed throughout not only the games individually, but as a

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<sup>3</sup> Particularly Raymond Monelle's book on topic theory, "Military, Hunt, and Warrior."

collective unit. This branches beyond one singular game, and Brame proposes that the unity can be understood as continuity within the franchise.

“There are elements of the game that are consistent throughout the series: adventure-style gameplay with real-time battle, puzzle solving, and exploration...Since the game itself is structured around the same mythical world in each major installment, the location of the primary musical theme is similar in each game. The Overworld Theme, also known as the Hyrule Field Theme and the Great Sea Theme, exists in every single game in the main series.”<sup>4</sup>

In his thesis, Brame suggests that the overworld themes perpetuate a connected narrative. Brame’s study relates to my topic by suggesting that elements of the game’s story can appear in the music. Brame goes on to discuss how as the story progresses, the music follows with cohesive ideas in place. My analyses go a step further to suggest how the music reflects directly what happens on screen in gameplay. This reasoning, among others, makes *The Legend of Zelda* series a large analytical undertaking. Brame continues to explain his observations further and argues that, “A video game score is the sum of all the music in a game.”<sup>5</sup> I agree with his argument as it relates to *The Legend of Zelda*, because through various methods of analysis, one can discover that the defining moments in the game that work with the music to make all aspects of the game connected. I find Brame’s discussion on the matter of music in video games to be insightful, and a useful tool to use.

In several cases, the same elements in different pieces such as rhythmic ideas or harmonic motion appear in various games. The stylistic similarities between certain tracks do not just come from one select game. For example, when discussing the topic of Hyrule Field from

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<sup>4</sup> Jason Brame. "Thematic Unity Across a Video Game Series." 2008, p. 4.

<sup>5</sup> Ibid., 4.

*Twilight Princess* and The Great Sea from *The Windwaker*, the rhythmic qualities of the two reflect each other. This is understandable since, as mentioned before in Brame's quote (p. 3), both are the Overworld theme (where the player spends most of their time). This thesis aims to follow in the footsteps of Elizabeth Medina-Gray, Sean Atkinson, and Jason Brame's writings and contribute to the growing analytical literature of music in video games.

### Why *The Legend of Zelda*?

Koji Kondo is revered in the world of video game music, and some go as far as to say he plays a crucial role in the development of video game soundtracks.<sup>6</sup> Kondo states that his team wants to understand how the player should feel; and convey that on a deep level with the music. This is exactly what I aim to explore in this study. What ideas exactly, were they evoking? When certain moments in the music from the games arise, why is there a sense of wonder and adventure, excitement or intensity? Much of this can be credited not only to instrumentation, but orchestration in the scores. This thesis discusses the music and scores from *Ocarina of Time*, *Windwaker* and *Twilight Princess*. Ultimately, *the structure of this thesis emulates the hero's journey within the games*. The main idea of *Zelda* games is adventure, which is the first point of discussion. As he/she ventures into Hyrule (adventure), battles occur (fight or flight) and loved ones are lost (lament), but the very end brings about the overcoming act of heroism.

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<sup>6</sup> Zig Haloperidol. *Koji Kondo Super Mario Bros*, Sputnikmusic. March 26, 2017.



### ***Adventure: Becoming a Warrior and Traversing Hyrule***

Traversing across lands, discovering treasure, fighting enemies, and meeting a plethora of characters is at the heart of the series. These actions equate to one word: adventure. The map of connected places is called the overworld, which the player uses to get from one section of the story to the next. Each game with this large map also includes an “overworld” theme. It is imperative that the concept of adventure is cohesive as the player moves throughout the game. The pieces I have chosen to focus on for this topic include aspects of adventure and act as maps to connect the game world. The selections chosen for this connecting theme include *The Great Sea* (Windwaker), *Hyrule Field* and *Gerudo Desert* (Ocarina of Time). By using conventional analysis methods and topic theory, one can surmise the way in which Kondo portrays adventure:

1. Syncopated rhythms
2. Horn call with open fifths (or in some cases fourths)
3. Warrior topic<sup>7</sup>
4. Modal mixture

From a global perspective, the overworld theme serves as a connective tissue throughout the game. Thus, musical features reflect the inspiration to press onward in the journey. For this reason, overworld themes could be considered the most significant musical means of creating an immersive world.<sup>8</sup> In addition, some pieces feature warrior topic, which is particularly fitting for Zelda games in which the player enhances his/her combat skills and defends the kingdom of Hyrule.

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<sup>7</sup> Raymond Monelle, *The Musical Topic*. Pp. 83 – 85, 130 – 131.

<sup>8</sup> With the addition of the music in boss battles.

*The Great Sea – Ocean Overworld (Windwaker)*

Within the Legend of Zelda series, *Windwaker* (WW) is ripe with vibrant color and characters. The story unfolds through visitation of various islands that the player traverses to via boat. In this world, the ocean (the “Great Sea”) is what connects the different islands. Usually the ocean is filled with enemies and civilians rarely travel. When out in “The Great Sea” (as the track is named), the overworld theme sounds, and in turn, creates the sense of adventure and freedom, and wonder. There are barriers to how far the player can go, but to an extent he/she is free to sail across the vast sea. WW gets its name as Link learns to harness the power of the wind; he (and in turn, you as the player) controls the wind and affects the direction he sails. With over 50 islands to discover, the music creates an exciting impression of exploration and discovery.

The Great Sea begins with an open fifth introduction that prolongs tonic. Therefore, in the top voice, there is an incomplete triad. The bottom voice arpeggiates the same open fifth [D – A] throughout mm. 1–4 (shown in bracket of Ex. 1.1, reduction below).

**Example 1.1, mm. 1–4: Open Fifth Introduction**

**Allegro** ♩ = 140

**Top voice:** A ---- A/G  
**Inner voice:** D C# C B  
**Bass:** D ----- D

**Reduction (mm. 1–4):**

From m. 18 onwards, the main theme appears and develops. The rhythm assumes a military-like quality, and the horn echoes the melody via triplets in m. 23, with a I: HC immediately following (see Ex. 1.2).

**Example 1.2, mm. 18–24**

**Incomplete chordal texture (D and A chords omit their 3<sup>rd</sup> or 5<sup>th</sup> until the half cadence)**

The rhythm is particularly significant here and adds a sense of forward motion. To further support this, the rhythmic figure above is the same in virtually all overworld pieces in the franchise. Hyrule Field (to be discussed later) uses the same ostinato pattern—driving forward with the dotted quarter, eighth note. According to topic theory, this type of rhythm resembles military pieces. When the main theme is repeats multiple times, a horn call sounds on the fifth

scale degree, evoking a battle-like quality (see m. 23). The rhythm gives the impression of a march, supported by the enthusiastic horn calls; which is acceptable in this case since the player often goes to battle in the overworld.

With respect to tonal structure, the piece remains in D major, and before resolving to an imperfect authentic cadence (IAC), the bass alternates between scale degrees  $\wedge 3$  and  $\wedge 2$ , replicating mini-interruptions in the top voice. The bass (see Ex. 1.3) darkens the submediant by moving to  $bVI$ . Subsequently, the mixture continues through  $bVII$  before rising to a restorative I: IAC in m. 49. This modal mixture in mm. 45–48 (Ex. 1.3) on the chromatic mediant creates a strong pull toward resolution via ascending parallel fifths (B  $\flat$ –F, C–G, D–A, see arrows in Ex. 1.3 and reduction). There is a “rising” effect in play here, as these two chords aim to reach the I: IAC.

**Example 1.3, mm. 45—48: Rising Adventure via Mode Mixture**

bVI ————— bVII

**Reduction:**

$\text{♩} = 145$

Note that the structural bass simultaneously displays bVI to bVII *and* parallel open fifths (indicated by arrows in Ex. 1.3). Kondo's remarkable modal mixture continues with a brief appearance of Lydian mode (inflection of G#, Ex. 1.4).

