Musical Wonder and Awe in Narnia: Comparing Two Related Emotions

Laura Steiner
University of New Mexico - Main Campus

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Laura Steiner

Candidate

Music

Department

This thesis is approved, and it is acceptable in quality and form for publication:

Approved by the Thesis Committee:

David Bashwiner, Chairperson

Kimberly Fredenburgh

Peter Gilbert
MUSICAL WONDER AND AWE IN NARNIA:
COMPARING TWO RELATED EMOTIONS

by

LAURA STEINER
B.M., PERFORMANCE, UNIVERSITY OF ALABAMA, 2015

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I also thank my parents, who are my greatest mentors, role models, and friends. Your love and support has been immeasurable, and I am so grateful for you.

Soli Deo Gloria!
Wonder and awe are often considered to be synonyms. But though these emotions are similar, a more nuanced look at their musical representations reveals that they are not entirely the same. This thesis examines the difference between musical wonder and awe in music from The Lion, The Witch and the Wardrobe, a 2005 film about siblings who find a magical world in a wardrobe. After a review of the literature on musical wonder, the music from two scenes is analyzed. The wardrobe scene, in which the youngest child discovers the land of Narnia, depicts wonder visually. Certain musical characteristics, both harmonic transformations and non-harmonic factors, correspond with this visual representation. The other scene analyzed is the battle scene, in which the children fight against the army of the evil White Witch. Visually, this scene is more complex and represents a variety of emotions, including power, fear, and awe. Again, both harmonic and non-harmonic factors contribute to a musical cuing of awe. This research finds that, in music from this movie, a major difference between wonder and awe is a difference in scope.
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Chapter 1

Introduction

Wonder and Awe

The emotion of wonder is underrepresented in scholarly literature and is often conflated with awe. But while these emotion terms are sometimes used synonymously, it is valuable to consider ways in which they might be different. We can see hints of those differences in the Merriam-Webster definitions, which say that wonder is “the quality of exciting amazed admiration” or “rapt attention or astonishment at something awesomely mysterious or new to one’s experience,”\(^1\) while awe is “an emotion variously combining dread, veneration, and wonder that is inspired by authority or by the sacred or sublime.”\(^2\)

When wonder and awe are portrayed in music, they are likewise similar, but examining the differences can lead to a more refined understanding of the two terms.

Film music is particularly suited to an examination of the musical representations of these emotions, or any emotions for that matter. In absolute music, one cannot know the intended emotion in any spot with any certainty. In programmatic music, it is still a difficult problem to connect particular moments with the events in the program, much less the emotions associated with those events. Vocal music is perhaps easier to work with in this regard. Live or video-recorded performances of vocal music can provide more information about emotion through the actions and expressions of the singers. The text of vocal music can also provide more information about musical emotions, and this


approach to emotion is used by Cooke, in *The Language of Music*. Cooke rarely uses a musical example that does not have text, and even then, usually uses music with a strong programmatic element. Likewise, the emotions presented in film music can be clarified by the onscreen elements: facial expressions, dialogue, and narrative can inform the listener and the analyst about the intended emotion. Of course, some film music is designed to contradict or provide conflict with the film rather than to reinforce the portrayed emotion—for instance, consider the use of the pleasant and hopeful song “We’ll Meet Again” as a soundtrack to sights of nuclear disaster in *Dr. Strangelove*. Because of contradictions like this, it is important to consider what the intended relationship between the music and the film might be before drawing conclusions. But a film that uses music to reinforce portrayed emotion allows for a nuanced look at how the emotions occur in that music. This thesis will use music from such a film to argue that wonder and awe are different yet related emotions and are represented in music in different ways.

**Narnia**

The film *The Chronicles of Narnia: The Lion, The Witch and the Wardrobe* (referred to hereafter as *LWW*) provides the music that will be examined in this thesis. Produced by Disney and Walden Media, this film was directed by Andrew Adamson, had music composed by Harry Gregson-Williams, and premiered in December 2005. Based

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on the children’s book of the same name by C. S. Lewis, *LWW* follows four British children during World War II. After they are sent to the countryside home of an aged professor to be safe from the London air raids, the youngest child, Lucy, finds the magical world of Narnia in a wardrobe. When her siblings Peter, Susan, and Edmund enter Narnia, they end up joining mythical creatures and talking animals in a fight to defeat the White Witch, who has covered Narnia with snow in a perpetual winter. The lion Aslan, the true ruler of Narnia, sacrifices himself to save one of the children but returns to life and appears during the final battle to claim the victory.

The score and story of *LWW* make it a good movie in which to examine musical emotion. As mentioned above, for accurate emotional analysis it is important that the music is intended to reinforce the onscreen emotion rather than contradict it. In *LWW*, Gregson-Williams called his approach towards scoring the movie “honest,” saying that he did not want to mislead the audience or even nudge them towards an emotion before it was time.\(^5\) He also did not want to “bang the audience over the head” with the emotion, instead wanting to use gentler and sophisticated ways to make them feel the intended emotion. He would even study Adamson’s body language as he listened to the cues to make sure the director was feeling the emotions Gregson-Williams was attempting to convey.\(^6\) Because of Gregson-Williams’s approach, the music of *LWW* allows the analyst to assume several things: first, that the music is not intended to contradict the emotions in the scene; second, that the emotion in the music does not precede the emotions portrayed

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onscreen; and third, that the music is intended to not only represent emotion but also to elicit emotion from the audience.

*LWW* is also well-suited for studying the specific emotions of wonder and awe. In the filmmakers’ commentary, wonder is an oft-mentioned emotion. Both Lucy and the professor are referred to as having an “open childlike wonderment,” and the filmmakers stated that the original book by Lewis, when reread as an adult, is about the wonder of childhood. In another bonus feature for the film, awe and wonder also are mentioned together as the ultimate description of the children’s experience. Lewis would likely agree that Narnia is wondrous. He rarely mentions wonder, but states in a footnote in his autobiography that his childhood stories of anthropomorphic beasts were not wonderous—their only commonality with Narnia was talking animals. This implies that he thought of Narnia as wonderous.

The specific scenes I have chosen to study are the wardrobe scene in which Lucy first discovers Narnia and the battle scene, where Peter and Edmund join forces with the creatures of Narnia against the White Witch’s army. According to my analysis, these correspond to the emotions of wonder and awe respectively. While a battle scene may seem like an odd choice for the study of emotion, the director’s stated intention for the scene was to create emotion: he “played it [the battle scene] more for the emotion and drama and not for the gore and violence.”

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Wonder in Scholarly Literature

Though wonder as an emotion is infrequently mentioned in scholarly literature, it is not completely absent—there are several important books which explore the emotion of wonder. Philip Fisher, in *Wonder, the Rainbow, and the Aesthetics of Rare Experience*, writes about how wonder, described as the aestheticization of delight, is opposed to the sublime, defined as the aestheticization of fear. While he maintains that wonder is rare or possibly nonexistent in music, his idea of wonder as related to delight is useful, and his sublime has parallels with awe. Robert C. Fuller, in his book *Wonder: From Emotion to Spirituality*, examines wonder and awe (for him, synonyms) as they relate to religion and psychology. His idea of wonder in music is that when we hear beautiful music with layers of order, we feel a sense of wonder at the music as we listen. This raises a question which Fuller does not explore: what is the object of wonder? In other words, is the wonder directed towards elements of the music itself, or can the music allow us to wonder at some external, non-musical object?

Frank Lehman, in *Hollywood Harmony: Musical Wonder and the Sound of Cinema*, examines what music theory has to offer us for the explanation of “wonderment,” which he defines as “the pleasurable sense of awe and exhilaration that comes from perceiving something exceeding the frames of normal everyday experience, yet without a threat to one’s sense of physical or psychic security.” Lehman’s wonderment, a cinematic emotion elicited by the larger-than-life visuals seen and

pantriadic harmonies heard in the movie theater, is not exactly the same as wonder. He divides it into two categories: awe and frisson. His idea of awe is very similar to the dictionary definition, but his idea of frisson shares elements with wonder. Lehman uses neo-Riemannian theory to examine the specifics of wonderment as expressed through pantriadic harmony, which is non-tonal yet still consonant. The transformations between triads, expressed by neo-Riemannian operators, allow him to examine the workings of pantriadic progressions of film music, which break tonal expectations and create wonderment.

Because neo-Riemannian theory aids in understanding pantriadic sections of film music such as those found in LWW, it is also useful to examine the work of other transformational theorists. Richard Cohn’s book *Audacious Euphony: Chromaticism and the Triad’s Second Nature* arguably has little to do with emotion in music, but, like Lehman, Cohn uses transformational theory to analyze pantriadic music.\(^\text{14}\) He examines how consonant, nearly even triads can be related and can be sorted into voice-leading regions (Weitzmann regions) organized by the completely even augmented triad. He also generalizes this out to seventh chords as well. Cohn’s work is based on a foundation laid by David Lewin, a critical figure in transformational theory, who in *Generalized Musical Intervals and Transformations* provides the mathematical groundwork for examination of the transformations between musical elements in general: notes, intervals, chords, and

\(^{14}\) Richard Cohn, *Audacious Euphony: Chromaticism and the Triad’s Second Nature* (New York: Oxford University Press, 2012). In this book Cohn avoids the label neo-Riemannian, in part because the ideas were likely not generated by Hugo Riemann, and in part because he does not agree with some views and practices associated with that name. (Cohn, xiii).
even time. Though Lewin’s work is not directly applicable to this thesis for the most part, he has influenced neo-Riemannian and transformational theory immensely.

Aside from Lehman, there are two other articles that deal explicitly with wonder in music. Zentner, Grandjean, and Scherer, in “Emotions Evoked by the Sound of Music: Characterization, Classification, and Measurement,” create a scale (GEMS) which is comprised of nine important musical emotions, grouped into three larger categories: sublimity, vitality, and unease. They place wonder in the sublimity category, and state that awe has certain parallels with transcendence (another sublimity emotion) and also might be related to wonder. Trost et al. use this scale in conjunction with functional neuroimaging in their article “Mapping Aesthetic Musical Emotions in the Brain.” This neuroimaging allows them to correlate activation of different areas of the brain with the nine emotions of the GEMS scale. The participants in this study also rated arousal and valence for each emotion. The plotting of these emotions onto an arousal/valence plot was particularly interesting for the case of wonder, which ended up being more closely related to the vitality emotions than sublimity emotions. The neuroimaging also identified certain brain correlates of musical wonder, which can help with understanding and identifying some of the ways in which wonder and awe might differ musically.

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17 Ibid., 506.
**Method and Outcomes**

When analyzing a piece of music, having access to some sort of score is highly beneficial, if not an absolute necessity. As film scores are not publicly available, the first step was to transcribe music from the scenes of interest to create a score. I transcribed the music primarily from the original soundtrack, which streamlined the transcription process through the absence of dialogue and sound effects.\(^1\) I then compared soundtrack transcriptions to the music in the film and sometimes changed them to reflect that music, which occasionally strays from the soundtrack in ways to be discussed later. The stylistic plurality of film music requires a comprehensive and flexible set of analytical techniques. Here, tonal analysis with roman numerals and figured bass is used, as well as transformational theory and some other elements of post-tonal theory. Sections of the music each lend themselves to a particular type of analysis, and some even allow for analysis using more than one technique. Non-harmonic elements can also provide meaningful emotional information: the use of factors such as dynamics, instrumentation, register, and melody are all of interest. It is also illuminating to examine the use of themes and leitmotifs over the course of the whole film to see how the music relates to the events and emotion of the film.

This thesis will show that musical wonder and awe as found in the music for *LWW* are related, but different. Not only are the general definitions different, but they are also different musically. Some of these differences will be shown to be differences in non-harmonic, or statistical, factors such as dynamics, instrumentation, and the like. But

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there are also harmonic, or syntactic, differences—mere volume and instrumentation are not enough to fully imply even basic emotions like happiness or sadness, much less the nuances between two closely related, more complex emotions. One of those differences will be shown to be a difference in scope. Lehman finds that awe breaks global tonal expectations while frisson, corresponding to wonder, breaks local tonal expectations.\textsuperscript{20} While this is a relatively minor argument in the scope of Lehman’s larger argument, the difference between global and local scopes identifies a crucial harmonic difference between wonder and awe in the music of \textit{LWW}, and even correlates with non-musical aspects of the movie.

