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Beyond Verse and Chorus:
Experimental Formal Structures in Post-Millennial Rock Music

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Abstract

**Beyond Verse and Chorus:
Experimental Formal Structures in Post-Millennial Rock Music**

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Music Theory

Rock songs are generally considered formally simplistic, based around alternation of verse and chorus, the latter functioning as the song's selling point—an easily identifiable advertisement for the song-as-commodity. However, many rock songs composed in the last ten to fifteen years are not structured in this way. Pieces composed by artists in the genres known as “post-rock,” “art rock,” “math-metal,” and “neo-prog” often feature forms that, instead of treating a repeated chorus as the dramatic high point, emphasize a single moment of climactic material at the end; and some present new material from beginning to end, resulting in an entirely through-composed formal structure.

This dissertation explores the link between these post-millennial experimental rock genres and the experimental song forms used by artists in those genres. Chapter One includes a literature review, identifies a mode of thought I call the “Verse/Chorus Paradigm,” and then presents a concise rock historiography that casts certain artists and genres on either side of that paradigm, either as conventional or experimental. In Chapter Two, I suggest revisionist theories of conventional rock form, present new models of climaxes and endings, and define experimental formal structures that will be used throughout the analyses in later chapters.

“Terminally-Climactic Form”—a formal type I have identified throughout post-millennial rock music—is the topic of Chapter Three. In this form, a single moment of new material at the end acts as the song’s focal point, rather than the chorus, the *de facto* focal point in conventional rock. I construct archetypes and provide analyzed examples for three classifications of Terminally-Climactic Form: two-part, three-part, and extended. In Chapter Four, I explore the more radical departure from conventional rock forms made possible by through-composition. Toward this aim, I construct a genetic taxonomy of four through-composed types based on an analogy to formal alleles; just as in Chapter Three, each of these types is supported with analyzed examples from the post-millennial experimental rock corpus. My dissertation concludes by considering some formally ambiguous pieces, and suggests how my formal theories might be adapted to analysis of more familiar, conventional rock music.

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DEDICATION

*To my old family—Mom, Dad, Kevin,
Grandmas Polly and Pauline, and Grandpa Claude*

and to my new family—Mrs. Emily Coleman

*I could not have achieved any of this without
the never-ending love and support
you have each given me.*

INTRODUCTION

The end of the first decade of the new millennium might prompt us to examine how rock music has changed in the twenty-first century. Compared to their “alternative rock” predecessors in the early 1990s, artists such as Radiohead, Björk, The Mars Volta, and Tool have made significant advances during the past ten to fifteen years in moving beyond the compositional conventions of radio-friendly rock music. The output of these musicians represents a body of music that I have identified as “post-millennial experimental rock.” Post-millennial experimental rock differentiates itself from more conventional Top-40 rock in a number of ways, but perhaps most significantly in terms of formal structure and organization. On one hand, most conventional rock music strategically places its climax-as-selling point in the repeated chorus, and brings about closure only by recapitulating a previously heard section. On the other hand, experimental rock forms effect a sea change in dramatic structure by playing with new possibilities for climaxes and endings—two pivotal formal elements. Experimental rock forms often present a single climactic moment only at the song’s ending; some close with new material; and some do both, resulting in a structure I call “Terminally-Climactic Form.” Some post-millennial rock artists (particularly in the “post-rock” genre) avoid recapitulation altogether, resulting in song forms that are entirely through-composed.

This dissertation explores the link between post-millennial experimental rock genres (“post-rock,” “art rock,” “neo-prog,” “math-metal,” to name a few) and the

experimental song forms used by artists in those genres. While we should be careful not to recapitulate Adornian alliances between experimental formal structures and artistry (as opposed to conventional form and commodity), this dissertation uses music-theoretical tools to inform genre distinctions, a task usually reserved for music criticism and the blogosphere. I can only hope that, as someone who writes as a music scholar and as a weekly columnist, I have avoided such elitism and have made some progress toward bridging the cultural gap between popular music audiences and the academy.

Chapter One constructs a narrative through most of the extant literature on rock song form, starting with what I identify as the “Verse/Chorus Paradigm.” Within this paradigm (tacitly accepted by composers, critics, and scholars alike), it is assumed that rock songs are little more than alternations of verse and chorus, sometimes including connecting sections such as intro/outro, prechorus, and bridge. After surveying the literature, I highlight two major lacunae that serve as focal points for the dissertation: the lack of research on post-millennial rock music (even extending to music released in the 1990s), and the near absence of non-recapitulatory endings (that is, songs that end with new material) in descriptions of song form. This chapter also situates rock compositional practices within a concise historiography. Toward this end, I construct an “Experimental Dialectic” that models the interaction between conventional and experimental approaches to songwriting since the late 1960s. The interaction between these two approaches can be modeled in a few different ways: experimentation may be read as a reaction to convention or convention may be read as a reaction to

experimentation (a sort of return to simplicity), or the two approaches could even be considered specific market-cornering strategies. I identify two significant experimental periods in such a reading, the first beginning with The Beatles' *Sgt. Pepper's Lonely Hearts Club Band* (1967) and the second beginning with Radiohead's *OK Computer* (1997).

Having defined my genre and approach, Chapter Two constructs an "Experimental Rock Form Theory" that is, firstly, experimental in scope, thus separating it from the Verse/Chorus Paradigm, and, secondly, contextually rooted in the experimental compositional practices of post-millennial rock. After presenting a novel system for organizing conventional rock structures (based on memorability and autonomy), I then define some unconventional formal structures heretofore unexplained by the existing rock literature. I close by presenting new theories aimed at re-evaluating the two pivotal formal elements that set experimental rock forms apart from conventional forms: climaxes and endings. By modeling two dichotomous pairs on a Punnett square (recapitulation/non-recapitulation; autonomy/non-autonomy), I construct a theory of rock endings consisting of four types, only one of which satisfies conditions of autonomy and non-recapitulation. This particular combination, which produces endings that are both new and highly memorable, is the broad category encompassing all formal types described in Chapters Three and Four. The last section of Chapter Two proposes a theory of sectional climax in rock (contra the "moment" climaxes of Western art music). After surveying the classical climax literature, I propose a new model based on the original Greek *Klimax*, meaning "ladder." Using

this model, I construe syntactic climax as a process of increasing memorability between sections, while statistical climax can be measured empirically using visual representations of sonic parameters.

Having presented my methodological approach, the context for post-millennial experimental rock, and the formal and philosophical underpinnings for non-recapitulatory endings, Chapter Three advances a specific formal type called “Terminally-Climactic Form.” Terminally-Climactic Form is defined by its tension between the *expected* memorable high point (the chorus) and the non-recapitulatory terminal climax, its *actual* high point, which appears only once at the end. After providing pre-1990 antecedents to such a form, the chapter proceeds by presenting archetypes for three classifications of Terminally-Climactic Form: two-part, three-part, and extended. These three archetypes are illustrated with concise analytical overviews and a detailed analysis of one complete song befitting each type (Radiohead’s “Faust Arp,” Coheed and Cambria’s “The Crowing,” and Tool’s “Pushit”).

Chapter Four catalogs another formal type based on autonomous, non-recapitulatory endings. Through-composed forms, which I present in four subtypes based on yet another Punnett square model, are perhaps more experimental than Terminally-Climactic Forms, since they dispense with verse/chorus designs entirely. Rather than utilize the same archetype/example format as Chapter Three, this chapter engages fewer examples in more detail, drawing on alternative media such as music videos, Pro Tools® screenshots, waveforms/sonograms, and other visual representations of sonic phenomena. The chapter closes by examining the similarities between

Terminally-Climactic and through-composed forms and uses a detailed analysis of Hopesfall's song "The End of an Era" to illustrate such hybridity.

While Top-40 artists are largely dependent on conventional song forms for their commercial success, groups outside of this category are free to experiment with song forms that rely less on choruses and recapitulatory endings. This point is pursued throughout my dissertation by coupling close analytical readings of specific pieces with broader theories of form and genre. In doing so, my work also attempts to bridge the often disparate practices of analysis and criticism, providing for meaningful crossover between the two. Through artist interviews and performer insight, this dissertation also provides evidence that many of my theories (and even some terminology) are familiar territory for rock musicians, thereby forging a strong bond between analysis and performance practice.

All transcriptions in this dissertation, unless noted otherwise, are my own.¹ They are meant merely as illustrative reductions, not as complete accounts of all musical material and certainly not as performance-ready scores. In most cases, I have chosen to represent only the primary melodic, harmonic, and rhythmic layers heard in a given section. Admittedly, my transcriptions do little to impart the beauty contained within many of these pieces. Instead, they highlight only the most salient aspects of any given section, as well as those most relevant to my analysis.

¹ All transcriptions are included as educational demonstrations under "Fair Use."

Choosing the proper octave in which to notate rock music involves some notable complications. Guitarists and bassists are already accustomed to hearing their music sound one octave lower than written. Furthermore, the overtone spectrum of a distorted electric guitar sometimes renders the perfect octave and the perfect twelfth above the fundamental as perceptible as the fundamental itself. Harmonic reductions, in both classical and rock music, are often notated without regard to the sounding octave of a given part or doublings in multiple octaves. Since my dissertation contains a significant number of guitar/bass transcriptions and harmonic reductions, I have merely notated all parts in the octave and clef that renders them with greatest visual clarity regardless of the actual sounding pitch or doublings. All vocal parts, however, are notated at pitch, and I have used the appropriate clefs as well as the familiar octave below/octave above staff designations to avoid excessive ledger lines.

Since rock music is almost never notated in score form, and since rock performers often incorporate a significant amount of improvisation, literal repeats are almost non-existent. My use of repeat signs should therefore be understood as representing the repeat of a basic structure, not the specific parts. For example, if a verse contains two presentations of the same chord progression, the basic melodic/harmonic/rhythmic reduction will likely repeat, though the exact parts in the kick drum, lead guitar, and lead vocal (especially the lyrics) will likely be varied.

Drum set transcriptions can be read using the key provided below. Since these examples are transcribed merely as analytical demonstrations, I have reduced the number of distinct cymbal types to two. The top space of the staff represents all

quieter time-keeping cymbals including closed hi-hat and ride cymbal, while the ledger lines above represent louder time-keeping cymbals including open hi-hats and crash cymbal.

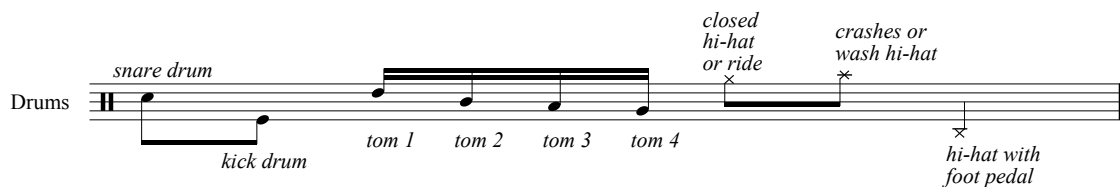


Figure 0.1: Drum Set Notation Legend

Readers will undoubtedly gain more from my discussion by consulting recordings of this music. Using one of the many streaming-audio websites available at the time of this printing (for example, youtube.com and grooveshark.com), interested readers can access these recordings at no charge. The exact recording may be identified by referring to the discography as well as the track timings and year of release that accompany my transcriptions and form charts.

CHAPTER ONE:
THE VERSE/CHORUS PARADIGM
WITHIN AN EXPERIMENTAL DIALECTIC

In a verse-chorus form, the focus of the song is squarely on the chorus . . . the verse serves primarily to prepare the return of the chorus (Covach 2005, 71).

The pop song typically alternates verses and choruses. These will usually be balanced by one or two statements of a contrasting bridge (Everett 2007, 112).

Pop/rock songs are generally considered little more than simple alternations of verse and chorus, sometimes including connecting sections like bridges, prechoruses, and outros. Two significant assumptions stem from this belief: first, and most problematic, it is assumed that the chorus functions as the song's selling point, an easily identifiable advertisement for the song-as-commodity; second, it is assumed that a song must close with a previously heard section. This usually means ending with a memorable section such as the chorus or verse, though a thematically dependent outro derived from either may also suffice. I identify this aggregate of assumptions as the "Verse/Chorus Paradigm," and aim to show throughout this dissertation that such a conceptualization of song form poorly represents the experimental practices of post-millennial rock artists.

The Verse/Chorus Paradigm represents a viewpoint embraced by people with myriad involvements in rock music, from academics and critics, to songwriters, performers, and listeners. Whereas most listeners and critics can identify a verse or

chorus, performers (especially session musicians) are often fluent in formal nomenclature unfamiliar to most, including “turnaround,” “interlude,” and “coda.” Though the Verse/Chorus Paradigm reaches different audiences through different media, this chapter focuses on how the paradigm is propagated through education, including textbooks, scholarly works, and non-academic written sources. Through textbooks, the average undergraduate is exposed to what approximates a statistical average of tonal music practices—a music education based solely on textbooks will never begin to reveal the intricate semiotic webbing of Mozart’s operas or the harmonic complexity of Beethoven’s late quartets, for example. Of course, advanced undergraduates, graduate students, and other academics have access to more complex accounts of that tradition through scholarly books and journal articles. While an analogous textbook/scholarly divide certainly exists in popular music studies, the gap is narrower. The reasons for this difference will become apparent over the course of the ensuing literature review.¹ Following an examination of the key sources on rock song form, I will identify two significant lacunae that remain in pop/rock scholarship.

¹ Building upon recent literature reviews by Endrinal (2008) and Stephan-Robinson (2009), this chapter focuses on highlighting the Verse/Chorus Paradigm as a trend in recent scholarship. Both of these dissertations pre-date Everett 2009, the most thorough treatment on the topic of rock form thus far. Everett’s book provides the basis for much of the terminology I will use regarding conventional song form in Chapter Two of this dissertation.

The Verse/Chorus Paradigm in Scholarly Works

References to form are usually terse in scholarly writing, often appearing alongside discussions of other phenomena. Since this dissertation focuses on form in very recent rock music, the most relevant scholarly resources may very well reside within contemporary writing on the topic. Regardless, it turns out that a researcher in this field has limited choices. Sustained commentaries on rock's formal structures appear exclusively in twenty-first-century publications. This factor can be attributed to the music-theoretical community's late engagement with pop/rock music as a serious topic, and the recent interest in rock forms may be linked to the renewed interest in common-practice forms following the publication of Caplin's *Classical Form* (1998) and Hepokoski/Darcy's *Sonata Form: Types and Deformations* (2006). There have only been three chapter-length entries, one article, and two dissertations dedicated to rock song form, all appearing in the last decade.²

In *What to Listen for in Rock*, Ken Stephenson devotes an entire chapter to the study of form in rock music.³ According to Stephenson, the lyrical text is often the most important factor in the delineation of formal boundaries, a viewpoint shared by Endrinal.⁴ Interestingly, he does not think that melody is a contributing factor, going so far as to say: "although melodic contrasts do not help much to delineate form in rock

² See Stephenson 2002, Spicer 2004, Covach 2005, Endrinal 2008, Stephan-Robinson 2009, and Everett 2009.

³ See Stephenson 2002, Chapter Six.

⁴ See Endrinal 2008. Stephenson's emphasis on lyrics can be observed in the following quote: "Perhaps the surest way of distinguishing sections in rock is by textual repetition . . . because textual patterns are easy to define and usually so clear cut" (Stephenson 2002, 124).

music, harmonic contrasts do.”⁵ Another criterion for locating boundaries between distinct sections is what Stephenson calls instrumentation, by which he means “the changing combinations of instruments, including voices, performing a piece.”⁶ Rather than instrumentation, I favor the term “timbre” to describe this parameter of rock music, since several distinct timbres can be produced by the same instrument, especially the electric guitar.⁷

Nearly all of Stephenson’s sectional definitions are based on the type of text that appear within them. These include the verse (“a different text every time”), the refrain (“one or two textual lines that recur periodically”), and the chorus (“a fixed text of several lines”).⁸ Aside from a short discussion of bridge, these are the only formal sections he explores, thereby implying that texted sections are the only ones “to listen for” in a rock song. In his review of this chapter, Shaugn O’Donnell asks of this perceived shortcoming: “What about the solo?”⁹ Fortunately, while Endrinal seems to take many of Stephenson’s ideas as points of departure, he corrects this oversight by

⁵ Ibid., 131. Stephenson bolsters this conclusion with a single example from REO Speedwagon, where he identifies the chorus by the appearance of the song’s title rather than by a contrasting melody. This single example hardly justifies the omission of melody from Stephenson’s four formal parameters.

⁶ Ibid., 126.

⁷ For example, an electric guitar can play “clean” (meaning without electronic effects processing) in quiet sections, or with distortion in louder sections. The wildly different timbres can sound like two different instruments, complete with unique spectral signatures. Aside from this polarity, there is a range of sounds between clean and distorted that can be produced using an array of stompbox effect pedals. Similar ranges of timbre can be found in the different methods of playing the drum set (closed vs. open hi-hats, time keeping on ride vs. crash cymbal, snare vs. tenor drum on backbeat), bass guitar (especially picked vs. plucked attacks), and voice (notably screaming vs. singing in metal-influenced genres).

⁸ Stephenson 2002, 134–135.

⁹ O’Donnell 2006, 136.

employing sectional definitions from a multitude of scholarly sources throughout his analysis of the U2 catalog.

John Covach's chapter "Form in Rock: A Primer" differs from Stephenson's chapter in its focus on formal types for entire songs, rather than the sections that compose those songs.¹⁰ Covach defines four formal types, grouped by what we might deem increasing complexity: twelve-bar blues, AABA, verse-chorus, and compound AABA. While we might speculate that most modern rock derives its form from a verse-chorus design, this turns out to be false according to Covach's theory; most rock music derives its form from Covach's compound AABA design. Because his verse-chorus form accounts for no section besides verse and chorus, the typical form [Verse 1–Chorus 1–Verse 2–Chorus 2–Bridge–Verse 3–Chorus 3] cannot be modeled using a verse-chorus design, since it contains a bridge. Instead, this combination of verses and choruses with a contrasting bridge necessitates his compound AABA form, whereby each verse/chorus pair constitutes an A, and the bridge is labeled as B. Since variations on the design provided above account for most modern conventional rock songs, two significant questions arise. First, on what body of music is Covach basing these decisions? Twelve-bar blues form has not been used with any frequency in rock music since The Beatles; AABA (or verse-verse-bridge-verse) owes most of its history to the Tin Pan Alley era; and songs with verses and choruses but with no bridge are scarcely heard in rock music released after the 1970s. Second, why does the vast majority of

¹⁰ See Covach 2005.

modern rock music, including nearly every conventional pop/rock song, owe its form to Covach's single most complex form, the compound AABA?

While Endrinal and Stephan-Robinson have benefitted somewhat from questioning the formal theories of Covach and Stephenson, all four of these scholarly works neglect to analyze songs with non-recapitulatory endings.¹¹ With the exception of a single speculative paragraph in Stephenson 2002 (which I will address later in this chapter), none of these works examines the possibility of a song ending in new, thematically independent material. Since they all utilize a lettering system to label complete song forms (e.g. V-C-V, or ABA), it is easy to scan the entire output of formal types and recognize that they all end where they begin, usually with "A" or "Chorus" playing the role of alpha and omega. Endrinal's systematic cataloging of U2's formal designs is instructive: of the 125 analyzed songs, none ends with material that is non-recapitulatory. While this data accurately represents U2's compositional practice, Endrinal's conclusion that his formal system "allows for a more thorough understanding of formal process and song construction in U2's music specifically, and popular music in general" is misleading.¹² This leads the reader to believe that "popular music in general" (however defined) adheres to these same formal designs, and that songs do not end with non-recapitulatory material. However, I will demonstrate in Chapters Three and Four that this is simply not true; a broader

¹¹ See Endrinal 2008 and Stephan-Robinson 2009.

¹² Endrinal 2008, 91. In fact, each of Endrinal's 125 examples follows a compound AABA format, though he is quick to point out (ostensibly to distance himself from Covach's theory) that each song features a unique combination of sections.

examination of contemporary rock music reveals a plethora of songs that cannot be modeled as compound AABA, including those that end in new material.

The Verse/Chorus Paradigm in Textbooks

While most contemporary music textbooks (both analytical and historical) seem to acknowledge popular music somewhere near the end of the book (or else illustrate popular music analogues in a superficial manner alongside classical examples), only two are devoted entirely to twentieth- and twenty-first-century popular music: Covach's *What's That Sound?* and Starr and Waterman's *American Popular Music*, both of which have been successful enough to merit multiple editions. Before reviewing these two publications, we should acknowledge that one should not expect textbooks to demonstrate the same detail or rigor as a scholarly work. On one hand, their brevity is understandable given the large body of music textbooks have to address in a limited amount of space. But, on the other hand, a textbook could be a student's only source of information on a topic, thus making it the author's responsibility to avoid far-reaching generalizations that may not hold up under further scrutiny.

Covach's textbook provides a typology of rock song forms. Just as in "Form in Rock: A Primer," only a limited number of complete song forms are presented as viable: 12-bar blues, simple verse, simple verse-chorus, contrasting verse-chorus, and AABA.¹³ Covach then presents "listening guides" throughout the book, where readers can listen to the song online and follow along with a form chart. Each listening guide

¹³ Covach 2009, 94–103.

provides a basic description of the track, including time signature, instrumentation, and, most troubling, the formal type that best describes the song. Therefore, the reader is to understand that any given song is “in the form of x,” just as he or she may be told a piece is “in the key of y.” What is missing is a detailed examination of the song’s constituent parts, a “bottom-up” component. Covach’s approach is clearly top-down, focusing on the broad formal type rather than on the constituent parts that compose each type. Furthermore, unlike Endrinal, Covach seems uninterested in song-to-song differences at the sectional level—the differences that make each song formally unique.

Only when Covach confronts Led Zeppelin’s “Whole Lotta Love” late in the book does he introduce the reader to a formal type not found in the aforementioned typology.¹⁴ Since the song consists of verse/chorus pairs separated by a bridge, Covach must finally introduce the staple of his scholarly work on rock form—compound AABA form. Many of the examples that follow from the mid-’70s onward utilize this form. In the following decades, we begin to observe increasing complexity in Covach’s examples. One begins to sense a correlation between more recent compositions and complexity of form, including greatly distended ending sections, which he labels as “coda” or “extended finale.” Covach never considers a different formal type befitting these unique forms. Of the 76 listening examples and form charts included in the book, only one ends in non-recapitulatory material, a point to which I will return in the “exceptions” section later in this chapter.

¹⁴ Ibid., 316.

Starr and Waterman's textbook *American Popular Music*, now in its third edition, exhibits a much broader scope than *What's that Sound?* since it is concerned not only with rock's comparatively short history, but with the history of American popular music since the beginning of the twentieth century. Like Covach, Starr and Waterman provide listening and analysis guides, some of which are accompanied by "listening charts," depicting the song's form with a series of letters. This differs crucially from Covach's method. Starr and Waterman propose no molds in which to pour various combinations of A, B, and C sections that compose a song. Rather, songs are left to exist in their particular combinations of these building blocks instead of being made to exemplify a small number of archetypical structures.

An important alteration to this format does occur when Starr and Waterman begin to analyze pieces released in the '70s and '80s. In order to accommodate the growing size and number of parts in these compositions, numbered sections begin to encompass groups of lettered sections, so that "section 1" might encompass A, B, and C, and "section 2" might encompass D, E, and F. The only two songs for which this design is used are Led Zeppelin's "Stairway to Heaven" (1971), lasting just over eight minutes, and Prince's "When Doves Cry" (1984, album version), which lasts just under six minutes. This two-part structure resembles Stephenson's compound-binary forms, as well as the multipartite form Everett ascribes to Crosby, Stills, and Nash's "Suite: Judy Blue Eyes,"¹⁵ both of which are addressed in Chapter Three of this dissertation.

¹⁵ See Stephenson 2002 and Everett 2009.

Of the many song forms charted in *American Popular Music*, only one ends in non-recapitulatory material: the impressive [AABBACCDEEF] form of “Castle House Rag” (1914).¹⁶ None of the rock songs analyzed by Starr and Waterman ends in a previously-unused letter, which, by their system, would be the marker for non-recapitulatory material. To be fair, they do address two pieces with notoriously intricate forms. Besides the tripartite suite form of Led Zeppelin’s “Stairway to Heaven” (1971), the authors also diagram the dizzying and positively uncanny form of The Beach Boys’ “Good Vibrations” (1966), which they deem “the most thoroughly innovative song from the singular decade of the 1960s.”¹⁷ The *Unheimlichkeit* of “Good Vibrations” ensues when the song seemingly spins off course after the second chorus. In a broader sense, the song does fit a compound AABA form (which is here labeled as: A–B–A–B–C–transition–D–transition–Variations on B), but the contrasting middle is much more expansive than a mere bridge. Indeed, the listener wonders if the song will *ever* make it back to the chorus.¹⁸

The Verse/Chorus Paradigm in Non-Academic Sources

It is important to bear in mind that the majority of rock songwriters lack formal musical training, and even fewer possess the musical training necessary to have intellectual access to music-theoretical writings on song form. It seems entirely likely

¹⁶ Starr and Waterman 2009, 55.

¹⁷ *Ibid.*, 265.

¹⁸ Larry Starr once revealed to me his personal experience upon first hearing The Beach Boys’ track in the 1960s, about which he confessed: “I thought it was two songs!”

that many songwriters simply assimilate ideas on song form from listening to music in the same way that young children pick up basic grammatical structure through listening to speech. Just as children will subsequently learn grammar through rules and guidelines, many songwriters will turn to so-called “craft” books to learn how to organize musical ideas in coherent ways. Both Stephan-Robinson and Furnes provide detailed literature reviews of songwriting books in the craftsperson tradition that will prove useful for readers interested in such matters.¹⁹ Unfortunately for our purposes, it turns out that nearly all of these books are focused on lyrics rather than musical parameters.²⁰

Most academic discussions of rock music, at least those focused on “the music itself,” tend to ignore music criticism, since these writings often display concern for aspects most analysts deem peripheral, including genre and culture. This dissertation, while admittedly somewhat removed from cultural studies, engages genre directly in several sections, including the second half of this chapter, the ends of Chapters Three and Four, and the Conclusion. I believe that much can be learned from criticism, and differences in lexicon and nomenclature notwithstanding, many people who write for and read those sources understand many of the same phenomena we do, just through a different language. Take for example *Pitchfork 500*’s description of Journey’s “Don’t Stop Believin’” (1981): “and then finally, the lone chorus comes at the very end,

¹⁹ See Chapter 10 of Furnes 2005 and Chapter 2 of Stephan-Robinson 2009; the latter provides a representative list of songwriting books.

²⁰ This is, of course, not to suggest that lyrics are unimportant to song construction, but only that the study of lyrics falls more under the domain of poetry than music.

implores the listener to keep the faith. Resistance is futile.”²¹ The following section will describe notable exceptions to the Verse/Chorus Paradigm such as this one.

Though I will show in Chapters Two and Three that this ending to Journey’s hit song is *not* a chorus but something more remarkable (a “terminal climax”), the language here is anecdotal compared to a shared understanding of a meaningful musical phenomenon.

Notable Exceptions to the Verse/Chorus Paradigm

One of the most sustained oppositions to the assumption that songs simply alternate verses and choruses comes from Mark Spicer’s article “(Ac)Cumulative Form in Pop-Rock Music.”²² Spicer sums up his opposition to the Verse/Chorus Paradigm nicely in the following excerpt:

Unfortunately, as with harmony, it is often assumed that the formal structure of most average three-or-four-minute pop-rock songs is trite and simplistic, consisting of not much more than a predictable strophic alternation of verses, refrains, and choruses (with the occasional introduction or bridge thrown in for good measure). If we examine pop-rock songs more closely, we can often find their composers employing techniques of considerable sophistication in order to create interesting and unique formal structures that transcend these predictable boundaries.²³

“Cumulative Form” is a term first coined by J. Peter Burkholder and later developed by Robert Morgan. Morgan relates the term to Wagner’s ideas about a

²¹ Plagenhoef 2008, 52.

²² The appearance of Spicer’s (2004) article in the inaugural issue of *twentieth-century music* lends credence to the increasing import of popular music studies in the academy.

²³ Spicer 2004, 30.

single unified melody that only presents itself near the end of the piece, specifically in reference to the first movement of Beethoven's *Eroica* Symphony.²⁴ Spicer takes a broader view, examining songs guided by two cumulative processes, one involving textural growth, the other involving a melodic culmination similar to the type described by Morgan.²⁵ Both Spicer and Morgan are interested in a unified, organicist notion of form, a developing entity that only reveals itself at the end. As such, neither of their theories is able to model any truly non-recapitulatory ending. All of the endings addressed by Spicer are thematically foreshadowed in much the same way as in the *Eroica*.²⁶ While this certainly represents "considerable sophistication" compared to a banal alternation of verse and chorus, Spicer's cumulative endings still rely heavily on recapitulation, never approaching the truly non-recapitulatory endings explored in Chapter Three, which are not foreshadowed but appear *ex nihilo*.

One compelling approach to describing non-recapitulatory endings has been suggested by Stephenson under the guise of "compound-binary form." He devotes a single paragraph to defining this form:

²⁴ See Burkholder 1995 and Morgan 1993, both of which are cited in Spicer 2004.

²⁵ All of Spicer's examples are drawn from European artists, though recent North American examples of melodically-cumulative endings can be found in Weezer's "The Greatest Man That Ever Lived" and Broken Social Scene's "7/4 (Shoreline)."

²⁶ However, Spicer's other type of growth and culmination, involving texture rather than melody (and this includes his smaller-scale "accumulative" growth), can produce endings with previously-unheard textures. These sorts of endings, which are actually quite common in pop-rock, result in thicker, accumulative textures presenting recapitulatory thematic material such as the chorus.

In a compound-binary song, the first part, itself as long as or longer than a normal song, usually follows one of the forms outlined above [strophic, rounded binary, verse–chorus–bridge]. As a result it may be dubbed a “super-section”: although a principal division of a piece, it in turn is divided into several sections. The second part is generally structured around several repetitions of a single melodic line or chord progression or both. This second division or part as a rule presents previously unheard material; were it otherwise, the passage would not be distinguished as transcendent to the form of the first part.²⁷

Stephenson seems to have developed this basic structure with the Beatles’ “Hey Jude” in mind, indeed admitting that the song “forms the model.”²⁸ However, Stephenson’s claim that this form was “heard mainly in the 1960s and 1970s” proves quite erroneous, and is due more to the author’s focus on music of that era than any statistical data.²⁹ Genre biases aside, Stephenson’s compound-binary form introduces two important concepts. First, the author acknowledges that not every rock song ends in recapitulatory material, and thus cannot be modeled using strict verse/chorus terminology. Second, with his conception of the “super-section,” Stephenson is able to invoke a second-level sectional hierarchy that has been nearly absent from descriptions of rock song form, a point to which I will return in Chapter Two.

Both of these revisionist contributions made possible by Stephenson’s compound-binary form seem to have inspired many of Covach’s formal theories,

²⁷ Stephenson 2002, 142.

²⁸ Though he provides three other examples befitting the form, none fits very elegantly. A brief discussion of how “Hey Jude” may be suited to a Terminally-Climactic Form appears in my third chapter.

²⁹ This genre bias is also noted in O’Donnell’s review of Stephenson’s book. Any of the two-part forms in Chapter Three of this dissertation could be considered post-millennial compound-binary forms following Stephenson’s broad definition.

including his all-important compound AABA form.³⁰ Most obviously, each “A” in such a form is itself a compound section, specifically a verse/chorus pair. Less frequently, Covach employs a large compound “AB” form that roughly equates to Stephenson’s compound-binary.³¹ These methodologies seem to have been imparted to Covach’s student Anna Stephan-Robinson, as evidenced by her use of compound AABA and compound AB forms in her dissertation.³²

“Hey Jude” is something of a flash point for discussions on experimental song forms in early rock. Everett’s treatment of the song is less convincing than Stephenson’s. Everett simply labels this ending as a repetitious coda: “Sometimes repetition can be so continuous as to function as a be-here-now mantra that savors the moment to promote a transcendent anthemic experience, perhaps the goal of the Beatles’ “Hey Jude.”³³ But Everett does provide several instances of songs with non-recapitulatory endings, including his “false ending” phenomenon. In one type of false ending, the artist telegraphs an end-signifying gesture only to begin again on something completely unrelated. Everett essentially achieves the opposite of what Stephenson does with compound-binary form. While Stephenson provides a model for non-recapitulatory endings, he cannot identify a convincing body of music that exemplifies

³⁰ While it is impossible to tell where exactly Covach found the inspiration for his compound AABA form, Stephenson’s idea appears in print three years earlier than Covach’s 2005 chapter.

³¹ See Covach 2009, 474. Nearly all of the pieces Covach chooses to analyze in his published works feature recapitulatory endings.

³² Stephan-Robinson introduces the compound AB structure to model two-part songs of Paul Simon in her fifth chapter.

³³ Everett 2009, 154. Everett also provides two additional songs with similar endings: Tommy James and The Shondells’ “Crimson and Clover” (1968) and Donovan’s “Atlantis” (1969).

the phenomenon. Everett's model lumps all such endings under the broader category of "coda," and is therefore under-formalized. While some of his false endings may be just that (endings to otherwise conventional songs), each of the three songs provided under his "be-here-now" category of codas effects a profoundly different macro formal structure that remains unaccounted for. In short, Everett combines all endings together under the umbrella term coda, even amidst the several distinct types of endings he analyzes.

Aside from notable exceptions to the Verse/Chorus Paradigm provided by Stephenson, Spicer, and Everett, much of the scholarly output from analysts working within the progressive rock corpus could be added to this list. I will address the progressive rock tradition later in this chapter, but for now I would like to make two points as they relate to the Verse/Chorus Paradigm. First, many progressive rock songs, while ambitious in sheer duration, still succumb to the Verse/Chorus Paradigm as a source for a song's basic building blocks. Second, as perhaps a consequence of the ambitious lengths of these songs, progressive rock songs often end with explicit recapitulations. After developing new material throughout the course of the song, it may be the case that the easiest and most logical way to bring about closure is to recapitulate some previously-heard gesture. Such is certainly the case in Yes's "Roundabout" (1972), which closes with a varied repetition of the opening acoustic guitar solo. I must admit that I find this perfunctory recapitulation disappointing. The song could have ended just as well on the climactic non-texted sing-along that appears just before the recap. And, as a point of fact, this turns out to be a common strategy for

Terminally-Climactic Forms both in the decade preceding prog rock (e.g. “Hey Jude”), and in a multitude of post-millennial rock songs addressed in Chapter Three.

Two Scholarly Lacunae: Non-Recapitulatory Endings and Music since 1990

Amidst all the contributions to rock scholarship that have appeared in the past decade, two scholarly lacunae remain outside of the Verse/Chorus Paradigm. Even in his radical end-directed (ac)cumulative forms, Spicer still locates these cumulative points only at terminal recapitulations, especially choruses. In Chapter Two, I present four types of distinct ending strategies for rock songs, one of which I call EPIC (Expressively-Partitioned Independent Conclusion). EPIC endings feature new material, and act as autonomous sections at the end of the song, rather than an appended section such as the coda. These endings, previously unexplored by rock scholarship, and only present in a handful of songs before the new millennium, form the basis of every formal type examined in Chapters Three and Four. By ending with something other than a recapitulated verse or chorus, these forms upset not only expected closing functions, but also the entire concept of verse and chorus as formal cornerstones. By ending with something new, these forms force a listener to confront the idea that verses and choruses may not be that important after all.

Lest I seem completely unsympathetic to analytical approaches to rock music that rely primarily on verses and choruses, let me make it clear that such models faithfully explain the majority of music for which they were designed: Top-40 pop/rock from 1957–1970, or what Walter Everett has called the “foundations” of

rock.³⁴ However, beginning as early as the mid 1960s, artists begin experimenting with forms outside this paradigm, leading to the expansive forms of 1970s prog rock, which sometimes dispensed with traditional designs altogether.³⁵ Then, in 1977, or, according to *The Pitchfork 500*, “the year that changed everything,” the conventional backlash spawned by punk and other D.I.Y. genres lead to a revival of sorts for the Verse/Chorus Paradigm.³⁶ All of a sudden, the old models begin to make sense again, and a significant body of work has been done on music from this period until about 1990. While the first experimental compositional period, conveniently labeled as prog rock, is beginning to receive serious attention in the scholarly community, the second experimental epoch beginning in the late 1990s has received far less attention, presumably because most present-day scholars are more familiar with a rock canon spanning the late '50s to the early '90s than with any contemporary practice.³⁷ As evidenced by my title, I devote nearly my entire dissertation to correcting this omission. All of my examples of experimental rock composition come from what I might call the “long twenty-first century,” by which I mean music from the new millennium, as well as precursors in the 1990s.

³⁴ Ironically, Everett’s book *The Foundations of Rock* (2009) contains a larger number of non-recapitulatory endings than any other source reviewed here.

³⁵ Jennifer Rycenga writes the following concerning the prog rock band Yes: “Despite attempts to read various pieces by Yes in symphonic or sonata form, they do not finally fit any given Western art music template, nor do they fit standard rock song forms, although hints of both can be discerned” (Rycenga 2002, 153).

³⁶ Plagenhoef 2008, introduction.

³⁷ For example, Stephenson (2002) includes 475 examples in his book, and the median release date among those examples is 1973. The median release date of the 36 examples included in Spicer 2004 is 1963.

Bottom-Up	Top-Down
Spicer 2004	Stephenson 2002
Endrinal 2008	Covach 2005
Everett 2009	Stephan-Robinson 2009

Figure 1.1: Bottom-Up and Top-Down Approaches to Rock Form³⁸

In surveying the major writings on rock song form, two camps, or schools of thought, emerge, as shown in Figure 1.1. On the right side, a more conservative approach tends to analyze from the top down, recognizing a select number of formal archetypes, then analyzing the discrete sections of songs in relation to those archetypes. On the left side, a more open-ended approach can be observed in authors who acknowledge a limited number of recognizable sections that compose rock songs, but who are less concerned with naming the unique constellation of these sections. The latter, “bottom-up” approach is more conducive to recognizing songs with non-recapitulatory endings, since a lack of formal type befitting such a song is of little concern; we need only find a name for the ending structure. Lacking a named macro-form that contains a non-recapitulatory ending, analyses using a conservative “top-down” approach tend to underplay the very things that make such songs unique. Instead, analyses in this vein tend to apply a standard name to each section that renders it part of a larger whole: for example, the coda of a compound AABA, or the final verse of a simple verse-chorus. Though Figure 1.1 is by no means comprehensive (and

³⁸ I have specifically excluded textbooks from this account, since they most often feature a top-down approach in order to impart the most piquant concepts to undergraduate audiences.

is overly generalized), I provide it not so much to champion one approach over the other (though it will become clear that I favor the bottom-up approach), but to situate my theory of rock form within a body of published research. As evidenced by the authors in each camp, a positive correlation between the Verse/Chorus Paradigm and top-down approaches (with the exception of Endrinal 2008) can be easily discerned.³⁹

Before exploring the ways in which the Verse/Chorus Paradigm shapes a theory of rock form (the topic of Chapter Two), the following section demonstrates how it relates to rock history. Just as the preceding section highlights a trend within rock scholarship (by no means providing a comprehensive account of every source on the topic), so my view of rock history identifies only a specific facet of the style's development since the late 1960s. I present this historical overview as a way to contextualize the post-millennial music presented later in this chapter and throughout the rest of the dissertation.

³⁹ Endrinal (2008) is an exception to this observation because, while he rightly recognizes the verse/chorus-based songwriting traditions in U2's music, he emphasizes the band's ability to vary the specific combinations of these sections to create unique songs.

The Experimental Dialectic

As history demonstrates, cutting edge trends (in fashion, technology, design, etc.) tend to be absorbed slowly into the mainstream. Of course, musical trends are no exception. In *Genre in Popular Music*, Fabian Holt defines this balance between experimental and conventional approaches as the “mainstream dialectic” of popular style:

After genres are established as specialized fields, distinct from the mainstream, their boundaries continue to be negotiated in relation to broader cultural formations. . . . A case in point is how the field of popular music changed when rock music ate into the markets of other genres until it finally lost some of its genre identity and became part of the mainstream, a process that resulted in the label “rock/pop.”⁴⁰

Though I criticized Covach’s analyses earlier, his textbook offers a detailed rock historiography similar to the one Holt describes above. Covach demonstrates a sort of give and take between the “hippie aesthetic” of the late 1960s and the multitude of conventional backlashes created in response to such attitudes. This hippie aesthetic, as demonstrated not by his analyses but by his musical examples, is really a *compositional* aesthetic, one that involves a songwriting complexity I will simply label “experimental.”

Covach’s narrative is problematic in that it never reveals these experimental formal structures that are so essential to his selections. Thus, the interested reader will be left wondering what this hippie aesthetic actually means outside of its original

⁴⁰ Holt 2007, 24.

connotation in late 1960s America. Furthermore, many utterly conventional and simplistic compositional trends were undoubtedly part of the hippie movement as a cultural phenomenon, especially in folk music. Even some of the experimental pieces Covach presents under the umbrella of the hippie aesthetic are rendered very conventional by his analyses. As I stated earlier, the analyses provided by Covach's "listening guides" merely recapitulate the formal conventions laid out in his 2005 scholarly work. Readers will likely understand from these listening guides that rock music is formally simple, that an underlying compound AABA informs nearly everything, and that recapitulatory endings are the norm.

Even though this simplicity is quite opposed to the formal aesthetic of experimental rock, I believe that dialogue between the conventional and the experimental provides a productive mode of discourse. For this reason, I aim to preserve the basic dialectical structure suggested by both Holt and Covach, recasting it as an "experimental dialectic."⁴¹ Beginning with rock's inception in the late 1950s, and continuing into the present, we can observe certain relationships between experimental compositional practices and more conventional ones. As Holt notes, this relationship often includes the development of an experimental aesthetic, which then gets absorbed into the mainstream.

But what exactly does the term "experimental" mean? Many will wrongfully assume from the name "experimental rock" that such music must have a "weird" sound

⁴¹ I am using the term "dialectic" only in the general sense (to describe the interaction between two opposing forces), and in no way aim to align my view of rock history with the homonymous Kantian/Hegelian philosophical concept.

(or be “out there”). While it is true that modifications to conventional compositional practices will result in some sort of change in sound, these changes do not necessarily yield music that sounds forced, or like an “experiment.” I define experimental rock in just this way, as a compositional process that *experiments* by challenging conventional assumptions about rock music. Artists may experiment with some parameters while leaving others intact. We can imagine a song that, instead of challenging conventional rock harmonic techniques, subverts traditional verse/chorus forms through experiments with song structure.⁴² Artists may conversely retain conventional verse/chorus or twelve-bar blues forms for a composition that experiments outside of rock’s mostly-diatonic melodic/harmonic paradigm in order to avoid alienating listeners, or perhaps presenting a sort of “information overload.”

A more thorough investigation of experimental rock compositions will appear in due course, but first I want to illuminate the ways that the experimental dialectic has shaped a few notable moments in rock history. My rock historiography identifies two significant experimental epochs, each of which is preceded, followed, and accompanied by more conventional movements. Conventional movements may relate to experimental movements in a few different ways. In the case of a conventional trend preceding an experimental one, the former may be read as an impetus for the latter. A conventional trend following an experimental one could, conversely, be interpreted as a backlash, a return to simplicity. Contemporaneous experimental and

⁴² This turns out to be the case with many two-part Terminally-Climactic Forms in Chapter Three. While these songs experiment with musical structure, many utilize comparatively conventional melodic, harmonic, and rhythmic techniques.

conventional movements can even be interpreted as specific market-cornering stratagems. If the market is flooded with convention, there may be profitable space for something more experimental, and vice versa.

Throughout this discussion, I use historiographical narratives found throughout Covach's *What's That Sound?* and Szatmary's *Rockin' in Time* as my point of departure. In order to enhance their contributions, I supplement the authors' discussions with analytical commentary on the music of key artists from those periods. In support of my general thesis that experimental formal structures can fruitfully be linked to experimental genres, I connect each experimental movement with forms featuring non-recapitulatory endings, and conventional movements with forms conforming to the Verse/Chorus Paradigm.

The first wave of significant experiments in rock composition is ushered in by the release of two highly influential albums: The Beatles' *Sgt. Pepper's Lonely Hearts Club Band* (1967) and The Beach Boys' *Pet Sounds* (1966).⁴³ The Beach Boys are experimenting with a post-folk American west-coast scene, where the confluence of Bob Dylan and the hippie/beat culture of Haight-Ashbury has created a people-friendly, do-it-yourself vibe. On the other side of the Atlantic, The Beatles are capitalizing on a growing drug culture in the London underground, a scene that would also serve as the basis for a number of psychedelic bands like Pink Floyd.⁴⁴ These two

⁴³ See Covach 2009, 273.

⁴⁴ See Szatmary 2009, 147–168 for more on the inter-continental hippie scenes, stemming from the drug-infused United States west coast and the London underground.

experimental albums can be seen as progenitors of the first sustained experimental movement, known to most simply as “prog rock.”

Covach, Starr/Waterman, and Harrison all champion The Beach Boys’ “Good Vibrations” as a crowning formal achievement of this era.⁴⁵ But this highly expressive (though ultimately verse/chorus-dependent) song is a point of contention for me. All three publications devote graphic listening guides to the song’s form. “Good Vibrations” begins innocuously enough with two verses and two choruses, then swerves impetuously toward what amounts to a long, wandering bridge function, eventually finding its way back to a recapitulated chorus featuring the title lyric to end the song. Chapter Two of this dissertation advances a theory of rock endings that demonstrates why endings, much more so than beginnings or middles, are vital to understanding form. Put crudely, recapitulatory endings are an aesthetic safety net. No matter how far afield the song goes (“Good Vibrations” and Yes’s “Roundabout” are great examples), the recapitulatory chorus ending reinforces the Verse/Chorus Paradigm by promoting the idea that the chorus is the song’s selling point, its alpha and omega. Truly revolutionary formal designs dispense with such chorus dependency by taking the compositional risk of ending in uncertainty, rather than fulfilling a listener’s desire for recapitulatory certitude and closure.⁴⁶

⁴⁵ See Covach 2009, Starr/Waterman 2009, and Harrison 1997.

⁴⁶ Though it may be argued that, by ending in another key, “Good Vibrations” does not end with “closure” in any harmonic sense, though I suppose this depends on the listener—modern rock listeners are quite used to hearing off-tonic endings and open harmonic structures.

Late '60s experiments in form by The Beatles and Beach Boys formed the impetus for 1970s prog rock. Covach states: "Progressive rockers may have taken themselves and their music very seriously, but the style was a logical development of the increasingly loftier ambitions that rock had adopted over the course of the 1960s."⁴⁷ Prog bands including ELP (Emerson, Lake, and Palmer), Pink Floyd, King Crimson, Yes, Genesis, Jethro Tull, and a host of others made it big in the 1970s, even spawning a revolution in popular music consumption known as "Album Oriented Rock (AOR)." The forms utilized by these bands have often been identified as deriving from classical practice, including the formation of multipartite song suites.⁴⁸ Despite their propensity for division into large sectional blocks, the elongated formal designs utilized by prog rock songs are so varied and individuated that very few archetypes have emerged from the published literature. Instead, most analyses (especially those in the collection *Progressive Rock Reconsidered*) have focused on the intricate designs of individual songs.

The commercial success of these compositional experiments came to a screeching halt in the late seventies due to two significant conventional backlashes: punk and disco.⁴⁹ Both styles represent a return to simplicity in terms of formal

⁴⁷ Covach links this musical development with the concurrent and concomitant development of cover art (2009, 330).

⁴⁸ See Covach 1997, Headlam 1996, and Everett 2009.

⁴⁹ We could also add the "new wave" movement to this list, except that new wave's DIY aesthetic was so allied with punk that this would be largely redundant. The difference in the two styles is primarily in instrumentation: new wavers preferred keyboards to electric guitars.

structure, and both were largely successful because they appealed to a host of listeners who had grown impatient with the decadent pomp of the prog rockers. Covach writes:

By the late 1970s, rambling jam tracks and rock symphonies were no longer considered “radio friendly”; they were too long, and either did not leave enough time for commercials or prompted listeners to change the station. Musicians and record companies understood that there was an ideal length for a radio track (about 4 to 5 minutes), and bands that did not conform would simply not get their music played.⁵⁰

Though I disagree with his analysis of prog rock as “corporate” and “materialistic,” Szatmary adds:

Opposed to the excessive corporate rock of the mid-1970s, they [the NY punks] created a minimalistic, angry music that threatened their materialistic baby-boom elders.⁵¹ Richard Hell helped define the do-it-yourself New York rock, which centered around Patti Smith. As a member of Television, Hell created a minimalist, populist image that would characterize punk rock and contrast starkly with the glittery image of David Bowie.⁵²

Punk rock took short song lengths to an extreme. This phenomenon is most common in early punk bands like The Sex Pistols and The Ramones, who often wrote songs under two minutes long. Disco tracks sometimes broke the newly imposed four-to-five minute glass ceiling, but achieved their post-progressive reaction in a very different way. Robert Fink has suggested that the trance-like, repetitious grooves of disco can

⁵⁰ Covach 2009, 404.

⁵¹ Szatmary 2009, 235.

⁵² *Ibid.*, 237.

be aligned with contemporaneous minimalist music practices in the United States.⁵³

More importantly to the style's patrons, disco represented a profound reaction to progressive rock in attitude as much as it did in musical characteristics. Covach notes:

Another explanation perhaps reaches deeper to the heart of why disco was viewed as such a threat within the rock community. In many ways, disco stood in direct confrontation to the hippie aesthetic that had been developing in rock music since the mid 1960s. Disco music was not about listening to music but rather about dancing to it. It was not concerned with important spiritual or social issues; it was about fun.⁵⁴

After the backlashes spawned by punk, new wave, and disco, Covach claims that at least part of the hippie aesthetic returns with the advent of MTV and the creative videos it beckoned ("Take On Me" comes to mind). True as this may be, I will continue to focus on experimental practices in the music itself. Under such a reading, the '80s and early '90s actually contain two concurrent movements, one largely experimental, the other largely conventional. The increased availability of electronic instruments led to a "synth-pop" genre that emphasized catchy hooks. Not surprisingly, the best way to sell hooks (and thus, records) was by using conventional verse/chorus forms; the more repetitious the hook, the greater the chance a listener might remember it. At the same time, bands following in the footsteps of prog rockers, including the more listener-friendly "prog lite" that was adapted to survive AOR's

⁵³ See Fink 2005. At the same time, Fink aligns both practices with the increasing mechanization of the Western world.

⁵⁴ Covach 2009, 400.

extinction, dovetailed with a new genre known as “hair metal.”⁵⁵ A significant number of hair metal bands, especially Guns & Roses, began experimenting with a song form that became more prevalent after the turn of the century—Terminally-Climactic Form. Chapter Three of this dissertation demonstrates this form in their song “Patience” (1989), though the same basic end-oriented formal design appears in many of their songs, including the hits “Sweet Child O’ Mine” (1987) and “November Rain” (1992).

	Experimental (1970s and 1980s)	Conventional (1980s and 1990s)
United Kingdom	Progressive Rock (Genesis, King Crimson, Yes, Pink Floyd)	Punk/New Wave (The Clash, The Sex Pistols, Rockpile, Elvis Costello)
United States	Technical Metal/Thrash Metal (Dream Theater, Queensrÿche, Slayer, Anthrax)	Grunge/Alternative Rock (Nirvana, Pearl Jam, R.E.M., Dinosaur Jr.)

Figure 1.2: Analogous Experimental-Conventional Dialectics in the U.S. and U.K.

In the 1990s a conservative/conventional meta-genre under the ironic umbrella “alternative” rock came to be the dominant mainstream rock paradigm. Alternative rock can be read as yet another reactionary formation to the growing technical complexities of hair metal, prog lite, and the later, heavier offshoot known as “technical metal.”⁵⁶ Nowhere was this alternative rebellion more salient than in the

⁵⁵ Prog lite is a subgenre identified by Holm-Hudson (2005). It is most readily associated with commercially successful acts such as Styx and Journey.