**Example 1.4, mm. 49–53**



Thus far, the darkening was represented by  $\wedge 6$  and  $\wedge 7$ . The main theme in other Zelda games such as *Ocarina of Time* and *Skyward Sword*, uses the same modal darkening.<sup>9</sup> Obstacles in the games range from puzzle-solving to conquering the beasts that lurks around every corner. In *The Great Sea*, modal mixture is a metaphor for peril. It portrays the dangers that the hero will confront on his/her journey. After 3 measures of altered chords, a I: IAC occurs (mm. 49). In addition to these factors, this piece utilizes suspensions to create an image of tension (dissonance) and resolution. Here again, musical features showcase not only the players current quest,<sup>10</sup> but also the adventures to come.

*Gerudo Valley – Ocarina of Time*

In *Ocarina of Time*, the expansive land of Hyrule includes Gerudo Desert, home of the antagonist, Ganondorf. He is a disgrace among the Gerudos as a result of his attempt to take

<sup>9</sup> In fact, it is driven one step further to  $b^{\wedge}2$ . Even though the Phrygian  $\wedge 2$  and Neapolitan chord are not evident here,<sup>9</sup> note that  $b^{\wedge}2$  makes an appearance in the main theme of *The Legend of Zelda* before a metaphorical transformation of  $bII$  to  $V/V$ , that could represent Link's heroic victory over Ganon.

<sup>10</sup> Such as conquering one dungeon out of many, and continuing exploration in the overworld.

what is rightfully Princess Zelda’s—the Triforce of Wisdom.<sup>11</sup> In each of the games in the franchise, Link’s quest is ultimately to recover sacred items to help him win the Zelda’s triforce back from Ganon. When Link ventures into Gerudo Desert, a sense of adventure *and* “battle” is immediately apparent. The piece entitled “Gerudo Valley” features bombastic horns and an iconic melody.<sup>12</sup> Though the piece is in F-sharp minor, it is anything but somber. The main theme (Ex. 2.1) establishes a presentation.<sup>13</sup>

### Example 2.1, mm. 6–9: Main Theme

$\text{♩} = 120$

In mm. 8–9, the harmonic progression  $i - VI - VII - V$  unfolds. Schenkerian voice leading analysis proves beneficial here, especially in the bass. The bass moves from F# to E, prolonged by their respective lower thirds (indicated by curves in Ex. 2.2).

### Example 2.2, mm. 6–9: Block Chord Reduction

<sup>11</sup> Used to protect the land of Hyrule, a piece of Triforce is given to those chosen. Zelda was chosen for the triforce of wisdom, Link the triforce of courage, and Ganon the triforce of power. Ganon betrays this trust from the Hylian goddesses when he chooses to go after Link and Zelda’s triforce elements.

<sup>12</sup> In a poll published in May, [ZeldaDungeon.net](https://www.zeldadungeon.net/poll-results-whats-your-favorite-zelda-song-and-why) asked fans to rank their favorite Zelda songs. The theme from Windwaker won first, followed by Gerudo Valley as a close second.

<sup>13</sup> Since these measures represent part of the main theme, it is applicable to call these 4 measures a basic idea.

Cross relation occurs in mm. 8–9, making the raised  $\hat{7}$  (E $\sharp$ ) striking in context. Constantjin Koopman and Stephen Davies warn of the dangers that come from interpreting music in merely harmonic progressions, rather than how a piece unfolds as a whole: “Music presents itself as a continuous process in which, at every moment, what we hear follows in a compelling way from what came before, that is, music proceeds not as the temporal succession of otherwise unconnected elements but as the unfolding of an integrated whole.”<sup>14</sup> Following the continuation, the main theme develops. Once again, the rhythm bares a striking resemblance to military material. In the orchestrated version, percussion instruments sound out the rhythm in the bass, further supporting this idea.

Measure 33 sparks a new section, which focuses predominantly on E major and B minor tonality. It is not inappropriate to suggest the piece is in E major, sounding out the tonic and dominant. However, to suggest that the piece moves into B minor before the end of piece appears plausible. This is due to the appearance of the raised (hypothetical) leading tone (A $\sharp$ ) in the last two measures of the piece (mm. 37-38). There is no underlying chord that explains this notation, such as B major (if the key were E major). Rather, it presents more modal mixture that presents the function to rise to the tonic (B), which lands eventually on  $\hat{2}$  (C $\sharp$ , see Ex. 2.3).

### Example 2.3, mm. 33-38: Reduction

Bottom voice uses D in the upper voice to connect to C.

<sup>14</sup> Constantjin Koopman and Stephen Davies. "Musical Meaning in a Broader Perspective," *The Journal of Aesthetics and Art Criticism* 59, no. 3 (2001): 261-73.

The “rise,” but *interruption* into the repeat suggests that the fundamentals of adventure (modal mixture and rhythm specifically) are the same. Though dangers may come, the overall goal for Link is still evident: to vanquish the land of Hyrule from evil.

### *Hyrule Field* (Ocarina of Time)

*Ocarina of Time*'s debut (1998) brought imminent success to the franchise. It remains one of the most successful 3D titles for the N64. Overall, the design of characters, art, and music had the potential to be more expressive and artistic. Link begins *Ocarina of Time* in his home of Kokiri Forest. The forest is sacred, and the children of the Kokiri Forest share the common knowledge that certain death awaits outside, should they ever leave. However, Link is the exception to the rule, and is chosen as the “hero of time.” He responds to the call to go speak with Princess Zelda, now with his new companion, the fairy Navi. Following Link's departure from the forest, the player's screen fades and transitions into Hyrule Field. The first glimpse of Hyrule Field shows its vast landscapes and wide fields. Filled with horns calls and snare, Kondo's composition of *Hyrule Field* from *Ocarina of Time* combines every aspect of a warrior and his/her adventure. The snare drum is unabating, and effectively propels the piece forward. The rhythm showcases quarter to eighth note patterns in percussion, similar to that of *The Great Sea*. The syncopation in this piece is prominent, rivaling that in *Hyrule Field* from *Twilight Princess*. The snare never changes, but the melodies change, creating a sense of unpredictability. The element of unexpectedness and perpetual change reflects the field's environment, because enemies lurk around every corner of the immense landscape. In “The Musical Topic,” Raymond Monelle discusses trumpet and horn calls. I discussed the significance of the horn calls earlier, but in *Hyrule Field* they play a vital role. The track is laden with trumpet calls—however, the calls are not perfect fifths, but fourths. The trumpet call fits naturally with the theme of becoming



a warrior more than an adventurer. Trumpet calls were often used in hunts, which can evoke combat and training. Horns were also used before battle, and thus symbolize warriors.<sup>15</sup> Monelle says of both the military march and trumpet call, which are prominent in *Hyrule Field*, "...had the aim of "cheering up" the soldiers... Perhaps the soldiers were cheered up by the cultural mythology of *the hero*; even the decadent soldiers of the day liked to think of themselves as little Rolands."<sup>16</sup> While there is combat and danger in the games, projecting oneself as "the chosen hero" that travels and conquers provides enjoyment within the adventure.

Harmonically, the piece centers on G. Motives in G major help create and maintain melodic interest. It is typical for video game music to be short and easily looped, but *Hyrule Field* is longer than most – five minutes in total. The piece utilizes parallel fourths, but there is a clear shift in m. 35 when the chords outline G7 – F7 – Eb7 – D7 – C#7 – d7, proceeding only in inverted forms (Example 3.2).