\textsuperscript{20} Lehman, 171-172.
Chapter 2
Literature Review and Methods

**Literature Review**

Scholarly writings on wonder are relatively scarce, compared to research on emotions such as happiness and sadness or even awe. Psychologist Robert A. Emmons states that wonder “has received scant empirical attention by psychologists,” while psychologist Robert C. Fuller shows that even theoretical attention to wonder in modern inquiry has been scant. Many scholars are content to lump wonder in with the related emotion of awe, both in music and in other disciplines. However, the emotions are not entirely the same, and making the distinction can lead to a more nuanced understanding of the music in question. There are several writings to be examined that consider the emotion of wonder as its own distinct and important emotion. Table 2.1 provides a summary of the approach of each writer.

**Wonder in the Arts and Religion**

Philip Fisher, in his book *Wonder, the Rainbow, and the Aesthetics of Rare Experiences*, examines the aesthetics of wonder. Wonder, which he calls the aestheticization of delight, stands in opposition to another rare experience, the sublime, which he describes as an aestheticization of fear. Fisher’s belief is that wonder is tied to visual art and only rarely exists in time-based arts such as music or dance. The

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22 Fuller, 22.
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Wonder</th>
<th>Awe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisher</td>
<td>Defined as the aestheticization of delight. Requires an absence of expectation.</td>
<td>Not mentioned. In my view, perhaps related to Fisher’s idea of the sublime, the aestheticization of fear.</td>
</tr>
<tr>
<td>Fuller</td>
<td>Unexpected. Psychologically and socially beneficial. Prompts a search for causality and purpose.</td>
<td>Treated as a synonym of wonder.</td>
</tr>
<tr>
<td>Lehman</td>
<td>Wonderment is pleasurable, outside the bounds of everyday life, and requires a sense of security. Wonderment contains both awe and frisson. Frisson is evidenced by breaking of local tonal expectations.</td>
<td>A category within wonderment, evidenced by breaking of global tonal expectations.</td>
</tr>
<tr>
<td>Zentner, Grandjean, Scherer</td>
<td>Associated with the words happy, amazed, dazzled, allured, and moved. Grouped into the Sublimity category, along with transcendence, tenderness, nostalgia, and peacefulness.</td>
<td>May have parallels with transcendence or wonder.</td>
</tr>
<tr>
<td>Trost et al.</td>
<td>Defined as in Zentner, Grandjean, and Scherer, but moved to the Vitality category, which also contains power and joy. Has positive valence and high arousal. In terms of activation of regions of the brain, most similar to Vitality emotions and less similar with Sublimity emotions.</td>
<td>Not mentioned. Transcendence remains a sublimity emotion, with positive valence and low arousal. I suggest that awe may have parallels with power, which (like wonder) has positive valence and high arousal and is in the Vitality category.</td>
</tr>
</tbody>
</table>

Table 2.1. Summary of Approaches to the Terms “Wonder” and “Awe”

extraordinary experience of wonder relies on three things: “suddenness,…the moment of first seeing, and…the visual presence of the whole state or object.”

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23 Fisher, 21.
of music ensures that the entire object is never completely “in view”; instead, the listener forms expectations and predictions for what will happen next. Thwarting those expectations can create surprise, but Fisher maintains that wonder requires an absence of expectation and therefore can be found in music only on rare occasions. He cites Stravinsky’s music as the best example of musical wonder, with its “instantaneous effects, the strangeness of the combination of instruments and sounds, the sudden introduction of elements without preparation, the rapid changes of tempo and rhythm.”

Fisher does not speak directly about the emotion of awe in this book. However, awe does seem to be related to his notion of the sublime as an aestheticization of fear. Fisher notes that the sublime is associated with the religious concepts of “the infinite and the relative insignificance of human powers” and states that “in the sublime, fear and surprise, power and danger occur in a rich blend.” The sublime, like wonder, is a rare experience, but it creates a feeling of dread rather than a feeling of pleasure. To illustrate the difference between wonder and the sublime, Fisher turns to architecture. The materials of glass, steel, and aluminum which were used to create the first skyscrapers could have been used to create the “brooding, shadow-crossed, sinister buildings of German Expressionist architecture.” These looming buildings would have been dreadful—sublime—but instead architecture turned to the wonder and delight of the skyscraper. The association of the sublime with dread of some external power is similar to awe, with its dread or veneration of authority. Fisher’s association of the sublime with

24 Ibid., 22.
25 Ibid., 2.
26 Ibid., 4.
human insignificance also accords with awe, which has been linked with feelings of self-diminishment.27

Robert C. Fuller examines the emotion of wonder in connection with religion and psychology in his book *Wonder: From Emotion to Spirituality*. Like Fisher, he writes that wonder arises because of the unexpected, but he also adds that wonder prompts a search for causality and purpose. Because wonder “elicits belief in the existence of a more-than-physical reality,”28 it plays a key role in religion and spirituality. Fuller is a proponent of engagement with the emotion of wonder, as it is linked with many psychological and social benefits, saying that “experiences of wonder…seem to comport well with reasonable criteria for healthy and responsible living.”29 Unlike Fisher, however, Fuller sees wonder as being compatible with time-based arts like music. Drawing on the work of Leonard B. Meyer, he proposes that expectations can create emotions. The emotion of wonder is specifically created when, while listening to beautiful music, we “discern a deeper order lurking just beneath the surface of sensory patterns.”30 However, Fuller’s description of wonder seems to indicate that the music itself is the object of the emotion.31 This wonder might be experienced when listening to a Bach fugue, or when listening to a masterful performance that reveals meanings and relationships not heard during prior hearings of a piece. Though Fuller’s type of wonder can certainly be experienced in such situations, there also exists a different sort of wonder. This different

28 Fuller, 1.
29 Ibid., 158.
30 Ibid., 119-120.
31 Though Fuller does not discuss this at length, he seems to be taking the same view as Peter Kivy. Kivy argues that when we are moved by a piece of music, we are “moved by the beauty or perfection of the music.” (Peter Kivy, *Music Alone* (Ithaca: Cornell University Press: 1990), 161.)
sort of wonder does not have the music itself as the object, and in fact may not even have an object at all. Peter Mew discusses how music can express objectless emotions: if there is a connection to an external object of the emotion, this is done only after the objectless emotion has already been aroused. This type of objectless emotion, later connected with an external object, is the primary form of wonder that this thesis will examine. As for awe, Fuller treats it as an emotion very related to wonder, using the phrase “wonder and awe” or the reverse ordering several times throughout the book. He does not specifically distinguish between the two emotions, almost seeming to consider them synonyms rather than separate emotions.

**Wonder in Film Music**

Frank Lehman explores wonder in film music in his book *Hollywood Harmony: Musical Wonder and the Sound of Cinema*. Lehman focuses on wonderment, “the pleasurable sense of awe and exhilaration that comes from perceiving something exceeding the frames of normal everyday experience, yet without a threat to one’s sense of physical or psychic security.” Like Fisher and Fuller, Lehman sees an element of the unexpected or unusual in wonderment. His additional requirement of no threat to the listener’s security seems to be satisfied by films, in which the audience is presented with fantastic, larger-than-life sights and sounds while sitting in a comfortable theater. Film music is specially crafted to elicit wonderment in conjunction with the dialogue, sound effects, visual elements, and narrative presented on the screen.

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33 Lehman, 10.
One critical distinction that Lehman considers in his discussion of wonderment is the difference between perceived and felt emotion. This is not a point of discussion for Fisher or Fuller; given the nature of their subject matter, they can be assumed to focus solely on felt emotion. But Lehman recognizes that in film, wonderment (or any other emotion, for that matter) can show up in three different forms: it can be represented by the characters, dialogue, and visuals on screen; it can be cued by music that signifies the emotion; or it can be elicited, allowing the audience to actually feel the emotion, with corresponding physiological and psychological responses. These forms can occur simultaneously for a single emotion, but it is important to distinguish between them. This thesis will focus primarily on how cued emotion corresponds with represented emotion, and perhaps creates elicited emotion. This means that the object of the emotion is not the music itself, either because of compositional ingenuity or a masterful performance—instead, the object of the emotion is something that is presented onscreen.

Lehman divides wonderment into two categories: awe and frisson, which are taken from David Huron’s book *Sweet Anticipation*. Huron links awe and frisson, along with laughter, with fear responses: frisson with fighting, laughter with flight, and awe with freezing. Linking these three positive emotions with the fight/flight/freeze responses of fear is somewhat tenuous and requires “evolutionary storytelling,” which Huron admits is a dangerous venture. But even if Huron’s linkage of these emotions with fear responses is questionable, Lehman’s categories are still of value. They arise

34 Ibid., 168.
36 Ibid., 31.
because of observable musical features and do not require a link with fear to be useful. However, Lehman states that much film music uses the two types seamlessly, and it is difficult and perhaps not always even profitable to distinguish between them—for broad analyses, the term “wonderment” can suffice.

Lehman does define the categories of awe and frisson, allowing for their use in more fine-grained analyses such as this one. Musical awe is related to a feeling of the “dizzying size, power, venerability, and…complexity” of the object observed. 37 In music, Lehman notes that awe is indicated in music by the “frustration of global harmonic expectancies” and by the “sustaining of tonal tension.” 38 The use of pantriadic chromaticism for an extended length of time is one way to frustrate harmonic expectancies, while tonal tension can be sustained through uncertainty or intensity. 39 Pantriadic tonality is a term created by Evan Copley and popularized by Richard Cohn in Audacious Euphony for the use of consonant triads in non-tonal, non-diatonic, and non-centric ways. 40 Lehman refers to this as pantriadic chromaticism, or simply pantriadicism. 41 Frisson is the other part of Lehman’s wonderment. Sometimes known as chills, frisson is an “unusually heightened emotional state,” which can be physiologically manifested in goosebumps and shivers. 42 Interestingly, most research on musically-induced physiological frisson does not mention wonder at all, though frisson has been linked to awe. 43 Lehman states that frisson is musically indicated by “the violation of a

37 Lehman, 170.
38 Ibid., 171.
39 Ibid., 171.
40 Cohn, xiv.
41 Lehman, 50.
42 Ibid., 171-172.
43 Yaden et al., 476.
local harmonic expectancy,” and “the build-up and discharge of tonal tension.” Local harmonic expectancies can be violated by a single unexpected chord, and this tonal tension can be quickly resolved and normalized, discharging the tension. Lehman mentions that frisson is often caused by “an abrupt or transitory stimulus of profoundly unexpected character.”

These violations of tonal expectancies are analyzed by Lehman using neo-Riemannian theory, which examines transformations between consonant triads. Film music, he explains, commonly uses consonant major and minor triads. Of course, film music is diverse, and many exceptions exist – seventh chords, other dissonant chords, and atonality for example. But American blockbusters (which deal in wonder) tend to follow the scoring practices mastered by John Williams, where pantriadicism plays an important role. Lehman states that pantriadicism has been “used throughout film history to represent and sometimes elicit the affect of wonderment.” So neo-Riemannian analysis, a technique that deals with non-tonal consonant chords, is useful for both the examination of film music and the emotion of wonder.

Lehman’s idea of wonderment is not entirely identical with the emotion of wonder examined in this thesis. Because he includes awe as a category within wonderment, his notion is broader than the definition of wonder I have given above, which takes awe as a separate but related emotion. Lehman’s other category, frisson, might fit better with wonder; however, the physiological manifestations of frisson and wonder have not been heavily associated in empirical studies. Notwithstanding the lack

44 Ibid., 172.
46 Lehman, 21.
47 Ibid., 10.
of that specific physiological connection, Lehman’s ideas about frisson may still be valuable to associate with wonder. Like wonder, frisson is closely related to, but not the same as, awe. In addition to its smaller scope, it also shares characteristics of the broader category of wonderment, which also correspond with wonder: an element of unexpectedness and the viewer’s personal security.

