

**Reinterpreting the *Leittonwechsel*'s Emotive Role in Film Music:  
Childlike Belief, Wonder, Nostalgia, Selfless Love, Empathy, & Christmas Magic**

by

Scott Jonathan Dinsfriend

A thesis accepted and approved in partial fulfillment of the

requirements for the degree of

Master of Arts

in Music Theory

Thesis Committee:

Dr. Jack Boss, Chair

Dr. Robert Kyr, Member

Dr. Timothy Pack, Member

University of Oregon

Spring 2025

© 2025 Scott Jonathan Dinsfriend  
This work is openly licensed via [CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/).



## THESIS ABSTRACT

Scott Jonathan Dinsfriend

Master of Arts in Music Theory

Title: Reinterpreting the *Leittonwechsel*'s Emotive Role in Film Music: Childlike Belief, Wonder, Nostalgia, Selfless Love, Empathy, & Christmas Magic

This paper explores the emotive role of the *Leittonwechsel* transformation as a leitmotif in Hollywood film scores and television series from 1985 to 2024 and as an associative harmonic progression in popular songs from 1967 to 2010. The *Leittonwechsel* (L) transformation, or leading-tone exchange, is a neo-Riemannian term (and triadic-altering operation) that denotes two possible progressions. This paper will focus on the L-major transformation, such as C-major to E-minor (I-iii).

Six specific emotional qualities consistently associated with the *Leittonwechsel* transformation (L-major) will be explored in eleven film scores, two television series, and eight songs. I will conduct a deeper investigation of the *Leittonwechsel*'s role as an effective harmonic leitmotif (or *leitharmonie*) in Danny Elfman's *Edward Scissorhands*, Michael Giacchino's *Up*, John Debney's *Elf*, Alan Silvestri's *Polar Express*, and Dave Grusin's *The Goonies*. These scores rely on the *Leittonwechsel* as an associative harmonic theme in the large majority of cues, many of which express feelings of wonder, childlike belief, nostalgia, romantic love, and empathy. These associations are strengthened by other parameters as well, such as rhythm, orchestration, and timbre, as my examples (transcriptions) will show. I will also discuss how composers use specific leitmotivic processes to contribute to a cue's emotional landscape, such as harmonic corruption, change of mode, associative transposition, and thematic fragmentation. This analysis will identify a repetitive pattern of predictable L-major undulations (I-iii-I-iii over

two measures) and accompanying L-major melodic formulas that occur frequently—sometimes verbatim—in other film scores as well. This undulating *Leittonwechsel* appears as a Christmastime, wonder-inducing schema that recurs across various film scores from 1990 to 2023. In Chapter II, I will offer a catalog of possible *Leittonwechsel* melodies based on this pattern. This analysis will also uncover other important recurring neo-Riemannian operations (such as SLIDE and <RP>) that surround the *Leittonwechsel* and contextually illuminate its positively-valenced emotional associations. It will also reveal Elfman's and Silvestri's affinity for specific neo-Riemannian links (<PR> and <PL>) that generate chains of modulatory *Leittonwechsel* progressions.

Lastly, I will discuss the *Leittonwechsel*'s remarkable versatility and ability to underscore complex emotional associations connected to the narrative and characters' nuanced psychological developments, especially nostalgia, childlike wonder, belief, romance, self-sacrificial love, empathy, and Christmas magic. In the final section, I will invoke David Huron's theory of binding tones to propose a homology that draws an organic connection between the musical structure of the *Leittonwechsel* and its positive emotional associations.

## CURRICULUM VITAE

NAME OF AUTHOR: Scott Jonathan Dinsfriend

### GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene  
Claremont Graduate University  
Azusa Pacific University  
University of Oregon, Eugene

### DEGREES AWARDED:

Master of Arts, Music Theory, 2025, University of Oregon  
Master of Music, Composition, 2017, Azusa Pacific University  
Bachelor of Music, Composition, 2011, University of Oregon

### AREAS OF SPECIAL INTEREST:

Neo-Riemannian Theory  
Film Music  
20<sup>th</sup> Century Composition Techniques  
Music and Emotion

### PROFESSIONAL EXPERIENCE:

Graduate Teaching Fellow, Music Theory/Musicology, University of Oregon, 2019-2024  
Graduate Teaching Assistant, Music Theory/Musicology, Azusa Pacific University,  
2015-2017  
Band and Orchestra Director, Christian Unified Schools of San Diego, 2024-2025

### GRANTS, AWARDS, AND HONORS:

Blaisdell Scholarship, Claremont Graduate University, 2018-2019  
*Magna Cum Laude*, Bachelor of Music in Composition, University of Oregon, 2011

*Ex Nihilo* for Symphony, Azusa Pacific University Graduate Composition Competition,  
2016

PUBLICATIONS:

Dinsfriend, Scott Jonathan. 2020. *Zelena for String Orchestra*. WoldProjects.net. World  
Projects Corporation. <https://www.world-projects.net/product/zelena-by-scott-jonathan-dinsfriend/>

## ACKNOWLEDGMENTS

I wish to express sincere gratitude to my adviser Dr. Jack Boss for his expert guidance in the preparation of this manuscript, for his encouragement as a mentor, and his inspiration as a professor. In addition, special thanks are due to committee members Dr. Tim Pack and Dr. Robert Kyr, for their helpful insights and support as I finalized this thesis. I also wish to thank Dr. Zach Wallmark for encouraging me to develop this thesis, for offering valuable connections between film music and emotion, and for providing high-level feedback on the revision.

## DEDICATION

To my wife, Natalie Joy, my sons, Jonah, Jude, and Ezra, and my daughter, Azalea-Mae.

*Soli Deo Gloria.*

## TABLE OF CONTENTS

Chapter	Page
I. REFRAMING THE <i>LEITTONWECHSEL</i> 'S ROLE IN FILM MUSIC.....	13
1. Introduction .....	13
2. Literature Survey .....	16
3. Reinterpreting Scott Murphy's "Loss Gesture" .....	19
II. L-MAJOR LOVE & EMPATHY IN <i>EDWARD SCISSORHANDS</i> & <i>UP</i> .....	22
1. <i>Edward Scissorhands</i> Introduction & The L-major Melodic Catalog .....	22
2. L-major in the Storytime Cue and The Sympathy Theme .....	27
3. <PR> Transformations as Linking Devices Between <i>Leittonwechsels</i> .....	30
4. Leitmotivic Harmonic Corruption Applied to the <i>Leittonwechsel</i> .....	36
5. Elfman SLIDING Between <i>Leittonwechsels</i> .....	40
6. The Nostalgic <i>Leittonwechsel</i> in <i>Up</i> .....	42
III. THE <i>LEITTONWECHSEL</i> 'S CONNECTION TO CHRISTMAS MAGIC .....	49
1. Analysis of <i>Elf</i> : "You Sit on a Throne of <i>Leittonwechsels</i> " .....	49
2. The Congruence-Associationist Model: <i>L</i> Elicits Love & Empathy .....	55
3. Belief- and Wonder-Inducing <i>Leittonwechsel</i> in <i>Polar Express</i> .....	58
4. <PL> Transformations as Linking Devices Between <i>Leittonwechsels</i> .....	61
5. <i>Christmas with the Kranks</i> , <i>Home Alone</i> , and <i>The Santa Clauses</i> .....	65
IV. L-MAJOR'S WONDER, AWE, & EMPATHY IN ADVENTURE FILMS.....	68
1. The <i>Leittonwechsel</i> Awakes Wonder in <i>Slumberland</i> .....	68
2. <i>The Goonies</i> L-major Arpeggio Theme .....	70
3. Dramatic Irony in <i>Hook</i> : Loss or Wondrous Reunion? .....	76

V. THE <i>LEITTONWECHSEL</i> ELICITS LOVE & ROMANCE .....	79
1. ABC's <i>The Bachelor</i> and The Love-Inducing <i>Leittonwechsel</i> .....	79
2. Elfman Feeling the Romantic <i>Leittonwechsel</i> Again: <i>Sommersby</i> .....	81
VI. POP GOES THE ' <i>WECHSEL</i> : L-MAJOR IN POP & CLASSIC ROCK.....	83
1. "Hey There Delilah" and "What a Wonderful World" .....	83
2. Kamakwiwo'ole's "Somewhere Over the Rainbow" & "Space Oddity" .....	86
3. "Penny Lane," "Touch Me," "Colour My World," & "Count on Me" .....	87
VII. HOMOLOGY OF UNION & RECAPITULATION .....	90
1. Homology of Union: Can the <i>L</i> 's Intervals Contribute to Emotions? .....	90
2. Recapitulation .....	97
BIBLIOGRAPHY.....	100

## LIST OF FIGURES

Figure	Page
1. <i>Leittonwechsel</i> , McDonald’s Commercial, “The Hashbrown” .....	13
2. <i>Leittonwechsel</i> Voice Leading .....	15
3. Edward’s Theme [L-major transformation with leitmotif] .....	23
4. Catalog of <i>Leittonwechsel</i> Melodies .....	24
5. Storytime Cue [ <i>Edward Scissorhands</i> ] .....	27
6. Storytime Cue Cont.: Hinting at Edward’s Theme .....	28
7. <i>Leittonwechsel</i> in Sympathy Theme .....	29
8. Edwards’ Theme [Transposed Theme] .....	30
9. <RP> Link to Edward’s Theme .....	31
10. Edward Interviewed On TV; Romantic <i>Leittonwechsel</i> .....	35
11. Climactic Goodbye with <i>Leittonwechsel</i> and Change of Mode .....	39
12. L-major and SLIDE with Kim’s Commentary .....	42
13. Debney’s <i>Elf</i> L-major Leitharmonie .....	50
14. L-major Believe Theme in Silvestri’s <i>Polar Express</i> .....	59
15. Octatonic <PR> Cycle .....	61
16. L-major Goonies Theme ( <i>Leittonwechsel</i> Arpeggio) .....	70
17. Modulating (<PLP>) <i>Leittonwechsel</i> Arpeggios .....	71
18. <i>The Bachelor Leittonwechsel</i> Accompanies Moment of Falling in Love .....	80
19. Interlocking <i>Leittonwechsel</i> , <i>The Santa Clause</i> Theme .....	92

## LIST OF TABLES

Table	Page
1. <i>Leittonwechsel</i> Associations in Four Pop/Rock Songs .....	88

## CHAPTER I: REFRAMING THE *LEITTONWECHSEL*'S ROLE IN FILM MUSIC

### 1. Introduction

A shimmering A-major triad orchestrated for harps and strings seamlessly glides to a C#-minor triad, accompanying a saccharine scene of dating and kissing, highlighting two finalists falling in love on ABC's *The Bachelor* (Season 28, Episode 9). A slow-motion panorama of a glowing, golden hash brown on a McDonald's commercial features a bright F-major triad scored for soprano voices and strings, swaying to and from an A-minor triad. A majestic mountain backdrop with a serenely guided meditation is set to sixty seconds of undulation between a D-major triad and F#-minor triad.<sup>1</sup> What do these diverse examples, including a reality television show, a fast-food commercial, and a meditation phone app, all have in common? They each utilize the emotive *Leittonwechsel* transformation, the harmonic progression from the tonic (I) to mediant (iii), to evoke awe, wonder, and romance. In Figure 1, McDonald's *Leittonwechsel*, with wordless choir and orchestra, seeks to elicit majestic wonder surrounding the iconic Hashbrown.

**Figure 1:** *Leittonwechsel*, McDonald's Commercial, "The Hashbrown," August 2023

transcribed by S.J. Dinsfriend

The musical score is written in 3/4 time with a key signature of one flat (Bb). It consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains a melodic line with four measures: a half note F, a quarter note G, a dotted half note A, and a dotted half note G. The bass staff contains a harmonic line with four measures: a whole note chord F (I), a whole note chord Am (iii), a whole note chord F (I), and a whole note chord Am (iii). Above the treble staff, the notes F, Am, F, and Am are aligned with the first four measures. Below the bass staff, the Roman numerals I, iii, I, and iii are aligned with the first four measures. The word "Leittonwechsel" is written in the center of the score, spanning the transition between the first and second measures, and between the third and fourth measures.

<sup>1</sup> John Eldredge's "One Minute Pause" app, based on One Minute Pause practice from his book *Get Your Life Back*, (John Eldredge, *Get Your Life Back: Everyday Practices for a World Gone Mad* (Nashville: Thomas Nelson, 2020)).

Whether in films, TV shows, songs, apps, or commercials, the *Leittonwechsel* is frequently associated with blossoming romance, selfless love, awe-inducing wonder, childlike belief, nostalgia, Christmas magic, and empathy. Each of these six categories represent positively-valenced emotions and all six of these affective associations share commonalities. For instance, childlike belief, Christmas magic, nostalgia, and wonder are often bundled in the same movie and elicited by the same *Leittonwechsel* theme. Similarly, selfless love, blossoming romance, and empathy are often paired together in films and television (such as in *Edward Scissorhands*, *Sommersby*, *The Bachelor*, *Elf*, *Christmas with the Kranks*, *Up*, and *The Goonies*).

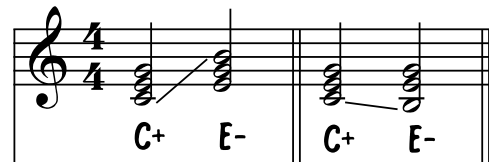
This paper explores the emotive role of the *Leittonwechsel* transformation as a leitmotif in Hollywood film scores and television series from 1985 to 2024 and as an associative harmonic progression in popular songs from 1967 to 2010.<sup>2</sup> The *Leittonwechsel* (L) transformation, or leading-tone exchange, is a neo-Riemannian term (and triadic-altering operation) that denotes two possible progressions. This paper will focus on the L-major transformation (not L-minor).<sup>3</sup> In an L-major transformation starting on C+ (C-major), [0,4,7] for example, the major triad's minor-third dyad—[4,7]—is retained, while the root shifts down by one semitone (0 to 11), thereby resulting in a minor triad, E- (E-minor). Figure 2 below depicts the “leading-tone exchange” from C to B (shown with lines connecting the two pitches, C to B), and it illustrates the two most common voice-leading scenarios for the L-major progressions that appear within this study's film scores, television series, and pop songs:

---

<sup>2</sup> Scott Murphy also chose 1985 for the starting point of his study (“Scoring Loss in Some Recent Popular Film and Television,” *Music Theory Spectrum* 36, 2 (2014): 295-314), but I have extended it by ten years (to 2024). I selected *The Goonies* (1985) because it represents one of the earliest examples of a positively-valenced *Leittonwechsel* theme (leitharmonie) in Hollywood film music.

<sup>3</sup> L-minor (E-minor to C-major, e.g.) is not nearly as common as L-major in film. One reason is that most of the film scores in this study emphasize a major key, featuring L-major (I-iii-I-iii) and contributing to positive associations.

**Figure 2:** *Leittonwechsel* Voice Leading



Six specific emotional qualities consistently associated with the *Leittonwechsel* transformation (L-major) will be explored in the following eleven film scores, two television series, and eight songs: “Penny Lane” by *The Beatles* (1967), “Touch Me” by *The Doors* (1969), “Colour My World” by *Chicago* (1970), *The Goonies* (1985), “What a Wonderful World” in *Good Morning Vietnam* (1987), *Home Alone* (1990), *Edward Scissorhands* (1990), *Hook* (1991), “Somewhere Over the Rainbow” by Israel Kamakwiwo’ole (1993), *Sommersby* (1993), *The Santa Clause* (1994), *Elf* (2003), *Polar Express* (2004), *Christmas with the Kranks* (2004), “Hey There Delilah” (2006), *Up* (2009), “Count On Me” by Bruno Mars (2010), “Space Oddity” in *Secret Life of Walter Mitty* (2013), *The Santa Clauses* (2022), *Slumberland* (2022), and *The Bachelor: American Season 28* (2024). I will conduct a deeper investigation of the *Leittonwechsel*’s role as an effective harmonic leitmotif (or *leitharmonie*) in Elfman’s *Edward Scissorhands*, Giacchino’s *Up*, Debney’s *Elf*, Silvestri’s *Polar Express*, and Grusin’s *The Goonies*. These scores rely on the *Leittonwechsel* as an associative harmonic theme in the large majority of cues, many of which express feelings of wonder, childlike belief, nostalgia, romantic love, and empathy. These associations are strengthened by other parameters as well, such as rhythm, orchestration, and timbre, as my examples (transcriptions) will show. I will also discuss how composers use specific leitmotivic processes to contribute to a cue’s emotional landscape, such as harmonic corruption, change of mode, associative transposition, and thematic

fragmentation.<sup>4</sup> This analysis will identify a repetitive pattern of predictable L-major undulations (I-iii-I-iii over two measures) and accompanying L-major melodic formulas that occur frequently—sometimes verbatim—in other film scores as well. This undulating *Leittonwechsel* appears as a Christmastime, wonder-inducing schema that recurs across various film scores from 1990 to 2023. In Chapter II, I will offer a catalog of possible *Leittonwechsel* melodies based on this pattern. This analysis will also uncover other important recurring neo-Riemannian operations (such as SLIDE and <RP>) that surround the *Leittonwechsel* and contextually illuminate its positively-valenced emotional associations. It will also reveal Elfman’s and Silvestri’s affinity for specific neo-Riemannian links that generate chains of *Leittonwechsel* progressions. Lastly, I will discuss the *Leittonwechsel*’s remarkable versatility and ability to underscore complex emotional associations connected to the narrative and characters’ nuanced psychological developments, especially nostalgia, childlike wonder, belief, romance, self-sacrificial love, empathy, and Christmas magic. In the final section, I will invoke David Huron’s theory of binding tones to propose a homology that draws an organic connection between the musical structure of the *Leittonwechsel* and its positive emotional associations.

## 2. Literature Survey

Scott Murphy’s (2014) article, “Scoring Loss in Some Recent Popular Film and Television,” provides the foundation for this thesis, which is a critique of his interpretation of the L-major transformation (*Leittonwechsel*) as a “loss gesture” in Hollywood film music. I use several of Murphy’s examples of this loss gesture, alongside dozens of new examples, and reinterpret the

---

<sup>4</sup> Matthew Bribitzer-Stull claims that “associative theme” may be more accurate than “leitmotif” in some cases. I have chosen to use “associative harmonic theme” and “leitharmonie” interchangeably for this current study. (*Understanding the Leitmotif: From Wagner to Hollywood* (Cambridge: Cambridge University Press, 2015) 258).

filmic *Leittonwechsel* as a transformation that is consistently associated with wonder, empathy, love, belief, and Christmas magic. I will discuss Murphy's argument that a homology of loss (the tonic being lost to the leading tone) might explain the *Leittonwechsel's* association with loss, and I will then propose a new homology of union, arguing that the *Leittonwechsel's* maximally-smooth intervallic attributes might account for the progression's common association with love, nostalgia, and wonder.

Frank Lehman's (2018) book *Hollywood Harmony* is also crucial to this thesis, as a rich resource including examples of Neo-Riemannian transformations and absolute progressions in film music. His application of these transformations (such as SLIDE) to emotion in film music are featured prominently in my thesis and serve to support my examples of the *Leittonwechsel* as an associative absolute progression in each of the films I survey. I incorporate Lehman's writings on the *Leittonwechsel's* ability to induce awe in *The Matrix* and *Alien* as a way to support my interpretation of the wonder-inducing *Leittonwechsel* in *Edward Scissorhands*.

A third important resource for me was David Huron's (2006) book *Sweet Anticipation*, which provides significant research that proposes a connection between the experience of human emotion and the structure of melodic intervals. Huron's theory of binding tones will set the framework for developing what I will call the homology of union, a metaphorical way of relating the musical structure of the *Leittonwechsel* (I – iii progression) with its positively-valenced emotional associations. I also build on his theory of the prediction effect and misattribution theory in my interpretation of Giacchino's use of the *Leittonwechsel* in Disney's *Up*.