**Example 3.2, mm. 35-40: Tension in Adventure (7ths, prolonged resolution)**

The musical score for Example 3.2, mm. 35-40, is presented in two systems. The first system contains measures 35, 36, and 37. The second system contains measures 38, 39, and 40. The score is in G major, 4/4 time. The chords indicated below the bass line are G 6/4, F 4/3, Eb 4/3, D 4/3, C# 6/5, and D 4/3. A measure number '4' is written above the first measure of the second system.

<sup>15</sup> Raymond Monelle, *The Musical Topic*. 164-165.

<sup>16</sup> Raymond Monelle, *The Musical Topic*. 169.

Each of these chords present the chordal seventh first in the top voice, and subsequently leap down to the third of the chord (except for the G 6/4). How do these seventh chords relate to the concept of adventure? Upon further examination, this technique resembles Caplin's continuation and cadential function,<sup>17</sup> but the rhythmic qualities in the top voice slow down.<sup>18</sup> In the first 33 measures of the piece, the rhythm in the top voice is stated in eighth and sixteenth notes. Half notes in the first 33 measures are sparse, but mm. 35 – 40 include half notes, with ornamented sixteenths. In this way, the main theme (that is, the main melodic idea/motive) sees a slight development that originates from the horn call at the beginning of the track. In addition, the voices alternate between open fifth horn calls and fourths. In each measure, there is always a fifth interval present. Sometimes this occurs in the bottom voice, and sometimes in the top voice, or both together. In m. 1 of the example (35), the inner voice (G) connects to D on the second beat. In m. 4 (Ex. 3.2, 38) however, the top voice sounds a fifth from C – F. Directly following the chain of seventh chords, the iconic original theme from numerous Zelda games prior emerges in mm. 49–50 (Example 3.3).

**Example 3.3, Main Theme in other Zelda Titles, referenced in mm. 49-50**



The motive is the epitome of adventure in the Zelda games for these reasons: 1. The notes outline a G chord, which lands on the fifth of the chord in m. 50. I previously discussed the topic of the horn call and this piece is no exception. Not only is the track filled with horns, but the

<sup>17</sup> William Caplin. *Analyzing Classical Form*, p. 705

<sup>18</sup> The continuation I point out here is from the altered chords/sevenths.

melody is clear in motivic horn calls. 2. In other Zelda games, the rhythm becomes varied and with dotted quarter to eighth, dotted eighth to sixteenths, or any other type of syncopated rhythmic figures. Though the rhythm varies from certain games, the harmonic features stay the same with the same chords. 3. Most of overworld themes, including Hyrule Field, proceed at a fast tempo. Hyrule Field is 150.

Hyrule Field and the overworlds from other Zelda games connect to villages and towns. Thus far, discussion has been about the adventure in the open world, but what about the villages encompassing the world of Zelda games? Often, Zelda games ornament themselves with an array of characters, diverse in color and shape. For example, Gerudo Desert is home to the Gerudos, a tribe mirroring the Amazonian woman.<sup>19</sup> However, the track does not necessarily imply islander or deserted themes. Rather, it focuses on the upbeat and precarious nature of adventure (see *Gerudo Desert*).

As previously mentioned, the adventure Link goes on throughout Hyrule introduces new territory, species, and people. The species in the games are not cordial in nature though, and battles often ensue while on the journey.

### ***Battle: Fight or Flight Responses***

High levels of stress can activate what is known as the fight or flight response.<sup>20</sup> This response triggers a sudden release of hormones that effects physiological functioning when a certain stimulus is perceived as a threat. In the hero's journey, he/she must conquer dungeons

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<sup>19</sup> In Greek Mythology, the Amazons were a proud tribe of female warriors who trained endlessly for battle. Men were only allowed in their realm when it was time to create more female warriors. The Gerudos are not as harsh against men as the lore of the Amazons, but the Gerudos do not allow men in their settlement/village and only venture to find a mate when they are ready. The Gerudos train in combat, and live in the desert, surviving with any food they can find. They are trained as warriors and their portrayal in Zelda games is that they are powerful and to be feared.

<sup>20</sup> M.E. Thase and R.H. Howland. "Biological Processes in Depression," pp. 213-279.

and defeat a wide array of bosses. If the quest to save Hyrule were a safe one, any character in the game could do it. In most of the games, Link (the player) is chosen specifically for this task and faces dangers deemed far too treacherous for those unwilling. The objective of the protagonist is to save Princess Zelda from the clutches of Ganondorf, which simultaneously saves Hyrule. The peril of the kingdom is imminent, made unabatingly clear in *Majora's Mask*. In this selection, the land of Termina (another version of Hyrule) is under threat of their homeland being destroyed by the moon within 3 days. The player manipulates time and constantly tries to figure out how to stop the impending doom of the land.

While *Majora's Mask's* story centers around the fate that looms above the town and the stress that comes with it, other games are not as ambitious in presentation. Many of the games sound out a battle track within the overworld themes. For instance, *The Great Sea* or *Hyrule Field* plays while he/she roams about, and when enemies appear, the music changes. At times, the change can be subtle or gradual—in other games it is abrupt and instantaneous. How can the aspects of danger appear in the music and cause a stress response? Kondo and fellow composers such as Toru Minegishi seem to employ the following methods to increase atmospheric tension and stress in times of battle:

1. Metric conflict gives off an aural impression of anxiousness and uncertainty. This includes an acceleration in tempo, periodically coupled with odd meters (see Ganondorf Boss Battle)
2. Little to no moments of silence in between melodic lines, evoking restlessness
3. Lower instrumentation (such as timpani and low horn or strings)<sup>21</sup>

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<sup>21</sup> I only add this because higher instrumentation is often used in the adventure or heroic themes.

### *Boss Battles*

Throughout the games, the player runs into enemies sent by the rapacious Ganon (or Ganondorf). These vile creatures hone the player's skills and pose a threat. If an adversary sees him/her in the overworld and begins to attack, the music will change. With the lack of music, he/she is unable to detect where the enemy sounds are coming from. The music still retains a level of unpredictability, as enemies often spawn at random. The melody of the battle theme stays the same regardless of enemy type, until the player participates in boss battles in the dungeons they must explore and conquer. Each of these battles cater to the type of boss faced; in the first dungeon of *Twilight Princess*, an ape boss emerges in the Forest Temple. The track features common African instruments such as djembe, bongos, and pan flute. In Snowpeak Ruins (from the same game), the player encounters an abominable snow beast. The ruins are filled with arpeggiated and somewhat disjunct melodies and open intervals, imitating the trickle of icicles.

#### Example 5.1: mm. 1-4, Ice Ruins

$\text{♩} = 140$

Glockenspiel

Bass

3

Glock.

B.

*Fountains of Rome* by Respighi references “trickling” of water by eighth note descent, much like the above example. The combination of descending eighth notes in a high register evokes droplets or trickling, both suitable for a piece about fountains and a piece about an ice dungeon.<sup>22</sup> When one enters the final boss battle in the dungeon, chimes and bells sound with an added array of voices. Additionally, the rhythm is in  $\frac{3}{4}$ , but the tempo increases from first being at 150 to ending at 180. The increase in tempo showcases the raising of tension within the battle, and since the battle is made up of two phases, the second phase acts as a final stressor.

In my view, many of the musical features that Kondo, Minegishi, and Ota include are not coincidental. Let us consider another boss from the same game; Morpheel. The collision with this water beast occurs after puzzle-solving in the notoriously confusing water temple. The player drops into an inescapable deep tank and as the player falls, haunting music sounds. Without the visual aspect, if one were to close his/her eyes and just listen, how would a sense of danger be translated from this track? Rolling timpani sound, strings move in hasty fashion, and the percussionists play rapidly. In order to emulate the falling and/or swirling water engrossing the player, the strings pan from left to right in the audio output (speaker or headphones). In both the Blizetta and Morpheel battles, it is apparent that fast-paced tempos and instrumentation create an aural impression of stress. The fast movement makes one feel that they must move with urgency and strategize how to defeat the boss, lest they lose their life. The melodies in these battle themes feature several striking chromatic alterations. Thus, it is safe to assume that Ganondorf’s theme encompasses these characteristics and more.