Lehman calls his method of analysis neo-Riemannian theory, as it follows certain ideas laid out by Hugo Riemann and later codified by 20th-century theorists such as David Lewin, Bryan Hyer, and Richard Cohn. However, some other scholars who do transformational analysis avoid that term. Cohn lays out two reasons for this eschewal: first, the ideas did not really originate with Riemann, who served “more as transmitter than generator,” and second, the field of neo-Riemannian theory is unstable, including certain ideas and practices that Cohn cannot agree with. But Cohn still uses transformational labels, seeing them as a first step towards an understanding of compositional systems. In this aspect, he and Lehman have much in common, even though Lehman’s work still flies under the banner of neo-Riemannian theory.

One part of Cohn’s approach in Audacious Euphony is to examine how major and minor triads, which are nearly-even versions of the completely symmetrical augmented triad, can be grouped into regions that are based on that augmented triad. He calls these Weitzmann regions, because the foundation for these regions was laid by the nineteenth-century theorist Carl Friedrich Weitzmann. There are four Weitzmann regions which each contain two voice-leading zones. The voice-leading zones each contain T₄-related chords which are contextually equivalent, and motion from one voice-leading zone to

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48 Cohn, xiii.
another is obtained through transformations of chords. For seventh chords, Cohn creates Boretz regions, which group the nearly-even seventh chords (major-minor and half-diminished) into similar regions, based on the symmetrical fully-diminished seventh chord.

**Wonder as a Musical Emotion**

Research by Zentner, Grandjean, and Scherer as presented in their article “Emotions Evoked by the Sound of Music: Characterization, Classification, and Measurement” creates a music-specific scale of emotions, both perceived and felt. Wonder is one of the nine emotions, making this scale relevant for this study. This scale was created using four different studies at the University of Geneva, all conducted in the French language. The first study started with a large list of emotions, which by the third study had been reduced into nine terms that were most frequently felt and perceived in response to music of multiple different styles (rock, pop, techno, Latin, jazz, and classical). The fourth study tested the model on music against the discrete and dimensional models and found that it outperformed these models on three different criteria. The final version of the model, the Geneva Emotional Music Scale (GEMS), contains nine first-order emotions, which group into three second-order categories. Wonder, transcendence, tenderness, nostalgia, and peacefulness are in the Sublimity category; power and joyful activation are in the Vitality category, and tension and

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49 Cohn, 102-105. \(T_4\) refers to transposition up by four semitones (a major third).
50 Cohn, 152.
51 The discrete and dimensional models are domain-general, meaning that they are applicable across different disciplines. The discrete model assumes a small set of core emotions, such as joy, sadness, fear, disgust, and anger; the dimensional model plots emotions onto a graph based on arousal and valence. The criteria used to determine performance of each model in this study were as follows: preference of listeners, agreement across listeners, and power to discriminate different musical excerpts.
sadness are in the Unease category. Wonder, as defined in this scale, means “filled with wonder” and is associated with a variety of other words: happy, amazed, dazzled, allured, and moved. The word “incantation,” which has associations with enchantment, enticement, and allurement, was also considered. GEMS, unlike typical discrete or dimensional scales, places a high emphasis on the emotion of wonder, and subsequent research which uses this scale provides much-needed data on wonder in music.

The GEMS scale, however, does not include awe. The authors state that the emotion of awe is related to transcendence, though they acknowledge that wonder is also a related emotion. Transcendence, like wonder, has associations with several words: inspired, feeling of spirituality, and thrills. While awe certainly can coexist with each of those feelings, the idea of transcendence misses out on certain elements of awe. Awe, like Fisher’s sublime, has links with the emotion of power. In the GEMS scale, power is also associated with a list of words: energetic, triumphant, fiery, strong, and heroic. By this association with power, we see that awe can have two different shades of meaning. One allows the subject to feel the power and greatness of the awe-inspiring object, while the other allows the subject to feel inspired by the spiritual meaning of the awe-inspiring object. Awe usually has as its object a powerful source, and whether the subject’s awe is directed more towards the powerful object or their own comparative insignificance can lead to these two shades of meaning. The next section will strengthen this link between awe and power and will examine why transcendence perhaps does not encapsulate all of the possible meanings of awe.

52 Zentner, Grandjean, and Scherer, 507.
53 The word happy may seem to make wonder very similar to joy; however this is likely an artifact of translation. The French word heureux “denotes happiness in the sense of bliss, felicity, and fulfillment, rather than joy or contentment.” (Ibid., 506.)
Musical Wonder and the Brain

Because of the GEMS scale, several more recent studies have examined the emotion of wonder, including studies that attempt to locate the regions of the brain associated with these musical emotions. An article by Trost, Ethofer, Zentner, and Vuilleumier, “Mapping Aesthetic Musical Emotions in the Brain,” uses functional neuroimaging to explore the areas of brain activation during music listening for the emotions in the GEMS scale. Excerpts of classical instrumental music (by well-known classical composers such as Bartok, Mahler, Pärt, Schubert, and Vivaldi) were chosen as representations for the nine GEMS emotions. These melodies, separated by random atonal control melodies, were played for subjects. In addition to the neuroimaging, subjects rated each melody for each of the nine emotions, as well as for valence (positive or negative), arousal (high or low), and personal familiarity with the piece. Subjects were asked to rate based on felt emotions rather than perceived emotions, and the physiological data taken reinforces that the music indeed elicited emotions in the listeners.

The emotions were grouped into four classes, corresponding to different quadrants of an arousal and valence plot. As might be expected, the emotions of joy and power both had high arousal and positive valence (A+V+) as part of the GEMS Vitality category. But surprisingly, there was another A+V+ emotion: wonder. Wonder had slightly lower arousal than joy but had the highest valence of all of the emotions. In the

54 Trost et al., 2773. I found it personally interesting that the excerpts by Mendelssohn, Brahms, Schubert, and Bach rated highest for wonder in this study. Mendelssohn, Brahms, and Bach are perhaps my three most beloved composers.  
55 Ibid., 2770-2771.  
56 Ibid., 2773. Physiological data alone cannot show that a subject feels an emotion. But if the subject is already providing information on felt emotion, physiological measures can help to verify that the subject is reporting accurately on their own emotional state.
arousal/valence plot, wonder was also clearly distinguished from the other Sublimity emotions—even though, according to the original GEMS scale, wonder was a member of that category. All other Sublimity emotions clustered together in the low arousal/positive valence (A-V+) quadrant and had lower valence than wonder, in addition to much lower arousal. For these reasons, the authors of the study classified wonder as a Vitality emotion rather than a Sublimity emotion. The remaining emotions from the GEMS scale, tension and sadness, were both negative valence emotions and mapped respectively into the high arousal (A+V-) and low arousal quadrants (A-V-).

As awe was not included within the original GEMS scale from Zentner, Grandjean, and Scherer, it was not mentioned by the Trost et al. study. In the original study, awe had parallels with transcendence, but was also related to wonder. However, the rating of emotions in the work of Trost et al. suggest that wonder and transcendence are quite different in the arousal dimension, at least when elicited by music. If there do exist strong parallels between awe and transcendence, then the difficulties we have in distinguishing between wonder and awe are hard to understand, and those two words perhaps should never be used synonymously. But because, by all accounts, awe is closely related to wonder, it is difficult to associate it solely with transcendence. While awe does share some characteristics with transcendence (such as being inspiring or filling one with spirituality), the subject of awe is usually powerful, vast, and massive, and those do not fit with it being simply transcendence. Because of this, awe in certain contexts may have more characteristics in common with the A+V+ emotion of power, rather than the A-V+ emotion of transcendence.

57 Ibid., 2774.
58 Ibid., 2774.
In addition to rating emotions for arousal and valence, the Trost et al. study also used neuroimaging to correlate each emotion with areas of brain activation. All of the Vitality emotions (power, joy, and wonder) correlated with activation in the bilateral superior temporal gyrus, the left ventral striatum, and the insula (compared to the other emotions studied). Within the Vitality group, taking joy as the standard against which to compare, wonder activated the right hippocampus more and the caudate less, while power had more activation in the motor cortex. The positively-valenced Vitality and Sublimity emotions were both associated with activity in the ventral striatum. The left ventral striatum was associated primarily with the A+ Vitality emotions, while the right ventral striatum was activated exclusively by the A- Sublimity emotions. Out of the Sublimity emotions, transcendence had greater activation in the left striatum.

Each of these regions of the brain has its own associations, which have implications for the emotions studied. The ventral striatum as a whole is part of the dopamine reward system, and the insula is specifically associated with rewards. The activation of the ventral striatum for all V+ emotions and the insula for only the A+V+ emotions implies that A+V+ emotions may be more strongly associated with rewards. The activation of the motor cortex for power implies that the high arousal of power may be related to the listener’s entrainment to rhythmic and dynamic features. Wonder had less activation in the motor cortex, but more activation in the hippocampus, which has been associated with memory. The writers state that “hippocampus activation to music

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59 Ibid., 2774.
60 Ibid., 2775.
61 Ibid., 2780.
62 Ibid., 2775.
63 Ibid., 2780-2781.
64 Ibid., 2779.
may reflect automatic associative processes that arise during absorbing states and
dreaminess, presumably favored by slow auditory inputs associated with low-arousal
music."65 This activation of the hippocampus does link wonder back to the Sublimity
emotions, as they also showed increased activation in the hippocampus. Because of the
similarities shared by the brain activations of wonder and these A-V+ emotions, as well
as similarities across quadrants for other emotions, the authors conclude that many of
these aesthetic emotions arise in the brain as blended combinations of simpler emotions
one might encounter in response to real-world events.66

Methods

I have used multiple theoretical tools to analyze the music of LWW. As the score
used in LWW is unavailable to the public, all scores and reductions have been transcribed
from the soundtrack and film. This allows for use of written analytical techniques.
Standard tonal theory provides for roman numeral/figured bass (RN/FB) analysis. This is
useful for some sections of the music, especially diatonic portions, but has less
explanatory power in non-diatonic sections. Some of those non-diatonic sections are still
triadic, however, and these sections of pantriadic chromaticism lend themselves to
transformational analysis. Unlike tonal analysis, in which multiple chords are related to
each other hierarchically and form progressions and phrases according to that hierarchy,
transformational theory deals with the transitions between pairs of chords. There is some

65 Ibid., 2780.
66 Ibid., 2781.
music in LWW which is best suited for transformational analysis, and some that is best suited for RN/FB analysis.

For the music in LWW that is neither diatonic nor triadic, RN/FB and transformational analysis have limited applicability. Techniques of post-tonal analysis can instead be used to make sense of these sections. As the usefulness and applicability of post-tonal analysis is well-known and widely-accepted—especially for music of the last century—there is little need to spend much time on it here, except to say that the non-diatonic/non-triadic music in LWW is nevertheless not dodecaphonic, lending itself to analysis using set classes of low cardinalities. So there exist three different harmonic types for the music in this film: tonal/diatonic, pantriadic chromatic, and non-triadic. Though each has a suitable method of analysis, the interaction of these types is sometimes also of note. In particular, it can be helpful to examine in what ways two (or more) types may overlap in ways that allow for multiple meaningful methods of analysis to be performed in a single section.