⁵⁶ Early 1990s technically-proficient metal bands like Tool and Dream Theater were inspired by 1970s progressive groups like Rush and King Crimson. This prog revival begins to lay the groundwork for a post-millennial genre called neo-prog, or new prog.

Pacific Northwestern style known as grunge. While punk can be seen as the British youth's rebellious return to simplicity after prog rock, grunge can be read in an analogous fashion after hair/technical metal in the United States a generation later (as shown in Figure 1.2).⁵⁷ As the music of this generation continued to evolve into yet another blanketing meta-genre known as indie rock ("indie" is short for independent; this is, once again, ironic inasmuch as these bands were often on major label offshoots),⁵⁸ the experimental aesthetic was all but erased from the mainstream. Just as the death of AOR in the 1970s killed the experimental aesthetic, the unfathomable commercial success of Seattle-based grunge bands Nirvana, Pearl Jam, and Soundgarden left little room on the airwaves for experimentation.⁵⁹ As if he were standing among the ruins of the hippie aesthetic, Covach contributes all of his commentary on twenty-first-century rock to mainstream bands under the "indie-rock" umbrella. Thus one could be led to believe that experimentation died in the 1990s

⁵⁷ Covach addresses this point when he says: "As the punks and new wave bands had done in the late 1970s, the alternative movement bands (led however reluctantly by Nirvana) embraced a return-to-simplicity/return-to-authenticity aesthetic" (Covach 2009, 514). Given Nirvana lead singer Kurt Cobain's admitted infatuation with older styles (especially the early pop of The Beatles and the Delta Blues of Leadbelly), his return to simplicity could be interpreted as a return to the musical styles he experienced in his formative years as a songwriter.

⁵⁸ Starr and Waterman note: "By the 1980s and 1990s, however, the major record companies had fully internalized the hard lesson of rock 'n' roll and had come to view independent labels as the functional equivalent of baseball farm teams: small, specialized, close-to-the-ground operations perfectly situated to sniff out the next big thing" (Starr and Waterman 2009, 447). The "mini-major" studio is an analogous strategy in the film industry, whereby blockbuster companies build studios dedicated to creating "independent" films.

⁵⁹ Nirvana did pursue comparatively more experimental sounds and forms on their 1989 independent release *Bleach* than they did following the commercial success of *Nevermind*, released by Geffen Records in 1991.

under the axe of Kurt Cobain. Perhaps this is true of the early nineties, perhaps even the entire decade in the United States. But in 1997, one album on the other side of the Atlantic would soon rise like a phoenix from the ashes of prog rock to signal what might be deemed the “second coming” of prog in post-millennial experimental rock.

Radiohead’s *OK Computer* as “Prog’s Progeny”

OK Computer convinced a legion of guitar bands that willful experimentalism was a logical career path. “Songs like ‘Paranoid Android’ made it OK to write music differently, to be more experimental,” says Brandon Curtis of Secret Machines. “*OK Computer* was important because it reintroduced unconventional writing and song structures.”⁶⁰

It [*OK Computer*] also must have represented a sophisticated alternative to mainstream Britpop, which by then had lost much of its spark. The ‘prog rock for the nineties’ tag that some critics lumbered it with doesn’t really stand up, even if the three-part structure and ambition of “Paranoid Android” does have more than a whiff of Queen’s “Bohemian Rhapsody” about it.⁶¹

The above quotes are demonstrative of the substantial impact made by British experimental rock group Radiohead’s third full-length album *OK Computer* (1997).

Szatmary notes: “Within another two years [of *The Bends*], they [Radiohead] released their masterpiece, the eclectic, progressive pop of *OK Computer*, which topped the

⁶⁰ Matt Allen, “Prog’s Progeny,” which includes an interview with Brandon Curtis of Secret Machines (www.guardian.co.uk/music/2006/aug/11/popandrock).

⁶¹ BBC review of *OK Computer* (www.bbc.co.uk/music/reviews/wcp2).

British chart and neared the Top Twenty in the United States.”⁶² I assert that *OK Computer*, which was released exactly thirty years after *Sgt. Pepper’s Lonely Hearts Club Band*, reignites the same experimental spark as its progenitor. The Beatles fronted an experimental push in the late 1960s that would pave the way for the decade of experimental aesthetics in the UK known as prog rock. Contrary to what Covach implies in *What’s That Sound*, a similar current of experimentation exists in post-millennial rock. Thus, my Experimental Dialectic shows how, after several conventional backlashes, the experimental aesthetic returns forged anew near the end of the twentieth century. Before devoting the remainder of this chapter to explicating the various genres and subgenres that emerge in a post-millennial, post-*OK Computer* corpus, I will first briefly analyze some of the more experimental facets of *OK Computer*.

Example 1.1 transcribes the opening guitar riff from “Airbag,” the album’s opening track. The song as a whole proves to be centered on A Major (established definitively by the strummed root position chord that ends the intro), though the recurring riff constantly hints at the parallel minor. This level of mode-mixture is exceptional for modern pop/rock music, which often limits modal borrowing to the flat-sixth degree (*le*), typically harmonized as either an inflection of the subdominant chord (making it minor), or as the root of a lowered submediant chord.⁶³ Radiohead’s

⁶² Szatmary 2009, 327. Like the BBC quote, this selection from Szatmary is contextualized amidst a long discussion of the history of Brit pop.

⁶³ However, the conservative harmonic practice I describe in modern pop/rock music is not representative of the level of mode mixture present in older rock and blues music.

guitar intro represents a more integrated approach to mode mixture, whereby the diatonic and borrowed versions of scale-degrees $\hat{3}$ and $\hat{6}$ are treated more or less equally, as two available choices on a broader tonal palette. By opening the album with this guitar riff, Radiohead effectively announces straight away that they intend to achieve something experimental with this album.⁶⁴



Example 1.1: Mode-Mixed Intro of Radiohead, “Airbag” (1997, 0:01)

The next track, “Paranoid Android,” also contains significant harmonic experimentation within its quiet middle section, which is structured as a looped passacaglia. The song is dynamically and timbrally organized in three parts: the bookending loud sections, performed on traditional rock instruments, are separated by the quiet, vocal-centered chorale transcribed in Example 1.2. After beginning on a C minor triad, the bassline initially promises a chromatic stepwise bass descent. Instead,

For example, The Beatles’ “I’ll Be Back” (1964) displays an integrated approach to mode mixture featuring at least the same degree of fluidity as “Airbag.”

⁶⁴ Radiohead seems to have used this strategy on each of their album-opening tracks since *OK Computer*. The opening tracks of *Kid A* and *Amnesiac* (“Everything in its Right Place” and “Packt Like Sardines in a Crushd Tin Box,” respectively) both immediately showcase experimental timbres, while the opening tracks of *Hail to the Thief* and *In Rainbows* (“2+2=5” and “15 Step,” respectively) both highlight odd-cardinality meters in their opening seconds (a facet suggested by their titles as well).

after descending three semitones to A, a root-position secondary dominant of ii emerges, after which follows a short tonicization of D minor. Another stepwise bass descent begins from D, this time diatonic, reaching down a minor seventh to E where yet another secondary dominant is formed, now tonicizing A. Following the arrival of the A major triad, it may seem as if the E major–A major combination would be interpreted as V/V after establishing the D minor tonic.⁶⁵ However, as the passacaglia loops back to the beginning, Radiohead simply begins again on the C minor tonic from which they started. This motion from A major to C minor (a Neo-Riemannian *PRP*) obliterates functional harmony, even the revised form that we normally associate with rock harmonic function. Repeated presentations of this progression grow increasingly uncanny as vocalist Thom Yorke continues to develop a lead vocal melody over the passacaglia.

⁶⁵ Whether or not D minor is established as a bonafide modulation (or even as a viable tonicized area) is an open question. If so, V/V is a valid analysis for the E major chord; if not, E to A would have to be interpreted as perhaps V/V/ii. Since the latter reads somewhat like a *reductio ad absurdum*, I am tempted to believe the former.

Lead Vocal

Rain down, rain down come on rain down on me.

Harmonic Reduction

Cm G/B Gm/B^b A Dm A Dm C

V/ii

From a great height, from a great height, he - ig - ht, he - ig - ht.

B^b F/A Gm F E A

V/V

Example 1.2: Middle Chorale of Radiohead, “Paranoid Android” (1997, 4:04)

A more thorough analysis of the entire album reveals many more compositional experiments, not only in harmony, but also in meter and timbre.⁶⁶ Guy Capuzzo has written about what he calls “sectional centricity” in the album’s sixth track “Karma Police.”⁶⁷ By demonstrating how the song moves from A minor to C major to B minor in the verse, chorus, and ending, respectively, Capuzzo claims that the song exhibits a harmonic organization similar to so-called “directional tonality” in nineteenth-century song. I will show in Chapter Three that the harmonic organization of “Karma Police” engenders a specific type of end-directed form known as Terminally-Climactic Form. But before exploring these specific formal types in Chapters Three and Four, a

⁶⁶ Radiohead went on to pursue even more complex compositions on their two subsequent, primarily electro-acoustic albums: *Kid A* (2000) and *Amnesiac* (2001).

⁶⁷ See Capuzzo 2009. A further investigation of Capuzzo’s argument and Radiohead’s song appears in Chapter Three of this dissertation.

sampling of the experimental genres that emerge following Radiohead's breakthrough album will be helpful for purposes of stylistic orientation.

Four Post-Millennial Experimental Genres

Though it should be obvious that any discussion of genre in popular music must include critical discourse, I contend that there is also much to be gained from analyzing the relationship between purely musical elements and the genres those elements signify. After all, one of the most common ways of talking about genre includes the word "sounds," as in: "(band A) sounds like (band B)," or "(band A) sounds (genre X)." Critics, fans, and most listeners possess the aural skills necessary to dissect what contributes to a band's "sound," even if they lack musical training. Fabian Holt speaks to this connection between genre and identifiable musical characteristics:

Structuralist and semiotic approaches can be useful in exploring conventions on the level of discrete musical elements. For instance, certain twelve-bar chord schemes are strongly identified with the blues, certain vocal techniques with soul, certain distorted guitar sounds with rock, and steel guitars with country. Some of these elements appear in many genres and some are regular fixtures in only some of the music of the genre . . . but have nonetheless assumed the status of genre signifiers.⁶⁸

In order to identify these "discrete musical elements" and the genres they signify, the following section of this chapter can be read as a taxonomy of the primary genres that emerge in a post-*OK Computer* experimental corpus. What follows is a representative

⁶⁸ Holt 2007, 22–23.

(if incomplete) account of these post-millennial genres. Each genre is supplemented with a description of that genre's most common musical signifiers, as well as examples from the post-millennial repertoire. Since the rest of this dissertation emphasizes the ways that forms signify genres, here I focus more on the surface level musical elements that contribute to the "sound" of a certain band or genre. Of course, following my bottom-up conception of musical form, changes in these discrete musical elements also create formal markers within the piece. The distinction is perhaps one of scale. While surface level gestures contribute to an immediate signification with regard to genre and "sound," the changes in those surface level elements over time result in the song's form.

Neo-Prog/New Prog

Neo-prog represents one of the broadest and most malleable genres in post-millennial experimental rock. Its name implies a relationship with an earlier generation of music, progressive rock. The showpersonship and virtuosity of the 1970s is still very much operative in the twenty-first-century version of this genre. In his review of Coheed and Cambria's album *IV*, David Browne highlights some of the similarities and differences between these two generations of prog, while also singling out two of the genre's most commercially viable groups: The Mars Volta and Coheed and Cambria.

When The Mars Volta's knotty epic *Frances the Mute* debuted in the top 10 a few months ago, prog—a genre once the proud home of noodlehead legends like Yes and Rush, but long since relegated to the margins of pop—was officially back. The beast roared anew. But

something has changed since the golden era. Musically and lyrically, the new prog is not your father's prog, and the strongest evidence yet is the third album from Mars Volta peers Coheed and Cambria.⁶⁹

While Coheed and Cambria and The Mars Volta share a high level of instrumental showmanship, the formal designs of their respective musics are quite divergent.⁷⁰

Since releasing *Frances the Mute*, The Mars Volta has steadily evolved into a live improvisatory band in the tradition of Phish. By ignoring the popular market's demand for recorded singles, they have also cultivated a select and devoted fan base. Coheed and Cambria, by contrast, while including some long tracks on their records, have remained largely accessible to audiences with relatively conventional tastes.⁷¹ This rift between an inaccessible progressive style on one hand and a more accessible (and thus commercially successful) one on the other mirrors the rift between progressive rock and the prog lite identified by Holm-Hudson.⁷²

The Mars Volta's connection to earlier progressive styles is apparent not only from their extraordinary song lengths, but also from their extraordinarily long song titles. "Cygnus . . . Vismund Cygnus: A. Sarcophagi, B. Umbilical Syllables, C. Facilis

⁶⁹ David Browne, "Review of *IV*" (www.ew.com/ew/article/0,,1105430,00.html). See also *Spin*'s review of Coheed and Cambria, calling them "prog rock heroes" (www.spin.com/articles/slipknot-coheed-and-cambria-rock-nyc).

⁷⁰ I use the gendered noun "showmanship" here because both groups contain only male musicians, a demographic largely reflected in their fan bases as well.

⁷¹ At least part of this mainstream success is due to their song "Ten Speed" being featured in the video game *Rock Band*. Starr and Waterman note that album sales for artists included in either *Rock Band* or *Guitar Hero III* have steadily risen since 2007 by anywhere from 15 to 843(!) percent (Starr and Waterman 2009, 8).

⁷² Holm-Hudson 2005.

Descensus Averni, D. Con Safo,” the opening track from their album *Frances the Mute* (2005), has a track length of over 13 minutes. The band’s debt to progressive rock may also be witnessed in the four-part suite design suggested by the letters A–D in the title, which some may read as perhaps an abbreviation for an even longer title.

Though one can locate four thematically distinct sections, the track can also be heard as a large-scale compound ABA form with an intro and two distinct ending segments (intro–A–B–A–C–D). As in the improvisatory forms of jam bands like Phish, Disco Biscuits, and even many different styles of jazz, the B section in compound ABA form is composed of instrumental solos, framed on each side by a head-section (A, then A’).⁷³ In the album version of “Cygnus,” this jam lasts from 3:57 to 7:03, though a typical Volta jam section can last between ten and fifteen minutes in live shows.

The jam section is based on a dizzying three-measure ostinato, each measure of which features a different number of beats (transcribed as 9/16, 6/8, and 2/4 in Example 1.3). Besides their propensity for frenzied rhythms, a key feature of the band’s sound is the stratospheric alto to soprano vocal range of lead vocalist Cedric Bixler-Zavala. In tessitura and affect, it is easy to hear the direct influence of an earlier prog vocalist—Led Zeppelin’s Robert Plant. Lyrically, The Mars Volta organizes most

⁷³ Unlike most jazz A sections, which are often composed of a single unit (sometimes an embedded binary form or 32-bar song form), The Mars Volta’s A section is actually a complete verse-chorus form followed by bridge-like transition (A=verse–chorus–verse–chorus–bridge). Just as Covach has defined the compound AABA by embedding a verse and chorus within a single “A,” so The Mars Volta’s form could be described as a compound ABA, though at a level of recursion one step higher than Covach’s, since this “A” is not merely a verse/chorus pair, but an entire song form itself (2 verses, 2 choruses, and a bridge).

of their albums as “concept albums,” whereby each song on the album is unified by a lyrical theme (if not a linear storyline, a variant known as “narrative concept album”). This was a common practice of 1970s progressive songwriters, and its genesis is usually attributed to The Beatles’ *Sgt. Pepper’s Lonely Hearts Club Band*. The lyrical domain may be the one place where The Mars Volta’s experiments have actually been eclipsed by Coheed and Cambria, who structure their entire catalog this way, beyond the boundaries of individual albums (what I call a “narrative concept catalog”). Each of Coheed’s five studio albums advances the story of *The Amory Wars*, a graphic novel series written by lead singer Claudio Sanchez.⁷⁴

The musical score for the jam section groove of The Mars Volta's "Cygnus..." (2005, 4:20) is presented for Drums and Bass. The Drums part consists of a series of multi-measure rests, with asterisks above the notes indicating a specific rhythmic pattern. The Bass part features a melodic line with a long note in the first measure, followed by a series of eighth notes and a final note with a long note in the last measure. The time signature changes from 9/16 to 6/8 to 2/4.

Example 1.3: Jam Section Groove of The Mars Volta, “Cygnus...” (2005, 4:20)

Math Rock/Math Metal

Theo Cateforis finds the defining characteristic of the math-rock genre to be “the extensive use of asymmetrical or ‘odd’ time signatures and shifting mixed meters.”⁷⁵ The Mars Volta groove transcribed in Example 1.3, which loops an ostinato composed of odd-cardinality and changing groupings, also demonstrates this technique.

⁷⁴ See further analysis of the connection between Coheed and Cambria’s “The Crowing” and *The Amory Wars* at the end of Chapter Three.

⁷⁵ Cateforis 2002, 244.

Artists in supposedly distinct genres often exhibit shared compositional techniques, a fact demonstrating the significant amount of stylistic crossover between these genres (a point acknowledged by Holt in the quote beginning this section). Following the semiotic potential of these discrete musical elements acknowledged by Holt, it is possible that this mixed-meter groove in The Mars Volta's song may even signify the math-rock genre.⁷⁶

In his essay "How Alternative Turned Progressive: The Strange Case of Math Rock," Cateforis examines how certain bands, mostly active in the late '80s, but including modern acts like Don Caballero, infused the sound of alternative rock with the technical proficiency required of mixed meters.⁷⁷ Cateforis's analysis is intriguing in relation to my form/genre thesis, inasmuch as it highlights the disparity between a genre usually considered musically conventional (alternative), and the experimental technique of utilizing meters other than the 4/4, 3/4, or 6/8 commonly heard in rock.

While Cateforis's essay is mostly concerned with older, pre-millennial music (partially a byproduct of its 2002 publication date), Jon Pieslak's recent essay on Meshuggah addresses the much newer (and heavier) offshoot known as math metal.⁷⁸ Meshuggah garnered significant attention near the turn of the millennium through their technical mastery of polymeter. While polymeter has been common territory for

⁷⁶ The appearance of this math-rock-style groove may even signify crossover itself as a musical aesthetic. Lest this seem far-fetched, consider that recent country artists such as Shania Twain have strategically placed rock timbres and rhythms in their otherwise conventional country songs to signify crossover, positioning themselves in the lucrative market niche known as "crossover country."

⁷⁷ Cateforis 2002.

⁷⁸ Pieslak 2007.

classical composers since Elliott Carter, the technique had been limited to 3 against 2 or 3 against 4 in most pop/rock music.⁷⁹ “New Millennium Cyanide Christ,” from Meshuggah’s album *Chaosphere* (1998), features a cymbal and snare groove in 4/4, against which the guitars and even the drummer’s kick drum play a metrically-dissonant groove in 23/16.⁸⁰ Due to the complex ratios between 16 and 23 (the number of sixteenth notes in each meter), the groove only “recycles” after a very long period. In this case, since one of those numbers is prime (23), the two meters only share a downbeat every 368 sixteenth notes (the product of the numerators 23 and 16). After using this technique for nearly every song early in their career, Meshuggah began exploring metric organization techniques that act on a more local grouping level. This is exemplified best by their 21-minute EP composed of a single song: *I*. Pieslak claims that Meshuggah’s rhythmic techniques on *I* may be better analyzed using numbered pulse streams, rather than imposing meter signatures on those pulse streams. In order to model the mode of hearing he suggests, some of his transcriptions contain neither barlines nor meter signatures.⁸¹

⁷⁹ Some of progressive rock’s polymetric structures (King Crimson’s 1981 track “Discipline”) may be considered an exception to this observation about the typical usage of polymeter in rock music.

⁸⁰ See Pieslak 2007 for a more detailed description of this song, as well as many others using this type of grouping dissonance involving 4/4 against a meter of different numerator and/or denominator.

⁸¹ *Ibid.*, 226. While I applaud Pieslak’s willingness to experiment with novel transcription techniques for new music (rather than simply accept western traditions *de facto*), I find his transcription unconvincing. Pieslak proves that a 4/4 analysis does not fit well with the passage in question, but he does not rule out meters of other cardinalities. I find that combinations of 3/4 and 4/4 engender the anacrusic gestures of this groove quite well.

Though Pieslak acknowledges a kinship between Meshuggah and fellow math-metal band Dillinger Escape Plan, the latter takes a distinctly different approach to metric complexity. Rather than composing grooves with identifiable meter signatures, Dillinger Escape Plan's music often appears in frantic successions of two- and three-sixteenth pulses (I find Pieslak's meter-free method of transcription more applicable to their music than Meshuggah's). Unless made explicit through a repeated groove, higher-level metrical structure is often imperceptible; indeed, their music moves at such breakneck speeds that simply keeping time can be arduous.⁸²

Post-Rock/Post-Metal

Perhaps nowhere is the break with conventional rock more apparent than in post-rock. The genre's moniker indicates a style that has somehow moved "beyond" the norms of rock music. This is accomplished in a variety of ways, as summed up by

AllMusic Guide's article on the genre:

Post-rock rejected (or subverted) any elements it associated with rock tradition. It was far more concerned with pure sound and texture than melodic hooks or song structure; it was also usually instrumental, and if it did employ vocals, they were often incidental to the overall effect.⁸³

⁸² This phenomenon, where shifting two- and three-note groupings are more salient than any larger metrical structure, can also be heard in the opening of Stravinsky's "Dance of the Earth" and throughout Steve Reich's *Double Sextet*. Readers curious to hear this technique should listen to Dillinger Escape Plan's "Sugar Coated Sour," the form of which I analyze in Chapter Four.

⁸³ *Allmusic Guide*, "Post-Rock" (allmusic.com/cg/amg.dll?p=amg&sql=77:2682).

Insomuch as rock traditionally foregrounds the lead vocal, post-rock subverts the rock tradition by nearly always removing the vocals. If vocals are present, they are often mixed in the background as any other instrument. The Icelandic post-rock group Sigur Rós is instructive in this case. One way the band retains focus on their hypnotic music instead of the vocals is by supplanting the lyrics with gibberish syllables.⁸⁴

Post-rock bands also distance themselves from conventional rock through formal structures that subvert traditional verse/chorus design. Aaron Turner, frontman of the post-rock band Isis, explicitly shuns conventional form when writing songs: “the standard song format of verse–chorus–verse–chorus is something that has been done and redone, and it seems pointless to adhere to that structure when there are so many other avenues to explore.”⁸⁵

The actual origin of the term post-rock derives from a review by critic Simon Reynolds, in which he implicates post-rock as “using rock instrumentation for non-rock purposes, using guitars as facilitators of timbre and textures rather than riffs and power chords.”⁸⁶ It is worth questioning what exactly constitutes “rock purposes,” but the most obvious way that this music moves toward Reynolds’s “non-rock purposes” is by shaping repetitious, minimalistic instrumental tapestries, rather than singable verses or choruses. Although music-theoretical scholarship has neglected this emergent style,

⁸⁴ Lead vocalist Jón Þór Birgisson has called this contrived lexicon “Hopelandic.”

⁸⁵ See Pamela Porosky’s interview with Aaron Turner and Michael Gallagher of Isis (www.guitarplayer.com).

⁸⁶ Simon Reynolds, review of Bark Psychosis, *Hex* (www.mojo4music.com).

it is likely that techniques used to analyze minimal music and electronic dance music would apply to this similarly sparse genre.⁸⁷

While Reynolds highlights the use of guitar/bass/drums instrumentation as post-rock's link with tradition, some bands have even gone so far as to subvert that convention. Such a departure should leave us wondering why we include the word "rock" in descriptions of this music. While commercially successful post-rock bands such as Mogwai, Explosions in the Sky, and Russian Circles use *only* traditional rock instruments for their sonic creations, artists like The Books and Godspeed! You Black Emperor use such instruments sparingly, if at all. I will now briefly analyze the sonic and textural progression of Godspeed! You Black Emperor's "Static," from their double LP *Lift Your Skinny Fists to Heaven*. A similar analysis of The Books' "S is for Evrysing" appears in Chapter Four.

The structure of "Static" can be divided into five large sections based on timbral characteristics maintained and altered over the course of the track's 22'36" duration. See Figure 1.3 for a graphic representation of this form. The first four minutes of the piece are best described as *musique concrète*. No traditional instruments are present, only sparse noises and samples processed using stereo panning effects. From 4:31 to 7:25, a lyrical solo violin accompanies a lengthy sermon delivered by a Southern Baptist preacher (immediately recalling Steve Reich's *It's Gonna Rain*). While the texture is sparse, the aesthetic is by no means minimal. The

⁸⁷ Chapter Four features a textural analysis of Sleepy Eyes of Death's "Pierce the Air" as a means of documenting the piece's through-composed structure.

section revels in an austere beauty that is constantly metamorphosed as the violin and speech seem to improvise along with one another. At 7:25 a pizzicato cello enters with the piece's first steady pulse. The texture slowly thickens, anticipating a volume climax at 11:20, where the percussion enters for the first time and Godspeed! rocks out for about five minutes. This rock-out section, the closest thing to traditional instrumentation in the whole track, gradually accelerates to a frenzied double-time groove until 16:28, when all instruments drop out. The song ends as it begins, with concrete music, but this is merely a return in a textural sense; the piece is entirely through-composed.

Section	Clock Time	Sonic Description
A	0:01	Concrete music. Stereo panning effects applied to train noises; high chords generated from string samples and guitar feedback; static noises with Morse-code-like beeps
B	4:31	Lengthy speech sample from southern preacher accompanied by solo violin; clean guitars and string pads join sample
C	7:25	Solo pizzicato cello establishes first pulse of the piece; electric guitar feedback, then keyboard percussion joins pizzicato; 4/4 pulse constant
D	11:20	Drums enter for first time; traditional electric guitar and bass sounds join drums in a 4/4 groove that accelerates constantly over nearly five minutes
E	16:28–22:36	Drums and rest of rock instrumentation drop out; concrete music until end featuring scraped cymbals

Figure 1.3: Through-Composed Form of Godspeed! You Black Emperor, “Static” (2000)

While Godspeed! You Black Emperor may represent the extreme end of the post-rock spectrum in terms of song length (rivaled perhaps only by Mogwai), their formal logic is a hallmark of the genre. Rather than organizing songs using repeated

lyrical/melodic/harmonic patterns, the sole structural element in this genre is often texture. Here, the link with minimalism is obvious. Post-rock bands often groove on a single rhythmic/harmonic pattern for the entire track in order to foreground subtle changes in timbre and texture.⁸⁸

Art Rock

While the previous three genres listed here provide for the possibility of a metal-influenced offshoot, such influences are noticeably absent from art rock. For any given genre, a metal splinter cell may be readily identified through the use of aggressive timbres, including screaming and highly distorted guitars. However, instead of foregrounding elements that are malleable in timbre, art rock often foregrounds timbre itself. Radiohead, Björk, Mew, and Deerhoof, regardless of whether their singers are male or female, all feature comparatively high vocal tessituras, often projecting timbres somewhat annoying or grating to those not inured to such practices.⁸⁹ This upper vocal range forges a link with many progressive rock bands of the previous generation, most notably Geddy Lee of Rush and Robert Plant of Led

⁸⁸ This “One-Part Monothematic Form,” which is quite similar to each section in Reich’s *Music for 18 Musicians*, is explored further in Chapter Four.

⁸⁹ For justification of art rock as a distinct genre, I here present a quote from Mew’s own Facebook page: “Whilst their music may be classified as indie and on occasion (like on *And the Glass Handed Kites*) prog rock, they sometimes humorously refer to themselves as “pretentious art rock,” or in guitarist Bo’s words, “the world’s only indie stadium band (www.facebook.com/mewmusic?v=info). See also *Rolling Stone*’s article on Deerhoof entitled “Deerhoof Make Magical Art Rock” (www.rollingstone.com/artists/deerhoof/articles/story/9182191/deerhoof_make_magical_art_rock).

Zeppelin. Such surface-level posturing may even be emblematic of experimental practices, as if the artists were wearing the genre on their sleeve. As Szatmary notes, “high-pitched vocalists beckoned their listeners with an exaggerated art pop that included flourishes of classical accents.”⁹⁰

Another hallmark of art rock is its propensity for synthesizing timbral elements from distinct styles into a cohesive whole. Due in part to popular audiences’ favorable response to “fusion” styles, many of these artists have become commercially successful using these techniques. Alex Ross notes how the departure from guitar-based styles on Radiohead’s *Kid A* paid off in just this way:

The world fame of Radiohead is a case in point. Having established themselves with tuneful guitar rock in the nineties, the members of this band took the risk of doing as they liked, and they discovered things about the marketplace which others had missed. Last year, they released an album titled *Kid A*, an eerily comforting blend of rock riffs, jazz chords, classical textures, and electronic noise, which, in a demolition of conventional wisdom, went to No. 1 on the Billboard chart. *Amnesiac*, its like-minded successor, came out in June and is doing just as well. Radiohead’s selling point is not their identification with any one genre but their way of ranging over music as a whole.⁹¹

A similar case can be made for Björk’s equally lucrative departure from her early dance-pop style:

⁹⁰ Szatmary 2009, 359. The last part of Szatmary’s quote rings truer for a progressive aesthetic (such as Rush in the 1970s) than art rock. While progressive artists often foreground technical skill, art rock rarely demonstrates surface-level virtuosity, often presenting its experimental aesthetic by more conceptual means.

⁹¹ Alex Ross, “The Searchers: Radiohead’s Unquiet Revolution” ([web.archive.org/web/20080214053947/http://www.therestisnoise.com/2004/04/mahler_1.html](http://www.therestisnoise.com/2004/04/mahler_1.html)).

Iceland's most successful cultural export, Björk Guomundsdottir is an extraordinary original. Since 1993, her solo career has taken her ever deeper into uncharted territory, mixing electronic dance music, folk and contemporary classical in ways the old prog brigade never dreamt of.⁹²

Victoria Malawey's dissertation on Björk's all-vocal album *Medúlla* (2004) sheds light on the various ways the artist borrows timbres from many diverse traditions to shape both style and form. She forges a convincing theory that listeners may be drawn into Björk's musical arguments in a more intimate way through the allure of her experimental vocal timbres. Aside from her own voice experiments, Björk has sought out the aid of renowned guest performers from wildly different musical idioms, including an Inuit throat singer, African-American and Japanese beat boxers, and experimental rock vocalist Mike Patton. Using Roland Barthes's concept of the "grain of the voice," she explains what makes these voices so magical:

I understand the "grain" of Björk's voice to engage the timbre, dynamics, articulation, and general *quality* of her particular vocal delivery, which has the potential to connote meaning beyond the surface of the lyrics. Furthermore, Björk's voice implies the materiality of her singing body, and this is in part what is meant by the "grain" of her voice.⁹³

In addition, Malawey's extensive transcriptions and analyses demonstrate that, instead of fitting her content into pre-established formal molds (such as those provided by the

⁹² See Robert Sandall's article for *Entertainment Weekly* (entertainment.timesonline.co.uk/tol/arts_and_entertainment/music/article3586432.ece).

⁹³ Malawey 2007, 254.

Verse/Chorus Paradigm), Björk conceives of her songs in a bottom-up, emergent fashion.⁹⁴ *Medúlla* is a superb example of how art rock artists use unconventional timbres (especially vocal timbres) and divergent styles to create a sound that defies conventional norms, as well as conventional forms.

These four genres (neo-prog, math-rock/post-metal, post-rock/post-metal, art rock) reveal a broad range of techniques available to experimental rock artists in the new millennium. Apart from its deeper formal complexity, this music often sounds different on its very surface. While song structure is only salient in more panoramic listening contexts, elements like timbre, rhythm, meter, harmony, and melody are immediately discernible. Some scholarship, including Pieslak's article on Meshuggah (2007) and Doll's dissertation on rock harmony (2007), has already attempted to illuminate these surface-level gestures. However, comparatively little research has been done on analyzing timbre, as music theorists have only begun to discover tools suited to the task following the advent and subsequent popularity of spectral analysis. Furthermore, as demonstrated in the first half of this chapter, a disproportionate amount of work has been applied to experimental rock's native formal structures.

In closing this chapter, I hope to have set the stage for the next three chapters, each of which advances theories of specific song forms and how those forms relate to experimental genres. The first half of this chapter revealed how the Verse/Chorus Paradigm has lured analysts away from exploring more experimental songwriting

⁹⁴ The relevant passage reads: "many of the extraordinary moments and passages in the songs on *Medúlla* express one or more of the following temporal effects: (1) emergence, (2) textural decay, (3) textural reduction, (4) expansion, (5) contraction, (6) metric suspension, and (7) metric modulation" (Malawey 2007, 60).

techniques, whereas in the latter half of this chapter, I suggested that a broader view of genre and rock history might also play into this paradigm, as well as teach us how to escape it. With each of these broader scopes in mind (the history of rock genres and the way analysts have treated their distinct musical components), my aim in the following chapters is to present theories and examples that may be taken as representative of the larger cultural movement I have identified as post-millennial experimental rock.

CHAPTER TWO:
AN EXPERIMENTAL ROCK FORM THEORY

Though it is true that theory tends to lag behind composition, the two practices are certainly related. A composer creates a piece of music with certain formal aspects, which the analyst then attempts to discover. Once certain archetypes emerge from the study of such pieces (sonata form, for example), composers may then create pieces that attempt to emulate those archetypes. However, the correlation between composition and formal analysis is certainly not perfect. A composer might imagine the components of his or her creation grouped in a certain way, while listeners may understand the form of that same creation very differently. To appreciate this dynamic interaction, I prefer to think of form as a communicative exchange between composer and theorist, the former as sender, the latter as receiver. Composers create form; theorists attempt to understand it.

We should bear in mind that the same interactive model could apply to any number of musical phenomena, but when applied specifically to form it may serve to remind us that musical form should not be considered static, since creating and understanding form necessarily involve a set of musical actions. Musical actions, as they relate to form, may be considered a set of transformations (in pitch, rhythm, timbre, etc.) that move the composer/listener from one musical point to another.¹

¹ Rahn's conception of musical actions differs from Lewin's theory of transformations inasmuch as Lewinian transformations typically preserve the size of the object transformed. Rahn is interested in musical actions that are independent of an object's size; in fact, Rahn is far more interested in the temporal metamorphosis itself than the

Formal analysis can therefore be understood as a process of discovering how the transformations between various musical parameters help us relate the parts of a composition to one another, and to the piece as a whole. Actions of this sort are best exemplified by the phenomenological and transformational theories of David Lewin, who wrote:

We tend to imagine ourselves in the position of *observers* when we theorize about musical space; the space is “out there,” away from our dancing bodies or singing voices. . . . In contrast, the transformational attitude is much less Cartesian. Given locations *s* and *t* in our space, this attitude does not ask for some observed measure of extension between reified “points”; rather it asks: “If I am *at s* and wish to get to *t*, what characteristic gesture [transformation] should I perform in order to arrive there?”²

Lewin’s beautifully performative model is certainly an inspiring impetus for the study of form, but the practices of listening to, writing, and playing rock music guide my formal theory as well. As John Covach has noted, terminology used in rock form

supposed object: “The thingness of music might lie in the magic metamorphosis from one thing, the music up to now as represented mentally and realized acoustically and in the score by acts, to a new and larger thing which is quite different, *voilà, hey presto*” (Rahn 2007, 58–59). Rahn’s description of the “thingness” of music is remarkably close to what I am calling the “form” of music. However, my theory of form is not necessarily dependent on the relative size of musical elements: a piece’s ending may come about through a set of transformations acting on elements present throughout the piece, yet that ending may be too short to constitute a “larger thing” than what preceded it.

² Lewin 2007, 159. Lewin 1993 offers an intriguing approach to form based on pitch transformations similar to those found in *GMIT*. While his approach may work for a solo piano piece, a strictly pitch-transformational approach provides too limiting a scope for most rock music, which marks formal boundaries by a multitude of other means including timbre and lyrics.

theory is the same as that used by rock performers (even in real-time, e.g. “go to the bridge”), and thus offers not just a music-theoretical abstraction, but also a way inside performance practice.³ Following from the fact that an overwhelming majority of listeners in this genre are not classically trained (much less trained in music theory), discussing form as relationships between recognizable parts also offers a more universal discourse than transformational theory or pc set theory.⁴ Lastly (and not rock-specific), it is often the case that formal study creates a holistic lens through which to analyze all facets of a piece, since analyzing form necessarily entails examining transformations between the many disparate parameters that propel the piece from moment to moment. Through the process of conducting formal analysis, one must consider changes between all musical elements, including pitch (melody and harmony), rhythm and meter, timbre and texture, and lyrics.⁵ In fact, these are the very transformations that define the boundaries between sections.

One of the most delicate balances required of a musically sensitive analysis of form is the balance between inductive and deductive reasoning. Rather than posit one or the other as a mode of analysis, in actual practice the two perspectives are in constant flux, as Heinrich Schenker suggests in his discussion of sonata form:

³ See Covach 2005.

⁴ Conversely, both transformational theory and pc set theory have been used to communicate rock practices to music theory audiences. See especially Capuzzo 2004 and Derfler 2000.

⁵ Walter Everett identifies “the elemental materials—color, pitch, rhythm, form, lyrics, and engineering—that form the building blocks of rock music” in the preface to *The Foundations of Rock* (Everett 2009, vi).

To bring the general into harmony with the particular is one of the most difficult tasks of human understanding. To gain mastery of the world of phenomena with just a few concepts, understanding must be directed towards the general. At the same time the ultimate secrets of the particular must be penetrated if the general is to be comprehended correctly, since the particular is actually the bearer of the general. The task is difficult because, as it always turns out, the general easily seduces us into making things easy for ourselves and spares us any further trouble over the particular. By continually disregarding the particular, however, the understanding of the general is, so to speak, bereft of spirit: it does not develop towards the truth, but remains grounded in a set of rules.⁶

Juggling these two thought processes in the analysis of rock music requires recognition of sectional conventions (verse, chorus, bridge, and the like), but also a willingness, and indeed, a readiness, to hear unconventional structures when appropriate. Within the context of a Top-40 pop tune, the analyst must be ready to admit that a given span of music may not conform to the conventional archetypes of popular taste. Conversely, in positing that a certain experimental composition derives from unique formal processes, the analyst must be receptive to the idea that a given section may owe its basic architecture to a 32-bar song form.

As I discussed in Chapter One, the Verse/Chorus Paradigm, though well adapted to Top-40 music from the late '50s to early '90s, fails to model a large body of experimental rock. This chapter, along with most of the dissertation, is a reconsideration of that paradigm. The aim is not to discredit the obviously appropriate theories that have been suggested by those before me, but to recognize the experimental compositional practices of post-millennial rock musicians. My goal is to

⁶ Schenker 1996, 23.

impart an analytical theory that experiments with formal conventions in much the same way that post-millennial rock artists experiment with formal conventions in their compositions. With this in mind, the double entendre in this chapter's title becomes clear; I intend to impart a theory of rock form that is both experimental in approach and that adapts specifically to experimental formal structures.

Autonomous and Non-Autonomous Conventional Structures

Even the most experimental forms still employ conventional structures from time to time. How better to capture an audience's attention near the beginning of Crosby, Stills, and Nash's "Suite: Judy Blue Eyes" than with a memorable eight-bar chorus ("I am yours, you are mine"), a hook that baits the listener to await the true formal climax nearly six minutes later.⁷ In order to facilitate recognition of such conventions, it will be helpful to start with accepted sectional definitions from rock scholarship. Throughout the following discussion, I use the conventional sections defined by Walter Everett in *The Foundations of Rock* as a point of departure.⁸ My autonomous/non-autonomous classification system separates these conventional sections (as well as a few experimental ones) into two strata, providing a novel method of organizing those structures according to the role each plays within the piece as a whole.

⁷ "Suite: Judy Blue Eyes" is analyzed (along with its terminal climax) in Chapter Three.

⁸ Among extant rock form theories, Everett 2009 is perhaps the most suitable for describing these conventions, since they helped pave the "foundations" of conventional rock songwriting practices.

While certain memorable sections serve as autonomous “structural downbeats” within the form, others act as connective structures between those memorable moments.⁹ As ligaments link to bone, so non-autonomous sections link to autonomous ones. Notice that I am not using the familiar terms “dependent” and “independent” here, which are typically used to describe *thematic* relationships between sections. I will use those terms for such purposes later in this chapter, but here I am trying to impart something different. An autonomous section is not necessarily thematically independent—the repeated chorus is a great example of this. Following the bridge, we often arrive at a third chorus which, though very much thematically dependent (namely on the previous two choruses), represents a memorable moment that functions on a higher dramatic plane than the thematically independent bridge. Likewise, a song’s intro, while initially appearing thematically independent (since it is the first thing we hear), is soon forgotten once the more memorable verse melody arrives.

A similar sectional division may also be observed in sonata theory. With his highly influential conception of the *Gang* and *Satz*, A.B. Marx created a distinction between that which can be regarded as stable and that which can be regarded as mobile, as evidenced in the following quotation:

⁹ Structural downbeat was originally defined by Edward T. Cone (1968). While downbeat denotes something stable within a metrical context, a structural downbeat is an analogous structure at the level of the piece itself. It can be thought of as the next logical step in the progression from metric downbeat (beginning of a measure), to hypermetric downbeat (beginning of a phrase), through structural downbeat (beginning of a memorable section).

The *Gang* is the first fundamental form in music. . . . In the *Gang* itself, no satisfaction can be found; rather the very act of moving forth is a search for satisfaction. . . . A thought that is closed in and of itself is called a *Satz*. Its conclusion is its characteristic feature. . . . The *Satz* is the second fundamental form in music.¹⁰

I understand Marx as describing a two-level division among sections, only one level of which contains musical ideas complete enough to bring about “satisfaction.” The *Satz* is formally autonomous, while the *Gang* is formally non-autonomous. The *Gang* is not to be understood by itself, but rather in relation to the surrounding *Sätze*. Following Marx’s lead (and more immediately, that of Schoenberg and Ratz), William Caplin has recently identified “tight-knit” structures like the eight-measure period and sentence as the building blocks for memorable themes. Conversely, transitions connecting those themes are described using language like “loose-knit” and “passage work.”¹¹ Like Marx’s *Gang*, Caplinian “passage work” is not memorable in and of itself, and often appears either between memorable themes (transition between first and second themes in sonata form) or after a memorable theme (coda). Under this reading, both Marx and Caplin describe a division between two types of sections, rendering some as self-sufficient, autonomous entities and others as subservient, non-autonomous appendages. The non-autonomous entities are not to be understood by themselves, but, rather, by their relationship to the autonomous entities they precede, bridge, and follow. A similar division between memorable, autonomous sections and less memorable, non-autonomous sections accurately describes the dramatic shape of rock songs. Having

¹⁰ Marx 1997, 67–68.

¹¹ See Caplin 1998.

explained my autonomous and non-autonomous sectional categories, I will now provide examples of sections befitting each.

Autonomous Sections

My category of autonomous structures in rock songs includes only the verse and chorus, with a provisional extension granted for particularly memorable interverses, as defined by Chris Endrinal.¹² The fact that nearly every conventional song contains both a verse and a chorus surely contributes to the autonomous status of those two sections.¹³ Indeed, some songs simply alternate verses and choruses without using any non-autonomous sections at all. While the verse appears strophically, distinguished each time by a new set of lyrics, the chorus usually presents the same lyrics each time.¹⁴ Often, the chorus also contains the song's title lyric, which can increase the section's memorability, provided the listener knows the name of that song. In addition to distinct lyrical functions, the chorus often features thicker textures than the verse, and generally "ups the ante" in nearly every musical parameter, presenting

¹² See Endrinal 2008. Endrinal's argument hinges on his observation that some memorable sections (worthy of the same hierarchical plane as verse and chorus) occur in the structural position we normally call bridge—that is, usually after a second chorus and before a third verse or chorus. Instead of accepting the term bridge, which he argues connotes a level of subservience in "bridging" two more important sections, Endrinal prefers his term interverse for such sections.

¹³ See Everett 2009, 145. Older strophic and 12-bar blues forms are only made up of one repeated section, and therefore cannot contain both a verse and a chorus. However, they still usually contain two contrasting sections: the main section (often labeled as A) and a contrasting bridge (often labeled as B).

¹⁴ *Ibid.*, 145.

more memorable melodies, harmonies, and rhythms to increase its dramatic impact.¹⁵

The fact that modern listeners have come to expect that a song will contain both of these sections also contributes to their autonomous status; their arrival within the form fulfills listener expectation.

Endrinal's interverse exhibits musical qualities of both verse and chorus, and is simply defined lexically: a texted section ("verse") that occurs between ("inter") other sections. But memorable moments in music, like memorable moments in other temporally dependent art forms such as film or literature, are not typically placed adjacent to one another, but are instead mediated by something less memorable. By virtue of its location between the two primary autonomous structures (the verse and chorus), I choose to include the interverse within my discussion of non-autonomous sections, though I take Endrinal's point that such subservience often short-changes the dramatic impact of particularly memorable interverses. Occasionally, we encounter a verse and chorus occurring serially with no transition, but often a less memorable section, like a prechorus or short transition, separates the two. However, the thought of three memorable sections (for example: chorus–interverse–verse) occurring consecutively without mediation seems nearly illogical. The next few paragraphs will explore the various types of non-autonomous sections that appear between autonomous ones.

¹⁵ Ibid., 145.

Non-Autonomous Sections

Non-autonomous rock formal structures can be defined as those sections that connect and flow between the autonomous verse and chorus, much like transitions between themes in sonata form.¹⁶ Every song needs at least one autonomous section, though not every song contains a non-autonomous section. Put differently, the presence of an autonomous section is a necessary condition, yet not a sufficient one, for the presence of a non-autonomous section. To reinforce this point by way of counterexample, consider the possibility of a song composed only of non-autonomous connective sections (perhaps intro–prechorus–bridge–outro?), which, though logically possible, is nonsensical. All non-autonomous sections can be grouped according to their function within a song: as initiating, medial, or concluding.¹⁷

Instead of beginning abruptly with an unprepared verse or chorus, many songs are initiated by a short warm-up commonly called an intro, which often introduces the harmonic and metric underpinning for the subsequent verse. Between autonomous sections, we often encounter mediating transitions, which I will label generically as “transitions” unless they function as one of the two most common types—the prechorus and the bridge. The prechorus connects the verse to the chorus, almost

¹⁶ There exist certain similarities between sonata form transitions and non-autonomous rock structures, possibly including development-as-bridge, and recapitulated first theme-as-recapitulated chorus. Despite these similarities in basic architecture, I am reluctant to see these practices analogously since my theory is contextually rooted in rock’s compositional syntax.

¹⁷ “Initiating,” “medial,” and “concluding” are generalized formal functions used by William Caplin. These generalized functions take on specific names when applied to specific *Sätze*. For example, an eight-measure sentence begins with a two-measure “basic idea” (initiating), continues by “sequential repetition” then “fragmentation” (medial), and closes with a “cadential function” (concluding) (Caplin 1998, 97).

functioning as a miniature introduction to the latter.¹⁸ By building up tension before the chorus, the prechorus enables a heightened sense of arrival at this memorable release. This connecting section is so strongly linked to the chorus that the arrival of an otherwise satisfying chorus can be rendered anti-climactic by the omission of a convincing prechorus.¹⁹ The bridge *function* appears as a few different types: a texted section (which Endrinal calls an interverse), an instrumental section (which I will call an interlude), or an interlude featuring an instrumental soloist (commonly called a solo). By bridge function, I mean to generalize several distinct types of sections that nonetheless share the same role within the song—sections that appear roughly two-thirds of the way through the song, separating adjacent verses and/or choruses. Such a mode of thinking resembles Caplinian formal functions, though only archetypically.

Concluding segments, called outros or codas, follow the final appearance of an autonomous section (usually a chorus) to bring about closure to the song. Though Everett devotes an unusually large number of pages to the oft-ignored coda, claiming the introduction and coda to be “two of the most important sections of a song from a marketing standpoint, but least important from a structural view,” his book dispenses with this form, describing all endings as codas.²⁰ This omission forces Everett to

¹⁸ See Everett 2009, 146.

¹⁹ Such an anti-climactic chorus arrival can be heard in Paramore’s “Pressure” (2005). The chorus is quite memorable, but its dramatic impact is nullified by the nonchalant presentation directly following the last bar of the verse.

²⁰ See Everett 2009, 152. Indeed, the word “coda” enjoys dozens of entries in the index, yet the word “outro” is nowhere to be found.

classify *all* endings as codas, even autonomous choruses that merely fade out.²¹

However, this generalization does little to highlight the plethora of distinct types of ending sections regularly employed by rock composers. While codas in classical practice appear only after structural closure is attained (specifically, after a perfect authentic cadence, according to Hepokoski/Darcy), no such boundary exists between the end of the chorus and the beginning of the fade-out. For example, The Beach Boys' *Pet Sounds* is rife with studio fade-outs in concluding sections, and it would be impossible to locate a division between where that section ends and the fade-out begins. For now, suffice it to say that fade-out choruses cannot be codas, and that both outro and coda function as non-autonomous concluding sections, though I will demonstrate later, in my theory of endings, that they are distinct entities.

Aside from these proper sections, certain vernacular terms are used to describe the role played by these sections within the song as a whole. In other words, the following terms represent functions rather than sections. The rock "refrain" is a memorable lyrical fragment that often appears at the beginning of a verse, but may also appear at the beginning of a chorus.²² Instead of a section proper, it is actually part of a verse, though the reappearance of a particularly memorable refrain can make such definitions problematic. Such is the case with the "Hey Jude" title refrain, which begins a section that is, lyrically speaking, a verse, although the memorability of this

²¹ Everett writes: "Some songs end cold . . . but far more often, the final idea is repeated, usually coming to rest only in the imagination as the engineer fades out the sound prior to the conclusion of the recording" (Everett 2009, 152).

²² Ibid., 145. In strophic forms, refrains may also appear at the end of the verse, and, in doing so, stand in place of a chorus.

section suggests a function closer to chorus. “Riffs” (or “tattoos,” following Everett) are the memorable ostinati usually played by the lead guitar (but also by the keyboard in Europe’s “The Final Countdown”) that allow a listener to identify a particular song independent of any repeated vocal hook.²³ They are often presented in the song’s introduction, and may recur between subsequent verses, as in Rage Against the Machine’s “Freedom” (analyzed in Chapter Three). Exact meanings of the terms recapitulation, return, and reprise tend to vary from author to author, but are always used to denote the reappearance of some previously-heard section. This could mean a general reappearance of material, a reappearance of the opening material, or a reappearance of musical material borrowed from another track on the same album (as in the reappearance of “Breathe” at the end of “Time” in Pink Floyd’s *The Dark Side of the Moon*). Throughout this dissertation, I will use recapitulation, not to denote the reappearance of the opening material, or to evoke sonata form (as does Everett), but generally, to denote the reappearance of previously-heard material.

Referencing specific instances of these conventional sections and functions within a song should rely on some well-defined numbering (or lettering) system. While this is often treated intuitively with vernacular like “second chorus,” such systems are often imprecise enough to create confusion between different listeners. For example, the common technique of eliding the first chorus between the opening two verses causes discrepancy between those who call the second entity “verse 2,” and

²³ Everett curiously pairs the vocal “motto” with its instrumental cousin, the “tattoo,” though the only difference between a vocal motto and a refrain is the motto’s placement outside a verse or chorus.

those who, because no chorus appeared between, retain the label “verse 1.” Such inconsistencies can be avoided by constructing a set of rules and preferences, such as the one I have provided in Appendix B.²⁴ Throughout the formal analyses and transcriptions conducted in subsequent chapters, I follow this set of rules and preferences in order to avoid interpretive confusion, as well as to facilitate applicability for those who wish to perform similar analyses.²⁵ While the rules I provide are absolute, the preferences are subject to interpretation in specific musical applications. Having provided a novel way of organizing conventional sections, I will now proceed to defining sections that only appear in experimental rock, sections that, heretofore, have not been explored in the theoretical literature.