Among the other important sources for this thesis was Richard Cohn's (1996) foundational Neo-Riemannian article, "Maximally Smooth Cycles, Hexatonic Systems, and the Analysis of Late-Romantic Triadic Progressions." Cohn describes a "maximally-smooth voice leading" that

can occur in certain transformations. In my thesis, I apply Cohn's research to the *Leittonwechsel*'s role in film music and propose that the L-major progression's maximally-smooth voice leading might relate to its positive narrative states and emotive associations.

Additionally, David Lewin's (1987) book *Generalized Musical Intervals and Transformations* provides labels, graphs, and definitions of neo-Riemannian transformations that play an important role in my analysis of film score leitharmonies. He gives examples of the leading-tone exchange (*Leittonwechsel*) as well as the SLIDE, which he instituted ("we can define the operation SLIDE that preserves the third of a triad while changing its mode").<sup>5</sup> I will show how these two specific operations (LT and SLIDE) work together to highlight the positive emotions associated with the L-major leitharmonie in both Danny Elfman's and Alan Silvestri's film scores.

Matthew Bribitzer-Stull's (2015) book *Understanding the Leitmotif* offers valuable insight into the ways associative harmonies and leitmotifs connect with characters or recurring themes, in music from Wagner to Hollywood films. His explanation of leitmotivic change of texture and associative transposition—and how these can signify a shift in a character's psyche—will be especially pertinent to my discussion of John Debney's development of the leitmotivic *Leittonwechsel* in *Elf* and Danny Elfman's *Edward Scissorhands*.

Before commencing the analyses, I will provide a new perspective on a prominent film-music scholar's publication about the *Leittonwechsel* (Murphy 2014), and will furthermore propose a new framework for reinterpreting the emotional associativity of the *Leittonwechsel* in film music.

---

<sup>5</sup> David Lewin, *Generalized Musical Intervals and Transformations* (New Haven: Yale University Press, 1987), 178.

### 3. Reinterpreting Scott Murphy's "Loss Gesture"

In his article, "Scoring Loss in Some Recent Popular Film and Television," Scott Murphy (2014) provides a brilliant discussion of and hypothesis on the *Leittonwechsel*'s (I-iii) emotion-inducing role in film scores. He elucidates the association of loss, sadness, and sorrow commonly attached to this highly emotive harmonic progression, almost always within the functional context of major tonic moving to minor mediant. Murphy claims that this progression (the neo-Riemannian transformation of L-major, often in the form of I moving to iii) is consistently employed by composers to connote "the contemplation of a loss-generated sorrow in popular film and television from 1985 to 2012."<sup>6</sup> He therefore refers to the *Leittonwechsel* transformation in film music as the "Loss Gesture." Murphy concedes that "there are undoubtedly countless instances that break this associative rule," such as "when a loss gesture on the soundtrack has little or nothing to do with a sorrowful loss."<sup>7</sup> However, after stating that he has written notes on harmonic language in over three hundred films, he makes the following bold proposal: "I have found in this genre no other musical utterance defined as precisely, or more precisely, than the loss gesture that is as consistently associated with sorrow; nor have I found another narrative state defined as precisely, or more precisely, than sorrow that is as consistently associated with the loss gesture."<sup>8</sup> In addressing the former claim, the intention of this paper is not to argue that I have found a different harmonic gesture that captures sorrow (or loss) more precisely than the *Leittonwechsel* (though perhaps there exists a harmony in film music that is in fact more isomorphic in its association with sorrow). However, to address Murphy's latter claim,

---

<sup>6</sup> Murphy, "Scoring Loss in Some Recent Popular Film and Television," 298.

<sup>7</sup> *Ibid.*, 300.

<sup>8</sup> *Ibid.*

I have found that more positively-valenced “narrative states,” especially romance, empathy, nostalgia, reclamation of childlike belief and wonder, and Christmas magic, are equally—if not more consistently—associated with the *Leittonwechsel* in film music.

In addition, it is critical to note that multi-dimensional expressions of sorrow and sadness exist on a sophisticated spectrum, ranging from extreme grief or depressingly bleak feelings to the more positively-valenced forms of sublime sorrow, sweet sorrow, or comforting sorrow.<sup>9</sup> Again, rather than arguing for a more precise harmony that induces or represents one-dimensional sorrow in film, my intention is to reframe our understanding of the associativity of the *Leittonwechsel* through a more nuanced angle that emphasizes the *Leittonwechsel*'s emotive *versatility* in film scores. I propose that the *Leittonwechsel*'s versatile associativity—specifically its ability to elicit multi-dimensional feelings of joyful wonder, nostalgia, restoration of childlike belief, selfless love, and empathy—occurs no less consistently than the harmony's association with loss or sorrow. The L-major transformation *consistently* (and *precisely*) evokes or accompanies these six positively-valenced cinematic feelings and these specific associations are consistently found during the same time frame of popular film music studied in Murphy's article (not to mention similar emotional associativity in pop/rock music during the same decades).

Throughout this study, I will align the *Leittonwechsel* with its specific visual-musical contexts in film and thus draw out more comprehensive emotional dimensions that reveal this popular harmonic progression as a versatile leitharmonie (associative harmonic theme). This contextualization will demonstrate that the *Leittonwechsel*'s affective associativity is as variegated as the characters' complex development of emotions and the plots' intricately interweaving twists and turns. In my process of reframing the *Leittonwechsel*'s emotive role in

---

<sup>9</sup> Oliver Herdson, Tuomas Eerola, Amir-Homayoun Javadi, “Analysis and Classification of Music-Induced States of Sadness,” *Emotion Review* 15, 2 (2023).

film music, I will start by addressing an example in Giacchino's score to *Up* and two examples from Elfman's score to *Edward Scissorhands*, specifically the ones that Murphy listed as loss gestures (sorrow-inducing gestures). Without examining the cue's full visual-musical context, it is tempting to interpret these *Leittonwechsel* examples as primarily sorrow-inducing gestures. However, the following analyses will argue that labeling the progression as a sadness-inducing loss gesture does not account for its more nuanced emotional associativity. Additionally, although Murphy claims that the narrative state of sorrow in film is most consistently associated with the *Leittonwechsel* harmony, this does not necessarily indicate that the *Leittonwechsel* is most consistently associated with sadness or loss.

My research offers a perspective that highlights more positive emotional associations with the *Leittonwechsel* and offers evidence to support this theory: my musical-emotional analysis of the *Leittonwechsel* in film scores from 1985 to 2024 (adding twelve years to Murphy's study) will offer examples of the L-major transformation's consistent appearance in Christmas films and its leitmotivic signification of the restoration of childlike belief, wonder, and Christmas magic (*Polar Express*, *Elf*, *The Santa Clause*, *The Santa Clauses*, *Hook*, *Home Alone*, *Edward Scissorhands*, *Christmas with the Kranks*, etc.). The *Leittonwechsel*'s remarkably consistent association with romantic and self-sacrificial love (as opposed to mere 'loss') also occurs as a powerful leitharmonie throughout Giacchino's *Up* and in Elfman's *Edward Scissorhands* and *Sommersby*. In these three films, the *Leittonwechsel* more commonly symbolizes selfless love, empathy, or deepening romantic love, arguably more than it symbolizes mere loss or sorrow. And its association with deep empathy (in addition to Christmas magic, nostalgia, and restoration of belief) will be analyzed in each of the twelve films, especially in Debney's two popular Christmas scores for *Elf* (2003) and *Christmas with the Kranks* (2004).

## Chapter II: L-MAJOR LOVE & EMPATHY IN *EDWARD SCISSORHANDS* & *UP*

### 1. *Edward Scissorhands* Introduction and The L-major Melodic Catalog

This first analysis examines several cues from Danny Elfman's iconic score for Tim Burton's *Edward Scissorhands* (1990). Two of the cues will directly challenge Murphy's interpretation of Elfman's use of the L-major theme. Elfman's score is saturated with the *Leittonwechsel* leitharmonie, and this L-major harmony appears even amidst more chromatic transformations (such as when he uses the neo-Riemannian SLIDE to connect two or more leitharmonic L-major progressions). In *Edward Scissorhands*, Elfman demonstrates leitmotivic treatment of the L-major theme with both harmonic corruption and thematic fragmentation to mirror the characters' emotional states as well as the narrative's drama. In *Scoring the Screen: The Secret Language of Film Music*, Andy Hill discusses the nature of Elfman's compositional style as it relates to the protagonist's characteristics and narrative in *Edward Scissorhands*:

“Some of the compositional elements—the strictly parallel keyboard and vocal counterpoint, for example—are still a bit naïve, but seem completely appropriate for this film and its guileless protagonist. *Edward Scissorhands* remains in many ways the definitive Elfman score.”<sup>10</sup>

Edward's “guileless” characteristic is developed primarily through the leitmotivic L-major theme. In Elfman's commentary for the ten-year anniversary DVD release, he associates the *Leittonwechsel* leitmotif with “the innocent heart of Edward,” or “Edward's innocent theme...His theme of the heart.”<sup>11</sup> This type of language from the composer reveals an

---

<sup>10</sup> Andy Hill, *Scoring the Screen: The Secret Language of Film Music* (Milwaukee: Hal Leonard Books, 2017), 200.

<sup>11</sup> Danny Elfman, “Commentaries,” *Edward Scissorhands: 10<sup>th</sup> anniversary ed.*, directed by Tim Burton (Beverly Hills, CA: 20<sup>th</sup> Century Fox, 2000), DVD Video.

intentional associative, leitmotivic way of thinking.<sup>12</sup> In fact, Elfman uses the term “leitmotif” several times in his commentary throughout the film. For the first appearance of Edward on camera (and the first entrance of the *Leittonwechsel* Edward Theme), Elfman defines the progression as Edward’s “emotional theme...which is really the theme that represents the heart of the character” (2000). Later in this analysis, we will discover that Edward’s “emotional theme” (which I will refer to as Edward’s Theme, see Figure 3 below) is harmonized by the score’s famous *Leittonwechsel* transformation (I-iii-I-iii):

**Figure 3:** Edward’s Theme [L-major transformation with leitmotif]

The musical score for Edward's Theme is presented in 4/4 time. It features a melodic line in the upper staff and a harmonic accompaniment in the lower staff. The score is divided into two sections: [Sol <+5, -1, X>] and [Sol <+9, -5, -4>]. The first section consists of two measures: the first measure has a major triad (Eb: I) with notes Sol (+5) and -1; the second measure has a minor triad (iii 6/4). The second section consists of four measures: the first measure has a major triad (I) with notes Sol (+9), -5, and -4; the second measure has a minor triad (iii 6/4); the third measure has a major triad (IV 6/4); and the fourth measure has a minor triad (iii 6/4) and a dominant chord (V 6).

In order to facilitate the comparison and discussion of Edward’s Theme and additional *Leittonwechsel* themes in this section, I will provide a categorization and nomenclature for available L-major melodies that occur above the L-major transformation. In both *Edward Scissorhands* and *Polar Express*, the *Leittonwechsel* associative harmonic theme occurs most commonly in four-measure units, typically with two half notes above the major triad and two half notes above the subsequent minor triad (articulated as “I-iii-I-iii” with one triad per measure, if associated key or tonal center is in play). Observe this harmonic rhythm in Figure 4 below.

**Figure 4:** Catalog of *Leittonwechsel* Melodies

<sup>12</sup> Bribitzer-Stull calls this analytical approach “poietic” (*Understanding the Leitmotif*, 279).

# L-major Catalog of Four-Note Melodies

S.J. Dinsfriend

Do <+4,-5,-4>      Do <+4,-9,+4>      Do <+4,-9,+9>      Do <+4,-5,+5>

9      Do <+7,-8,+8>      Do <+7,-3,+3>      Do <+7,-8,+5>      Do <+7,-3,-4>

[Elf/ Polar Express]

17      Sol <+5,-1,-4>      Sol <+5,-5,+4>      Sol <+5,-1,+5>      Sol <+5,+4,-5>

[Edward Scissorhands/  
The Santa Clauses/  
Christmas with the Kranks]

25      Sol <+5,+4,-9>      Sol <+5,-5,+9>      Sol <+9,-5,-4>      Sol <+9,-9,+4>      Sol <+9,-5,+5>

[Edward Scissorhands]

The catalog of possible L-major melodies serves two main functions: First, it offers composers and theorists a thorough list of available themes that are useful in the context of creating or analyzing film-scores that depend on the *Leittonwechsel* progression. Second, the catalog of melodies assists the analyst or listener in understanding how a composer might

truncate a melody, embellish it, or perhaps use motivic fragments of the melody in other cues (or use the entire melody over an alternate chord progression or simply a divergent harmonization; leitmotivic change of mode and harmonic corruption will be discussed later on). For instance, in *Edward Scissorhands*, Elfman sometimes uses fragments of the primary L-major theme (Edward's Theme) as a countermelody in an entirely different context (instead of being paired with the L-major undulation, the thematic fragment shows up contrapuntally in a minor mode and therefore serves a different associative role in the narrative).

In order to create this catalog, I abided by intentional limitations that would facilitate the analysis and comply with the majority of Hollywood leitmotifs: (1) I only include melodies without repeated consecutive pitches. Repeated pitches are allowed (such as the *Elf/Polar Express* theme Do <+7,-8,+8>), as long as they do not occur one after the other; this guideline makes for a more interesting theme and, probably for the same reason, reflects the fact that these types of themes more commonly appear in film scores; (2) Within each four-note melody, the pitch intervals never exceed a major-sixth. Many filmic themes remain within a more parsimonious, compact contour. One reason for this range limitation is that the melody obtains a more memorable and singable shape. Bribitzer-Stull confirms the importance of composing a memorable, recognizable theme in film music: "Leitmotif also handed composers a ready-made, concise, and easily recognizable nugget of form, tonality, and thematic content; its ability to unite these things made it invaluable as a tool for reinforcing narrative across disjunct scenic cuts in space and time."<sup>13</sup> With this in mind, the use of disjunct melodic octave displacements would not serve to reinforce the narrative as effectively as an easily recognizable leitmotif that recurs from cue to cue. Lastly, the nomenclature (or taxonomic identification) I chose for these L-major

---

<sup>13</sup> Bribitzer-Stull, *Understanding the Leitmotif: From Wagner to Hollywood Film Music*, 267.

melodies is based on the first solfege syllable of the triad (Do, Mi, or Sol) and the ordered pitch intervals that follow. For example, the thematic *Leittonwechsel* melody from *Edward Scissorhands*, Sol-Do-Ti-Sol, is labeled: Sol <+5, -1, -4>. The decision to use ordered pitch-interval classification for my catalog of L-major melodies allows for immediate comparison of motivic similarities (regardless of key/tonality), as well as immediate comparison of inversions and other recurring motivic fragments within the theme. For instance, the melody Do <+4,-9,+4> clearly bares a recurring ascending major-third fragment (+4). Lastly, for the scope of this thesis, I limited the catalog examples to (1) melodies that only start on Sol or Do and (2) melodies that begin with an ascending interval.

The repeat sign for each *Leittonwechsel* transformation indicates the fact that these progressions commonly occur in four-measure undulations (the L-major transformation happens twice). This four-measure pattern is exactly how Elfman and Silvestri employ the L-major associative theme in *Edward Scissorhands* and *Polar Express* (as well as in many of the other film scores in this study). This repetition (undulation) of back-to-back *Leittonwechsel* transformations emphasizes the L-major transformation as a harmonic leitmotif. Bribitzer-Stull describes how a repetitive filmic chord progression can become an “associative harmonic progression” and explains how these repetitive associative progressions gain “the ability...to accrue extra-musical significance.”<sup>14</sup> As an example from opera, he explains how Wagner’s “Tarnhelm music...thematicizes the progression.”<sup>15</sup> He also claims that, “in Danny Elfman’s scores to *Beetlejuice*...and *The Nightmare Before Christmas*, the ‘Tarnhelm’ progression

---

<sup>14</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 267.

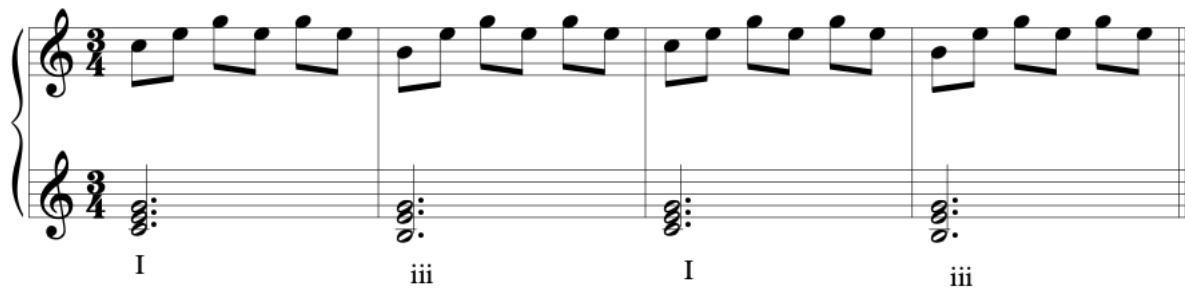
<sup>15</sup> *Ibid.*, 140.

appears in enough separate moments to justify calling it a motive.”<sup>16</sup> Bribitzer-Stull’s statement about Elfman’s associative progression applies clearly to Elfman’s utilization of the L-major associative harmonic theme in *Edward Scissorhands* as well.

## 2. L-major in the Storytime Cue and The Sympathy Theme

The first arrival of the L-major associative harmonic theme (leitharmonie) occurs in the ‘Storytime’ cue, where an old woman (Kim) tells her granddaughter about Edward (see Figure 5 below). The arpeggiation and harmonic rhythm derive from the film’s Main Title (Storybook Theme), thereby creating textural coherence between the themes.

**Figure 5:** Storytime Cue [*Edward Scissorhands*]



The Roman-numeral analysis in Figure 5 reveals the film’s first iteration of the *Leittonwechsel* associative progression. However, the leitmotivic Edward Theme, the melody attached to the *Leittonwechsel* progression, does not occur until Kim says, “His name was Edward,” establishing this particular L-major melody as a leitmotif. Even before this, Elfman hints at Edward’s Theme with a short-lived version of the *Leittonwechsel* (an obscured version of the harmonic theme). The leitharmonic *Leittonwechsel*, D-major—F#-minor, betokens Edward’s Theme, evident in the transcription below, Figure 6 (L-major: D-major—F#-minor, mm. 20-21):

<sup>16</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 152.

**Figure 6:** Storytime Cue Cont.: Hinting at Edward's Theme (mm. 20-21)

5 "No, Scissor-hands."

12

20 Edward's Theme hinted

Repeat last 4 bars

*I* *iii* *V(aug.5)/iii*

The Sympathy Theme occurs next, eight measures after Elfman augurs Edward's Theme with the L-major progression (mm. 20-21). The Sympathy Theme is another leitmotif paired with a recurring L-major associative harmonic theme, and it very often occurs alongside Edward's Theme. The main difference between the Sympathy Theme and Edward's Theme is that the former only uses one L-major transformation whereas Edward's Theme repeats the *Leittonwechsel* transformation twice (oscillating back-to-back) over the course of four measures (similar to Silvestri's *Polar Express* and modeled in the L-major melodic catalog). The other significant difference is the Sympathy Theme's melody <F#-G#-A#-B-C#, F#-G#-A#-D#-C#>,

etc., which occurs above the L-major progression (Do <+4,+3, X> in the melodic catalog).<sup>17</sup> The grandmother continues, “The inventor was very old. He died before he was able to finish the man he invented. So the man was left by himself, incomplete and all alone.” The emotional reaction to her description, “left by himself, incomplete, and all alone” is intended to be one of deep sympathy and compassion, and the Sympathy Theme accomplishes this empathetic associative response with the L-major transformation (m. 26) as well as the emotive “borrowed” iv chord (Bm, m. 28), evident in Figure 7 below.

**Figure 7:** *Leittonwechsel* (F#-major—A#-minor) in Sympathy Theme

The musical score for the Sympathy Theme, measures 26-31, is shown below. The key signature is F# major (three sharps) and the time signature is 4/4. The melody is in the treble clef, and the accompaniment is in the bass clef. The chords are labeled as F#-I, iii, vi, iii, IV, iv, V/vi, and V (sus6-5)/vi.

