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**PERSPECTIVES ON POPULAR MUSIC ANALYSIS:
TOWARDS A STANDARDIZED APPROACH**

THESIS SUBMITTED TO

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ABSTRACT

This thesis investigates the potential for a standardized methodology for the study of popular music. It examines recent applications of voice-leading analysis and harmonic analysis to pop/rock songs and highlights common ground among them –commonalities that could contribute to a standardized methodology. In particular, the thesis focuses on the analytical approaches of Allan Moore, Walter Everett, and Lori Burns –leading scholars in the field. The underlying principles of each approach are illuminated through case studies of pop/rock songs by 1990s North American female singer-songwriters. After examining how scholars analyse the musical structure of pop/rock songs, the thesis considers the analysis of musical structure in association with text and vocality.

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FOREWORD

This thesis provides an examination of the application of voice-leading and harmonic analysis to selected pop/rock songs in recent scholarship and a close examination of the commonalities in these studies with a view to developing a standardized methodology. In the midst of a growing interest in popular music analysis, scholars are attempting to establish analytic methods for this stream of music. Theorists adapt traditional methodologies appropriate for the study of “classical music” or devise new approaches implicitly linked to common-practice techniques. The pop/rock analyst faces many interpretive difficulties and challenges that are specific to this repertoire. The following questions come to mind: Are the analytical tools of the common-practice period appropriate for the study of pop/rock music? Should these tools be modified?

In response to these critical questions, my thesis will present a survey of current trends in popular music analysis and provide a critical commentary on analytical approaches. I will implement case studies in order to apply some of these approaches to particular songs and make the transition “from theory to practice.” My thesis will also present a comparative study, which will highlight common links between existing analytical approaches. My emphasis on commonality supports a claim that a standardized methodology for the study of popular music analysis might be possible.¹ This

¹ I am aware that a “standardized” approach may raise questions. The term is used here in the spirit of John Rahn. Rahn suggests that a scientific model of theory, such as Schenkerian analysis, “supports discourse among analysts, so that significantly differing perceptions of the structure of a piece can be articulated precisely” (Rahn 1989, 150). He also states that “a community of analysts (such as one finds in a classroom of graduate students of music theory)” can use formal theory to engage in “musical interpretation. . . . experience the merits of each [interpretation], and undergo that special process of explicit and implicit influence and competition among specific musical ideas in a community of people which constitutes musical education” (150-151).

standardized methodology is useful because it defines techniques beneficial for the analysis of popular music. It also facilitates discourse among music theorists.²

I choose to study the following repertoire: songs composed by North American, 1990s, confessional female singer-songwriters of the pop/rock field. Time constraints and limitations on paper length dictate the number of pieces that I will analyse.

Consequently, I will restrict my study to the analysis of the following three songs that gained popularity in the 1990s: Sarah McLachlan's "Do what you have to do," Madonna's "Frozen," and Jewel's "Foolish Games."

Chapter organization

The present study will unfold as follows. In Chapter 1, I will provide the background for the field of pop/rock music by introducing a number of analytical methodologies used by current scholars. The chapter will also present critical issues that often arise in popular music studies. The remainder of the thesis divides into two parts, Part I and Part II, each of which comprises two chapters. Part I deals with musical structure and Part II with musical meaning. Chapter 2 explores voice-leading analysis in relation to the tonal or modal organization of a song. It discusses and compares this analytical method as used by two theorists (Burns forthcoming e; Koozin forthcoming). In Chapter 3, I will investigate the application of Schenkerian analysis and its modified version in relation to the structural divisions within pop/rock songs. This investigation will proceed through a study of two theorists' analyses of the same song (Everett 1987; Moore 1997). Chapter 4

² My thesis is directed towards music theorists.

examines how musical meaning is interpreted through the study of text-music relations in a pop/rock song. It focuses on a number of musical constructs or musical codes that are frequently explored in text-music analyses by theorists (Burns forthcoming b; Everett forthcoming; Moore 1997; Covach 1997a). Chapter 5 further examines musical codes, this time with an emphasis on codes that cannot be represented by Western musical notation. In particular, it focuses on vocal production techniques in relation to text/music analysis. The musical examples for all chapters are available in the Appendix of the thesis.