However, there are other factors to examine besides harmony. The melodic features of the music must also be considered, and there are a host of other features such as instrumentation, rhythm, tempo, and dynamics that certainly also contribute to the elicitation of emotion. One melodic feature of note is the use of modes. The modes used in the LWW soundtrack include the so-called church modes, which rotate the major and natural minor scales, as well as modes which rotate the melodic minor scale. In the music of LWW, modes are suggested through the use of scalar passages or non-chord tones above individual chords.
Another non-harmonic feature that has particular significance for film music is the use of motives. Early film composers from Classical Hollywood, such as Max Steiner and Miklós Rózsa, used motives in their film scores, drawing on the use of leitmotifs in Wagner’s operas. However, the use of leitmotifs in film music is not as complex as the use of leitmotifs by Wagner. This usage has more in common the simpler ideas of Hans von Wolzogen (the proponent of leitmotif interpretation in Wagner’s operas) than with Wagner’s actual use of leitmotifs.\textsuperscript{67} But even though Classical Hollywood film scores may not be as complex in their motivic networks as Wagner’s music (at least in the final film score), they do use motives to signify characters and concepts, and these can be considered to be leitmotifs.\textsuperscript{68} Justin London points out that, “the use of leitmotifs in filmic contexts is generally regarded as a stylistic continuation of Wagner’s musical practice.”\textsuperscript{69} Many composers for the epic blockbuster films of the New Hollywood Era have returned to Classical Hollywood’s ideal, using motives as signifiers. John William’s score for \textit{Star Wars} and Howard Shore’s score for the \textit{Lord of the Rings} trilogy, for example, have easily recognizable leitmotifs. Harry Gregson-Williams, in an interview about the \textit{LWW} music, does not refer to motives specifically as leitmotifs; however, he names a melody “the Narnia theme.”\textsuperscript{70} This implies that he is conceiving of that melody, and likely others, as having the type of associations that would generally be leitmotivic. This thesis examines motives as melodies on their own, but also looks at certain motives and themes as being signifiers of particular characters, concepts, and places. This takes us

\textsuperscript{68} Ibid., 107.
from considering characteristics of the music alone to the necessary task of considering how the music relates to the non-musical elements of the film.

In order to study how the music and on-screen elements relate in this film, a two-step process was used. First, the important formal events in the music were identified, with no reference to associations with the film. This includes beginnings of motivic presentations and transition passages, cadential areas, and harmonic abnormalities (such as abrupt modulations, chords which harmonized a motive differently than previous times, and chords that “jolt” progressions out of their course in a way best described through transformational analysis). Next, the action and dialogue for each of these musical events was determined, and a screenshot of the film was associated with each event. This process allowed for a somewhat objective look at how the film and music relate, with less influence from recollections of previous viewings of the film, or from the emotion portrayed and elicited by the film. Most, if not all, of the important dramatic elements were associated with musical events; however, not every musical event corresponded to a meaningful on-screen element.

Though the process described above attempts to study the relationship between the music and film in a way that was not biased by emotion, emotion is the very thing that this process helps to study. Because the on-screen action and dialogue specifies particular emotions in a way that music cannot, the relationship between the film and the music can help to identify spots that may cause the listeners to recognize and even feel emotion. After that, it is up to the analyst to propose how the music aids in eliciting emotion. Though there are several different ways in which emotion is thought to be elicited by music, one way that is especially relevant for this thesis is resemblance
between musical characteristics and characteristics of the corresponding emotions.\textsuperscript{71} We see this resemblance in Lehman’s definitions of awe and frisson. Awe, associated with vastness and power, is harmonically represented by frustrating global expectancies as well as sustaining tonal tension, while frisson, a much smaller, more personal physiological response, is harmonically represented by frustrating local expectancies as well as a build-up and discharge of tonal tension.\textsuperscript{72}

Lehman’s approach to musical emotion is especially interesting because, in his view, harmony is a main contributor to the emotion. However, some theorists of music and emotion see other factors as being of primary importance. These other factors such as timbre, texture, dynamics, and tempo are called “statistical,” after Leonard B. Meyer, while the factors of melody, harmony and rhythm are “syntactic.”\textsuperscript{73} This thesis will use these terms and will assume that syntactic factors and statistical factors can work together to elicit emotion. However, following Lehman, syntactic factors are taken to be the primary bearers of emotion in the music of LWW. A simple example can suffice to justify emphasis on syntactic versus statistical factors: take a chorale melody, harmonized by Bach. If we keep all non-harmonic factors constant—dynamics, texture, etc.—we only change syntactic factors. However, a new harmonization (especially if written by a lower-level theory student!) certainly will have a different emotional impact than the original one by Bach. The importance of syntactic factors on listener perception is also evidenced by the results of a study by Hill, Kamenetsky, and Trehub on a chorale tune set with


\textsuperscript{72} Lehman, 171-172.

\textsuperscript{73} Leonard B. Meyer, “A Universe of Universals,” \textit{The Journal of Musicology} 16, no. 1 (Winter 1998): 9. The reason for the unusual meaning of “statistical” is because these factors are quantifiable, while the “syntactic” factors are not quantifiable.
various texts.” In this study, they examine how Baroque composers and modern listeners both tend to associate salvation and reward with settings in the Ionian mode, while settings in the Phrygian mode are associated more with condemnation and punishment. Keeping statistical factors and changing the syntactic factors led to different results for listener perception, which implies that syntactic factors are indeed relevant to the study of emotion.


75 Ibid., 18. The study found that Baroque composers also tended to choose modes based on instrumentation: vocal settings were more often Ionian, while organ settings were more often Phrygian.
Chapter 3:
Wonder and the Wardrobe

**Summary of the Scene**

The first music from *LWW* to be examined is from the scene “The Wardrobe.” This scene is pivotal in the film: production designer Roger Ford said that this scene is one of the most moving parts of the film, while Gregson-Williams described his music for this scene as a “very important music cue.”

Lucy, the youngest of the four child protagonists, hides in a wardrobe during a game of hide-and-seek and discovers that it is a doorway to the magical, snow-covered world of Narnia. Providing the first glimpse into Narnia for both the young protagonist and for the audience, this scene contrasts heavily with the opening scenes of the movie, which portray an air-raid on London and the forced evacuation of children to the countryside. Lucy’s discovery is unexpected, and her expression makes it clear that she experiences wonder in this scene. This representation of wonder, in addition to musical cues for wonder to be discussed in this chapter, may also elicit wonder in the audience. Using Lehman’s terms, wonder is here not only represented dramatically, but also cued musically and perhaps even elicited for the viewers.

The scene begins with Lucy opening the door to the room in which the wardrobe is stored. The non-diegetic music from the previous hide-and-seek scene is an upbeat

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77 Though it is unexpected to Lucy, a perceptive movie-viewer would expect something to happen considering the wardrobe’s place in the title of the movie.
1939 popular song by the Andrews Sisters called “Oh Johnny! Oh Johnny! Oh!” This song cuts off and echoes for a couple of seconds as Lucy freezes and stares at the wardrobe, which is covered in a fabric dust cover. Gregson-William’s cue begins after these echoes. Lucy then looks around the room and walks up to the wardrobe. After she pulls off the dust cover, Lucy (and shortly thereafter, the audience) sees the wardrobe unveiled. She realizes that the wardrobe is the perfect hiding spot, so she enters it, leaves the door open just a crack, and backs up through the fur coats. But she freezes as she suddenly feels snow on pine trees behind her. After checking to make sure she can still see through the cracked door, Lucy begins to explore the snowy forest. Her expression becomes more and more delighted as she walks further and further into the forest.78 After a last look back at the cracked door, Lucy walks toward an inexplicable sight—a lamppost, shining brightly in the middle of the forest. The scene ends with Lucy trying to hide behind the lamppost as frightening, scurrying footsteps are heard in the surrounding forest.

**The First Sight**

Gregson-Williams’s cue, which starts shortly after Lucy opens the door to the room, begins with violins holding a high F# as a harmonic and a lower F# and A.79 This, with no other context, could be heard as either D major or F# minor. However, the preceding song “Oh Johnny!” is in the key of F# major, and listeners are likely to hear the

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78 Georgie Henley, the 10-year-old actress who played Lucy, had not been shown the set before filming. Her reaction to the magical forest with falling snow was not entirely an act!
79 There are slight differences between the soundtrack and the scene version, mostly related to matters of timing: in the soundtrack, the beginning is shortened and the harp enters immediately, measure 17 has only an extra beat instead of two fermatas, and the break in measure 38 does not exist.
F# tonic as continuing, albeit with a changed mode.\textsuperscript{80} F# minor is confirmed by the entrance of a C# in the violas in measure 2. Following this in measures 2 and 3, a piano gesture in a bell-like upper register implies the Dorian mode with D#s above a harp oscillation between F# and A. The new timbre and the Dorian mode of the piano gesture suggest something unusual beyond the still, muted F# minor chord we have heard up to that point—a hint of the wonder that will come later.

The first harmonic change occurs in measure 7 as Lucy reaches to pull the dust cover off of the wardrobe. Here, a note change in the violas projects a B minor-minor seventh chord before returning to F# minor in measure 9. The F#-A dyad in the harp and violins continues as before, implying that the viola notes may simply be neighbor tones under a constant F# minor chord rather than an actual harmonic change. But the change is also marked with a bass drum hit. This extra emphasis attaches more importance than a typical neighbor tone would require, and allows this change to project a plagal motion of i-iv(7)-i. Over the B minor-minor seventh of measure 8, the piano plays the last few notes of its previous gesture in measure 3.

The Aslan Motive

In measures 9-10, as Lucy and the audience see the unveiled wardrobe, several clues mark the music as significant. The texture is thickened with the addition of a flute and a wordless chorus, and the harmonic rhythm speeds up dramatically for three chords with new harmonies on the half note. A lower register is opened up by a strong bass motion, the dynamics increase, and the first melodic material of the scene appears. This

\textsuperscript{80} This is an example of the transformation P—other transformations will be discussed later.
melody, played by the flute, is related to some of the earlier motives heard in the beginning of the movie. But here the lack of previous melodic material in this scene, its presentation by a new instrument, and its distinctive rhythmic profile all mark this motive for attention. The presentations of related material earlier in the movie are not marked for attention and thus cannot really be associated with any specific visual elements. But now this motive acquires some association with the wardrobe: we see three shots, corresponding to three chords, with different views of Lucy looking at the wardrobe—which she sees as the perfect hiding place. My interpretation of this leitmotif is clarified by several recurrences later in the movie. The motive is heard when the older children first see the snowy woods of Narnia and in two other meaningful scenes: when the children first see the great lion Aslan, and when Aslan is revealed to be alive following his death at the hands of the White Witch. This leitmotif becomes more refined in meaning as the movie progresses—it first refers to a wardrobe with unknown contents and a misidentified purpose, then refers to the magical land within the wardrobe, and ultimately refers to Aslan, the ruler and savior of Narnia.

![Figure 3.1. Reduction of the Aslan motive and prior chords](image)

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81 These two occurrences have a similar texture to measures 9-10 of the Wardrobe.
Measures 9 and 10 are interesting not only motivically, but also harmonically. Figure 3.1 shows these measures, along with the prior two chords of F# minor and B minor-minor. The chords F# minor, D major, and B major are presented with a clear bassline moving in descending thirds (major then minor, arpeggiating a minor triad). While F# minor is unsurprising, the following chords are not entirely expected. Previously, the D#s in the piano from measure 2 have set up the expectation of F# Dorian. The recurrence of the end of that gesture in measure 8, despite the violas’ D natural, calls our memory back to the Dorian mode of the full gesture. But the root of D for the second chord of measure 9, while set up by the previous B minor neighboring harmony, conflicts with the Dorian mode. So we are frustrated in our efforts to hear a modal harmony in these measures, and we fall back to a tonal explanation of these measures. This makes sense for these two chords: in F# minor, i goes to VI. Listeners accustomed to tonal music would not be surprised to hear a iv chord next; however, the chord we hear is not the B minor chord typical in F# minor but a B major chord. This B major chord provides us the subdominant harmony we would expect, but with a D# instead of a D natural, returning us back to the Dorian flavor of the piano gesture! The next chord, which starts another statement of related motivic material, shifts us back to another B minor-minor seventh chord with a D natural and back to F# minor, returning us to the plagal motion heard before the Aslan motive.