Ganondorf, lord over the dark creatures in the series, is a tyrant with his own special and fitting theme. This theme is played in each of the games discussed here: *Ocarina of Time*, *TP*,

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<sup>22</sup> Fourth Movement, *The Villa Medici Fountain at Sunset*. Notes on *Fountains of Rome*. Elizabeth and Joseph Kahn 2016, West Michigan Symphony.

and WW. In some of the *much* earlier games (*Adventures of Link, Zelda II*), there was no motive unique to Ganondorf. For example, the theme for Hyrule Castle would play and after conquering the castle and coming to the throne room, the same theme could be used with subtle changes. However, in *Ocarina of Time*, *Twilight Princess* and *Windwaker*, Ganondorf has a defined theme.

### *Ganondorf Battle*

The entirety of the protagonist's journey leads up to this point—the battle with Ganondorf. The items acquired and skills learned along the way culminate into the climatic final boss fight. In *Ocarina of Time*, Ganondorf's theme cycles between asymmetrical time signatures that equal 23/16. In his video on the topic, youtuber "8bitMusicTheory" speculates on the ramifications of such an odd time signature. "Without having the music in front of you, it's really hard to follow. Which makes it perfect for this boss fight. The rhythm's frantic energy and disorienting harmony leaves us barely hanging on as listeners...putting us in a *fight or flight state* the goes along with challenging the evil demon king of the world."<sup>23</sup> The meter feels uneven and displaced, because the position of the dotted quarter notes suggests a different beat pattern than the recurring sixteenth note figures. The combination of incessant rhythm and struggle with which beat to follow renders the listener to a state of disorientation.

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<sup>23</sup> 8bit Music Theory, youtube.com. 01/14/2019

### Example 5.2: mm. 1-3, Odd Meter = Unpredictability

**Furioso** ♩ = 115 ...

The musical score consists of three systems of piano accompaniment. Each system has a treble clef staff and a bass clef staff. The time signature is 23/16. The tempo is marked 'Furioso' with a quarter note equal to 115 beats per minute. The right hand plays chords and single notes, while the left hand plays a continuous eighth-note pattern. The score is divided into three measures, with a dotted line indicating the division of each measure into two groups of beats: 13/16 and 10/16.

In transcriptions of the piece, dotted lines divide each measure, demonstrating the asymmetrical groupings of beats (see example 5.2a, dotted line). When divided, the groupings are 13/16 and 10/16.

### Example 5.2a: Asymmetrical Groupings

The notation shows a sequence of eighth notes grouped into two measures. The first measure contains 13 eighth notes, and the second measure contains 10 eighth notes. A dotted line is placed between the two measures, indicating the division of each measure into two groups of beats: 13/16 and 10/16.

In a state of fight or flight, the human mind and body must act post haste, and decide whether to fight or flee. Fight or flight can heighten the human sense of awareness, making individuals more sensitive to their environment. In the case of a boss battle, the player must strategize how to vanquish the enemy. The music overwhelms the listener as he/she deciphers the layout of the battle area and formulates a plan. The boss battles permeate Zelda games, and



each time, the player must conjure up a new strategy.

Again, it is the rhythm that drives the theme of immediate danger. In *Twilight Princess*, the concept of metric conflict takes on a new meaning and instead switches between time signatures. This idea shares likeness with metric conflict in that the pulse changes, but contrasts with the change of time signatures. By the time the he/she feels they aurally understand the music, the meter changes from 4/4—3/4—5/4—4/4 (often in the span of six measures). In line with this idea, the Ganondorf fight in *Twilight Princess* consists of four stages, each set to different tempos: 1. Puppet Zelda (♩ = 124), 2. Dark Beast Ganon (♩ = 95), 3. Horseback Fight (♩ = 150), and 4. Ganondorf Sword Fight (Final, *accel. to* ♩ = 158). My analysis reveals that tempo plays a great narrative role in these stages. In the Puppet Zelda fight, the enemy mirrors the tempo (124) and moves moderately fast as she flies around the player. The second stage pits him/her against a beast that advances in a slower manner (95), but still poses a threat.<sup>24</sup> The third features Link on horseback as he chases after Ganondorf who is also on horseback protected by other enemies. The tempo at 150 sets the influence to move fast to maintain combat with Ganondorf and in the last stage, the tempo returns to its state from *Windwaker's* Ganondorf theme at 158.

My analysis of the rhythm demonstrates the conflict of beat, and just how much tempo can reflect what happens on screen. However, the last stage from the fight above could seem lackluster without proper attention to the second and third points in my argument for this fight or flight experience. The tracks from *Ocarina of Time*, *WW*, and *TP* share the hallmark quality of Ganondorf's theme: disjunct harmonies, endless chromatic alterations, and even hunt topic.

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<sup>24</sup> The instrumentation in the second stage is brought even lower as well.

This aspect and low instrumentation work together to form a sound that seldom ceases to be ominous. The examples below showcase the defining feature in the battle with Ganondorf in each game.<sup>25</sup>

In *Ocarina of Time*, the harmony's placement clashes with the melody. The sixteenth notes often sound a minor or major second (using octave equivalence, see *Ocarina of Time* example, both bars) which causes dissonance with the top voice counterpart. In the first grouping of sixteenth notes in bar 1, G (bass) and Ab (top) appear simultaneously. There are several harmonic and melodic dissonances here, refer to the circles within example 5.3A.

### Example 5.3: Ganondorf's Theme Evolves

#### A. *Ocarina of Time* (Ganondorf)

The image displays two systems of musical notation for the Ganondorf theme in *Ocarina of Time*. Each system consists of a grand staff with a treble clef on top and a bass clef on the bottom. The key signature is three flats (B-flat, E-flat, A-flat), and the time signature is 23/16. The first system begins with a tempo marking of quarter note = 115. The melody in the treble clef features a series of quarter notes and half notes, with some notes tied across bar lines. The bass line consists of a steady stream of sixteenth notes. The second system continues the piece, with a red '2' above the first measure of the treble clef. Blue circles are drawn around specific notes in the second system, highlighting dissonances between the top and bottom voices.

<sup>25</sup> Though most of these are transcriptions, I believe them to be accurate and the greatest resource for analysis during this time.

## B. Windwaker

The image shows a musical score for a piece titled 'B. Windwaker'. It consists of two systems of music, each with a treble and bass clef staff. The first system has four measures. The second system starts with a measure number '222' above the treble clef and also has four measures. The music is written in a 4/4 time signature and features a melodic line in the treble clef and a harmonic accompaniment in the bass clef. The key signature is ambiguous, with various sharps and flats appearing throughout the piece.

A look at these scores (for example, the theme from Windwaker, B.) shows chromatic alterations and vague key signatures. The later games, Twilight Princess and Windwaker, share similar motivic concepts, and both feature changes of key. In both pieces, the tonal implications range from Cm, Dm, Eb, or Ab. Much like the time signatures, the tonal center changes frequently, and the conventional pre-dominant to dominant function of tonal harmony is amiss. Cm and Eb have the strongest representation in both TP and WW, but the chords change often enough to leave the true key and harmony vague.