Unconventional Sections in Experimental Rock

My contention throughout this dissertation is that experimental rock artists distinguish their formal practices from more conservative Top-40 artists by utilizing different macro-structures. Complete song forms used by experimental artists resist classification in a verse/chorus-based system. Yet these differences can also be observed at the level of individual sections. Indeed, the formal idioms of this genre require me to define a *new* set of sections that compose experimental rock songs. The fact that these structures have not been previously defined is due in part to the lack of

²⁴ Similar systemizations can be found in Lerdahl and Jackendoff 1983 and London 2004.

²⁵ For example, Appendix B contains rules that govern when to label a section “verse 2” instead of “verse 1,” as well as preferences that help an analyst determine in which section group to place a transition.

formalization applied to this genre. What follows is a concise set of definitions for sections that will appear in subsequent analytical chapters. The descriptions provided here are rendered brief, with few rules or preferences, allowing me to elaborate on their specific function and meaning within actual musical examples in Chapters Three and Four.

Retrospective Prechorus (RPC)

An interesting formal twist occurs when a listener believes in real time that he or she has just heard a song's chorus twice (a repeated lyrical/melodic hook after verses one and two), yet later hears a different, more memorable section that reveals itself as the song's unequivocal chorus, complete with subsequent recapitulations. This first repeated structure, the "retrospective prechorus," can then be interpreted as a prechorus whose promised chorus was initially omitted, only appearing after the second verse and RPC. The Janus-faced RPC, which looks forward as a chorus yet backward as a prechorus, will thus appear differently in real-time than it does in retrospect, as shown by the diagram in Figure 2.1.²⁶

²⁶ In concluding his recent essay on formal functions, William Caplin notes the "potential for the retrospective reinterpretation of formal functions" as a yet-unexplored possibility (Caplin 2009, 40).

Temporal Perspective	Section				
	In Real-Time:	Verse 1	Chorus 1	Verse 2	Chorus 2
Retrospectively:	Verse 1	Prechorus (elided chorus)	Verse 2	Prechorus (elided chorus)	Chorus

Figure 2.1: Temporally-Dependent RPC Hearings

This structure, and the form it engenders, are used regularly by emo-influenced experimental rock groups such as Coheed and Cambria (“A Favor House Atlantic” and “The Suffering”), Armor For Sleep (“Chemicals” and “The Truth About Heaven”), and Funeral for a Friend (“Juneau” and “All the Rage”). Verses, RPCs, and choruses in songs like these can easily be distinguished by their unique modal rotations of a shared diatonic collection. See, for example, the form of Armor For Sleep’s “The Truth About Heaven,” provided in Figure 2.2. The verse is in E Dorian, the RPC rotates to G Lydian, and the highly anticipated relative D major is reserved for the arrival of the true chorus. If the song ended after this first chorus arrival, it would be a two-part Terminally-Climactic Form, a formal type described in Chapter Three.²⁷ But in returning to either the chorus, RPC, or both, this song structure is best classified as a highly expressive verse/chorus form with a recapitulatory ending, one that I might call “Multiple Chorus Form.”

²⁷ If this were the case, we would also interpret this final climactic structure not as a chorus, but as a terminal climax. Choruses, by definition, recapitulate, while terminal climaxes are singular, independent sections.

G A A^{#dim7}
I came down here to tell you it rains in hea - ven all_

Bm G A A^{#dim7}
_ day long (all_ day lo - ng.) I wa - nna find you so_ bad and let you know I'm mis
(backing, only at 2:41)

Bm
era - ble up here with - out_ you (mis - era - ble up her with - out_ you.
(backing)

Example 2.1: Retrospective Prechorus in Armor For Sleep, “The Truth About Heaven” (2005, 0:48)

D F^{#7} G
Don't be - lie - ve_ that it's be - tter when you leave_ eve - ry - thing be - hi -

D F^{#7} G Gm*
nd. Don't be - lie - ve_ that the wea - ther is per - fect the day that you die.

*=only at 2:31

Example 2.2: Chorus in Armor For Sleep, “The Truth About Heaven” (2005, 2:02)²⁸

²⁸ The [I–III[#]–IV–iv^b] progression is something of a rock hallmark, whereby the III[#] (an applied dominant of vi, with or without a seventh) resolves “deceptively” to IV via the voice-leading gesture [# $\hat{5}$ – $\hat{6}$]. As much as this move might be unexpected in classical music, it has been employed with such frequency in this genre that it has reached a level of expectancy few would describe as deceptive. In many progressions, the previously-interpreted # $\hat{5}$ then acts as $b\hat{6}$ to effect the Neo-Riemannian “P” on the subdominant. Such is the case here, and in Radiohead’s “Creep,” transposed to the key of G.

Section	Clock Time	Description
Intro	0:01	RPC progression=[G–A–A [#] dim7–Bm]
Transition	0:21	Solo guitar
Verse 1	0:26	Verse progression=[Em–G]
RPC	0:48	RPC progression with vocal hook
Verse 2	1:09	Verse progression with new lyrics
RPC	1:41	Recap RPC with same lyrics
Chorus	2:02	Chorus progression=[D–F [#] 7–G] x3
RPC	2:33	Recap RPC with backing vocals
Chorus	3:15–3:31	Only solo guitar and voice

Figure 2.2: Multiple-Chorus Form in Armor For Sleep, “The Truth About Heaven” (2005)

Independent Verse/Independent Chorus

Sections commonly serve the *function* of a verse or chorus within the context of an entirely through-composed song. This is especially prevalent in the music of metal-influenced artists, such as the Drowningman excerpt transcribed in Example 2.3. A section may set a repeated vocal hook utilizing thick textures, and in this way exhibits chorus-like characteristics without recourse to any repetition scheme.²⁹ Such structures can be considered “independent choruses,” and are analyzed in through-composed songs by Emery and Hopesfall in Chapter Four. By analogy, we can also locate “independent verses” that, while displaying verse-like characteristics (narrative textual

²⁹ One of the stronger aspects of Caplinian formal function is the freedom it allows the analyst to describe a section in terms of how it behaves, rather than what it is. Such methodologies are useful in sections like these, which behave in a certain way, yet do not fit the established definitions for verse or chorus. Caplin states this clearly in analyzing an unconventional section: “By fixing our attention on this theme’s constituent functions, we can be very precise on just how this particular sentence-like structure deviates from the norms of its type” (Caplin 2009, 31).

development, repeated chord progression, vocal-oriented, static metric character), never recapitulate, and thus cannot present multiple strophes.³⁰

The image shows two staves of musical notation in E Major, 4/4 time. The first staff is labeled 'E Major:' and shows a chord progression of I, vi, iii, IV. The lyrics are: 'Way up high_ loo-king down_ I can see__ al-most eve-ry-thing__'. The second staff shows the same melody with a different chord progression: I, vi, iii, IV. The lyrics are: 'Way up high_ loo-king down_ I can see__ al-most eve-ry-thing_'. The melody consists of quarter notes and half notes, with some notes beamed together.

Example 2.3: Independent Chorus in Drowningman, “Black Tie Knife Fight” (2000, 1:04)³¹

Section Group

Strictly speaking, a section group is not a section proper, but a congregation of sections displaying shared musical characteristics. They are only a useful analytical concept when a song exhibits distinct spans of a certain character that do not recapitulate. As such, they are not particularly suited to the Verse/Chorus Paradigm, where songs nearly always end with recapitulated sections (verse or chorus), or with non-autonomous extensions to those sections (coda or outro). Section groups are used to model songs that begin with several iterations of verse and chorus (verse/chorus *group*), then progress to one or more distinct section groups, never recapitulating either

³⁰ For discussion of this phenomenon (including an informative interview with Emery guitarist Matt Carter), see especially “In a Lose, Lose Situation,” analyzed in Chapter Four.

³¹ “Black Tie Knife Fight” is analyzed in detail in Chapter Four.

the verse or chorus.³² They represent a level of recursion one level above Covach’s compound AABA form.³³ Each letter in compound AABA form represents a verse/chorus pair. A verse/chorus section group encompasses all verses and choruses, which would sum to both *As* in compound AABA.

Section Group	Section	Clock Time
Verse/Chorus	Chorus	0:01
	Tattoo	0:17
	Verse 1	0:30
	Prechorus	0:54
	Chorus	1:09
	Tattoo’	1:41
	Interverse	1:54
	Prechorus	2:05
	Chorus	2:25
	Tattoo”	3:00
Climactic	Transition	3:16
	Terminal Climax	3:29
	Variation 1	4:16
	Climax- Dependent Outro	4:42
	Coda	5:21–5:37

Figure 2.3: Section Group Formal Design of Silverchair, “Across the Night” (2002)

³² Specific types of section groups, including “climactic group” and “bridge group,” are described in detail in Chapter Three, while Chapter Four explores the possibility of entirely through-composed section groups.

³³ This observation builds upon several points I made about Covach’s compound AABA form in the first part of Chapter One. The same level of recursion present in section groups, as defined here, is also approximated by Ken Stephenson’s compound-binary form and by Stephan-Robinson’s compound AB form. See my Chapter One for further discussion of Covach 2005, Stephenson 2002, and Stephan-Robinson 2009.

Terminal Climax

In conventional song forms, there are two basic ways to end a song: by recapitulating the autonomous verse or chorus, or by appending an outro or coda to the end of either autonomous section. By contrast, experimental rock artists regularly end songs with completely new material designed to be more memorable than anything previously presented: the “terminal climax.” This section, though given a brief introduction here, will not be fully explained until Chapter Three. Terminal climaxes often display chorus-like characteristics, though they are autonomous, thematically independent sections distinct from the actual chorus, appearing only once at the end of the song, *ex nihilo*. Usually terminal climaxes present a repeated lyrical/melodic hook over a section that is marked by dynamic, rhythmic, or harmonic change. These dramatic endings come about through any combination of amplitudinal climax, harmonic modulation, and changing meter. Chapter Three is devoted to exploring this unconventional section, as well as the experimental forms it engenders.

Before analyzing experimental formal structures in Chapters Three and Four, it is necessary to frame exactly what sets them apart from conventional formal practices, what makes them experimental. Both Terminally-Climactic Forms and through-composed forms (the topics of Chapters Three and Four, respectively) play with the established norms of the Verse/Chorus Paradigm by restructuring two pivotal formal elements: climaxes and endings. Since understanding these two elements will aid the reader in recognizing these modifications, I first present theories of climaxes and endings suitable for rock formal analysis.

Sectional Climax in Rock Music

Climaxes are ubiquitous among pieces of music in nearly every Western genre. It is then surprising that so few theorists have addressed this phenomenon with any rigor. Perhaps climaxes are so intuitive that they present no need for formalization, or perhaps the formal properties of climax are so elusive that they resist any attempt at concrete systemization. Kofi Agawu laments the lack of theoretical engagement on the topic:

Further survey of the literature shows that writers who concern themselves with notions of climax are not the “serious” theorists . . . but rather those who are addressing a non-specialist audience in such documents as program notes, books on music appreciation, or opera guides. But surely it is ironic that our most ordinary and substantive experience functions only minimally in attempts to unravel the structure of music, suggest ways of hearing, and, through these, deepen our emotional experience of the works we analyze.³⁴

Susan McClary finds this lacuna even more suspect, suggesting that analysts may even dismantle emotional climaxes with their theoretical tools, perhaps to avoid the less secure position of letting themselves be swept away in a maelstrom of sensual indulgence. According to McClary and Walser:

³⁴ Agawu 1984, 159–160.

It is the relative absence of such recognition [of climax] that makes so much rock musicology seem very alien. . . . What musicologists can contribute to the discussion of the politics of popular music is some way of explaining how the powerful moments in music are accomplished, without discrediting the impression that they are exciting, disturbing, or pleasurable.³⁵

Paradoxically, Scott Burnham implicates the climax with the *cause* for such restrictive listening practices. According to Burnham, Beethoven was the catalyst for the climax-driven listening practices of Western audiences, and has since caused us to hear music as goal-directed, leading us to forget “why we value the presence of any given music, and how we are present in the experience of that music.”³⁶

Of course, a great number of contributors address climax tangentially in a variety of analytical settings. In his analysis of Debussy’s *Feux d’artifice*, David Lewin identifies three different climaxes over the course of the four-minute prelude, each of which is informed by a different parameter.³⁷ In short, the musical climax, omnipresent as it may be, seems to have received a surprisingly disproportionate amount of attention as a theoretical concept. Aside from two dissertations in the 1950s, the only sustained studies of climax in Western art music are found in articles by Meyer, Agawu, and Patty, each of whom acknowledges this philosophical lacuna.³⁸ My theory of rock climaxes builds upon ideas put forth by Meyer, Agawu, and a recent

³⁵ McClary and Walser 1990, 289.

³⁶ Burnham 1995, 167.

³⁷ See Lewin 1993.

³⁸ Meyer 1980, Agawu 1984, Patty 2009.

dissertation on musical “hits.” I offer synopses of each of these sources before formulating a new theory of climax fully contextualized to rock music.

Meyer identifies two distinct *types* of climax: “syntactic” and “statistical.” While statistical climaxes are somewhat empirical and, as such, subject to measurement, syntactic climaxes involve purely aesthetic judgments.³⁹ Syntactic climaxes are usually the “elusive” phenomena that resist formalization. Meyer writes: “[they are] a change in which forms and processes shaped by the primary parameters of melody, rhythm, and harmony move from a state characterized by relative mobility, ambiguity, uniformity, or irregularity, to one of relative stability, coherent process, and clear form.” While it seems that Meyer is depicting a “release” here (for example, a recapitulation of the home key following a tumultuous development), he later contradicts this, stating: “the point of highest *tension* is the climax proper.”⁴⁰ Meyer’s formulation of climax depends on the presence of a straining, a buildup of some musical other needing to be released. I will refer to such ideology (commonly held among classical listeners) as the “tension and release” model, and will attempt to show that it is not entirely suitable for rock music.

Kofi Agawu borrows Meyer’s term “highpoint” for the title of his article on climax in the music of Robert Schumann. Agawu initially takes the etymology of “climax” as a point of departure. He claims that, while *Klimax* (meaning ladder, or staircase in Greek) was originally used to “denote an arrangement of figures in

³⁹ Meyer defines statistical climax as “a gradual increase in the intensity of the more physical attributes of sound, the arrival at a tensional ‘highpoint,’ followed by a usually rapid decline in activity” (Meyer 1980, 189).

⁴⁰ *Ibid.*, 194 (emphasis mine).

ascending order of intensity,” modern usage “refers only to the point of culmination.”⁴¹ Agawu favors Meyer’s more neutral term “highpoint” in order to avoid lexical confusion, and aims to address these structures in Schumann’s *Dichterliebe* rather than ponder such philosophical quandaries any further. As a visual supplement to his analyses, Agawu provides a number of sketches that illustrate the placement of highpoints within the dramatic structure of Schumann’s songs. These are reproduced in Figure 2.4. As a metric for measuring highpoints, Agawu also supplies a list of parameters that may inform such dramatic shapes, including “the highest pitch of a melodic line; the last stage of a sequence; a point of textural transformation; the last significant dissonance before the final close; and so on.”⁴² As can be surmised from this quote, as well as his title, Agawu is only interested in locating climax at a single point, another popular way of thinking I will henceforth refer to as the “moment” model.



Figure 2.4: Agawu’s Dramatic Shapes⁴³

⁴¹ Agawu 1984, 160.

⁴² *Ibid.*, 176.

⁴³ The uppermost point on each arc represents his “highpoint” (Agawu 1984, 162–166).

Odd Torleiv Furnes's dissertation is not specifically focused on climax as a theoretical concept, but rather, confronts the phenomenon en route to determining a possible psychological basis for what makes certain pop songs "hits." His criterion for such songs is "memorability," which measures a listener's ability to process a given musical stimulus as relatively marked. According to Furnes, if a given section conforms *too much* to a given "image schema" (or expected profile), it will not be memorable. Yet if it deviates too much from our assumptions about that section, it will also be forgettable. Thus, memorability is an intricate "balance between organization and distinctiveness."⁴⁴ Unlike Agawu and Meyer, who address climactic moments in Western art music, Furnes is only interested in entire sections of pop songs, specifically verses and choruses. Furnes's image schema theory only works when analyzing memorability at the section level, not the moment. He writes:

The act of reduction will be more dependent on a temporal segmentation into sections than on the single event . . . there will be a main focus on the dynamic structure that emerges between events and between sections, i.e. the relationship between successive components.⁴⁵

My theory of sectional climax provides an alternative to the classically-oriented "tension and release" and "moment" approaches, which identify climaxes at a certain points, rather than identifying entire sections as climactic.⁴⁶ I should make it clear that

⁴⁴ Furnes 2005, 96.

⁴⁵ *Ibid.*, 187.

⁴⁶ It is worth noting that while Patty (2009) attempts to disentangle the uneasy and assumed alliance between acceleration and tension (and its correlary: deceleration and

I am not professing a perfect correlation between, on one hand, classical music and moment climax, and on the other, rock music and sectional climax. In other words, one can easily find exceptions to this correlation—there are certainly classical pieces in which entire sections feel climactic, and there are definitely climactic moments in rock songs. It is in fact possible for climax to appear both ways in a single piece. For example, Scott Burnham locates a tension-filled moment in the “climax of shattering force” just before the new theme in the *Eroica* development, though later locates another climax that we may deem to be an entire section: “the moment of syntactical climax, the recapitulation.”⁴⁷

But if rock were dependent on moment climaxes (as opposed to sectional), where would that moment occur? Perhaps the most likely candidate might be the end of country and pop song bridges, where the slight accumulation of harmonic tension and volume prepares for a syntactic release in the third chorus. This is surely a poor excuse for musical climax. Consider Tim McGraw’s “Live Like You Were Dying,” where the violin rises and the drums pound for two seconds just before the third chorus, which arrives at 3:17 replete with the expected “truck-driver” (direct stepwise) modulation. But recall that Meyer’s theory of moment-based climax presented somewhat contradictory views in regard to tension and release. Is the climax the point of highest tension, or the moment in which that tension is released? In the Tim

relaxation) through his “pacing scenarios,” he takes for granted both “tension” and “moment” as necessary components of musical climax.

⁴⁷ See Burnham 1995, 9–13. If drawing analogies between classical form and rock/pop form, the recapitulation is certainly akin to the return of the third chorus just after the bridge, though compressed eight-bar bridges achieve a minuscule amount of contrast in comparison to the *Eroica* development.

McGraw song, the fleeting buildup from 3:14 to 3:16 is easily the moment of highest tension, and the release of that tension occurs at the recapitulated chorus at 3:17.⁴⁸

However, I do not believe that this exact *moment* at 3:17 is the climax. The real climax here is a syntactic, sectional event more akin to *Eroica*'s recapitulation than its development. The bridge section creates a sense of expectation with regard to the memorable chorus; the momentary buildup of tension just before the chorus's arrival and the modulation that begins that chorus are mere intensifications of that expectation.

Whether assessed in terms of autonomy or climactic structure, it should be clear that certain sections of pieces are more syntactically important than others. Jonathan Bernard invokes this idea when he takes Walter Everett to task for an analysis that highlights the coda over the bridge, arguing that the bridge is "more important formally than the coda."⁴⁹ After demonstrating the need for these distinct dramatic planes, we still need a way to measure the dramatic impact of one section relative to another, in other words, which sections are of highest memorability (following Furnes). While Agawu is understandably tentative in conflating climax and *Klimax*, opting instead for the neutral term "highpoint," I want to treat the original Greek *Klimax* as my model. In doing so, I construe sectional climax in rock songs as a ladder of increasing

⁴⁸ This particular chorus includes a rather trite attempt on the part of the songwriters to increase the section's dramatic import by direct stepwise transposition. Though Buchler (2008) provides many instances of this technique abetting lyrical drama in Frank Loesser's early songs, it has become so telegraphed in modern country and pop as to border on banal. In the next chapter, we will encounter more dramatic modulations within terminal climaxes, modulations that accompany previously-unheard material rather than recapitulations in a higher register.

⁴⁹ Bernard 2003, 380.

memorability. Consult Figure 2.5 for a visual representation of this climactic archetype.

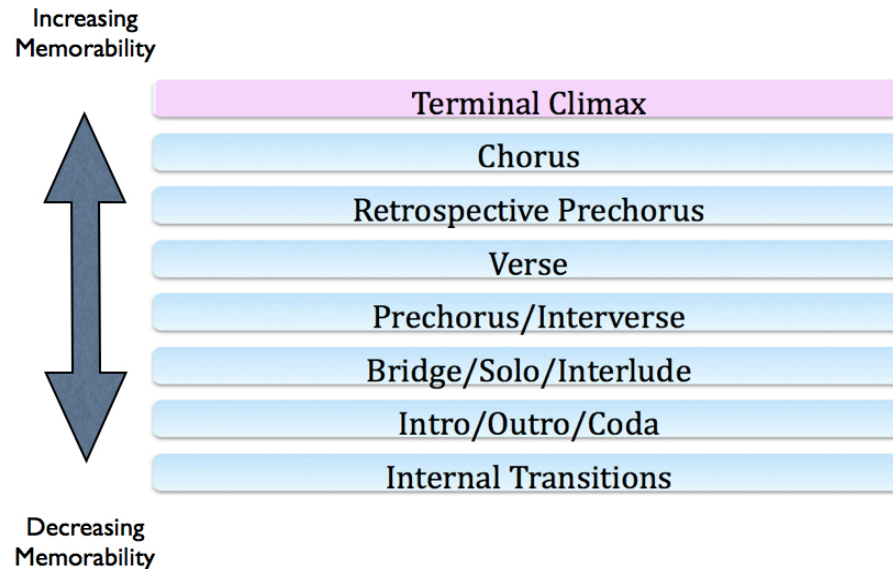


Figure 2.5: Archetypal Ladder Model For Sectional Climax

Most songs will not contain all of the sections featured on the ladder. In fact, some sections within each rung are almost mutually exclusive (for example, rarely would a song feature both a solo *and* an interlude as its bridge-functioning section). Some *rungs* may even be mutually exclusive. For example, many songs spend the entire bridge function on a texted internal section (interverse) before moving directly to the next chorus, leaving no space for a non-texted bridge section (solo or interlude), or vice versa. Additionally, conventional songs will not feature the unconventional terminal climax and retrospective prechorus sections defined earlier in this chapter.

Even when skipping rungs, the climactic ladder can still be understood as a process of increasing memorability (and thus, syntactic climax) from bottom to top.

The ladder's uppermost rungs are reserved for what I defined earlier as autonomous sections: sections that function as structural downbeats within the form. This includes the conventional sections verse and chorus, as well as the experimental sections terminal climax and retrospective prechorus. While a standard rock prechorus is non-autonomous, inasmuch as it builds expectation for the chorus, a retrospective prechorus earns its autonomy by first appearing as the chorus itself, only later unveiling its large-scale prechorus function. Retrospective prechoruses are also quite a bit longer than standard prechoruses, which often appear as two- or four-measure units.⁵⁰ An extra transition is often interpolated between the RPC and the arrival of the true chorus to build *additional* tension before that chorus.⁵¹ If the RPC existed on the non-autonomous level, the song would have no problem proceeding directly to the chorus. This suggests that the RPC functions more autonomously than a standard prechorus; the song seems to require a non-autonomous transition between the memorable RPC and chorus.

⁵⁰ Compare the standard two- to four-measure prechorus to the length of some retrospective prechoruses provided earlier in the chapter: "The Truth About Heaven" (8 measures, later doubled to 16); "A Favor House Atlantic" (10 measures); "The Suffering" (16 measures); "Chemicals" (20 measures). These are clearly more expansive than the standard two-to-four measure prechorus.

⁵¹ This is especially salient after the second RPC in Coheed and Cambria's "The Suffering" (2005), which features a three-measure cadential extension via repetition of the last lyric ("well I hope you're waiting") as the drums pound sixteenth notes building up to a chorus release. Lead vocalist Claudio Sanchez's lyrics text-paint the song's structure, as if the listener is not sure what he or she should be waiting for, a question immediately answered by the first appearance of the major-mode chorus.

Terminal climaxes, while briefly defined in this chapter, will not be treated with any detail until Chapter Three. Regarding the climactic ladder, suffice it to say they only occur when a song already has a repeated chorus. Thus, they can be defined as autonomous structures that engage in a hierarchical battle with the chorus, the *de facto* memorable highpoint of the song. They are, by definition, always more memorable than the chorus, tipping the song's dramatic structure toward the end. That is to say, the repeated chorus-as-climax convention intermittently presents listeners with the high point several times throughout the song, seesawing between repeated memorable highpoints and connective tissues.⁵² By contrast, terminal climaxes end-weight the song's dramatic structure by presenting the memorable high point only once, anchoring the song with a dramatic conclusion.

Though we are now equipped with a model to visualize the dramatic structure of rock songs, we still need a set of parameters to assess the various ways songs achieve climax.⁵³ I will continue to assert throughout this section that rock climaxes occur as sections rather than tension-laden moments. Even in the case of statistical climaxes, which can be measured empirically at definite peaks, those peaks either last for an entire section or recur throughout a section. Consult Figure 2.6 for a chart of the various musical parameters, both statistical and syntactical, that inform the ladder of sectional climax.

⁵² In the case of a repeated chorus, it makes more sense to speak of “a” high point rather than “the” high point. Alternatively, we can speak of a high “plateau” that is reached several times throughout the song.

⁵³ In this way my methodology resembles Agawu's, since I too provide a spatial representation of dramatic structure, as well as a set of parameters by which to measure relative position within that structure.

Syntactical Climax	Statistical Climax
Memorable Hook (especially featuring repeated lyrics)	Highest/Lowest Pitches (especially vocal)
Texture/Timbre Change (especially added vocal parts)	Loudest/Quietest Section
Meter Change (especially to half-time or double-time)	Fastest/Slowest Rhythm and/or Tempo
Key Change (especially relative major/minor)	

Figure 2.6: Parameters for Gauging Syntactical and Statistical Climaxes

Though the role of recapitulation within rock song form has received a significant amount of attention thus far, I have spent comparatively little time discussing the role of repetition. Recapitulation can be defined as the return to a previously heard section following the presentation of contrasting material, as in the second “A” of an [A–B–A] form. Repetition, on the other hand, requires no contrasting material. For example, given some thematic event “A,” all subsequent presentations of that material (A–A–A . . . , or perhaps A–A’–A” . . .) should be considered repetitions. While conventional rock songs rely on recapitulation to bring about closure, nearly all rock songs, conventional or experimental, utilize repetition within individual sections. Verses can be built from a looped chord progression, beat, or melody, sometimes from all three. Choruses often contain the same hook presented twice (with or without different lyrics) for exaggerated impact. Thus, it makes more sense to speak of sectional plateaus rather than individual peaks, since syntactic and statistical climax outliers will often repeat throughout a section. Consider the highest lead-vocal pitches among sections in Radiohead’s “Faust Arp,” which are graphed in

Figure 2.7. There are three distinct plateaus: the obsessively repeated F#3 in the verse, the looped B3 in the chorus, and the heroic ascent to F4 in each of the two phrases making up the terminal climax.⁵⁴ The ascent between boundary pitches is analogous to the ascent between those pitches’ respective sections on the climactic ladder (verse–chorus–terminal climax). These gradual statistical and syntactic ascents work in tandem to prepare the terminal climax as the song’s most memorable section.⁵⁵

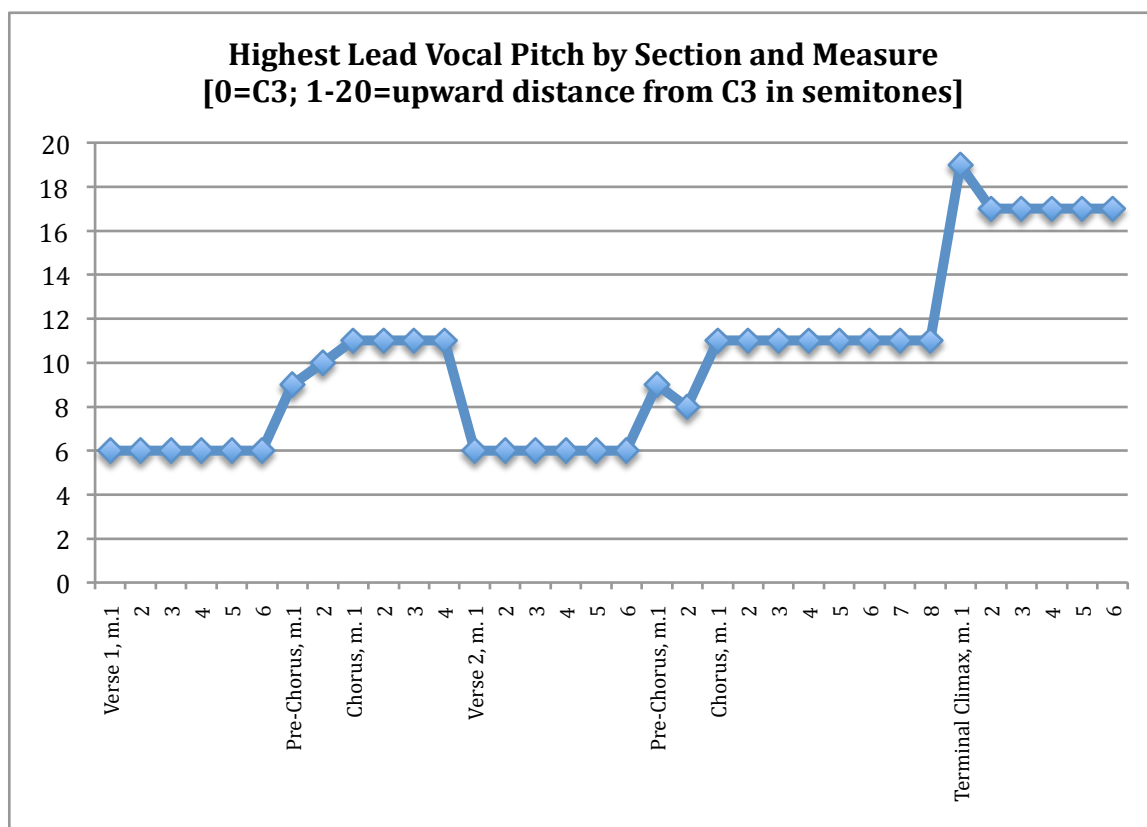


Figure 2.7: Lead Vocal Pitches in Radiohead, “Faust Arp” (2007)

⁵⁴ This brings to mind Maria Callas’s performance of Donizetti’s aria “Spargi d’amaro pianto,” in which she heroically ascends to Eb6 (!) at the final cadence.

⁵⁵ A complete analysis of “Faust Arp,” including its experimental harmonic palette and modulatory scheme, can be found at the end of Chapter Three.

As is well-known, compression is a volume-maximizing and -limiting studio effect applied liberally to nearly every pop/rock song, mainstream or otherwise. Though certainly most pronounced in pop-punk, Scandinavian metal, R&B, and other “polished” sounding genres, it is applied sparingly to even the most indie-sounding recordings. By squashing the dynamic range of the track, it reduces the volume spikes caused by screams, guitar feedback, and strong drum attacks closer to the average track level. Compression also elevates softer attacks such as closed hi-hats, clean guitar, and even vocalists missing the microphone’s “sweet spot” to a normative level. Because of this sonic manipulation, the average rock song’s dynamic profile is almost devoid of momentary peaks and valleys, and instead features changes between adjacent sections that range from nuanced to extreme. With compression, a single instrument cannot, under most circumstances, simply play softer or louder to achieve this desired contrast.⁵⁶ These changes in volume must be executed by thickening or reducing textures, and by adding or subtracting guitar parts and backing vocals. Using waveform analysis, Figure 2.8 shows the terraced volume plateaus corresponding to distinct sections in Deftones, “Root.”

⁵⁶ This tends to be truer of electric and electronic instruments; acoustic instruments such as voices and drum sets possess greater dynamic freedom.

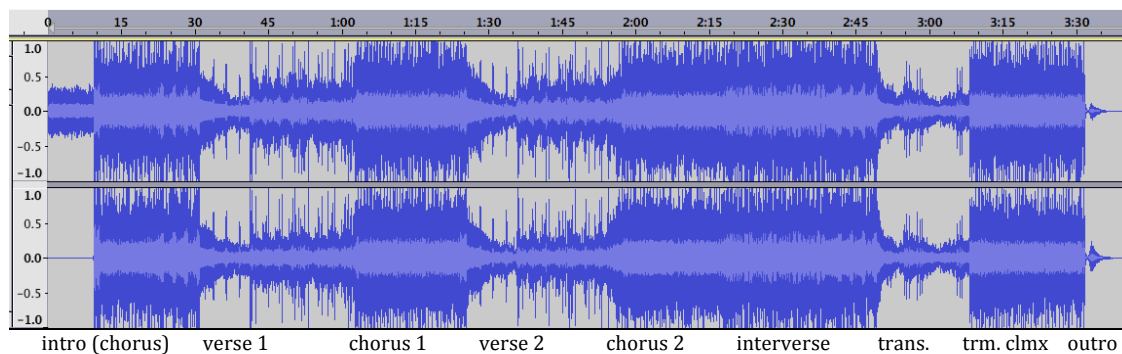


Figure 2.8: Waveform Analysis of Deftones, “Root” (1995)

Unlike statistical climaxes, syntactic climaxes in rock music are reached through purely compositional conventions (independent of studio production), so the link with classical practice is stronger. As I noted earlier in the chapter, Scott Burnham locates the statistical climax of the *Eroica* at the tyrannical crescendo in the development (a moment), while withholding the syntactic climax for the recapitulation (a section). Moment climaxes simply do not occur in rock songs like they do in classical pieces, partially due to the constraints on volume in studio recording, but also due to rock’s compositional focus on choruses. This focus results in choruses that function as sectional, syntactic climaxes.

Every criterion I have provided for syntactic climax tends to be uniform across an entire section. Memorable hooks are often repeated, taking up the entire eight- or sixteen-measure space of a chorus. Key changes begin and end, usually very abruptly, at sectional boundaries. Recall the relative minor modulation in the bridge of “Live Like You Were Dying,” which is followed by an abrupt “truck-driver” modulation to begin the last chorus. Tempo changes, especially to half-time, act as a rhythmic

signifier for epic endings in rock music, especially terminal climaxes. Just like harmonic modulations, tempo and meter modulations often hold for entire sections, or in the case of math-rock, form a repeated mixed-meter ostinato spanning an entire section.⁵⁷ Changes of texture, which inform and are informed by the studio demands on volume changes, tend to vary only between sections, since a new take is necessary every time a player needs to switch instruments, or when an extra guitar part needs to be added. Figure 2.9 shows the syntactical parameters consistent within entire sections of Coheed and Cambria's "The Crowing," noting how the transformations between these syntactical parameters actually demarcate sectional partitions.⁵⁸

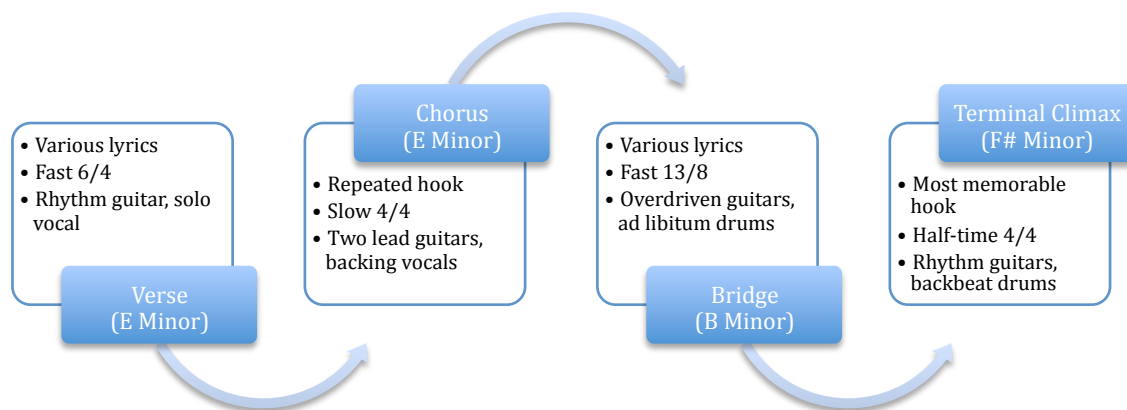


Figure 2.9: Sectional Transformations in Coheed and Cambria, "The Crowing" (2003)

Throughout my discussion of climax, I have avoided providing anything resembling a climax-finding algorithm. Instead, my theory of sectional climax posits *how* they appear in a given genre, providing a method of locating climax that departs

⁵⁷ For further analysis of groove patterns in math-rock, see Osborn 2010.

⁵⁸ "The Crowing" is analyzed more thoroughly in Chapter Three.

from the classical “tension and release” and “moment” models. While conventional rock music repeats a song’s dramatic highpoint (the chorus) several times in order to increase its marketability, artists utilizing Terminally-Climactic Form drastically modify a song’s dramatic structure by relocating the focal point to new material at the end.⁵⁹ In doing so, these experimental artists may even begin to bend the “climax-as-advertisement” convention toward an artistic practice in which climax functions as an *aesthetic* product rather than a commercial one.

But to appreciate better these novel endings in Chapter Three, a systematic account of how rock endings function will be necessary. My theory of endings builds upon the autonomous/non-autonomous distinction constructed earlier in this chapter, and follows from a question posed by my discussion of climax in conventional rock music: can a recapitulated structure truly express climax? If the same scene reappearing three or four times over the course of a novel seems like an absurd way to structure dramatic climax, why does the same chorus reappearing throughout a song seem like a more plausible solution for musical climax? In order to answer these questions, the following section considers not only the impact of autonomy/non-autonomy on sectional hierarchy, but also the impact of recapitulation/non-recapitulation on sectional climax.

⁵⁹ Though the interviews presented in Appendix D demonstrate that many experimental artists explicitly avoid verse/chorus-based forms, I am not suggesting that these artists knowingly replace verse/chorus-based forms with other “forms.” I would argue that Terminally-Climactic Form is not something an artist sets out to write, but instead comes about naturally through experimentation with non-recapitulatory endings.

A Genetic Model for Ending Function in Rock

As I stated earlier in this chapter, sections can serve one of three functions within a song: initiating, medial, or concluding. While some sections may serve different functions within different songs (for example, verses can function as initiating, mediating, or concluding), others are less flexible. An introduction cannot, by definition, end a song. A bridge can only serve mediating function. Sections that can and do end songs may be separated further into four categories based on whether they function as autonomous or non-autonomous, and whether they contain recapitulatory or non-recapitulatory material. Borrowing the Punnett square model from genetics allows us to visualize where sections lie in relation to these two dichotomous pairs.

	Recapitulatory (<i>R</i>)	Non-Recapitulatory (<i>r</i>)
Autonomous (<i>A</i>)	< <i>R, A</i> >=Recapitulatory and Autonomous (concluding chorus or concluding verse)	< <i>r, A</i> >=Non-Recapitulatory and Autonomous (terminal climax)
Non-Autonomous (<i>a</i>)	< <i>R, a</i> >=Recapitulatory and Non-Autonomous (outro)	< <i>r, a</i> >=Non-Recapitulatory and Non-Autonomous (coda)

Figure 2.10: Punnett Square of Concluding Section Types

Figure 2.10 uses capital italicized letters (*R, A*) to cast recapitulation and autonomy as dominant genes, and lowercase italicized letters (*r, a*) to cast the absence of those elements as recessive genes. When two recessive and two dominant genes are

plotted in a Punnett square, the four genotypes will always be of the form <dominant, dominant>, <dominant, recessive>, <recessive, dominant>, and <recessive, recessive>. In the following section I will provide examples of sections befitting each of these four categories, as well as musical examples illustrating the use of these ending sections in both conventional and experimental rock.

Recapitulatory Endings

Concluding choruses and verses represent the genotype <R, A>, and are perhaps the most common end-functioning sections. They are self-evidently recapitulatory, since verses and choruses recapitulate by definition, and are also autonomous inasmuch as they function not as appendages but as memorable sections themselves. The concluding chorus is especially common. Many times this last chorus comes to an end by means of a studio-engineered fade out (the original studio take would reveal that the performers played longer than heard on the recording). However, just as a song's first verse may begin without an introduction, a song may end directly following its final chorus iteration. Such is the case in Radiohead's "Knives Out." In fact, as seen in Example 2.4, Radiohead even cuts the final chorus short by one measure. All previous choruses play through the entire 14-measure phrase en route to a subsequent verse or interlude, but the terminating chorus abbreviates this structure by a full measure. Ending verses may function analogously. Many of Lisa Loeb's songs end with a final verse that sounds as if it may progress to the final chorus, but instead,

that verse simply stops.⁶⁰

The image shows a musical score for the chorus ending of Radiohead's "Knives Out". It consists of two staves of music in 4/4 time. The first staff has a treble clef and a key signature of one sharp (F#). The lyrics are: "Knives out, catch the mou - se_". Above the staff are four chords: Am, AM, Dm, and DM. The second staff has a bass clef and the same key signature. The lyrics are: "squash his head_ put him in_ the pot." Above the staff are three chords: Gm, Fadd⁶, and Em (lead guitar). The music ends with a fermata over the final chord, with the instruction "(ensemble fermata on E minor chord)".

Example 2.4: Chorus Ending in Radiohead, “Knives Out” (2001, 3:42)

For an example of a recapitulatory section that is non-autonomous we now turn to the outro—genotype $\langle R, a \rangle$. The outro may be the second most common way to end a song (next to the concluding chorus), and often flows directly out of a concluding chorus. The fact that it seems to lead out of this final section demonstrates the outro’s non-autonomous status. It is as if the outro serves as an extension to whatever section precedes it. Often the outro acts as a literal cadential extension. Once the lead vocalist reaches a perfect authentic cadence to end the chorus, the concluding outro merely reinforces that cadence. Outros are distinct from codas in that they are thematically dependent, and as such, utilize melodic/harmonic material from some other section, usually the chorus.⁶¹ Dependent outros that borrow

⁶⁰ These “cliffhanger verses” (as I like to call them) can be heard in Loeb’s songs “We Could Still Belong Together,” “Falling in Love,” and “Furious Rose.”

⁶¹ The chorus serving as a source for dependent material is also evident in instrumental solo sections, where the soloist improvises over the chorus’s chord progression. In older, one-part forms such as twelve-bar blues or strophic form, the instrumental solo

material from the verse are less common, partly because they tend to sound like concluding verses.

The ending of Jimmy Eat World's "A Table for Glasses" is an instructive example of a verse-dependent outro that distinguishes itself from a concluding verse. See Example 2.5. Though it recapitulates the lyrics and basic melodic shape of a clip from verse two, the verse bass progression (A–G–D) is replaced by upper and lower tonic pedal points, signifying concluding function. If it were an autonomous concluding verse, a recapitulated harmonic progression would set a new lyrical strophe. But in this verse-dependent outro, that formula is reversed: the second verse's lyrics are recapitulated over a divergent harmonic structure. One could also argue that the fragmentary nature of this section, which extracts only the second half of verse two's lyrics, also detracts from the section's autonomy. Coldplay's "In My Place" features this same basic design, though the verse chord progression is still audible throughout the verse-dependent outro. Whereas the guitars and piano played this progression in all previous verses, the progression is arranged for quiet string ensemble in the outro. Both examples only draw material from a fragment of the verse in their outro (rather than a whole strophe, which would make it closer to an end-functioning verse), and both signify endings by their pared-down, vocal-focused textures, featuring no guitars, basses, or drums.

section typically draws its harmonic and rhythmic underpinning from the single repeated section, typically referred to as a "chorus" in 12-bar blues, and a "verse" in strophic form. I place the section names in quotation marks here, because earlier usages of these terms differ from those used in post-1960s rock. See Stephenson 2002 for more on this terminological distinction.

Example 2.5: Verse-Dependent Outro in Jimmy Eat World, “A Table for Glasses”
(1999, 4:03)

Non-Recapitulatory Endings

Codas appear less frequently than outros in rock songs. Perhaps consequently, they also appear less frequently in literature about rock songs, and are often confused with, or omitted in favor of, the outro. While outros $\langle R, a \rangle$ are always thematically dependent, and thus recapitulatory, I define rock codas $\langle r, a \rangle$ as non-recapitulatory.⁶² My motivation for distinguishing codas from outros is to highlight the unique dramatic effects of the two sections, to highlight the difference between ending with something old and ending with something new.

In the late '60s and early '70s, rock artists regularly grafted thematically divergent sections onto the ostensible ends of songs. Everett has described this as the “false ending” phenomenon, which I interpret as a specific type of coda.⁶³ The Beatles’ “Cry, Baby, Cry” (1968) and Led Zeppelin’s “What Is and What Should

⁶² I acknowledge that some readers may take issue with which of these structures I define as recapitulatory (why can’t the coda be recapitulatory and the outro non-recapitulatory?). Regardless of what we call these formal structures, it is important to recognize their distinct musical effects.

⁶³ Everett 2009, 154.

Never Be” (1969) are both well-known examples of this technique. In the Beatles example, the song sounds as if it should end directly following the last title lyric at 2:34, after which it actually fades out. But after a complete fade out, the track is seemingly resurrected by the unrelated coda: “can you take me back where I came from.” We can interpret the fade out of the memorable chorus as the song’s structural closure, and the coda as a non-autonomous, non-recapitulatory appendage to that memorable section.⁶⁴

Apart from their recapitulatory/non-recapitulatory difference, the relative length of coda and outro sections is a distinguishing feature. And here I am comparing coda and outro using two different measurements: the length of an average coda relative to that of an average outro, and the length of each concluding section relative to the song as a whole. The average coda is not only longer than the average outro, but also spans a greater proportion of the track than the outro. Green Day’s “Chump” begins rather unremarkably, following the conventional form [verse 1–chorus 1–verse 2–chorus 2] for the first 1’28.” After this stock verse/chorus arrangement, the track ends with an unrelated instrumental coda that increases in rhythmic activity from 1:29 to 2:58, effectively splitting the track in half. Copeland’s “California” exhibits similar architecture, withholding the two-minute instrumental coda until the conclusion of two verse/chorus pairs (lasting 3’40”). In all cases, the unrelated coda material is obviously non-recapitulatory, distinguishing it from a dependent outro. Codas are also easily

⁶⁴ In late ’60s albums by The Beatles and The Beach Boys, we might also consider these false endings as transitions between songs, since these recordings were conceived of as cohesive albums.

distinguishable from terminal climaxes: as non-autonomous sections, they act as appendages to the memorable section they follow. This appendant function is easily gleaned from the Italian noun *coda* (tail). The listener may begin to lose interest in these long, unmemorable endings, perhaps even to the point of wanting to change tracks.

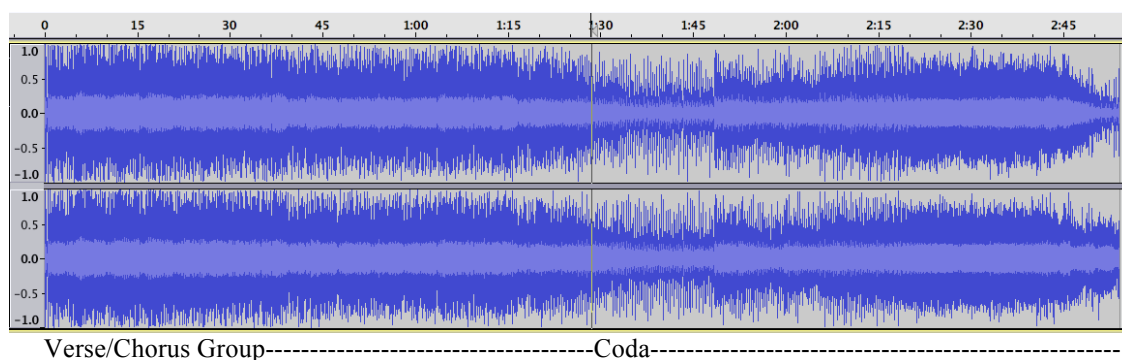


Figure 2.11: Coda in Green Day, “Chump” (1993)

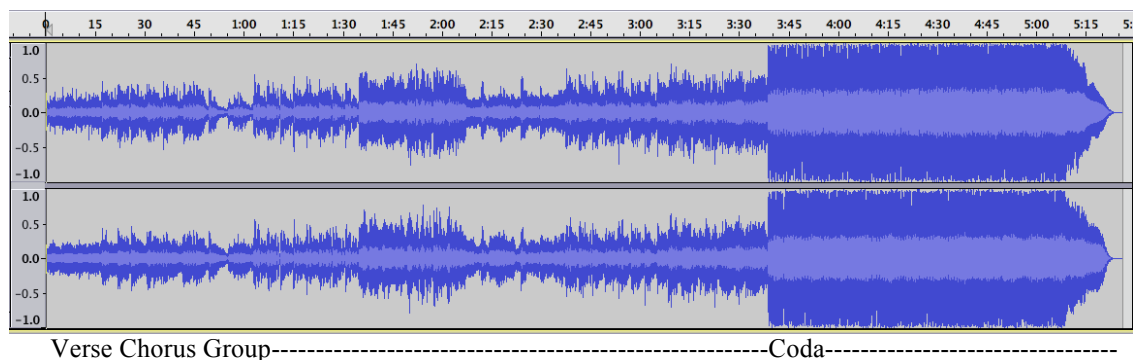


Figure 2.12: Coda in Copeland, “California” (2002)

While the concluding genotypes $\langle R, A \rangle$, $\langle R, a \rangle$, and $\langle r, a \rangle$ all yielded familiar, conventional structures, the genotype $\langle r, A \rangle$ requires me to define a new formal type:

the Expressively-Partitioned Independent Conclusion (EPIC). The acronym EPIC is simply an eloquent descriptor of the $\langle r, A \rangle$ genotype. “Expressively-Partitioned” conveys the section’s autonomous nature (distinguishing it from a coda); “Independent” defines the section as non-recapitulatory (distinguishing it from a concluding chorus or verse);⁶⁵ and “Conclusion” clarifies that I am discussing a concluding-functioning section, rather than one that is expressively-partitioned and independent in the middle of a song, such as the first dramatic arrival of a chorus. Additionally, the acronym EPIC conveys the apotheosis one experiences upon hearing a memorable moment whose arrival has been withheld the entire song. EPIC endings are strikingly similar to Burnham’s description of the ending of the *Eroica*’s first movement: “both goal and closure, telos and epilogue.”⁶⁶

Terminal climaxes, which have been defined briefly in this chapter, are the consummate EPIC-functioning sections. Aside from the obvious difference between a terminal climax and a Beethovenian coda (Beethoven’s coda is very much thematically dependent),⁶⁷ the *Eroica* ending evokes many of the same feelings as the EPIC terminal climax. First, EPIC endings experimentally modify a Verse/Chorus Paradigm that has reached a similar level of expectancy with modern rock audiences as sonata form did with nineteenth-century classical patrons. Second, terminal climaxes seem to compensate for unfulfilled expectations only with their EPIC endings. As we shall see

⁶⁵ Recall that I am reserving my use of the terms dependent and independent solely for discussing thematic content while using autonomous and non-autonomous to describe a division among section types.

⁶⁶ Burnham 1995, 18.

⁶⁷ Namely, the coda is dependent upon thematic material from the exposition.

in Chapter Three, the most common expectation left unfulfilled by the verse and chorus in a Terminally-Climactic Form is a sing-along moment, an expectation that is instead fulfilled within the highly-singable terminal climax. In Beethoven's *Eroica* these expected paradigms include a second theme, a recapitulation of that second theme, and an actual "thematic" setting of the first theme.⁶⁸ The second theme appears only in the development, while both the recapitulation of the second theme and a thematic presentation of the first are reserved for the expansive coda. Third, like the claims about Beethovenian codas made by Rosen and Kerman, EPIC endings are where experimental rock composers finally discharge the expansive thematic material they could not release within the confines of the Verse/Chorus Paradigm.⁶⁹ Terminal climaxes are far too expansive to fit within a chorus. Furthermore, they are so climactic that no musical logic would permit anything to occur after them; thus they must be withheld until the end.⁷⁰

Understanding this fundamental distinction between EPIC endings and conventional rock endings is paramount to the rest of this dissertation. All musical examples and formal types defined in Chapters Three and Four feature EPIC endings. In the following analytical chapters my principal contribution is exploring the somewhat rare (and unexplained before now) case of songs that end with autonomous,

⁶⁸ Burnham makes this point clearly as he states, "what an appropriate way to signal apotheosis: the unstable and volatile theme of the opening bars is now heard as a stable, indeed, potentially unending iteration" (Burnham 1995, 19).