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82 The harp’s ostinato of F#-A persists through all three chords. These notes are members of F# minor and D major; however, the A would make B major a dominant seventh chord, especially considering how it functioned in the B minor-minor seventh of earlier. But in this case, the increasing dynamics in the bowed strings, choir and flute occlude the first few notes of the harp’s oscillation, allowing a B major triad to sound without A for at least a beat and a half before a decrescendo. The remaining harp As in the measure seem less a part of that chord and more like a pedal tone, helping to return us to the original texture after the Aslan motive.
This progression is explainable through tonal theory, which allows the B major chord to exist through mixture in the progression i-VI-IV#—though ending the motivic statement on a IV# chord is strange, as is the following iv7 in measure 11. But a look at the transformations between chords can help to explain the strangeness of the duality that has been set up between D and D#. It is necessary to look even before the Aslan motive, at the initial motion from the beginning’s F# minor to measure 7’s B minor. This is a two-letter transformation (LR), but is complicated by the fact that the B minor chord includes a seventh of A. Lehman calls these transformations from a triad to a seventh chord and vice versa *fuzzy transformations*, and labels them with the tilde: ~LR. But in this particular case, it is informative to note that the B minor-minor chord is a union of the results from the L and the LR transformations on F# minor. To denote this union, this transformation will be labeled LU LR, and the transformation that returns to F# minor will be LU LR*. The F# minor chord in measure 9 undergoes an L transformation to arrive at D major, and the B minor chord that would be expected would be an R transformation on D major, moving A up to B. But the B major chord we get is an RP transformation from D major, moving two tones instead of just one. This is the most surprising move so far, and Figure 3.2, laid out on the Tonnetz, can help us understand why.

Figure 3.2 (a) shows the motion from the beginning’s F# minor to measure 7’s B minor-minor. A bold line between F# and A indicates the two common tones held

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83 I am indebted to David Lewin’s mathematical approach to musical transformations in *Generalized Musical Intervals and Transformations* for inspiring this particular notation. A note about the apostrophe: most neo-Riemannian transformations are involutions. But this fuzzy transformation can only add notes, not remove them, and therefore cannot be an involution. The apostrophe here is used to denote the inverse of the transformation—though there is surely another way to write the inverse, it is not necessary for my purposes.
Figure 3.2. (a) beg. to measure 7; (b) measures 9-10; (c) expectation for measures 9-10 through LULR. This motion is horizontal on the Tonnetz, indicating its diatonic nature. After LULR' brings us back to F# minor, Figure 3.2 (b) shows the progression from measures 9-10. Again, a bold line indicates the common tones held during the L transformation. However, the RP transformation only holds one tone, F#, in common with D major (or even F# minor, for that matter). Compare that to the two common tones held in Figure 3.2 (c), which shows the expectation, unfulfilled, of a R transformation to B minor instead of the actual B major chord. In terms of the number of common tones, the B major chord resulting from the RP transformation shares the least compared to all of the previous transformations. But it also introduces a new upward direction of motion
on the Tonnetz, taking the progression out of the strictly diatonic realm it has inhabited so far by mixing F# minor with a reference to F# Dorian. The unexpected B major chord from RP does not mean that the earlier L transformation is not also important: Lehman mentions that the L, when used to move from minor to major, has been historically associated in film music with “matters of mythic significance.” While this may not be true in every case, here the audience may already have a sense of the significance of the wardrobe, and the prominence of this L transformation as one of the first chord changes in the scene may, even imperceptibly, strengthen that feeling.

**Emotional Impact**

The emotional impact of these two measures is significant, both for the music and the film. The first view of the wardrobe is one of wonder for both Lucy and the audience, though in different ways. Lucy is simply delighted to have unexpectedly found the perfect hiding spot, but the audience has more information. This portion of the scene has the potential to move the audience to wonder when Lucy reveals the wardrobe, as the audience will have a higher interpretation of the significance of this moment. This is caused by the extra importance given by the music, camerawork, and set design, as well as the inclusion of the word “Wardrobe” in the movie’s title. As for the musical elements, the statistical factors of increased instrumentation, register, and dynamics

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84 Lehman, 100.
85 The hide-and-seek game is referenced shortly after these measures by the sound of Peter, the seeker, counting the seconds. This reminds us that Lucy expects the wardrobe to just be a good place to hide and does not yet have any other idea of its significance.
86 According to production designer Roger Ford, this is “the most fantastic shot in the film.” (Roger Ford, “Cinematic Storytellers,” 7:02.) There are several visual elements that contribute to this: the wooden beams in the empty room were designed to draw one’s eye to the wardrobe, the intricate carvings on the wardrobe illustrate the story of the creation of Narnia, and the dust cover billows dramatically to the floor when Lucy pulls it off.
contribute to the emotional impact, but the harmonic information allows us to specify the emotion more precisely. The unexpected entrance of the B major chord breaks our local harmonic expectations, in terms of the progression as well as the voice-leading, and this corresponds to wonder as equated with the frisson component of Lehman’s “wonderment.” The broken expectation of B major instead of B minor is, of course, only a mild violation of expectation, but it only needs to cause a mild sense of wonder—we haven’t even seen Narnia yet!

**Snow and Shock**

In measures 16-17 we encounter another moment of intense visual and musical interest; however, the emotion aroused seems different from that which above I labeled wonder. It may instead be described as something like “shock.” This moment occurs when Lucy backs through the coats, confused by the depth of the wardrobe, before suddenly feeling snow. This moment does not cause wonder, which, as we remember from Lehman, requires a sense of safety. The feel of snow on pine needles implies that Lucy may have her back to something open and dangerous, rather than to the solid and safe wood of the back of the wardrobe. Her expression as she turns around reinforces that she is not yet delighted by the woods, but instead is cautious about a potential unknown danger.

Though the progression from measure 16-17 is similar to that in measures 9-10, its repetition in the intervening measures has dulled the wondrous entrance of the B major
chord—it is not unexpected anymore. But significant here is the introduction of dissonance, which mirrors Lucy’s increasing confusion about the wardrobe’s depth. Both in the D major and B major triads, the dissonant C# is heard as the prominent melodic note in a modified Aslan motive. The surprise of the snow corresponds with the second half of measure 17’s first beat. The whole note we expect for the B major chord is shortened to a quarter, and all instruments drop out except for the violins, which hold F#s. Here the musical time stands still as the F# double-octave hangs in the air for about four seconds. Then the high F# continues as the second violins alternate between F# and A in a fingered tremolo, which lasts for about ten more seconds. This calls to mind the beginning of the cue: these F#s and As are the same as those held by the violins in the fermata there, when Lucy stares at the covered wardrobe after opening the door and stopping short. Measure 17 does not move on to the metered time of measure 18 until Lucy looks back at the crack she left in the wardrobe door—reassuring her that she can safely leave if there is danger—and begins to smile. In summary, the shock Lucy feels in measure 17 corresponds musically with an abrupt shortening of the B minor harmony and a break in the melodic line, as well as a suspension—not of tonal tension as in Lehman’s awe, but a suspension of musical time.

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87 While the B major chord is still unexpected in harmonic terms (the progression has not changed!), the repetition sets up an expectation of a different sort. Using terms defined by Huron, the B major chord is a violation of the listener’s schematic expectation, while (after the first occurrence) the B major chord is a confirmation of veridical expectation. (Huron, *Sweet Anticipation* 224-225.)

88 The C#’s presence is perhaps most easily explained as an extension of the first note of that motive, a C# which is consonant above measure 16’s F# minor chord. The two other tones can be explained as well: the E is perhaps a parallel to the G# from the initial Aslan motive in measure 9, while the B could be seen as an anticipation of the upcoming B major harmony.

89 The biggest musical difference between these two moments of shock is the tremolo of the second violins. At the beginning, this is not a fingered tremolo between the notes but a tremolo with the bow, sounding both notes at once.
Wonder inside the Wardrobe

After Lucy recovers from her surprise and feels safe, she is able to start feeling wonder. The representation of wonder seen in her expression and actions is reflected in the music of measures 20-33, and is calculated to elicit wonder from the audience. Figure 3.3 shows a reduction and analysis of these measures. A brief introduction in measures 18-19 first reinstates a meter, which is triple instead of the Aslan motive’s quadruple. The transition from F# minor to measure 20’s D major is smoothed by means of a subtle transformation in the middle of measure 19. At this point, Lucy has only just started to smile—the full wonder of the situation takes longer to build for her. At the D major in measure 20, a new theme is introduced in the pan flute. As viewers of the film, we are led to associate the theme with the snowy woods of Narnia in this scene, and realize

![Figure 3.3. Reduction and analysis of measures 20-33.](image-url)
throughout the film, as the forest thaws and flowers, that it simply represents the land of Narnia. Gregson-Williams, in an interview, indeed calls it “the Narnia theme.” This theme is comprised of two equal two-measure subphrases: a modal ascending line with a jump at the end which has been labeled “x,” and “y,” which is descending and ends in a downwards leap of a perfect fifth. Each subphrase is supported by two chords, one per measure.

The subphrase x first appears above measure 20’s D major chord. The G# in its ascending scale indicates the Lydian mode, which according to Lehman, “has come to connote wonder and magic.” But x is not simply in D Lydian, with its bright raised fourth degree, but is in D Lydian-with-a-lowered-seventh-degree—a rotation of the melodic minor scale known as Lydian Dominant. The C which forms the lowered seventh degree appears on the downbeat of measure 21, supported by an A minor chord. When the x subphrase returns in measures 24-25, the underlying chords are B minor and E major. Because the chords here are in different modes and have a different relationship than the chords in the original x statement, the melody changes slightly. The scale is now in B dorian to fit above the minor triad, and the arrival note in measure 25 is changed to become the third of the E major chord. In the third and fourth statements of the x subphrase in measures 30-31 and 32-33, all chords are major, and the Lydian Dominant mode returns. The subphrase y is first supported by F major and e minor, and subsequent iterations use different chords with those same qualities. All of the statements of y project the Phrygian mode—though the lowered second degree is not present in y melodically, it

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90 Scoring Sessions, “Taming the Lion with Harry Gregson-Williams,” 0:44.
91 Lehman, 3.
is found as the root and bass of each statement’s first chord. x and y do not always appear in that order: the ordering found in this passage is x y ’ x y y ’ x x, with apostrophes indicating cadential moments and phrase boundaries.93

In measures 20-33, the attempt to analyze the Narnia theme according to tonal theory fares worse than it did for the Aslan motive. Taking any of the chords in the first four-measure phrase as a potential tonic shows that tonal theory is unlikely to provide much useful information, at least about the entire phrase. And if we decide to break the phrase into more tonally manageable segments, we end up with two options: the first option is segments that are not aligned with the subphrases. The second option is segments which correspond to the subphrases; however, if we stick with diatonic tonality, the tonic for each segment ends up being a chord that is not even present. But if we examine the relationships between adjacent chords, however, we discover that using transformational techniques does shed some light on these progressions. This is a moment of full-blown pantriadicism, and we feel violations of our tonal expectancies from chord to chord.94 This local scale of expectancy violation in the music is connected to Lehman’s frisson, and primes the viewer to feel wonder as they watch this portion of the scene.

When looking at the transformations within this passage, there are two transformations that appear frequently. Within each subphrase is an F transformation, which takes a major chord to the minor chord built on its fifth degree or vice versa. Even

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93 These cadential moments are identifiable by a change in melodic instrument, by a change in accompanimental texture, and sometimes by the slight relaxation of dynamic level.
94 For violations of tonal expectancies to occur, it is necessary to have some sort of tonal expectation in the first place. This is why it is important to consider potential tonal explanations, even though they do not entirely work in every case.
though the first presentation of x goes from major to minor and the second is the opposite, these are both manifestations of $F$.\textsuperscript{95} The last two statements, in 30-33, are each $F\cdot L$.\textsuperscript{96} In contrast, the y subphrase always contains a $F\cdot PL$ transformation.\textsuperscript{97} In between different statements of x and y, the transformations are less consistent, though most include some sort of L transformation: $L$, $RL$, $F\cdot L$, $L$, $N$, and $L\cdot F$.\textsuperscript{98} In fact, even when the scene is considered as a whole, $F$ and $L$ transformations seem to be quite common.