The coupling of grandmother Kim’s compassionate inflection on the words “all alone” and the emotional quality associated with the *Leittonwechsel* transformation create an undeniable feeling of sympathy for (and empathy toward) Edward. Referring to associative harmonic themes (such as the *Leittonwechsel*), Scott Murphy explains that “both film composers and moviegoers, whether consciously or not, are undoubtedly acquainted with many, if not all, of these associations through repeated exposure.”<sup>18</sup> The Sympathy Theme includes another harmony that seems to emit a common emotional reaction of sympathy as well: the emotive borrowed iv chord. Directly after this sympathy-inducing iv chord, a secondary dominant (V/vi) transitions—

<sup>17</sup> Do <+4,+3, X>: The “X” indicates that this particular L-major melody only has three pitches. The “X” also indicates that this melody could be completed by several different pitches/results from melodic catalog.

<sup>18</sup> Scott Murphy, “Transformational Theory and the Analysis of Film Music,” In *The Oxford Handbook of Film Music Studies*, (Oxford: Oxford University Press. 2014), 488.

as the new dominant—to the key of Eb major (VI), marking the first entrance of Edward’s Theme (another *Leittonwechsel*). As mentioned earlier, Edward’s Theme begins only milliseconds after the grandmother says, “His name was Edward,” highlighting its leitmotivic role. Edward’s Theme consists of the L-major associative harmonic theme (leitharmonie) as well as two accompanying L-major melodies: (1) Sol <+5,-1,X>, mm. 30-31 and (2) Sol <+9,-5,-4>, mm. 32-33. In Figure 8 below, the last two measures include a transposed version of the first three pitches, Sol <+5,-1,X> (Eb-Ab-G). This motive can be found in the L-major melodic catalog, although it does not occur over an L-major progression.

**Figure 8:** Edward’s Theme [Transposed Theme over the IV6/4—iii6/4]

The musical score for Figure 8 is presented in two staves. The top staff is in treble clef, and the bottom staff is in bass clef. The key signature is two flats (Eb major), and the time signature is 4/4. The melody in the top staff is divided into two phrases: the first phrase [Sol <+5, -1, X>] covers measures 1-2, and the second phrase [Sol <+9, -5, -4>] covers measures 3-4. The bass staff shows chords: Eb: I (measures 1-2), iii 6/4 (measures 1-2), I (measure 3), iii 6/4 (measure 4), IV 6/4 (measure 5), iii 6/4 (measure 6), and V 6 (measure 6).

### 3. <PR> Transformations As Linking Devices Between *Leittonwechsels*

Thus far, within the span of one cue, Elfman presented the *Leittonwechsel* associative harmonic theme in three different key areas: C-major, F#-major, and Eb-major. The last key (Eb+, Edward’s Theme) relates to the first key (C+) by the binary-generated <PR> transformation. The second key (F#+, Sympathy Theme) relates to the last key also by a <PR> transformation. The first (C+) and last (Eb+) keys are likewise related by the octatonic cycle (<PRPR>). Elfman therefore uses <PR> transformations consistently as linking devices to

connect modulatory chains of L-major associative progressions. This neo-Riemannian “Associative Transposition” serves as one way to signify a change in the narrative or shift in the emotional landscape while using the same *Leittonwechsel* leitmotif.<sup>19</sup> It also represents a brilliant neo-Riemannian compositional technique that causes a repetitive leitmotivic *Leittonwechsel* transformation to retain freshness and unpredictability within a film score that relies on it so frequently. Murphy calls this a “recombinant” approach, when a composer strings together a “relatively novel sequence of well-worn” triadic progressions.<sup>20</sup>

Another example of Elfman’s ability to string together novel sequences of TTPCs is when we see a flashback of the very moment when the Inventor conceived of the idea to create Edward. The Inventor holds a sugar cookie in the shape of a heart and places it slowly on the chest of a lifeless robot. A solo oboe begins playing the Storybook Theme (in the key of D-minor), but instead of resolving from the dominant (V) back to D-minor (as was expected from the Main Title), Elfman writes a deceptive cadence to Bb-major. Immediately after the deceptive cadence, an intimate wordless choir emerges in the key of G, singing Edward’s Theme. Figure 9 below depicts the important <RP> transformation (from Bb-major to G-major):

**Figure 9:** <RP> Link to Edward’s Theme

Dm (i)—AM (V)—BbM (VI), <RP> link to [Edward’s Theme]→ GM—Bm—GM—Bm—DM
---

This is an example of thematic truncation, as we only hear seven of the twelve pitches from the *Leittonwechsel* melody, <D—G—F#, D—B—G—F#>.<sup>21</sup> There are two significant

<sup>19</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 291.

<sup>20</sup> Murphy, “Transformational Theory and the Analysis of Film Music,” 492.

<sup>21</sup> Bribitzer-Stull explains that “Truncation stands as one of the most common Wagnerian thematic techniques used by film composers” (2015, 289).

compositional elements in this cue: (1) Elfman seamlessly links the Storybook Theme to the L-major Edward Theme with yet another octatonic binary-generator, <RP> Bb+ to G+ (compare this to the previous <PR> transformations that linked together a chain of L-major themes), and (2) The *Leittonwechsel* theme (Edward’s associative L-major theme) signifies the sentimental moment when the Inventor first thought of creating Edward. The *Leittonwechsel* very effectively evokes the emotional attachment to Edward in this moment and also creates a deep sense of nostalgia and compassion: The camera captures the expressive look of longing from the Inventor as he imagines creating his beloved Edward.

In *Hollywood Harmony*, Frank Lehman describes a very similar cinematic compositional tool in *The Song of Bernadette* (1943). Referring to Alfred Newman’s cue that depicts Bernadette’s supernatural vision of the Virgin Mary, Lehman points out that, “Almost entirely free of dialogue, the scene relies on Jennifer Jones’s expressive face and the exceptionally foregrounded score for its *wow*-factor.”<sup>22</sup> Just as Edward’s Theme boldly frames the Inventor’s wonderment-saturated face as he conceives of the invention of Edward, so too in “The Vision” scene, the “camera’s fixation on Bernadette’s wordless face strengthens the out-of-time quality already implied by Newman’s meandering, tonally uninhibited *unendliche Melodie*.”<sup>23</sup> Although their techniques are quite different, both of these scenes (by Elfman and Newman) rely on chromatic triadicism—such as Newman’s major tritone progression from F-major to B-major, <RPRP>—and both exemplify the ability of neo-Riemannian transformations to signify the character’s moment of epiphany, even in a context void of words.

---

<sup>22</sup> Frank Lehman, *Hollywood Harmony: Musical Wonder and the Sound of Cinema* (New York: Oxford University Press), 228.

<sup>23</sup> Lehman, *Hollywood Harmony*, 233.

Another example of the leitharmonic *Leittonwechsel* progression (Edward's Theme) is when Edward sees a photo of Kim for the first time. It is noteworthy that Kim does not receive her own theme. Edward's Theme is projected over Kim and it represents the moment Edward experiences romantic love (or affection) for the first time. The L-major leitharmonie here emphasizes the versatility of the *Leittonwechsel* transformation and its unique ability to emanate a variety of emotional associations, such as romantic love, sympathy and compassion, or nostalgia and wonder. Elfman elaborates on the L-major Edward Theme, calling it "Edward's emotional center."<sup>24</sup> He admits that "Edward's music would even play over Kim," and that, "as a character...she wasn't going to get her own theme."<sup>25</sup> Explaining his reason for this, Elfman states, "I like following the emotions, not the characters. I've always felt that way, and that carried into the score as well."<sup>26</sup> Bribitzer-Stull reveals a very similar compositional approach when discussing Arnold Schoenberg's film-score approach to Pearl Buck's *The Good Earth*: "Rather than associating themes simply with characters or things, Schoenberg's titles suggest that he – like Wagner – imagined concepts and emotions lying at the heart of themes' projected semantic functions."<sup>27</sup> So too does Elfman employ the L-major associative harmonic theme (Edward's Theme) as the emotional underpinning in multiple cues throughout the narrative, rather than limiting it to one character or idea. Edward's Theme here represents both his blossoming love for Kim (the wonder of an inventor's creation learning about love) as well as his purity and innocence. The emotional quality associated with the *Leittonwechsel* effectively

---

<sup>24</sup> Elfman, "Commentaries," *Edward Scissorhands: 10<sup>th</sup> anniversary ed.* (2000).

<sup>25</sup> *Ibid.*

<sup>26</sup> *Ibid.*

<sup>27</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 270.

creates the nostalgic feeling of falling in love that Burton and Elfman sought to capture in this scene. Elfman emphasized that the Edward Theme (with its *Leittonwechsel* harmony) succeeded the most in capturing the innocent heart of Edward.<sup>28</sup>

Yet another instance of the associative, leitharmonic *Leittonwechsel* (Edward's Theme) appears in a particularly poignant moment in the film, when Edward is interviewed on TV and asked, "Is there some special lady in your life?" The camera focuses in on Edward's eyes, and then cuts to Kim's face, zooming in to her eyes as well. During this silent, salient moment (Edward does not give a verbal answer), Edward's Theme is all that we hear. It is as if the *Leittonwechsel* and its melody are speaking for Edward. That is, Edward's Theme is answering the question, giving the viewer the emotional signification that Edward has indeed fallen in love. Elfman subtly brings in the violins, piccolo, and harp to signify this intimate revelation. In Figure 10 below, the harp arpeggiation and piccolo line play fragments of the Edward Theme above the progression:

---

<sup>28</sup> Elfman, "Commentaries," *Edward Scissorhands: 10<sup>th</sup> anniversary ed.* (2000).

Figure 10: Edward Interviewed on TV; Romantic *Leittonwechsel*

"Is there some special lady in your life?" [56:10]

Danny Elfman

trans. by S.J. Dinsfriend

The musical score is arranged in two systems. The first system consists of two staves: a Violins staff and a harp staff. The Violins staff is in 4/4 time and contains a melodic line with notes G4, A4, B4, C5, D5, E5, and F5, with a fermata over the final note. Above the staff are the labels 'Violins', 'Am7', 'C (flute/strings)', and 'Em'. The harp staff is also in 4/4 time and contains a descending melodic line with notes G4, F4, E4, D4, C4, B3, and A3, with a fermata over the final note. Below the harp staff are the labels 'iv7', 'VI', '----L-major----', and 'i'. The second system consists of two staves: a (Fl.) staff and a (choir) staff. The (Fl.) staff is in 3/4 time and contains a melodic line with notes G4, A4, B4, C5, D5, E5, and F5, with a fermata over the final note. Above the staff is the label '(Fl.)'. The (choir) staff is in 4/4 time and contains a sustained chord. Below the (choir) staff is the label 'i'. The score concludes with a double bar line.

The emotional association with the *Leittonwechsel* in this case is one of deep longing, romantic love, and an epiphany on Kim's end. This is similar to the use of the *Leittonwechsel* in *Elf's* narrative, when Buddy's Father has a complete change of heart, a revelation that he loves his son. Similarly, Kim begins to experience reciprocal feelings of love toward Edward in this scene, and her awakening of love is illustrated by the sentimental L-major progression and fragments of the melody from Edward's Theme. Bribitzer-Stull elucidates how, in *The Ring*, Wagner "used Thematic Fragmentation to capture the sense of emotion associated with the emergence or departure of an important dramatic element."<sup>29</sup> In this case, the fragment of Edward's Theme

<sup>29</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 289.

captures the sense of emotion that is associated with the emergence of Kim's love toward Edward.

#### 4. Leitmotivic Harmonic Corruption Applied to the *Leittonwechsel*

Bribitzer-Stull also discusses how film scores incorporate the leitmotivic compositional technique of "Harmonic Corruption."<sup>30</sup> A strong example of harmonic corruption in *Edward Scissorhands* occurs when Edward has a heart-wrenching flashback: Edward's Inventor is about to give him his new pair of hands (to replace his scissor-hands), but he dies right in front of Edward before he is able to assemble his new hands. At the very moment the Inventor dies, Elfman captures the psychological terror and devastation that Edward and the viewers experience by ceasing the *Leittonwechsel* progression and replacing it for the first time with a horrifying <PL> transformation (Bb-minor to D-minor). Edward's melodic *Leittonwechsel* Theme (S<+5,-1,X>), as if to symbolize the ghost of the Inventor, is eerily still heard above the new <PL> transformation. None of the pitches (chord-tones) need to be altered to fit this new minor tonic (Bb-minor). This shift from the *Leittonwechsel* to the more chromatic <PL> can be understood as neo-Riemannian harmonic corruption, demonstrating the "dramatic and emotional power of associative themes" in their ability to augment "images and myriad aspects of the drama, including those unseen, like the psychological aspects of a character's state of mind."<sup>31</sup> Edward's innocent L-major Theme suddenly falls prey to the psychological shock of the death of his creator, and the once-tranquil *Leittonwechsel* passes away from the listener as fast as the Inventor passes away in front of Edward. Murphy listed this scene as one that exemplifies the

---

<sup>30</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 285.

<sup>31</sup> *Ibid.*, 255-256.

*Leittonwechsel* as a loss gesture, but I contend that loss and sorrow in this scene are actually depicted by Elfman's harmonically corrupted *Leittonwechsel*, the <PL> transformation (the startling chromatic mediant). More accurately, the *Leittonwechsel* depicted their love for one another, whereas the <PL> transformation depicted the moment Edward lost his creator.

Elfman's score exhibits another leitmotivic device, change of mode, which also occurs in the context of Edward's Theme. During one of the final scenes, Kim comes to Edward's rescue, declares her love to him and kisses him for the first (and last) time. As stated earlier, just as Buddy's *Leittonwechsel* Theme occurs right when the father says, "I love you," so too the downbeat of the Sympathy (*Leittonwechsel*) Theme is perfectly synchronized with Kim's statement, "I love you." The oboe (an instrument commonly associated with Edward's Theme throughout) plays variations on Edward's Theme, and only subtly presents fragments of the original L-major melody. However, the emotional association with Edward's love for Kim—and now Kim's love for Edward—is still powerfully evoked through the *Leittonwechsel* transformation that remains underneath the melodic variations. But this enchanting moment of romantic love (articulated by Edward's Theme and the Sympathy Theme) is coupled with the impending reality that they will never be able to see each other again (Edward says "Goodbye" before they kiss). This is why Murphy also includes this scene as an example of the L-major progression signifying loss and sorrow. However, the overall emotional expression from the *Leittonwechsel* in this scene is one of deep romantic love and selflessness. Elfman not only uses the *Leittonwechsel* to induce feelings of nostalgia, blossoming romance, and innocence; he also uses the L-major transformation's unique ability to capture the bittersweet emotional association of self-sacrificial love, agápe: a form of love that selflessly endures pain for the sake of love; an unconditional love that will, in extreme circumstances, cause one to sacrifice even his/her own

life to protect the other. Lehman also references the unique associative power of L-major when he explains “the undulation between DM and F#m in...*Alien* draws on L(M)’s bittersweet disposition, with Goldenthal’s music providing a preemptive elegy for Ripley as she prepares to sacrifice herself.”<sup>32</sup> This self-sacrificial love is what Elfman attempts to illustrate with the *Leittonwechsel* here, since Kim must choose to permanently separate from Edward in order to protect his life. The change of mode in measure 13 (D-minor, iv) in the middle of the L-major Sympathy Theme also captures the emotional turmoil and devastation that both characters are facing. The change of mode occurs at the exact moment that Kim runs away, denoting the last time she and Edward will see each other. This unexpected transformation, m1m <LPLR> or <PLPR>, interrupts the Sympathy Theme and effectively depicts the sorrow associated with the fact that Edward and Kim must tragically separate forever. Much like the previous scene, it is usually a more chromatic gesture (such as the <PLPR>, the iv D-minor chord in Figure 11 below) that depicts loss or sorrow, *not* the *Leittonwechsel*.

---

<sup>32</sup> Lehman, *Hollywood Harmony*, 100.

Figure 11: Climactic Goodbye with *Leittonwechsel* and Change of Mode

The Kiss and "I Love You"

Danny Elfman  
trans. S.J. Dinsfriend

Oboe

Harp

I [L-major] iii      I      [L-major] iii

5 "I love you"

(Harp)

IV      4-21 (0246)      V/vi      vi      Pivot-IV

9 A: I      [L-major] iii      vi

12

iii      iv      4-21 (0246)  
(Fr +6 or Gr + 6)

In Figure 11, the change of key between Edward's *Leittonwechsel* Theme (C+) and the Sympathy *Leittonwechsel* Theme (A+) is another example of Elfman's affinity for the neo-Riemannian octatonic-cycle: he uses an <RP> transformation as a linking device between L-major progressions or key areas. In this case, the <RP> represents the overarching key area relationship (since there are triads/pivot chords—m5M—that occur between the C+ and A+ key areas). In the case of the Inventor conceiving of the idea to create Edward, the <RP> transformation occurred immediately between two triads/themes (Bb+ to G+). The correlation between these two <RP> transformations creates a coherent harmonic arch and may very well have overarching associations as well: The first <RP> link to the L-major Edward Theme occurs when we witness the initial conception of Edward's existence, and the last <RP> link from the Edward Theme to the Sympathy Theme occurs when we witness the bittersweet ending of Edward and Kim's relationship.

##### 5. Elfman SLIDING Between *Leittonwechsels*

During the last scene of the film, Elfman uses a different type of neo-Riemannian link to connect iterations of the *Leittonwechsel* Edward Theme. Two instances of the SLIDE transformation (Bb-minor to A-major, where the perfect-fifth dyad slides down by a semitone) are used to depict the irrevocable separation between Kim and Edward. However, the fact that the SLIDE links two *Leittonwechsel* Themes together symbolizes the love between Edward and Kim that is still very much alive. The SLIDE educes the association of a bittersweet connection between Edward and Kim. In "Transformational Analysis and the Representation of Genius in Film Music," Frank Lehman explains the "SLIDE's unique ability to connote extreme tonal

distance while maintaining extreme pitch proximity.”<sup>33</sup> It is this paradox of extreme tonal distance and extreme pitch proximity that parallels the narrative’s irony here: Kim and Edward are extremely close to each other’s hearts (embodied perhaps by the enharmonic Db and C#), but physically (and dimensionally) separated by an insurmountable distance. The end of the film shows Edward, who has not aged, still creating ice sculptures of Kim as a teenager, as he remembers her. In this final cue, Edward’s Theme returns as well. In the middle of Edward’s Theme (after the *Leittonwechsel* four-measure undulation), the SLIDE occurs right as Kim says “I’d rather him remember me the way I was.” The SLIDE captures Kim’s internal coping mechanism (sweet sorrow) with its ability to convey a psychological shift (just as Lehman indicated). The SLIDE also incarnates the juxtaposition of Kim’s current age (an aging grandmother) and Edward’s eternal youth. The nature of the static third—the enharmonic Db/C# that never moves—perhaps parallels Edward, who never ages or leaves his castle, and the perfect fifth which slides down a half step (Bb—F to A—E) perhaps represents Kim’s humanity, as she is subject to time (and change).

Before the second SLIDE, the granddaughter asks Kim, “How do you know he’s still alive?” In response, Kim says, “I don’t know...not for sure, but I believe he is.” This shift from doubt (“how do you know he’s still alive”) to childlike faith (“I believe he is”) is depicted by the SLIDE as well. Also, the final statement of belief is depicted by the return of Edward’s Theme (The associative *Leittonwechsel* progression and melody). The feelings of nostalgia, wonder, love, and hope (belief) associated with the *Leittonwechsel* leitmotif are substantiated by Kim’s final words to her granddaughter: “Sometimes you can still catch me dancing in it,” referring to the magical snowfall that Edward still creates through ice sculpting. This of course recalls when

---

<sup>33</sup> Lehman, *Hollywood Harmony*, 6.