If there is ever a moment of rest in one instrument in the orchestra, another starts or continues. Furthermore, the chromatic alterations do not cease, and tones continue to “darken.” The instrumentation includes low horn, cello, timpani, and low octave strings. Although WW and TP use piccolo, the highest note it sounds is A5, which is in the lower range of the instrument. The dissonant sounds in the melody resonate and cause an unfavorable response in the brain. Studies in the past show that humans prefer consonant sounds because of the

mathematical relationship between different frequencies.<sup>26</sup> The desire for consonant sound makes dissonant intervals or conflicting melodies unpleasant for the ear and influence the initial response to hearing this type of music. It does not please us as humans, but rather tacks on an added level of stress to a current situation. This is a great tool to use, as it encourages the idea of anxiety and stress response when appropriate: in battle with the immoral overlord. My analysis shows that the idea of a fight or flight response can be evoked through music by way of metric conflict, ambiguous harmonies and melodies, and low instrumentation.

Hyrule fears the power of Ganondorf because he brings death and destruction to the land. It is a time of trial for the citizens of Hyrule, and during this time, the characters lose loved ones. *Midna's Lament* and *Farewell Hyrule King* explore the concept of lament.

### ***Lament: Evocations of Loss, Tragedy, and Darkness***

In my analyses thus far, I explored the ways in which Kondo and fellow composers Toru Minegishi and Asuka Ohta use music to craft intriguing worlds in the Legend of Zelda series. When a hero confronts danger on his/her journey, sometimes he/she experiences loss. To lament is to be engulfed in deep sorrow. Link often says goodbye to his companions in these games either by travel or by death, and the citizens of Hyrule often lose family, friends, or their homes. Without lament, there would be little to contrast the acts of heroism and triumph. The pieces *Midna's Lament* and *Farewell Hyrule King* leave a caricature of desolation left by Ganondorf's wrath. Fundamentally, minor keys can convey loss or hopelessness, and what Kondo and his team appear to focus on is use of modal mixture. In addition, other salient musical features that emerge as characteristic of lament are:

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<sup>26</sup> Marion Cousineau. University of Montreal, Quebec. <https://www.nature.com/news/why-dissonant-music-strikes-the-wrong-chord-in-the-brain-1.11791>

1. Use of lament bass
2. Modal mixture, whether it be from major to minor, or others such as Phrygian
3. Slower tempo<sup>27</sup>
4. Large melodic intervals (P5 or larger)

### *Midna's Lament*

In *Twilight Princess* (the Zelda game), a jaded but helpful twilight creature named Midna aids the player on his/her journey. After an encounter with the villain Zant, a servant of Ganondorf, Zant uses his power to strip Midna of her's. The only way to restore her power is to quickly navigate to Princess Zelda, who decides to transfer her own soul into Midna to give Midna back her strength (Zelda disappears in this process). During these vital moments of racing to Princess Zelda, Midna's original theme changes into *Midna's Lament*, a piece incorporating dorian and phrygian inflection, and lament bass. The rain is relentless in this portion of the game until Midna is restored, and the potential of this being Midna's swan song leaves the player at a loss for words.<sup>28</sup>

*Midna's Lament* contains no key signature, but clearly centers on d minor until later in the piece. In this portion, the piece moves into A minor as the new tonic (or globally just v) and displays the lament bass. In Bach's *Crucifixus*, the lament bass appears in a descending step-wise pattern (Ex. 5.4).

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<sup>27</sup> This is not to say any slow song is innately hopeless, but it is in contrast with the other songs that have been upbeat and lively, conveying other concepts such as adventure.

<sup>28</sup> Merriam Webster Dictionary, <https://www.merriam-webster.com/dictionary/swan%20song>.

**Example 5.4: Bach's (A) Lament Bass vs. Midna's (B)**

**5.4A**



**E (1)**

**D# (#7) D (7)**

**C# (#6) C (6)**

**B (5)**

**5.4B**



**A (1)**

**G (7)**

**F (6)**

**E (5)**

A typical lament bass descends from the tonic note to the dominant by step; at times stepping down chromatically. While Midna's lament bass appears different than Bach's, the overall function remains the same. The structural basis for Bach's line (without added sevenths or chromatic alterations) is:  $\wedge 1 - \wedge 7 - \wedge 6 - \wedge 5$ . The first appearance of Midna's lament bass happens at the same time as seems to be an appropriate subordinate theme. Right after Midna's lament bass in the example above (mm. 45 – 52), a reversal of the lament bass occurs and closely aligns to Bach's with an ascending chromatic line (ex. 5.5).

**Example 5.5, mm. 53-60: Midna's Reverse Lament (Reduction)**

Am: ^6                      ^#6                      ^7                      ^#7

This last gesture appears right before the end of the piece, and such an action could be construed as a metaphor for Midna's hope to continue living. The argument that the piece moves into A minor by this point is supported by the fact that G# acts as the leading tone. The "reverse" lament bass is more than a sequence here, and instead supports the new key area of A minor with the innate pull toward tonic. A minor (the key) sounds out again in the last four measures of the piece before the coda.

As suggested earlier, the greater portion of this piece relies on d minor tonality. It is unlikely that the piece would operate on iv (if it was clearly in a minor), which is why it is only natural to understand this piece in D Dorian.<sup>29</sup> A d minor ninth chord unfolds in the bass, implying heavy emphasis on D, E, and F. This basal texture is steady throughout the whole piece, as the top line chimes out with wide spaced intervals. Example 5.6 shows this relation and summarizes the progression in both voices. In measure five, ^5 (**d** = i, thus **a** = v) appears promptly and proceeds to ^3. The F ultimately resolves to E, and moves to D, supporting the bottom voice's structure.

<sup>29</sup> For clarity in writing, I am suggesting that the piece is in D Dorian in the hope that scale degrees will be made clear.

### Example 5.6, mm. 1 — 11: Reduction

$\text{♩} = 130$

m. 1-4                      m. 5-11

(4x)

The inclusion of  $\hat{4}$  appears in measure 16, creating a tonal structure that matches the tonal structure of many paradigmatic classical pieces.<sup>30</sup> Scale degree  $\hat{2}$  in measure 19 creates a feeling that is suspension-like, waiting to be resolved. This is quickly interrupted and diverts into full-fledged D Dorian by outlining  $b2$  in mm. 23-27 (Eb, ex. 5.7).

### Example 5.7, mm. 23-27: Midna's "Last Hope"

A noticeable shift occurs with these tones that simultaneously acts as a darkening and a brightening. While the  $b2$  comes abruptly, and appears unwelcome, it is contrasted by  $b4$  because they create a consonant interval respectively. Kondo shows special preference to using different modes in this piece and *Farewell Hyrule King*, and even uses it in the main theme of *The Legend of Zelda*. *Midna's Lament* is taken to the furthest point of darkening—in both *The Legend of Zelda* main theme and *Midna's Lament*, the themes reach their darkest point:  $b2$ . In

<sup>30</sup> By this I mean moving from 5 – 4 – 3 – 2 – // . (The slashes represent an interruption)



the main theme, this action is overcome by an uplifting resolution; however, in Midna's song, it continues to fall into chromaticism by way of b5 (Ab). This enables the music to move back into the original theme presented, before introducing the secondary theme in measure 44. The lament bass begins here, and tonal motion leans toward A minor. If it were to be analyzed in D Dorian, then the structural bass pitches still act conventionally in Schenkerian terms: 5(A) – 4(G) – 3(F) – 2(E) - ||. Before resolution to A in the last four measures, the music evokes a stopping point. The modal inflections have now been extended to the furthest point of darkening by presenting b2. In *Music Theory for Computer Musicians*, Michael Hewitt suggests that flat keys are often thought to be “darker.”<sup>31</sup> Regardless of whether the piece is in D minor, D Dorian, or A minor, flats are used for chromatic alteration. The leading tone and shift to A minor present one last change, a dichotomy between the despair felt at the beginning of the piece and Midna's fleeting hope.