The L discussed in measure 9 is one example, but it also fits into an overall $F$ between F# minor and measure 10’s B major. Measures 13-14, which as a slightly varied repetition of 9-10 were not discussed above, also use that same $F$. When also looking at the $F$ transformations within the x and y subphrases, it is clear that $F$ is an important transformation. Lehman states that $F$ has been associated with multiple different things, but nature is the first on his list.\textsuperscript{99} This association corresponds with $F$’s use in the Narnia theme. But it is also interesting that here $F$ is sometimes combined with $L$, another frequent transformation, for $F\cdot L$. The first $F\cdot L$ transformation is positioned in measures 25-26, and the second and third are, as mentioned above, in the x subphrase in measures 30-33.

\textsuperscript{95} There are a variety of ways that the $F$ transformation can be found tonally: I-v, IV-i, or V-ii. Note that the first two possibilities require the use of modal mixture, while the third possibility’s motion from dominant to pre-dominant is not typical tonal behavior. While these possibilities can be heard, the lack of context for those keys and the parallelism between the two presentations of the x subphrase suggest that a transformational approach is valuable.

\textsuperscript{96} The interpunct sets off the neo-Riemannian operator to its left for extra analytical emphasis.

\textsuperscript{97} Though there are, of course, many ways to express this particular transformation, this one captures the similarity to the transformations in the x subphrase. The reader who is skeptical about the possibility of hearing the $F$ as part of this transformation, or even as part of the x’s $F\cdot L$, is directed to Lehman. Page 135 of Hollywood Harmony provides a convincing justification of his use of the much more complex label $PLPR\cdot PLP$. The situation here is not entirely the same, but the same reasoning can be used.

\textsuperscript{98} The lack of consistency between subphrases compared with the greater consistency within them suggests that the segmentation is indeed accurate.

\textsuperscript{99} Lehman, 100.
Now let us turn to statistical factors in these measures that help to cue wonder. Starting at measure 20, the pan flute is heard for the first time. The classical flute was heard in the Aslan motive in measures 9 and 10, as well as in the introductory measures prior to this excerpt (measures 18-19). But the comparative breathiness of the pan flute and its connotations of folk music and nature add a distinct and special flavor to the Narnia theme. In the second phrase, the clarinet takes over the $x$ subphrase in measure 24. It is accompanied by a change of texture, which prepares a transition to the texture of the following $y$ subphrase in measure 26. There are many factors that mark measures 26-29 as the climax, in addition to the $F\cdot L$ transformation that brings us into the G major harmony of this bar. The range of the orchestra is expanded to the bottom of the bass clef and ledger lines in the treble clef. Violins play the $y$ subphrase in octaves and are joined by a choir singing the vowel “ah.” These changes in texture and register are accompanied by a crescendo, leading to the loudest dynamic in the scene. After this climactic section, measures 30-33 contain the $x$ subphrase presented first by the pan flute and then by the cellos. But these measures also refer back to the piano gesture from measure 3. They include a similar gesture as a countermelody, with a high register and bell-like timbre played by the celeste.

**Lucy’s Emotions**

Throughout measures 20-33, the audience sees Lucy from many camera angles as she slowly walks into and through the snowy forest. The modal pan flute melody in measure 20 corresponds with the audience’s first view of the woods. Lucy continues to walk and look around, and in measures 22 and 24 gasps with delight. At the pickup to
measure 26, a closeup of Lucy shows a wide smile on her face as she reaches to touch the falling snowflakes. This corresponds with the climax of statistical factors, and the first of the F·L transformations. Lucy’s expression and actions here help the audience to see the snow through the eyes of a child as a truly wonderful experience. Throughout this entire sequence, there is also a sense of delight that radiates from Lucy, which recalls Fisher’s idea of wonder as the aestheticization of delight. But it is also important to note that Lucy looks back at the wardrobe door multiple times. The last time corresponds to the x subphrase in measures 30-31, which contains another F·L transformation. Lucy looks back to once again be reassured that she is safe and can leave when she wants, and the confirmation of the cracked wardrobe door allows her to again smile and continue to wander through the woods. The music in this passage, with its pronounced use of the F transformation and its refusal to submit to local tonal norms, links nature with wonder independently of the visual elements of the movie. But when the two are combined, the viewer is gently led to feel real wonder along with Lucy at the magical woods of Narnia.

The Scope of Wonder

The wonder we have examined, both musically and visually, is all of small scope. The harmonies violate our tonal expectations, but only on a local level, from chord to chord. Globally, the cue begins in F# minor and returns to F# minor in measure 17 after the Aslan motive. The Narnia theme takes us further afield, but we are returned to F# minor by the very next chord in measure 34. It is possible that we may not even hear the equivalence of this last F# minor chord—the thorough breaking of our local harmonic expectations in measures 20-33 means we may even lose track of what our global
expectations would have been. In terms of statistical factors, the climax in measures 26-29 is more dynamically and registrally striking than the remainder of the cue, but approaches a dynamic of only approximately forte, which lasts only four measures. When compared to the music for many other scenes in the movie, this cue is rather quiet. Even the visuals for this scene are reserved. The wardrobe opens to woods, not open land, and it feels dense and closed-in. The colors are also subdued: grays, browns, black, and white.

This narrow scope is the result of an intentional decision by the director and contributes to the wonder that the scene represents and elicits. Adamson wanted the movie to start big, with a London air raid and a crowded train station. Then it would funnel down to the size of a wardrobe, and gradually expand over the course of the movie to depict the whole country of Narnia. This decision affected the choices for the camerawork, for the setting and colors, and, of course, for the music. This is confirmed by Gregson-Williams, who said that he had wanted to open up the music when Lucy first saw Narnia. But that did not fit into the director’s vision. Adamson had asked for this scene to have “that sound where there’s not much sound.” When Gregson-Williams asked for clarification on that cryptic statement, Adamson described entering a clearing and having a feeling of emptiness. The average listener would likely not describe “a feeling of emptiness” as the dominant emotion in the music in this scene. But Gregson-William’s music does creates a sense of wonder that is not overblown into a different emotion—it is local in scope and more intimate, without the vastness associated with awe.

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100 Adamson, Ford, and Johnson, “Filmmakers’ Commentary,” 1:44.
Chapter 4
Awe and the Battle

Summary of the Scene

While the wardrobe scene in *LWW* expresses and elicits the emotion of wonder, the battle scene is very different. The scene begins with Lucy’s eldest brother Peter and elder brother Edmund, who have just found out about Aslan’s death at the hands of the White Witch. After Peter checks Aslan’s tent to confirm, Edmund and Oreius, a centaur and the general of Aslan’s army, convince Peter to lead the army. The camera zooms into and over their battle map, which transforms into the field of battle—a large grassy valley surrounded by mountains. The audience first sees the Narnian army: mythical creatures such as centaurs, fauns, griffins, and talking animals; then the White Witch’s much larger army comes into view over a crest and charges. The Narnians charge slightly later, and the music is silenced at the first clash of the ground forces. The scene then cuts back and forth several times between the brothers in the battle and the sisters Susan and Lucy, who witness Aslan’s resurrection and join him to free Narnians imprisoned by the White Witch. As the battle begins to turn against the Narnians, Peter tells Edmund to take their sisters home for safety. But instead Edmund attacks the witch and destroys her wand. She uses the broken wand to fell Edmund, causing Peter to become enraged and engage her in one-to-one combat. Aslan and the liberated prisoners appear, but Peter’s duel continues and ends with the White Witch pinning Peter to the ground. Before she is able to kill him, however, Aslan pounces on her and she realizes that the battle is over and she has lost.
The scene ends with Peter, Susan, and Lucy reuniting and their realization that Edmund is missing.

**Differences between Soundtrack and Cue**

In the wardrobe scene there were only slight, timing-related differences between the original soundtrack recording and the cue used in the film, but in the battle scene the differences between the soundtrack and the cue are significant. Figure 4.1 (a) shows the form of the soundtrack in shaded bars, which correspond to sections related by thematic material. The width of the bars corresponds roughly to the length of each section in seconds. Figure 4.1 (b) shows the form of the film cue in the same way. As can be seen, the beginnings and endings are the same, but there is material in the middle of the scene that is not present in the soundtrack. There is also material from the soundtrack that is repeated—in particular, the Heroic theme from measures 72-89. In the extended edition of the movie, there are even more instances of additional material and repeated material.\footnote{Andrew Adamson and Mark Johnson, *The Chronicles of Narnia: The Lion, the Witch and the Wardrobe*, 4-disc extended ed. DVD, directed by Andrew Adamson, Burbank, CA: Walt Disney Pictures and Walden Media, 2005.}

One reason for the differences between soundtrack and cue is the structure of the scene. Rather than being solely a battle scene, it is two scenes in one, shifting back and forth: a scene with Peter, Edmund, and their army, and a scene with the girls and Aslan. The music for the girls’ portion of the scene uses motives that relate to prior scenes. This music is not on the soundtrack, but one section is of particular interest: when the girls see Aslan after he has come back to life, the Aslan motive is presented with the same
a) Soundtrack:

Themes: Intro Heroic Villain Battle Heroic Ending
Measures: 1-9 10-23 24-41 42-71 72-89 90-132

b) Film:

Themes: Intro Heroic Villain Battle Heroic Non-Soundtrack Music Heroic Ending
Measures: 1-9 10-23 24-41 42-71 72-87 - 72-89 90-132

Figure 4.1. Structure of the soundtrack vs. film
harmonization and a similar texture to the wardrobe scene, albeit in a different key. This music which corresponds to the girls and Aslan is relatively unrelated to the music in the battle portions. The similarities between the music from these two parts of the scene rest mainly in how different motives relate to each other—as will be discussed below, several themes from the battle share intervallic similarity with the Aslan motive. But the emotions that the girls feel throughout the course of the scene are far removed from those felt by the boys and the army, having more to do with emotions such as sadness, joy, and tenderness rather than awe. So while this music is interesting in conjunction with earlier scenes, it is out of the scope of this chapter and thesis, and will not be considered in depth here.

But even when the music for the girls is excluded, there is a fair amount of non-soundtrack music that remains in the cue. One possible explanation for this intervening battle music is the complexity of the visual and narrative form of the scene. The filmmakers stated that it was difficult decide how to pace back and forth from the battle to the girls. The initial plan was to have Aslan’s resurrection occur before the rest of the battle, and even Aslan showing up with reinforcements at the end of the battle was a last-minute decision.\(^\text{103}\) This difficulty with pacing goes back to the origin of the battle scene—the original book focuses on Aslan, the girls, and the freed prisoners, who show up for only the last few minutes of the battle. The reader learns about the rest of the battle through a retrospective explanation by Peter, and the entire battle narrative covers less than two pages.\(^\text{104}\) But Adamson wanted the battle to be a much larger part of the movie,


to match his memory from reading the book as a child.\textsuperscript{105} This meant that the battle scene was written with less reference to the book, and required original decisions and imagination from the filmmakers. It ended up being the most visually complex scene in the movie. To deal with the sheer complexity of creating the different mythical creatures in the scene (almost all of which had to be partially or completely computer-generated), there was a previsualization of the scene, started about two years before filming. Sometimes it was strictly followed, and at other times completely thrown out.\textsuperscript{106}

Because of this complexity, it is conceivable that much of the music for the internal sections of battle scene was devised to be flexible. These sections rely heavily on computer animated action, with less representation of emotion from the main characters. One exception is when Oreius charges the White Witch to save Peter, during which one of the themes from the soundtrack is heard. But the other internal battle music could easily be heard in a battle scene from any movie, sharing only occasional, inconclusive resemblance to other motives.\textsuperscript{107} Also, many of the differences between the original and extended editions of the movie occur in the battle scene. Almost all of the added parts of the scene occur in these internal portions of the battle, set with music that is not found in the soundtrack.\textsuperscript{108} This implies that these internal portions are themselves more musically flexible and are less likely to have critical musical material. Because of this, my analysis will use the music from the soundtrack. The music from the parallel scene with the girls is not emotionally relevant, while the non-soundtrack battle music is less connected to the

\textsuperscript{105} “Visualizing The Lion, The Witch and the Wardrobe: The Complete Production Experience,” 1:47:01.
\textsuperscript{106} Ibid, 1:55:58.
\textsuperscript{107} One example is an ascending motion up through a third, like the ascending motion at the beginning of the Aslan motive. But ascending through a third is not very specific if not combined with other intervallic or rhythmic information.
\textsuperscript{108} The one exception is an extension of an aerial fight between griffins and harpies, set with a repeat of an eight-measure section of music.
motivic material and is less consistent between editions. In contrast, the soundtrack music is emotionally relevant, motivically connected, and remains practically the same between editions.