⁶⁹ Rosen's and Kerman's contributions are discussed in Burnham 1995, 20.

⁷⁰ For example, I cannot imagine presenting a terminal climax mid-song, then returning to a verse or chorus. The resulting effect would be akin to watching someone strike a match after observing a grand fireworks display.

non-recapitulatory material. While Chapter Three address EPIC endings within verse/chorus-based song structures, the through-composed pieces addressed in Chapter Four utilize autonomous, non-recapitulatory structures not only in their endings but as formal building blocks for the piece as a whole.

CHAPTER THREE:
TERMINALLY-CLIMACTIC FORMS

Rock songs structured in otherwise conventional ways (observing the Verse/Chorus Paradigm) often feature memorable endings, culminating in EPIC sections that are both autonomous and non-recapitulatory.¹ While some post-millennial artists have experimented with various ways to structure such climaxes using through-composed forms (the topic of Chapter Four), the current chapter explores a single EPIC formal type in detail, one that I call “Terminally-Climactic Form.”² Modern rock songwriting makes extensive use of two-part, three-part, and extended Terminally-Climactic archetypes, though the antecedents for such structures can be found in rock music since the late 1960s. Through analytical overviews of several songs, the current chapter aims to define and demonstrate Terminally-Climactic Forms in post-millennial songwriting practice, addressing the many independent parameters that shape overall form.³

We will recall from Chapter Two that Kofi Agawu describes Schumann’s typical song form as following the dramatic curve of “ascent to a highpoint followed

¹ I defined the EPIC (Expressively-Partitioned Independent Conclusion) near the end of Chapter Two. EPIC endings are autonomous, non-recapitulatory sections appearing at the end of a song.

² As a particular formal type that represents entire pieces (as opposed to sections of pieces), Terminally-Climactic Form acts like one of A.B. Marx’s *Kunstformen* inasmuch as “artistic forms are the forms of complete art works.” Marx’s commentary is also suggestive of Terminally-Climactic Form’s “compound” section groups: “Let it first be said that this designation [artistic forms] is not strictly suitable, and that the expression ‘compound forms’ would be more systematic” (Marx 1997, 71).

³ As I stated in Chapter One, by post-millennial, I am conceiving of a “long twenty-first century” that includes precursors in the 1990s.

by a descent,” but also notes that “transformations of this basic shape are possible . . . including the creation of a series of miniature curves leading to one supreme highpoint.”⁴ While Agawu goes to great lengths to separate his idea of “highpoints” from the original Greek *Klimax* (“ladder” or “staircase”), I used this ladder metaphor to model the dramatic structure of rock songs in Chapter Two.

In his primer on rock song form, John Covach writes: “In a verse-chorus form, the focus of the song is squarely on the chorus. . . . the verse serves primarily to prepare the return of the chorus.”⁵ By coupling this axiom of the Verse/Chorus Paradigm with the original Greek *Klimax*, one might place the chorus atop the “high point” of a song’s climactic ladder,⁶ just above the verse, which would sit on the rung directly below.⁷ While this could faithfully model any number of Top-40 rock songs,

⁴ Agawu 1984, 175–176. Agawu lists a few parameters that may be used to measure dramatic structure, including register, dissonance, and stages of sequential or textural transformation. See my Chapter Two for a thorough discussion of parameters used to delineate sections in rock songs, which are the same parameters for measuring relative highpoints in those sections.

Austin T. Patty suggests several precedents for Agawu’s “series of curves” approach to musical structure, including early twentieth-century theorists August Halm, Ernst Kurth, Hans Mersmann, Arnold Schering, and Kurt Westphal. Most notable is perhaps the *Kraftwelle* theory of Ernst Kurth, in which local events (cf. Agawu’s “miniature curves”) lead to a *Gipfelwelle* (or “apex wave,” cf. Agawu’s “supreme highpoint”), which discharges the energy accumulated by all preceding *Kraftwellen* (Patty 2009, 328).

⁵ Covach 2005, 71.

⁶ To separate Agawu’s exact definition of “highpoint” from my continued use of the ladder metaphor, I will now simply use the vernacular form: high point.

⁷ Revisiting Furnes’s concept of memorability discussed in Chapter Two, recall that his entire dissertation is concerned only with verses and choruses, the two top points on my ladder. For the purpose of my dissertation, memorability serves as a marker for dramatic structure, meaning that sections with higher levels of memorability rank higher on the climactic ladder.

Terminally-Climactic Forms necessitate a section even more memorable than the chorus adorning the highest rung—the terminal climax. By this, I simply mean a memorable, climactic section that occurs at the end of a song. Terminally-Climactic Form can be broadly defined as the specific EPIC-functioning formal type that upsets an expected balance between a repeated chorus and the song’s ending. That is to say, in verse/chorus form, one expects the repeated chorus to function as the song’s selling point, but in Terminally-Climactic Forms, a single autonomous, non-recapitulatory section at the end functions as the song’s most memorable moment. Since Terminally-Climactic Forms pit their end-functioning climax against a repeated chorus, they are defined in terms of tension between the expected high point (repeated chorus) and the terminal climax, the song’s actual high point.⁸ See Figure 3.1 for a reproduction of the ladder model I proposed in Chapter Two, noting especially the two experimental sections—terminal climax and retrospective prechorus—that rank among verse and chorus as a song’s only autonomous structures.⁹

⁸ The end of Chapter Four explores the possibility of terminal climaxes occurring in non-verse/chorus forms. Throughout the text, I capitalize Terminally-Climactic Form, while leaving the general section name in lowercase.

⁹ Chapter Two provides further justification for a division of sections into two categories according to the role they play within the dramatic structure of the song as a whole: autonomous and non-autonomous.

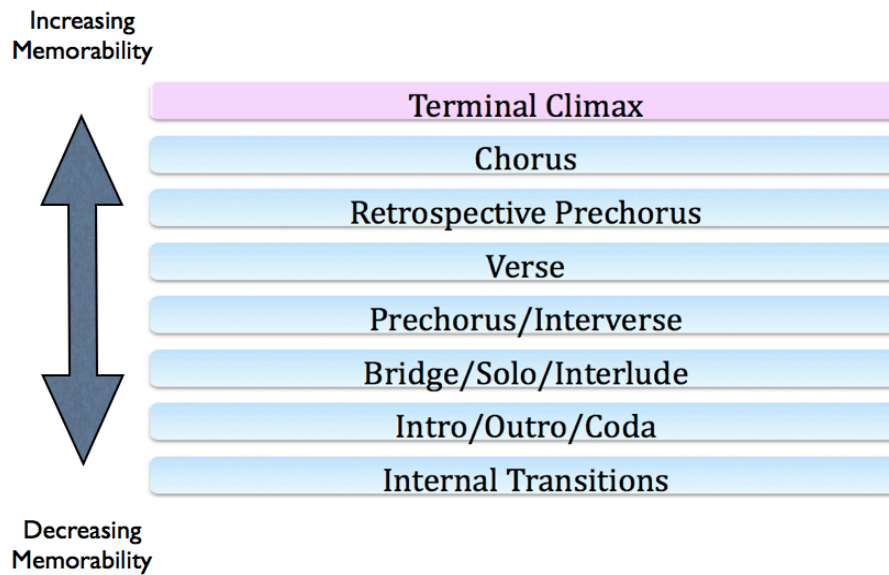


Figure 3.1: Ladder Model of Sectional Memorability (reproduced from Chapter Two)

Pre-1990 Antecedents for Terminally-Climactic Forms

In his chapter on form, Ken Stephenson speculates on two “new trends” he believes to be outside rock’s dominant formal paradigms.¹⁰ Stephenson curiously identifies the first trend as “Verse–Chorus–Bridge” form, though rock songs consisting of verses, choruses, and a bridge are hardly new. Covach discusses this form extensively, providing examples as early as Boston’s hit “More Than a Feeling” (1976).¹¹ Walter Everett’s more comprehensive volume contains several examples recorded between 1957 and 1970.¹² If Stephenson were writing a history of popular

¹⁰ I say “speculates” because Stephenson provides very few examples of these “new trends” (Stephenson 2002, 141–143).

¹¹ Covach 2005, 74.

¹² Everett 2009, 134–156.

song (like Starr and Waterman 2009), perhaps this would be a new trend, but in the context of rock musical practice spanning the last 50 years or so, this is a trend that originated relatively early and has persisted until today.

Stephenson identifies the other “new” trend as “compound-binary form,”¹³ which he finds common to ’60s and ’70s rock songwriting.¹⁴ Among his four examples of such a form, The Beatles’ “Hey Jude” (1968) is the only one analyzed in any detail.¹⁵ According to Stephenson, compound-binary form models a song that can fruitfully be split into two large parts, which I will call section groups.¹⁶ The first of these groups can be represented by a paradigmatic structure such as verse-chorus-bridge, strophic, or AABA. He provides no guide for what might happen in the ending group, except by example in “Hey Jude,” which is essentially a climactic sing-along over a repeated chord progression. I agree with Stephenson’s analysis of the song, except the first section group should be read as a *verse-bridge* form,¹⁷ with the refrain lyric “hey Jude...” beginning each verse over an F major triad, and each contrasting

¹³ Stephenson 2002, 141. Note the difference in Covach’s (2005) use of “compound AABA form,” which translates directly to Stephenson’s “Verse-Chorus-Bridge” model. Covach calls it compound AABA by containing each verse/chorus iteration within a single “A,” and representing the bridge with “B,” thus yielding a verse/chorus, verse/chorus, bridge, verse/chorus song, as is the case with “More Than a Feeling.”

¹⁴ This is surprising, since this date range is hardly “new” within the scope of rock songwriting since the late 1950s.

¹⁵ Stephenson 2002, 142. The others (all mentioned briefly within a single paragraph) include “Layla,” “Stairway to Heaven,” and Grand Funk Railroad’s “Closer to Home/I’m Your Captain.”

¹⁶ See Chapter Two for more on section groups. My usage matches Stephenson’s description of the first section group of compound-binary form, which is some paradigmatic structure, or what he calls a “super-section” (Stephenson 2002, 142).

¹⁷ Stephenson (2002) alludes to a chorus-bridge form with the label CCBCBC, though he is correct in stating this much could stand for an otherwise autonomous song.

bridge beginning on a B♭ major triad. The modulation to a contrasting F Mixolydian progression [F–E♭–B♭–F] sets the stage for the ending’s memorable sing-along (“na, na-na, na-na-na-na”). Lacking additional detailed analyses, it is difficult to infer what other types of end-functioning events Stevenson believes to exemplify this form in ’60s and ’70s rock. Climactic endings in “Hey Jude” and other contemporaneous examples can be, however, modeled as terminal climaxes, and I will henceforth refer to them as such.

Contrasting sing-alongs preceded by otherwise complete, paradigmatic song structures can be found throughout the pre-1990 rock canon. These sing-alongs may be texted, but are often composed of untexted vocalise, as is the case with “Hey Jude.”¹⁸ One could argue that the untexted vocalise is the singalong *par excellence*, since it only requires audiences to memorize a tune (no lyrics) in order to sing along. One might even place the untexted singalong higher on the ladder of memorability than the chorus, which often features a repeated *texted* melody (itself more memorable than the verse, which typically features no repeated hooks).

Texted sing-alongs often mark their memorable location in the song’s dramatic structure by repeatedly presenting the yet-unheard song title.¹⁹ Ask anyone to sing

¹⁸ Other examples include the long untexted choral sing-along in Michael Jackson’s “Wanna be Startin’ Somethin’” (1982), which serves as a backdrop for Jackson’s improvisation. A shorter example of the same basic design concludes Sly and the Family Stone’s “Stand” (1969). Although not a two-part design, the ending of Crosby, Stills, and Nash’s “Suite: Judy Blue Eyes” (1969) also features a contrasting sing-along on the syllable “doo,” over which the lead vocal improvises on a Spanish text.

¹⁹ Though it is possible to present the title of the song earlier and have its reappearance in the climax be set to truly contrasting material, this is somewhat rare.

Journey's "Don't Stop Believin'" (1981) and, chances are, they will sing the clip starting with the title lyric. Furthermore, many will be surprised to learn that this memorable section they recalled so easily is not a recapitulated chorus, but a single section appearing at the end of the song.²⁰ By reserving the song title for a terminal climax instead of the chorus, Journey is able to increase the dramatic import of its arrival,²¹ much like the anticipation of a previously-withheld tonic chord.

My hypothesis that untexted sing-alongs tend to be more memorable than those with texts, of course, does not always hold. Pink Floyd's "Goodbye Blue Sky" (1979) features a title-bearing terminal climax that far outshines the untexted vocalize ("oooh, oooh") that begins each verse—an exact reversal of my hypothesis. Similarly, Fleetwood Mac's "The Chain" (1977) postpones its song title declamation until the contrasting, bombastic double-time groove at the end, well worthy of the length and sectional autonomy required for a terminal climax.²²

Rather than feature the song title, The Beach Boys's "Cabinessence" (1967) closes with a repeated sing-along composed entirely of new lyrics. To supplement its

Recapitulations of a prominent lyric, especially the song title, are often set over the same harmonic/melodic framework as part of a repeated chorus. One exception appears at the end of Imogen Heap's "Hide and Seek" (2005), analyzed later in this chapter.

²⁰ Television commercials may be partially guilty for causing audiences to retain only the catchiest part of a song, as their "best of" mixes are often advertised using short clips of the title-containing section as a representative sample.

²¹ My favorite example of a lyric carrying dramatic import at the end comes from a contemporaneous song, but one that is not terminally-climactic under the current definitions. After concealing his true identity throughout, the narrator of Styx's "Mr. Roboto" (1983) ends the song with the revealing lyric "I'm Killroy, KILLROY!" over a previously-heard stop time gesture.

²² Someone originally suggested "The Chain" to me as an example of the rock coda. Chapter Two presents guidelines for distinguishing terminal climaxes from codas.

dramatic import, the climax sits on a dominant pedal, growing increasingly vociferous for each of its four repetitions. Texted sing-alongs not containing the title lyric sometimes sound like improvised jams, like the memorable “I like to hear some funky Dixieland” sing-along that closes The Doobie Brothers’ “Black Water” (1974), as well as the supergroup chorale ending of Band Aid’s “Do They Know it’s Christmas?” (1984).

Two-Part Terminally-Climactic Forms

Taking Stephenson’s definition of compound-binary form and similar terminally-climactic phenomena in pre-1990 rock music as my point of departure, I have developed a two-part archetype that I will now discuss in relation to more recent rock music. As Figure 3.2 shows, two-part Terminally-Climactic Forms are divided into two large section groups. The first, called the verse/chorus group, contains all iterations of verses and choruses, and in many cases could be a complete song, though one lacking a bridge. The second is the climactic group, containing the memorable hook as its terminal climax,²³ “generally structured around several repetitions of a single melodic line or chord progression or both,”²⁴ as well as optional connective

²³ Particularly memorable melodies (especially in popular song) are commonly referred to as “hooks.” For more on this usage, see Traut 2005. Since terminal climaxes are always based on memorable melodies, I use the terms “hook” and “terminal climax” synonymously throughout this chapter unless I am referring to a different, less memorable hook occurring elsewhere in the song.

²⁴ Stephenson 2002, 142.

sections.²⁵ Sing-alongs typically fill the role of climactic hook in the pre-1990 canon, a trend that continues in contemporary rock songwriting practices. Since two-part Terminally-Climactic Forms contain a repeated chorus (as do all Terminally-Climactic Forms), that chorus must be downplayed in some way to reserve the true memorable high point for the terminal climax.

Verse/Chorus Group	Climactic Group
<i>Intro</i> , Verse 1, Chorus 1, Verse 2, Chorus 2	<i>Transition</i> , Terminal Climax, <i>Brief Outro</i>

Figure 3.2: Two-Part Terminally-Climactic Archetype

To demonstrate several contemporary examples of this two-part design, I will utilize a type of analytical overview that outlines only clock time and basic identifying characteristics of sections. While these overviews are in no way intended to be exhaustive analyses, they should provide sufficient information to enable the reader to locate the sections in question. Each formal design chart is followed by a brief passage demonstrating ways in which the terminal climax acts as the song's contrasting high point. In verse/chorus groups, I have also used Roman numerals to enumerate the verse/chorus pairs that divide the group.²⁶ All section names follow definitions

²⁵ Section names appearing in italics in this chart (and in later archetype charts) designate optional structures that may or may not appear in any given song.

²⁶ The verse/chorus pair is exactly what Covach (2005) refers to as a "compound section," which is a smaller component of my verse/chorus section group, containing

provided in Chapter Two, continuing to observe distinctions between properly-named conventional sections (verse 1, chorus 2) and letter-named experimental sections (A, B'). Since every song in this chapter contains a terminal climax, I have also identified such sections with a "TC" alongside the letter-named section.²⁷

Two-part Terminally-Climactic Forms play a unique role in this dissertation in that they are the only EPIC-containing forms found in radio-friendly idioms, at least with any regularity. This is due in part to the form's short duration (relative to that of three-part and extended forms), which fits beneath the three-to-four minute glass ceiling imposed on singles by the radio and other broadcasting media, such as MTV. Thus, songs in two-part Terminally-Climactic Form span a wider genre of rock music, ranging from the popular to the experimental.

Red Hot Chili Peppers' "Under the Bridge" centers its verse/chorus group in E major, albeit with an independent introduction in a far-removed key.²⁸ The climactic group immediately modulates from the established E tonic to a mode-mixed A minor

every iteration of verse/chorus. These numbered pairs correspond to the numbered verse (not chorus, see rules in Appendix B) that begins each pair. Often, this results in Roman-numbered pairs that contain a different Arabic-numbered verse and chorus. This is due to the somewhat common practice of withholding the chorus until after verse two.

²⁷ When a climactic section group contains two distinct presentations of the same thematic material (A and A'), it can be difficult to identify one or the other as the singular terminal climax. In some cases, A acts as a sort of warm-up for the more climactic A' presentation. Other times, A' acts as a varied repetition of the climactic A presentation that preceded it. I acknowledge the possibility that others may find a different presentation of the climactic theme more memorable than the one I have identified as the singular terminal climax.

²⁸ The solo guitar introduction oscillates between D major and F# major triads, a chromatic mediant relationship that can be expressed by the compound Neo-Riemannian operation LP. Using traditional harmonic function analysis, it would be difficult to relate these two chords to one another, or to the rest of the song as a whole.

progression, its first chord borrowed from the parallel major, followed by an Aeolian bass descent. Anthony Kiedis’s vocalise begins at 2:51 in anticipation of the hook, sung by a female choir at 3:13. This hook is punctuated by Kiedis’s texted vocal in a traditional call-and-response format: the choir repeatedly calls the hook “under the bridge downtown,” after which Kiedis responds with varying lyrics.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	[D–F#] solo arpeggiated guitar
	Verse 1	0:28	[E–B–C#m–G#m–A, E–B–C#m–A] (x2)
	Transition A	0:51	Sustained EMaj7, drums enter
II	Verse 2	0:58	Verse recap
	Transition A	1:20	Transition A recap
	Chorus 1	1:27	[F#m–E–B] (x4)
III	Verse 3	1:50	Voice enters after one chord cycle
	Transition A	2:23	Recap transition A
	Chorus 2	2:29	Recap chorus
Climactic	A	2:51	[A–Am–G–F] (x3) [F–E7–G]
	A’ (TC)	3:13	[A–Am–G–F] “under the bridge”
	A”	3:36	Vocalise over choir “away”
	Outro	3:57–4:33	Guitar/bass [A–Am–G–F] solo

Figure 3.3: Formal Design of Red Hot Chili Peppers, “Under the Bridge” (1991)

The image displays four staves of music for the song "Under The Bridge" by Red Hot Chili Peppers. Each staff is labeled "Voices" and contains a treble clef, a 4/4 time signature, and a key signature of one flat (B-flat major). The music is divided into two parts: a "Choir" part and a "Lead" part. The "Choir" part consists of a rhythmic pattern of eighth notes: G4, A4, Bb4, G4, F4, E4, D4, C4. The "Lead" part consists of a melodic line: G4, A4, Bb4, G4, F4, E4, D4, C4. The lyrics are: "Choir: Und - er the bridge down - tow - n, Lead: is where I drew some blood." The chords are A, Am, G, and F. The second staff has lyrics: "Choir: Und - er the bridge down - tow - n, Lead: I could not get e - nough." The third staff has lyrics: "Choir: Und - er the bridge down - tow - n, Lead: for - got a - bout my love". The fourth staff has lyrics: "Choir: Und - er the bridge down - tow - n, Lead: I gave my life a - way!".

Example 3.1: Call-and-Response Terminal Climax in Red Hot Chili Peppers, “Under The Bridge” (1991, 3:13)²⁹

“Karma Police,” the second single from Radiohead’s *OK Computer*, incorporates many of the album’s harmonic complexities while retaining the sonic and textural conventions of radio-friendly rock (in ways that the first single “Paranoid Android” did not). Its memorable chorus inverts the expectation of increased amplitude, attracting significant attention by the sudden drop in dynamics, dramatically reduced texture (only voice and piano), and abrupt harmonic shift. Directly after its second chorus, the song reaches a memorable lyrical/melodic hook sung in vocalist Thom Yorke’s highest register thus far (“for a minute there, I lost myself”), which is repeated several times to bring about closure.

²⁹ Each lead vocal entry is also doubled at the octave by the choral voices. I have omitted this detail from the transcription for the sake of visual clarity.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	[Am-D9/F#-Em-G, Am-F-Em-G, Am-D-C-G, Am-Bm-D] ³⁰
	Verse 1	0:26	Intro progression (x2) with lyrics
	Chorus 1	1:18	[C-D-G-F#] (x3), [C-Bm-D]
II	Verse 2	1:43	Verse recap (only half as long as verse 1)
	Chorus 2	2:08	Chorus recap
Climactic	A (TC)	2:34	[Bm-D-G-D-G-D-E7](x5) “for a minute there, I lost myself”
	Outro	3:37-4:22	Noise fades in at end of hook, continues

Figure 3.4: Formal Design of Radiohead, “Karma Police” (1997)

The Juliana Theory’s “Duane Joseph,” like many two-part Terminally-Climactic songs, begins unassumingly, utilizing the expected verse/chorus design. One “clue” to notice in the beginnings of such songs is the lack of distinct contrast between verse and chorus. In “Duane Joseph,” they are not only in the same key, but feature nearly exact [vi-V-IV^{add9}] progressions.³¹ The song withholds memorable contrasting material (such as one has come to expect from a chorus) until the climax in the relative major.

³⁰ Capuzzo (2009) analyzes the second chord in this progression as D9/F#, though I can also hear it as a half-diminished seventh chord on F# with an added sixth. Just as an F major triad containing a D is best analyzed as F^{add6} in pop-rock music, so the F# half-diminished seventh with an added D may be analyzed as such, rather than as an inverted tertian harmony. The argument for “added-note” harmonies in rock music as an alternative to inversion is explored further in Doll 2007.

³¹ While it may seem initially curious to label progressions in relation to not-yet-present tonics, recent research (See Biamonte 2008 and Spicer 2009) has suggested analyzing verse progressions in relation to tonics that are withheld until the chorus. By analyzing both verse and chorus in relation to a tonic present only in the terminal climax, I not only demonstrate the ways in which the terminal climax subverts the expectations of a chorus, but also highlight the subservience of the verse/chorus pair to that terminal climax.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	[Dm–C–B ^b add ⁹ –C] (solo guitar)
	Verse 1	0:15	Voice enters over solo guitar chords
II	Verse 2	0:38	Full band entrance
	Dep. Transition	1:12	Verse progression, tacet vocals
	Chorus 1	1:24	[Dm–C–B ^b add ⁹], background vocals enter
III	Verse 3	1:53	Recap verse
	Chorus 2	2:39	[Dm–C–B ^b add ⁹]
Climactic	A (TC)	3:05–3:52	[F–C–B ^b add ⁹](x4)

Figure 3.5: Formal Design of The Juliana Theory, “Duane Joseph” (1999)

Example 3.2: Terminal Climax in The Juliana Theory, “Duane Joseph” (1999)

“Hide and Seek,” by Imogen Heap, is performed entirely *a cappella*, not with overdubs, but with a Digitech Harmonizer[®], controlled real time via MIDI.³² Heap’s coupling of singable melodies with beautifully bewildering vocal timbres (which many

³² The Harmonizer was originally marketed to create automated background harmonies for a solo performer. It works by synthesizing one or more prescribed tones to complement any note in the scale the performer sings, though the algorithm it uses to do so is quite primitive. Given performer input pitch $\hat{1}$, the harmonizer is likely to produce $\hat{3}$ and $\hat{5}$, regardless of whether the guitarist is playing IV^{add6} , ii^7 , or even $i^{\flat3}$ (though recent advancements have corrected this oversight by using an instrumental input to analyze the actual harmony played by the guitarist/keyboardist in real-time). By interfacing the harmonizer with a MIDI keyboard, Imogen Heap is able to specify in real time the exact harmonies she desires by playing those pitches at the keyboard.

mistakenly assume to be produced by a vocoder)³³ made her an overnight success following the song's appearance on *The OC*. Two choruses calmly and quietly set the title lyrics, "hide and seek," but Heap sings the title melismatically at *forte* during the terminal climax using a completely different sequential and polyphonic melody that contrasts with the otherwise homophonic song.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Verse 1	0:01	"Where are we?"
	Chorus 1	1:13	"Hide and seek"
II	Verse 2	1:47	"Spin me around..."
	Chorus 2	2:20	Chorus recap, aborted registral climax
Climactic	A	2:52	"Ransom notes..."
	A' (TC)	3:24	"Hide and seek," contrasts chorus setting
	B	3:58–4:29	"You don't care a bit"

Figure 3.6: Formal Design of Imogen Heap, "Hide and Seek" (2005)

Saves The Day's "Rocks, Tonic, Juice, Magic" is the most concise and definitive exemplar of a two-part Terminally-Climactic Form I have encountered. Just like "Duane Joseph," its most explicit climactic marker is the modulation that shifts the minor verse/chorus group to the relative major (in this case F minor to A \flat major). The climactic hook, repeated four times with the same melodic/lyrical pattern, displays all the characteristics and memorability expected of a chorus, even incorporating backing vocals, the feature that originally gave the chorus its name. Additional emphasis is provided by a half-time metric modulation at the downbeat of the climax. Amidst the

³³ See, for example, Pitchfork Media's review of her album *Speak for Yourself*, the title of which is somewhat ironic given her extensive use of electronic vocal manipulation (www.pitchfork.com/reviews/albums/4025-speak-for-yourself).

rest of the song’s frenzied punk rock double-time pace, this modulation allows the song to lay back for its epic conclusion.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Verse 1	0:01	[Fm–D \flat –A \flat –E \flat] progression, guitar and voice
	Verse 2	0:39	Drums and bass enter
	Chorus 1	1:06	[Fm–D \flat –A \flat –E \flat] progression continues
III	Verse 3	1:31	Recap verse
	Chorus 2	1:59	Chorus progression ends on A \flat
Climactic	A (TC)	2:28–3:28	[A \flat –E \flat /g–D \flat –Fm–E \flat], “you and I, are like when . . .”

Figure 3.7: Formal Design of Saves The Day, “Rocks, Tonic, Juice, Magic” (1999)

A \flat E \flat /G D \flat Fm E \flat

You and I are like when fi - re and the o - cean floor c - o - llide.

Example 3.3: Terminal Climax in Saves The Day, “Rocks, Tonic, Juice, Magic” (1999, 2:28)

While the memorable endings of many Terminally-Climactic songs are set apart by harmonic modulation, Jimmy Eat World’s “A Table for Glasses,” the opening track from their album *Clarity* (often considered a progenitor of the modern “emo” genre), achieves contrast between verse/chorus and climactic groups primarily by increasing dynamics.³⁴ Quiet glockenspiel, fingerpicked guitar, and a drum set part consisting of only ride cymbal and snare (note the absent kick drum) make up the

³⁴ This is an example of a climax created by a measurable parameter, or what Meyer (1980) calls a “statistical climax.” See my Chapter Two for more on the difference between statistical and syntactic climaxes.

minimal texture of the verse/chorus group. Strings and bass guitar join in the second verse and chorus to prepare for the climax's dynamic explosion on the downbeat at 2:45. A four-on-the-floor kick drum and synthesized sub-bass drive a choir of overdubbed voices (all performed by vocalist Jim Adkins) in the hook of this loudest climactic section group.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	Sustained organ note, solo drum set
	Verse 1	0:23	[D ^{add9} /A–D ^{add9} /G–D ^{add9}] (bass=A–G–D)
	Chorus 1	0:55	[Em–G]
	Dep. Transition	1:26	Drums drop out, only arpeggiated guitar
II	Verse 2	1:42	Recap verse
	Chorus 2	2:13	Recap chorus, crescendo into climax
Climactic	A	2:45	[D–Bm–G] “feed my skeptic side”
	A' (TC)	3:16	Polyphony over continued A melody
	Dep. Outro	3:49–4:22	Verse fragment over D pedal ³⁵

Figure 3.8: Formal Design of Jimmy Eat World, “A Table for Glasses” (1999)

³⁵ A further analysis of this ending is provided in my discussion of outros in Chapter Two.

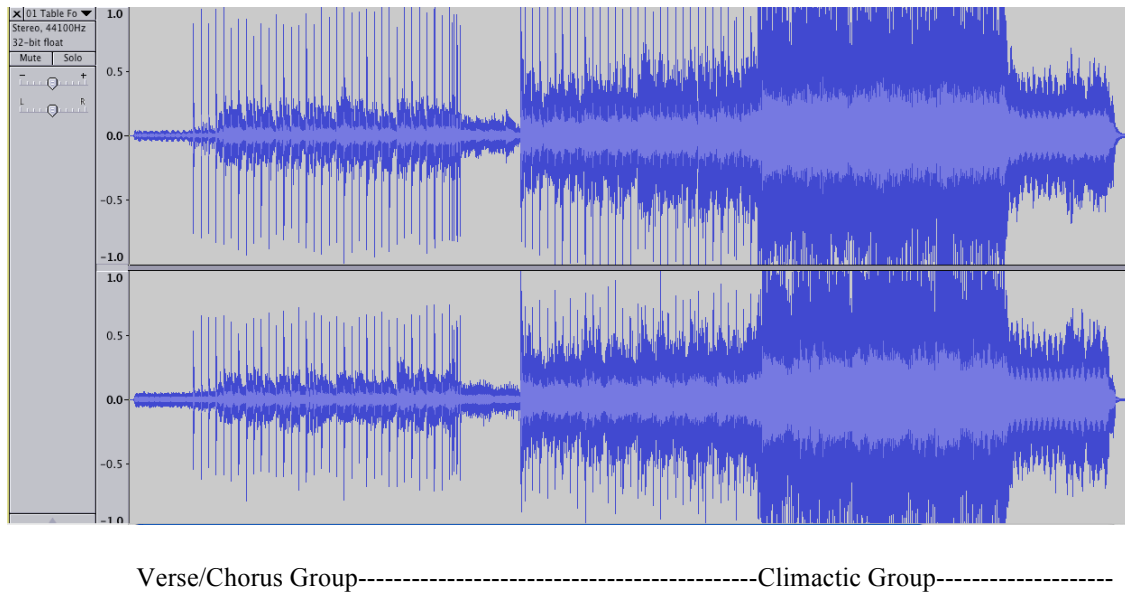


Figure 3.9: Dynamic Profile of Jimmy Eat World, “A Table for Glasses” (1999)

“Hands Down” originally appeared as a song for two acoustic guitars and voice on Dashboard Confessional’s *So Impossible* EP, and was more famously adapted for a full band rock-and-roll version on a subsequent LP. The minor/relative major relationship evident in many Terminally-Climactic songs (minor in the verse/chorus group, relative major in the climax) is here inverted: an $E\flat$ major verse/chorus group modulates to a long dramatic climax in C minor at 1:56, which spans nearly half the total song length. Minor mode sing-alongs are imbued with a profound and sophisticated beauty lacking in the often saccharine effect of their major mode counterparts. A half-time metric modulation heightens this emotional effect, drawing further attention to the anthemic lyrical climax.³⁶

³⁶ The half-time metric modulation is a common device used in terminal climaxes. It is especially common in punk/emo-influenced genres, where double-time grooves are so

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	Prolonged E \flat tonic solo guitar
	Verse 1	0:13	[E \flat -Cm-B \flat -A \flat -(D \flat -C octaves)]
	Chorus 1	0:44	Verse progression, “my hopes are so high”
II	Verse 2	1:05	Recap verse
	Chorus 2	1:35	Recap chorus
Climactic	A (TC)	1:56	[Cm-A \flat ^{add9} -E \flat -B \flat] with title lyric
	A'	2:47-3:11	TC progression cont., “you meant it”

Figure 3.10: Formal Design of Dashboard Confessional, “Hands Down” (2001)

common that the shift to half-time creates a marked release of kinetic energy. “Rocks, Tonic, Juice, Magic,” “Duane Joseph,” “Freedom,” and “The Crowning,” all analyzed in this chapter, also feature half-time metric modulations in their terminal climaxes. Though the rhythm section does not move to half-time, the vocal rhythms in the climax of “A Table for Glasses” slow from four notes per bar [♩♩♩♩] in the verse to two [♩ ♩] in the climax.

Cm A^b E^b B^b
 Hands down this is the best date I can ev - er re - mem - ber, al - ways re - mem - ber the sound
 Cm A^b E^b B^b
 of the ste - re - o down oh so soft like the scent of your hair that you twirl_ in your fin - gers and the
 Cm A^b B^b E^b
 time on the clock when we rea - lized it's so late and this walk that we share to - ge - ther. The streets
 Cm A^b E^b B^b
 were wet and the gate_ was locked so I jumped in and let you in and you stood
 Cm A^b E^b B^b
 at your door with your hands_ on my waist and you kissed_ me like you meant it And I knew
 Cm A^b E^b B^b
 _ that you meant it that you meant_ it that you meant_ it and I knew
 Cm A^b E^b
 _ that you meant it that you meant_ i - t.

Example 3.4: Terminal Climax in Dashboard Confessional, “Hands Down”
(2001, 1:56)

Despite its formal sophistication, Alkaline Trio’s “Mr. Chainsaw” is still a punk rock song, and as such, contains little to no harmonic or metric contrast throughout.

Adjacent sections distinguish themselves primarily through different chord progressions, albeit simply changing the order of the same I, IV, V, and vi triads.

Choruses 1 and 2 are unified by everything except lyrics, shaping a linear narrative rather than a repeated lyrical hook. In fact, the terminal climax is the only section that

features repeated lyrics. The reduction of the harmonic content to include only primary triads, the first passage of the song to be so limited, enhances the sing-along quality of this section.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	[A–D (x2) F#m–E–D]
	Verse 1	0:17	Intro progression cont., “when was it?”
	Chorus 1	0:53	[A–E–F#m–E–D] “everything...”
II	Verse 2	1:09	Recap verse, different lyrics
	Chorus 2	2:01	Recap chorus “every breath...”
Climactic	Transition	2:18	[A–D] (x2)
	A (TC)	2:27–3:05	[A–D–E] “in case you’re wondering...” (x4)

Figure 3.11: Formal Design of Alkaline Trio, “Mr. Chainsaw” (2001)

With their reliance on modulatory endings, these concise two-part forms recall modulatory conventions in late romantic music, often discussed under the classification “directional tonality.” In his recent article, Guy Capuzzo has applied these tonal models to some recent rock music, crafting what he refers to as “sectional centrality,” and even describes Radiohead’s “Karma Police” (analyzed earlier in this chapter) using this nomenclature.³⁷ As this chapter progresses from two-part to three-part sectional designs, Terminally-Climactic Forms retain these modulatory conventions, though a modulation to a third key in the middle bridge group often mediates the beginning and ending key areas.

³⁷ For more on sectional centrality, as well as a brief bibliography on directed tonality, see Capuzzo 2009.

Three-Part Terminally-Climactic Forms

Three-part Terminally-Climactic Forms proceed much like their two-part cousins. The main exception is that the prototypical bridge section, which often separates the second and third choruses in recapitulatory forms, is here expanded to a multipartite section group. Of course, this group no longer leads to a recapitulatory ending, but instead to a terminal climax. Just as in two-part Terminally-Climactic Forms, the memorable high point is reserved for the climactic hook. The climactic section is also expanded and includes not just a single hook, but may also contain modular sections acting as variations on that hook. Since this design usually yields a longer overall duration, the antecedents for such structures do not appear with any frequency until later in the 1960s, becoming especially prominent in the 1970s.

Verse/Chorus Group	Bridge Group	Climactic Group
<i>Intro, Verse 1, Chorus 1, Verse 2, Chorus 2</i>	Modular sections (sometimes including lyrics), <i>Recap of Verse/Chorus pair</i>	<i>Transition, TC, Modular Sections, Outro</i>

Figure 3.12: Three-Part Terminally-Climactic Archetype

Walter Everett's analysis of "Suite: Judy Blue Eyes," by Crosby, Stills, and Nash (1969), provides substantial evidence for an underlying three-part design, Everett's own four-part analysis notwithstanding.³⁸ There are only two distinct tempi in the song: 152 bpm in the first (0:01–2:47) and third (6:32–end) sections, and a half-time 76 bpm in the middle section. Everett also notes that, among his four parts, only three "incorporate contrasting sections within them."³⁹ My reasoning for parsing the song into three section groups should soon become clear.

A verse/chorus group spanning 0:01–2:50 begins the song, featuring the memorable "I am yours, you are mine" repeated chorus.⁴⁰ Rather than following a standard verse/chorus design, the bridge group immediately modulates to half time and features the melodic/lyrical refrain, "what have you got to lose." Just as the shift to half time marked the beginning of the bridge group, the return to double time at 4:42 announces the climactic section.⁴¹ Pulsating bass and busy percussion provide a

³⁸ Everett 2009, 392–399.

³⁹ *Ibid.*, 392.

⁴⁰ My location for this formal boundary is the same as Everett's (2009), as we both recognize the paradigmatic verse/chorus design.

⁴¹ This is the only structural disagreement between my analysis and Everett's (2009). Everett prefers to read the section from 4:42–6:32 as a separate large section, declaring the sing-along at 6:32 a section by itself. While I agree that this section is a climactic standout, I believe it works better within the context of the structural crescendo from 4:42, which acts as a quiet introduction. By splitting the middle of this song into two distinct section groups, Everett represents each of those sections as forms that are roughly equivalent to autonomous songs. Both of his internal sections (parts II and III) are structured as verse-bridge forms. Before proceeding with this detailed analysis, Everett makes it very clear that, "although this suite is often said to be a collection of disparate songs joined without a break, it has more integrity as a whole" (2009, 392). While I fully agree on this point, I find that by structuring the song's internal sections as paradigmatic song forms, his analysis demonstrates exactly the perspective to which he is opposed.

lengthy buildup to the climactic hook at 6:32, an untexted sing-along punctuated by a Spanish-language solo. This longer climactic section group (compared to Everett's final section beginning at 6:32) is common for climaxes in three-part Terminally-Climactic Forms. Usually, final section groups begin with quieter material in order to highlight the climactic amplitude reached by the hook.

Regardless of where one locates the division of its internal parts, the form of "Suite: Judy Blue Eyes" is much too expansive for a two-part Terminally-Climactic Form. While the two-part design moves directly from a recognizable verse/chorus group to a climactic group, the three-part design adds an additional passage between the verse/chorus group and the climactic group that provides structural contrast. Crosby, Stills, and Nash achieve this contrast by a combination of thematic treatment, a reduction of dynamics and tempo, and an ending passage with a loud, fast climax. They also use less memorable material in the bridge group to shape the song's dramatic structure. The memorable high point is certainly the climactic sing-along where Stephen Stills "liberate[s] himself in an imagined flight to Cuba";⁴² the repeated chorus ("I am yours") runs a close second. The only other moment memorable enough to compete for the high point is the bridge's "what have you got to lose" refrain, which is thematically downplayed in the bridge along with the reduced tempo and dynamics.

In the 1980s subgenre known colloquially as "hair metal," this three-part design was defined by a lengthy bridge group including a guitar solo leading to the climax. In Guns & Roses' "Patience" (1989), Slash's guitar solo, which begins at 3:26, progresses

⁴² Ibid., 393.

to an authentic cadence at 4:12 to create sectional closure. The climactic section begins again after a grand pause, opening with an instrumental transition to the hook.⁴³ Textural contrast between section groups is provided by a choir singing the hook (“a little patience”) underneath Axl Rose’s texted, blues-inflected vocal solo. Kirk Hammett, Metallica’s equally skilled lead guitarist, often facilitated such guitar-centered structures in the band’s late ’80s ballads, including the hits “One” and “Fade to Black.” This basic design persisted into the 1990s, picked up by bands such as Rage Against the Machine. “Freedom,” a noteworthy example from their oeuvre, is featured later in this chapter. Their bridge groups often feature guitarist Tom Morello in a solo section bridging the verse/chorus group to the climactic group. Shorter songs usually structure this as a two-part Terminally-Climactic Form (see Figure 3.13a), the guitar solo acting as a transition into the climactic group rather than being enclosed within a separate bridge group. In these cases, the solo electric guitar, which Shaugn O’Donnell calls “the *quintessential* rock signifier,”⁴⁴ signifies a timbral divide between formal boundaries.

⁴³ I advocate precisely this—an instrumental transition to the hook contained within the climactic section group—in my analysis of “Suite: Judy Blue Eyes,” rather than banishing the hook to a separate section.

⁴⁴ O’Donnell 2006, 136.

a. Guitar Solo as Bridge Section

Verse/Chorus Group	Climactic Group
<i>Intro, Verse 1, Chorus 1, Verse 2, Chorus 2, <u>Guitar Solo</u></i>	<i>Terminal Climax, <u>Brief Outro</u></i>

b. Guitar Solo as part of Bridge Section Group

Verse/Chorus Group	Bridge Group	Climactic Group
<i>Intro, Verse 1, Chorus 1, <u>Transition</u>, Verse 2, Chorus 2</i>	<i>Modular sections, <u>Guitar Solo</u></i>	<i><u>Transition</u>, Terminal Climax, <u>Modular Variations</u>, <u>Outro</u></i>

Figure 3.13: Guitar Solos in Two-Part vs. Three-Part Designs

As more sections are introduced to longer three-part songs, there is inevitably more variation of the archetypes. Post-1990 examples of three-part Terminally-Climactic Forms are noticeably less paradigmatic than their two-part analogues. One thing that unifies all three-part designs (whether late '60s folk ballads, '80s hair metal, or even classical ternary forms) is the presence of a contrasting middle separating the first and last section groups. In the pre-1990 canon, this medial contrast is articulated by thematic manipulation, as well as dynamics, tempo, and timbre, trends that persist in modern songwriting practices.

After a first verse containing only his voice and fingerpicked parlor guitar, the transition of Sufjan Stevens's "Seven Swans" grows louder by the addition of low piano tones, but this intensification is quickly aborted in favor of sparse instrumentation and hushed volume in the second verse. After a quiet solo guitar

transition, the bridge is introduced by female background vocalise on “ooh” and piano, now playing in both high and low registers. Following a few lines of sung text, the bridge steadily swells in volume preparing for the climactic hook, “he is the Lord.” Overdriven and compressed drums enter for the first time, easily elevating the song to its highest amplitude thus far, almost to the point of clipping. The C’ variation at 5:36 transfers the “he is the Lord” hook to the female voice, enabling Stevens to proclaim the song’s title several times. This section boasts the song’s loudest dynamic, recurring title lyrics, and background vocals—these are features one would typically expect from a repeated chorus—yet it occurs only once at the end of the piece.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	Swing fingerpicking in A minor
	Verse 1	0:37	Voice enters
	Chorus 1	1:07	“I saw a sign in the sky,” A major
	Transition	1:45	Low piano added [C–D–A]
II	Verse 2	2:15	Only voice and guitar again
	Chorus 2	2:46	Recap chorus
Bridge	A	3:33	A–G#–D line introduced
	B	4:04	“He will take you”
Climactic	C (TC)	4:34	“He is the Lord”
	C’	5:36–6:33	“Seven swans, seven swans...”

Figure 3.14: Formal Design of Sufjan Stevens, “Seven Swans” (2004)⁴⁵

⁴⁵ Stevens also uses this formal design in “Come On Feel the Illinoise” (2005), which features a comparatively longer bridge section group and shorter climactic group.

Example 3.5: Terminal Climax in Sufjan Stevens, “Seven Swans” (2004, 5:32)

With a running time of only 3’40”, A Perfect Circle’s “Three Libras” is exceptionally short for a three-part Terminally-Climactic Form. The song is truncated considerably by reducing the number of distinct bridge sections to only two (which are approached directly, without transition), and by keeping the number of verse/chorus pairs to only two. Due in part to this condensed design, “Three Libras” was a somewhat successful radio single from the band’s album *Mer de Noms*, which is otherwise composed of much longer tracks. Enigmatic fingerpicked guitar chords in parallel ninths also grab the listener’s attention, adding to the song’s memorability.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	Fingerpicked parallel ninth chords
	Verse 1	0:28	Voice, drums, and bass enter
	Chorus 1	0:50	“Difficult not to feel just a little bit...”
II	Verse 2	1:20	Recap verse with melisma
	Chorus 2	1:41	“Here I am expecting just a little bit...”
Bridge	A	2:01	“Threw you the obvious,” loud E major
	B	2:21	“Oh well,” recap parallel ninth chords
Climactic	C (TC)	2:46	“You don’t see me,” loudest section yet
	C’	3:06–3:40	Melismatic variation on same lyrics

Figure 3.15: Formal Design of A Perfect Circle, “Three Libras” (2000)

Fingerpicked acoustic guitar,
detuned a minor third
(C# F# B E G# C#)

A add⁹ C#m add⁹ A add⁹ E add⁹ C#m add⁹

A add⁹ C#m add⁹ A add⁹ E add⁹ C#m add⁹

D add⁹

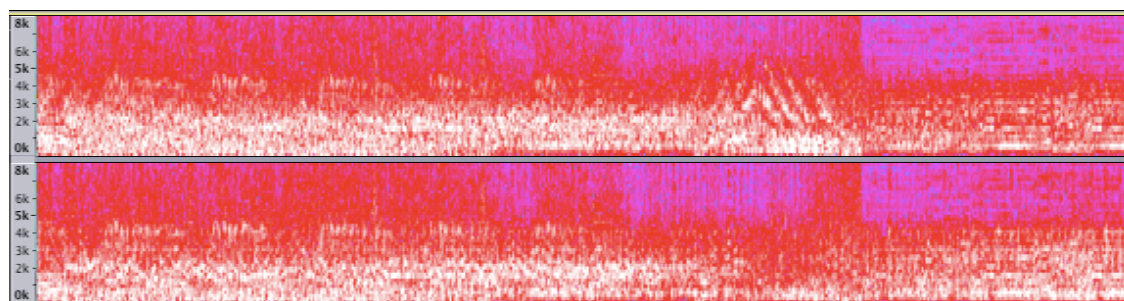
Example 3.6: Intro of A Perfect Circle, “Three Libras” (2000, 0:03)

Comparing the truncated design of “Three Libras” with the extraordinarily sprawling formal plan of The Mars Volta’s “Meccamputechure” (lasting over eleven minutes) reveals the immense flexibility of the three-part design. The form is expanded far beyond the scope of a two-part design by four verse/chorus pairs (each separated by guitar solos) lasting a total of seven minutes. The bridge and climactic groups both proceed with variations on some basic thematic idea. A bass and drums groove (borrowed from the verse) serves as the accompaniment for an improvised saxophone solo in the bridge, which undergoes a process of tape transformation yielding three distinct sectional stages. Another groove (borrowed from the chorus) serves as a tapestry for the repeated lyrical hook “it lacks a human voice” in the climactic group, which undergoes a similar process of deformation (as opposed to transformation): Cedric Bixler-Zavala’s voice is subjected to numerous digital editing

processes, culminating in an entirely instrumental outro, his deformed voice gradually faded out as saxophone and other instrumental timbres are pushed to the foreground.

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	Initial 12/8 hemiola groove introduced
	Verse 1	0:43	Voice with bass and drums groove
	Transition A	1:43	Improv guitar solo
II	Verse 2	1:51	“Please dismantle all these phantom limbs”
	Transition B	2:09	Drum solo
	Chorus 1	2:18	“Everyone stares all the time...”
III	Transition A	2:34	Longer improv guitar solo, like 1:43
	Verse 3	3:24	Voice reenters, recap “please dismantle...”
	Transition B	4:19	Drum solo
IV	Chorus	4:27	“Everyone stares all the time...”
	Transition A’	4:44	Double guitar solo
	Verse 4	5:23	Recap verse quietly, vocal manipulation
Bridge	Transition B’	6:28	Vocals added over drum solo
	Chorus 3	6:36	Double chorus
	A sax solo	7:04	Uses verse groove
Climactic	A’	7:34	Tape sounds added
	A”	8:45	Tape sounds take over, sax barely recognizable
	B (TC)	9:15	“It lacks a human voice”
Outro	B’	9:47	Organ solo, melisma, drums accelerate
	Outro	10:30–11:03	Voice drops out

Figure 3.16: Formal Design of The Mars Volta, “Meccamputechure” (2006)



B-----B’-----*-----Outro-----**-----

B: Full spectrum; voice, drums, guitar, bass all present

B’: Drums accelerate, then drop out at *, leaving gap in high frequency spectrum as cymbals exit

Outro: Spectrum loses all high end with vocals and cymbals gone, until brief reentrance of drums at **

Figure 3.17: Spectral Analysis of Mars Volta, “Meccamputechure,” (2006, 9:15–end)

In what is a common variation of the three-part Terminally-Climactic design, a recognizable AABA structure is embedded within the verse/chorus and bridge section groups. This AABA is actually a “compound AABA,” in which each combined verse/chorus pair is considered an “A,” and the bridge is considered “B.”⁴⁶ The first two A sections of the embedded AABA variant are verse/chorus pairs, bearing the Roman numerals I and II, respectively, while the B section is all or most of the bridge section group. After B, a verse/chorus recap resurfaces (labeled as the final “A”), spreading the AABA evenly across two section groups: the verse/chorus group and the bridge group.

One may object that there is no need to place the recapitulation of A within the bridge section group. However, given the logical alternatives, it requires the least distortion of a form so clearly composed of three distinct parts, regardless of their order. One alternative might show four distinct section groups instead of three: verse/chorus (AA), bridge (B), recap of the verse/chorus (A), climax (C). The other alternative encloses the entire compound AABA structure within one section group, reducing the total number of section groups to two: verse/chorus (AABA), climax (C). A four-part design is unsatisfactory in that it represents a *recapitulation* as a distinct section group, while the two-part design misrepresents the diversity of materials by

⁴⁶ This design, a fairly obvious extension of the timeless AABA principle, is arrived at differently by Stephenson (2002, 137) and Covach (2005, 74). Mine is slightly divergent from the design Covach describes, in that his does not include the bridge as a compound section. In his analysis of “More than a Feeling,” the B section of the compound AABA is a single section. Whereas, in my design, “B” is composed of distinct sections, making it a section group.

merging two distinct parts with very different thematic characteristics (verse/chorus and bridge) into one.