Kim, as a teenager, danced underneath the snowflakes that fell while Edward was creating an angelic ice sculpture of her. The viewer subconsciously associates this magical moment with the *Leittonwechsel* Edward Theme, which saturated the cue with L-major transformations and symbolized their climactic moment of love and wonder. Figure 12 below depicts the SLIDE and Leittonwechsel transformations in the context of Kim’s important conversation with her granddaughter:

**Figure 12:** L-major and SLIDE with Kim’s Commentary

<p>[Edward’s Theme/<i>Leittonwechsel</i>]: Gb—Bbm—Gb—Bbm—[SLIDE] <b>“I would rather him remember me the way I was”</b>—[Edward’s Theme/L] A—C#m—A—C#m—Bm—D—E7—</p> <p>[Sympathy Theme Truncated/<i>Leittonwechsel</i>]: A—C#m—F#m—D#half-dim— <b>“How do you know he’s still alive?”</b></p>
<p>[Edward’s Theme/L]: Gb—Bbm—Gb—Bbm—[SLIDE] <b>“I believe he is.”</b></p> <p>[Edward’s Theme/L]—A—C#m—A—C#m—Bm—D—C#m—D—Db—D—A/E—E7—</p>
<p><b>“Sometimes you can still catch me dancing in it”</b>: [Edward’s Theme/L] A—C#m—A—C#m—Bm—D—E, [Sympathy Theme/L]- A—C#m—F#m—C#m—D—Dm—C#7—F#m—B—Db—[Edward’s Theme/L]- Gb—Bbm—Gb—Bbm—Gb—Bbm—Gb—Bbm</p>

## 6. The Nostalgic *Leittonwechsel* in *Up*

Disney/Pixar’s *Up* (2009), directed by Pete Docter and composed by Michael Giacchino, is a movie that carries a profound ability to evoke deeply nostalgic feelings. The film is about an old man (Carl) who goes on an adventure while processing the loss of his wife and developing a new friendship with a young boy. In rediscovering the spirit of adventure, wonder, and love for life that he had cultivated with his wife, he in turn rediscovers childlike joy, hope, and a restored

sense of purpose in life. In the scene that Murphy correlates with the loss gesture and sorrow, Carl is reminiscing as he looks through an old photobook of memories of him and Ellie. In every picture, Carl and Ellie are smiling, laughing, and enjoying life together. The composer (Giacchino), referring to the *Leittonwechsel* (“Married Life”) leitmotif, explains, “Even though she [Ellie] passes away, she needs to stay with Carl through the rest of the film, and the way we do that is through her theme.”<sup>34</sup> The composer is implying that, instead of acting primarily as a sadness/loss gesture, the *Leittonwechsel* theme acts as a leitmotivic reminder that Ellie is always with Carl. In the composer’s view, the *Leittonwechsel* is not a loss gesture but is in fact a harmonic signification that Ellie will never leave Carl. This is substantiated by the visual stimuli as well: Carl actually ends up smiling with gratitude and tears of joy when we hear the *Leittonwechsel* undulating in this moment. He is not focused on the loss, but the sweet appreciation of memories and vicarious joy of viewing photos of him and his bride enjoying life together. This is an emotionally complex process of initial grief, followed by a tender recollection of happy memories, and ultimately a nostalgic healing that acts as a backdoor to joy.

In “The Analysis and Classification of Music-Induced States of Sadness,” Herdson et. al. describe an ironic “comforting sadness” as including “feelings of comfort, tenderness, and peacefulness.”<sup>35</sup> Nostalgia can be experienced as a bittersweet joy of reminiscing and finding “comforting sorrow” or “sweet sorrow” in this process of wistful remembrance.<sup>36</sup> If anything, it might make more sense to call the *Leittonwechsel* a nostalgia-gesture here, or perhaps an empathy-gesture. This would also account for the paradoxical nature of emotions that are stirred

---

<sup>34</sup> Douglas Hyde, “CNN: ‘Up’ composer, Michael Giacchino’s big year,” YouTube video, 0:51, March 2, 2010, [https://www.youtube.com/watch?v=m5HvU\\_tpIKs](https://www.youtube.com/watch?v=m5HvU_tpIKs).

<sup>35</sup> Herdson et. al., “The Analysis and Classification of Music-Induced States of Sadness,” 102.

<sup>36</sup> *Ibid.*

through the associativity of the *Leittonwechsel* in film music. This *Leittonwechsel* theme is associated with deep love and nostalgia in this scene, *even more so* than loss or sadness. To support this point, note how the scene ends with a glimmer of restored wonder as Carl reads Ellie's final note to him: "Thanks for the adventure. Now go have a new one! -Love, Ellie."

The sentimental *Leittonwechsel* recurs at the climax of the film, during "The Ellie Badge" scene. The animation "camera" zooms out, and we continue hearing the *Leittonwechsel* as the scene reveals their old house miraculously sitting on top of Paradise Falls, precisely where Ellie had dreamt of moving it (the last time we saw this house in the film was when Carl was required to release his attachment to it as he watched it disappear into the clouds, also accompanied by the *Leittonwechsel*). During this final scene, the *Leittonwechsel* assists us in marveling at the beautiful dramatic irony of the house ending up in Paradise Falls while Carl is unaware, but sitting with perfect contentment and newfound happiness. It seems miraculous that the house landed there safely, beckoning the viewer to question what this might represent. Does it signify the eternality of love between Carl and Ellie, embodied by the house's resilience and by its ability to withstand being destroyed or lost? The *Leittonwechsel* perhaps symbolizes an eternal, unbreakable love that can even outlast death itself. This is represented by the seemingly eternal loop between the I and iii in the repetitive *Leittonwechsel* undulation. This metaphor is also implied by the cinematographic choice to slowly zoom out, further and further from the house, not dissimilar to the way an album fades out and represents the possibility of a song that never truly ceases. The *Leittonwechsel* theme indeed represents Carl and Ellie's "song," and it successfully embodies their undying love.

We have explored thus far how Michael Giacchino relies on the undulating L-major theme to capture Carl's deep love for his wife, renewed wonder, belief, and sweet nostalgia as he

rehearses their memories of love, romance, and adventure. Another instance of the *Leittonwechsel*'s associative versatility occurs when Carl suddenly realizes he has found "Paradise." The clouds dissipate and the *Leittonwechsel* transformation accompanies the look of wonderment on his face and, for the listener, induces the feelings of awe and wonder that Carl is apparently experiencing. The *Leittonwechsel* can be understood as a physical (sound) manifestation (or representation) of wonderment that then aligns the listener's emotions onto the same emotions that the character in the film is supposed to be experiencing. Since Carl is not actually hearing the underscored (non-diegetic) music, it can be deduced that our minds are misattributing the pleasure that we feel from the music and mapping it (superimposing it) onto the emotions of the animated character on the film. A similar phenomenon occurs in David Huron's theory of "misattribution" that occurs in our minds during the "prediction effect," his reframing of the "exposure effect," which essentially states that the more we are exposed to something, the more we will prefer it.<sup>37</sup> He posits that, when our brain processes the successful prediction of a musical event, we end up feeling positive emotions because we misattribute the feelings of pleasure onto the music itself—the stimulus—rather than orienting our pleasure toward the brain's remarkable ability to predict something accurately—the thing that perhaps deserves the praise or celebration.<sup>38</sup> In a similar way, I propose that (1) we subconsciously misattribute our associative emotional reactions to the *Leittonwechsel* (rather than our brains), then (2) superimpose these feelings onto the character's psychological state or onto the emotional landscape of the contextual scene in the movie, and (3) finally, we "experience" these superimposed feelings that we placed upon the actors and "mirror" them back onto ourselves,

---

<sup>37</sup> David Huron, *Sweet Anticipation: Music and the Psychology of Expectation*. (Cambridge, Massachusetts: MIT Press, 2006) 131.

<sup>38</sup> *Ibid.*, 138.

creating a simulation in which we are mimetically, vicariously feeling parallel emotions with the actors or visual cues.<sup>39</sup> Some philosophical frameworks hold that the *Leittonwechsel* never had the intrinsic ability to induce this or to start this chain of events. They claim that it was our initial emotional reaction to the combination of both the visual stimulus and the association that we perceived coming from the *Leittonwechsel*. The simulation I described represents just one model for explaining how we experience emotions through music in film while accounting for the philosophical stance that “only sentient creatures can express emotions.”<sup>40</sup>

Regardless of the harmony’s ability to induce emotion, we at least know that a human’s reaction to the music creates genuine emotions or feeling-states. This brings up another philosophical debate: The ‘emotivists’ believe genuine emotions can be experienced through music while the ‘cognitivists’ believe that music-induced emotions are not genuine because of their lack of real-life consequences.<sup>41</sup> I propose that emotional-musical analyses of film scores can side more with the ‘emotivist’ camp, since film music is contextualized with real actors (or voices) on screen, or various visual referents that embody the emotions that are expressed or induced by the music. Music in film has an even greater potential for creating ‘real’ emotions in listeners (inducing deeply felt emotions), because the visual scenes and characters amplify one’s experience of “vicarious” emotions, just as we react with empathy and feelings of nostalgia that align with Carl’s emotional processes in *Up*. Although some scholars (cognitivists) have argued that these emotions are “non-genuine,” I contend that film music (and music in general) can induce genuine emotions. One does not need a real-life consequence to experience real sadness

---

<sup>39</sup> Vittorio Gallese and Michele Guerra, *The Empathic Screen: Cinema and Neuroscience* (Oxford: Oxford University Press 2019).

<sup>40</sup> Stephen Davies, 2010, *Handbook of Music and Emotion: Theory, Research, Applications*, Eds. Juslin & Sloboda, 29.

<sup>41</sup> Herdson et. al., “The Analysis and Classification of Music-Induced States of Sadness,” 99.

or joy (or myriad other emotions). One's imagination can just as easily experience or induce real emotions, just as one can dream of crying over something sorrowful and feel genuine sadness upon waking. Consider also the fact that one can experience general moods (or mood swings) without pinpointing any specific reason behind the induction of these flippant moods (there are often no pressing ecological consequences connected to them).

To close this analysis of *Up*, let us return to Herdson, Eerola, and Javadi's recent article (2022), "Analysis and Classification of Music-Induced States of Sadness." I have shown how Giacchino uses the *Leittonwechsel* as a musical signification that points to the filmic 'referent' of Ellie's eternal place in Carl's spirit (heart). However, though I have supported this with the composer's own words, with the specific contextual physical gestures (smiles) of the characters, and other corroborating examples of the *Leittonwechsel*'s positive associations throughout the film, it is pertinent to reinterpret Murphy's loss gesture with another piece of evidence. Herdson et. al. define various states of sadness and contend that scholarship surrounding sad emotions has displayed reductionistic descriptions of sorrow. They define "Sweet Sorrow" as being "associated with positively psychological outcomes, ...self-reflection, and adaptive coping mechanisms."<sup>42</sup> This state of "sweet sorrow" is developed in tandem with the *Leittonwechsel*'s swinging oscillation, which accompanies Carl's self-reflective coping mechanism of reminiscence as he leafs through the photobook of memories with Ellie. In the same way that Herdson et. al. argue that nuances of sad states are often overgeneralized, I would argue that Murphy's claim about the *Leittonwechsel* being most consistently a sadness-inducing loss gesture is reductionistic. Even in the scenes that elicit a certain amount of sadness or loss, the music is often doing the *opposite* emotionally: The *Leittonwechsel* is the balm of healing, the

---

<sup>42</sup> Herdson et. al., "The Analysis and Classification of Music-Induced States of Sadness," 102.

comforting empathy, the musical medicine that soothes the soul with its sweet sorrow marked by a lulling undulation from major I to minor iii.

Andrew Powell (2018) confirms that the *Leittonwechsel* is more nuanced in its emotional expressiveness, and describes its associativity as a “Love-Loss” duality.<sup>43</sup> In his discussion of Elfman’s *Edward Scissorhands* score, Powell ends up calling the *Leittonwechsel* the “Love” theme, supported by the overarching narrative and emotional landscape that traces Edward’s efflorescing love for Kim and Kim’s awakened love for Edward at the close of the film (I will analyze this cue in depth later on). Additionally, Powell emphasizes Elfman’s use of this Love-Loss duality with the *Leittonwechsel* in Elfman’s score to *Frankenweenie*, as the L-major theme depicts Victor Frankenstein’s affection and love for his dog, Sparky. Similar to these examples by Elfman and Giacchino, the following analysis of John Debney’s score to *Elf* exemplifies the *Leittonwechsel*’s strong association with empathy, love, and belief.

---

<sup>43</sup> Powell, 2018, “A Composite Theory of Transformations and Narrativity for the Music of Danny Elfman in the Films of Tim Burton,” PhD diss., (University of Kansas), 133.

### CHAPTER III: THE *LEITTONWECHSEL*'S CONNECTION TO CHRISTMAS MAGIC

#### 1. Analysis of *Elf*: “You Sit on a Throne of *Leittonwechsels*”

In Figure 12 below, I have transcribed the main theme from the Christmas hit, *Elf* (2003), directed by Jon Favreau and composed by John Debney. The illustration (Figure 12) depicts the L-major associative harmonic theme when it first occurs, in the Main Title. Notice, in the first two measures, how the melodic theme ascends by a perfect fifth (Db—Ab), descends by a minor-sixth (with the passing tone), and reascends to the Ab (C—Ab) while traversing the *Leittonwechsel* transformation (Db+ to F-). It is also significant to note the parsimonious, “maximally smooth” voice-leading in the bass line (the F and Ab remain while the Db descends by a half-step). This bass line reinforces the melody’s parallel motion down to C as well. In Richard Cohn’s neo-Riemannian article, “Maximally Smooth Cycles, Hexatonic Systems, and the Analysis of Late-Romantic Triadic Progressions,” he explicates that “all transitions between adjacent chords are maximally smooth” if “only one voice moves, and that motion is by semitone.”<sup>44</sup> This symmetrical difference—a member of [0,1]—is especially evident in Debney’s *Leittonwechsel* theme, since both the melody and bass line exemplify the parsimonious voice leading of a descending half-step, as in Figure 13 below. In the final chapter of this thesis, I will develop a homology that draws a metaphorical connection between the *Leittonwechsel*’s maximally-smooth voice leading and the nature of its most consistent emotional associations.

---

<sup>44</sup> Richard Cohn, “Maximally Smooth Cycles, Hexatonic Systems, and the Analysis of Late-Romantic Triadic Progressions,” *Music Analysis* 15, 1 (1996): 9.

Figure 13: Debney's *Elf* L-major Leitharmonie

Elf Main Title  
John Debney

15

19

After invoking Peter Kivy's "physiognomy of musical expression," concepts of contour theory, mimetic theory, and Zbikowski's cross-domain mapping of image schemata (especially 'verticality'), Scott Murphy considers the homological interpretation that the *Leittonwechsel*'s voice-leading motion of a descending semitone might represent the descending contour of sadness that can be physically felt or shaped by a sorrowful frown on the human face.<sup>45</sup> However, my research on the *Leittonwechsel*'s consistent association with Christmas magic and belief does not find congruence with this contour-theory homology of sadness symbolized by descent. Ultimately, Murphy agrees that this homology falls short and points out that the *Leittonwechsel* does not always contain descending gestures in its voice-leading motion (the melodic *Do* can leap up a seventh to *Ti*, for instance, or the two chords can be in root position and the bass can rise by a major third). He therefore concedes that "the expressiveness of musical

<sup>45</sup> Murphy, "Scoring Loss," 310.

utterances that are defined solely in pitch-class space...cannot be satisfactorily explained by using contour theory.”<sup>46</sup> To exemplify his point, Debney’s *Elf* theme ascends by a fifth, descends by a fifth, reaches down to a half-step, and then ascends even higher (up a minor-sixth): A contrasting homology or contour metaphor at play here that connects with the narrative state of Christmas belief is that the largest interval in the theme—a rising sixth—might suggest a cross-domain mapped ‘feeling’ of spatial ascent, which could mimetically induce the joyful feeling or image of the rising nature of a smile.<sup>47</sup> Or, borrowing from a more abstract domain, it could connote the ‘rising’ nature of Christmas spirit, wonder, and childlike belief in magic. I am *not* contending that Debney’s use of the *Leittonwechsel* somehow embodies this sense of ascending joy. Additionally, even if the ascending contour plays a role in inducing joy, it does not necessarily explain why the *Leittonwechsel harmony* induces positively-valenced emotions. Regardless of our inability to pinpoint exactly how the Christmas magic emanates from the *Leittonwechsel*’s musical structure (I will save this for Chapter VII), it is important now to simply note that giving the *Leittonwechsel* a name like “loss gesture” does not leave room for the harmony’s other consistent and numerous associations in film, such as Christmas magic, wonder, and nostalgic joy.

It will be beneficial to summarize some aspects of the narrative in *Elf* so that the emotional association with this L-major theme can be analyzed in later cues. The main character, Buddy the Elf, undergoes intense psychological stress as he begins to realize that he, as a human, does not fit in at the North Pole. He starts feeling like an outsider, illegitimate, alone, and completely disconnected from his elf family. He finds out that he was adopted, leaves his elf

---

<sup>46</sup> Murphy, “Scoring Loss,” 311.

<sup>47</sup> Zbikowski, “Conceptualizing Music: Cognitive Structure, Theory, and Analysis,” (NY: Oxford University Press, 2002), 68.

community, and seeks to reunite with his biological father, a children's book editor, in New York City. He soon finds out the devastating reality that his father is not interested in reuniting and worse yet, that his father does not believe in Santa Claus.

Debney's associative *Leittonwechsel* theme appears in various cues and in different tempos throughout the film, such as when the camera zooms in on Buddy during his long trek through the mountains on his way to New York City. However, when it accompanies this joyful trek, the *Leittonwechsel* theme is truncated and orchestrated less prominently (we encounter leitmotivic thematic truncation in Elfman's *Edward Scissorhands* and Silvestri's *Polar Express* as well). Later in the film, during one of the most emotive presentations of the L-major theme, we audibly hear Buddy's internal voice as he is writing a heart-wrenching letter to his biological father: "I've ruined your life...I don't belong here, I don't belong anywhere. I'll never forget you. Love, Buddy." In this case, the theme is set to a much slower tempo and is orchestrated much more poignantly, with an intimate clarinet solo accompanied by soft, high-register violins and a gentle solo piano texture (the *non-Leittonwechsel* features). Bribitzer-Stull discusses how leitmotivic "change of texture" appears in opera, and also "remains a common technique for modifying thematic association in film music."<sup>48</sup> He explains how change of texture "is most often used to show a change in character," which is exemplified here when both the protagonist and his father experience a notable psychological character development.<sup>49</sup> Under the L-major theme's change of texture, Buddy, who previously demonstrated exuberant optimism through the entire film, finally gives in to hopelessness, while Buddy's father, a man who seemed incapable of empathy, finally begins developing a softness of heart toward his eccentric son. For this

---

<sup>48</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 293.

<sup>49</sup> *Ibid.*

change of texture, the associative L-major progression is still paired with the identical leitmotivic melody from the Main Title (Buddy's Theme), transposed to G-major. The triadic voice leading is still maximally smooth, evident in the bass line. The cue's Roman numeral analysis—I—iii6/4—IV—V6/4—V5/3—demonstrates how the *Leittonwechsel* transformation works smoothly within the phrase's functional tonal progression.<sup>50</sup>

During the cues with the L-major associative theme, Debney usually avoids more chromatic neo-Riemannian progressions, whereas Elfman and Silvestri gravitate toward them (the SLIDE transformation, <PRP>, and <RP> operations are used as linking devices in *Edward Scissorhands* and *Polar Express*).<sup>51</sup> Right as Buddy says, "I'll never forget you," the scene cuts to Buddy's father reading over the letter with a look of profound sorrow and regret. The *Leittonwechsel* here is highly effective in producing the reaction of empathy (Elfman's L-major theme also depicts strong empathy in *Edward Scissorhands*). Debney's L-major theme also portrays Walter's painful epiphany: the feeling that he should have chosen selfless love, to welcome Buddy into his family instead of rejecting his own son. This moment may seem to align with Murphy's "loss gesture" theory and terminology. However, I maintain that the *Leittonwechsel* is not overarchingly an associative "loss gesture," but is chameleon-like in its ability to match the various hues of the characters' shifting emotions and unfolding drama on the screen. Yet another nuanced angle here is that, although the characters are experiencing temporary loss and sadness, the viewer may be experiencing a different emotion altogether, such as empathy or nostalgia, or hope that Walter and Buddy will reconcile. In fact, Herdson et. al. suggest "that sad music does not elicit basic emotions, such as sadness, but creates feelings of

---

<sup>50</sup> This is different than the *Leittonwechsel*'s role as an absolute progression, which simply oscillates back and forth.