#### *Farewell Hyrule King (WW)*

At the opening of *Windwaker*, the player learns that the King of Hyrule used the last of his strength to flood the land in the hope that he could put an end to Ganondorf's desire to reign over the kingdom. As Ganondorf strived to re-create the land of Hyrule (which would destroy the islands that now encompass the world of *Windwaker*) and rule it in tyranny, the King seeks after an individual who is able to stop Ganondorf (i.e. Link, the player). After defeating Ganondorf in *Windwaker*, the Hyrule King understands that his time has come, and he must pass on. In the game, he/she travels with the Hyrule King by boat. This anthropomorphic boat names himself The King of Red Lions, until he later reveals that he is indeed the true King of Hyrule. The player and the King sail far and wide across the clear blue sea, defeating many obstacles in the

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<sup>31</sup> Michael Hewitt, *Music Theory for Computer Musicians*. 2008.

process. This kind of partnership occurs often in Zelda games (Midna for example) and creates a sense of close friendship between the player and companion. At this point in the game, his/her sense of friendship is heightened by the knowledge that the goal is just in reach: to save Hyrule. This great act of triumphant heroism is sorely contrasted in the scenes thereafter (or in some cases before): saying farewell.

The step-wise material resembles the movement of a lament bass, but it is less clear than in *Midna's Lament*. In contrast, modal inflections decorate the piece and once again, the composers (now with Kenta Nagata) incorporate the Neapolitan as a means of tonal darkening. Lowered  $\hat{5}$ 's and raised  $\hat{7}$ 's are also in play as the piece continues in g minor. The open and low octaves in place give the aural impression of the King's sobering reality; the impending truth of death. Speaking on his fifth symphony, Beethoven states, "This is the sound of fate knocking at the door."<sup>32</sup> I am not suggesting that *Farewell Hyrule King* is of the same magnitude of Beethoven's fifth, but the tonal nature of deep octaves and instrumentation leaves an impression of death or "fate knocking at the door." The sheet music is marked *Pesante* (heavy) and draws out low tonic (g minor) by way of whole notes in the bass and dotted quarter-half notes in the inner voice. The 5 – 6 sequence from G – D, G – E remains with little change until measure 9, which is then transformed into 5 – b6, which subsequently acts as b2 in the key (see example 5.8).

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<sup>32</sup> Liner notes. "Beethoven Symphony No. 5." Conducted by Kurt Masur. Inspiration Warner Classics. *Beethoven: Symphony No. 5 - Fate Knocking at the Door*. 2017, CD.

**Example 5.8: mm. 1 — 4, 9 — 12: 5 – 6 and 5 – b6 Sequence (Reduction)**

Pesante  
♩ = 84

9 – 12

While the bass plays out this new 5 – 6 (measure 9 – 12, bars 3 - 4 in above example), the top voice brings in other alterations such as #7 and b5. Once again, we see the display of somber tones. Incomplete chords are used in the next section (mm.17 – 24), with only the one and five of each in use (ex. 5.9).

**Example 5.9 mm. 17 — 24: Open Chords and Half Cadence**

Pesante  
♩ = 84

i: HC

Because of this open-ended space in the bass, incomplete voicing is achieved that in turn further supports the emptiness felt when left behind. At measure 24, a much needed half cadence resounds with all aspects of the chord in place. This is the first instance of “completeness” reached in the chords used in the whole piece. Odd it may seem; the half cadence poses as a defining moment, giving stability to a piece that has not yet to have a cadence. The

impression of structure via cadence destabilizes in the proceeding B section in measure 25. The new section outlines tonic, with hammer blows of octaves in the bass. The piece increases in intensity by measure 37 and creates active motion in both the top, bottom, and inner voices. The piece features modal mixture, topics on lament, slower tempo, and intervals of a P5 or more. Octave exchange occurs at a rapid pace throughout, and upon the listening, the piano's sound panders from one ear the other. Again, this evokes a sensation of being surrounded. Perhaps the technique was chosen because Hyrule is not only surrounded by water in Windwaker (like the emulation of swirling water by the strings in the Morpheel battle discussed earlier), but the player could feel encircled by sadness at saying farewell.

The course of a hero's journey consists of adventure, enemy encounters, and lament from loss. If the journey for Link stopped there however, there would be no game to play. The Legend of Zelda is about saving the land of Hyrule from certain evil; thus, it is pertinent that the act of heroism is forthright in presentation. This includes not only the story's narrative, but the music as well.

### ***Heroism: Bravely Overcoming Danger and Peril***

#### *The State of Heroism*

Through the course of each game in *The Legend of Zelda*, Link is either already chosen as a hero, or becomes one. Heroism is defined as a state of great bravery; to put oneself at stake for another.<sup>33</sup> Video games have long heralded this idea, and heroism is central to video game narratives. The player is thrust into a world where he/she is the hero and only they can save a friend (*Final Fantasy*), loved one (*Fallout*), or even the world from certain disaster (*Majora's Mask*). In the Legend of Zelda, the player controls Link, the deemed hero of the series. As the

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<sup>33</sup> Merriam Webster and Google Dictionary. <https://www.merriam-webster.com/dictionary/heroism>

journey continues, the player's skills develop, which help to increase his/her ability to defeat a difficult array of enemies. When those enemies are subsequently defeated, the player feels triumphant and heroic. The psychology of *effort = reward*<sup>34</sup> is sought after in the game through side missions, battles, and goals that eventually lead to end of the game where the player emerges as the hero of Hyrule.

### *Heroism in Music*

Thus far, my analyses explore Kondo and his team's use of rhythmic, tonal structure, and modal mixture to evoke three narrative concepts in The Legend of Zelda series.<sup>35</sup> Music enriches the atmosphere of video games by stimulating the human sense of sound. When in gameplay, the visual and aural aspect increases immersion, and while some studies discuss the breaking of immersion from the music in video games, my studies explore just the opposite. The prior topics are important in adventure type games like The Legend of Zelda, but the culmination of these topics leads to perhaps the most vital of them all: victory over evil (heroism). Ultimately, game players and listeners alike can experience the musical characteristics of heroism:

1. Dorian 5 - 6 evokes heroism and/or ascent
2. *Twilight Princess*' "hero's motive" sounds not only in the overworld, but also whenever he/she verses a boss from a dungeon
3. Heroism shares musical characteristics with adventure—through the player's journey/adventure, he/she becomes a hero, which makes this fitting

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<sup>34</sup> Carrie Steckl. <https://www.mentalhelp.net/blogs/the-greater-the-effort-the-sweeter-the-reward-and-the-harder-the-loss/>

<https://neurosciencenews.com/neuroscience-effort-reward-5142>

Howard Schuman, Edward Walsh, Camille Olson, and Barbara Etheridge. "Effort and Reward: The Assumption That College Grades Are Affected by Quantity of Study." *Social Forces* 63, no. 4 (1985): 945-66.

<sup>35</sup> i.e. Adventure/Warrior, Fight or Flight, Lament.

Kondo and his team evoke heroism in many ways. As a result, let us consider what makes a musical motive sound “heroic” or triumphant. In line with the points above, faster tempo, rhythmic and harmonic acceleration, counterpoint, and modal shifts from minor to major (and vice versa) could all be considered examples of heroism/victory in Zelda music. Hyrule Field from *Twilight Princess*<sup>36</sup> employs a striking Dorian 5 - 6 exchange to epitomize a hero’s motive, as well as the previously listed points.