The introductory riff of Rage Against the Machine's "Freedom" embodies what Walter Everett calls a "tattoo": "a short, one-phrase unit that may reappear as if to bring the song back into focus."⁴⁷ In the absence of sung vocals, this riff provides one of the most unifying elements of the song.⁴⁸ Rage Against the Machine guitarist Tom Morello frequently employs this unifying device in transition figures like transition A, which is repeated three times in this song. The embedded AABA design stretches across the verse/chorus and bridge groups, beginning with a tattoo guitar riff and closing with another riff. Quiet guitars and delicate *ad libitum* drums introduce the climactic section then initiate a large-scale crescendo stretching from the onset of the spoken title lyric to the explosive climactic hook at 4:51, where vocalist Zac De La Rocha screams, "Freedom! Yeah! Freedom? Yeah Right!"

⁴⁷ Everett 2009, 151.

⁴⁸ De La Rocha's vocal styles encompass spoken dialogue, rapping, and the type of screams and growls typical of metal-influenced genres.

Section Group	Section	Clock Time	Description	
Verse/Chorus	I Intro	0:01	Tattoo guitar riff, vocal improv	
	Verse 1	0:26	Quieter, vocals texted	
	II Intro	0:39	Tattoo returns with new vocal improv	
	Verse 2	1:05	Recap verse	
	Transition A	1:32	Guitar drops out, only bass and drums	
	Bridge	Riff A	1:45	New fast, chaotic syncopated groove
	Guitar Solo	2:09	Bass plays tattoo underneath guitar solo	
	Riff B	2:35	New laid back groove with vocal improv	
	III Verse 3	3:01	Recap entire verse subsection	
	Transition A	3:27		
	Recap Riff A	3:43	Transposed at the fifth at 3:50	
	Climactic	Transition	4:14	Noise, ad lib drums, guitar begins new riff
	A	4:25	Spoken “freedom,” building volume	
	A’ (TC)	4:51	Screamed “freedom!”	
	Outro	5:25–6:07	Noise, ad lib drums	

Figure 3.18: Formal Design of Rage Against the Machine, “Freedom” (1992)

Lead guitar

(muted strings)

(pick behind nut)

(slide)

Example 3.7: Guitar Tattoo in Rage Against the Machine, “Freedom” (1992; 0:01, 0:39, 2:09)

The complex form of Tool’s “Hooker with a Penis” prefixes the embedded AABA with another verse/chorus pair, then appends an additional compound bridge section at the end (AAABAB). Bridge themes C and D provide metric contrast, preparing the pair of melodic/lyrical hooks in the climax. As is the case with many

Tool songs, the dependent outro acts as a pithy way to unify the entire song,⁴⁹ since quite a bit of divergent material has occurred since the recognizable verse and chorus.⁵⁰

Section Group	Section	Clock Time	Description
Verse/Chorus I	Intro	0:01	Guitar tattoo riff
	Verse 1	0:37	Abrupt compound time shift
	Intro recap	0:51	Intro with lyrics “he was OGT...”
II	Verse 2	1:03	Recap verse
	Chorus 1	1:19	“I’ve got some advice for you little buddy”
	Transition A	1:40	5/8 groove
III	Verse 3	1:48	Bass and drums only
	Chorus 2	2:02	Recap chorus
	Transition A’	2:16	11/8 groove under scream
Bridge	A	2:34	Laid back 6/8 instrumental
IV	Verse 4	3:05	Recap verse, very quiet, then scream
	C	3:22	5/8 groove
	D	3:35	“All you wear or read or see on TV...”
Climactic	E (TC, hook 1)	3:47	“Buy my new record, send more money”
	F (TC, hook 2)	4:01	“Fuck you buddy” over tattoo riff
	Dep. Outro	4:13–4:36	Borrows from tattoo riff

Figure 3.19: Formal Design of Tool, “Hooker with a Penis” (1996)⁵¹

⁴⁹ These outros are not autonomous sections, but appendages to an end-functioning climax, and are usually very short, which prevents them from being construed as autonomous sections following definitions in Chapter Two. Examples of this closing strategy abound in Tool’s music, including “Forty-six and Two,” “Eulogy,” “H,” and “Aenema,” all from the same album: *Aenima* (1996).

⁵⁰ An obvious connection exists between Rage Against The Machine’s use of the guitar riff tattoo as a unifying factor and Tool’s use of the guitar riff as an alpha/omega device. Though RATM and Tool operate in very different musical idioms, it is perhaps worth noting that their two guitarists (Tom Morello and Adam Jones, respectively) actually played together in a small Boston-based group called Electric Sheep before they both moved to Los Angeles to start their more successful current bands.

⁵¹ Since themes E and F both exhibit repeated lyrical/melodic material, it is difficult to say which is the singular terminal climax; rather, I think the two hooks work in tandem.

The image shows a musical score for three instruments: Voice, Guitar, and Drums. The music is in 8/8 time. The voice part consists of a single melodic line with the lyrics "Fuck you bu - ddy!". The guitar part features a complex, rhythmic pattern of chords and single notes. The drums play a steady, syncopated rhythm with various accents and patterns.

Example 3.8: Terminal Climax (Theme F) in Tool, “Hooker with a Penis” (1996, 4:01)

Just as the range of possibilities for specific formal designs within an archetype grows from short two-part structures to longer three-part ones, the task of generating overarching formal principles from even longer songs becomes increasingly complex. Consider two scientific experiments, one with few dependent variables, the other with several. Researchers will undoubtedly predict with greater accuracy the results of the experiment with fewer variables, while those containing a multitude of uncertainties will produce a wider range of outcomes. Scholarship on form in 1970s progressive rock, where songs can often last ten minutes or more, follows in much the same way. Rather than search for elusive overarching principles, many authors have simply focused on the form of a single piece, with very few archetypes surfacing from the analytical data.⁵² Though I appreciate this hesitancy to over-generalize, I have found that, by extending the same principles present in two-part and three-part Terminally-Climactic Forms, the archetype I present for extended Terminally-Climactic Forms is

⁵² One notable trend in these longer songs is the large, compound ABA form that many liken to sonata principles, though the similarities between progressive rock and classical practice have been refuted by many. See Covach 1997.

able to represent these large structures abstractly enough to model a wide range of individual formal designs.

Extended Terminally-Climactic Forms

Kevin Holm-Hudson's introduction to *Progressive Rock Reconsidered* laments the tendency to attempt "faulty generalizations caused by a lack of familiarity with progressive rock as a whole," though he immediately points to a set of coherent values summing up the progressive rock aesthetic.⁵³ Three of these apothegms read: "Progressive rock is music that incorporates: 1) songs predominantly on the longish side, but structured, rarely improvised; 2) multi-movement compositions that may or may not return to a musical theme, *in some cases the end section may bear little resemblance to the first part of the song*; and 3) compositions created from unrelated parts."⁵⁴

Pink Floyd's seventeen-minute song "Dogs" (1977), from their LP *Animals* (which consists of only five exceptionally long tracks), epitomizes this progressive rock formal aesthetic. It is composed of four section groups, each of which contains many internal sections.⁵⁵ Instead of the verse/chorus pairing typical of rock music,

⁵³ Holm-Hudson's (2002, 3) sentiments are not specific to progressive rock, but indicative of the urge to classify any genre of music, classical or popular.

⁵⁴ Holm-Hudson cites Lucky 1998, 120–121 (*italics mine*).

⁵⁵ The four section groups are arranged A–B–A'–C. Following the logic expressed by the embedded AABA structures, one might, of course, choose to disregard the recapitulatory A' and read this as a three-part design. However, the song's exceptional length speaks to an archetype that treats this long section (rather than fleeting recaps in "Hooker" and "Freedom") as part of the dramatic structure itself, much like the recapitulation in a sonata form.

Pink Floyd often prefers to introduce contrasting material between verses through solos performed by guitarist David Gilmour. “Dogs” follows this trend, and as a result I find it more appropriate to refer to 0:01–4:48 of “Dogs” as a “verse/solo group” rather than a verse/chorus group; this opening section group begins with an acoustic guitar intro and contains three verse/solo pairs. The quiet B section group from 4:49 to 11:41 is marked by a sound sample featuring the barking and howling of dogs, drifting in and out of the musical texture like some sort of zoological refrain. At 10:05, the texture gets even quieter when the bass borrows a progression from the first verse anticipating the recap of A’, signaled by the original acoustic guitar intro. A’ proceeds in much the same way as its predecessor, providing loud bookends to the quiet B group, getting ever louder from 13:28 to prepare the arrival of the climax at 15:22.

In “Dogs,” Pink Floyd distinguishes section groups from one another by assigning unique dynamic and harmonic profiles to each, but also uses a familiar poetic structure to highlight the arrival of the climactic group. The repeated lyrical/melodic pattern “who was” now opens every line in the climactic group. The narrative progression of the climactic text (shown in Figure 3.20), which uses the abusive training of a dog as a metaphor for the growing psychological and physical torment of a human worker in late capitalist technoculture, ultimately closes the song in death. Ironically, this image of death is painted by the song’s loudest dynamic, the arrival of thick backing vocals, and David Gilmour’s highest vocal note—all climactic high points.

*Who was born in a house full of pain
 Who was trained not to spit in the fan
 Who was told what to do by the man
 Who was broken by trained personnel
 Who was fitted with collar and chain
 Who was given a pat on the back
 Who was breaking away from the pack
 Who was only a stranger at home
 Who was ground down in the end
 Who was found dead on the phone
 Who was dragged down by the stone.*

Figure 3.20: Complete Climactic Lyrics in “Dogs”

Just as the quiet group in “Suite: Judy Blue Eyes” stands in contrast to the louder verse/chorus and climactic section groups, internal groups within what I call extended Terminally-Climactic Forms differentiate themselves chiefly by dynamic contrast. Extended Terminally-Climactic Forms expand the bridge group of three-part design by recursion. Three-part Terminally-Climactic Forms expand the bridge of a prototypical verse/chorus form, and the extended archetype expands that middle bridge group itself into at least two distinct groups. Due to their increased duration, these extended forms vary unpredictably from song to song, each song taking a unique element as a point for exploration. Often dynamic contrast between internal section groups is the only invariable factor. Thus, I cautiously present an extended Terminally-Climactic archetype that names internal groups simply by their role in such a dynamic contrast, either as “loud” or “quiet.”

[-----Bridge Expansion-----]			
Verse/Chorus Group	Loud Group	Quiet Group	Climactic Group
<i>Intro</i> , Verse 1, Chorus 1, <i>Transition</i> , Verse 2, Chorus 2	Dynamically-related modular sections	Dynamically-related modular sections	<i>Transition</i> , Terminal Climax, <i>Modular Sections</i> , <i>Outro</i>

Figure 3.21: Extended Terminally-Climactic Form Archetype⁵⁶

The Portland-based rock group The Decemberists have made a name for themselves by employing coherent lyrical narratives spanning entire albums. While their early attempts ranged from the now-common concept album through the more recently exploited narrative concept album,⁵⁷ their release *The Hazards of Love* (2009) comes across as a recorded rock opera in the tradition of The Who's *Tommy*. "The Crane Wife: Parts 1 and 2" is the penultimate track from The Decemberists' release *The Crane Wife*. Though it has significant lyrical ties to the rest of the album (namely "The Crane Wife part 3," which curiously *begins* the album), it is musically

⁵⁶ Just as the number of these bridge expansion section groups is variable, so is the order. While "Dogs" precedes the climax with a loud group, "The Crane Wife" uses a quiet group to emphasize the climax's dramatic arrival.

⁵⁷ While a narrative concept album deploys a linear narrative across all the tracks on an album, concept albums simply unify those tracks with similar subject material. Concept albums gained popularity in the late 1960s, partially due to the success of *Sgt. Pepper's Lonely Hearts Club Band*, while narrative concept albums did not become en vogue until Cursive's *Domestica* (2000), which chronicles the lead singer's real-life divorce drama. Narrative concept albums became increasingly popular in the mid 2000s, especially among screamo bands, including Boys Night Out's *Trainwreck* and Armor for Sleep's *What to Do When You are Dead*, both released in 2005. Recorded rock operas are quite rare in the twenty-first-century mainstream.

autonomous, lacking the thematic unification required of rock operas.⁵⁸ Furthermore, “The Crane Wife parts 1 and 2” functions as one autonomous song in much the same way Everett and I have argued for “Suite: Judy Blue Eyes,” and the way Stephenson analyzes Chicago’s “Dialogue (Parts I & II)” as a single song.⁵⁹

⁵⁸ “The Crane Wife parts 1 and 2,” based on a Japanese folk tale, tells the beautiful and heartbreaking story of a man who rescues an injured crane. Unbeknown to the rescuer, the crane turns out to be a magical being, who falls in love with him for his compassion and becomes his human wife. The wife is exceptionally gifted in the art of weaving, and quickly makes a fortune for their family, but warns the man never to enter her weaving room while she is working. When the man becomes worried after finding blood and feathers in some of his wife’s weaving, he defies her by entering her studio, just in time to see her revert to a crane and fly out the window. Though this story is completed in “The Crane Wife part 3” the two tracks function autonomously (part three’s lyrics only contain the story’s dénouement).

⁵⁹ Stephenson 2002, 141. “The Crane Wife: Parts 1 and 2” reminds me of Grand Funk Railroad’s “Closer to Home/I’m Your Captain” (also mentioned by Stephenson) in that it is composed of two musically-related parts that are used to set one linear narrative. The first part of Grand Funk Railroad’s song describes a sea captain’s despair out at sea, while the second half sets the optimistic title lyric, “I’m getting closer to my home.”

Section Group		Section	Clock Time	Description
Verse/Chorus	I	Verse A1	0:01	[G–Em–C–G], voice and ac. guitar
	II	Verse A2	1:38	“It was a white crane,” drums enter
Loud		Chorus A1	2:33	“My crane wife”
	III	Verse A3	2:57	“I helped her”
		Chorus A2	3:49	Recap chorus
		Outro	4:12	“Da, da” over verse progression, decrescendo, inflect minor mode at 4:57
Quiet		Transition	5:33	Fingerpicked guitar [Dsus4–C–G]
	I	Verse B1	5:54	“My crane wife arrived at my door”
		Prechorus	6:47	“Sound the keening bell” [Em–A]
		Chorus B1	7:18	“My crane wife”
	II	Verse B2	7:43	Recap verse
		Prechorus	8:43	Recap prechorus
		Chorus B2	9:07	Recap chorus
Climactic		Transition	9:20	“There’s a bend in the wind” build-up [Em–F]
		A	9:44	“Rakes at my heart”, instrumental at 10:14
		A’ (TC)	10:28	“Heart” melismatic choral recap
		Outro	11:00–11:20	Song title, fingerpicked guitar over pedal

Figure 3.22: Formal Design of The Decemberists, “The Crane Wife: Parts 1 and 2” (2006)

The eleven-minute track is far too unified to be composed of two separate songs.⁶⁰ Choruses A and B (which I have labeled as such to avoid numbering sections continuously in two distinct groups) are really the same chorus, containing only slight modifications. These adaptations are partially due to their respective dynamic settings: one, a loud full band instrumentation (chorus A), the other a quiet texture of fingerpicked guitar and voice (chorus B). Consult Example 3.9 for a comparison of

⁶⁰ The fact that the Decemberists include the music on one track is itself indicative of its cohesion, or at least, of their aspiration toward that cohesion. Had the music spanned two separate tracks on the album, one would be more inclined to partition them accordingly. Separate tracks unified by lyrical content are the defining feature of a concept album. The musical content of a concept album should be analyzed only within the scope of a single track, while the lyrics are dependent on the album as a whole.

the dramatic arrival of the boisterous climax by preceding it with a subdued quiet group. Vocalist Colin Meloy's quivering melismatic interpretation of the hook's final word "heart" is easily the song's high point, made even more memorable by the heartbreaking empathy the listener feels for the narrator's profound loss as depicted in the song's lyrical drama.

Having described archetypes and given examples for three types of Terminally-Climactic Forms (two-part, three-part, and extended), the remainder of this chapter provides detailed analyses of songs from each type—one song for each, by an artist who uses that particular form in many of their songs.⁶¹ While the brief analytical overviews conducted thus far aimed to outline a general skeleton for each archetype (as well as significant variations of that archetype), the following detailed analyses shift focus from the general to the specific, emphasizing the individual formal expressions employed by these experimental artists. As O'Donnell warns, "one might argue that we need many more close analytical readings of specific songs before attempting to generalize the musical properties of fifty years of rock."⁶²

⁶¹ Radiohead, Coheed and Cambria, and Tool often use these Terminally-Climactic Forms (two-part, three-part, and extended, respectively). See Appendix C for a representative sample of such songs.

⁶² O'Donnell 2006, 139. O'Donnell's commentary refers to Stephenson's (2002) final chapter. He asserts that the real strength of Stephenson's book lies in his ability to get inside a single piece of music, not in his overly generalized theory of form.

Detailed Analyses

In the three detailed analyses that follow, I have taken the opportunity to represent fully the harmonic phenomena from individual chord progressions through contrasting tonal areas. I also provide sonic illustrations of each complete track (waveforms, spectrographs), which, in my process of analysis, proves to be a key factor in delineating formal boundaries. Transcriptions are provided for any smaller sections addressed in the prose, and can be thought of fruitfully as momentary magnifications of the detailed form chart. Rather than show clear-cut examples as I have done in previous analytical overviews, I have intentionally selected examples that provide more interesting musical fodder for analysis. In choosing these less straightforward pieces I aim to demonstrate the flexibility of my archetypes, and to show that experimental music quite often defies predictability. I contend that any viable theory of form must be able to accommodate such situations.⁶³

⁶³ Caplin (1998) prefers to couch his formal types in well-defined terms so that he can apply them “flexibly” in analyses. I aim for a similar balance between archetypes and the musical examples they are made to represent. Caplin says of these archetypes: “[they] represent abstractions based on generalized compositional tendencies. . . . By strictly defining categories of form, it is possible to apply them in analysis with considerable flexibility” (Caplin 1998, 4). The primary difference I see between my approach and Caplin’s is that, while Caplin strives to create as many distinct types and hybrids as there are musical situations that prompt those structures, I find that, by conceiving of forms as broader, more flexible processes, we can accurately represent a multitude of distinct pieces while addressing the details on a piece-by-piece basis.

After Thom Yorke's spoken four-count that begins Radiohead's ephemeral track "Faust Arp," guitarist Johnny Greenwood introduces a fingerpicked pattern on the acoustic guitar, establishing the underlying *tala* for the entire song.⁶⁴ While the rhythm could be transcribed in common time, it sounds like a non-isochronous pattern of 3+2+3 sixteenth notes, relative to Yorke's established pulse. This particular combination of threes and twos in eight beats is rarer than the more conventional 3+3+2, which retains a strong four-note pulse beneath the rhythmic surface.

The initial statement of this pattern arpeggiates a static B minor chord, but as the voice enters, the guitar initiates a mode-mixed B minor progression consisting of only two complete chords (B minor and second inversion B major). An Aeolian bass line traverses the fourth between the two chords descending through scale degrees $\flat\hat{7}$ and $\flat\hat{6}$. Though this descent is often harmonized by parallel major triads ($\flat\text{VII}\rightarrow\flat\text{VI}$), it is left unaccompanied in this particular progression.

⁶⁴ I originally became interested in the harmonic complexities of this song in a 2008 workshop called "The Tonal Systems of Rock," led by Walter Everett at the University of Michigan. Though all graphics appearing throughout the analysis are my own, my research partner, Eric Smialek, created a painstaking transcription of the track that has proved invaluable throughout the project.

(intro) Verse 1

Voice

Guitar

Wa - key wa - key, rise and shine it's

Bm

Voice

Gtr.

on a-gain off a-gain on a-gain. Watchme fall_ like do-min oes_ in pre - tty pa - terns.

Bm/A Bm/G B/F#

Example 3.10: Intro and Verse of Radiohead, “Faust Arp” (2007, 0:05)

This sequence is repeated once before being changed just before chorus one.

C major, $A\flat$ major, and $D\flat$ major triads in the turnaround defy any all-encompassing key, acting instead as transitional material between the verse’s B tonic and the chorus’s G tonic. Functional harmonic analysis fails to describe this passage convincingly, but it may be worth considering C major as a pivot chord ($Bm:\flat II=G:IV$) and $A\flat$ major as a tritone substitution of G’s dominant. This still fails to explain $D\flat$ major as the chord directly preceding G, unless one is willing to consider $A\flat-D\flat$ as II–V transposed down a semitone!⁶⁵ Regardless, the diminished fifth root movement between $D\flat$ and G

⁶⁵ Though I have no methodical survey in which to situate these findings, I do know of one other song that uses a II–V transposed down a half step. In Silverchair’s “Ana’s Song” (1999), the $E\flat$ major verse connects to the E major chorus by way of $B\flat$ major and F major triads. One could read this as a pivot of sorts: V–II in $E\flat$ pivoting as $\flat V-\flat II$ in E. Once again, we could read the F major triad directly preceding the chorus as a tritone substitution for E’s dominant, while the $B\flat$ major triad defies tonal explanation.

reciprocates the bass progression between the second inversion B major and root position C major triads, thereby beginning and ending this tumultuous transition with jarring tritone bass leaps. I consider this voice-leading anomaly a fitting harmonic character for a fleeting section functioning only as transition.

The modally-ambiguous chorus is an apt counterpart to the mode-confused verse. Additionally, it shares the same propensity for holding chords over a changing bass. After beginning on a root position G major triad, the chorus enacts the same Aeolian fourth descent ($\hat{1}$ down to $\hat{5}$), transposed four semitones from the verse. This descending tetrachord reinforces the G tonic by arriving on its dominant, even though it never expresses dominant harmony.

pitch and rhythm in voice approximate,
lots of grace notes, falls, and anticipations

stuffed, stuffed, stuffed, we thought you had it in you but no, no, no, for no real rea-son

GMaj GMaj/F GMaj/E^b GMaj/D GMaj GMaj/F GMaj/E^b GMaj/D

Example 3.11: Chorus of Radiohead, “Faust Arp” (2007, 0:29)

Verse two and chorus two progress much like their antecedents, though chorus two is doubled to four iterations instead of two. Immediately following, an instrumental interlude presents yet another radical tonal shift, this time to B \flat major. While the tonal materials of the interlude provide the first complete tonic–dominant

relationship (B \flat –F/A) in the song, the interlude follows in the same vein as all other harmonic progressions in “Faust Arp”: a series of chords that cannot be accounted for by any single diatonic system.

The harmonic progression in the interlude also sets the harmonic underpinning for the final climactic section.⁶⁶ Gushing strings enter at 1:33 just prior to the arrival of Thom Yorke’s highest vocal note at the downbeat of the climax. Soaring violins and Yorke’s uppermost vocal tessitura climb to previously unreached volume levels, the instrumental textures now at their thickest (as demonstrated by the dense spectral image of the climax). The outro to this fleeting song arrives all too early at 1:51, using the chorus bassline to fade away in hushed dynamics and sparse string textures.

The musical notation consists of two staves in 3/4 time, key of B-flat major. The first staff contains the vocal line with lyrics: "You're got a head full of fe - a - thers". Above the staff, chords are indicated: B \flat , F/A, C/G, and G. A triplet of eighth notes is marked over the notes for "fe - a - thers". The second staff continues the vocal line with lyrics: "you've got mel - - ted to bu - tter." Above the staff, chords are indicated: B \flat , F/A, and "(Begin outro)". A triplet of eighth notes is marked over the notes for "mel - - ted".

Example 3.12: Terminal Climax in Radiohead, “Faust Arp” (2007, 1:34)

⁶⁶ In order to avoid abrupt modulation at the climactic vocal hook, the shift to B \flat occurs in the interlude, in the same way that artists often avoid the “truck driver modulation” by shifting up a step during the bridge instead of the last chorus. For further examples of this technique in post-1990 acoustic rock songs, see Lisa Loeb’s “Jake” (1997) and The Cardigans’ “Communication” (2003). It could be that, while the abrupt modulation is fine in thick rock textures, it seems jarring in delicate acoustic settings such as these and “Faust Arp.”

Compare Yorke's angular melody transcribed above to the melodies expressed by the verse and chorus (see Examples 3.10 and 3.11). Upon seeing only the hook melody, one might doubt that a line so destitute in contour could serve as the memorable hook, but relative to the nearly monotone verse and chorus, this melody enables "Faust Arp" to achieve the unique balance between climax and chorus typical of Terminally-Climactic Forms. Harmonically, the climax also presents the most functional chord progression in a song characterized almost entirely by non-functional harmony, including the first instance of an authentic tonic-dominant progression. One could argue that the song requires such a progression in the climax to attain closure, though this closure is achieved using a local harmonic progression rather than large-scale tonal organization.

Section group: Verse/Chorus Group-----		Bridge Group -----				Climactic Group -----								
Song form:	Intro	V1	C1	V2	C2	A	B	C	D	E	F	G	G'	G
Clock time:	0:01	0:17	0:50	1:13	1:46	2:09	2:31	2:53	3:13	3:30	4:06	4:56	5:18	6:02-6:35
Chord prog:	Em D C	Em D C	Em C	Em D C	Em C	C D	Em D C	Em	Bm A	G Bm	Bm G	F#m D A E		
Implied center:	Em	Em	Em	Em	Em or C	Em	Em	Em	Bm	Bm	Bm	F#m		
Tonal area:	E minor-----B minor-----F# minor-----													

Figure 3.25: Formal Design of Coheed and Cambria, “The Crowing” (2003)

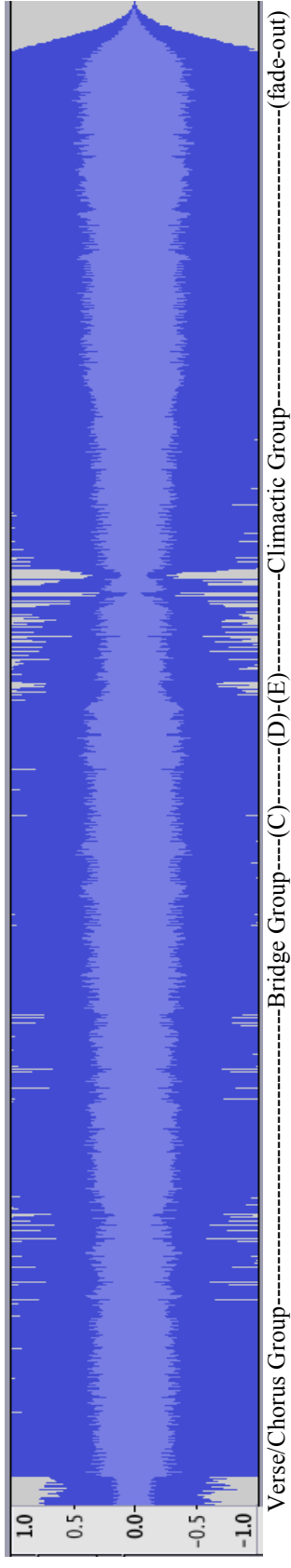


Figure 3.26: Waveform Analysis of Coheed and Cambria, “The Crowing” (2003)

With the commercial success of *Sgt. Pepper's Lonely Hearts Club Band*, The Beatles brought the tradition of the “concept album” to life. Coheed and Cambria have taken this tradition much further, extending the twenty-first-century narrative concept album to a narrative concept catalog.⁶⁷ By this I mean the band exists solely for the purpose of setting to music a story—*The Amory Wars*, a graphic novel written by Coheed frontman Claudio Sanchez. Aside from this unprecedented large-scale formal design, many individual songs on Coheed's albums exhibit the Terminally-Climactic Form that allows their song climaxes to correspond with climactic moments in the graphic novel.⁶⁸

Contrasting with the tonally/modally complex opening of “Faust Arp,” the entire verse/chorus group of Coheed and Cambria's “The Crowing” is completely centered in E minor. After commencing with solo guitar, the verse is accompanied by a complete rhythm section in an ambiguous six eighth-note ostinato that can be felt in either compound or duple time. Primary contrast between verse and chorus happens through the slower 4/4 metric modulation and repeated lyrical/melodic hook of the chorus, set to a different E minor progression with slower harmonic rhythm.

⁶⁷ While many attribute the first concept album to *Sgt. Pepper's Lonely Hearts Club Band*, admittedly, the album does not have much of a concept—essentially, a band plays a concert. In this way, Coheed and Cambria's use of *The Amory Wars* as the unifying story for their entire catalog represents a quantum leap in terms of lyrical concept.

⁶⁸ Similar Terminally-Climactic Forms from *The Amory Wars* can be found in “Everything Evil” and “Three Evils,” both of which feature overtly violent textual climaxes.

Example 3.13: Verse Groove of Coheed and Cambria, “The Crowning” (2003, 0:08)

The bridge section group encompasses several thematically distinct sections, most of which are texted. While the group begins in the same E minor tonal area as the verse, it gradually moves its emphasis to B minor. This modulation is made somewhat smoother by the instrumental vamp at section C, which removes the principal melodic instrument (the voice), encouraging the listener to focus on the metrical complexities of the passage. It is this rhythmic device itself that bridges the E minor and B minor tonal areas. The same 32nd-note percussive barrage from the end of section C (in E minor) reappears at the end of section D (in B minor). Following this heightened rhythmic activity, section E’s final C^{add9} chord acts somewhat like a medial caesura, after which the final bridge section (section F) begins again with quiet palm mutes, gradually building in volume as it approaches the F[#] minor climax.

A. Section C, half-time feel

Guitar
* = pinch harmonic

Drum Kit

B. Section D, faster

Guitar
* = bend with pinch harmonic

Drum Kit

Example 3.14: C and D Bridge Sections of Coheed and Cambria,
“The Crowing” (2003; 2:53, 3:13)⁶⁹

Lyrically, the climax of “The Crowing” marks a very important moment in the plot of *The Amory Wars*. Claudio, the story’s protagonist, metamorphoses at this point into the prophetic savior hinted at from the onset—The Crowing. Ambellina, a member of the troupe of angels called The Prise, has been watching the story unfold from Heaven, but now decides to burn her wings and return to Earth as Claudio’s

⁶⁹ Guitar tablature, or “tabs” as they are known colloquially, represent the most popular form of guitar notation (rock guitarists who read and write in traditional Western notation are in the minority). I include it here as an alternate, equally-viable form of musical representation.

guardian. The complete lyrics of the climax are most often interpreted as a letter from Claudio to the angel Ambellina after learning of her descent to Earth.⁷⁰

Dear Am be-lli - n a___ the Prise wish-es y - o-u___ to watch o-ver me_____ o - h

G': (chord progression continues, double-time tempo modulation...)

“I fought the decision that call and lost
my mark as the relevant piece in this
I will come reformed
In short for the murders of those I court
I bless the hour that holds your fall
I will kill you all”

G'': (chord progression continues, back to half time)

“I will call you out from shelter burn your wings, you'll know no better
I will call you out from shelter burn your wings and learn their letters
I will call you out from shelter burn your wings and learn their letters
I will call you out from shelter burn your wings and learn their letters
I will call you out from shelter burn your wings and learn their letters”

(Recap G until fade out)

Example 3.15: Climactic Lyrics of Coheed and Cambria, “The Crowing”
(2003, 4:56–end)

⁷⁰ There is much debate among Coheed and Cambria fans as to the meaning of this passage, especially whether or not Claudio’s gratitude to Ambellina is meant sarcastically. Many contributors to the forums on the official Coheed and Cambria/*Amory Wars* fansite, Cobalt and Calcium, believe that he is bitter, and that he actually believes The Prise somewhat responsible for the death of his parents and siblings (<http://forums.cobaltandcalcium.com/showthread.php?t=15584>).

This pivotal textual moment is set to music by a repeating lyrical/melodic hook that unfolds over a stock F# Aeolian progression. “The Crowing” marks this climax not with the common minor/relative major harmonic modulation, but with a more sophisticated culmination of an upward fifths progression separating the three section groups.⁷¹ Palm-muted guitar textures at 4:06 also provide sharp dynamic contrast to the explosive amplitude climax at 4:56. Guitarist Claudio Sanchez gradually lifts his right palm off the strings (just above the guitar’s bridge) throughout this section, which, with the aid of saturated guitar distortion, increases the volume as the strings are allowed to vibrate with decreased dampening, only allowed to ring free and unrestrained at the climactic release.

⁷¹ The verse/chorus group is all in E minor, the bridge group adds another sharp to reach B minor, and the climactic group immediately adds another sharp, presenting a hook in F# minor.

Section group:	Verse/Chorus Group-----	Loud Group-----	Quiet Group-----	Loud Group-----	Climactic Group-----
Song form:	Int. V1 Tr V2 PC C1 V3 PC C2 A A' B C D	E E' F G H	J	K (TC)	K' outro
Clock time:	0:01 0:24 0:50 1:02 1:25 1:48 2:00 2:34 2:46 2:57 3:30 3:52 4:16 5:05	6:26 7:08 7:25 7:53 8:22	8:51 9:06 9:18 9:30 9:42-9:58		
Chord prog:	Am pedal	AGACB	AG	AMaj riff	AEGD AFGD, FD
Implied center:	A	A	A	A	(riff) ADCD, B♭
Tonal area:	Am-----	Dm-----	Am-----	Dorian-----	

NB: All chords are root and fifth power chords unless otherwise noted

Figure 3.27: Formal Design of Tool, “Pushit” (1996)

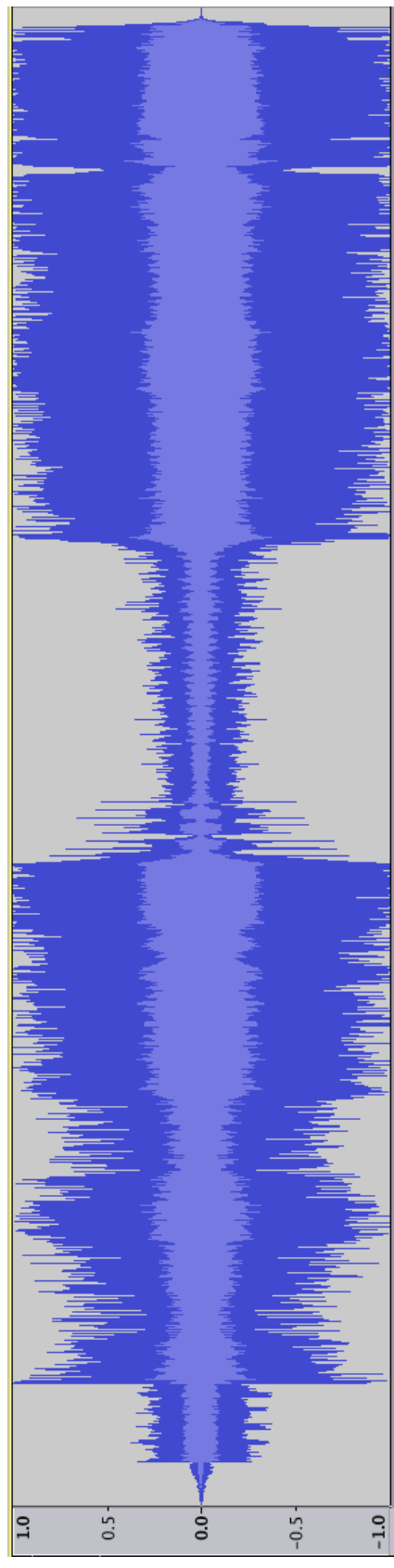


Figure 3.28: Waveform Analysis of Tool, “Pushit” (1996)

Tool's "Pushit" is one of nine epic songs on their album *Aenima*. Though the album contains fifteen tracks, six of these are *intermezzi* placed between the longer songs on the album.⁷² Since these *intermezzi* are quite short, most songs on the 77-minute album are very long, with an average duration of 7'25". Some of the shorter songs can be modeled using three-part Terminally-Climactic Forms ("Hooker with a Penis") while longer ones such as "Pushit" (9'58") and "Third Eye" (13'48") must be modeled by an extended, multi-partite formal design.

The introduction to "Pushit" is composed of an initial swarming noise, somewhere between the sound of a beehive and Penderecki's *Threnody for the Victims of Hiroshima*. Swarming continues as the guitar introduces the verse riff (transcribed in Example 3.16), after which the voice joins as the harbinger of verse one, while full band timbre is suspended until 0:50. Like "The Crowing," the verse groove of "Pushit" is metrically ambiguous; it can be felt as fast compound 12/8 or alternately as duple 6/4 or 3/2, depending on how fast the listener wishes to interpret the primary pulse. Drummer Danny Carey's open hi-hats on every third attack (against the clear duple rhythm in his kick and snare) lend metric dissonance to this already-swirling vortex of rhythmic complexity.

⁷² By *intermezzi*, I mean that the six other tracks are not songs in any traditional sense. These tracks include death threats left on drummer Danny Carey's answering machine set to classical piano music ("Message to Harry Manback"); a recipe for hashish cakes chanted in German ("Die Eier von Satan"); and a simulated electrical storm performed on acoustic percussion instruments ("(-) Ions"). After the third song, this pattern of alternating songs with *intermezzi* follows uninterrupted for the rest of the album. The fact that the first three tracks on the album are songs was probably due to a decision by the band or record company to start in a conventional manner before making such a radical departure from the standard album format.

The musical notation for Example 3.16 is in 3/2 time. The guitar part consists of a repeating eighth-note pattern: G4, A4, B4, C5, B4, A4, G4. The drum kit part consists of a repeating eighth-note pattern: G4, A4, B4, C5, B4, A4, G4. The drum kit part also includes a hi-hat pattern, with a '+' symbol indicating an open hi-hat. The notation is in 3/2 time and consists of two staves: Guitar and Drum Kit. The guitar staff shows a repeating eighth-note pattern. The drum kit staff shows a pattern of eighth notes and hi-hats, with a '+' symbol indicating an open hi-hat.

Example 3.16: Verse Groove of Tool, “Pushit” (1996, 0:50)⁷³

Strophic textual patterns in the verse give way to a repeated refrain (“pushin’ me, shovin’ me”) that defines the prechorus at 1:25.⁷⁴ Thematically, the difference from verse to chorus is somewhat understated. In fact, the verse and chorus may be described as monothematic, since both consist of the same basic guitar and drums groove. Verse/chorus contrast is largely sonic. While the verses are composed of only slightly-dirty guitar tones and closed hi-hats, the chorus boasts fully-overdriven multiple guitars accompanied by washy ride and crash cymbals. Combined with the timbral growth enacted from the onset of the swarming noises, one can hear the first two minutes of “Pushit” as a continuous arc of swelling texture and dynamics.

⁷³ Unlike most rock drummers, who improvise around a backbeat, Tool’s drummer Danny Carey (who attended the UMKC conservatory before touring with the band) actually composes and revises drum patterns before recording. Carey does sometimes shift the placement of the two-sixteenth hi-hat motive shown in Example 3.16.

⁷⁴ There is also a somewhat understated change in the lead guitar, which transposes the verse riff at the fifth. I consider this understated because the riff frequently uses “power chords”—chords in which the fifth (but not the third) above each fundamental is always present.

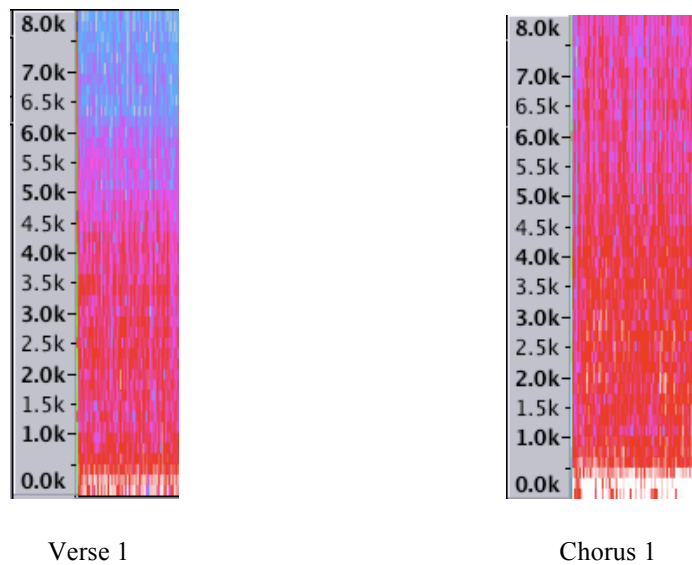


Figure 3.29: Spectrographic Comparison of Verse 1 and Chorus 1 in Tool, “Pushit” (1996)

Verse three and chorus two follow in a more or less standard way. The comparatively loud chorus acts as a smooth dynamic transition to the first of three bridge-functioning section groups. Harmonic change in this song is quite subtle. Whereas the progression underlying the verse, prechorus, and chorus is less of a progression than a “riff” expressing a tonic pedal, the loud group differentiates itself by changing bass underneath this guitar riff.⁷⁵

⁷⁵ Middleton provides a comparative account of the term “riff” in many divergent popular styles, even considering it synonymous with “musical idea” (Middleton 1990, 125). Tool often utilizes guitar riffs over a static pedal in their music—in fact, much of their music is centered around a more or less constant D fundamental (so much so that drummer Danny Carey tunes his drums to the key of D minor). This change of bass underneath the riff is a common strategy used by bassist Justin Chancellor to add subtle contrast in bridge-functioning sections. See also Tool songs “Forty-six and Two” (2006, 5:05) and “Schism” (2001, 4:40) for additional examples of this changing bass technique.

The image shows a musical score for guitar and bass in 3/8 time. The guitar part (top staff) begins with a rhythmic pattern of eighth notes: G4, A4, B4, C5, G4, A4, B4, C5, G4, A4, B4, C5. This is followed by three measures of rests, indicated by a double slash and a vertical line. The bass part (bottom staff) begins with a rhythmic pattern of eighth notes: G2, A2, B2, C3, G2, A2, B2, C3, G2, A2, B2, C3. This is followed by three measures of rests, indicated by a double slash and a vertical line. The key signature is one sharp (F#).

Example 3.17: Change of Bass Under Guitar Riff in Tool, “Pushit” (1996, 2:57)

The bridge of “Pushit” is expanded into three dynamically distinct section groups in the pattern of quiet–loud–quiet. Departing from the established guitar riff for the first time in the song, variation A’ at 3:30 simply adds power chords to the change of bass pattern established at 2:57. There is also a marked metric change, as the ambiguity between compound and duple time is resolved in favor of a clear 12/8 for the first time in the song. Maynard James Keenan’s overdriven voice repeatedly yells the refrain “push it on me” (first presented in the prechorus), leading to contrasting instrumental B material at 3:52. The B material starts as a unison guitar and bass 12/8 groove, soon morphing to *divisi* as the guitar moves into a higher tessitura for the variation at 4:04.

The quiet group begins abruptly at 4:16 immediately following the loud 12/8 groove. It immediately flips the newly established compound time to an unequivocal 6/4 duple groove, initially set up by electronic percussion and acoustic hi-hat. Clean guitar enters at 4:52 and continues *ad libitum* when the bass enters at 5:05, after which the voice returns with an improvisatory “push/put me somewhere I don’t wanna be,” which continues through most of the section.

The image shows musical notation for two instruments: Bass (processed) and Electronic Percussion (quasi improv). Both are in 6/4 time. The Bass staff has a repeating eighth-note pattern with slurs. The Electronic Percussion staff has a repeating eighth-note pattern with slurs and a 'x' mark above the fifth measure. A label 'acoustic hi-hat (played w/pedal)' is positioned below the first two measures of the Electronic Percussion staff.

Example 3.18: Bass and Drums Groove of Tool, “Pushit” (1996, 5:04)

The loud section group develops the quiet group’s bass groove at 6:26 while the guitar begins to solo.⁷⁶ In fact, this beautiful bass groove acts as a unifying device for the entire loud group, while drums and guitar explore more virtuosic techniques typically associated with solo sections. At 7:25, the guitar settles into yet another riff as the voice re-enters. This is followed at 8:22 by a repeated call-and-response pattern between the instruments and the voice, where the registral peak of Maynard James Keenan’s vocal line signifies the beginning of the climax.

⁷⁶ Guitarist Adam Jones’s solos are nothing like the quintessential electric guitar solos many people associate with metal or hard rock. The most common strategy for electric guitar solos is rapid improvisation over scalar passages; Jones instead prefers to feature very few notes, limiting his materials to a single register and timbre. He often limits his choice of distinct pitches by utilizing short two- or three-note motives throughout, such as in the solo to “Eulogy,” also from the album *Aenima*, which features an oscillating two-note whole step motive throughout.

Freely

Voice

Guitar

Drums

(ad libitum 16th-notes on ride cymbal and toms in compound feel)

Voice

Guit.

Dr.

(sim.)

Voice

Guit.

Dr.

(sim.)

Example 3.19: Terminal Climax (Theme H) in Tool, “Pushit” (1996, 8:22)⁷⁷

The climax of “Pushit” flows directly from the final loud group, announced by a repeated riff in the guitar, bass, and drums, and a stunningly beautiful vocal melody in contrasting *bel canto* tone. After three presentations of this call-and-response, the

⁷⁷ I have omitted barlines from this transcription for the same reason that Pieslak (2007) does in some Meshuggah songs: this section is better felt in free combinations of two- and three-beat groupings than with any specific measure length or meter signature.

music shifts gears to a freer metric organization at 8:51, featuring yet another varied presentation of the lyrical theme “pushin’ and shovin’, pushin’ me.” Keenan’s trademark sustained scream in a high tessitura (“there’s no love in fear!”) transitions into the hook at 9:06, under which the guitar, bass, and drums establish the 6/8 compound groove that forms the backdrop of this memorable lyrical/melodic moment.

There’s no love in fear!

Staring down that hole again
 Hands are on my back again
 Survival is my only friend
 Terrified of what may come

Remember I’ll always love you
 As I claw your fucking throat away
 It will end no other way
 It will end no other way!

Example 3.20: Terminal Climax (Theme K) and Lyrics in Tool, “Pushit”
 (1996, 9:06–end)

Rather than present a repeated sing-along melody (a feature normally outside Tool’s neo-prog style), the lyrics presented by the hook continuously develop and progress in intensity, only repeating a lyric at the end to bring about closure. A brief outro follows without transition, composed of a short unison instrumental tag that leaves the D minor piece hanging on a dramatic non-tonic $B\flat^{add9}$ harmony.

Terminal Climaxes Within the Verse/Chorus Paradigm

In his essay on formal structures in The Beatles, John Covach argues that the Fab Four's gradual development of a more independent formal aesthetic from 1964 to 1968 marked a shift from the "craftsperson" approach to songwriting toward a truly "artistic" formal innovation.⁷⁸ Covach's thesis is that songwriters Lennon and McCartney were deeply steeped in the American pop tradition, and that this is where they learned the conventional formal structures (especially AABA) so common in their early music. He explains how they later began to add additional sections to modify these paradigmatic structures. However, Covach does not take his argument far enough to cover the truly revolutionary formal designs they explored in their latest works.⁷⁹

All of Covach's formal designs end with either a verse or chorus; the sole exception is the four-measure coda that ends "Lady Madonna," a song in "broken AABA form."⁸⁰ I contend that, while this middle-period Beatles practice described by Covach represents a distinct evolution in rock songwriting practice (one that influences composers to this day), their true contribution was the omission of concluding recapitulations, a practice that did not become fully realized until the Terminally-Climactic Forms closer to the turn of the century. While the Beatles retained many of

⁷⁸ See Covach 2006.

⁷⁹ Covach hints at this later practice at the end of his essay: "Lennon's contributions to the *White Album*, on the other hand, include some of his most formally complex songs, including "Happiness is a Warm Gun" (2006, 49). The true formal complexity involved in "Happiness" comes from its non-recapitulatory nature, and also from its through-composed design, which I analyze in Chapter Four.

⁸⁰ *Ibid.*, 49.

the early American pop conventions in order to experiment with rearranging the constituent parts of conventional forms, their non-recapitulatory endings were perhaps *too* revolutionary.

Rock artists in the new millennium can thus be understood as having one foot in the dominant formal paradigms of today *made possible by* The Beatles, while recursively beginning to integrate their revolutionary terminal climaxes into their regular compositional practice.⁸¹ In *The Time of Music*, Jonathan Kramer writes:

Those rare pieces that end in a key other than the one in which they begin depend for their force on the denial of this expectation (or else they are products of particular stylistic conventions, as are Sousa marches, for example). The expectation of tonic return is still operative, but that implication is ultimately denied for expressive effect.⁸²

While the Beatles' use of non-recapitulatory endings was certainly received as expressive denial, terminal climaxes in contemporary experimental rock music may begin to reach the point of a particular stylistic convention by the twenty-first century. This evolution faithfully models the conventional/experimental compositional dialectic I describe in Chapter One. The Beatles' experimental push could not be fully absorbed into rock aesthetics until after the conventional backlash of the 1980s and early 1990s, spawning genres like punk and grunge. Post-millennial experimental rock artists

⁸¹ This is a good example of the Experimental Dialectic I described in Chapter One, whereby trends that were once radical are slowly absorbed into more conventional compositional practices.

⁸² Kramer 1988, 25. This quote appears as a caveat to Kramer's assertion that most tonal music uses what he calls "linear" or goal-directed time.

composing Terminally-Climactic Forms are *experimenting* with verse/chorus-based forms, using recognizable verse and chorus structures while exploring new ways to end songs without relying on the recapitulatory conventions of Top-40 rock.

CHAPTER FOUR:
THROUGH-COMPOSED FORMS
IN EXPERIMENTAL ROCK

Though the forms discussed in Chapter Three certainly represent a departure from the Verse/Chorus Paradigm, there are forms in post-millennial rock that are more experimental still, including those that eschew verses and choruses altogether. The genres and subgenres within this experimental corpus are known by many names (post-rock/post-metal, math-rock/math-metal, art rock, neo-prog, to name a few), but the compositions created by these artists can be grouped by shared characteristics. First, experimental rock compositions usually exhibit unconventional formal designs, and are frequently through-composed. Second, experimental rock compositions are, by and large, performed on traditional rock instruments.¹ This facet ensures their ability to be marketed and recognized as rock compositions despite their technical complexity and ambitious scope.² Before devoting a large portion of this chapter to the four types of

¹ It should be noted that, even within traditional rock instrumentation (guitar, bass, drums, keyboards), the individual instruments are not always used to produce conventional timbres. For example, guitarists in the subgenre known as “noise rock” often play their guitars on the ground or on a table, using them not as strummed accompaniment instruments, but as noise generators filtered through multiple effect loops.

² Instrumentation can be a useful metric for distinguishing contemporary art music compositions (Reich’s *Music for 18 Musicians*, Arvo Pärt’s *Arbos*) and experimental rock compositions (Radiohead’s *Hail to the Thief*, Sigur Rós’s *Takk*). However, as Alex Ross notes, as the lines between popular and classical genres have been blurred in the twenty-first century, so have their native timbres and textures: “If you were to listen blind to Björk’s ‘An Echo, A Stain,’ in which the singer declaims fragmentary melodies against a soft cluster of choral voices, and then move on to Osvaldo Golijov’s song cycle *Ayre*, where pulsating dance beats underpin multi-ethnic songs of Moorish

through-composed forms that emerge from post-millennial rock compositions, I will briefly discuss some precursors to such forms in both classical and popular practice.

In many of his Lieder (including “Sprache der Liebe,” “Betras Lied in der Nacht,” and “Halt!”) Schubert sets each lyrical stanza to new music, a profound departure from the strophic forms commonly used at that time.³ Later in the nineteenth century, the term through-composed (*durchkomponiert*) was used to describe not only songs whose strophes were each set to new music but also symphonic poems, which, unlike *da capo*, theme and variation, and sonata forms, typically feature no recapitulation. Modernist composers in the first half of the twentieth century also favored non-recapitulatory forms as an aesthetic ideal. This led Theodor Adorno to dismiss popular music for its reliance on idiomatic, repetitive forms, which, he argued, stood in contrast to the self-directed, individuated formal designs of the modernists.⁴

Through-composed pieces evolved into something decidedly different in the so-called minimalist period (ca. 1965–1972). Some of these pieces can be considered

Spain, you might conclude that Björk’s was the classical composition and Golijov’s was something else” (Ross 2008, 590).

³ Schubert is often cited as the quintessential composer of through-composed song. In fact, the only example of through-composed song cited in *Oxford Music Online* is Schubert’s “Halt!” Marjorie Wing Hirsch, in her book on Schubert’s lieder, mentions both “Betras Lied in Der Nacht” and “Sprache Der Liebe” as through-composed, though their individual forms are given very little detailed treatment (Hirsch 1993, 12 and 97).