<sup>51</sup> One notable exception in *Elf* is at the final scene: when Santa flies over Central Park, Debney presents the L-major theme first in C+, followed by a hexatonic LP-link, resulting in the second iteration of L-major theme in E+.

‘being moved’...and ‘aesthetic awe.’”<sup>52</sup> To address an even more complex side of interpreting this filmic moment of sadness, Herdson et. al. reveal the fact that “there currently lacks a comprehensive understanding of why sadness associated with music can attenuate both positive and negative moods.”<sup>53</sup> I contend that the reason we lack a comprehensive understanding in this area is because music has the unique ability to fluctuate in its associativity and metaphorical meaning depending on variables such as enculturation, individual mood, memories, proclivity to visual imagery, or individual acquisition of musical schemata. In the same way, fluctuating film scenes exhibit the ability to influence and activate any number of emotional reactions from a wide spectrum, even when the same leittharmonic progression is employed (such as the versatile *Leittonwechsel*). With this in mind, it might be better to regard music that has a particular flavor for inducing sadness as “sentimental” music, not “sad” music. Additionally, consider a situation where one listens to Murphy’s “loss gesture” and feels ecstatic joy and magical wonder (which is indeed what happens consistently in each of the Christmas and adventure film examples in this study). This listener’s reaction may not have even touched upon the more positively-valenced “sad” emotions such as sublime sorrow.<sup>54</sup> Instead, they were being more influenced by wonder-inducing visual stimuli, awe-inspiring narrative developments and other positive associations with Christmas magic, love, or childlike belief.

---

<sup>52</sup> Herdson et. al., “The Analysis and Classification of Music-Induced States of Sadness,” 100.

<sup>53</sup> *Ibid.*

<sup>54</sup> Herdson et. al. (2022) reveal that sublime sorrow includes experiencing emotions of transcendence, wonder, satisfaction, and joy (“The Analysis and Classification of Music-Induced States of Sadness,” 102).

## 2. The Congruence-Associationist Model: The *Leittonwechsel* Elicits Love and Empathy

In *Theorizing the Moving Image*, Noël Carroll explains how film music “is a highly expressive symbol system” and provides “more direct access to the emotive realm than any other symbol system.”<sup>55</sup> Just as the associative *Leittonwechsel* theme in *Elf* evokes deep empathy toward Buddy’s feelings of rejection and alienation, Carroll reveals how the “music tells us something, of an emotive significance, about what a scene is about; the music supplies us with...a description...of the emotive properties the film attaches to the referents of the scene.”<sup>56</sup> One might build upon Carroll’s theory to interpret the emotive properties as being attached to the L-major progression itself. In “Tonal Design and Narrative in Film Music: Bernard Herrmann’s *A Portrait of Hitch* and *The Trouble with Harry*,” David Neumeyer discusses the validity of Gorbman’s “thematic score” film theory, especially in scores that make use of associative themes:

[W]hen musical pertinence coincides with cinematic pertinence, the image is often marked as significant. Thus, it is not just the image that marks music as significant, but also the musical theme that marks visual objects as especially significant.<sup>57</sup>

Both Carroll and Neumeyer underscore the way in which a theme (or leitmotif) can viscerally draw out the emotional reaction that the director wishes to associate with the actions (or visual referents) on the screen. This sonic-visual phenomenon is just as powerful and convincing with the employment of leitharmonies (or associative harmonic themes), such as the *Leittonwechsel*.

In the next scene, the *Leittonwechsel* theme’s emotive association is seamlessly transformed from empathy and sorrow into depth of love and acceptance when the father repents

---

<sup>55</sup> Noël Carroll, *Theorizing the Moving Image* (Cambridge: Cambridge University Press, 1996), 142.

<sup>56</sup> *Ibid.*

<sup>57</sup> David Neumeyer, “Tonal Design and Narrative in Film Music: Bernard Herrmann’s *A Portrait of Hitch* and *The Trouble with Harry*,” *Indiana Theory Review*, 19 (Spring/Fall 1998): 100.

and reunites with Buddy. Walter says to his son, “Buddy...I didn’t mean anything I said back there. Not a word...I don’t want you to leave. You’re my son and I love you.” To augment the importance of the first time the father says “I love you” to his son, Debney turns to the leitharmonic L-major progression and theme. An interesting connection between *Elf* and *Edward Scissorhands* is that Danny Elfman also uses his leitharmonic *Leittonwechsel* to accompany the very first (and only) time Kim says, “I love you” to Edward. Additionally, in *Elf*, the associative L-major leitharmonic returns in full force when the father, previously one of the most callous characters, experiences childlike belief in Santa Claus. In this case, the leitmotivic, chameleonic *Leittonwechsel* is associated with a character’s psychological transformation from selfishness and cynicism to childlike joy, selfless love, and magical wonder. The L-major leitmotif serves various functions in the film’s narrative, and Debney uses its associative, emotive versatility to trace the father’s complex psychological processes: the *Leittonwechsel* theme contextualizes his severe remorse and evolving empathy, his softened heart, his declaration of love for Buddy and his restoration of childlike innocence and belief (when he sees Santa).

According to the congruence-associationist model developed by Marshall and Cohen (1988), when we are “watching a movie, our attention will be drawn to the cross-modal congruence between the music and the moving image.”<sup>58</sup> When we see Buddy’s father with his hands woefully pressing against his shameful face during the L-major theme, we experience this cross-modal phenomenon, where the filmmaker intentionally “directs the eye to visual parts that are structurally congruent with the music.”<sup>59</sup> In his dissertation, *A Perspective Theory of Music*

---

<sup>58</sup> Björn Vickhoff, “A Perspective Theory of Music Perception and Emotion,” (PhD diss., University of Gothenburg, Sweden, 2008), 176.

<sup>59</sup> *Ibid.*, 179.

*Perception and Emotion*, Björn Vickhoff elaborates on this congruence-associationist (c-a m) model:

When we hear a salient sound, the eyes will search for the cause of the sound. Attention is brought to the source. We need to select the right object out of a spectrum of objects on the scene. For this reason sounds must create expectancies of what we are about to see. And...the eye is looking for synchronization between the sound and the object.<sup>60</sup>

In relation to Vickhoff's description of the congruence-associationist model, the L-major progression consistently displays its ability to assist the viewers in selecting the right objects in the scene, and subsequently, to assist the viewers in feeling what the characters are feeling. In *Understanding the Leitmotif*, Matthew Bribitzer-Stull corroborates this particular feature of associative themes, as he accentuates the "multiplicity of connections between harmonic progressions and the textual, programmatic, visual, narrative, and dramatic components of the works in which they appear."<sup>61</sup> In the case of *Elf*, it is clear that the *Leittonwechsel* can effectively serve as an absolute progression even in a more docile diatonic context. Furthermore, Frank Lehman explains how absolute progressions are not always chromatic, and that "diatonic progressions can be used to this effect as well."<sup>62</sup> An absolute progression, which appear more clearly in the following *Polar Express* analysis, is the repetitious juxtaposition of two triads (major or minor) that acquires an associative characteristic in and of itself (typically without any connection to a larger tonal or harmonic progression).

---

<sup>60</sup> Vickhoff, "A Perspective Theory of Music Perception and Emotion," 179.

<sup>61</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 152.

<sup>62</sup> Lehman, *Hollywood Harmony*, 76.

### 3. Analysis of the Belief- and Wonder-Inducing *Leittonwechsel* in *Polar Express*

Only one year after *Elf*, the groundbreaking animated Christmas movie *Polar Express* was released (2004). I have selected this film score by Alan Silvestri for comparison because (1) Silvestri's chromatic triadicism is particularly apt for applying neo-Riemannian chromatic-harmonic analysis to the rich emotional development of characters and plot (consider his major tritone progression that evokes time travel in *Back to the Future*); (2) He likewise incorporates the nostalgic L-major associative theme to conjure the wonder of Christmas magic and childlike belief; and (3) His L-major associative melody (Do-Sol-Ti-Sol) is virtually identical to the melody used in the L-major leitmotif from Debney's *Elf*. The main difference is that Silvestri incorporates what Frank Lehman refers to as "chordal oscillation," wherein the two triads derived from the *Leittonwechsel* transformation "swing back and forth."<sup>63</sup>

*Polar Express*, directed by Robert Zemeckis and composed by Alan Silvestri, is an animated Christmas adventure film about a boy who is battling an internal, overwhelming temptation of disbelief in the magic of Christmas and Santa Claus. The narrative traces this boy's psychological journey from doubt and disappointment to the restoration of belief and wonder. Silvestri captures this boy's inspiring transformation with the same associative *Leittonwechsel* progression that Debney used in *Elf*, and more astoundingly, with the same melody. The eight-bar phrase with the Believe Theme is transcribed in Figure 14 below.

---

<sup>63</sup> Lehman, *Hollywood Harmony*, 76.

**Figure 14:** L-major Believe Theme in Silvestri's *Polar Express*

Polar Express: "I believe" cue, Alan Silvestri

transcribed by S.J. Dinsfriend

The musical score consists of two systems of piano accompaniment. The first system, starting at measure 35, is in 4/4 time and G major. The right hand plays a melody of quarter notes: G4, A4, B4, A4, G4, F#4, E4, D4. The left hand plays chords: G (measures 35-36), Bm/F# (measures 37-38), G (measures 39-40), and Bm/F# (measures 41-42). The left hand is labeled 'L-major' in measures 36 and 40. The second system, starting at measure 39, continues the melody. The right hand plays: D4, E4, F#4, G4, A4, B4, A4, G4. The left hand plays chords: Am (measures 39-40), F# (measures 41-42), Am (measures 43-44), CM7 (measures 45-46), and D (measures 47-48). The left hand is labeled 'PRP' in measures 40 and 44.

Though the first two measures in Figure 14 reveal the same melody as Debney's Christmas *Leittonwechsel* in *Elf*, one of the primary differences is the immediate repetition of the two-measure L-major transformation. Scott Murphy claims that the repetition (or undulation) of a harmonic progression creates an even stronger association by "pointing toward itself," such that the harmonic theme may even obtain status as a filmic character in and of itself:

The immediate juxtaposition of two major or minor triads can fit this bill well, particularly when the juxtaposition...avoids participating in a larger harmonic trajectory but instead self-encapsulates somehow, often through undulation, pointing toward itself, creating what the early twentieth-century music theorist Ernst Kurth called an "absolute progression." Like distinctive timbres, the distinctive triadic successions that pervade this style of music can serve as a medium for communication even more expeditious than an associative theme. As musicologist Carl Dahlhaus has observed..., 'unusual progressions may even acquire a characteristic identity comparable to that of a Leitmotiv.'<sup>64</sup>

<sup>64</sup> Murphy, "Transformational Theory and the Analysis of Film Music," 484.

The back-to-back repetition of the L-major progression also allows for an extension of the leitmotivic melody that is attached to this associative harmonic theme. The phenomenon of this thematic *Leittonwechsel* oscillation that points to itself can be understood and illuminated in the context of Huron's theory of surprise as well as the “prediction effect.”<sup>65</sup> The more we hear this thematic chordal oscillation (swinging back and forth between I and iii), the more we feel a sense of (repetitive) connection and familiarity with not only the theme, but also with the associated cue (scene) and its characters or events. Silvestri will use this familiarity (via prediction) later on when he captures our attention through a surprise harmonic shift in the context of this theme. In other words, the surprise chromatic modulation that comes in the climax of the film would not carry as much dramatic weight if we had not been previously exposed (conditioned repetitively) in a way that strategically set us up to continuously expect the same progression (I-iii-I-iii-I) to be presented in the same way.

Although Silvestri uses virtually the same L-major melody as Debney, he takes a different harmonic approach for the remainder of his “Believe Theme.” As noted in the transcription (Figure 14), the neo-Riemannian transformation of A-minor to F#-major represents a PR-generated transformation, <PRP> (mm. 39-41). These PR- or RP-generated transformations derive from the octatonic cycle, as represented in the diagram (Figure 15) below.<sup>66</sup>

---

<sup>65</sup> Huron, *Sweet Anticipation*, 131.

<sup>66</sup> Laura Mason, “Essential Neo-Riemannian Theory for Today's Musician,” (Master's Thesis, University of Tennessee, 2013), 45.

**Figure 15:** Octatonic <PR> Cycle (Laura Mason)

	P	R	P	R	P	R	P	R		
C,+	C,-	Eb,+	Eb,-	Gb,+	Gb,-	A,+	A,-	(C,+)	[0134679A]	
D,+	D,-	F,+	F,-	Ab,+	Ab,-	B,+	B,-	(D,+)	[235689B0]	
Db,+	Db,-	E,+	E,-	G,+	G,-	Bb,+	Bb,-	(Db,+)	[124578AB]	

#### 4. <PL> Transformations as Linking Devices Between *Leittonwechselfs*

Other PR-generated transformations occur alongside L-major associative harmonic themes in Elfman’s scores as well (*Sommersby* and *Edward Scissorhands*), usually serving as links to L-major transformations in new keys. In Silvestri’s score for *Polar Express*, the <PRP> ternary-generated transformation and its inverse are not used as links. However, Silvestri relies on the binary-generator <PL> as a linking device between the *Leittonwechsel* associative themes. For instance, in this particular cue, a strong half-cadence (V) chord—F#+—resolves unexpectedly to the L-major theme in D-major (F#+ to D+ is a <PL> transformation). Using the <PL> transformation as a link allows Silvestri to create new key areas that illuminate an emotional shift, character development, or other critical aspects in the narrative. For instance, the aforementioned <PL> transition to a new iteration (and key area) of the *Leittonwechsel* theme occurs when Santa Claus turns to one of the boys (Billy) who struggled with depression and unbelief through the entire film. The <PL> link to the new key area for the L-major theme (D+) symbolizes and parallels two important aspects here: (1) The boy has a revelation that Santa Claus is real and acquires belief (this magical belief is heightened by the associative *Leittonwechsel* transformation), and (2) The return of the benevolent *Leittonwechsel* leitmotif reveals that doubting Billy will not be punished for his lack of belief.

It is also important to note here that the audience (viewers/listeners) is awakened through a chromatic-mediant modulation that shocks the system into hearing the *Leittonwechsel* theme

from a different harmonic direction and thus from a new perspective. Huron discusses the nature of these <PL> transformations and explains how “chromatic mediant chords...have a low probability of occurrence and so tend to evoke a sense of surprise, novelty, or unusualness.”<sup>67</sup> He also reveals that “major chromatic chords tend to sound more distinctly ‘major,’ and so are somehow ‘brighter’ or more ‘positive’ than major chords within the key.”<sup>68</sup> For these two reasons—the sense of surprise as well as the bright, positive connotations—it is clear how Silvestri’s modulation to the chromatic mediant (F#-major to D-major) indeed evokes a level of musical surprise that might parallel Billy’s surprise upon realizing Santa Claus exists. Further building on Huron’s theory, this harmonic choice also might heighten the sense of brightness and positivity that accrued when we heard the magical ringing of the bells shortly before this transformation, signifying the restoration of childlike belief for multiple characters in this climactic cue. This segment of analysis demonstrates how the emotions of Christmas magic, belief, and wonder associated with the *Leittonwechsel* are enhanced by other harmonic gestures of surprise that contextually surround this leitharmonie.

In *Polar Express*, the <PL> acts as a link to multiple *Leittonwechsel* iterations, creating more surprising, wonder-inducing presentations of the otherwise repetitive *Leittonwechsel*. The <PRP> progression, however, has a different role: Throughout Silvestri’s score, the <PR> transformations function harmonically as a way to evoke mystery, awe, and wonder. Silvestri pairs the more chromatic <PRP> transformation together with the more diatonic L-major associative harmonic theme in order to heighten the coexisting emotional reactions of awe, fear,

---

<sup>67</sup> Huron, *Sweet Anticipation*, 274.

<sup>68</sup> *Ibid.*

mystery, and magical wonder as the boy finally sees Santa Claus (after he says, “I believe.”).<sup>69</sup> The <PRP> brings the listener to a more distant, non-functional triad (E-major to Db-major), thereby evoking a heightened sense of magical surprise and fearful awe (Santa’s arrival). The boy is suddenly able to hear the magical sound of the bell ringing. In order to hear the bell, one must acquire the virtue of childlike faith; one must believe. Right as the boy says, “I believe” and hears the supernatural ringing of the bell, we simultaneously hear the entrance of the magical *Leittonwechsel* associative theme. As a leitharmonie, the *Leittonwechsel* signifies the experience of magic, wonder, and belief for the viewer. As nondiegetic music, it is undetermined whether or not the characters in a film ever hear the associative theme. However, the leitharmonic *Leittonwechsel* allows the listeners/viewers to achieve the same sense of wonder and magical Christmas awakening that the boy is experiencing by meeting Santa Claus face-to-face. What the sound of the bell is to the boy, the leitmotivic *Leittonwechsel* is to the viewer/listener. It successfully symbolizes the emotions associated with Christmas magic, wonder, and childlike belief.

In *Hollywood Harmony*, Frank Lehman describes a similar type of awe and wonder in his discussion of Don Davis’s score to the *Matrix*. Lehman explains how Davis’s simple triadic transformation (D-minor—Bb-major), an L-minor relationship, is able to produce Huronian awe, especially with its abrupt juxtaposition against the surrounding intensity of atonality.<sup>70</sup> Lehman posits that this “shift has become common currency for instant awe in millennial ‘epic’ film scores.”<sup>71</sup> In *Polar Express*, Silvestri does not create surprise and wonder by employing this

---

<sup>69</sup> Octatonic collections have been associated with magic since Rimsky-Korsakov and Stravinsky.

<sup>70</sup> “In theorizing the cognitive foundations of musical surprise, [David] Huron isolates three kinds of responses to a violation of musical expectation: laughter, frisson, and awe.” (Lehman, *Hollywood Harmony*, 170).

<sup>71</sup> Lehman, *Hollywood Harmony*, 171.

juxtaposition technique (as in *The Matrix*), nor does he use the saturation of chromatic transformations to induce awe. Rather, he accomplishes a sense of wonder and awe that is just as convincing with his simple chordal oscillation (and association) of the L-major leitharmonie in the context of a surprising, modulatory hexatonic <PL> shift that takes the listener to a place that is simultaneously unfamiliar (due to the <PL> shift) and comforting (due to the L-major “Believe” Theme restated in this distant key). When David Huron states that “there are not many documented instances of musically evoked awe,” he reveals that “identifying its musical characteristics is notably speculative.”<sup>72</sup> Nonetheless, this exploration of Silvestri’s use of awe through the “majestic” chromatic-mediant modulation has shown that the neo-Riemannian <PL> transformation is a strong musical characteristic connected to the experience of awe and wonder, especially when these harmonic transformations are used to bridge multiple instances of the nostalgic, sentimental *Leittonwechsel*. One might also understand the mysterious <PL> (chromatic mediant) transformations as representative of the fearful side of awe and wonder connected to belief in something or someone magical, like Santa Claus (*Polar Express* captures this majestic, fearful awe when a larger-than-life Santa delivers a reprimanding message to one of the boys and displays a comportment of seriousness and regality). On the other hand, the more diatonic *Leittonwechsel* might represent the less-intimidating side of splendiferous awe and childlike wonder that comes with Christmas belief, such as the feeling of wonderment when one “magically” receives gifts under the tree, or the warmly nostalgic memory of being safely tucked in bed while anticipating a magical night to unfold (on Christmas Eve).