A Definition of the Repertoire

It is beneficial to explain the terms “confessional female singer-songwriter and pop/rock field” which classify the repertoire under study. Returning to the challenges in this new and rapidly unfolding field of study, questions of genre are significant and difficult to resolve. For instance, when defining the term “singer-songwriter” some authors maintain that there is an essential distinction to be made based on gender. There are a variety of definitions for the term singer-songwriter, each with different gender implications. Lucy O’Brien describes the word from a historical perspective. She writes that the term was commonly used to describe female folk singers of the 1970s who accompanied themselves with a guitar (O’Brien 1995, 175). Through their lyrics, singer-songwriters had the opportunity to “make sense of the world” (176). O’Brien cites Joni Mitchell and Suzanne Vega as examples of 1970s and 1980s singer-songwriters respectively. It is interesting to note that O’Brien fails to include male artists in her description of the singer-songwriter. Similar to O’Brien, Simon Reynolds and Joy Press make an essential distinction with respect to sex when describing the term singer-

songwriter. They attach the words “female” and “confessional” to the term. They refer to the compositional technique of such musicians as the “Dear Diary approach to songwriting ... with soul-baring [which] turns suffering into an affirmation: a kind of strength-through-vulnerability” (Reynolds and Press 1995, 256). Although they blatantly use the “confessional” term in accompaniment with singer-songwriters, Reynolds and Press are aware of the implications involved. They suggest that the “emotional frailty” portrayed by the confessional singer-songwriter is problematic because it makes the woman look like a victim who is defenceless (254). On the other hand, Roy Shuker criticizes scholars, such as O’Brien, Reynolds, and Press, who “equate the [singer-songwriter] ‘form’ with women performers, due to its emphasis on lyrics and performance rather than the indulgences associated with male-dominated styles of rock music” (Shuker 1998, 277). As a solution, Shuker offers a more general description of the singer-songwriter designation:

The term singer songwriter has been given to artists who both write and perform their material, and who are able to perform solo, usually on acoustic guitar or piano. An emphasis on lyrics has resulted in the work of such performers often being referred to as song poets, accorded auteur status, and made the subject of intensive lyric analysis.

(Shuker 1998, 277).

Shuker’s definition of the singer-songwriter does not specify the sex of the musician, nor does it imply that the lyrics are a confession. In the present thesis I decided to limit the choice of test cases to songs written and performed by women, not because I found the arguments in favour of distinction by gender convincing, but because there may be some characteristics proper to women artists that will emerge or come to be recognized. My

definition of singer-songwriter slightly deviates from those of other authors in that I allow a broader range of instrumentation. In the 1980s and 1990s, technological advancements and lower costs made electrical instruments more widely accessible to artists. Today, musicians are no longer financially restricted to merely use guitar or piano in their performances. My definition of the singer-songwriter will therefore include those artists who use a variety of electrical instruments: guitars, keyboards, and percussion.

The remaining term that necessitates explication is the rock/pop field. Even in the broad genres of pop and rock there is semantic and definitional controversy. For example, Johan Fornäs believes that genres “are continuously transformed, according to the context and conditions that frame them, and the interpretations they are given” (Fornäs 1995, 118). With this in mind, Fornäs insists on a broad definition of rock that characterizes the genre as a dynamic entity and “as an open and unfinished category” (Fornäs 1995, 113). When it is considered that styles within the genres of pop and rock fluctuate greatly and change constantly, the problem of definition is magnified. Hence it is not a subject of this thesis. Since it is extremely difficult to categorize music of the rock/pop field, I will not define the test cases presented in this thesis.

Transcriptions, sheet music, and the musical score in pop/rock studies

It has become standard for music theorists to use a musical score as an object for analysis. In popular music studies, sheet music and transcriptions of performances often serve as a basis for analysis. Charles Seeger coined the following two terms to describe such analytical objects: “prescriptive” and “descriptive.” In reference to Seeger’s

terminology, Peter Winkler states that a prescriptive score “indicates the meter, identifies the sections of the piece, indicates which instruments play in which sections, marks off the number of measures in each section, and gives the basic chord progressions” (Winkler 1997, 174). Sheet music or lead-sheets are prescriptive. A descriptive score is one that reveals “how a specific performance of any music actually did sound” (Winkler 1997, 174). It indicates what notes were actually played in a given performance. Transcriptions of a recording or performance are descriptive.