⁴ Witkin (1998) offers a compelling critique of Adorno’s argument, demonstrating that Adorno applied his limited experience with popular music (mostly from Tin Pan Alley and early jazz) to a blanket critique of all popular music. His work draws heavily upon Gracyk’s (1992), who shares his condemnation of Adorno for ostensibly ignoring the experimental jazz and rock of the 1960s (Witkin 1998, 160–180). Though Adorno may have been correct about Tin Pan Alley (AABA forms, in particular), the experimental music of the late 1960s made significant advances in reinventing popular forms.

one-part forms, since they lack recapitulation and clear formal divisions. Many pieces from this era develop a central idea through some audible process, and it is this process (more than the musical material) that defines the piece. This technique is most obvious in early tape pieces such as Steve Reich's *Come Out* (1966) and Alvin Lucier's *I am sitting in a room* (1970), both of which develop a recorded speech sample as their musical idea. In Lucier's case, the original sample is subjected to an additive process whereby intelligible speech is gradually replaced with ambient room noise. Reich's process, on the other hand, simply involves playing two versions of the same sample at slightly different speeds, a technique which gradually moves the two versions out of phase with one another. His post-minimal masterpiece *Music for Eighteen Musicians* (1976) takes the African bell pattern as its *idée fixe*, sculpting each movement with a process that expands and contracts the length of that pattern.⁵

Similarly, in the sphere of popular music, late '60s and early '70s rock artists (especially the forerunners of "prog rock") began structuring songs with little or no recapitulation, developing what Dave Headlam has called "large, complex forms based on contrasting sectional blocks."⁶ In his analysis of "Babe I'm Gonna Leave You" (1969), Headlam explains how Led Zeppelin avoids a recapitulatory ending by dividing the song into two juxtaposed blocks, "each with its own instrumentation,

⁵ In most sections (I, IIIa, IIIb, IV, VI, VII, VIII, and XI), Reich begins by presenting a one-measure ostinato, which is then expanded to two- and then four-measure groupings. After this expansion, he contracts the four-measure grouping to two- and then one-measure units, creating a 1-2-4-2-1 arch form.

⁶ Headlam 1995, 329. Headlam analyzes three songs by Led Zeppelin, and claims that the influence for such structures originates with both *Sgt. Pepper's Lonely Hearts Club Band* (1967) and The Jimi Hendrix Experience's *Electric Ladyland* (1968).

dynamics, texture, and gestures.”⁷ The same two-part block design can be found in “When the Levee Breaks” (1971), also analyzed by Headlam. Though I concur with his two-part block analysis, I will henceforth refer to similar structures as section groups, following the definition of such structures in Chapter Two. My reasoning for this choice of nomenclature should become clear in the next paragraph.

We will recall from Chapter Two that section groups are used to model songs whose discrete sections can be organized into non-recapitulating groups. Unlike verse/chorus section groups, which are unified by recapitulations of verse and chorus (verse/chorus group=verse 1–chorus 1–verse 2–chorus 2), through-composed section groups must cohere in more musically sophisticated ways, since sectional recapitulations are, by definition, not present in through-composed forms. This is an important distinction in focus: while Terminally-Climactic Forms cannot recapitulate section groups, but can recapitulate sections within those groups, through-composed forms may not recapitulate any section, and thus, no section group.⁸ The pieces one considers to be through-composed are contingent upon on the level of focus one adopts. We can think of these levels of focus like the zoom function on a camera lens.

⁷ Ibid., 353.

⁸ The following design common to two-part Terminally-Climactic Form cannot be considered through-composed because it features recapitulated verses and choruses: [GROUP I=Verse 1–Chorus 1–Verse 2–Chorus 2; GROUP II=Transition–Hook]. Note that while the form features recapitulation at the section level, it does not feature recapitulation at the level of section group, since group I moves to group II without a return to the original group. The following design should be considered through-composed regardless of how one partitions the sections into groups: [A–B–C–D . . .]. This is because it is characterized by an absence of recapitulation of any thematically distinct section, labeled here with consecutive letters rather than proper names like “verse” and “chorus.”

At the most “zoomed-out” level, every piece is through-composed, since its mega-group (encompassing all sections in the song) never recapitulates; at the most “zoomed-in” level, a piece that repeats *anything* cannot be considered through-composed, since at least one of its (micro-)sections is recapitulated. I choose to define through-composed forms as a form in which no discrete section is recapitulated. Sections may be repeated (in that successive iterations may be placed back-to-back), but once contrasting material is introduced, the original section does not recur. Since each section group in “Babe I’m Gonna Leave You” features recapitulation of that group’s constituent sections, the song should not be considered through-composed. However, the section groups and non-recapitulatory ending fit Ken Stephenson’s compound-binary form quite well.⁹

The Beatles made use of through-composed song forms in their late period, perhaps most famously in “Happiness is a Warm Gun” (1968). The song can be heard as a three-part design.¹⁰ See Figure 4.1. After a short introduction, section group I begins in a slow and somber 4/4, opening with the lyrics “she’s not a girl who misses much.” Beginning with the guitar solo at 0:44 (which foreshadows the memorable “I need a fix ’cause I’m goin’ down” theme), the second section group modulates abruptly to compound time. Following the second of two sections in group II (“Mother Superior jump the gun”), the third group sets the title lyric in slow 4/4, with the leisurely du-wop progression

⁹ See Stephenson 2002, which is discussed in my Chapter One.

¹⁰ Walter Everett points out that the title-containing last section group (which he calls a “finale”) was added to the song later. The two-part artifact can still be heard on the *Anthology* (Everett 1999, 182).

(I–vi–IV–V) providing an ironic twist on the violent lyrics. Unlike the first two section groups, which each comprise at least two distinct themes (identified by distinct Roman letter names), this sing-along ending is only made of one theme. Therefore it is not, strictly speaking, a section group, but merely a section whose memorability is ensured by its many varied repetitions. While this sing-along features intra-sectional repetition, the three-part song structure features no sectional recapitulation, making the song a through-composed form that stands in contrast to the verse/chorus designs characteristic of rock since the late 1950s.

Section Group	Section	Clock Time	Description
I	A (intro)	0:01	“She’s not a girl who misses much” [Am7–6–Em]
	B	0:14	“she’s well acquainted” [Dm–Am]
II	C (transition)	0:44	Guitar foreshadows “need a fix” theme; moves to 6/8 time.
	C’	0:58	“I need a fix ‘cause I’m goin’ down” [A7–C–Am]
III	D	1:13	“Mother Superior jump the gun.” [A7–C–A7–G], alternating 9- and 10-beat groupings
	E	1:34	“Happiness is a warm gun” [C–Am–F–G]; du wop backing vocals continue until end
	E’	1:48	“When I hold you” (each previous chord reduced from 4 beats to 3)
	E”	2:05	“Happiness” (4/4 restored, vocal improvising), ends on F minor (borrowed iv)
	E'''	2:22–2:44	Lennon’s PAC on C5 begins chorus-dependent outro

Figure 4.1: Formal Design of The Beatles, “Happiness is a Warm Gun” (1968)

This chapter will now define four types of through-composed forms, using charts like the one provided above to illustrate the pieces under discussion. Before

proceeding, it will be helpful to explain briefly some of the formal symbols used throughout this chapter, which differ slightly from the ones used in Chapter Three. Consulting the leftmost column in Figure 4.1, we can see that section groups are now identified only by consecutive Roman numerals, rather than proper names as they were in Chapter Three (verse/chorus group, bridge group, climactic group). This is due to the lack of verses and choruses in through-composed forms.¹¹ Moving one column to the right, notice that instead of labeling thematically distinct sections as “verse,” “chorus,” and the like (as in Chapter Three), I here use consecutive Roman letters to identify those thematically distinct sections.¹² If two adjacent sections are based on the same thematic material, yet are recognizably different in terms of timbre/texture, rhythm/meter, or some other salient musical parameter, I use the familiar “prime” symbol (′) to identify successive presentations.¹³ While A and B represent thematically distinct sections, C and C′ represent two distinct presentations of shared thematic material. The various criteria used to group sections hierarchically into

¹¹ If a song does not have verses and chorus (recapitulatory structures), then it cannot have a verse/chorus group; if it does not have verses and choruses, it cannot have a bridge (thus no bridge group), since the bridge is defined largely in relation to the verse and/or chorus; and if it does not have a chorus, it cannot have a terminal climax (which is also defined in relation to the chorus), nor a climactic group.

¹² I add a proper name in parenthesis when the section in question behaves somewhat like a properly-named section found in verse/chorus-based forms. This is explained further in my discussion of “independent verses” and “independent choruses” in Chapter Two.

¹³ Notice that I do not use the “prime” designation for presentations featuring new lyrics. If successive presentations of a given chord progression feature new lyrics, but no other change in the musical parameters given above, I would simply label all such presentations under the same section (X), rather than assigning each presentation a prime designation because of its new lyrics (X–X′–X″).

section groups are explained alongside the four types of through-composed forms discussed in this chapter.

A Genetic Model for Through-Composition in Post-Millennial Rock

Through-composed forms in post-millennial experimental rock can be construed as interpretations and adaptations of the classical and popular precedents I provided earlier in this chapter. In order to understand better the variegated approaches to through-composition in post-millennial rock, I have constructed a taxonomy of through-composed types based on a genetic analogy to formal alleles.¹⁴ Discrete sections of through-composed pieces may exhibit a higher-level grouping structure, thus partitioning the form into section groups, or may simply appear consecutively without higher levels of organization. If all sections exist within a single section group (or within no section group at all),¹⁵ the form can be described as “one-part” (allele *O*); if divided into multiple section groups, the form can be described as “multi-part” (allele *G*).¹⁶ Whether the song is divided into one part or multiple parts, the sections composing those divisions will either exhibit thematic unity or thematic diversity. If

¹⁴ An allele is a genetic component that corresponds to a certain trait. The resultant combination of multiple alleles is known as a genotype. For example, allele *A* and allele *B* combine to yield the genotype $\langle A, B \rangle$.

¹⁵ In terms of grouping structure alone, only a semantic difference exists between, on one hand, all of a piece’s sections collected under a single section group, and on the other, all of a piece’s sections collected under no section group. However, when the basis for organizing these sections into groups is shared thematic material, the musical effects of these two designs are very different, as will be exemplified by through-composed types I and III, respectively.

¹⁶ The *G* allele may serve to remind us that the multi-part form is partitioned as such by section groups.

thematically unified, the section group or piece can be described as “monothematic” (allele *M*); if thematically diverse, the section group or piece can be described as “polythematic” (allele *P*). Plotting dichotomous allele pairs *O/G* and *M/P* on a 2x2 Punnett square produces four distinct genotypes (*<O, M>*, *<O, P>*, *<G, M>*, *<G, P>*), as shown in Figure 4.2.

	One-Part Forms (<i>O</i>)	Multi-Part Forms (<i>G</i>)
Monothematic (<i>M</i>)	Type I: One-Part Monothematic <i><O, M></i>	Type II: Multi-Part Monothematic <i><G, M></i>
Polythematic (<i>P</i>)	Type III: One-Part Polythematic <i><O, P></i>	Type IV: Multi-Part Polythematic <i><G, P></i>

Figure 4.2: Punnett Square of Through-Composed Types

Songs befitting genotype I *<O, M>*, or “One-Part Monothematic Forms,” feature thematically unified adjacent sections with no thematic contrast, and thus do not necessitate a second section group. The presence of multiple themes necessitates multiple section groups, yielding genotype II *<G, M>*, or “Multi-Part Monothematic Forms.”¹⁷ Genotype III *<O, P>*, or “One-Part Polythematic Forms,” arise when no higher level of organization can be discerned from thematically diverse sections. When those thematically diverse sections nonetheless exhibit coherence through some

¹⁷ This is not to suggest that the piece is monothematic, only that each individual section group is monothematic. The presence of multiple section groups, each with its own theme, obviously renders the piece polythematic.

other parameter (e.g., rhythm, meter, tempo, timbre, or lyrics), genotype IV <G, P>, or “Multi-Part Polythematic Forms,” arranges those sections into section groups.

Whereas thematic unification seems to be the norm in common practice, disunity and fragmentation are often described as a decidedly postmodern phenomena,¹⁸ more germane to post-WWII music (rock included) than any classical precedent.¹⁹ In the next section of this chapter, I will provide representative examples for each of these four through-composed types from the post-millennial rock corpus. In my analyses, I aim to demonstrate the many ways in which composers unify through-composed pieces, while also attempting to highlight the role of disunity and fragmentation as aesthetic ideals in this genre.²⁰

¹⁸ Although the question remains whether or not this has to do with an inherently postmodern musical object or with postmodern modes of reception for that object. Dell’ Antonio argues stridently for the latter, citing Frith 1996: “We certainly do now hear music as a *fragmented* and *unstable* object (my emphasis) . . . All music is more often heard now in fragments than completely: we hear slices of Beatles songs and Bach cantatas, quotes from jazz and blues” (Dell’ Antonio 2004, 220).

¹⁹ In “Postmodern Concepts of Musical Time,” Jonathan Kramer suggests a series of postmodern musical traits, including “disdain for the often unquestioned value of structural unity,” and “fragmentations and discontinuities” (Kramer 1996, 21–22). There are of course postmodern “classical” pieces that make use of fragmentation, namely collage pieces such as the third movement of Berio’s *Sinfonia*. In popular culture, such aesthetics can be found in the recently conceived mash-up genre, including the successful sampling artist Girl Talk.

²⁰ I am aligning thematic diversity with an aesthetic of disunity as a way to distinguish the practice of simply stringing together several diverse themes from the practice of thematic unification we associate with common practice works. The fragmentary aesthetic comes about not only through thematic diversity, but through the undeveloped presentation and rapid succession of these diverse themes, which we will observe in several One-Part Polythematic Forms later in this chapter.

Through-Composed Type I: One-Part Monothematic Forms

By developing a single thematic idea over the course of an entire track, the One-part Monothematic Forms used by experimental rock composers recall the developing processual forms of minimalism, though forms such as these are certainly not unique to either genre. In *Structural Hearing*, Felix Salzer describes Marenzio's madrigal *lo piango* as follows: "This madrigal gives the impression of a fully through-composed form, with one large motion driving on to its conclusion."²¹ One could also approach One-Part Monothematic Forms as (post)modern analogues to the practice of developing variation. The single unifying idea developed throughout these pieces is typically a theme, by which I mean a melodic/harmonic idea or repeating ostinato. As a way to develop these ideas, rock artists often manipulate sonic parameters such as volume, timbre, and texture to shape the form of the piece. By doing so, these artists forge another kinship with modernist compositional practice, where "in the absence of the tonal system's *a priori* goal definition . . . changes of texture, timbre, figuration, or register help to define contrasting phrases."²²

"Mean Time 'Till Failure," the opening track from Sleepy Eyes of Death's 2007 *Street Lights for a Ribcage*, is unified by a relentless two-chord progression (F major–A minor) performed on an array of synthesizers. This motive is manipulated by amplitudinal and rhythmic means over the course of the track in a linear process that reduces the pounding drums and full texture of the opening to the quiet and serene synthesizer-only ending. The track initially builds in intensity by layering synthesizer

²¹ Salzer 1962, 235.

²² Kramer 1988, 33, referencing the Second Viennese School.

and vocoder parts, but this growth levels off by 1:07 in preparation for the structural decrescendo from 2:12 to the end. At no point in the track does the listener encounter any contrasting thematic idea that might necessitate a separate section group. The entire work can be heard as developing the two-chord motive by means of texture, timbre, and dynamics.

Section	Clock Time	Description
A	0:01	Fuzzy guitars and drums, “Riley” synth loop, synth pads carry [F–Am]
A’	0:36	Guitar lead changes direction upward over second chord
A’’	1:07	Vocoders added to [F–Am] pad motive
A’’’	2:12	Drums and fuzzy guitar exit, only Riley synth and two-chord pads left
A’’’’	2:50-4:21	Riley synth faded out gradually, only two-chord pad left with soft lead

Figure 4.3: Formal Design of Sleepy Eyes of Death, “Mean Time ‘Till Failure” (2007)

"Riley" loop

Lead synth

Synth pads (reduction)

F Am/E

Example 4.1: Two-chord Thematic Idea in Sleepy Eyes of Death, “Mean Time ‘Till Failure” (2007, 0:01)

F Am/E F Am/E

Fuzzy Guitar

0:01-0:36, 1:08-1:40 0:36-1:08, 1:40-2:12 (ends on F last time)

Example 4.2: Guitar Leads in Sleepy Eyes of Death, “Mean Time ‘Till Failure” (2007, times given in transcription)

Animal Collective's "Banshee Beat" may also be heard as a dynamically guided structural process, but one that moves in the opposite direction, resulting in a structural crescendo. The 8'22" track utilizes only two chords and a [3+3+2] sixteenth-note groove. However, both of these musical ideas take some time to blossom. The second chord takes more than two minutes to appear in the progression, rendering the song's opening as an extended tonic pedal. Likewise the percussion groove is constructed via an additive process that gradually fills in each of the sixteenth-notes in the original two-note syncopated pattern (♯ ♯ ♯). The resulting all-sixteenth pattern does not appear fully formed until 2:59 (note the jagged surface of these sixteenth-notes in the middle of the Figure 4.5 waveform).²³ The slowly-developing thematic content seems to reach completion only at 4:27, where the first instance of a two-note "howling" motive appears in the lead vocal, intermingling with other animal noises until the end of the track.²⁴ The gradual process of constructing a theme that only materializes at the song's end could be interpreted as a non-recapitulatory, through-composed version of Spicer's "Cumulative Form."²⁵

²³ This percussion groove is performed on "found" objects, rather than traditional percussion instruments. Found objects also produce the metallic clicking noises heard throughout the song, which are particularly audible during the track's quiet opening. These noises, which often sound like someone tinkering with a small metal object in the studio, are a common way artists add acoustic richness to otherwise electronic tracks. For other examples of this technique, see The Postal Service, "Sleeping In" and Múm, "Green Grass of Tunnel."

²⁴ Animal Collective's name betrays their continual obsession with human-imitated animal noises, which appear quite frequently in their music.

²⁵ See Spicer 2004. The difference between Spicer's form and the process I am defining here has to do with whether the material presented at the end is recapitulatory. In Cumulative Form, the material presented at the end derives from sections found

Section	Clock Time	Description
A	0:01	Single chord
	0:17	Voice enters
	1:51	Two-note percussion faded in
A'	2:25	Second chord added
	2:59	3+3+2 matures
	4:00	Voice two makes animal noises in background
A''	4:27	"Howling" climax begins
	5:30	Lead vocal abandons text, joins second vocal in barking noises
A	6:53	Reversion to single chord
	7:42-8:22	Chords and rhythm begin to fade out, leaving only "tinkering" noises

Figure 4.4: Formal Design of Animal Collective, "Banshee Beat" (2005)

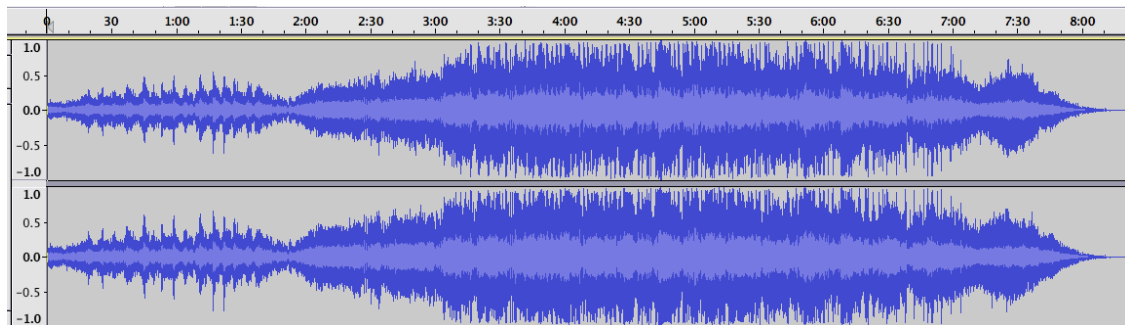


Figure 4.5: Structural Crescendo in Animal Collective, "Banshee Beat" (2005)

Sigur Rós's "Glósóli" is perhaps the most explicit example of an artist structuring a track through dynamic processes. The bass progression [G–D–E–C]

throughout the song. In other words, the material is recycled (so to speak) from prominent sections heard earlier (usually the chorus). In this Animal Collective song, we cannot rightly call the material at the end recapitulatory, since the piece is monothematic. Since there is no contrasting material to separate successive presentations of this theme, there can be no recapitulation, only development.

unifies the entire song,²⁶ which is otherwise structured only by a crescendo spanning the entire track.²⁷ In addition to the volume crescendo, the piece also utilizes an overarching rhythmic crescendo. The bass and percussion begin by playing march-like quarter-notes until 3:42, where they accelerate to eighth-notes en route to the volume climax at 4:33. This One-Part Monothematic Form owes its shape to these two simultaneous processes applied to a single theme.

The cinematic and narrative content of the “Glósóli” music video reveals many connections with the musical form I identify. Note especially the striking visual parallel between the track’s upward dynamic curve (Figure 4.7) and the slope of the cliff that appears at the video’s climax (Figure 4.8). As the video begins, we see a small boy with a military side drum sitting alone on the beach, staring across a vast Icelandic sea. Marching to the song’s quarter-note pulse, he wanders through the pastoral landscape, summoning other small children with the pulse of his drum (which, of course, matches the pulse of the song). More children are added to the group in a linear accumulation paralleling the gain in amplitude throughout the song. Just before the shift to eighth-note pulses at 3:42, the children lie down on a rock to sleep for the night. They wake in the morning to bright sunlight (Glósóli means “glowing sun” in Icelandic), and as they all gaze up a large hill, the drummer boy begins to tap his new eighth-note pulse. The volume rises, the children’s facial expressions grow more

²⁶ The only modifications to this bassline happen through rhythmic and metric alteration. Twice during the build-up to the climax, the rhythm is normalized to equal values, beginning on the D instead of G [D–E–C–G].

²⁷ The valleys at the end of the track’s spectrum and waveform graphics (see Figures 4.6 and 4.7) represent the last chord being held out over 40 seconds until it gradually decays.

intent, and at the onset of the musical climax, the boy points his mallet like a sword as the children race up the hill. As they approach the hill's crest, the camera pans out to reveal that the assumed hill is actually a sheer cliff face, the children running toward it like lemmings. Throughout the pounding climax, the children fly off—literally, as birds—the cliff with bright smiles on their faces, as if it were a carnival ride of sorts. Just as the last chord is struck, one last sheepish child attempts to fly, but instead cannonballs off the precipice down into the water. The fate of the fallen child is left to the viewer's imagination as the track fades out.

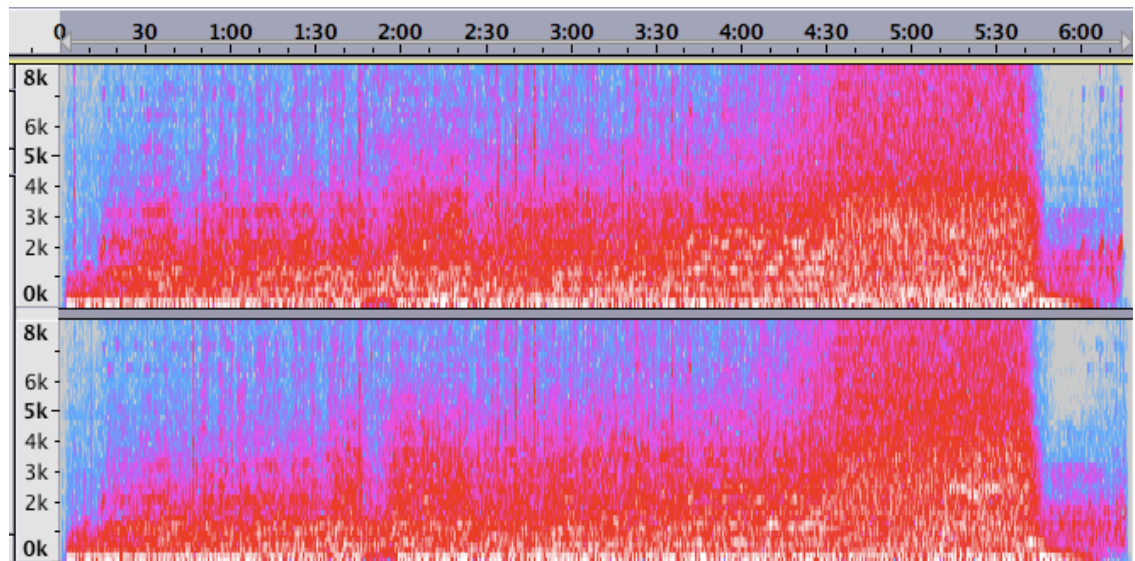


Figure 4.6: Spectrographic Image of Sigur Rós, “Glósóli” (2005)

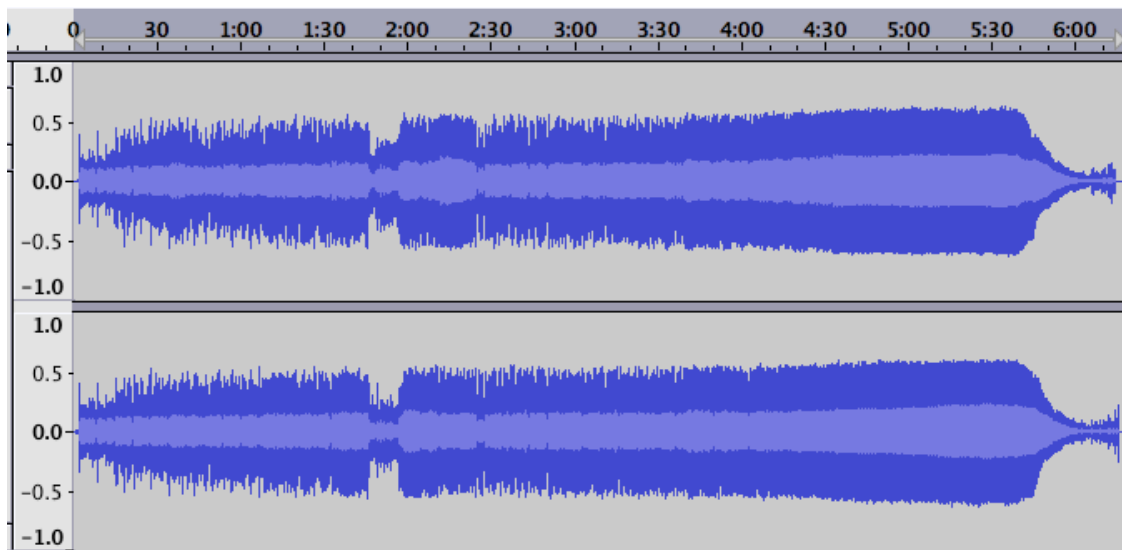


Figure 4.7: Waveform of Sigur Rós, “Glósóli” (2005)



Figure 4.8: Screenshot from Climax of Sigur Rós, “Glósóli” (2005)

One-Part Monothematic Forms often appear as short tracks on albums otherwise composed of more conventional song forms. Dillinger Escape Plan's short instrumental track “*#..” functions somewhat like a musical interlude between the comparatively longer, texted songs. Despite this seemingly subservient status, the track proves to be a complex process involving considerable rhythmic complexity. After an introduction featuring unintelligible vocal samples, synthesizers, and noise, a unifying percussion sample enters in 7/8 (see Example 4.3), forming the groove for the rest of the piece.²⁸ However, this relatively stable rhythm is constantly bombarded by grouping dissonances, provided first by a dissonant minor second in the guitar that enters at six eighth-note intervals over the 7/8 sample. If one adopts 7/8 as the primary meter, the guitar appears to transpose its entrance backward one integer in mod-7 beat-class space (5–4–3–2–1–0–6–5), a process that recycles over the course of six 7/8 bars, as shown in Example 4.4.



Example 4.3: Unifying 7/8 Sample in Dillinger Escape Plan, “*#..” (1999, 1:06)

²⁸ Though one should be wary of assigning meter signatures to heard (rather than notated) music, they can be useful in discussing the rhythmic feel of a repeated groove. They can also be useful for discussing the mathematical properties of math-rock grooves, as demonstrated in Osborn 2010.

The image shows musical notation for a drum loop and guitar. The drum loop is in 7/8 time and consists of a repeating eighth-note pattern. The guitar part is in 7/8 time and features a sixteenth-note pattern with a 'beat-class: 5' label. The guitar part is divided into two systems, each with four measures. The first system has measures with notes on strings 5, 4, 3, and 2. The second system has measures with notes on strings 1, 0, 6, and 5.

Example 4.4: Metrically-Dissonant Minor Seconds in Dillinger Escape Plan, “*#..” (1999, 1:17)

As this rhythmic process completes, a palm-muted guitar and improvised drum set slowly fade in playing a six eighth-note pattern. The “minor second” guitar then begins looping its last three bars of Example 4.4 (21 beats), this time adding three eighth-notes of rest each time (for a total of 24 beats) in order to align its grouping structure with 4 bars of a 6/8 groove that begins at 1:30. At 1:53, the improvised drum set begins to thicken the texture with two-note “diddle” patterns on the snare and toms, gradually incorporating the vociferous china cymbal starting at 2:02.²⁹ Near the end of the piece, these snare/china diddles dominate the texture, and the original 7/8 sample is nearly inaudible. Dillinger Escape Plan structures the track using an audible process that first complicates, then obfuscates the original 7/8 rhythmic idea. Such calculated metrical dissonances show significant pre-compositional insight, and have earned

²⁹ Diddles are two consecutive notes performed quickly with the same hand (for example, R–R or L–L).

Dillinger Escape Plan a tremendous amount of attention from groups as diverse as math-metal fans, critics, and even scholars.³⁰

Section	Clock Time	Description
A	0:01	Speech samples, foreboding noise
	0:41	Glitching introduced
A'	1:06	Tribal 7/8 rhythm, noise continues
	1:17	Minor 2nd guitar riff added
A''	1:30	6/8, improv drums and palm-muted guitar riff
	1:53	Diddles begin
	2:02-2:41	Two-note china begins

Figure 4.9: Formal Design of Dillinger Escape Plan, “*#..” (1999)³¹

Fragmented interludes like “*#..” have become the basis of an entire style for The Books, though they seem to be the only group pursuing such radical ideas.³² As performers, The Books are a guitar and cello duo, but under their newly-assumed roles as “sample librarians,” they create music consisting of rapid-fire successions of unrelated samples lacking any reference to a harmonic, melodic, or metric framework. “S is for Evrysing” may be best described as a sonic hodgepodge of found speech

³⁰ Jonathan Pieslak (2007) places Dillinger Escape Plan alongside Meshuggah at the forefront of the math-metal subgenre. The x vs. y grouping dissonance (6 vs. 7 in the case of “*#..”) that recycles over a large span of music is something for which Meshuggah is also well known.

³¹ As I stated earlier, capital letter names are used to distinguish thematically distinct sections, and “prime” symbols are used to designate varied repetitions of thematically unified sections. When a span of music presents neither a new theme nor a varied repetition of a previous one (for example, a transition or addition of a new layer), I simply leave the “section” column blank.

³² Pitchfork Media’s review reads: “*The Lemon of Pink* may sound a bit like this duo’s debut, but it also sounds like nobody else. The Books remain more or less a genre of one” (www.pitchfork.com/reviews/albums/855-the-lemon-of-pink).

samples, various instrumental sounds (including guitar and synthesizer), and sung vocal fragments, all presented against the backdrop of a through-composed solo cello melody.³³ The cello part, arguably the piece's single unifying element, is itself not an organic whole, but rather the sum of many short tape snippets digitally spliced together.³⁴ This compositional technique, known as "glitching," gets its name from the intentional roughness of the editing process, whereby cuts between samples are not smoothed, but left audibly rough at the edges to create the sonic illusion of a CD skipping. This can be seen in the jagged surface of the waveform in Figure 4.10. With identifiable musical elements lasting no longer than one to three seconds, creating a graph of the samples composing the piece is tedious, and of seemingly little phenomenological value. Stable structural signposts are never allowed to materialize in this process of constant flux. "S is for Evrysing" exemplifies a one-part form best understood through a continual process of deconstructing and reordering a unifying sample that the listener never hears in its original state.

³³ The unifying role of the cello melody is similar to the role Mahler's Scherzo plays in stitching together the various quotations found in Berio's *Sinfonia* III.

³⁴ While tracks by The Books vary greatly in compositional design, this technique can be found in most of their pieces. A pre-recorded improvisation is digitally cut into very short fragments (usually under one second) and distributed throughout the piece. The samples are often cut into extremely short uniform pieces and rhythmically strung together as eighth- or sixteenth-notes, giving the illusion that the performer is actually playing that rhythm, when, in reality, the "performance" was created in post-production via cut and paste.

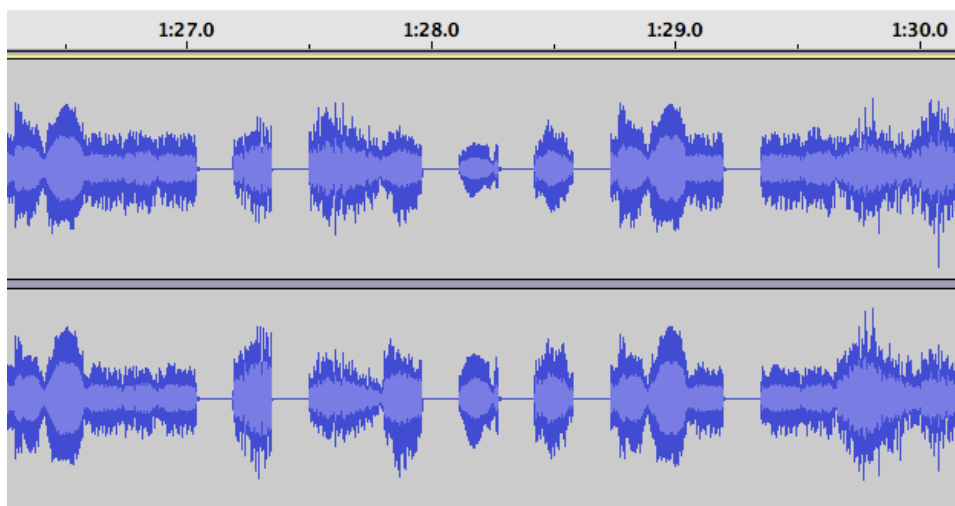


Figure 4.10: Glitching in The Books, “Tokyo” (2003, 1:26)

Through-Composed Type II: Multi-Part Monothematic Forms

Perhaps it is the desire for contrast that leads some artists to favor Multi-Part Monothematic Forms over the one-part design. Instead of having to structure an entire piece using one musical idea, composers using the multi-part design can have two or three different thematic ideas, each contained within its own section group. Whereas multiple thematic ideas are often organized as rounded binary (A–BA), ternary (A–B–A), or rondo (A–B–A–C–A) forms in classical practice, such recapitulations do not occur in through-composed forms. Following these models, section groups in Multi-Part Monothematic Forms would be labeled by consecutive letter names (A–B–C–D. . .), but since I employ letter names for thematically distinct sections, I label section groups using Roman numerals. Multi-Part Monothematic Forms are usually partitioned into either two or three section groups, the latter of which can be observed in my earlier analysis of “Happiness is a Warm Gun” (section groups I, II,

and III). Since section groups in Multi-Part Monothematic Forms are unified by thematic content, only sections labeled by a single letter may appear within the same group. Thus group I may contain sections A and A', but not A and B. It should be no surprise that all sections in One-Part Monothematic Forms featured only the letter A, since the entire piece was thematically unified. But since nothing larger than a section group is thematically unified in Multi-Part Monothematic Form, the piece can have as many distinct themes as it has section groups.

We will recall from the previous chapter that most Terminally-Climactic Forms are also divided into two or three section groups. However, Terminally-Climactic Forms are not included in the categories of through-composed forms. Since section groups in Terminally-Climactic Forms—especially the verse/chorus group—often contain internal recapitulations, the two-part or three-part design shared between Terminally-Climactic Forms and through-composed forms is quite superficial; the distinguishing characteristic of a through-composed form is its lack of recapitulation. As I stated earlier, the distinction can be understood as a matter of focus. I contend that in order for a song to be through-composed, it must contain no sectional recapitulation, regardless of how one partitions the sections. This prevents an observer from construing three-part Terminally-Climactic Forms as three-part through-composed designs (verse/chorus=A, bridge=B, climax=C), since the verse/chorus group contains internal sectional recapitulations. Individual section groups in Multi-Part Monothematic Forms often feature repetition of (or better yet, development of) a musical idea, but once that idea is left, it may never reappear if the piece is to be

considered through-composed.³⁵ Repetition is very different from recapitulation. The practice of sectional recapitulation begins to promote the idea that a piece's form is somehow modular, or even circular, which is wholly opposed to the linearly-conceived forms found in this chapter.

Our first example of this form comes from Mew, the Danish art rock group, who partitions their song "Chinaberry Tree" into three large section groups (I–II–III). The three groups can be easily distinguished from one another by melodic and rhythmic organization. The first group sets two different vocal episodes (A and A') over a 4/4 bass and drums groove. Using a strategy similar to group I, group II uses a new 9-beat bass and drums groove (established at 0:59) to unify three short vocal episodes. Groups I and II feature similar harmonic structures inasmuch as they both begin in E minor and then move to C major, but in no way do the two groups sound like a first and second verse due in large part to their unique grooves and vocal melodies.

³⁵ I would argue that strict repetition is not a viable construct. In human-performed music, performer re-interpretation will always introduce nuanced distinctions (as in the many repetitions of Satie's *Vexations*), and the only way to avoid this is through looped playback using recorded media. Even in the case of a technologically-reproduced loop, listeners will interpret a given stimulus differently over time (bearing in mind that time is also elastic in that one's sense of time is readily altered by repetition), resulting in a sort of phenomenological "development" on the part of the listener. This is explored briefly by Edward T. Cone (1968, 46).

Section Group	Section	Clock Time	Description
I	Intro	0:01	Bass and drums 4/4 groove established
	A	0:04	Voice enters [Em–Am–F–C–Em]
	A'	0:28	[F–C] truncated progression, repeated lyric
	transition	0:48	Moves to 3/4
II	Intro	0:59	New 9-beat bass and drums groove
	B	1:04	Voice returns [Em–Am–F–C–Em]
	B'	1:35	Higher vocal tessitura, [F–C] progression
	B''	1:45	More metrical dissonance, PAC at end
III	C	2:05	[C–Em–Dm–F] x2
	Outro	2:37–3:33	Sustained lower C, shifting upper partials

Figure 4.11: Formal Design of Mew, “Chinaberry Tree” (2005)

a) A Section Melody, 0:04–0:18

Voice

In pa-ra-llel seas where would I be my first love

Bass

Drums

Voice

said to me... Tears out for the world to see...

Bass

Dr.

b) B Section Melody, 1:30–1:44

The musical score consists of two systems. The first system shows the voice part with lyrics "me. I don't care," and the bass and drums parts. The voice part has a slur of 8 beats over the first two notes and a slur of 4 beats over the next two notes. The bass part has a steady eighth-note pattern. The drums part has a 9-beat groove, indicated by a "9" under a slur. The second system shows the voice part with lyrics "I'm not there. So" and the bass and drums parts. The voice part has a slur of 4 beats over the first two notes and a slur of 8 beats over the next two notes. The bass part has a steady eighth-note pattern. The drums part has a 9-beat groove, indicated by a "9" under a slur.

Example 4.5: Representative Grooves and Melodies of Groups I and II in Mew, “Chinaberry Tree” (2005; 0:04, 1:30)

Groups I and II contain distinct voice and rhythm section parts, and also differ in the way those two parts interact with one another. The metrical dissonance between vocal melody B and its accompanying 9-beat groove in group II (see Example 4.5b, where competing metrical spans are notated as numbered slurs) provides a sort of meta-contrast to the metrically consonant interaction of voice and groove in theme A. Ultimately, the metrical dissonances become so jarring by the end of group II that they seem to necessitate a perfect authentic cadence at 2:04 to bring about closure. Following this perfect authentic cadence, group II gives way to an extended instrumental closing group composed exclusively of synthesizer pads. The

synthesizers initially play a repeated four-chord progression from 2:05 to 2:36, then end on a constantly morphing chord whose bottom tones are held as a pedal while the top partials shift like a kaleidoscope.³⁶ This shifting of upper partials allows the chord to be held for a long time without losing its novelty in much the same way that spectral composers often allow long periods of time for listeners to process their complex harmonies. Unlike many conventional rock songs, which constantly draw a listener's attention to the lead vocal melody, "Chinaberry Tree" seems to change its focal parameter from group to group, transforming the stable, melody-driven group I to a metrically-complex, rhythm-focused group II. Groups I and II then yield to an instrumental group III, which is characterized by a dramatic focus on timbre, rather than on melody or rhythm.

Another Multi-Part Monothematic Form can be found in Björk's hit "All is Full of Love." The two-part song is structured much like a two-part Terminally-Climactic Form, since in both cases the latter of two large section groups presents a repeated hook. Whereas the first group of a Terminally-Climactic Form is often a paradigmatic verse/chorus structure (and could thus stand alone), the first group of "All is Full of Love" is decidedly teleological, composed as a linear trajectory toward a climactic goal. Like her compatriots Sigur Rós, the Icelandic pop star has garnered enough fame to produce extravagant music videos. "All is Full of Love," which has earned several

³⁶ I recognize that what I have labeled as group III could also be considered a coda. The relative lengths of my three groups, as well as the two-section structure of the final group, inform my argument against such a reading. At nearly one minute long, the hypothetical coda would take up almost half of group II, and would have to be labeled as a two-part coda, something that would be wholly uncharacteristic of rock music.

awards,³⁷ depicts Björk in computer-generated animation as a robot whose features are based on those of Björk herself. Initially the viewer sees Björk being constructed by several other robotic arms (much like a modern automobile), her fetal position and squinted eyes suggesting an infantile state. A hypermetric shift occurs at 0:56, flipping the “odd-strong” rhythm to “even-strong.”³⁸ Just as the hypermetric rhythm rectifies itself at 1:22, Björk’s eyes open wide for the first time, and the camera zooms in as she sings the lyrics “trust your head around.” Her cognitive programming seemingly complete, she looks up and sees another robot extending her hand.³⁹ In a traditional call-and-response format, Robot #2 sings the repeated title hook “all is full of love” in the background at 1:46, while Björk responds in the foreground with varying lyrics. The climax occurs at 2:11 as Björk’s soaring lead vocal joins the background hook in canon. This musical climax is paralleled in the visual domain by the two robots’ passionate embrace, both still under construction while a white industrial fluid is emitted from each of their bodies.

³⁷ This includes a Grammy for Best Short Form Music Video, an MTV Breakthrough Video award, and a #1 ranking on MTV2’s “100 Best Videos Ever.”

³⁸ “Hypermetric shift” and “even/odd-strong” are terms developed by David Temperley (2008), and are used to describe irregularities in two-bar hypermeasures. While Temperley focuses his discussion on classical music, his article also includes an example from *The Spinners*.

³⁹ Strangely, the two robots, both obviously patterned after Björk’s own features, look nearly identical.

Section Group	Section	Clock Time	Description
I		0:01	Single chord
	intro	0:17	Drums and bass groove [Fm–D♭–G♭] ⁴⁰
	A (verse)	0:30	Vocals enter
	A'	0:56	Odd-even flip “maybe not from...”
	A	1:22	Even-odd flip back “trust your head”
II	B (hook)	1:46	Repeated hook in background [G♭–B♭m]
	B'	2:11	Lead vocal takes hook in canon
	B''	2:45	Lead vocal leaves, reaching highest note
	(outro)	3:54–4:45	Vocals tacet, only instrumental

Figure 4.12: Formal Design of Björk, “All is Full of Love” (1997)



Figure 4.13: Video Still from Climactic Canon in Björk, “All is Full of Love” (1997, 2:11)

⁴⁰ The passage [Fm–D♭–G♭] can be heard locally as F Phrygian, but since the repeated D♭ is the lowest bass note in the song, I can also hear it, along with the ending [G♭–B♭], in relation to a global D♭ tonic. Following Spicer 2009, this climax is especially convincing as a IV–vi “absent tonic” progression.

Voice A
(Lead, quasi
improvisatory)

Voice B
(Looped)

? ? ? ? All is full of love All is full of...

All is full of love All is full of love

G^b B^bm G^b B^bm

Example 4.6: Climactic Canon in Björk, “All is Full of Love” (1997, 2:11)⁴¹

While Sleepy Eyes of Death structured “Mean Time ’Till Failure” using a thematically unified one-part form, their song “Pierce the Sky” is an example of Multi-Part Monothematic Form, featuring two distinct themes separated by a medial caesura. Group I is thematically unified by a pair of synthesizer riffs, one playing the same paradiddle patterns found in Steve Reich’s *Different Trains*, the other emphasizing a melodic minor sixth, hereafter referred to respectively as the “paradiddle” riff and “minor sixth” riff.⁴² Group II features a new pair of synthesizer patterns, which I have labeled in Figure 4.14 as “whole note” and “octave arp.” Although climaxes are not a necessary component of through-composed forms, many post-rock instrumental pieces include climactic endings as a way to bring about closure. In fact, climactic endings have become something of a recognizable trope in this genre. Sleepy Eyes of Death brings the piece to a climax at 4:26 by increasing both volume and metrical tension as

⁴¹ Björk’s official website identifies no lyrics at the anacrusis; however, it is clear that she sings unintelligible lyrics at that point.

⁴² Paradiddles are drum rudiments where the left and right hands follow the pattern [R–L–R–R–L–R–L–L]. In *Different Trains* and “Pierce the Air” this [R/L] hand pattern is isomorphically mapped onto the pitch register [low/high]. Reich’s use of this pattern in many of his works no doubt stems from his training as a percussionist.

the piece nears completion. The steady 4/4 feel, present throughout the song, is complicated by a metrically dissonant layer in the 3 vs. 4 synth part. At the same time, as if to counteract this metrical attack, the 4/4 drums begin adding rapid tom and snare drum “fills” and washing on the crash cymbals, a gesture that also builds the track’s volume level to a statistical climax.⁴³

Section Group	Section	Clock Time	Description
I	intro	0:01	“THX” intro
	A	0:09	Introduces “paradiddle” synth
		0:27	Noise synths creep in, pitchbending at 0:42
	A’	0:52	“Whole-note” synth pads enters
	A”	1:14	“Minor 6 th ” synth in R channel
		1:46	“Minor 6 th ” harmonized, guitar enters slowly
		1:58	[4e+a1] digital hi-hat foreshadows drum arrival, guitar feedback getting louder
		2:40	“Whole note” leaves, noise in L channel and guitar getting louder
II		3:00	Live drums, digital hi-hat remains in L Chan
	B	3:22	Modified “whole note” synth begins repeated chord progression
		3:43	“Octave arp” synth, progression continues
	B” (climax)	4:26	3 against 4 synth, rapid drum fills, washing on crash cymbals
		4:55	Vocoders audible as pads
	outro	5:08–5:37	Drums drop out, only synths remain

Figure 4.14: Formal Design of Sleepy Eyes of Death, “Pierce the Air” (2009)

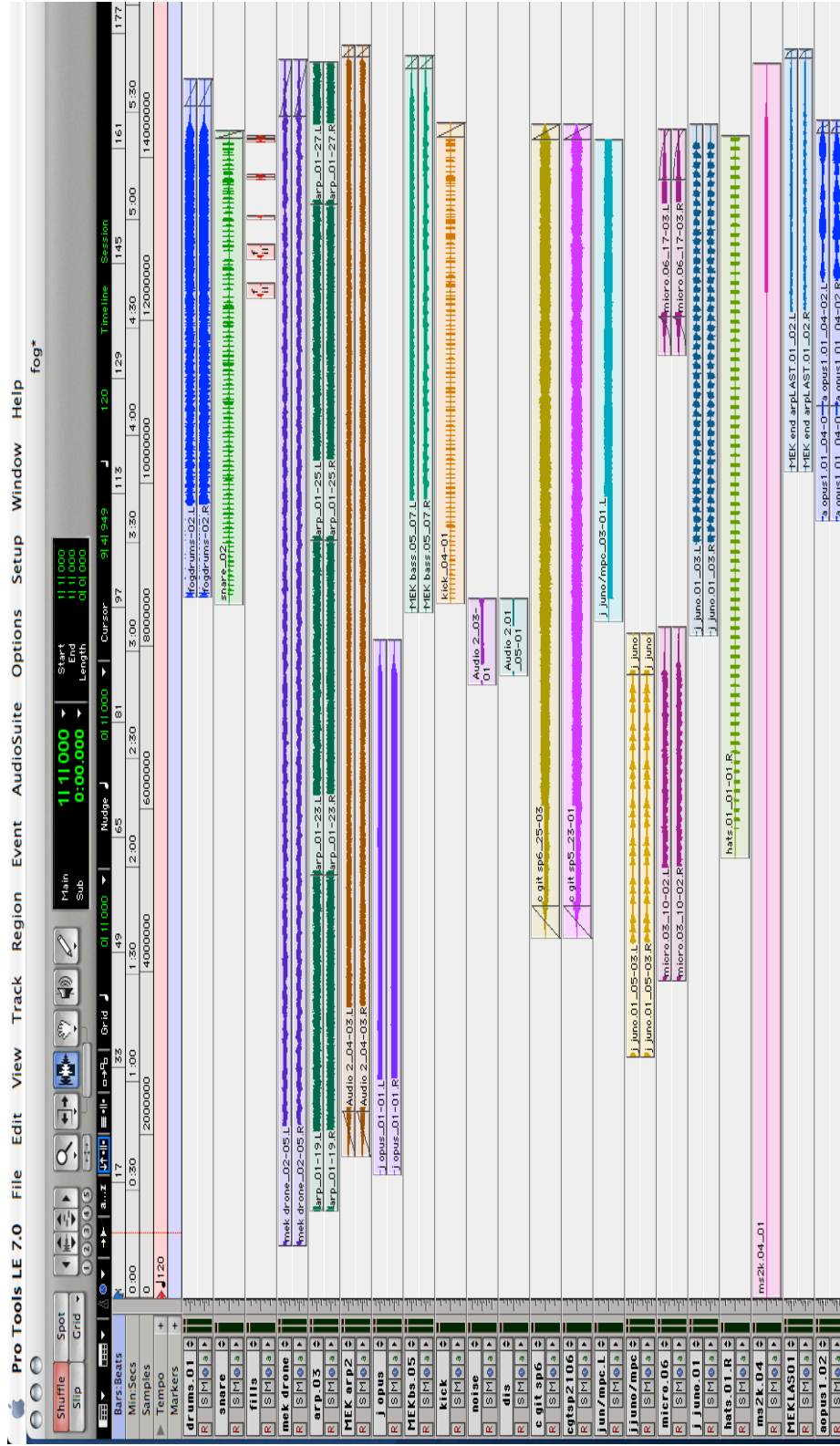
⁴³ While rock drummers usually keep time on the kick, snare, and cymbal, these time-keeping patterns are often broken up at key moments (such as hypermetric downbeats) by fills. “Washing” is the practice of keeping time on a loud crash cymbal, rather than the quieter hi-hat and ride cymbals. “Fills” are notes that replace the established kick, snare, and cymbal pattern, and they usually incorporate comparatively faster notes, performed on the snare and toms.

Each of the two section groups in “Pierce the Air” initiates a process that gradually assembles a groove by adding new layers.⁴⁴ This construction process is illustrated in Figure 4.15, which provides a screenshot of the Pro Tools[®] file used to mix and master the track. Each rectangle represents the position of an individual layer (performed by either an instrument or voice) within the time span of the track.⁴⁵ Layering techniques such as these may have been adopted from electronic dance music (EDM), another popular music genre, though one not typically considered “rock.” In EDM, artists (called DJs) shape their studio pieces by layering new tracks, though live performances of EDM pieces often include improvisatory arrangements of these layers that may differ from the studio mix.⁴⁶ Notice the visible seam around 3:00 in the screenshot, where many new layers, including live drums and new synths, are introduced for the first time as others are either faded out or simply discontinued. Since all thematic elements in “Pierce the Sky” are produced by introducing new electronic layers, the Pro Tools[®] screenshot is a perfect visual representation of a two-part structure based on additive processes.