---

<sup>72</sup> Huron, *Sweet Anticipation*, 290.

## 5. *Christmas with the Kranks*, *Home Alone*, and *The Santa Clauses*

*Elf* and *Polar Express* are not the only two holiday films that use the *Leittonwechsel* to conjure Christmas nostalgia. Many Christmas movies as well as commercials turn to the *Leittonwechsel* as an effective harmonic association with Christmastime magic. Beginning with the early 90s (such as in *Edward Scissorhands* and *Home Alone*), this L-major progression seems to have secured its place as a recurring Hollywood leitharmonie commonly associated with Christmastime emotions, especially wonder, magic, selfless love, and childlike belief.

One of the most common themes in Christmas films is the idea of understanding the “true meaning of Christmas,” which usually results in the main character coming to realize the importance of selfless love, generosity, and compassion (as an archetypical example, consider Scrooge’s metamorphosis in Dickens’ *A Christmas Carol*). In Joe Roth’s comedy *Christmas with the Kranks* (2004), composer John Debney delivers another sentimental *Leittonwechsel* theme to capture the feeling of timeless Christmas magic. In the climactic and most impactful scene, Luther Krank, the main Scrooge-like character marked by selfishness and insensitivity, has an epiphany of the true meaning of Christmas spirit and compassion. With this newfound sense of selfless love and generosity, he decides to gift his expensive Caribbean cruise tickets to his neighbors, Walt and Bev Scheel. The audience feels an even greater depth of love and empathy here because the neighbors are experiencing an extremely difficult season, as Bev is undergoing chemotherapy. Luther implores his neighbors to receive this extravagant gift by saying, “This is a sincere, heartfelt, no-strings-attached, Christmas offering to two very selfless people.” Directly after this statement, Debney brings in the same exact *Leittonwechsel* leitmotif that we previously encountered in *Polar Express* and *Elf*: Do—Sol—Ti—Sol. To reinforce this melody’s implication of the *Leittonwechsel* leitharmonie, Debney brings in the expected L-major harmony

(I-iii) three times throughout this cue, in three separate keys. Each time the *Leittonwechsel* occurs, the audience feels another measure of empathy and compassion, such as when Luther offers to watch the neighbors' troublesome cat, or when Luther hugs Bev and affectionately says, "Merry Christmas." Each instance is marked by a modulation that reemphasizes the magical, empathy-inducing *Leittonwechsel*.

Released almost fifteen years before *Christmas with the Kranks*, John Williams' score for *Home Alone* (dir. Chris Columbus) represents perhaps one of the first occurrences of the *Leittonwechsel* used as a leitharmonie in a Christmas film. The *Leittonwechsel*'s emotive role in this film is also very much connected to rediscovering the "true meaning" of Christmas, specifically forgiveness, simple gratitude, and love for one's family. For instance, Williams' *Leittonwechsel* occurs strategically right when Kevin finally reunites with his mother and the rest of his family (after being separated from them and realizing he deeply loves and misses them). Perhaps the most heart-warming occurrence of the *Leittonwechsel* in *Home Alone* is when Kevin looks out from his window and sees that his lonely neighbor, who had been estranged from his son for years, finally reunites with his son and granddaughter. Earlier in the film, Kevin encouraged his neighbor to call his son and ask for forgiveness. We hear the empathy-inducing *Leittonwechsel* right as we see the neighbor reuniting with and embracing his son. Then, when the neighbor is hugging and holding his granddaughter, he sees Kevin and waves, smiling with pure gratitude and joy. Right at this moment, Williams modulates to a new key (one half-step lower) and presents the *Leittonwechsel* once again. It is significant to note how often composers will modulate to new keys in order to restate the *Leittonwechsel*. This keeps a simplistic "absolute progression" sounding fresh and novel and almost always correlates to an emotional shift in the narrative. It is also interesting to note that the last time Kevin interacted with his

neighbor was in the church, when we heard a different *Leittonwechsel*, one that occurred in the famous Christmas song, “O Holy Night,” by Adolphe Adam. A semblance of the *Leittonwechsel* is heard on the lyrics, “Till He appeared,” right before the chorus, “Fall on your knees.” This music occurs right as the neighbor asks if he can sit next to Kevin. This surprises Kevin, as he previously thought the neighbor was a murderer. It is doubtful that Columbus and Williams intentionally incorporated a Christmas song that uses a subtle *Leittonwechsel* as a way to connect to Williams’ original theme; however, it is significant to note that this famous Christmas composition utilizes the *Leittonwechsel* at one of the most emotive moments in the whole song. The lyrics draw the listener into an experience of awe, wonder and worship, emotions not uncommonly associated with the *Leittonwechsel* in other filmic contexts.

The *Leittonwechsel*’s strong association with Christmas wonder and magic is apparently still alive and well. In November 2022 on Disney-Plus, *The Santa Clauses* was released and wasted no time giving the listener their Christmastime *Leittonwechsel*. Literally, in the very first two seconds of the first episode, composer Ariel Rechtshaid delivers a clear *Leittonwechsel* harmony right before we see Santa Claus flying in his sleigh. Interestingly enough, it is precisely the same motive as the first half of Elfman’s *Leittonwechsel* theme from *Edward Scissorhands* (Sol-Do-Ti). In this study, the last *five* examples of Christmas films spanning from 1990 to 2022 make a case for the argument that the *Leittonwechsel*’s association with Christmastime is precise and consistent. Next, we will look at another relatively recent Hollywood *Leittonwechsel* that also made its debut in November of 2022 and likewise used the *Leittonwechsel* to produce wonder and hope.

## CHAPTER IV: THE L-MAJOR'S WONDER, AWE, & EMPATHY IN ADVENTURE FILMS

### 1. The *Leittonwechsel* Awakens Wonder in *Slumberland*

One of the most recent examples of the wonder-inducing *Leittonwechsel* in film music is from the Netflix movie, *Slumberland* (released November 11, 2022), directed by Francis Lawrence, scored by Pinar Toprak, and based on the 1989 animated film, *Little Nemo: Adventures in Slumberland*. During the climactic scene, Nemo, in her lucid dream, finally receives a coveted wishing pearl, for which she had been searching in order to make the wish to see her late father again. However, instead of using it for herself, she chooses to make a loving, selfless wish for her friend Flip to be saved from vanishing forever into the horrid Nightmare. The Dream Director meets with Nemo after this selfless act and says to her, “You had to give up your dream. Guess you found something more important.” When we hear the *Leittonwechsel* in this context, it clearly represents the bittersweet feeling of self-sacrificial love, similar to its associativity in *Elf*, *Sommersby*, and *Edward Scissorhands*. The *Leittonwechsel* accompanies Nemo’s (and the other characters’) epiphany that selfless love is that which is “more important.” The bitter part of bittersweet here is that Nemo sacrificed her wish to see her father again, but the sweet part is the selfless love that saved her friend, which far outweighs any feeling of loss.

After this moment, Nemo suddenly realizes that she magically receives another wishing pearl and she is refueled with joyful wonder and hope. The *Leittonwechsel* progression strategically returns when the camera turns back to Nemo’s face, capturing this restored sense of joyful wonder and hope. The *Leittonwechsel* here also elicits a sense of magic and mysterious power (another flavor of wonder), just as we encountered in the climactic *Polar Express* scene. The Dream Director reassures Nemo, “You have the dream you’re meant to have. We make sure

of that.” We then hear the *Leittonwechsel* when Nemo wishes to see her dad again, knowing that the power of the wishing pearl will fulfill her greatest desire. Our awareness of the repeated *Leittonwechsel* parallels Nemo’s wonder-inducing realization that she has regained another opportunity to use a wishing pearl, and more importantly, to reunite with her father. It is also interesting to note the following overarching narrative choice from Lawrence (dir.) and Toprak (comp.): The *Leittonwechsel* is *not* used for the sadder moments, such as when Nemo finds out that her father died. Rather, the powerful *Leittonwechsel* is saved for a more positive emotional evocation, accompanying the very moment when Nemo realizes she can make a wish to reunite with her father. Perhaps the maximal closeness of the tonic and mediant (only separated by one half step) symbolizes the close bond between Nemo and her father. The *Leittonwechsel*’s maximally-close voice leading perhaps parallels the fact that she is about to see him again. The distance Nemo felt throughout the whole film is finally bridged by her opportunity to see her beloved father again.

The *Leittonwechsel*’s rising major-third in the bass line—tonic to mediant—might also contribute to feelings of hope and belief. In his article, “Metaphor and Music Theory, Reflections from Cognitive Science,” Lawrence Zbikowski discusses conceptual metaphors in music, cross-domain mapping (physical space to musical contour), and image schemata as viable frameworks to understand how humans draw connections between music and abstract ideas, or music and motion. He discusses the “verticality schema,” and explains how “pitch relationships are relationships in vertical space, which maps special orientations such as *up-down* onto the pitch continuum.”<sup>73</sup> With Zbikowski’s verticality schema, it is possible to interpret the *Leittonwechsel*’s rising bass line (scale degree 1 to scale degree 3) as a metaphor for ascending.

---

<sup>73</sup> Lawrence Zbikowski, “Metaphor and Music Theory, Reflections from Cognitive Science,” *Music Theory Online* 4, no. 1 (1998): 4.

This metaphor of ascent (or something rising) can then be mapped (or projected) onto the cue's extramusical content, such as Nemo's feeling of rising hope and increasing wonder, as she discovers that she is able to miraculously see her father again.

## 2. *The Goonies* L-major Arpeggio Theme

If *Slumberland* represents one of the most recent occurrences of the *Leittonwechsel* in Hollywood film music, then *The Goonies*, now enjoying its fortieth anniversary, might represent one of the earliest examples of a leitmotivic *Leittonwechsel* in Hollywood film. The very first entrance of the “L-major Goonies Theme” occurs when the five main characters—Mikey, Mouth, Data, Chunk, and Brand—are excitedly exploring the Walsh's dark, mysterious attic (15:35). Illustrated in Figure 16, *The Goonies* L-major theme, a descending, arpeggiating *Leittonwechsel* (F#—D—C#—A—F#) is preceded by an ominous strike of lightning and thunder, causing the already-stressed-out Mikey to take another puff of his asthma inhaler.

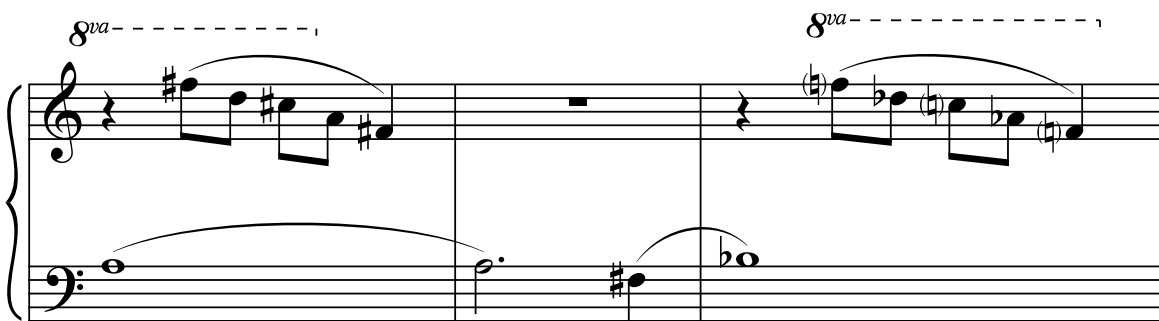
**Figure 16:** L-major Goonies Theme (*Leittonwechsel* Arpeggio)



The forbidding sounds of stormy weather continue and, right as Mikey uncovers One-Eyed-Willie's ancient treasure map, the orchestra enters with an awe-inducing, melodic *Leittonwechsel*, F#—D—C#—A—F#. This is immediately followed by another *Leittonwechsel*

with a direct modulation and transposition, one half-step lower: F—Db—C—Ab—F. Similar to Silvestri’s *Polar Express* score, Grusin employs a <PLP> transition—D-major to Bb-minor— between these two L-major themes, which (1) alerts the listener to pay attention to the transposed theme and (2) also causes the listener to vicariously experience what Mikey is feeling, a sense of awe and wonder. The cello and double bass sections, playing half-tremolo and half-arco, drone a pedal point on A, followed by the violins sustaining an F#, which highlights the entrance of the synthesizer’s leitmotivic L-major arpeggio (F#—D—C#—A—F#). The cellos’ A then skips down to an F#, followed by an ascending major-third to Bb. This new bass note (Bb) reinforces the Bb-minor 7th chord while the transposed L-major theme arpeggiates above it: F—Db—C—Ab—F, as illustrated in my transcription (Figure 17) below.

**Figure 17:** Modulating (<PLP>) *Leittonwechsel* Arpeggios



Although I will continue calling this descending, arpeggiated leitmotif the “L-major Goonies Theme,” it is important to note that the arpeggio is not always supported by an L-major transformation in the underlying harmonies. Nonetheless, this horizontal, arpeggiating L-major Goonies Theme (leitmotif) may still be considered a true *Leittonwechsel*, since the arpeggio clearly outlines both chords (VI—i) and since the bass line reinforces the fifth of the major triad

(the fifth acts as the pedal point as well, since it represents one of the two common tones between VI and i).

The next time it occurs is after Chunk accidentally discovers another artifact that might point to the hidden treasure, the article about Chester Copperpot. Chunk emphasizes the quote from the newspaper article by slowing down his phrasing and accenting every other word, “I have...the key...to One-Eyed...Willy,” and the L-major theme is heard while Mikey and Data respond with wide-eyed wonder over One-Eyed Willie. Mikey is hit with a revelation, wonder, and awe as he exclaims, “Wow, do you guys realize what we could do!?” This rhetorical question is accompanied by the L-major theme as well. After the two older boys express doubt about the legend and the treasure, Mikey exhibits extraordinary childlike belief and wonder, retorting, “But *what if?* You guys, just *what if* this map could lead to One-Eyed-Willie's rich stuff?” The L-major theme repeats and highlights Mikey’s wide-eyed-wonder and childlike hope, as he proposes this far-fetched adventure to find pirate’s treasure in order to save their house from foreclosure.

Grusin’s second way of using the *Leittonwechsel* represents empathy from the older brother, Brand (21:25). The L-major transformation is used here to evoke feelings of empathy as Mikey’s older brother comforts him with a hug, showing that he understands Mikey’s sadness at the thought of losing their home. Although this could align with Murphy’s theory of the Hollywood *Leittonwechsel* as a “loss gesture,” the emotional induction here is primarily one of empathy and love, as Brand finally shows his brother thoughtfulness and compassion. In all the previous scenes, Brand acts as the typical tough, sarcastic older brother, relentlessly teasing Mikey and talking rudely to him. However, in this scene, the *Leittonwechsel* succeeds in showing that Brand also has deep feelings of compassion and care for his little brother.

The next time the L-major returns is when Mikey pulls out One-Eyed-Willy's treasure map, explaining to his friends that this adventure is the only way to save their house from turning into a country club and golf course. The L-major Goonies Theme returns, this time outlining and oscillating between A major and C#-minor triads (C#—A—G#—E—C#), occurring underneath an A-major triad. As Mikey reopens the pirate map, he asks, “What are we going to do about that country club? It’s killing our parents” (22:26). He continues, “If we don’t do something now, there’s going to be a golf course right where we’re standing.” Grusin uses another <PL> transformation to increase the feeling of urgency, arriving on an F-major triad. This modulation includes the L-major theme arpeggiating once again in its typical descending contour: A—F—E—C—A. The last pitch of the five-note, arpeggiating L-major theme coincides perfectly with the startling sound of thunder outside. The thunder combined with the awe-inducing *Leittonwechsel* serves to indicate how the boys finally realize that this intrepid idea—searching for pirate’s treasure—might be their only hope.

Once Mikey and his friends arrive at the coast, he pulls out the pirate’s doubloon (with three holes in it) and discovers that the three holes perfectly match the two rocks and the lighthouse. This exciting realization is accompanied by the L-major theme (F#—D—C#—A—F#) over a D-major chord, followed by another <PLP> transformation to Bb-minor, where the L-major arpeggio is superimposed above the Bb-minor 7th chord (27:33). This L-major theme and <PLP> transformation are virtually identical to the very first time this leitmotif was introduced (when they discovered the map in the attic). Grusin uses this leitmotif similarly here, as a way to allow the audience to experience the characters’ feelings of awestruck wonder in this scene.

This leitmotivic connection and repetition of the original key areas emphasize the important correlation between the Goonies Theme and One-Eyed-Willy's treasure. More

specifically, the theme evokes wonder and awe whenever the children make progress toward the treasure. The feelings of excitement and awe are heightened by the wonder-inducing L-major arpeggios, and the feeling of mystery and magic are elicited by the combination of the L-major that occurs after a chromatic jolt caused by the <PLP> transformation (D-major to Bb-minor).

To increase the sense of excitement, Grusin continues transposing the leitmotivic L-major arpeggio (Goonies Theme) in a series of ascending <PR> transformations: Gb-major—A-major—C-major. These <PR> modulations give the otherwise repetitive *Leittonwechsel* arpeggios an unexpected chromatic profile with thrilling momentum, paralleling the boys' excitement as they triumphantly run toward the restaurant where they believe the treasure is hidden.

As Mikey says, "I can feel it, One-Eyed-Willy; I know you're down here," the descending L-major arpeggio accompanies his persistent childlike belief: G—Eb—D—Bb—G (33:45). Mikey convinces his friends to continue the adventure with inspiring words: "Come on guys, this is *our* time. Our last chance to see if there really is any rich stuff." There is a bright Eb-major chord (in second inversion) which is followed by an emotive G-minor triad. This *Leittonwechsel* has a different melody than the Goonies Theme, Bb—Eb—Bb—Bb—D (an exact inversion of Debney's *Elf Leittonwechsel* theme). This is the same *Leittonwechsel* melody (leitmotif) that was first heard when Mikey's older brother Brand comforts him with a hug, showing empathy and compassion. In this context, the empathy-inducing *Leittonwechsel* is utilized again right after Mikey pulls on the heart strings of his friends. After Chunk expresses his desire to call it quits and go home, Mikey responds rhetorically with, "Home? What home? In a couple hours, it ain't gonna be home any more." This statement is also accompanied by the *Leittonwechsel* (A—G—F—E, with F-major—A-minor).

When we first saw Mikey psychologically processing the impending threat of losing his home, Grusin brought in the healing power of the *Leittonwechsel*. Again, after Mikey reminds his friends about the threat of losing his home, Grusin relies on the empathy-inducing *Leittonwechsel*, attempting to cause the listeners to feel the same kind of compassion that is being experienced emotionally by the Goonies in this scene. After this *Leittonwechsel*, a surprising <PRPRP> (A-minor—Eb-major) transformation allows for another *Leittonwechsel* (Eb-major—G-minor), which now accompanies the approving faces of Mikey’s brother and friends as they agree to continue the adventure in order to save the house. The *Leittonwechsel* embodies childlike hope and belief here, similar to the way Silvestri uses the L-major theme to indicate childlike belief in Santa Claus. Like Silvestri, Grusin also creates strings of *Leittonwechsel* transformations by progressing through harmonic <PR> (octatonic) relationships.

Another use of the L-major leitmotif (the arpeggiating Goonies Theme) is to indicate to the listener that Mikey is talking to One-Eyed-Willy, which clearly incorporates an element of childlike faith (the mystical idea and suspension of reason required to believe that somehow he can communicate to a dead pirate, even if rhetorically or playfully): “This is one of your tricks, isn’t it, One-Eyed-Willy?” With a low and menacing Eb drone from the basses and cellos, the familiar descending L-major theme arpeggiates above, C—Ab—G—Eb—C. To prolong his conversation with One-Eyed-Willy, Grusin modulates to E-minor (another <PLP>) and brings the L-major arpeggio back, B—G—F#—D—B (this superimposed L-major arpeggio, G-major—B-minor, results in an E-minor 7/9 chord)<sup>74</sup>. Mikey rhetorically asks, “You wouldn’t have gone through all this trouble if you weren’t really hiding something, would you?” It is important to note here the relentless hope that Mikey holds regarding his ability to discover the treasure and

---

<sup>74</sup> These type of extended tertian sonorities (7/9) are to be expected, as Dave Grusin is an accomplished jazz pianist as well as a film composer.

save his home. The *Leittonwechsel* serves two functions here: (1) To point our attention to Mikey's next question to One-Eyed Willie and (2) to accompany yet another moment in the film that emphasizes Mikey's childlike faith.