**Musical Themes**

There are three primary themes or motives that are used in this cue, given in figure 4.2. In addition to the melodic material of these themes and motives, this figure includes the harmonization of the first appearance of each in this scene. I have labelled the first as the Heroic theme. This theme has been heard before in conjunction with heroism of the children: surviving the collapse of a melting frozen waterfall, walking through Aslan’s camp and drawing the attention of the Narnian army, and practicing mounted swordplay. This theme has connections with the Aslan motive, which can be seen in the first three notes and the goal note in the second measure, circled in figure 4.2 (a). In fact, these first three notes can be found throughout the movie, occasionally wrought into themes and motives additional to those covered here.

This sort of relationship between motives is nothing new, and can be traced back to Wagner’s operas, in which “the various individual motives are related to each other through an organic process of growth and development.” Of course, because film music is subservient to the narrative and visual events of the film in a way that the music of Wagnerian operas is not, film music does not use such complex networks of motives, and this film is no exception. However, the connections between the Aslan motive and the Heroic theme are interesting, considering Aslan’s role in the pivotal moment of the

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109 Stephen C. Meyer, 103.
Aside from its typical appearance in four-bar phrases, the very beginning of the Heroic theme also appears in several transition passages. While these appearances could also be seen as related to the Aslan motive, they are much more likely to be heard as related to the Heroic theme because of similar rhythm, repetition within this scene, and recency.

There is another theme used in the battle scene that bears resemblance to the Aslan motive. This theme only appears in this scene, and so I have labeled it as the Battle theme. It appears three times, in four-bar statements that are harmonized almost identically. The last appearance is extended by two bars, one of which is extended itself.

**Figure 4.2.** (a) Heroic Theme; (b) Battle Theme; (c) Villain motive
by two beats. The first measure of this theme can be seen as resembling the Aslan motive, with a reversal of the order of the internal notes. The circles on figure 4.2 (b) indicate another similarity to the Aslan motive, on a larger scale. At this point in the movie, it has been a while since the Aslan motive has been heard, so it is more difficult to hear these resemblances in context. However, the syncopated rhythm and the P4 between the first note and the goal note both point back to that motive in a way that is possible for the audience to hear.

The other important motive in the scene is very different, bearing no resemblance to the Aslan motive. The set <0156> is labeled as the Villain motive—it has the leitmotivic characteristics of a short length, an easily distinguishable intervallic profile, and a meaning which develops throughout the movie. Table 4.1 shows how the motive itself also develops throughout the movie, changing set-classes and rhythmic profiles but always having semitones on either side of a leap. In the battle scene, <0156> does not appear frequently: it is only presented once, at the moment the White Witch’s army is revealed in measures 30-31. It is surrounded by related material that is based on the frequent use of semitones. This material is non-diatonic and non-triadic, but is centric. Out of this material, the set <0134> appears frequently, and even seems to take over as a representation of the White Witch at the end of the scene. The listener will likely associate this related material with the Villain motive because of the prior associations of semitonal motion as presented in table 4.1. But the motive in measures 30-31 is especially marked for attention by its presentation in the horns above a homophonic texture and by its use of triadic harmony amidst the surrounding non-triadic music.
<table>
<thead>
<tr>
<th>Scene</th>
<th>Action</th>
<th>Motive</th>
<th>Setclass</th>
<th>Instrument</th>
<th>Screenshot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Inside of a German plane</td>
<td><img src="image1.png" alt="Motive" /></td>
<td>&lt;012356&gt;</td>
<td>Horns</td>
<td><img src="image2.png" alt="Screenshot" /></td>
</tr>
<tr>
<td>Introduction</td>
<td>Bombs being dropped</td>
<td><img src="image3.png" alt="Motive" /></td>
<td>&lt;01256&gt;</td>
<td>Violins</td>
<td><img src="image4.png" alt="Screenshot" /></td>
</tr>
<tr>
<td>Introduction</td>
<td>The children and their mother run to the shelter</td>
<td><img src="image5.png" alt="Motive" /></td>
<td>&lt;01457&gt;</td>
<td>Horns</td>
<td><img src="image6.png" alt="Screenshot" /></td>
</tr>
<tr>
<td>Hail the Queen!</td>
<td>White Witch asks Edmund to sit with her</td>
<td><img src="image7.png" alt="Motive" /></td>
<td>&lt;0134&gt;</td>
<td>Synth</td>
<td><img src="image8.png" alt="Screenshot" /></td>
</tr>
<tr>
<td>Hail the Queen!</td>
<td>White Witch creates Turkish Delight for Edmund</td>
<td><img src="image9.png" alt="Motive" /></td>
<td>&lt;01378&gt;</td>
<td>Violins and synth</td>
<td><img src="image10.png" alt="Screenshot" /></td>
</tr>
<tr>
<td>The Queen’s Lair</td>
<td>White Witch threatens Edmund</td>
<td><img src="image11.png" alt="Motive" /></td>
<td>&lt;0145&gt;</td>
<td>Horns</td>
<td><img src="image12.png" alt="Screenshot" /></td>
</tr>
<tr>
<td>Battle for Narnia</td>
<td>White Witch’s army is revealed</td>
<td><img src="image13.png" alt="Motive" /></td>
<td>&lt;0156&gt;</td>
<td>Horns</td>
<td><img src="image14.png" alt="Screenshot" /></td>
</tr>
</tbody>
</table>

**Table 4.1.** Development of the Villain motive. This is not an exhaustive list of all appearances throughout the film. Several screenshots were dark and have been color-corrected for better visibility.
Syntactic and Statistical Factors

In terms of harmony, the Heroic and Battle themes are again similar. Both are mostly diatonic. Their harmonic progressions make some sense tonally if we allow for modal mixture, modulation, the frequent use of plagal motion, and reliance on less-common chords. The first statement of the Heroic motive in measures 9-13, seen in figure 4.2, begins with a C# minor chord. The listener most likely will establish C# minor as tonic, and it is followed by VI-III-VII. If the VII chord is reinterpreted in F# minor as IV#, the following chords in F# minor would be i-VI-iv-i. Though this may not be the most common tonal progression, it is certainly possible. But the avoidance of any sort of dominant chord is notable. The first occurrence of the Battle motive, which can be seen in figure 4.2 (b), begins in C minor and is harmonized by the progression i-iv6-i6-VII6-v-VI-III6-VII6, from measures 49-52. This also is not unexplainable tonally, but again the reliance on less-common chords such as III and VII and the eschewal of the dominant function is somewhat unusual. In both themes and especially in the Heroic theme, there are cadential moments every two bars. These “cadences,” or caesuras, are inconclusive and lead fluently to the next chords. In the interpretation of the Heroic theme presented above, which appears to start in C# minor and end in F# minor, the first caesura is a “half cadence” in the key of E Major, and the second one is a “plagal cadence” of iv-i in F# minor. The Battle motive, which begins in c minor and is followed by c minor, has two “half cadences” in the key of Eb Major. In order to make sense of the caesuras in these two motives, the sense of key must be kept somewhat flexible: while all of the chords can

110 Because these are found at the ends of short subphrases, not phrases, they are not properly cadences. However, especially in the Heroic theme, they still feel like cadences, or at least caesuras.
be made sense of in one key (or two closely related keys), the cadential emphasis on the caesuras break, or at least bend, the expectations we have about those keys.

One other factor related to harmony is the use of non-chord tones. The Heroic and Battle themes frequently use accented non-chord tones in the inner voices. Some of these are accented passing and neighbor tones while some are suspensions. But most of them have an intensity similar to that of suspensions, even when the tone is not prepared in the same voice or is not even present in the previous chord. This is perhaps because many of these non-chord tones create the close dissonances of seconds or ninths with the melodic line, a feature that can often be found in suspension chains. Suspensions (or quasi-suspensions) appear throughout the cue and are rarely absent at cadential moments. This stands in contrast to the wardrobe scene, in which most non-chord tones occur as unaccented passing tones in a scale.

The Villain motive and its related material must be analyzed differently than the two diatonic themes. While the statement in measures 30-31 is harmonized triadically, this short progression behaves very differently from the triadic passages in the other two motives. The chords here are F# minor, D major-minor seventh, and D# minor. These are good candidates for transformational analysis, because there is no easy way to make tonal sense of these three chords in a given key, yet their relative consonance sets them apart from the surrounding non-triad music. The overall transformation from F# minor to D# minor is LS. This transformation is not just relevant for these chords, but also for the surrounding material, which is related to the motive by its frequent use of semitones. Measures 24-29 center around F# and measures 32-35 center around Eb, and the Villain motive in the middle connects these two areas. LS, in addition to describing
the overall motion, also roughly describes the individual motions between the three chords in measures 30-31. To get from F# minor to D major-minor, only one note, the C#, is moved. But unlike the typical transformations in which each note only moves in one direction, here C# splits, moving both up to D and down to C for a ~L transformation. The following transformation, ~S, is a unique transformation that suggests both close roots (D and D# are only a semitone away) and tonal distance. The regular S transformation on D major moves from an implied key signature of two sharps to an implied key signature of six sharps—four stations away on the circle of fifths. In this particular instance, because of D major’s added minor seventh, ~S moves from only one sharp to six sharps—five stations away. The proximity and distance that S concurrently implies make it a unique and striking transformation.

There are many transition sections that occur in between statements of themes; in fact, only once do two thematic statements appear directly adjacent to each other. Some of the transition sections are harmonized similarly to the Battle and Heroic themes. An example of this type of transition can be found in measures 14-16, in which a progression of D major, C# minor, D major, and E major transitions from a Heroic statement ending in F# minor to another Heroic statement starting in F# minor. Once again, this is diatonic, but with a progression of i-VI-v-VI-VII-i that is not entirely standard in terms of tonal theory. Some other transitions are each built over a single chord, held as a pedal, while melodic instruments elaborate a scale with countermelodies or suspensions.

But the most interesting transitions occur at boundaries of sections, as different themes and transitions undergo harmonic transformations. For example, the slow, nebulous introduction to the scene is in D minor, with an excursion that centers around E.
This attempts to move back down to D minor in measure 9, but extra momentum carries it down to C#, with a quarter note triplet substituting for quarter notes and providing the space for an extra note. C# minor is heard as the first chord of the Heroic motive in measure 10, and the effect is that of a T₁ transposition or “pump-down” modulation. Even though this is the directional opposite of the more common intensifying “pump-up” modulation of T₁, it is not the expressive opposite, and can still convey an increase in intensity.¹¹¹ This transformation corresponds with the camera zooming into the battle map to reveal the field of battle. A similar transformation occurs between the two Heroic statements that border each other directly. The Heroic theme in measure 80 begins in d minor, and we would expect the C# diminished 7-6 chord at the end of the theme in 83 to precede a transition section starting with a D minor chord. But here, the C# diminished chord becomes the new tonic of another Heroic theme, as G moves up to G#. Once again, the overall effect is that of an intensifying T₁ transposition, but it is achieved in a very different way from the initial T₁.

Perhaps the most interesting transformational moment occurs at the end of the Heroic theme in measures 84-87. This statement has been modified to cadence in measure 87 with a plagal motion in C# minor, the same key in which it began.¹¹² This cadence marks the end of the soundtrack material and is followed by musical silence as the armies clash. It is followed by a shift to the girls, accompanied by music specific to the film. But the soundtrack music returns after Edmund is knocked out by the White Lehman, 65. The T₁ transformation, with its downward motion, might convey an increase of more negative or sinister intensity than the upwards motion of T₁.