### *Hyrule Field* (Twilight Princess)

Much like the Great Sea, Hyrule Field is an area that makes connections to different towns, grants new items, and helps to cultivate different techniques. Hyrule Field hones the player’s skills as the overworld, and his/her journey never fails to return to this “home” base. In turn, it seems the “hero’s motive” is in the track of Hyrule Field. This is the same motive that is heard when defeating bosses.<sup>37</sup> In the previous discussion on boss battles, the music is foreboding, and thereby suggests imminent danger (and the fight or flight response). As soon as the player gets the upper hand, this same motive (from Hyrule Field) comes back. The orchestration becomes thicker, the tempo is faster and rhythmic figures accelerate, but the motive returns nonetheless. Because Hyrule Field from *Twilight Princess* is where much of the journey takes place, it appears that using the motive from Hyrule Field in boss battles is a type of “callback” to the skills the player learns on his/her journey. The greater portion of my argument for heroism discusses modal mixture which also encompasses dorian mode. However, another aspect of heroism can be found in the rhythm in Hyrule Field. Eighth notes with rests in between them creates syncopation which in turn evokes movement forward. While this is reminiscent of

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<sup>36</sup> The Hyrule Field discussed earlier is from *Ocarina of Time*.

<sup>37</sup> Each final boss in the dungeons, such as: Forest Temple, Water Temple, Snowpeak Ruins, etc.

adventure, it can also represent heroism. No matter the challenge or boss, he/she must continue to vanquish evil. At times, he/she may feel stress while in gameplay, but they must press on to become the hero Hyrule needs.

Hyrule Field could be considered a sonata and using Schenkerian analysis can help reveal the hero's motive. In the subordinate theme, we find the hero's motive; it plays a central role as it *becomes* the main theme. Though the main theme establishes the *Dorian 5 – 6*, the subordinate theme “rises” as if to become the main theme (it appears much more during the piece and even comes back later as previously discussed). The piece begins in E Dorian. This is because the beginning showcases e minor chords harmonically, while C-sharps decorate the melody. This leads me to believe, that much like Midna's Lament, the piece is in a Dorian mode, rather than simply a major key.<sup>38</sup> The main theme presents the first Dorian 5-6 and is as follows (Ex. 5.10):

#### Example 5.10, mm. 6-9: Main Theme and E Dorian 5-6

*E Dorian 5-6 = E in bass, B in top voice.*

*The next connection in the top voice is a raised 6<sup>th</sup> (in this case C#) above the bass.*

The musical score for Example 5.10, mm. 6-9, is presented in a grand staff format. The tempo is marked as ♩ = 144. The key signature is one sharp (F#), indicating E Dorian. The score consists of four measures. The top voice (treble clef) begins with a half note E, followed by quarter notes B and C#, and ends with a half note D. A trill (m3) is indicated over the final D. The bottom voice (bass clef) begins with a half note E, followed by quarter notes B and C#, and ends with a half note D. Fingering numbers (5, 6, 3, 5, 6, 3) are provided for the top voice. The bass line consists of a steady eighth-note accompaniment.

The voice leading in the top treble line may seem atypical with respect to Classical style composers such as Beethoven and Mozart, but for Koji Kondo, adjustments and modal

<sup>38</sup> I propose Hyrule Field is in E Dorian, as opposed to D major (akin to the proposition in Midna's Lament. with that piece featuring D Dorian, not A minor).

inflections are common and salient. The main theme (MT) begins with a leap from B to G. The dorian 5 – 6 first changes over E in the bass, which remains as focal point in the bass throughout the main theme. The top voice on B and ensuing C# form the basis for the dorian exchange (Example 5.10). After the main theme settles and leads into the transition, the subordinate theme appears. Sonatas in the classical era often move from major tonic for the main theme to major dominant for the subordinate theme. In the piece in discussion, the tonal motion from E to B dorian seems fitting for a “sonata” type exposition, as E’s fifth is B.<sup>39</sup> The hero’s motive occurs in the subordinate theme (ST), and the dorian 5 – 6 exchange continues (Ex. 5.11).

**Example 5.11 mm. 27–30: “Hero’s Motive” and Dorian 5 – 6**

*B Dorian 5-6 = B in bass, F# in top voice.*

*The next connection in the top voice is a raised 6<sup>th</sup> (in this case G#) above the bass.*

Though a D major triad forms the basis of the treble lines (F# - D - A, arcs in example 5.11), a deeper analysis will reveal that the three pitches outline the 3<sup>rd</sup>, 5<sup>th</sup>, and 7<sup>th</sup> of the B minor seventh referential sonority. In measure 27, F# is the fundamental line’s beginning and leads into the G# of measure 28. Because of the employment of the G# and attention to b minor tonality, I lean toward calling this b dorian; which would be the *relative Dorian* of A major.<sup>40</sup> Overall, the line for the hero’s motive (and the *Urlinie*) goes from F# - G#, with G# acting as the

<sup>39</sup> In a typical minor key sonata, tonic will move to III, v, or V for the subordinate theme. In this case, it is minor v.

<sup>40</sup> It shares exact common tones (even accidentals) with A major.



goal tone. This is congruent with the introduction—which before presented B - C#. The main theme influences the expectation to rise to G# in the ST.

Since the first goal tone in the main theme emerges from the Dorian 5 – 6 in E dorian (with B – C#), the ear expects to have this sort of goal tone in B Dorian, which would be displayed as F# - G#. The next section seems to be a response to the first, and when transposed up an octave, only begins a fifth above E in the bass.<sup>41</sup>

**Example 5.12 mm. 31–34: Up an Octave, Up a Fifth**

Once again, the new connections of important tones fall in line with Dorian 5 – 6. Though it is mimicking the main theme's Dorian with E in the bass and B – C# in the top voice, the motion of the note in the top voice mirrors the beginning of the subordinate theme. The *Stufen* follows a pattern of up a fifth and back down: E (main theme) – B (subordinate theme) – E.

The piece returns to the *obligate lage*, of where the subordinate theme began. Inner voice connections act as support to the *Urlinie*, rather than independently. The note A becomes the next part of the fundamental line, leaving the *Urlinie* like so: F# - G# – A. The example below

<sup>41</sup> Or a third in half steps from the previous goal tone (G#).

shows yet another Dorian 5 – 6 (in b Dorian) in measure 39 by implied tone of F# in the top voice (indicated by arrow in ex. 5.13).

**Example 5.13, mm. 38-41**

Bar 3 brings in Bb—this use of the Bb would be shocking to the ear, but modest analysis shows Kondo’s brief use of modal mixture once again. The tonal area suggests D minor, but the piece does not remain in this area very long and in turn does not evoke that leaves b Dorian. It seems Kondo was still sure to include the idea of being uplifted, by use of Bb in the bass and putting F# to G in the inner voices. While not another dorian 5 – 6, this keeps with the same idea of an ascending 5 – 6 sequence. My analysis argues that the inner voice connections are still significant to explain the sudden use of Bb. The piece rises in the bass as D creates a voice connection to get to the next part of the *Stufe* (E).

What if the initial goal tone of the *whole piece* was the same as the beginning’s goal tone? Displayed below is the same C# (in terms of register) that the piece ended on for the beginning main theme’s goal tone.

Example 5.14, mm. 42-43: C# Goal Tone



A conjecture that could arise is that C# is either the 3<sup>rd</sup> being in A major or perhaps the 7<sup>th</sup> if concretely in D major (or even a V chord in D major)—however, it is still theoretically sound to suppose C# here as the *second scale degree* in b Dorian. Video games tracks are often loopable, thus, ending on the second scale degree and *almost* reaching tonic leaves much anticipation for the final resolution at the end of the track (which does not occur until the end credits of this game). Overall, the whole hero's motive works toward the goal of C#, the same goal in the main theme, when the Dorian 5 – 6 is first established. There is an *ascent* throughout the whole piece to get back to the initial C#. Additionally, when this same motive returns during triumphant moments in boss battle encounters, the tempo rises to ♩ = 180.