Grusin's use of the *Leittonwechsel* in *The Goonies* exemplifies the progression's effectiveness in conjuring both mystery and childlike wonder, as well as empathy (such as when Brand comforts his younger brother). The next section represents another adventure film that takes advantage of the *Leittonwechsel*'s ability to accompany scenes of empathy and wonder.

### 3. Dramatic Irony in *Hook*: Loss or Wondrous Reunion?

In Steven Spielberg's 1991 adventure film *Hook*, which has become a cult classic and a thrilling reinterpretation of *Peter Pan*, composer John Williams relies on the *Leittonwechsel* to simultaneously draw on the three emotional aspects of the film's climactic scene: (1) The listener's feeling of compassion, (2) the character's feeling of love for her children, and (3) an overall feeling of wonder that accompanies the dramatic irony of their return. Murphy interpreted this scene as a "Mother lamenting the loss of her children, who have been missing for several days."<sup>75</sup> However, the first *Leittonwechsel* in this cue actually occurs before the timestamp listed in Murphy's article: Directly after the two children climb into their beds, the *Leittonwechsel* enters while the camera pans to the mother, who is slowly waking up (2:08:43-45). Just before she awakes with the sound of the gentle *Leittonwechsel*, her daughter adoringly says, "She looks like an angel" (2:08:30). The *Leittonwechsel* then appears when Wendy, the great-grandmother, walks into the bedroom and compassionately asks, "My dear child, have you been up all night?" The *Leittonwechsel* seems to produce a sense of empathy and comfort here. The mother then

---

<sup>75</sup> Murphy, "Scoring Loss," 301.

responds, “I see them in their beds so often in my dreams. When I wake up, they’re still there” (2:09:34). The *Leittonwechsel* continues oscillating as we see the mother turn around and look with astonishment and wonder as the daughter excitedly jumps out of bed and exclaims, “Mommy!” (2:09:39). Overall, this series of *Leittonwechsel* transformations seems to elicit feelings of empathy, wonder, and love as the children reunite with their mother. And I argue that these emotions are felt by the characters and listeners much more than loss.

The first reason I interpret the L-major progression here in a more positive light (evoking wonder and love) is because the audience, through dramatic irony, is already aware that her two children have securely returned to their beds and will shortly reunite with their mother. This implies that the psychological experience of the viewers is one of reassurance, resolution, and anticipatory joy. The second reason I interpret this *Leittonwechsel* as an empathy-eliciting gesture is because it accompanies Wendy’s compassionate interaction with the mother. Perhaps calling the L-major transformation an empathy gesture represents its more nuanced association. Unlike the mother (Moirira), Wendy knows where the children have been (in Never-never Land) and she also knows that Peter will rescue them. Both the audience and Wendy (and the composer of the *Leittonwechsel*) are privy to the fact that the children will soon reunite with their mother. Perhaps one reason the *Leittonwechsel* works so effectively with this scene’s dramatic irony is because of the paradoxical dichotomy between major (I) and minor (iii), considering how these chords are only one semitone apart. That is, the two triads sound quite distinct when juxtaposed against one another (major versus minor), but they are connected so closely together (sharing the third and fifth scale degrees), not unlike the mother, who is momentarily unaware of the fact that her children are only three feet behind her (simultaneous connection and disconnection). The

musical structure of these oscillating chords—so close, yet not entirely joined together—might very well parallel this scene’s wonder-inducing dramatic irony.

## CHAPTER V: THE *LEITTONWECHSEL* ELICITS LOVE & ROMANCE

### 1. ABC's *The Bachelor* (Season 28, Episode 9) and the Love-Inducing *Leittonwechsel*

The very concept of saying, “I love you,” and the idea of a contestant falling in love represents the pinnacle moment in this reality television show about a bachelor searching for his “soul mate.” The powerful love-inducing *Leittonwechsel* once again succeeds in getting the viewers to fall in love with the idea of falling in love (in this case, tracing the journey between Joey and Kelsey). The producers of this series seek to create the most magical feeling when the final two or three contestants begin to *verbally* express their love for the Bachelor (or vice versa). In this episode, Kelsey, one of the last three contestants fighting for Joey’s heart, finally builds the courage to say, “I love Joey” (37:54). She expresses it again, “I love him,” (39:12) and this time the *Leittonwechsel* occurs with lush strings and harp, depicting the couple’s blossoming love. The *Leittonwechsel* also accompanies the two lovers swimming alongside sea creatures in a pristine, translucent ocean. Kelsey, grinning from ear to ear, takes in the magical moment and says to the camera, “I’m really happy right now...Tonight I could tell Joey that I love him.” The *Leittonwechsel* returns, intentionally synchronized with her verbal expression of falling in love. In the transcription below (Figure 18), notice that the *Leittonwechsel* repeats eleven times within one minute and in three different keys (E, D, and B). Framing the final authentic cadence, Kelsey concludes the cue by declaring, “It’s so magical.” The magic of falling in love is successfully captured by the wonder-inducing *Leittonwechsel*, just as we observed with the romance-infused, magical L-major progression in *Edward Scissorhands*.

Figure 18: *The Bachelor* Leittonwechsel Accompanies Moment of Falling in Love

The Bachelor, Season 28, Episode 9 [39:13-40:20]

"It's So Magical"

Transcribed by S.J. Dinsfriend

The example above (Figure 18) illustrates how several voices rise during the L-major progression (consider E rising to G# in the bass line in mm. 2-3, as well as A rising to C# on the second *Leittonwechsel*, mm. 6-7). Zbikowski's verticality schema can be applied here as well, as

the repetitive rising major-third in the *Leittonwechsel* might metaphorically signify how Joey and Kelsey are experiencing the cumulative rising feelings of love, excitement, and wonder. In this next analysis of *Sommersby*, we will observe how Elfman likewise turns to the *Leittonwechsel* to accompany the deeply romantic moments when two individuals fall in love.

## 2. Elfman Feeling the Romantic *Leittonwechsel* Again: *Sommersby*

Directed by Jon Amiel, *Sommersby* is a heart-wrenching 1993 romantic drama set in the post-Civil War Reconstruction Era. Jack Sommersby apparently returns to his wife Laurel after six years of absence and after supposedly dying in the war. Jack must convince Laurel and the community that he is not an imposter, and the film traces the way in which Laurel (Jodie Foster) falls in love with this new and improved Jack Sommersby, who treats her with kindness and passion. Composer Danny Elfman turns again to the *Leittonwechsel* as a leitharmonie associated with the main characters' journey of falling in love. For the scope of this section, I will provide one example of the *Leittonwechsel* love gesture, as it inhabits the most passionate scene, where Laurel finally allows Jack to sleep in their bed together. Before this, she did not accept him as her true husband and forced him to sleep downstairs. During this moment, she lovingly caresses his smiling face and finally calls him, "Jack," spoken in the timbre of an intimate whisper (30:09). After Jack requests, "Say it again," Laurel leans even closer to his ear and passionately says, "Jack," signifying that she has accepted him as her true husband and is beginning to fall in love with him (30:22). This scene is accompanied by both versions of the *Leittonwechsel*, presented back-to-back within the same cue: L-minor (G#-minor—E-major, 30:25) and L-major (B-major—D#-minor, 30:33-30:35). Elfman chooses the *Leittonwechsel* to emphasize the passion and romantic love that Laurel and Jack experience as they consummate their love. Only

three years prior, Elfman used the *Leittonwechsel* at every turn of Edward's journey of falling in love with Kim. In terms of Elfman's compositional output, it seems clear that he and the respective directors view the *Leittonwechsel* as an associative harmony that is uniquely suitable for depicting and evoking romance and the feeling of falling in love.

## CHAPTER VI: POP GOES THE ‘*WECHSEL*: L-MAJOR IN POP & CLASSIC ROCK

### 1. “Hey There Delilah” and “What a Wonderful World”

Genres outside of film music also support the theory that the undulating L-major transformation is commonly associated with romantic love, self-sacrificial love, and wonder. One of the strongest examples is found in *Plain White T's* popular song, “Hey There Delilah” (2006), written and performed by Tom Higgenson and released as an EP from their album *All That We Needed* (2005). It begins with the quintessential undulating *Leittonwechsel* transformation (I-iii-I-iii): The back-to-back repetition of the *Leittonwechsel* causes the chord progression to become even more highlighted, foregrounded and ingrained into one’s memory, thereby increasing the likelihood of this triadic transformation becoming a harmonic schema in the listener’s psyche. In *Sweet Anticipation*, Huron sheds light on why our minds prefer and even desire repetition in a more general sense. He explains how “Pleasantness is directly correlated with predictability,” and concludes that the “most predictable tones and tone sequences tend to be experienced as the most pleasant” (2006, 173). That the *Leittonwechsel* repeats as a leitmotif in many of the film cues and songs—and also that it repeats in phrases due to its undulation—increases its predictability and explains in part why this progression is consistently associated with pleasant emotions such as love, wonder, and nostalgia.

The *Leittonwechsel* in “Hey There Delilah” was not only repeated due to its undulation in every verse: it had an unusual number of repeated plays. This famous song reached No. 1 on the *Billboard* “Hot 100” in July, 2007 and was nominated for Song of the Year at the 50th Grammy Awards (2008). Its extreme success and popularity should point to the fact that the *Leittonwechsel* transformation gained a secure place in the aural schema of a colossal fanbase

(pop/indie/folk listeners). This reflects the widespread cultural adoption and prominence of the L-major harmony as a metaphor for love and romance during the mid and late 2000s. Consider the firm place of the *Leittonwechsel* and how it was saturating the culture's ear with associations of romance and love just before the release of Disney's *Up* (2009), wherein Michael Giacchino relies on the undulating L-major theme to capture Carl's deep love for his wife and eventual nostalgia as he remembers his love for her. The song's ("Hey There Delilah") ubiquitous presence on the radio, in stores, malls, bowling alleys, and even on *Sesame Street* thus significantly increased the likelihood for film-goers to continue—even if subconsciously—interpreting this harmony through a romantic lens. One example of the nature of the romance-infused lyrics accompanied by the love-inducing *Leittonwechsel* is when Tom sings, "Hey There Delilah, Don't you worry about the distance/ I'm right there if you get lonely, Give this song another listen/ Close your eyes, Listen to my voice, it's my disguise, I'm by your side." The power of the oscillating *Leittonwechsel*, with its gentle rocking-back-and-forth motion, effectively partners with the lyrics to help convey the feeling of nearness, comfort, and soothing romantic love.

Another very popular song, "What a Wonderful World" (sung by Louis Armstrong), also relies on the wonder-inducing *Leittonwechsel*. This timeless and poignant song, composed by Bob Thiele and George David Weiss in 1967, gained its prominence in the US when it was reissued as a single in 1988, after it appeared in the film *Good Morning, Vietnam* (1987). The song is full of lyrics and images that imply a deep gratitude for the beauty of life, such as "And I think to myself, What a wonderful world," or "They're really saying, 'I love you.'" The songwriters felt that the *Leittonwechsel* captured the essence of this feeling of wonder, love and gratitude, especially considering it is the very first chord change in the song. However, in *Good*

*Morning, Vietnam*, it is somewhat unsettling how the feeling of joyful wonder that the *Leittonwechsel* typically conjures in “What a Wonderful World” is actually set ironically against scenes of violence and conflict in the Vietnam War. This does not downplay the *Leittonwechsel*’s typical emotional associativity of wonderment and the restoration of childlike wonder. If anything, its contrastive placement against these disturbing images amplifies the fact that the *Leittonwechsel* typically induces positively-valenced emotions such as wonderment and belief. The paradoxical juxtaposition heightens the emotional incongruence between sound and picture and thus causes the listener to consider why their expectation is being thwarted. In adapting David Huron’s ITPRA (Imagination-Tension-Prediction-Reaction-Appraisal) theory to a filmic context, one might first *imagine* or visualize the expectation of ‘wonderful’ scenes of a happy, harmonious humanity, just as the title and lyrics of the song suggest. But *tension* immediately builds as the *Leittonwechsel* and the rest of the song are not paired with beautiful or wonderful visual stimuli in the way one would expect; Rather, they are accompanied by disturbing scenes from the Vietnam War. The *prediction* might involve the viewer questioning whether or not the scenes will end up actually matching the sentiment of the song, or if the incongruency will remain throughout the entire song. The initial *reaction* might include an overall feeling of dissatisfaction, discomfort, emotional disorientation or confusion. And finally, the metacognitive *appraisal* might represent the moment when the viewer realizes that this ironic pairing of musical and visual stimuli was an intentional technique wherein the director crafted a build-up of unresolved tension in order to expose the horrors of the war. Britzner-Stull offers some insight into this kind of incongruency between visual and aural stimuli:

“It seems that examples of music and image in contest have a striking effect on the audience’s overall impression of narrative as a whole. Audiences remember film scenes better if the music foreshadowing the scene is incongruent with what actually occurs (i.e., the audience is set up to expect one thing and is then surprised).”<sup>76</sup>

With this theory in mind, it makes perfect sense that (director) Barry Levinson would choose “What a Wonderful World,” with its empathy-inducing *Leittonwechsel* harmony, as a way to accentuate the striking incongruency between the horrors of the Vietnam War and the lovely idealism and innocence of Armstrong’s lyrics.

## 2. Kamakwiwo’ole’s “Somewhere Over the Rainbow” and “Space Oddity.”

Influenced by “What a Wonderful World,” the exceptional Hawaiian singer-songwriter Israel Kamakwiwo’ole arranged and performed a famous version of “Somewhere Over the Rainbow” (originally recorded in 1993 as a medley with “What a Wonderful World”). One of the distinctively new developments in Kamakwiwo’ole’s version is his decision to use a *Leittonwechsel* transformation as the first chord change. His song rose to number 12 on *Billboard* Hot Digital Tracks in 2004. In the same year as the influx of examples of the Christmas *Leittonwechsel*, such as in *Elf* (2003), *Polar Express* (2004) and *Christmas with the Kranks* (2004), Israel Kamakwiwo’ole’s beautiful version of “Somewhere Over the Rainbow” uses the *Leittonwechsel* transformation twenty separate times (uniquely offering a different flavor than Harold Arlen’s *Wizard of Oz*—1939—version, which harmonized the melody with a typical tonic-dominant, I-V). Kamakwiwo’ole’s moving performance of “Somewhere Over the Rainbow” now has 1.2 billion views on YouTube, thus gaining its place as one of the most recognizable *Leittonwechsels* worldwide. The song’s hopeful, comforting lyrics, “Where trouble melts like lemon drops” and “Dreams really do come true,” connect organically with the

---

<sup>76</sup> Bribitzer-Stull, *Understanding the Leitmotif*, 278.

*Leittonwechsel*'s Hollywood associations with empathy, love, wonder, and childlike belief.

Another repetitive, oscillating *Leittonwechsel* occurs in “Space Oddity” in *The Secret Life of Walter Mitty* (2013). David Bowie’s *Leittonwechsel* in “Space Oddity” elicits a form of wonder that entails the reclamation of childlike belief and courage as Walter intrepidly jumps into a helicopter in Iceland. Walter undergoes a powerful internal transformation as he overcomes timidity and decides to take one of the biggest risks of his life. Up until this point, his spectacularly dangerous actions have been portrayed only as visions of his vivid imagination. This is the first time we see Walter tackling an incredibly perilous action in real life, and the awe and restoration of belief in his ability to conquer real obstacles in life are accompanied by the wonder-inducing *Leittonwechsel* transformation in “Space Oddity.”

### 3. “Penny Lane,” “Touch Me,” “Colour My World,” and “Count On Me”

Several other pop songs exhibit the undeniable connection between the *Leittonwechsel* and its association with romance, selfless love, and nostalgia. The following table (Table 1) will display four additional famous pop and classic rock songs that include prominent and repetitive use of the *Leittonwechsel*, and will provide a brief description of how the songs’ lyrical content connects to the themes and emotions typically associated with the filmic *Leittonwechsel*.

**Table 1:** *Leittonwechsel* Associations in Four Pop/Rock Songs

<u>Title/Year/Artist(s)</u>	<u>Leittonwechsel (I-iii)</u>	<u>Main Lyrical Content</u>	<u>Association/Theme</u>
“Penny Lane” (1967) by <i>The Beatles</i>	A-major—C#-minor	“Penny Lane, is in my ears and in my eyes”	McCartney/Lennon reminiscing with nostalgia about a place they grew up in
Touch Me (1969) by <i>The Doors</i>	G-major—B-minor	“Now I’m gonna love you ‘Till the heavens stop the rain/ I’m gonna love you/ ‘Till the stars fall from the sky/ For you and I”	Singer professing his undying love; Romance, self-sacrificial love
“Colour My World” (1970) by <i>Chicago</i>	F-major7—A-minor	“As time goes on/ I realize/ Just what you mean/ To me/ And now/ Now that you’re near/ Promise your love/ That I’ve waited to share/ And dreams/ Of our moments together/ Colour my world with hope of loving you”	Romantic love, selfless love, nostalgia, nearness, wonder, hope.
“Count On Me” (2010) by Bruno Mars	C-major—E-minor	“You can count on me like one, two, three, I’ll be there...And if you ever forget how much you really mean to me, Every day, I will remind you.”	Selfless love, the bond of selfless love and dependability in friendship, empathy, compassion

The table above demonstrates how these hit pop/rock songs, in addition to “Somewhere Over the Rainbow,” “What a Wonderful World,” “Hey There Delilah,” and “Space Oddity,” exemplify a remarkable consistency of positively-valenced emotions associated with the *Leittonwechsel*, paralleling the progression’s emotive role in films. The *Leittonwechsel*’s positive emotional associations might be partially explained by David Huron’s theory of scale degree

qualia. Based on his research on emotional reactions to scale degrees, Huron reveals that “each scale tone appears to evoke a different psychological flavor or feeling.”<sup>77</sup> Weighing data from his scale degree qualia survey, it was determined that the mediant scale degree (which is the root of the iii chord in the *Leittonwechsel* transformation), elicited common descriptors such as “bright, love, warmth, beauty, light, lifted, point of many possible departures, strongly restful, peaceful and calm” (2006, 145). This provides corroborating evidence for my proposal that the *Leittonwechsel* is consistently associated with love, wonder, empathy, belief, Christmas magic, and nostalgia (sometimes even more so than its association with loss or sorrow). It is not surprising, for instance, that Kamakwiwo’ole’s melody begins by ascending from the tonic to the mediant (Do-Mi), thus doubling the root of the mediant and amplifying its bright, warm, light-infused and love-inflected qualia. After all, the mediant, because it exists in both of the *Leittonwechsel* chords (I and iii), is statistically the most recurring tone in this harmonic progression (tied with the dominant scale degree). In this final section, I will address some theories and homologies that Murphy (2014) proposed as a way to describe how the *Leittonwechsel*’s intervallic musical structure might influence its association with loss and sorrow. I will then propose a “homology of union” that emphasizes the *Leittonwechsel*’s more versatile associative connections with love, wonder, belief, nostalgia, empathy, and Christmas.

---

<sup>77</sup> Huron, *Sweet Anticipation*, 145.