⁴⁴ Butler (2006) calls this process, whereby a groove is gradually assembled piece by piece, a “buildup.” Remarking on compositions by DJs Shiva and Stanley, he states: “during the buildup, various instruments are added to the texture, usually one at a time. This process increases intensity—not only by thickening the texture but also by filling in various rhythmic positions within the measure” (Butler 2006, 224).

⁴⁵ While the left/right axis corresponds to time, the up/down axis is completely arbitrary and has no bearing on the track’s sound. Engineers often assign names to the individual takes, and organize them in a coherent manner by instrument family (percussion takes, guitar takes, etc.) to facilitate mixing.

⁴⁶ Butler (2006, 202–254) addresses the differences between live and studio versions of EDM pieces in great detail.



Group I-----Group II-----

Figure 4.15: Pro Tools Screenshot of "Pierce the Air"

Before proceeding to my third through-composed type, I would like to present a telling excerpt from an interview I conducted last year with two members of Sleepy Eyes of Death following a live performance on May 1, 2009 at Chop Suey in Seattle. In this excerpt, Andrew Toms responds to a question I posed about a live performance of “Pierce the Air.” It is worth noting that, while my analysis presented above is based on several close hearings of the recorded track, my questions and observations in the interview were based only on notes taken at the concert (I had not yet heard the corresponding album, which had only recently been released). I met backstage with the band, who provided a setlist so that I could reference specific songs. This excerpt speaks not only to the perceptibility of this form even on first hearing, but also provides evidence that the musicians themselves conceive of the two-part structure in a manner similar to what I have suggested in my analysis.

(Brad Osborn): One thing I noticed in your set on May 1st is the way that many songs seem to be structured around a volume climax at the end, like the piece is one big build-up to that. This is something I see in a lot of post-rock, especially instrumental. A good example of this is “Pierce the Air,” where there is certainly thematic contrast between the two big parts, but also a continual increase in volume. Is this something you think about consciously when composing songs?

(Andrew Toms, SEOD member): I think the composition of “Pierce the Air” brings up an interesting point. There are two distinct parts in the song: a quieter first half and more explosive, quicker moving second half. Both halves of the song have different layers (sampled textures, machine drums vs. live drums, synths, etc.) and are marked by different [guitar] leads and guitar volume. For me personally, I think both parts work together really well and the build flows pretty smoothly, so it might seem like a “thematic contrast,” but to me they seem very different but complement each other really well.

Figure 4.16: Excerpt of Interview with Andrew Toms⁴⁷

Though-Composed Type III: One-Part Polythematic Forms

Since pieces in One-Part Polythematic Form exhibit no thematic unity between sections, they, like One-Part Monothematic Forms, feature no section groups. Whereas One-Part Monothematic Forms lack section groups because they contain no thematic contrast (thus necessitating only one group), One-Part Polythematic Forms lack section groups because they contain *only* contrast. Because of this, one cannot group their constituent sections by shared thematic material. Lack of inter-sectional unity may be linked to the aesthetics of the genres in which this form appears, most of which are metal-influenced. By utilizing non-tonal guitar riffs, which often feature pitches doubled at the fifth (either perfect or diminished) or octave instead of traditional chords, metal avoids at least one method of unification common to rock music—tonality. Whereas thematic unity is often made explicit in rock songs by repeatedly sung lyrical/melodic phrases, recapitulated lyrics are rare in metal, and singing is

⁴⁷ The complete interview can be found in Appendix D.

usually replaced by screaming or growling. All of these aesthetic qualities result in a form that revels in fragmented disunity instead of thematic coherence.

The math-metal group The Chariot imposes a superficial unity on their One-Part Polythematic Forms through clever song titles. Their album *The Fiancée* features the track listing provided in Figure 4.17, which is obviously intended to be read continuously.⁴⁸ In “Back to Back,” the form of which is given in Figure 4.18, adjacent sections are differentiated by their distinct grooves, most of which feature jarring odd-cardinality groupings (5, 9, 11, and 17).⁴⁹ Many of these, like the 17/16 ostinato transcribed in Example 4.7, sound like conventional grooves elongated or truncated by one beat, bringing to mind Messiaen’s concept of “added” rhythmic values.⁵⁰ The rhythm section finally settles into a relatively comfortable 4/4 pattern at 1:10 to accompany the repeatedly screamed lyric “by grace, oh my god!” which functions as an independent chorus. Unlike Hopesfall and other metal/rock crossover bands, the Chariot’s regular lineup includes no melodic singer; instead, their vocal parts consist of nothing more than a barrage of short, screamed fragments. The disjunct nature of their

⁴⁸ This represents only the first eight tracks of the ten-song album. The last two break the pattern and have seemingly autonomous titles (“Forgive Me Nashville” and “The Trumpet”). The titles themselves are quoted from a piece of nonsense verse, and in no way influence any album-unifying lyrical concept.

⁴⁹ Once again, care needs to be taken in applying meter signatures when transcribing this music. However, when a certain groove with a clear beginning and ending is repeated a number of times, there can be little doubt as to the length of that groove. For example, the repeated groove in Example 4.7, which I have transcribed in 17/16, unequivocally spans 17 evenly-spaced units, though the subdivision of those units into pulses and measures could be interpreted a number of different ways.

⁵⁰ Here I am using the rock backbeat as a point of departure. Assuming that the snare drum plays on beats two and four, this groove sounds like a 4/4 pattern elongated by one sixteenth-note.

formal designs parallels the necessarily disjunct presentation of screamed vocals, which appear only in short bursts because they demand such a huge volume of air.

1. Back to Back
2. They Faced Each Other
3. They Drew Their Swords
4. And Shot Each Other
5. The Deaf Policeman
6. Heard This Noise
7. Then Came To Kill
8. The Two Dead Boys

Figure 4.17: Partial Track Listing of The Chariot, *The Fiancée* (2007)

Section	Clock Time	Description
intro	0:01	Noise, then staccato 5/16 in unison
A (verse)	0:20	17/16 groove with vocals
transition	0:54	Metrical flux, staccato groove liquidated
B	0:58	9/16, 11/16 groove, vocals tacet
C (chorus)	1:10	4/4 “oh my god” repeated lyric
outro	1:26–1:33	Only drums and vocals

Figure 4.18: Formal Design of The Chariot, “Back to Back” (2007)

The image shows a musical score for the song "Back to Back" by The Chariot. It consists of two staves: Voice (screamed) and Drums. The time signature is 17/16. The voice part has lyrics: "we both know we're both gon - na die there's a". The drums part shows a 17/16 groove with triplets and a 3:5 ratio.

Example 4.7: 17/16 Added Value Groove in The Chariot, “Back to Back” (2007, 0:20)

One-Part Polythematic Forms do not necessarily correspond to pieces as short as “Back to Back,” which has a total track length of 1’33”. Drowningman’s “Black Tie Knife Fight” features a much more expansive through-composed design lasting over four minutes. It contains only two sections that function like a verse or chorus; most sections simply present a series of screamed vocal fragments accompanied by a repeated guitar/percussion ostinato. Sung vocals occur only once over an independent chorus at 1:04, which is immediately followed by a varied repetition featuring similar rhythm and harmony with different melody and lyrics. As is common in metal, the vocals in “Black Tie Knife Fight” are mixed just like any other instrument, rather than being highlighted in the foreground as in rock and pop. Virtuoso guitar and drum patterns tend to be the aesthetic focal point of most metal pieces, almost as if the musicians conceive of tracks as a showcase for new grooves and techniques. Here we may observe yet another link between a genre’s aesthetics and that genre’s form. The One-Part Polythematic through-composed designs of metal often appear as loosely-organized successions of rhythmically-interesting riffs with an apparent disregard for compositional unity.

Section	Clock Time	Description
A (verse)	0:01	Structured as one compound unit, played twice back to back
transition	0:35	Stop-time
B	0:44	4/4, 4/4, 2/4
C	0:53	Syncopated 4/4 groove
D (chorus)	1:04	Double-time “way up high, looking down”
	1:24	Half-time, “say goodbye”
transition	1:44	Stop-time gestures
E	1:56	Double-kick drum flourishes
transition	2:25	7/8 groove with tempo change
F	2:35	Different double-kick syncopated flourish
G	2:46	Vocals enter at 2:56, 4/4 quieter, only slightly dirty guitars.
H	3:27	Instrumental 4/4, ascending guitar lead
outro	3:48–4:10	Solo bass guitar under held chord

Figure 4.19: Formal Design of Drowningman, “Black Tie Knife Fight” (2000)

The musical score consists of four systems, each featuring three staves: Voice, Electric Guitar, and Drum Kit. The first system is in 6/8 time and features a screamed vocal line with lyrics: "Try and stab me mo - ther fuck - er you". The guitar part is in a key with one sharp (F#) and features a complex, syncopated rhythm. The drum kit part is a steady 6/8 beat. The second system changes to 4/4 time and includes the lyrics: "can't hit what you can't see all these lights are blin - ding Let's (voice 2)". The guitar part continues with similar syncopation. The third system is in 4/4 time and includes the lyrics: "go! let's do it! let's go! you sack of shit let's". The fourth system is also in 4/4 time and includes the lyrics: "go! let's do it! let's go! you sack of shit." The guitar part in the final system concludes with a double bar line and repeat dots.

Voice (screamed)
Try and stab me mo - ther fuck - er you

Electric Guitar
(Tuned up a 1/2 step in Drop D#)

Drum Kit

Voice
can't hit what you can't see all these lights are blin - ding Let's (voice 2)

E. Gtr.

Dr.

Voice
go! let's do it! let's go! you sack of shit let's

E. Gtr.

Dr.

Voice
go! let's do it! let's go! you sack of shit.

E. Gtr.

Dr.

Example 4.8: Opening Compound Unit of Drowningman, "Black Tie Knife Fight"
(2007, 0:01)

The mechanistic drumming of Chris Pennie, the drummer for Dillinger Escape Plan, couples with the two guitarists' exceedingly fast guitar riffs to create perhaps the busiest rhythms in modern metal.⁵¹ On the surface, these rhythmic patterns rarely appear as "grooves" with recognizable meter signatures. More often, they feel like frenzied successions of two or three sixteenth-notes, much like the opening of Stravinsky's "Dance of the Earth." While Dillinger Escape Plan does not use traditional choruses complete with sung vocals and recapitulation, they contrast metric turbulence with stability to create passages that act much like choruses. These repeating ostinatos, especially in the rare occasions when they settle into common time, provide the same memorability that listeners identify with a chorus. We might recall Furnes's "image schema" theory from Chapter Two, which states that musical events that deviate too much from expected paradigms will not be memorable. The same is true for events that conform too much to those paradigms. Dillinger's music is nearly always on the "deviant" end of that spectrum: therefore, by employing the occasional recognizable groove, their music only stands to gain in memorability.

The most stable groove in their song "Sugar Coated Sour" is the repeated 7/4 pattern with vocals that appears twice in direct succession starting at 0:53. Following these two vocal presentations, the groove continues instrumentally until it disintegrates into a stop-time gesture at 1:28. This gesture then gradually materializes into a new 5/4 groove at 1:39. When this 5/4 groove is liquidated, it becomes apparent that one

⁵¹ Pennie's precision drumming is remarkable within metal circles. In addition, he is also a featured clinician and performer at international drum festivals, and has appeared several times in trade magazines such as *Modern Drummer* and *Drum!* In 2007, Pennie left Dillinger Escape Plan to join the neo-prog group Coheed and Cambria.

can hear this song as a process of incrementally-constructed grooves, each of which is then disassembled to create new ones. Dillinger Escape Plan's complex brand of math-metal (perhaps *calculus*-metal?) often sounds as if they are constantly rearranging streams of sixteenth-notes like beads on an abacus, constructing and deconstructing metrical patterns with varying degrees of memorability.

Section	Clock Time	Description
intro	0:01	Virtuosic guitar and drums
A (verse)	0:03	Fragmented 16 th -note patterns
	0:28	Ascending scale patterns
	0:40	Quiet guitar solos leading to grand pause with ride cymbal
B (chorus)	0:53	7/4 repeated ostinato
	1:17	7/4 continues with rolling bass drum and solo guitar feature
	1:28	Stop time gesture introduced
C	1:39	Stop time gestures build 5/4 groove
D	1:51	Vocals enter over new groove
outro	2:15–2:24	Disintegration of groove into pulsed snare rolls

Figure 4.20: Formal Design of Dillinger Escape Plan, “Sugar Coated Sour” (1999)

Through Composed Type IV: Multi-Part Polythematic Forms

The fourth through-composed type shares the same abstract partitioning with Multi-Part Monothematic Forms (type II) inasmuch as they both compose larger structures (section groups) from smaller ones (sections). While this structural similarity may seem apparent, the musical differences are more nuanced. Recall from Chapter Three that I first used section groups to describe Terminally-Climactic Forms, where section groups cohere *not* by their thematic contents, but by their formal functions (verse/chorus=initiating, bridge=medial, climactic=concluding). A

verse/chorus group contains thematically diverse verse and chorus sections, and even utilizes this thematic contrast to highlight the more memorable chorus as the song's selling point. The difference between type II and type IV through-composed forms has to do with thematic unity. Whereas Multi-Part Monothematic Forms unify each section group by thematic coherence (section group I=A-A'-A"), Multi-Part Polythematic Forms unify thematically diverse sections through other salient musical parameters (section group I=A-B-C).

It may be argued that, since the difference between these two types may be construed as merely nominal, why should one build separate categories for them? As Caplin asserts, by constructing well-formed types, we can apply those types more fluidly (i.e., song A has elements of forms X and Y) in analyses of real music.⁵² In providing rules that define a formal type, I am not defining that form in name only, but also providing a useful framework for talking about real pieces. Considering how adjacent sections cohere into groups can guide an analysis, less as a classification system (e.g., is this type II or type IV?) and more as a prompt to examine the similarities and differences between sections (in harmony, melody, rhythm, timbre, etc.).⁵³

⁵² Caplin states: "my theory establishes strict formal categories but applies them flexibly in analysis" (1998, 4). He recently reprinted this quote in response to James Hepokowski's critique of formal functions (Bergé 2009, 52).

⁵³ This is why, throughout my text, I prefer to think of abstract forms in the plural (Terminally-Climactic Forms, One-Part Processual Forms) instead of the singular. Since each piece has its own unique form, these archetypes must be thought of as categories, not prescriptive entities.

Many pieces that employ Multi-Part Polythematic Forms utilize what I defined in Chapter Two as independent verses and choruses. As such, they feature catchy hooks without resorting to recapitulation. Certain sections of Emery's through-composed songs can be heard as matching the function of traditional verse and chorus sections without recourse to any recapitulation scheme. Emery acknowledges this practice in a poignant excerpt from an interview I conducted:

(Brad Osborn, referencing the Figure 4.22 formal design): The design I show has no literal repetition of any section, which is true considering the lyrics and the melodies. However, do you find there is some hidden structure that is actually repeated? For example, I can kind of hear IB, ID, and IIC as verse-like structures, as they all three use two long chords, over which there are lots of lyrics. This would make sense, given the vocalists' tendency to vary the vocal melodies in two different verses, whereas most vocalists would simply place new words over the same melody in two verses. But, you tell me?

(Matt Carter, Emery Guitarist): Yes, even repeating verses seems boring at times, so we would certainly call them verse one and verse two even though they aren't the same, their FUNCTION is the same. The intensities kinda match and they break up other parts and the lyrics carry a great deal of the meaning and story of the song. . . so yeah, if the verses can have different words, why can't they have different chords or beats too?

Figure 4.21: Excerpt of Interview with Matt Carter⁵⁴

⁵⁴ The complete interview can be found in Appendix D. It may be worth noting that Emery's through-composed forms were my musical prompt for considering independent choruses and verses as viable formal structures, a hypothesis that was later confirmed by this interview. My concept of independent verses simply labels what Carter describes above as verses that have "different chords or beats."

“In a Lose, Lose Situation” (see Figure 4.22), one of many Emery songs that uses independent verses, represents a distinct break from the typical strophic designs of the Verse/Chorus Paradigm. Emery regularly employs independent choruses as well. Given that traditional choruses tend to display certain musical characteristics (louder volume, repeated lyrics, backing vocals),⁵⁵ one can identify chorus-like sections in Emery’s songs that do not recapitulate. Sometimes Emery even includes two distinct independent choruses within the same song.⁵⁶ After presenting two memorable sections featuring repeated lyrics (an independent chorus at G, and an independent verse with refrain at H), Emery concludes “In a Lose, Lose Situation” with an even more memorable section. At 3:06 the rhythm section drops out, leaving only a single vocalist and lead guitarist to generate expectation for the major mode, half-time terminal climax that occurs at the song’s highest volume level twelve seconds later.⁵⁷ In under four minutes, Emery includes as many memorable sections as a traditional verse/chorus-based song, though, unlike the recapitulated structures of the Verse/Chorus Paradigm, each of these sections presents new memorable material.

⁵⁵ Indeed it is often possible to turn on the radio and immediately identify the sounding section as the song’s chorus without hearing any surrounding material.

⁵⁶ An outstanding case of this phenomenon happens in “Miss Behavin’” (2005), which features independent choruses at 1:01 and 1:49, both of which feature a repeated lyric with polyphonic backing vocals. This formal tour-de-force also features a terminal climax at 2:43 that far outshines these independent choruses in terms of memorability.

⁵⁷ Of course, the idea of a terminal climax within a through-composed song would need to be tempered with the caveat that terminal climaxes, as defined in Chapter Two, require the presence of a repeated chorus. For now, suffice it to say that I am allowing independent choruses as a necessary condition for the presence of terminal climaxes, a point to which I will return before and after the extended analysis at the end of this chapter.

Section Group	Section	Clock Time	Description
I	A (intro)	0:01	“Don’t be late,” arp guitar pedal
	B (verse)	0:24	“If I could tell the truth or lie,” two-chord progression, full band enters
	C (transition)	0:52	Quietly, “its just a game we play”
	D (verse)	1:04	“If you regulate” polyphonic vocals with palm-muted guitar riff
	E	1:33	New guitar riff, “this is still my life”
II	F (intro)	1:50	Solo guitar riff
	G (chorus)	2:02	“Anyone in their right mind,” full band at 2:14, polyphonic chorus
	H (verse, with end-refrain)	2:38	“Careful not to breathe in” refrain happens twice at end of lines
	J (build)	3:06	“To breathe in the air, that so proudly put to death...”
	K (climax)	3:18–3:57	“My own father’s name!”

Figure 4.22: Formal Design of Emery, “In a Lose, Lose Situation” (2005)

Examining Emery’s two primary stylistic influences, rock and metal, reveals a connection to their extensive use of type IV through-composed forms. Most listeners and critics would place Emery squarely within a melodic rock genre, but their use of Multi-Part Polythematic Forms can be linked to their frequent incorporation of stylistic elements borrowed from metal. Emery frequently writes verse/chorus-based rock songs. Many of these are Terminally-Climactic, which means they use section groups. If we take a two- or three-part Terminally-Climactic Form and infuse it with two formal elements common to metal (fragmentation and through-composition), we end up with a Multi-Part Polythematic Form (through-composed type IV). The *idea* of verses and choruses blends with a through-composed, fragmented aesthetic to create this formal design so common in Emery’s songs. Of course Emery’s metal influences are readily apparent in their surface-level gestures as well. These gestures include the intermittent screaming provided by keyboardist Josh Head, as well as the guitarists’

extensive use of distorted minor seconds. The vocalists' (sometimes simultaneous) mixture of singing and screaming is an especially revealing surface-level manifestation of their combined metal and rock influences.

Nowhere is this metal/rock crossover more salient than in the case of melodic hardcore band Hopesfall. "Screamo" is a term sometimes used to describe their sound, as well as that of other bands who blend a "shoegazing" emo-rock sound (similar to My Bloody Valentine and Smashing Pumpkins) with the screaming vocal timbres native to metal. Hopesfall guitarist Josh Brigham even acknowledges this confluence:

The Smashing Pumpkins and Hum, Dinosaur, Jr., The Pixies, The Smiths. That was what I got into when I was forming my own opinions about music in my early teens. Then I got into hardcore and heavier music later because I was so fed up with what was on the radio. . . . Musically we've always tried to be somewhere between the two.⁵⁸

Hopesfall inverts the relationship between singing and screaming used by Emery by having a "lead screamer" who only sings intermittently. The band's timbre, dominated by distorted guitars and screaming, places them superficially within a metal genre, but a closer examination of their song structures (particularly their sung choruses) reveals a profound melodic rock influence. For another example of Multi-Part Polythematic Form, let us now consult the form of their song "Dead in Magazines," provided in Figure 4.23. Two independent choruses appear at 0:54 and 1:29, each of which sets a unique repeated lyrical/melodic pattern. The first of these is

⁵⁸ This interview of Hopesfall guitarist Josh Brigham was conducted by *Maelstrom* magazine (www.maelstrom.nu/ezine/interview_iss11_135.php).

sung in a low register (and is decidedly undermixed), the second in a high tenor that projects over the entire band. Though not as chaotic as the rhythmic surfaces of math-metal bands Dillinger Escape Plan and Meshuggah, Hopesfall's grooves often feature odd-cardinality and changing meter. When the groove simplifies into a memorable 4/4 pattern, verse- or chorus-like structures often appear. If there are lyrics present, these sections can be considered either independent choruses or verses, depending on whether the lyrics are repeated (chorus) or form a linear narrative (verse). Hopesfall's typical practice of alternating sung independent choruses with screamed narrative sections suggests a vestigial verse/chorus skeleton still present in their type IV through-composed forms.

Section Group	Section	Clock Time	Description
I	intro	0:01	5/4 Riff
	A	0:09	Dual vocals enter over riff, ends on PAC
	A' (verse)	0:32	Tempo change, 4/4 groove
	B (dark chorus)	0:54	Dark singing, stop time
II	C	1:16	[$\hat{3}$ - $\hat{5}$ - $\hat{4}$ - $\hat{5}$ - $\hat{1}$] stop time riff, call-and-response with screaming
	C' (bright chorus)	1:29	Bright singing over riff
	D	1:51	Transition, 3 vs. 4 prolonged
	E (verse)	2:09	4/4 groove
	III (more monthematic than polythematic)	F	2:27
F'		2:40	Beat, guitar chords
F''		2:54-3:32	Quasi improv drums, new guitar

Figure 4.23: Formal Design of Hopesfall, "Dead in Magazines" (2002)

a. Dark Chorus at 0:54

musical score for the Dark Chorus at 0:54. It features two staves: Voice 1 (sung) and Electric Guitar. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The lyrics are "mo-dern- day. Eve_____ locked arm in arm with Cos - mo queen". The guitar part includes a double bar line with repeat dots and a "7" above the staff. Chords are indicated below the guitar staff: C#m, /G#, E, C#m, /G#, and A. A second voice part is indicated by "x" marks on the staff and "(voice 2: screamed)" above it.

b. Bright Chorus at 1:29

musical score for the Bright Chorus at 1:29. It features three staves: Voice 1 (sung), Guitar, and another Voice 1. The key signature is two sharps (F#, C#) and the time signature is 4/4. The lyrics are "try - ing to find_____ the po - lar-ized ver - sion...". The guitar part is marked "D pedal". The second voice part is marked "(screamed): "...of their obsession"".

Example 4.9: Two independent Choruses in Hopesfall, "Dead in Magazines"
(2002; 0:54, 1:29)

Metal bands often place quiet section groups between the louder beginning and ending groups in order to create contrast. But many of Hopesfall's three-part formal designs *end* with these quiet groups, whereas metal songs typically bring about closure through loud, unison rhythmic gestures. At 2:27, the distorted guitars, bass, and vocals drop out abruptly, leaving only a quiet clean guitar and a ride cymbal/cross stick pairing playing steady eighth-notes. The quiet eighth-note section has evolved into something of a post-hardcore trope. Placing such a section in your song guarantees

that insiders (known as “scenesters”) will clap the fast eighth-notes over their heads.⁵⁹ Viewed in this way, Hopesfall’s modification of a paradigmatic dynamic structure (replacing “loud–quiet–loud” with “loud–loud–quiet”) can be understood as withholding a familiar trope until the song’s conclusion, a clever variation on terminal climax.

Bodies of Water is a Canadian rock group organized as a “collective.” Collectives, which feature a constantly-changing line-up rather than a finite number of musicians headed by a lead singer, are especially common among experimental rock bands (particularly those congregated around Montréal). Bodies of Water’s through-composed song “I Guess I’ll Forget The Sound, I Guess, I Guess” is structured in three section groups, the last of which is a sing-along evoking the “Hey Jude” tradition. What makes this Multi-Part Polythematic Form so interesting is that it appears to be roughly equivalent to a three-part Terminally-Climactic Form, except it features no verse/chorus recapitulation.

The first section group contains an independent verse and an independent chorus. After several fully-orchestrated repetitions of the chorus, that section’s thematic material is then reduced to an *a capella* texture that functions as a transition into group II. The second section group modulates to compound time, and consists entirely of a single harmonic progression. Since it contains no thematic contrast, the

⁵⁹ This could perhaps be interpreted as Generation Y’s answer to the previous generation’s over-the-head clapping of the backbeat at Bruce Springsteen concerts.

second group is more monothematic than polythematic.⁶⁰ At the end of group II, a D7 chord (V7 of III, performed with exaggerated *ritardando*) generates tension to be released at the modulation to the relative major marking the start of group III. This third group consists of two themes, the second of which is a climactic sing-along on the title lyric.⁶¹ Each letter-named section in “I Guess I’ll Forget the Sound” presents a distinct theme in terms of lyrics, melody, and rhythm, but these thematically distinct sections are unified within one of three section groups by either a common key or harmonic progression. The song’s title is a perfect metaphor for through-composition: if a composer “forgets” the sound of a previous theme, he or she cannot help but continually present new material!

⁶⁰ It is often the case that a single section group within a multi-part formal design will be organized differently than the other groups. In cases such as these, it can be difficult to assign a single through-composed type to the song, since different groups of the song are organized in different ways (group I might be polythematic and group II might be more monothematic). Rather than be disheartened by such discrepancies, I contend that paying attention to the ways in which a song’s organizational strategy changes over time is far more interesting, and musically revealing, than being able to pinpoint a definitive label for it.

⁶¹ Even though the section begins on a C chord, this IV–I plagal motion is idiomatic to rock music, and does not necessarily connote C Lydian.

Section Group	Section	Clock Time	Description
I	A (verse)	0:01	Closed E minor progression [Em–C–Em–D–Em], voice and guitar
	A'	0:14	Em progression cont., full band, harmonized vocals
	B	0:54	“Ba-ba” groove introduced
	B' (chorus)	1:09	“Ba-ba” vocalise enters over groove
	B''	1:31	Instruments all drop out, long a capella on chorus vocalise
II (more monothematic than polythematic)	C (verse)	1:56	[Em–C–Em–C; Em–C–G–D] repeated progression with linear text (quiet)
	C'	2:16	(loud)
	C''	2:34	(quiet)
	C'''	2:50	(loud)
		3:03	D7 dominant pedal
III	D (chorus)	3:13	[C–G–D–Em], title lyric introduced amid linear narrative textual development
	E (climax)	3:56	“I guess we’ll forget the sound” hook repeated
		4:28	Drums change to only quarter-note pounding, joined by clapping
	Outro	5:13–5:41	String duo

Figure 4.24: Formal Design of Bodies of Water, “I Guess I’ll Forget the Sound” (2007)

C G D Em

I guess we'll for - get the sound, I guess, I gue ss.

Example 4.10: Climactic Sing-along in Bodies of Water, “I Guess I’ll Forget the Sound” (2007, 3:56)⁶²

⁶² The transcription provided in Example 4.10 is a monophonic reduction that I have abstracted from the polyphonic choral texture present throughout this climactic section. Through the exact arrangement varies over the course of the section, this is the melody toward which my ear gravitates, even when that means skipping from one voice part to another.

Terminal Climaxes Within Through-Composed Forms

Chapter Two suggested that Terminally-Climactic Forms *require* a terminal climax to compensate for the absence of the customary recapitulatory endings of the Verse/Chorus Paradigm. Without recapitulation, the only way for a Terminally-Climactic song to bring about closure is to introduce a section so memorable that it outshines any repeated chorus, thus replacing the desired section with something even better.

Replacing the structure a listener expects with something even more memorable seems like a reasonable strategy for ending Terminally-Climactic Forms, but the question of how through-composed pieces bring about structural closure has not yet been addressed. Though I have not gone so far as to suggest any sort of Terminally-Climactic/through-composed hybridity in this chapter, one can observe throughout my examples and analyses that in through-composed pieces (particularly, type IV) the most memorable part of the piece—the climax—is often withheld until the ending in order to achieve the strong sense of completion needed for closure. It could be the case that listeners expect some sort of climactic gesture in all pieces of music, that a piece cannot convey a sense of completion without one.⁶³ This is true of most film and literature as well, but while the duration of a novel or feature film allows plenty of room for a substantial *dénouement*, this may not be possible within the confines of a three to five minute rock song. And since presenting anything except a *dénouement* after a climax makes little formal sense, through-composed pieces often end with

⁶³ Of course, minimal music provides a notable exception to this observation.

climaxes. However, many metal pieces in One-Part Polythematic Forms (type III) end on a neutral dramatic plane, as if they were simply done stringing together new riffs and grooves. While it may seem tempting to describe this as amateur compositional technique, I believe that to be an unfair reading unduly influenced by the teleological formal conventions of Western art music, conventions foreign to metal and its unique formal logic.

Of all the formal types defined in this dissertation, the most conventional and teleological is probably two-part Terminally-Climactic Form (since it is closest to the Verse/Chorus Paradigm), and the most radical may be One-Part Polythematic Form (since it lacks recapitulation, hierarchy, and telos). Multi-Part Polythematic Forms (type IV) offer a reconciliation of these two divergent formal aesthetics. While Multi-Part Polythematic Forms lack recapitulation and thematic unity, they often feature independent verses and choruses, and tend to bring about closure through a climactic ending. Earlier in this chapter, I stated that the melodic hardcore band Hopesfall embodies the cross-pollination of rock and metal styles as clearly as any. Metal revels in fragmentation, rock in telos. If one subscribes to the idea of relating form to genre, it should come as no surprise that this cross-pollination of styles has also resulted in Hopesfall's extensive use of Multi-Part Polythematic Forms, which reconcile the formal paradigms of rock and metal. This chapter now closes with a detailed analysis of their song "The End of an Era." Throughout my analysis, I aim to demonstrate how stylistic elements of rock and metal can be heard in the surface-level gestures of the piece and in the underlying formal design.

Section group: Riff Group-----		Quiet Group-----		Climactic Group-----							
Song form:	Riff 1	Riff 2	Riff 3	Riff 4	Riff 5	Transition	Crescendo section	Var. 1	Hook	Var 2	Outro
Clock time:	0:01	0:46	1:31	2:18	2:42	3:12	3:19	4:53	5:25	6:10	6:26-6:48
Chord prog:	c# B	c# B A ⁹ g# A	c# d# E f#	c# B A ⁹ #4	A g# A B	c# B A ⁹	E c# A ⁹				
Implied center:	c#	c#	c#	c#	c# or E	c#	E				
Tonal area:	c#-----E-----										

Figure 4.25: Through-Composed Formal Design of Hopesfall, “The End of an Era” (2001)

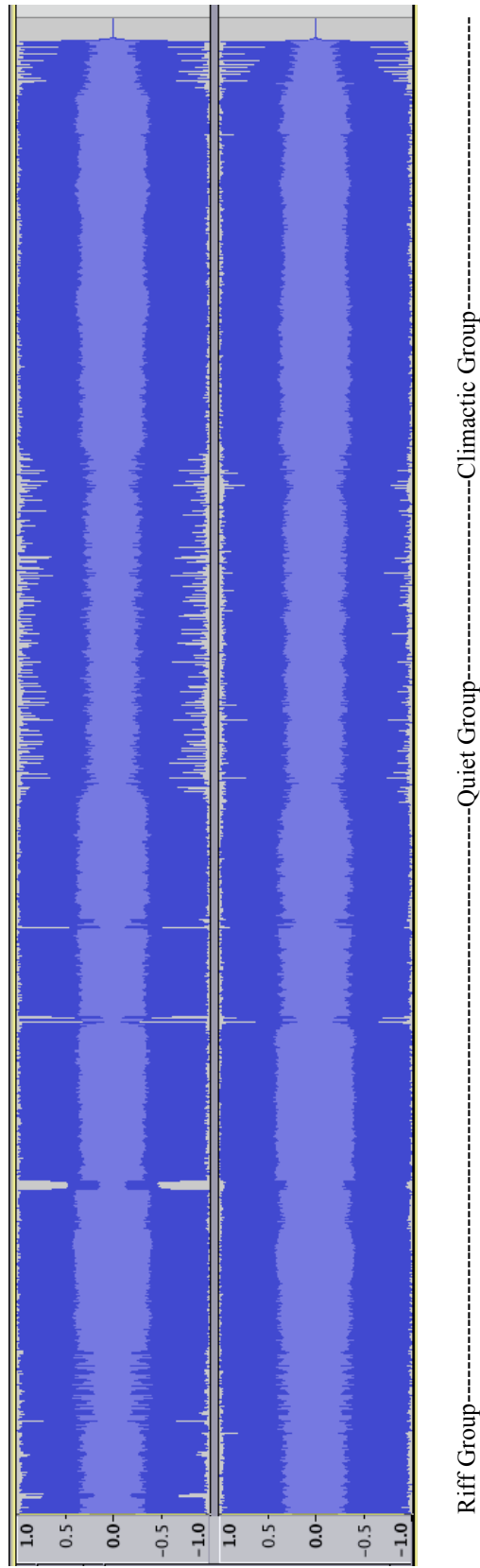


Figure 4.26: Waveform Analysis of Hopesfall, “The End of an Era” (2001)

“The End of an Era” showcases Hopesfall’s addition of dissonant tones to their guitar voicings, something far more common in hardcore and metal than rock. Rather than use complete triadic voicings (for example, the open guitar chords common in acoustic rock and folk) or simple root and fifth “power chords” (common in punk and electric rock), Hopesfall usually opts for power chords colored by added dissonances. Christopher Doll has suggested that the various tones rock guitarists add to a power chord may be treated equally within the scope of “functional” rock harmony.⁶⁴ For example, within the key of E, an A5 power chord (A and E) functions as a subdominant harmony regardless of whether it contains an added third, ninth, flatted-sixth, or appears alone as an open fifth. The three chords shown in Figure 4.27 are taken from “The End of an Era,” but the transpositionally-equivalent voicings appear regularly in Hopesfall’s music, as well as that of other metal bands.

IV-A add^{#11} IV-A add⁹ vi- C[#]sus⁴
(or) C[#]/F[#]

Figure 4.27: Three Common Power Chord Colorings⁶⁵

⁶⁴ In noting the link between rock timbres and harmonies, Doll posits: “Power chords often work this way—indeed, when sounded on distorted amplifiers, these open-fifth harmonies tend to intimate their thirds in the form of overtones, blurring the distinction between which tones are real and which are imagined” (Doll 2007, 30).

⁶⁵ While the open fifths of power chords and added ninths add notes to the fundamental in an ascending circle of fifths, the chordal fourth underneath the fundamental (whether

Just as in “I Guess I’ll Forget the Sound,” the first section group of this Hopesfall track acts like the verse/chorus group of a three-part Terminally-Climactic Form, except that no section is recapitulated. Up to this point I have not been assigning proper names to section groups within through-composed forms. But in metal songs, such as the Drowningman example found earlier in this chapter, the opening section group behaves as what I might call a “riff group”: a succession of guitar/drum riffs over which various vocals are layered. In “The End of an Era,” this first section group is partitioned from the other two by its continually reinforced C# Aeolian center. Example 4.11 provides transcriptions for two of the five riffs that compose this first section group.

a. Intro (0:01)

Electric Guitar 1

Electric Guitar 2

Drum Kit (floor tom and kick)

C#m B

played by the guitar or bass) can be understood in a dualist fashion as adding another fifth *below* the fundamental.

b. Riff 2 (1:17)

Half-time feel

Guitar 2

Guitar 1

Bass

C#/F# B/E A/D A⁹/C#

E. Gtr.

E. Gtr.

Bass

G#m⁷ A #11

Example 4.11: Selected C# Aeolian Riffs in First Section Group of Hopesfall, “The End of an Era” (2001; 0:01, 1:17)

The frequent use of Aeolian modes (instead of tonicized minor keys) in rock music has prompted recent scholars to theorize a way of hearing these modes in relation to their not-yet-present relative major.⁶⁶ This is due to Aeolian rock songs’ ubiquitous tendency to modulate to the relative major at some point, usually for a repeated chorus. However, as demonstrated in Chapter Three, many Terminally-Climactic rock songs reserve this dramatic modulation for the terminal climax. Following the definition provided in Chapter Two, no song lacking a repeated chorus can have a true terminal climax, since the terminal climax is largely defined as a foil to

⁶⁶ See Biamonte 2008 and Spicer 2009. Biamonte suggests an especially attractive way of hearing such structures, prompting us to hear them locally as modal progressions (C# Aeolian), and within the scope of the piece as a whole, as tonal progressions in the relative major (C#m=vi).

the repeated chorus. However, the last section group in “The End of an Era” presents all the musical characteristics of a terminal climax, including a half-time tempo modulation, a dynamic climax, the arrival of the relative major, and a repeated setting of the song’s most memorable lyrical/melodic hook. Hopesfall shapes their through-composed metal song using a large-scale modulation to the relative major (an archetype of Terminally-Climactic rock forms), a musical device emblematic of their rock/metal crossover.

Except that Hopesfall does not reserve the relative major modulation explicitly for the terminal climax; it actually occurs in the middle quiet group.⁶⁷ The modulating quiet group behaves somewhat like a transition between first and second tonal areas in sonata form, preparing the key for the memorable theme. This point at 3:19 presents not only a tonal modulation but also a half-time tempo modulation and a significant volume reduction. These striking attenuations in dynamics and tempo help shape the structural crescendo from 3:19 until the arrival of the climactic group at 4:53. The valley created by this dynamic reduction is readily apparent in the waveform shown in Figure 4.26 (note also the “spiky” texture of the quiet group itself). Typical of studio mixing of metal music, the loud sections are heavily compressed, which allows for very little dynamic variation. Note the consistent plateaus of sound in the beginning and ending of Figure 4.26. In contrast, note the variegated peaks and valleys found

⁶⁷ I am intentionally conflating terminology used to describe Terminally-Climactic Forms (“terminal climax” and “quiet group”) and through-composed forms in order to reinforce this crossover.

throughout the quiet group, as washy cymbals and delay-soaked clean guitars are allowed to grow and decay freely, without compression.⁶⁸

While the riff group was composed of several successive ostinati all unified by their C# Aeolian center, the quiet group develops a single thematic idea in E major (and in this way, resembles the second group of “I Guess I’ll Forget the Sound”). I might deduce at this point that both songs structure their medial section group this way to avoid some sort of information overload. If all three section groups contained many contrasting parts the effect would be one of fragmentation (something we find in Type III through-composed) rather than unity, and in this unity we can observe the residual effect of the Verse/Chorus Paradigm.

The image shows two staves of musical notation for drums. The top staff is labeled 'Drums' and the bottom staff is labeled 'Dr.'. Both staves are in 4/4 time. The top staff has a key signature of one sharp (F#) and a common time signature (C), indicating E major. The bottom staff has a key signature of two sharps (F# and C#) and a common time signature (C), indicating C#m. The notation includes various drum symbols: 'x' for cymbals, 'o' for open hi-hat, and 'z' for snare. The top staff shows a repeating pattern of cymbals and snare, with open hi-hats on the first and third beats. The bottom staff shows a similar pattern, but with a different hi-hat pattern and a final flourish at the end.

Example 4.12: Drum Groove in Quiet Group of Hopesfall, “The End of an Era” (2001, 3:19)

Example 4.12 provides a transcription of the drum groove unifying the quiet section group. All instruments gradually increase in volume as they approach the

⁶⁸ Please see Chapter Two for further discussion of how compression affects the dynamic structure of modern rock recordings.

climactic downbeat at 4:53. The guitarists achieve this crescendo by picking harder, a dynamic technique that works only with clean guitar tones through responsive tube amps. Drummer Adam Morgan has more dynamic freedom by virtue of his purely acoustic instrument. As the Example 4.12 transcription shows, his drum pattern begins with single open hi-hat attacks on beat classes 0, 2, and 8, but as the song nears the end of the bridge, he steadily transforms these occasional intensities into a wide-open hi-hat wash, and switches to the even more vociferous crash cymbal for the terminal climax. Drummers often vary the instruments used to keep time from section to section. This common strategy for shaping the song's dramatic curve is so effective that increases in instrument volume—for example, quiet closed hi-hat to loud open hi-hat to even louder crash cymbal—often map onto increasing memorability in the climactic ladder.

Screamer Doug Venable announces the arrival of the terminal climax with a piercing scream directly on the downbeat at 4:53. Coinciding with this scream, the guitarists reactivate their distortion pedals, creating a heavily compressed wall of sound carrying a low E major chord. This dynamic and timbral explosion announces the arrival of the climactic section group, while the sung melody at 5:25 acts as the memorable hook. Not only the most memorable sung melody, this is actually the only sung melody in an otherwise screamed song. Consulting the transcription in Example 4.13, one can see that this melody is not exactly characteristic of a memorable hook. However, just as in the climactic hook of “Faust Arp,” within the environment of a

song otherwise devoid of contoured melody, it stands out like a rose among the thorns.⁶⁹

The musical score is written in 4/4 time with a key signature of one sharp (F#). The Lead Vocal line begins with a whole rest, followed by a quarter note G4, a quarter note A4, a quarter note B4, and a half note C5. The Backing Vocal line starts with a quarter rest, followed by a quarter note G4, a quarter note A4, a quarter note B4, and a half note C5. The lyrics for the Lead Vocal are "I pray you find..." and for the Backing Vocal are "the peace you have been long - ing for. (last time only)". Chords E, C#m, and Aadd9 are indicated above the staff.

Example 4.13: Climactic Hook of Hopesfall, “The End of an Era” (2001, 5:25)

Though it is obviously through-composed, Hopesfall’s “The End of an Era” displays the same basic skeleton as a three-part Terminally-Climactic Form. This formal crossover, which blends the through-composition of metal with the terminal climaxes of rock, is a deeper manifestation of the rock/metal crossover already present in the band’s sound. As Josh Brigham, the band’s guitarist, has noted, the band’s members have always listened to such iconic rock groups as Smashing Pumpkins and Hum (in fact, their album *The Satellite Years* was engineered by Hum frontman Matt Talbot); however, their instrumental timbres also betray the influence of metal bands such as Botch and Converge, with whom Hopesfall regularly toured. Trustkill Records, the label to which Hopesfall is signed, deals almost exclusively with traditional metal and hardcore bands (e.g., Terror, Bleeding Through), and it is in this way that the band is generally promoted. Only by examining the group’s deep-seeded

⁶⁹ Analyses of Radiohead’s “Faust Arp” can be found in Chapters Two and Three.

absorption of verse/chorus-based song forms can one recognize Hopesfall's significant debt to melodic rock.

Though the end of this chapter demonstrates the large degree of crossover between Terminally-Climactic Forms and through-composed forms, the former have a considerably higher chance at mainstream success. By and large, through-composed forms are harder to find in commercially successful music, whereas Chapter Three and Appendix C both demonstrate that Terminally-Climactic Forms can serve as viable structures for artists who have crossed over into the mainstream (Red Hot Chili Peppers, Dashboard Confessional, Pearl Jam). There are even instances of Top-40 songs structured in just this way. By contrast, many readers will recognize fewer artists featured in Chapter Four—rarely does one hear a through-composed song on the radio. This leads me to conclude that through-composed forms are *more* experimental than Terminally-Climactic Forms, in so far as they represent a more profound departure from rock's verse/chorus conventions. By extension, artists utilizing through-composed forms may be considered more experimental than those who use Terminally-Climactic Forms. Future research could conceivably develop this distinction between the artists discussed in Chapters Three and Four as the basis for a division into two experimental meta-genres.

CONCLUSIONS

My aim in Chapters Three and Four of this dissertation was to define and illustrate two formal types that I find intriguing and compelling: Terminally-Climactic and through-composed forms. That some experimental songs will not fit one of these discrete formal types perfectly should be of little concern or surprise. To paraphrase William Caplin, the *raison d'être* of form analysis is not to apply formal labels (i.e. song X is *in* formal type Y), but to examine the underlying musical assumptions we make in applying the theory to a specific piece of music. Throughout the analyses conducted in this dissertation, I have privileged different formal parameters for different pieces. In many cases privileging a different parameter might yield a different formal reading of a piece. One might even imagine that a piece has alternate formal “realities” existing in different universes, each universe governed by a different musical force. Viewed in this way, my multivalent formal readings (to use Webster’s expression) provide an occasion to evaluate the musical criteria with which we assess experimental forms, especially in cases of formal ambiguity.¹

My attempt in the preceding chapters has been to present well-defined formal types, and to illustrate those types with pieces that contain little ambiguity. Many Terminally-Climactic songs in Chapter Three sound explicitly goal-directed toward decisively new material at the end. The majority of songs analyzed in Chapter Four bear an overtly fragmented design that in no way satisfies the listener’s expectation for

¹ Webster 2009.

recapitulation, for a return to something familiar. In my pursuit of examples that illustrate these attributes convincingly, I have omitted a few interesting, formally-ambiguous pieces, and have also not taken the opportunity to entertain alternate hearings of a single piece. Before concluding this dissertation, I would like to explore two of the “in-between” formal types that exist just outside the boundaries of Terminally-Climactic and through-composed forms, as well as present alternate hearings for pieces analyzed in previous chapters. I will then suggest ways that my theories of experimental formal analysis may be adapted to the analysis of more conventional modern rock styles.

Terminally-New, Terminally Anti-Climactic

Terminal climaxes, as defined in Chapters Two and Three, exhibit a unique combination of newness and memorability. The final section of a Terminally-Climactic song must be both new and memorable. If a song’s ending is memorable, but not new, it probably ends on a recapitulated chorus. A composer can increase this memorability by presenting the last chorus in a higher key (the so-called “truck driver modulation”) or by presenting many previously-heard layers simultaneously (Spicer’s “cumulative form”), but if the material is recapitulatory, the song cannot be considered Terminally-Climactic. Conversely, if a song’s ending is new, yet not particularly memorable, it probably ends on a thematically independent instrumental coda. A composer could present material in this ending that is thematically independent, but if

that material does not present the singular most memorable moment in the piece, the song cannot be considered Terminally-Climactic.

But what about pieces that end with texted material that is new, yet not quite as memorable as the chorus? This closing section could be considered a coda (although codas are usually instrumental), yet cannot be a terminal climax because it is less memorable than the chorus. At this point, we might forego the value judgment placed upon the ending—memorability. If a song ends in a section that is thematically independent, yet not the most memorable moment of the song, we can consider it simply Terminally-*New*, or if we would like to retain the ability to judge its memorability, perhaps even Terminally-*Anti*-Climactic. I will first describe the latter.

A terminal anti-climax is essentially equivalent to a thematically independent texted coda. Songs befitting what we could call Terminally-*Anti*-Climactic Form often appear as the final track of an album, and are usually quite long. Though the reader may immediately think of so-called “hidden tracks,” which appear after a period of silence following the last titled track, this is something altogether different.² Just like the terminal climax, the terminal anti-climax typically appears after several iterations of verse and chorus. But rather than the loud, triumphant material of the terminal

² Construing the last titled track and the hidden track a single unified piece is problematic to say the least. In doing so, the analyst would have to consider the musical silence separating the two an integral part of the composition. Then one would have to reconcile the presupposed integral nature of said silence with the usual practice of fast-forwarding through it to arrive at the hidden track. One would even have to rename these final structures something like “hidden endings,” or “hidden partial-tracks,” since they would no longer be tracks in and of themselves.

climax, the dynamics of a terminal anti-climax are often softer than any previously-heard section, and the lyrics are usually dark, contemplative, or melancholy.³

Mew's "Louisa, Louisa," the seven-minute closing track from *And the Glass Handed Kites* (2005), is a perfect example of Terminally Anti-Climactic Form. After two soft verses, two loud choruses, and an instrumental bridge, the track ends in a new section featuring singer Jonas Bjerre accompanied only by sustained synthesizer pads. His repeated lyrics ("stay with me, I don't want to be alone") can be read as an obvious text painting of the vocal-solo texture, as if he is pleading with his bandmates to return. In many of their concerts, Mew in fact closes with this song, and Jonas's bandmates leave him alone physically on the stage to sing this ending. Thereafter, the band usually returns to the stage for at least one encore, rewarding the concertgoer with a final rock-out for empathizing patiently with the singer's loneliness.

Some of Kimya Dawson's recent material utilizes new ending themes, but her remarkably short songs often exist on a neutral dramatic plane. Since most of her song's sections share the same tempo, key, and volume level, and since she seldom leaves the comfortable middle range of her voice, her songs rarely exhibit identifiable climaxes. "Being Cool," from her album *My Cute Fiend Sweet Princess* (2007), features an entirely through-composed lyrical structure over the same melody and two chords repeated back to back throughout the song. Only at the end does she offer a

³ A particularly dark and disturbing terminal anti-climax occurs at the end of Korn's nine-minute long track "Daddy," which closes their self-titled debut album (1994). The end of the track showcases lead singer Jonathan Davis speaking, shouting, and crying about his experience of being molested as a child while the band plays softly in the background.

new melody for the repeated lyrics, “the part of me that knows I never cared for being cool.” If this new title-containing material had been accompanied by a change in almost any other musical parameter (key/meter change, crescendo, textural modification), we would consider it a terminal climax, but it is difficult to call something climactic if it resides on the same neutral dramatic plane as the rest of the song. Hence this song is best described as simply Terminally-New; it ends with new lyrical/melodic material that is far from climactic.

It should be clear that I am privileging the presence of original thematic material as my primary criterion for newness. Privileging another parameter would, in many cases, render some of my new material old, and some of my old material new. Using dynamics as a primary gauge for climax would likely render most pop/rock songs Terminally-Climactic, since the final chorus presentation often features a thicker texture and louder dynamic level. An analyst could in fact create several different formal readings of a single piece by privileging different musical parameters.

Take for example the brief analysis of Copeland’s “California” I presented in Chapter Two. I originally cast this ending as a long instrumental coda, due to its abandonment of texted verses and choruses for a long instrumental ending. When my primary gauge of dramatic structure was memorability, which is largely based on thematic attributes, the piece ends with something quite forgettable—a long instrumental vamp presenting the same three chords again and again. However, as shown in the waveform analysis (reproduced in Figure 5.1), the track has a very obvious *dynamic* terminal climax. If “rocking out” is your primary gauge for terminal

climax, “California” is definitely end-directed, and can be read as a large scale-crescendo from beginning to end, much like Sigur Rós’s “Glósóli,” analyzed in Chapter Four.