My analysis suggests that the elements at work in this piece are connected. The piece begins in E dorian, whose relative major is D major (which is superimposed at times while the piece is still in e dorian or b dorian), whose relative minor is b minor (chords that are interlaced throughout); which on another, deeper level is b dorian. B dorian's relative major is A major, which is the last chord the piece ends on and one that sounds intermittently throughout the piece. Given this analysis, and the notion of Kondo and team's desire behind the music—would it be too much to suppose that Hyrule Field is a depiction of the game as a whole? From my perspective, I believe the heroic features are most evident in Hyrule Field, an overworld theme

and one that reappears. Everything the player does comes back to the place where he/she has grown in skill and technique and learned much on his/her journey. In no other way than through Schenkerian analysis could this overall connection and goal tone be presented so well—and in my view, no other way would the demonstration of a hero’s motive be quite as powerful than through that of the dorian 5 – 6.

"A sword wields no strength unless the hand that holds it has courage. You may be destined to become the hero of legend... You must use your courage to seek power...and find it you must. Only then will you become the hero for whom this world despairs."

The Hero of Time, *Twilight Princess*

### *Conclusion*

I have included context for many of the pieces in discussion for the purpose of raising awareness to what he/she might experience while in gameplay. In addition, I propose that though the visual aspect makes the multimedia experience more impactful, my use analytical techniques such as Schenkerian voice leading reveals musical evocations (i.e. danger, lament). I have done my own study and played these pieces for people who have no prior knowledge of the games. Whenever I chose *Ganondorf’s Battle*, the response from people is that they feel in “danger,” or stressed.<sup>42</sup> Additionally, I have asked different individuals to listen to *Midna’s Lament* and *Farewell Hyrule King*, which most often receive a verbal confirmation of “sadness.”<sup>43</sup> Throughout this study, I report that modal shifts and inflections, rhythmic qualities, tonal centers, orchestration and instrumentation, work together to illuminate the concepts of adventure, fight or flight, lament, and heroism. This thesis is a culmination of these topics in the structural and

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<sup>42</sup> I played select pieces for friends, my spouse, and my family.

<sup>43</sup> The individuals had no prompting on the subject matter, which in turn creates an organic response.

working frame. I believe that the way the research is structured carries the reader through not only the game, but topics that relate to aspects of the human experience. For example, humans yearn for adventure—they often fight “battles” against time and responsibilities. One of the most tragic experiences is *lament*, a sobering and universal subject. In great contrast, when *victory* (heroism) occurs, humans rejoice together.

Video game music has uncanny ways of telling this story, and the music in *The Legend of Zelda* evokes these concepts by utilizing various musical topics and ideas. Ultimately, rhythm is responsible in musical evocations of movement forward (pp. 6-16), rising heartbeat (pp. 18-23), and moments of loss. The tonal aspect of these pieces evokes a call to battle (horn call, pp. 6-16) and exploration (pp. 6-16), environment (pp. 19-21), disorientation (pp. 24-26), emptiness (<P5 intervals, pp. 29-31), and heroic uprising (return of a motive in moments of triumph, pp. 34-40). These topics and musical components coalesce into one overarching concept: the journey of a hero.

## Bibliography

- Atkinson, Sean. "The Musical Narrative of JRPGs." *First Person Scholar*. January 30, 2019. Accessed April 26, 2019. <http://www.firstpersonscholar.com/the-musical-narrative-of-jrpgs/>.
- Beethoven, Ludwig van. "Beethoven Symphony No. 5." Conducted by Kurt Masur. By Ludwig Van Beethoven. Recorded September 1, 2017. In *Beethoven: Symphony No. 5 – Fate Knocking at the Door*. Ludwig Van Beethoven, 2017, CD.
- Bradford, Wesley. "Modernist Style and Neo-Narrative - YouTube Gaming." YouTube. February 09, 2018. Accessed December 26, 2018. <https://gaming.youtube.com/watch?v=cXSEXfSojzk>.
- Brame, Jason. *Thematic Unity Across a Video Game Series and Examining Non-Linear Forms: Techniques for the Analysis of Scores Found in Video Games*, Master's thesis, Texas Tech University, 2010. Lubbock, TX. [https://www.academia.edu/7832352/Thematic\\_Unity\\_Across\\_a\\_Video\\_Game\\_Series](https://www.academia.edu/7832352/Thematic_Unity_Across_a_Video_Game_Series).
- Caplin, William Earl. *Analyzing Classical Form: An Approach for the Classroom*. Brantford, Ontario: W. Ross MacDonald School Resource Services Library, 2016.
- Gervais, Nicholas (2015) "Harmonic Language in The Legend of Zelda: Ocarina of Time," *Nota Bene: Canadian Undergraduate Journal of Musicology*: Vol. 8: Issue 1, Article 4.
- Haloperidol, Zig. "Koji Kondo Super Mario Bros." Sputnikmusic. March 26, 2017. Accessed March 17, 2019. <https://www.sputnikmusic.com/review/73310/Koji-Kondo-Super-Mario-Bros>.
- Hartmann, Thomas. "Orchestra Hero: A Study of Musical Tools and Orchestration in Video Games." Academia.edu - Share Research. May 2015. Accessed December 23, 2018. [https://www.academia.edu/17510689/Orchestra\\_Hero\\_A\\_study\\_of\\_musical\\_tools\\_and\\_orchestration\\_in\\_video\\_games](https://www.academia.edu/17510689/Orchestra_Hero_A_study_of_musical_tools_and_orchestration_in_video_games).
- Hepokoski, James A., and Warren Darcy. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata*. Oxford; New York: Oxford University Press, 2011.
- Hewitt, Michael. *Music Theory for Computer Musicians*. Boston, MA: Course Technology, 2008.
- Jerold, Beverly. "Bach's Lament about Leipzig's Professional Instrumentalists." *Bach* 36, no. 1 (2005): 67-96. <http://www.jstor.org.ezproxy.uta.edu/stable/41640534>.
- Kimmel, William. "The Phrygian Inflection and the Appearances of Death in Music." *College Music Symposium* 20, no. 2 (1980): 42-76. <http://www.jstor.org/stable/40374079>.
- Mackey, Bob. "Super Mario's Maestro: A Q and A with Nintendo's Koji Kondo." *US Gamer*, December 14, 2014. Accessed December 07, 2017. <https://www.usgamer.net/articles/koji-kondo-interview-nintendo>.

- Monelle, Raymond. *The Musical Topic: Hunt, Military and Pastoral*. Bloomington: Indiana University Press, 2006.
- Monelle, Raymond, and Robert Hatten. *The Sense of Music: Semiotic Essays*. Princeton; Oxford: Princeton University Press, 2000. <http://www.jstor.org/stable/j.ctt7rszr>.
- Rosand, Ellen. "The Descending Tetrachord: An Emblem of Lament." *The Musical Quarterly* 65, no. 3 (1979): 346-59. <http://www.jstor.org.ezproxy.uta.edu/stable/741489>.
- Schenker, Heinrich, Ernst Oster, and Oswald Jonas. *Free Composition: New Musical Theories and Fantasies = Der Freie Satz*. Hillsdale, NY: Pendragon Press, 2001.
- Thase, M. E., & Howland, R. H. (1995). "Biological Processes in Depression: An Adapted Review and Integration. In E. E. Beckham & W. R. Leber (Eds.), *Handbook of Depression* (pp. 213-279). New York, NY, US: Guilford Press.
- Theory, 8-bit Music. "Odd Time Signatures in Video Game Music." YouTube. January 14, 2019. Accessed January 01, 2019. <https://www.youtube.com/watch?v=5JRojRIA1ng>.