## CHAPTER VII: HOMOLOGY OF UNION AND RECAPITULATION

### 1. Homology of Union: Can the *Leittonwechsel*'s Intervals Contribute to Emotions?

At the end of Murphy's article, "Scoring Loss in Some Recent Popular Film and Television," he argues that, similar to the contour theory of emotional induction, the sorrow associated with the *Leittonwechsel* can be explained through the homology of voice leading that corresponds to real-life experiences (similar to cross-domain mapping). He describes the "loss" of the *Leittonwechsel*'s tonic—being replaced by the leading tone and thus leaving its third and fifth triadic members left without its root member—as a felt metaphor for the loss-induced sadness one experiences in the film scenes accompanied by the *Leittonwechsel*.<sup>78</sup> One challenge to Murphy's homology of loss is that, in many examples of the *Leittonwechsel* in film music, the composer chooses to resolve back to the tonic (I), implying that the third and fifth of the tonic triad have regained their stable tonic root and have *not*, after all, permanently lost their important root (home) member. If this metaphor is indeed interacting with our *Leittonwechsel*-induced feelings, then it would make more sense to interpret the *Leittonwechsel* as representing temporary loss followed immediately by the restoration of that which was lost. This might actually explain, for instance, why Giacchino ends on the tonic at the very last scene of *Up*, as Carl has clearly regained his hope in life and has a restored sense of joy and wonder in life. His enduringly happy memories of his late wife now eclipse any grief or emotions of loss. We are directed to believe that Carl losing his wife is not ultimately what the *Leittonwechsel* represents. Instead, the nostalgic, empathy-inducing *Leittonwechsel* points more often to Carl's newfound ability to find comfort in knowing that the unbreakable bond of love for his wife (and her reciprocal love) will never be lost.

---

<sup>78</sup> Murphy, "Scoring Loss," 312.

Another example is in *Edward Scissorhands*, where the *Leittonwechsel* phrase does not end on the second chord (iii) but resolves to a predominant (IV) and typically reaches an authentic cadence. This resolution and restoration of the “lost” tonic could very well invoke a metaphorical connection to the meaning of hope, wonder, and love. This is supported in that Kim passionately expresses wonder and love to her granddaughter (as described in my analysis of the final scene in *Edward Scissorhands*).

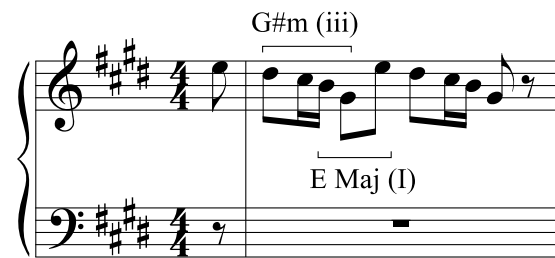
Another homology, also explored by Murphy, is the submission that the major (I) and minor (iii) chords that occur side-by-side in the *Leittonwechsel* transformation can be interpreted as a superficial duality of joy and sorrow.<sup>79</sup> This homological interpretation might uncover why film music and other genres prefer the major-seventh chord (Do-Mi-Sol-Ti) as a harmony that can elicit nostalgia. Recall that Giacchino uses this nostalgic major-seventh tonic chord often in his score for *Up*, in addition to the *Leittonwechsel* transformation. It is not a stretch to imagine the major-seventh chord as a kind of compressed version of the *Leittonwechsel* transformation. In pitch-class set theory, using Allen Forte’s terminology, the *Leittonwechsel* and the major-seventh chord can both be understood, at least from an analytical vantage point, as ‘4-20’ chords (0158). Any major-seventh chord can be analyzed as a harmonically “vertical” manifestation of the L-major transformation. That is, if the two chords (I and iii) are played simultaneously, the result is a major-seventh tonic chord. There are also examples of this major-seventh form of the *Leittonwechsel* in narrative states and emotional associations that match the body of evidence I have put forth (especially in *The Goonies*). Consider also John Pasquin’s *The Santa Clause* (1994), wherein Michael Convertino saturates the score with this major-seventh leitmotif, relying on its harmonic power to conjure the magic and wonder of Christmas. In Figure 19, I have

---

<sup>79</sup> Murphy, “Scoring Loss,” 309.

provided a transcription that shows interlocking chords within the film’s main leitmotif. The motive clearly outlines a *Leittonwechsel* (E-major—G#-minor—E-major—G#-minor, etc.). Since the anacrusis (E) represents the tonic (I), it can be heard as either an L-major or L-minor. Regardless, the two chords oscillate to produce the magical Christmas *Leittonwechsel*.

**Figure 19:** Interlocking *Leittonwechsel*, *The Santa Clause* Theme



Additionally, Dave Grusin uses the major-seventh chord as the primary leitmotif in *The Goonies* (1985), relying on the *Leittonwechsel* to produce awe, mystery, wonder, and childlike belief. In *The Goonies*, recall how the major-seventh chord leitmotif occurs as a descending *Leittonwechsel* arpeggio, such as F#—D—C#—A—F# (similar to Convertino’s *Leittonwechsel* leitmotif in *The Santa Clause*). These types of *Leittonwechsel compressions* amplify the paradox and duality of major-against-minor that is inherent within the L-major progression.

It is not, however, enough to say that the juxtaposition of a major chord and a minor chord is what results in this possible homology of bittersweet nostalgia (e.g., love-loss duality or joy-sorrow paradox). If this were the case, as Murphy (2014) points out, then any major-minor chord juxtaposition would work. Unlike other major-minor transformations, the tonic-mediant progression in particular is a convincing candidate for eliciting emotions such as romantic love, empathy, belief, and nostalgia. Perhaps the *Leittonwechsel* produces a greater amount of nostalgia than other major-minor dualities because, in all of music, it is the only harmonic shift that changes qualities (major to minor) with only one semitone motion while staying in the same

diatonic territory (in the same key). In this way, the listener does not feel a chromatic jolt (there is a safety and familiarity that is retained), but contrastively, the immediate shift from major to minor produces a substantial measure of wonder and curiosity. The neo-Riemannian ‘Parallel’ transformation (C-major to C-minor, for example) has the same kind of voice-leading technology as the *Leittonwechsel* in its ability to change qualities with only one semitone motion, but it does not stay within the same diatonic collection. This seems to be the reason the Parallel transformation is more often used to evoke intense surprises, disruptions, instabilities, or other emotional reactions that are quite different from the *Leittonwechsel*’s more “positive” associations such as love, wonder, empathy, and nostalgia.

It might seem paradoxical that, in addition to loss and sorrow, the *Leittonwechsel*’s use in film is strongly associated with the restoration and presence of childlike belief, romance, empathy, wonder, and Christmas magic. I will submit two possible reasons behind this paradox: One, perhaps these emotionally-dichotomous associations occur because a kind of musical paradox is metaphorically embedded within the structure of the harmony itself: As mentioned previously, the *Leittonwechsel* offers the most parsimonious (maximally-smooth) voice-leading work needed to change seamlessly from a major chord to a minor chord within the same key. That is, the tonic-mediant progression requires only one half-step shift from the tonic to the leading tone (the German term *Leittonwechsel* means ‘leading-tone exchange’). In a sense, the two chords are in “opposition” because one triad has a major quality (I) while the other, minor (iii). At the same time, the *Leittonwechsel* traverses the least amount of distance required to create this opposition. It is this “closeness” of pitch proximity and minimal voice-leading work in combination with the major-minor duality that may serve to evince extra-musical meaning—derived from the cross-domain mapping between space (closeness) and musical pitch—such as

the paradoxical juxtaposition of sorrowful loss alongside the restoration of childlike belief, or grief alongside sweet sorrow, or fear alongside wonder, or doubt giving way to belief.

Through the course of this study, we have seen this peculiar dichotomy reflected analogously in the *Leittonwechsel*'s complex emotional associations. For instance, both empathy and nostalgia are inherently paradoxical in their manifestation of emotional experience: Empathy can be understood in the context of nostalgic feelings, in that nostalgia is a way for one to feel empathetic toward oneself for having lost a special time from the past; a kind of “comforting sorrow” through the coping mechanism of reminiscence. This empathy for oneself is what contributes to a positively-valenced reaction, wherein one comforts oneself with nostalgic, happy feelings from a happier time period or memory. With this paradoxical voice-leading homology in mind, the *Leittonwechsel* should not solely be labeled as the “loss gesture,” as it is much more nuanced, particularly in its consistent association with wonder, nostalgia, childlike belief, Christmas magic, selfless love, and empathy.

Finally, Murphy (2014) claims to have discovered the most convincing homology for understanding the *Leittonwechsel*'s association with sadness and loss in film. He argues that the root of the tonic, which is felt as the most prominent and important “home” tone of the major I triad, is in essence “lost” when it descends to the leading tone, leaving the tonic triad’s third and fifth “alone,” thereby effectively making the listener feel alone.<sup>80</sup> This homology is theoretical, of course, but even if proven true, this voice-leading technology and its interpretative metaphor of loss does not account for the other emotions that are consistently and precisely associated with the *Leittonwechsel*. Thankfully, there are multifarious ways to arrive at a convincing homology that ties together the structure of the music with the music’s emotional associativity. One of these

---

<sup>80</sup> Murphy, “Scoring Loss,” 313.

ways is through the psychological study of music and emotions. For this I will turn to David Huron's discussion of musical expectation from his book *Sweet Anticipation* (2006), specifically in Chapter 7, "Mental Representation of Expectation." Huron's theory of binding tones will set the framework for developing what I will call the *homology of union*, a metaphorical way of relating the musical structure of the *Leittonwechsel* with its positively-valenced emotional associations.

First of all, Huron reveals that, in a broadly biological sense, "mental representation...appears to favor neighboring over distant relationship."<sup>81</sup> This translates to our musical discussion in that the *Leittonwechsel* represents the least amount of distance needed to change from one chord to another (one half step). Thus, the maximally-smooth voice leading of the *Leittonwechsel* may contribute to its many positively-valenced emotions. Huron then states that "it is easier to recognize a relationship between neighboring states than more distant states."<sup>82</sup> This fact might explain why the *Leittonwechsel* conjures feelings of nostalgia or love, since the progression often undulates and creates a sense of recognition, and therefore comforting familiarity (and does so through minimal intervallic motion). More importantly, Huron states that we do not hear intervals as separate pitches, but the "quality we call 'melodic interval' is a property that binds to the ensuing tone."<sup>83</sup> Put another way, "the interval feels as though it is a quality or property of the second tone."<sup>84</sup> If this is indeed how we hear intervals, then the *Leittonwechsel* would represent the closest possible feeling of "binding" that can be experienced between two chords (since they are related by only a semitone). To add to this, the

---

<sup>81</sup> Huron, *Sweet Anticipation*, 122.

<sup>82</sup> *Ibid.*

<sup>83</sup> *Ibid.*, 124.

<sup>84</sup> *Ibid.*

*Leittonwechsel* is the only absolute progression that creates the closest possible feeling of binding while simultaneously remaining diatonic. This unique feature—the *Leittonwechsel* tones being heard as binding together in the closest way possible—may very well translate to the human experience of relational binding, oneness, and togetherness. If the tones, according to Huron, are “heard” as binding together, can they also be “felt” as bound together?

This leads me to the *homology of union*. The *Leittonwechsel*'s ability to evoke love, empathy, nostalgia, and belief, inherent in its maximally-close binding tones, can be smoothly mapped onto the domain of human relationships. Empathy, love, and belief represent emotions that require a close union. Empathy requires union because we vicariously reach out and feel the same emotions as another person, binding ourselves to this person through care and compassion. Love, perhaps the most obvious example of relational union, requires reciprocal affection, selflessness, and a close binding of hearts. The process of belief (faith) can be understood as a journey from the cerebral (adult, skeptical mind) coming into union with the heart (childlikeness, trust, and wonder). Even nostalgia can map onto the metaphor of union: One's present state binds bittersweetly with a past memory. Ultimately, according to Huron's theory of binding, we hear the *Leittonwechsel*'s two chords (such as I and iii) coexisting as one affective sound, like the major-seventh chord (4-20), which gives birth to nostalgic-flavored qualia. This *homology of union*—describing the relationship between the *Leittonwechsel*'s musical structure and its emotional referents—accounts for the progression's versatility and positive qualia, especially considering the *Leittonwechsel*'s consistent and strong association with romantic love, empathy, wonder, belief, nostalgia, and Christmas magic.

## 2. Recapitulation

Over the course of this study, we have encountered the associative power of the *Leittonwechsel* (L-major) as a leitharmonie, employed frequently by film composers and songwriters to evoke feelings of wonder, nostalgia, childlike belief, romance, and self-sacrificial love. In Debney's *Elf*, the L-major associative harmonic theme effectively portrayed the psychological complexities of a son feeling rejected by his father while simultaneously revealing the father's transformed heart (as he realizes his love for his son). This exemplified the *Leittonwechsel*'s empathy-inducing quality. The versatility of the *Leittonwechsel* was apparent in *Edward Scissorhands* as well, as the L-major leitmotifs (Edward's Theme and Sympathy Theme) were able to accompany intricate character developments and emotional shifts, including romantic love, overwhelming empathy, and childlike belief. In Silvestri's *Polar Express* and Elfman's *Edward Scissorhands*, we discussed the significance of the neo-Riemannian binary-generators (<PR> and <RP>) that were used consistently as linking devices between *Leittonwechsel* themes. These PR/RP transformations also indicated dramatic, narrative developments, such as Billy's transformation from doubt to belief in *Polar Express*, marked by the <RP> link to a *Leittonwechsel* in a new key, allowing the progression to maintain a novel sense of wonder.

Throughout this paper, I proposed a new perspective concerning Murphy's interpretation of the filmic *Leittonwechsel*. Murphy stated that the *Leittonwechsel* "indicates an association" with "sorrow, particularly in the contemplation of some kind of considerable loss, commonly the death of a loved one."<sup>85</sup> Although this association (regarding the loss of a loved one) is indeed common among Hollywood *Leittonwechsel* progressions, my analysis focused on the

---

<sup>85</sup> Murphy, "Transformational Theory and the Analysis of Film Music," 487.

*Leittonwechsel*'s more positively-valenced associations such as joyful wonder, self-sacrificial love, deep empathy, nostalgia, and childlike belief, especially in Santa Claus. It is true that the one-dimensional emotional associations of sorrow and loss can manifest in *Leittonwechsel* contexts in film music from 1985 to 2012. However, I have found that film composers more regularly rely on the *Leittonwechsel*'s nuanced, versatile nature: namely, its effectiveness in evoking more complex, intricate sides of emotional processes, such as paradoxical tears of joy (*Up*), or the self-sacrificial *agápe* form of love (*Elf*, *Sommersby*, *Edward Scissorhands*), or the coexistence of wonder alongside fear (*Polar Express*, *The Goonies*, *Hook*), or the “happy sadness” (and comforting sorrow) that accompanies nostalgia (*Slumberland*, *Edward Scissorhands*). In the over twenty examples chosen for this study, the *Leittonwechsel* often signified a deeply nostalgic, sentimental feeling associated with the realization or epiphany of romantic love: in *Edward Scissorhands*, the L-major theme accompanies every moment of Edward's journey of falling in love with Kim, for instance. The *Leittonwechsel* progression also consistently and precisely signified childlike faith, awe, and wonder in something magical; It often accompanies a character's moment of epiphany or belief, such as the protagonist's realization that Santa Claus exists in the final scene of *Polar Express*, or the father's revelation that Santa Claus exists in the final scene of *Elf*. Based on these examples, I theorized that the impressive range of qualia and positively-valenced associations connected to the filmic *Leittonwechsel* might be explained through the homology of union. That is, the human experience of binding relationally to one another might very well find its musical analogue in the *Leittonwechsel*'s maximally-smooth, closely-bound intervallic attributes.

Perhaps this study will inspire more research on the correlation between neo-Riemannian transformations and associative harmonic themes in visual media. There seem to be an

incalculable number of analytical opportunities waiting to be excavated in regards to film composers' unique application of neo-Riemannian transformations and leitmotivic techniques that intricately weave through the nuances of narrative drama and psychological character processes. Just as the *Leittonwechsel* evoked wonder consistently in these film, television, and song examples, I hope this study will also spark wonder and awaken childlike belief in the pursuit of understanding and discovering more examples of homologies that illuminate the thrilling metaphorical connections between musical structure and emotional induction.

## BIBLIOGRAPHY

- Albrecht, Joshua D. 2018. "Expressive Meaning and the Empirical Analysis of Musical Gesture: The Progressive Exposure Method and the Second Movement of Beethoven's *Pathétique* Sonata." *Society for Music Theory*, 24, no. 3.
- Bribitzer-Stull, Matthew. 2015. *Understanding the Leitmotif: From Wagner to Hollywood Film Music*. Cambridge: Cambridge University Press.
- Buhler, James. 2014. "Ontological, Formal, and Critical Theories of Film Music and Sound." In *The Oxford Handbook of Film Music Studies*, ed. David Neumeyer, 188-225. Oxford: Oxford University Press.
- Carroll, Noël. 1996. *Theorizing the Moving Image*. Cambridge: Cambridge University Press.
- Cohn, Richard. 2012. *Audacious Euphony: Chromaticism and the Triad's Second Nature*. New York: Oxford University Press.
- Cohn, Richard. 1996. "Maximally Smooth Cycles, Hexatonic Systems, and the Analysis of Late-Romantic Triadic Progressions." *Music Analysis* 15, no. 1 (March): 9-40.
- Cohn, Richard. 1997. "Neo Riemannian Operations, Parsimonious Trichords, and Their 'Tonnetz' Representations." *Journal of Music Theory* 41, no. 1: 1-66.
- Davies, Stephen. 2010. "Philosophical Perspectives on Music's Expressiveness." In *Handbook of Music and Emotions: Theory, Research, and Applications*, edited by Patrik Juslin and John Sloboda, 23-44. Oxford: Oxford University Press.
- Eldredge, John. 2020. *Get Your Life Back: Everyday Practices for a World Gone Mad*. Nashville, TN: Thomas Nelson.
- Elfman, Danny. 2000. "Commentaries." *Edward Scissorhands, 10th anniversary ed.* DVD. Directed by Tim Burton. Beverly Hills, CA: Twentieth Century Fox.
- Herdson, Oliver, Tuomas Eerola, and Amir-Homayoun Javadi. 2023. "Analysis and Classification of Music-Induced States of Sadness," *Emotion Review* 15, no. 2: 99-117.
- Hill, Andy. 2017. *Scoring the Screen: The Secret Language of Film Music*. Milwaukee, WI: Hal Leonard Books.
- Huron, David. 2006. *Sweet Anticipation: Music and the Psychology of Expectation*. Cambridge, Massachusetts: MIT Press.
- Lehman, Frank. 2013. "Transformational Analysis and the Representation of Genius in Film Music." *Music Theory Spectrum* 35, no. 1: 1-22.

- Lehman, Frank. 2018. *Hollywood Harmony: Musical Wonder and the Sound of Cinema*. New York: Oxford University Press
- Lewin, David. 1987. *Generalized Musical Intervals and Transformations*. New Haven: Yale University Press.
- Mason, Laura F. 2013. "Essential Neo-Riemannian Theory for Today's Musician." Master's Thesis. University of Tennessee.
- Murphy, Scott. 2014. "Scoring Loss in Some Recent Popular Film and Television." *Music Theory Spectrum* 36, no. 2: 295-314.
- Murphy, Scott. 2014. "Transformational Theory and the Analysis of Film Music." In *The Oxford Handbook of Film Music Studies*, 471-99. Oxford: Oxford University Press.
- Neumeyer, David. 1998. "Tonal Design and Narrative in Film Music: Bernard Herrmann's A Portrait of Hitch and The Trouble with Harry." *Indiana Theory Review*, 19 (Spring/Fall): 87-123.
- Powell, Andrew S. 2018. "A Composite Theory of Transformations and Narrativity for the Music of Danny Elfman in the Films of Tim Burton." PhD diss., University of Kansas.
- Vickhoff, Björn. 2008. "A Perspective Theory of Music Perception and Emotion." PhD diss., University of Gothenburg, Sweden.
- Zbikowski, Lawrence. 2002. *Conceptualizing Music: Cognitive Structure, Theory, and Analysis*. New York: Oxford University Press.
- Zbikowski, Lawrence. 1998. "Metaphor and Music Theory, Reflections from Cognitive Science." *Music Theory Online* 4, no. 1: 1-11.