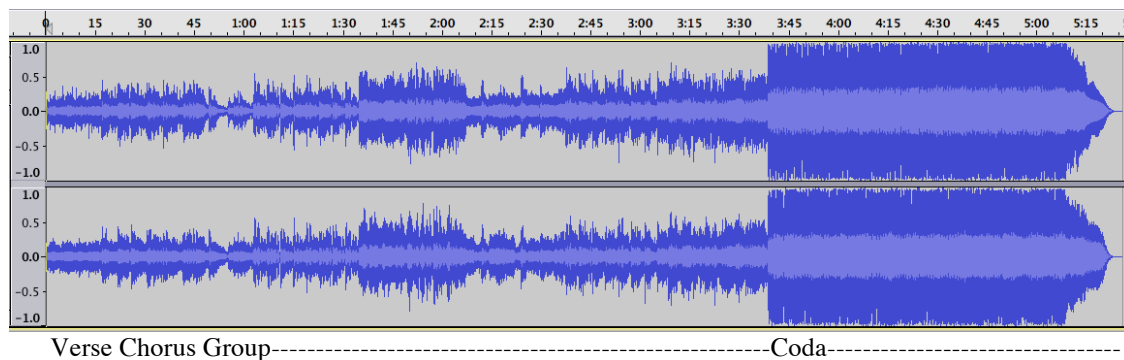


Figure 5.1: *Dynamic Terminal Climax* in Copeland, “California” (2002)

Nearly Through-Composed

In my search for through-composed song structures I encountered a few pieces that were almost through-composed, but which recapitulated a single section somewhere in the song. This recap usually occurs either as a second verse, or as a brief reappearance of the introductory riff to bring about a sort of alpha and omega closure. I found myself actually getting upset when a song would do this. From an aesthetic standpoint, I began to think it unfortunate that an otherwise creative song structure would regress, as it were, to the recapitulatory conventions of the Verse/Chorus Paradigm. But this need not preclude us from admiring a piece’s formal design: one that falls into another in-between territory I might call *nearly* through-composed.

In fact, two of the through-composed songs I already presented as such in Chapter Four (Sigur Rós’s “Glósóli” and Björk’s “All is Full of Love”) could be read alternatively as nearly through-composed. They both present a sort of formal “hiccup,” a brief contrasting “B” moment that might be said to turn an otherwise monothematic section (A, A’, A”, etc.) into ABA’. I previously analyzed “All is Full of Love” in two large section groups. The first, spanning 0:01 to 1:45, is unified by the repeated chord progression [F minor–D \flat major–G \flat major]. However, the hypermetric shift from 0:56 to 1:22 is composed only of alternating G \flat and F chords, essentially removing D \flat from the progression. Thus, at 1:22, when the D \flat chord re-enters, the progression could be considered a sort of miniature recapitulation. In Chapter Four, I label these three events as [A–A’–A], casting the middle as a variation of sorts, whereas another analyst might take the omission of D \flat to warrant a distinct thematic change, rendering the opening section group an [A–B–A] form. The same basic phenomenon occurs in “Glósóli,” which was mentioned in Chapter Four. When the ordering of the bass notes is changed from [G–D–E–C] to [D–E–C–G] at 1:33, the listener may hear the return to the original ordering as a recapitulation.⁴

Mew’s song “Cartoons and Macramé Wounds” presents an even more interesting case of nearly through-composed form. Stark dynamic contrasts clearly

⁴ In both of these cases, my decision about the form was contextual. Since both were otherwise through-composed toward a climactic goal, I categorized them as such. These two pieces have different types of final goals; “All is Full of Love” presents a melodic hook on the song’s title, while “Glósóli” is structured using a large-scale crescendo. See Chapter Four for more detailed analyses of these pieces, both of which include the songs’ corresponding music videos as evidence of their through-composed structures.

point to a division into three section groups, each of which contains more than one theme, except for the last, which is a monothematic group that develops a climactic theme. Hence the song is very close to a Type IV through-composed form (Multi-Part Polythematic), as can be seen from the Figure 5.2 form chart. The hiccup here occurs in the second section group, which moves from theme C to theme D, then recapitulates the former, then the latter. This obviously excludes it from a true through-composed form as per the thematic criterion presented in Chapter Four. Yet the song does feature three section groups that do not recapitulate (I–II–III), and only one of those contains internal recapitulation. To be clear, a non-recapitulating section group design does not, in itself, suggest through-composition (if so, every Terminally-Climactic Form would also be through-composed), but themes C and D in no way function like memorable verses and choruses. Section group II functions somewhat like a bridge group in Terminally-Climactic Form (especially since group III is climactic), and as such, is composed of short bridge-like fragments. Thus the listener does not register the recapitulations of sections C and D as memorable moments, but instead hears them as slightly familiar musical moments en route to a loud climactic group. The resulting musical effect is more like a Multi-Part Polythematic through-composed form than any conventional verse/chorus form, and actually functions similarly to the Terminally-Climactic/through-composed hybrid forms suggested at the end of Chapter Four.

Section Group	Section	Clock Time	Description
I (moderately loud)	A	0:01	[3+2+4+5] groove, lead vocal presents vocal hook with title “you drew me cartoons”
	B	1:13	Low bass note enters, metric dissonance, vocals present new “keeping score” theme
II (quiet)	C	2:05	“We will go skating” theme presented first by keyboard, then vocals
	D	2:32	Contrasting vocal melody
	C'	2:47	Instrumental version of “skating” theme
	C''	3:06	“Skating” vocal melody returns
	D'	3:41	Contrasting vocal melody with new lyrics
III (loud, climactic)	E	4:12	Full band reenters, new 3/4 vocal melody presents developing lyrics
	E'	4:41	New lead vocal enters, E melody in background, more vocal layers gradually accumulated
	E''	6:08–7:13	All melodies dissolve into untexted vocalize, texture gradually reduced to a cappella

Figure 5.2: Form of Mew, “Cartoons and Macramé Wounds” (2009)

Adaptations to Conventional Rock

Having spent the last few years working on this project, I have had many occasions to discuss my theories with people of various musical persuasions. Many of these people are familiar with conventional rock music, but not with post-millennial experimental music (with the possible exceptions of Radiohead and Björk). As such, the types of song structures I talk about seem somewhat alien to them. Though some fruitful and unexpected crossover has come about through these spontaneous interactions,⁵ I often feel a sense of loss when leaving these conversations, and find

⁵ For example, Chris Stover has shown me that some types of Cuban music quite regularly feature Terminally-Climactic-type endings on new material.

myself wishing I could relate the interesting aspects of the music I know and love to the music others know and love.

Toward this aim, I began thinking about ways to adapt my theories of post-millennial experimental rock to the conventional rock music that is more familiar to both the general public and most popular music scholars. As I stated earlier, most of my theories are based on the presence of new thematic material, either at the end (Terminally-Climactic Form), or at all times (through-composed form). Mark Spicer's "Cumulative Form" already presents a conventional analogue of sorts to Terminally-Climactic Form. All of Spicer's cumulative endings are recapitulatory, and most incorporate a number of previously-heard themes into the recapitulated section (usually the chorus), almost as a sort of mega-recapitulation. Ironically, the dramatic effect of bringing back many previously-heard themes simultaneously is remarkably similar to bringing back no previously-heard themes, in other words, a terminal climax.

But there seems to be no conventional analogue to the constantly evolving thematic material found in through-composed forms. Except in one important domain—lyrics.⁶ Many artists in the singer/songwriter tradition present a through-composed set of lyrics over highly recapitulatory chords and melodies. In this tradition, the lyrics are often considered to be the most important musical element (as in the music of Bob Dylan). I hypothesize that the most effective way to highlight a

⁶ I get the impression that the majority of people who listen to popular music think of lyrics as the most important musical parameter. This is not to suggest that people do not listen for structural elements in a song, only that a good set of lyrics can be the deal-breaker for a hit song, and conversely, trite or offensive lyrics may preclude an otherwise engaged listener from liking a certain song.

constantly-developing lyrical narrative is to present a relatively uninteresting rhythmic/harmonic accompaniment underneath. Additionally, presenting said lyrics with the same basic repeated melodic pattern may help retain focus on the lyrics themselves, rather than on the changing lyrical/melodic combination. The best way to tell a story may be to get the distracting musical elements out of the way.⁷

The analogue to experimental through-composition in conventional music may be through-composed lyrical narratives. Artists may still use verses and choruses, but those repeated choruses will present different lyrics each time over recapitulated chords, melodies, and rhythms. Take for example The Weakerthans' "Sounds Familiar," which presents through-composed lyrics over the same rhythmic, harmonic, and melodic accompaniment throughout the entire track.⁸ One can easily see how this [A–A'–A''–A''' . . .] form clearly text-paints the song's title. More common are songs like The Mountain Goats' "Tetrapod," which presents a through-composed lyrical narrative over recapitulated contrasting sections [A–B–A'–B'–A''–B'' . . .]. Instead of chorus lyrics that appear the same each time, the entire song features a single through-composed narrative that tells a linear story over the course of the song.⁹

⁷ This is, of course, not to say that interesting musical or structural elements cannot be used to enhance a story—one can scarcely imagine the lyrical drama of Schubert's *Der Erlkönig* unfolding apart from the song's harmonic structure.

⁸ In fact, if there is only a single combination of melody, harmony, and rhythm throughout the entire track, it would be considered a One-Part Monothematic through-composed form as defined in Chapter Four. In cases such as these (for example, The Weakerthans' "Sounds Familiar"), the one-part form is more static and repetitious than processual.

⁹ This is a song-length structure analogous to the narrative concept album, which presents a linear narrative over the course of an entire album, though narrative concept

An even more sophisticated example can be heard in The Weakerthans' song "Watermark" (2000). Rather than interpreting the standard rock ABABA design as verse–chorus–verse–chorus–verse, whereby a repeated B section functions as a highly-memorable chorus, The Weakerthans instead treat the A section as the most memorable moment. Here we have to rethink what we mean by "verse" and "chorus." The "A" and "B" in this ABABA form function more like "memorable/less memorable" (respectively), much like the "chorus-bridge" designs common to '50s and '60s rock. In "Watermark," sections A and B are contrasting (as they are in contrasting verse chorus form), but the roles of A and B are reversed. The A section functions not as contrasting material to highlight the arrival of B, but as the memorable moment itself, with successive presentations of A separated by contrasting, less memorable B sections.

albums may still recapitulate lyrics either within a single song, or over the course of the album.

[A Section (quiet): I–V–vi–IV]

I count to three and grin.
 You smile and let me in.
 We sit and watch the wall you painted purple.
 Speech will spill on space.
 Our little cups of grace.
 But pauses rattle on about the way that you

[B Section (loud): vi–vii^{#5}–I–IV]¹⁰

Cut the snow-fence, braved the blood,
 the metal of those hearts that you always end up pressing your tongue to.
 How your body still remembers things you told it to forget.
 How those furious affections followed you.

(return to quiet A)

I've got this store-bought way of saying I'm okay,
 and you learned how to cry in total silence.
 We're talented and bright. We're lonely and uptight.
 We've found some lovely ways to disappoint.

(return to loud B)

But the airport's always almost empty this time of the year,
 so let's go play on a baggage carousel.
 Set our watches forward like we're just arriving here
 from a past we left in a place we knew too well.

(return to A in highest register, loudest volume, thickest texture)

Hold on to the corners of today,
 and we'll fold it up to save until it's needed. Stand still.
 Let me scrub that brackish line that you got
 when something rose and then receded.

Figure 5.3: Form and Lyrics of The Weakerthans, “Watermark” (2001)

¹⁰ The use of the minor leading-tone chord represents one of the only systematic alterations to conventional rock's fully diatonic harmonic language. Since most of rock's harmonic language is based on power chords containing a perfect fifth, the replacement of the perfect fifth with a diminished fifth sounds much more jarring than the simple alteration of $\hat{4}$ to $\#\hat{4}$ necessary to render the leading-tone chord minor instead of diminished. The same argument could be made for the use of the $bVII$ chord, which avoids a diminished fifth by replacing $\hat{7}$ with $b\hat{7}$.

Recall from Chapter Three that most Terminally-Climactic songs intensify the dramatic impact of their final section through harmonic modulation. Consult Figure 5.3 for an illustration of how The Weakerthans utilize off-tonic B sections to present their final A section as somewhat climactic. Preceding the final A section with an off-tonic B section allows for a climactic presentation of an *on*-tonic A section. Each A section features the repeated progression [I–V–vi–IV], while the B sections present a contrasting Aeolian flavor with the progression [vi–vii^{#5}–I–IV]. The final A section presents a considerable increase in volume, and the vocalist sings new lyrics in a much higher register. This use of the higher register at the end of the song (over the same recapitulated progression in the same key) could be interpreted as the conventional analogue to modulating terminal climaxes. The same basic structure can be heard in Stars’ epic song “In Our Bedroom After the War” (2007), which also utilizes off-tonic B sections to highlight the arrival of a final A section that presents the song’s title for the first time over a massive volume and textural climax. Reserving the simultaneous presentation of a number of structural high points (loudest volume, thickest texture, highest registers, and a repeated melody featuring the title lyric) for the final section of a song results in a conventional, recapitulatory structure that approximates a dramatic effect similar to that of Terminally-Climactic Form.

BIBLIOGRAPHY

- Agawu, Kofi. 1984. "Structural 'Highpoints' in Schumann's *Dichterliebe*." *Music Analysis* 3, no. 2: 159–180.
- Attas, Robin. 2009. "Meter as Process in Pop Song Introductions: Groove Buildups, Level Shifts, and a Few Bad Girls." Paper presented at the West Coast Conference on Music Theory and Analysis, Pomona, CA.
- Biamonte, Nicole. 2008. "Pentatonic and Modal Systems in Rock Music." Paper presented at the annual meeting of the Society for Music Theory, Nashville, TN.
- Brackett, David. 2001. Essay Review of *Expression in Pop-Rock Music*, edited by Walter Everett, and *Understanding Rock: Essays in Musical Analysis*, edited by John Covach and Graeme Boone. *Popular Music* 20, no. 2: 275–283.
- Bernard, Jonathan. 2003. Review of *The Beatles: Sgt. Pepper's Lonely Hearts Club Band*, by Allan F. Moore; and *The Beatles as Musicians: "Revolver" through "The Anthology"*, by Walter Everett. *Music Theory Spectrum*, 25, no. 2: 375–382.
- . 2010. "Form (?) in Twentieth-Century Music." Keynote presentation at the West Coast Conference of Music Theory and Analysis, Eugene, OR.
- Borio, Gianmario. 2006. "Dire cela, sans savoir quoi: The Question of Meaning in Adorno and in the Musical Avant-Garde." Translated by Robert L. Kendrick. In *Apparitions: New Perspectives on Adorno and Twentieth-Century Music*, edited by Berthold Hoeckner, 41–67. New York: Routledge.
- Buchler, Michael. 2008. "Modulation as a Dramatic Agent in Frank Loesser's Broadway Songs." *Music Theory Spectrum* 30, no. 1: 35–60.
- Burns, Lori. 2007. "Analytic Methodologies for Rock Music: Harmonic and Voice-Leading Strategies in Tori Amos's 'Crucify,'" In *Expression in Pop-Rock Music*, edited by Walter Everett, 213–246. New York: Routledge Press.
- Burnham, Scott. 1995. *Beethoven: Hero*. Princeton: Princeton University Press.
- Butler, Mark. 2006. *Unlocking the Groove*. Bloomington: Indiana University Press.
- Caplin, William. 1998. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. New York: Oxford University Press.
- . 2009. "What are Formal Functions?" In *Musical Form, Forms, and Formenlehre*, edited by Pieter Bergé, 21–40. Leuven: Leuven University Press.

- Capuzzo, Guy. 2004. "Neo-Riemannian Theory and the Analysis of Pop-Rock Music." *Music Theory Spectrum* 26, no. 2: 177–199.
- . 2009. "Sectional Tonality and Sectional Centricity in Rock Music." *Music Theory Spectrum* 31, no. 1: 157–174.
- Clendinning, Jane and Elizabeth West Marvin. 2005. *The Musician's Guide to Theory and Analysis*. New York: W.W. Norton and Company.
- Cone, Edward T. 1968. *Musical Form and Musical Performance*. New York: Norton.
- Cook, Nicholas. 1987. "Musical Form and the Listener." *The Journal of Aesthetics and Art Criticism* 46, no. 1: 23–29.
- Cotner, John S. 2006. Review of *What to Listen for in Rock: A Stylistic Perspective*, by Ken Stephenson. *American Music* 24, no. 2: 217–220.
- Covach, John and Graeme Boone, eds. 1997. *Understanding Rock: Essays in Musical Analysis*. New York: Oxford University Press.
- Covach, John, 1998. Review of *Listening to the Future: The Time of Progressive Rock, 1968–1978* by Bill Martin, *Rocking the Classics: English Progressive Rock and the Counterculture* by Edward Macan, and *The Music's All That Matters: A History of Progressive Rock* by Paul Stump. *Notes* 55, no. 1: 77–80.
- . 1999. "Popular Music, Unpopular Musicology." In *Rethinking Music*, edited by Nicholas Cook and Mark Everist, 452–470. New York: Oxford University Press.
- . 2005. "Form in Rock Music: A Primer." In *Engaging Music: Essays in Musical Analysis*, edited by Deborah Stein, 65–76. New York: Oxford University Press.
- . 2006. "From 'Craft' to 'Art': Formal Structure in the Music of the Beatles." In *Reading The Beatles: Cultural Studies, Literary Criticism, and the Fab Four*, edited by Kenneth Womack and Todd F. Davis, 37–54. Albany: State University of New York Press.
- . 2009. *What's That Sound? An Introduction to Rock and its History*. New York and London: W.W. Norton and Company.
- . 2010. "Leiber and Stoller, the Coasters, and the "Dramatic AABA" Form." In *Sounding Out Pop: Analytical Essays in Popular Music*, edited by Mark Spicer and John Covach, 1–17. Ann Arbor: University of Michigan Press.
- Dahlhaus, Carl. 1975. "Some Aspects of Unity in Musical Form." *Journal of Music Theory* 19, no. 1: 2–30.

- Dell' Antonio, Andrew. 2004. "Collective Listening: Postmodern Critical Processes and MTV." In *Beyond Structural Listening? Postmodern Modes of Hearing*, edited by Andrew Dell' Antonio, 201–232. Berkeley: University of California Press.
- Derfler, Brandon. 2000. "U Totem's 'One Nail Draws Another' as Art Music." *Indiana Theory Review* 21: 79–101.
- Doll, Christopher. 2007. "Listening to Rock Harmony." PhD diss., Columbia University.
- Endrinal, Chris. 2008. "Form and Style in the Music of U2." PhD diss., Florida State University.
- Everett, Walter. 1999. *The Beatles as Musicians: Revolver through the Anthology*. New York: Oxford University Press.
- . 2001. *The Beatles as Musicians: Quarry Men through Rubber Soul*. New York: Oxford University Press.
- . 2004. "Making Sense of Rock's Tonal Systems." *Music Theory Online* 10, no. 4
- . 2007. "Pitch Down the Middle." In *Expression in Pop-Rock Music*, edited by Walter Everett, 111–174. New York: Routledge Press.
- . 2009. *The Foundations of Rock. From "Blue Suede Shoes" to "Suite: Judy Blue Eyes."* New York: Oxford University Press.
- Fink, Robert. 2005. *Repeating Ourselves: American Minimalism as Cultural Practice*. Berkeley: University of California Press.
- Frith, Simon. 1996. *Performing Rites: On the Value of Popular Music*. Cambridge: Harvard University Press.
- Furnes, Odd Torliev. 2005. "Musical Memory, Attention, and the Hit." PhD diss., University of Oslo.
- Gjerdingen, Robert. 2003. Review of *What to Listen for in Rock: A Stylistic Perspective*, by Ken Stephenson. *Music Perception* 20: 491–497.
- Gracyk, Tim. 1992. "Adorno, Jazz, and the Aesthetics of Popular Music." *Musical Quarterly* 76, no. 4: 526–542.
- Harrison, Daniel. 1997. "After Sundown: The Beach Boys' Experimental Music." In *Understanding Rock: Essays in Musical Analysis*, edited by John Covach and Graeme Boone, 33–58. New York: Oxford University Press

- Headlam, David. 1996. "Does the Song Remain the Same? Issues of Authorship and Identification in the Music of Led Zeppelin." in *Concert Music, Rock, and Jazz Since 1945: Essays and Analytical Studies*, edited by Elizabeth West Marvin and Richard Hermann, 313–363. Rochester: University of Rochester Press.
- Heneghan, Áine. 2009. "The 'Popular Effect' in Schoenberg's Serenade." In *Schoenberg's Chamber Music, Schoenberg's World*, edited by James K. Wright and Alan M. Gillmor, 37–51. Hillsdale, NY: Pendragon Press.
- Hepokoski, James and Warren Darcy. 2006. *Elements of Sonata Form: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata*. New York: Oxford University Press.
- Hirsch, Marjorie Wing. 1993. *Schubert's Dramatic Lieder*. New York: Cambridge University Press.
- Holm-Hudson, Kevin. 2000. Review of *Understanding Rock: Essays in Musical Analysis*, edited by John Covach and Graeme Boone. *Journal of Music Theory* 44, no. 2: 495–498.
- , ed. 2002. *Progressive Rock Reconsidered*. New York: Routledge Press.
- . 2005. "'Come Sail Away' and the Commodification of 'Prog Lite.'" *American Music* 23, no. 3: 377–394.
- Holt, Fabian. 2007. *Genre in Popular Music*. Chicago: University of Chicago Press.
- Hughes, Timothy. 2003. "Groove and Flow: Six Analytical Essays on the Music of Stevie Wonder." PhD diss., University of Washington.
- . 2007. "Trapped within the Wheels: Flow and Repetition, Modernism and Tradition in Stevie Wonder's 'Living for the City.'" In *Expression in Pop-Rock Music*, edited by Walter Everett, 239–266. New York: Routledge.
- Kramer, Jonathan. 1988. *The Time of Music*. New York: Schirmer.
- . 1996. "Postmodern Concepts of Musical Time." *Indiana Theory Review* 17, no. 2: 21–61.
- Krebs, Harald. 1981. "Alternatives to Monotony in Early Nineteenth-Century Music." *Journal of Music Theory* 25, no. 1: 1–16.
- . 1996. "Some Early Examples of Tonal Pairing: Schubert's 'Merres Stille' and 'Der Wanderer.'" In *The Second Practice of Nineteenth-Century Tonality*, edited by William Kinderman and Harald Krebs, 17–32. Lincoln and London: University of Nebraska Press.

- Lerdahl, Fred and Ray Jackendoff. 1983. *A Generative Theory of Tonal Music*. Cambridge: MIT University Press.
- Letts, Marianne Tatom. 2005. "How to Disappear Completely: Radiohead and the Resistant Concept Album." PhD diss., University of Texas at Austin.
- Lewin, David. 1993. *Musical Form and Transformation: Four Analytic Essays*. New Haven and London: Yale University Press.
- . 2007. *Generalized Musical Intervals and Transformations*. New York: Oxford University Press.
- London, Justin. 2004. *Hearing in Time: Psychological Aspects of Musical Meter*. New York : Oxford University Press.
- Lucky, Jerry. 1998. *The Progressive Rock Files*. Burlington, ON: Collector's Guide Publishing, 1998.
- Malawey, Victoria. 2007. "Temporal Process, Repetition, and Voice in Björk's *Medúlla*." PhD diss., Indiana University.
- Manuel, Peter. 2002. "Modernity and Musical Structure: Neo-Marxist Perspectives on Song Form and its Successors." In *Music and Marx: Ideas, Practice, Politics*, edited by Regula Burckhardt Qureshi, 45–62. New York and London: Routledge.
- Marx, A.B. 1997. *Musical Form in the Age of Beethoven: Selected Writings on Theory and Method*, edited and translated by Scott Burnham. New York: Cambridge University Press.
- Meyer, Leonard. 1980. "Creating Limits: Creation, Archetypes, and Style Change." *Daedalus* 109, no. 2: 177–205.
- McClary, Susan and Robert Walser. 1999. "Start Making Sense! Musicology Wrestles with Rock." In *Rethinking Music*, edited by Nicholas Cook and Mark Everist, 277–292. New York: Oxford University Press.
- Middleton, Ben. 1990. *Studying Popular Music*. Berkshire: Open University Press.
- Moore, Allan. 1993. *Rock: The Primary Text*. Buckingham: Open University Press.
- . 1999. Review of *Understanding Rock: Essays in Musical Analysis*, edited by John Covach and Graeme Boone. *Music and Letters* 80, no. 1: 153–156.
- . 2003. "Jethro Tull and the Case for Modernism in Mass Music." In *Analyzing Popular Music*, edited by Allan Moore, 158–172. New York: Cambridge University Press.

- O'Donnell, Shaugn. 2006. Review of *What To Listen For in Rock: A Stylistic Analysis* by Ken Stephenson. *Music Theory Spectrum* 28, no. 1: 132–140.
- Osborn, Brad, and Eric Smialek. 2008. "Form Function in Radiohead's "Faust Arp." Paper presented at the Tonal Systems of Rock workshop, Ann Arbor, MI.
- . 2010. "Beats that Commute: Algebraic and Kinesthetic Models for Math Rock Grooves." *Gamut* 3, no. 1.
- Patty, Austin. 2009. "Pacing Scenarios: How Harmonic Rhythm and Melodic Pacing Influence Our Experience of Musical Climax." *Music Theory Spectrum* 31, no. 2: 325–367.
- Pieslak, Jon. 2007. "Re-casting Metal: Rhythm and Meter in the Music of Meshuggah." *Music Theory Spectrum* 29, no. 2: 219–245.
- Plagenhoef, Scott and Ryan Schreiber, eds. 2008. *The Pitchfork 500: Our Guide to the Greatest Songs from Punk to the Present*. New York: Fireside.
- Rahn, John. 2007. "Approaching Musical Actions." *Perspectives of New Music* 45, no. 2: 57–75.
- Ross, Alex. 2008. *The Rest is Noise: Listening to the Twentieth-Century*. New York: Picador
- Rycenga, Jennifer. 2002. "Tales of Change within the Sound: Form, Lyrics, and Philosophy in the Music of Yes." In *Progressive Rock Reconsidered*, edited by Kevin Holm-Hudson, 143–166. New York: Routledge Press.
- Salzer, Felix. 1962. *Structural Hearing: Tonal Coherence in Music*. New York: Dover.
- Spicer, Mark. 2004. "(Ac)cumulative Form in Pop-Rock Music." *twentieth-century music* 1: 29–64.
- . 2009. "Absent Tonics in Pop and Rock Songs." Paper presented at the annual meeting of the Society for Music Theory, Montreal, QC.
- . 2010. "Reggatta de Blanc: Analyzing Style in the Music of The Police." In *Sounding Out Pop: Analytical Essays in Popular Music*, edited by Mark Spicer and John Covach, 124–153. Ann Arbor: University of Michigan Press.
- Starr, Lawrence and Christopher Watermann. 2009. *American Popular Music: From Minstrelsy to MP3*. New York: Oxford University Press.
- Stephan-Robinson, Anna. 2009. "Form in Paul Simon's Music." PhD diss., University of Rochester.

- Stephenson, Ken. 2002. *What to Listen for in Rock: A Stylistic Analysis*. New Haven: Yale University Press.
- Subramanian, Sundar. 2008. "Saying 'Yes' to Semiology: Form and Syntax in 'Close to the Edge.'" Paper presented at the annual meeting of the International Association for the Study of Popular Music, St. Catharines, ON.
- Szatmary, David. 2009. *Rockin' in Time: A Social History of Rock and Roll*. Upper Saddle River, NJ: Prentice Hall.
- Temperley, David. 2008. "Hypermetrical Transitions." *Music Theory Spectrum* 30, no. 2: 305–325.
- Traut, Don. 2005. "'Simply Irresistible': Recurring Accent Patterns as Hooks in Mainstream 1980s Music." *Popular Music* 24, no. 1: 57–77.
- Walser, Robert. 2000. Review of *Understanding Rock: Essays in Musical Analysis*, edited by John Covach and Graeme Boone. *Notes* 57, no. 2: 355–357.
- Webster, James. 2009. "Formenlehre in Theory and Practice." In *Musical Form, Forms, and Formenlehre*, edited by Pieter Bergé, 123–139. Leuven: Leuven University Press.
- Witkin, Robert. 1998. *Adorno on Music*. New York: Routledge.

DISCOGRAPHY

- Alkaline Trio. *From Here to Infirmary*. Vagrant, 2001.
- Animal Collective. *Feels*. Fat Cat, 2005.
- Armor For Sleep. *What to Do When You are Dead*. Equal Vision, 2005.
- The Beatles. *The Beatles* ("The White Album"). Apple, 1968.
- Björk. *Homogenic*. One Little Indian, 1997.
- Bodies of Water. *Ears Will Pop & Eyes Will Blink*. Secretly Canadian, 2007.
- The Books. *The Lemon of Pink*. Tomlab, 2003.
- The Chariot. *The Fiancée*. Solid State, 2007.
- Coheed and Cambria. *In Keeping Secrets of Silent Earth: 3*. Equal Vision, 2003.
- Copeland. *Beneath the Medicine Tree*. Militia Group, 2002.
- Dashboard Confessional. *So Impossible*. Vagrant, 2001.
- The Decemberists. *The Crane Wife*. Capitol, 2006.
- Deftones. *Adrenaline*. Maverick, 1995.
- The Dillinger Escape Plan. *Calculating Infinity*. Relapse, 1999.
- Drowningman. *How They Light Cigarettes in Prison*. Revelation, 2000.
- Emery. *The Question*. Tooth and Nail, 2005.
- Every Time I Die. *The Big Dirty*. Ferret, 2007.
- Green Day. *Dookie*. Reprise, 1993.
- Godspeed! You Black Emperor. *Lift Your Skinny Fists Like Antennas to Heaven*. Constellation, 2000.
- Hey Mercedes. *Everynight Fireworks*. Vagrant, 2001.
- Hopesfall. *No Wings to Speak of*. Trustkill, 2001.

- . *The Satellite Years*. Trustkill, 2002.
- Imogen Heap. *Speak For Yourself*. Sony, 2005.
- Jimmy Eat World. *Clarity*. Capitol, 1999.
- The Juliana Theory. *Understand This is a Dream*. Tooth and Nail, 1999.
- Killswitch Engage. *The End of Heartache*. Roadrunner, 2004.
- The Mars Volta. *Frances the Mute*. Universal, 2005.
- . *Amputechture*. Universal, 2006.
- Mew. *And The Glass Handed Kites*. Sony, 2005.
- . *No More Stories Are Told Today I'm Sorry They Washed Away No More Stories the World Is Grey I'm Tired Let's Wash Away*. Sony, 2009.
- A Perfect Circle. *Mer de Noms*. Virgin, 2000.
- Pink Floyd. *Animals*. EMI, 1977.
- Radiohead. *OK Computer*. Capitol, 1997.
- . *Amnesiac*. Parlophone, 2001.
- . *Hail to the Thief*. Capitol, 2003.
- . *In Rainbows*. Self-released, 2007.
- Rage Against the Machine. *Rage Against the Machine*. Epic, 1992.
- Red Hot Chili Peppers. *Blood, Sugar, Sex, Magik*. Warner Brothers, 1991.
- Saves The Day. *Through Being Cool*. Vagrant, 1999.
- Sigur Rós. *Takk*. Geffen, 2005.
- Silverchair. *Diorama*. Eleven, 2002.
- Sleepy Eyes of Death. *Street Lights For a Ribcage*. Sleep Capsule, 2007.
- . *Dark Signals*. Mass Movement, 2009.

Smashing Pumpkins. *Mellon Collie and the Infinite Sadness*. Virgin, 1995.

Sufjan Stevens. *Seven Swans*. Sounds Familyre, 2004.

Tool. *Undertow*. Zoo, 1993.

———. *Ænima*. Zoo, 1996.

The Weakerthans. *Watermark*. G7 Welcoming Committee, 2001.

APPENDICIES

Appendix A: Selected Post-Millennial Experimental Rock Artists in Four Genres

Each of the four genres addressed in Chapter One embraces a diverse group of distinct styles. Creating a representative list of artists in this group will surely garner a slew of dissenting opinions regarding which artists belong to which genre. Perhaps my selection of *these* four genres might even seem idiosyncratic. That notwithstanding, this table provides a good starting point for readers unfamiliar with post-millennial experimental styles. It may also provide a useful resource for listeners who are familiar with some, but not all bands on this chart, and who would like to discover music by similar artists.

Genre:	Neo-Prog/ New Prog	Math-Rock/ Math-Metal	Art Rock	Post-Rock/ Post-Metal
Selected bands associated (however loosely) with genre	Coheed and Cambria, The Mars Volta, The Sounds of Animals, Fighting, Tool, Opeth, Dimmu Borgir, Nine Inch Nails/Trent Reznor, Circa Survive	Dillinger Escape Plan, Meshuggah, Dysrhythmia, Every Time I Die, The Chariot, Circle Takes the Square, Battles, The Locust	Mew, Deerhoof, Radiohead, Björk, Animal Collective, Múm, Joanna Newsom, The Dirty Projectors, Sunset Rubdown/ Spencer Krug	Mogwai, Explosions in the Sky, Godspeed! You Black Emperor, Six Parts Seven, Isis, Sigur Rós, The Books, The Album Leaf, Pelican

Appendix B: Rules and Preferences for Formal Labels

Rule #1 (numbered verses): Different Arabic numbers will be given to different spans of verse material if, and only if, there exists a significant event between those two spans to set them apart perceptually. Thus, repeated phrases within one span of continuous verse material will be labeled with the same Arabic numeral, while spans of verse material separated by a contrasting event will be labeled with consecutive Arabic numerals.

Rule #2 (numbered verse/chorus pairs): Roman numerals given to verse/chorus pairs correspond to the Arabic number assigned to the verse it contains (not the chorus).¹

Rule #3 (intro and outro grouping): Intro sections are grouped hierarchically within the section groups they precede. Outro sections are grouped hierarchically within the section they follow.

Rule# 4 (instrumental verse beginnings vs. transition): If a span of music directly preceding a texted verse (other than the first)² exhibits the harmonic and rhythmic characteristics of that texted verse (simply missing the vocal melody), it is labeled as the beginning of that verse. If a span of music directly preceding a texted verse (other than the first) exhibits harmonic and rhythmic characteristics divergent from that texted verse, it is labeled as a transition.

Preference #1 (transition grouping): Transition sections are placed within the adjacent section group with which they share the most thematic material.

Preference #2 (generic vs. alphabetic transitions) If a given transitional figure occurs more than once in a song, it is assigned an uppercase letter, which is applied each time that same transitional figure appears throughout a song. If separate transitional sections are not recognizably similar, they are not given uppercase letters, and are labeled generically, or if they borrow significant material from another section “x” in the song, as “x-dependent”.

¹ This is due to the somewhat common practice of eliding the chorus between the first and second verses. In cases such as these, a second verse will be paired with a first chorus in verse/chorus pair II. This phenomenon of elided first chorus is only possible if verse 1 and verse 2 are numbered as such following rule #1.

² Following the sectional definition given for intro, any span of music preceding verse one, thematically dependent or not, is labeled as an intro. This is due to the phenomenal experience of an intro, which initially appears independent because it is the first element experienced by a listener.

Appendix C: Selected Post-1990 Terminally-Climactic Songs

Artist	Song	Year Released	Climax at clock time:
Alice in Chains	“Would”	1992	2:41
Alkaline Trio	“97”	2000	3:02
Animal Collective	“Brother Sport”	2009	3:16
	“The Purple Bottle”	2006	5:08
Arcade Fire	“No Cars Go”	2007	3:13
	“Crown of Love”	2004	3:45
At the Drive In	“Invalid Litter Department”	2000	4:40
Björk	“Pagan Poetry”	2004	3:56
Broken Social Scene	“Shoreline (7/4)”	2005	3:55
Circle Takes the Square	“Interview at the Ruins”	2004	3:43
Claire Bowditch	“Lips Like Oranges”	2005	2:46
Coheed and Cambria	“Everything Evil”	2002	4:26
	“Three Evils”	2003	3:14
Coldplay	“Politik”	2002	4:05
	“Amsterdam”	2002	4:00
Converge	“Home Song”	2002	5:13
Dashboard Confessional	“The Best Deceptions”	2001	3:21
	“Screaming Infidelities”	2001	2:44
Deerhoof	“Fresh Born”	2008	3:09
Deftones	“Root”	1995	3:10
Emery	“The Weakest”	2005	2:59
	“Walls”	2004	2:46
Every Time I Die	“I Been Gone a Long Time”	2:03	2:05
Fairweather	“If They Move, Kill Them”	2001	2:38
Foo Fighters	“I’ll Stick Around”	1995	2:56
Fugazi	“Epic Problem”	2001	3:00
Funeral For a Friend	“10:45, Amsterdam Conversations”	2003	2:33
	“Streetcar”	2005	2:34
	“Escape Artists Never Die”	2003	2:59
	“Red is the New Black”	2003	4:12
He is Legend	“China White”	2004	3:25
	“The Greatest Actor”	2004	2:27
Jesse Tree	“Gloves for Snow Enthusiasts”	2001	3:56
Justin Timberlake	“Lovestoned/I think She Knows”	2007	4:59
Kanye West	“Robocop”	2008	2:54
Low	“Broadway (So Many People)”	2005	4:33
Meshuggah	“Bleed”	2008	5:53
Mew	“Am I Wry”	2003	3:24
	“Introducing Palace Players”	2009	3:50
	“Vaccine”	2009	3:30
	“Tricks of Trade”	2009	2:57
No Motiv	“So What”	1999	1:12
	“Born Again”	2001	3:04
Okkervil River	“John Allyn Smith Sails”	2007	3:10
P.U.S.A.	“Peaches”	1995	1:52
Paramore	“My Heart”	2005	2:40
Park	“Pomona For Empusa”	2003	3:38

Park (continued)	“Gasoline Kisses for Everyone”	2003	3:49
	“Dear Sweet Impaler”	2003	3:48
Pearl Jam	“Black”	1991	3:38
Radiohead	“You and Whose Army”	2001	1:54
	“I Will”	2003	1:20
	“2+2=5”	2003	1:54
	“Stand Up, Sit Down”	2003	3:03
Rage Against the Machine	“Wake Up”	1992	5:07
	“Down Rodeo”	1996	4:08
	“Guerilla Radio”	1999	3:00
	“Roll Right”	1996	3:18
	“Bullet in the Head”	1992	2:54
Reel Big Fish	“Big Star”	1998	2:27
Refused	“The Deadly Rhythm”	1998	2:23
	“Refused are Fucking Dead”	1998	4:00
Saosin	“Seven Years”	2003	2:17
	“I Can Tell”	2003	3:07
Saves The Day	“Firefly”	2001	1:22
Say Anything	“Belt”	2003	3:17
Shadows Fall	“Thoughts without Words”	2002	3:43
Sigur Rós	“Untitled 1”	2002	4:54
Silverchair	“Across the Night”	2003	3:29
Soulfly	“Call to Arms”	2002	0:58
Stars	“In Our Bedroom After the War”	2007	4:25
Stone Temple Pilots	“Where the River Goes”	1992	6:27
Sufjan Stevens	“Come on Feel the Illinoise”	2005	5:23
System of a Down	“Sugar”	1998	1:56
The Cranberries	“Daffodil Lament”	1994	4:17
The Decemberists	“Sons and Daughters”	1996	3:30
The Hold Steady	“Slapped Actress”	2008	4:00
Tool	“Aenema”	1996	4:10
	“Undertow”	1993	3:48
	“46 and 2”	1996	5:05
	“Schism”	2001	5:59
	“Vicarious”	2006	6:34
Unkle	“Nursery Rhyme”	1998	3:11

Appendix D: Artist Interviews

Interview with Keith Negley and Andrew Toms of Sleepy Eyes of Death³

(Osborn): How does your composition process work? Does one person come with a lot of things already worked out and teach the group, or is it a more collaborative effort from the beginning?

(Negley): We all like to contribute to the songs, and our process has been constantly evolving. There was a time when someone would bring a riff and a skeleton of an idea for a structure to the practice space and we'd play the part over and over again until a song emerged from it. But lately I have been writing songs on my own and bringing them to the band more or less as finished pieces. Joel and Andrew have been writing and arranging songs together and bringing those to the band as well. There have been a few instances where songs get recorded before we ever play them together as a band, but recently we've been trying to rehearse all the songs in the practice space prior to tracking it to help shape what direction a song wants to go.

(Osborn): Do you ever make a conscious effort, as songwriters, to end a piece with new material, rather than with a simple recapitulation of some pre-existing material?

(Negley): We have a few tracks off *Streetlights for a Ribcage* ("Mean Time 'Till Failure," "Eyes Spliced Open") that start one way, and end completely differently. Those were conscious decisions we made because we felt that's what those songs needed to feel complete to us, but it's not something we set out to do just for the sake of doing it; it really comes down to what the individual song calls for. On the opposite side of the spectrum, we also have songs that are just one repeating riff that gets built upon until it crescendos.

(Osborn): I don't know how you guys feel about specific subgenres, but how do you think the structure of your songs (not just your sound, or style) compares to other post-rock artists, for example: Sigur Rós, Mogwai, or the incredibly long pieces of Godspeed! You Black Emperor?

³ This interview was conducted by Email correspondence in May 2009.

(Negley): For me I think a lot of what the post-rock scene established was that there are no rules to writing “rock” music. For us it’s just about writing what the song calls for. The bands you mentioned are great examples of that. I think it’s easy to compare us to those groups obviously because we share a lack of vocals, but also because we don’t hold our music to specific templates. Our songs are typically shorter than most bands playing instrumental rock music, and that’s a conscious choice. I have a lot of respect for bands that can pull off 15-minute songs and do it well, and maybe someday we’ll have a few of our own, but we’re fanatical about editing our songs down to their essentials. Less is more and all that . . . and we’ve just never written anything that I felt needed to be sustained for that long (yet). I think there is a misconception (or at least there was) that the longer your songs are the more intense or meaningful they must be, and I just don’t buy it. I’m really more interested in creating a sense of “urgency” in our music, and that’s a quality that can be exhausting on the ears for more than a few minutes at a time.

(Toms): Adding to how Keith stated we consciously have decided to stray away from very long compositions, I think these shorter songs also accommodate the shorter live sets we like to play. We have never sat down and stated we can’t write sprawling, long songs, but I think that the idea of trimming and editing our songs into the best, compact versions they can be has ended up being highly beneficial to our live shows. Recently our sets have been a little longer at 40 minutes, whereas in the past they usually were no longer than 25–30 minutes.

(Osborn): One thing I noticed in your set on May 1st is the way that many songs seem to be structured around a volume climax at the end, like the piece is one big build-up to that. This is something I hear in a lot of post-rock, especially instrumental. A good example of this is “Pierce the Air,” where there is certainly thematic contrast between the two big parts, but also a continual increase in volume. Is this something you think about consciously when composing songs?

(Negley): Sure, it’s conscious. There’s something inherently satisfying about building tension throughout a song, and coming to the end of that song in an explosive release of that tension. This idea gets pushed even further when playing live. Emotions, adrenaline and the energy of the audience feeds you and it makes for a very natural progression. Though, we make a point not to let it become too formulaic; every song we write we try to bring new ideas to the table and they don’t always have to end in epic climaxes . . . those are just the most fun to play live.

(Toms): I think the composition of “Pierce the Air” brings up an interesting point. There are two distinct parts in the song: a quieter first half and more explosive, quicker moving second half. Both halves of the song have different layers (sampled textures, machine drums vs. live drums, synths, etc) and are marked by different (guitar) leads and guitar volume. For me personally, I think both parts work together really well and the build flows pretty smoothly, so it might seem like a “thematic contrast,” but to me they seem very different but complement each other really well.

(Osborn): Lastly, considering all of these post-rock compositional trends I've described, can you comment briefly on the differences in song structure you find between your music and Top-40 rock songs, which are typically structured around recapitulations of verse and chorus?

(Negley): We still manage to write a few songs with conventional verse/chorus/verse structures. It's a formula that works, to the point where it's been ingrained into our cultural psyche. So in that sense, we have songs that really aren't all that different from Top-40 rock songs speaking from a strictly structural perspective. But I like to think we don't nail ourselves down to any specific structures. We have just as many songs, if not more, that break those conventions. I'm most interested in the deconstruction of what it is that makes a "song" a song. The majority of what we write tends to consist of a repeated element that carries throughout the piece, and by introducing and removing different melodies, it alters the feeling and mood of that original element. I think it's easy to weigh songs down with too many parts and the song loses its power when that happens. The best songs are deceptively simple and only contain two or three components to them.

(Toms): Whereas Keith is often interested in the "deconstruction" of song components and taking the essence or best part and building upon that, I think I have the tendency to want to add more parts. In cases where we have a really good hook or riff, I often have the urge to want to revisit the part and use a verse/chorus/verse, but I'll also want to add an additional ending to offset the more traditional structure. A good example where I think this personally works would be in "Eyes Spliced Open," from *Streetlights for a Ribcage*. The synth hook lead comes in twice, before the slower last part. On the other hand, a similar structure is used in the song "Tired Channels," but the last half feels a little too detached and not necessarily cohesive with the more pop-minded structure of the beginning. Having the ability to not limit ourselves to purely Top-40 structured music, it's definitely liberating but it's also a learning experience and I think we're just learning along the way what works well and what might not.

Interview with Matt Carter of Emery⁴

(Osborn): How does your songwriting process work? Does one person come with a lot of things already worked out and teach the group, or is it a more collaborative effort from the beginning?

(Carter): The songs almost always start with an idea from one person, (Devin, Toby, or myself)—usually something as simple as a verse and a chorus framework and usually some melody or lyrics. Then we try to collaborate with another person to criticize it and begin to shape a form and write more parts: intros, bridges, transitions etc. Then once it is shaped we try to show it to the whole band and make it an “arrangement” in terms of texture and feel (drum beats, guitar style etc.). Then we can really see what needs to change, be rewritten, or what new parts the song is asking for. It’s almost as if once a song is started, it’s more like discovering and decoding what the song already is or wants to be.

(Osborn): Do you ever make a conscious effort, as songwriters, to end a song with new material, rather than with a simple recapitulation of the chorus or some other pre-existing material?

(Carter): The main reason we like to end with new material is simply that, although most people would be comfortable or even happy to hear the restated chorus, WE, having written and being destined to perform the song over and over, feel bored with it and feel that it’s easier to write a new part that is written to be more intense rather than simply add something new or sing differently on the last chorus. Also, we like songs that are that way so naturally we do it. There is some effort not to do the chorus three times because of a sensitivity to being seen as or accused of being “too pop,” but if a song needs a third chorus, we will do it.

(Osborn): A follow-up to the last question, using a specific example: In one of my favorite songs, “The Weakest,” the formal design goes something like this:

0:01=Verse 1A (begins in 7/8, dueling voices, starts with “point the gun” refrain)
 0:21=Verse 1B (4/4, mostly solo voice)
 0:44=Chorus 1 (“let’s leave this place...”)
 1:06=Verse 2A (begins in 7/8, dueling voices, starts with “point the gun” refrain)
 1:17=Verse 2B (4/4, mostly solo voice)
 1:39=Chorus 2 (repetition of chorus)
 2:05=Bridge (“running with the scissors...”)
 2:27=Chorus 3 (repetition of chorus, starts soft)
 2:59=Climax (stop time attacks, screams)

⁴ This interview was conducted by Email correspondence in June 2009.

[Osborn, continued]: How do you construe the balance between the repeated chorus (0:44, 1:39, 2:27) as the song's real selling point, and the completely new ending at 2:59, which is the loudest, most energetic screaming point? Which do you find more memorable, and was this balance something you thought about in composing the song? How about in a similarly-designed song, such as "Walls," which features a scream climax after a couple verses and choruses?

(Carter): Well I wrote that one, so it's easy to answer. I had the verse first and then the intro and wanted to turn it into a song. So I sought some help for the chorus and then it still seemed boring, honestly. It was nice and pretty and fun, but seemed boring so we had to come up with a new part for the end. It came very late—it was written in the studio. We think in general the end should be a climax and it should be the heaviest part, so if you put a heavy part in the middle of the song and that's people's favorite part, then why listen to the rest of the song? I guess a lot of our songs start and end heavy. That feels right. We try to build you up and set the texture so that you don't get bored with all melody or all heavy. We all know when every part of a song is heavy—it's almost as if none of it is heavy.

(Osborn) In many songs, you don't even use a recognizable verse/chorus design, in fact, the song features little to no recapitulation. Instead of sections ABABCBD, as in "The Weakest," many of your songs simply go ABCDEFG. . . . This is something I notice in a lot of metal-influenced bands, especially Beloved (R.I.P.), for example, in their songs "Rise and Fall" and "Inner Patterns." Is this a conscious decision in your music, to avoid recapitulation?

(Carter): It's usually only semi-conscious. The thing is, sometimes the idea is all about the transition, and just two parts, like "Disguising Mistakes with Goodbyes." The problem is that when you change tempo, time signature, key, and/or feel, it's TOO HARD to get back to the original idea, especially when the tempo slows. When a tempo slows it feels good or heavy, but speeding back up seems unnatural. So the songs tend to just turn into one long adventure.

(Osborn) Once again following up on the last question using a specific example: There are too many examples of this phenomenon to be comprehensive, but let's take "In a Lose, Lose Situation" for example:

0:01=A ("don't be late" quiet)
 0:23=B ("if I could tell the truth or lie...", full band)
 0:53=C (quiet transition)
 1:05=D (if you regulate...", full band)
 1:38=E (scream)
 1:50=F (stop time guitar, continues with beat and solo voice, BG vocals at 2:14)
 2:38=G (deciding...careful not to breathe in)
 3:07=H (quiet transition solo voice)
 3:18=I Climax (my own father's name!)

[Osborn, continued]: The design I show has no literal repetition of any section, which is true considering the lyrics and the melodies. However, do you find there is some hidden structure that is actually repeated? For example, I can kind of hear 0:23, 1:05, and 2:38 as verse-like structures, as they all three use two long chords, over which there are lots of lyrics. This would make sense, given the vocalists' tendency to vary the vocal melodies in two different verses, whereas most vocalists would simply place new words over the same melody in two verses. But, you tell me?

(Carter): Yes, even repeating verses seems boring at times, so we would certainly call them verse one and verse two even though they aren't the same, their FUNCTION is the same. The intensities kinda match and they break up other parts and the lyrics carry a great deal of the meaning and story of the song...so yeah, if the verses can have different words, why can't they have different chords or beats too?

(Osborn) Concluding question: Very rarely do your songs actually contain recognizable verse/chorus-based, recapitulatory forms like Top-40 pop. It seems as if you generally are using one of the two models I describe above, neither of which feature much recapitulation, if at all. How do you think this reduced lack of recapitulation in your music contributes to your market success in the mainstream? How does it affect your success in the indie scene? My hypothesis is that recapitulation sells in the mainstream, but is boring and campy in the indie scene. Without sounding too elitist, it seems as if repetition is necessary for reaching people who aren't really paying attention on the radio or MTV (mainstream), but boring and monotonous to people who actually take the time to sit down and listen attentively (indie scenesters).

(Carter): This analysis is basically true. Our most popular songs seem to have the most recapitulation, and we are somewhere on the borderline. we love Top-40 pop music and do not criticize it, but also we like the adventure and expression of more experimental forms. Certainly it takes much more attention and effort to absorb less common forms or harmonies or chord functions, but also the payoff can be higher. We don't usually think about the listener in terms of what we are writing. We don't usually "try" to make a song for radio or not, but once it's close to formed and it seems to be mostly in a commercial format, we may decide to push it further that direction, or steer it away intentionally, but ultimately it's simply about what we want to hear. I know you know this, but music theory is just a system of explaining and communicating what freely creative people have always done; it tends to stifle creativity when it's used on the front end of composing. So we just do what feels good for the most part.

VITA

Brad Osborn was born in the Ozark Mountains of Missouri, where he grew up studying piano and trombone while teaching himself to play drums and guitar. After several unsuccessful garage bands, he decided to pursue a degree in Music Education at Missouri State University. While earning his teaching certificate and planning for a career as a high school band director, Brad got distracted playing and singing in more rock bands (these were at least moderately successful). Instead of beginning a teaching career in the public schools, he enrolled in a graduate program at Florida State University, where he earned a Master of Music Theory degree in 2006. Here he began to combine his love of rock music and scholarship, presenting papers on Radiohead at conferences across the country. After two years, he decided to change schools for his Doctorate in Music Theory, enrolling at the University of Washington, where he completed his degree in 2010. Brad records rock music under the artist name BradleyHeartVampire, and his music is available at various online outlets such as iTunes and Amazon.com. For the 2010–11 academic year, Brad has taken a position as Visiting Assistant Professor of Music Theory at Rhodes College, though he and his wife Emily Coleman still call the Pacific Northwest home.

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