¹¹¹ Lehman, 65. The T₁ transformation, with its downward motion, might convey an increase of more negative or sinister intensity than the upwards motion of T₁.
¹¹² Note that this chord does not contain any sort of E. The listener will hear it as C# minor, however, because no information to the contrary has been presented since the C# minor chord in the previous measure.
Witch, and this section gets repeated as part of that. The cadence in measure 87 marks the turning point of the battle, which at this point is going poorly for the Narnians. On the cadential chord, Aslan appears and roars. The following two measures show the Narnian reinforcements and Peter’s reaction to seeing them and Aslan. After the cadential chord of C# minor, the very beginning of the Heroic theme is used as the progression moves from an A major-major seventh to F major. Then the next section begins, marked by a change in tempo and beginning with an A minor chord. Figure 4.3 (a) shows a reduction of measures 87-90, along with labels of the transformations, while figure 4.3 (b) shows these chords on the Tonnetz. These chords do not inhabit a diatonic space, but rather are grouped into one of Cohn’s Weitzmann regions, bordered on either side by the augmented triads F-A-C# and C-E-G#. This grouping of measures is perhaps one of the most striking pantriadic sections in the movie. The overall transformation from C# minor to A minor is LP, but each individual transformation also includes some sort of L. Once

![Figure 4.3.](image)

Figure 4.3. (a) Analysis of measures 87-90; (b) Measures 87-90 on the Tonnetz.
again, a $L$ which moves from minor to major, such as that used in the first transformation here, is associated with “matters of mythic significance.”\textsuperscript{113} The appearance of Aslan, thought by Peter to be dead, is certainly a matter of much mythic significance.

Aside from syntactic factors, there are also statistical factors that influence the emotions cued by the music in the battle scene. The volume of the track is generally high. Some transition sections are mezzo-forte or mezzo-piano, and the intro and ending are quiet, but the main body of music ranges between forte to fortissimo. The registral range is large as well: some melodic material is in the low bass clef and some falls well above the top of the treble clef, and accompanimental parts can be found to range up to these two extremes. But one of the most striking elements of this music is the strong rhythmic component. Aside from the beginning and ending of the track, there are very few moments that lack some sort of percussion. This not only influences the rhythmic entrainment of the listener, but also provides a strong metrical foundation upon which to hear the many accented non-chord tones. The overall metric regularity helps to set up a regular phrase structure, while the rhythmic emphasis provided by the percussion or percussion-like parts aids in the delineation between phrases and subphrases.

**Emotion in the Battle**

So how does all of this relate with emotion? In the wardrobe scene, the emotion represented by Lucy’s expressions and actions is wonder, and it is reinforced by the music to elicit the emotion from the audience. But in the battle scene, Peter, Edmund and the Narnians are not depicted as feeling awe; instead, they appear to be fearful, though

\textsuperscript{113} Lehman, 100.
having courage and resolve despite their fear. These emotions are shown by facial expressions, as well as by dialogue: in one exchange, the general Oreius tells Peter “Numbers do not win a battle,” and Peter replies “No. But I bet they help.” Here Oreius’s line signals courage, while Peter’s line seems more fearful. The Narnians certainly have an object for fear and dread: the White Witch’s army is about three times larger than their army, and many of the mythical creatures on her side are primed to cause fear by their very appearance. But even though Peter, Edmund, and the Narnians occasionally are shown to be fearful, the audience of the movie does not necessarily feel fear. Here we have a potential difference between represented and elicited emotion, but what about musically cued emotion? The music related to the Villain motive, with its non-diatonic, non-consonant syncopations, may cue something like fear. But as this music is primarily visually linked with the White Witch and her army—the objects creating the fear, not the subjects experiencing it—it may be linked less with fear and more with scariness or power.

The other musical themes in this scene also do not seem to cue fear. The first presentation of the Heroic theme in this scene is forte, and coincides with the entrance of percussion, rolling arpeggios in the violins, and a strong bassline with chord roots in the lower strings. The bassline projects a sense of stability, and the other factors mentioned add to the excitement and rhythmic entrainment of the listeners. These are far more easily linked with power than fear; in fact, increases in the motor cortex which suggest rhythmic

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114 Very young children might feel fear in this scene, but I would imagine that this is because they are not yet able to distinguish the action in a movie from reality. The members of the standard movie-going audience, able to distinguish reality from fiction, will know that they are personally safe. I imagine most viewers would be more likely to be moved to an emotion that corresponds with the courage of the characters rather than to the fear that they sometimes show.

115 Other presentations of this theme are similar but not identical in instrumentation.
entrainment have been found to correspond with the GEMS emotion of power.\textsuperscript{116} During this first statement of the Heroic theme, the camera zooms into the battle map and transitions to the field of battle, and the audience gets their first view of the Narnian army, from the perspective of a flying griffin. Visually, the audience gets a sense of power from the vast field of battle and the surrounding snow-covered mountains, from the size of the Narnian army, and even from the griffin, which as the mythical combination of a lion and an eagle has connotations of strength and power. Successive statements of this theme accompany an aerial view of the charge of the Narnian army and Peter’s battle with the White Witch, and highlight the courage and strength of the Narnians in general and Peter specifically. The Battle theme likewise has a strong rhythmic component, as it coincides with the entrance of a regular heartbeat-like rhythm. It also contains a strong bassline, though it is not always the root of each chord. The first presentation of this theme corresponds with the charge of the White Witch’s army as the Narnians stay resolute; the second and third statements correspond to the charge of the Narnian griffins and the entire Narnian army, respectively. Because the camera does not pick one side during the presentations of this theme, is unclear whether it refers to the Narnian army or the White Witch’s army. But regardless of which army is in view, the audience is visually reminded of the power and the imminent clash.

So all three primary themes in the battle scene musically cue not fear, but some sort of power. Visually, there are representations of fear, seen in the expressions of the Narnians, and of power, seen through the sweeping shots of the opposing armies. The combination of the visual representations of fear and power along with the musical cues

\textsuperscript{116} Trost et al., 2779.
for power do not elicit a sense of fear, but rather a sense of awe. As mentioned before, awe and power have certain connections—they are both associated with strength and vastness, both of which are depicted in this scene in the large enemy army. But just as the audience may personally identify with the fear felt by the Narnians, it is also unlikely that they would personally identify with the emotions felt by the enemies by feeling a sense of power themselves.\textsuperscript{117} Rather, with an awe-inspiring object—the large and powerful armies—the audience will feel awe. Recall the dictionary definition of awe: “an emotion variously combining dread, veneration, and wonder that is inspired by authority or by the sacred or sublime.”\textsuperscript{118} This awe has more in common with Fisher’s sublime, the aestheticization of fear or dread rather than transcendence. It is not a low-arousal emotion, but has high arousal and excitement.

Recalling Lehman’s distinction between awe and frisson, the awe in this scene is global, not local. In the Battle and Heroic motives, harmonies usually make sense next to each other tonally. The difficulty comes when one begins to zoom out and look at the cadences. Here, local expectations from chord to chord are not being broken, but the global expectation of cadential moments that correspond to the key is broken. In terms of the larger form, we have fairly diatonic sections that are occasionally separated by harmonic transformations. Though these transformative moments do not occur after every diatonic section, the moments when they appear throw off the global expectation for the transitional material to maintain a diatonic harmonic profile. Many of these transformations match up with important moments in the scene, such as the first sight of

\textsuperscript{117} An exception might be when listening to the soundtrack without visual information. Without this context, the listener could feel a sense of triumph or heroism.

the battlefield and the appearance of Aslan. But even the setting of this scene has global characteristics, with a large valley surrounded by impressive mountains, and the bright colors of the Narnian army and the green grass below. Again, this makes sense with Adamson’s vision for the movie to start large, then narrow to a wardrobe before expanding again.
Chapter 5

Conclusion

**Wonder and Awe**

In these two scenes from *LWW*, we have examined how wonder and awe are cued musically. In the Wardrobe scene, wonder is represented by Lucy’s expressions and actions. We can see her wonder at the wardrobe even before she knows its true significance. But once she goes inside to the snow-covered forest she is swept up in the wonder of another world, and this wonder is enhanced by the safety she feels at still being able to see the wardrobe door cracked open. Here, wonder is coupled with delight, corresponding to Fisher’s idea of wonder as the aestheticization of delight. The music when she sees the wardrobe cues wonder by the use of a RP transformation to get to a chord that is unexpected, both in terms of tonality and voice-leading. But the music after Lucy feels snow and realizes that she has stumbled into a new world also cues wonder. Statistical factors that influence this include the new timbres of the pan flute, wordless chorus, and celeste as well as the dynamic climax of the scene and the expansion of registral space. But the harmony also projects wonder, with its disruption of tonal expectancies from chord to chord. The combination of wonder represented by Lucy and wonder cued by the music nudges the audience in a gentle and sophisticated way (to use Gregson-William’s words) into also feeling wonder.

In the battle scene, emotion is presented quite differently. The Narnians feel fear at the vastness of the White Witch’s army, but also are filled with courage and resolve to fight against it. These emotions are represented by facial expressions and occasionally
dialogue. The White Witch’s army does not show any fear, but rather represents power and might. Here, I propose that rather than identifying with the exact emotions of either side, the audience will more likely feel a sense of awe—at the size of the White Witch’s army, at the bravery of the Narnians, and even at the setting. This awe is like Fisher’s sublime, which is the aestheticization of fear. The music reinforces this by cuing power and awe. The rhythmic intensity, regular meter and structure of the music, and high volume all make the music exciting and allow the listener to entrain rhythmically, activating the motor circuits of the brain which are associated with power. The high valence and arousal vectors of power are likewise present in this music. The music also suggests awe through the usage of harmony. Diatonic harmony works on a local scale, but globally—once one zooms out to the phrase level or farther—the diatonic expectations are broken through the use of cadences in different keys and through transitions that are distinctly non-tonal.

This illustrates an important difference between wonder and awe, which can be seen here to correspond to Lehman’s frisson and awe. While wonder breaks local tonal expectancies, with individual chords and pairs of chords that are unexpected, awe breaks global tonal expectancies with violations of expectation on a higher level. The scope of the movie even goes along with this: wonder in the wardrobe is local, personal, and quiet. The snow falling in the dense woods of Narnia causes colors and noises to be muted, and the only sounds Lucy makes as she explores alone are quiet gasps of delight and soft footfalls in the snow. In contrast, awe is vast and complex: the battle scene has thousands of actors, both real and computer-generated, is set in the largest locale in the movie, and has bright colors and loud noises. The music matches the scope: wonder is local, while
awe is global. So we see, through the comparison of these scenes, that wonder and awe, far from being the same emotion, are represented musically in different ways.

**Relevance and Further Research**

The material in this thesis is relevant to the fields of music theory and musical emotion for several reasons. First, as has been mentioned, wonder is an underrepresented emotion in scholarly literature, and is often conflated with awe. This justifies the examination of wonder in general, and this thesis’s specific examination of wonder as compared with awe. The study of musical wonder is also a recent development within the last eight years, with the creation of the GEMS scale by Trost et al. in 2012 and Lehman’s work in *Hollywood Harmony* from 2018. The music of *LWW*, unlike that of other fantasy blockbusters like *Lord of the Rings* or *Star Wars*, also has not been studied before to my knowledge.

This also opens up several questions for further research. First, how can the principles of wonder and awe as seen in film music be related to absolute music? It is more difficult to study emotions in absolute music, but with information about the harmonic and non-harmonic correlates of these emotions as found in film music, this may be more feasible. Another question may be whether other films that visually and narratively represent wonder also cue wonder similarly to *LWW*, or how certain musical elements that cue wonder or awe can also be used to cue other emotions.
Appendix A

Transcription of The Wardrobe\textsuperscript{119}

"The Wardrobe"

from *The Lion, the Witch, and the Wardrobe*

by Harry Gregson-Williams

Transcribed by Laura Steiner

\textsuperscript{119} All transcriptions are my own, as well as any errors. My usage of these transcriptions is in accordance with fair use, as given in the United States Copyright Act, Section 107.
Appendix B

Transcription of *The Battle*—soundtrack version

"The Battle"
from *The Lion, the Witch, and the Wardrobe* Soundtrack
by Harry Gregson-Williams

Transcribed by Laura Steiner
References