My analytical study will rely on prescriptive sheet music published by the chosen singer-songwriters. The scores provide a keyboard rendition of the pieces, the vocal lines, and lyrics. The analysis of transcriptions of performances or descriptive scores presents several problems, not the least of which is access to materials. In addition, the accuracy of transcriptions and the difficulty or impossibility of verifying the accuracy causes problems. These problems do not arise when working from song sheets. I also support the use of published sheet music as my object of study because it is in the nature and goal of linear-reductive analysis to emphasize the structural properties of compositions rather than elaborations. In fact when one compares transcriptions of performances to song sheets, the characteristics central to the study are largely invariant.³ It could be objected that individual artists might vary the leading tone in tuning or produce a vocal slide in performance, thus altering the mode of the song. It can be answered that the songwriter decides which pitch is principal and prescribes it on a song

³ I arrived at this conclusion after comparing the orchestral transcription of the Beatles song “She’s Leaving Home” as presented in an article by Walter Everett (1987) and the published sheet music of the same song by the Hal Leonard Publishing Corporation (1967). With respect to pitches that are not elaborative tones, the vocal line and the supporting bass are similar in both media.

sheet. I am aware that the published scores, based on the European notational system, prioritize pitch and rhythm and marginalize other musical elements such as timbre and dynamics. Because I am employing analytical techniques derived from the European notational system, my study primarily focuses on those elements represented by that particular system.

CHAPTER ONE:

An analytical framework for pop/rock music: Current research methodologies and theoretical issues

Although the field of popular music studies is relatively new, the scholarship is extensive. There are a vast number of academic scholars who actively conduct research in this field –theorists, musicologists, ethnomusicologists, and cultural theorists. At times analytical approaches are quite similar and at other times differences are abundantly clear. By choice, this thesis focuses on the literature that would fall under the rubrics of musicology and music theory. An exploration of the methodologies implemented by scholars such as Allan Moore, Walter Everett, Lori Burns, John Covach, David Brackett, and Richard Middleton will provide an excellent introduction to the existing scholarship in the field of popular music studies. This is the goal of the present chapter. The discussion will proceed by introducing a number of theoretical issues that are pertinent to the study of pop/rock music. These issues focus on the similarities and differences between pop/rock music and the common-practice “classical” repertoire with respect to analytical methodologies and musical structure.

Background: The Development of a New Field

1) The “classical” connections to pop/rock music

In the 1990s, it is becoming abundantly clear that the split between ‘classical’ and ‘popular’ musics is fast diminishing, whether this is judged with reference to use, to marketing and dissemination, to production, or to any other of a multitude of criteria. The danger attendant on this is that we may come to overlook the real differences inherent in the ways different styles are constituted.

(Moore 1995, 199)

In the above quotation, Allan Moore addresses his concern for popular music studies that tend to overlook the differences between “classical” or common-practice music and pop/rock music. Moore warns scholars regarding the danger of equating the two types of music. There are a number of theorists who explicitly or implicitly adopt common-practice analytic procedures, values, and judgements for the study of pop/rock music. Allan Moore, Lori Burns, Walter Everett, Timothy Koozin, and John Covach are among those popular music scholars who favour analytic tools derived from common-practice tonal methodology. All of these theorists modify traditional analysis in order to suit the unique identity of the pop/rock repertoire. In this way, they heed Moore’s warning. Explicit or implicit in their studies is the idea that pop/rock music may incorporate musical elements or processes from the common-practice period or it may introduce new ones. The question that arises is whether we could use common-practice techniques to analyse pop/rock music, whether these techniques could be modified, or whether a new analytical methodology could be created. This question will be repeatedly addressed in subsequent chapters of the thesis.

2) The approach: A focus on musical structure versus a focus on musical meaning

Scholars are divided in their general approach to the study of pop/rock music. Some analysts examine the musical structure of a pop/rock song and depend heavily on the analytic methodologies of traditional musicology and music theory (Hamm 1979; Mellers 1973; Forte 1995). For example, recently theorists applied Schenkerian analysis to this type of music. This application is controversial since Schenkerian analysis is being used

to study music outside of the repertoire for which it was originally intended.⁴ John Covach represents those theorists who promote the use of this conventional methodology. He believes that Schenker's work is worthy of this new analytical task because it is "one of the dominant paradigms within the discipline of music theory."⁵ Covach suggests that theorists are wary to use Schenkerian analysis in areas outside of the original repertoire because they are unwilling to obtain negative results. Covach also argues it is presumptuous to believe that conventional methodologies are inappropriate for popular music analysis. In their study of pop/rock music, Moore, Burns, Koozin, and Everett are influenced by Schenkerian principles. Some theorists rigorously apply the methodology (Everett 1987; Koozin forthcoming) while others extend the theory to accommodate the harmonic and melodic environment of popular music (Burns 1997; Moore 1993; Middleton 1990; Covach 1997b).

At the opposite analytical pole, other scholars investigate the musical meaning of a song by drawing upon cultural or social theories (Walser 1993; Tagg 1979; Brackett 1995; Shepherd 1991 and 1997; McClary 1991). Robert Walser writes,

Rock songs ...do have meanings that can be discovered through analysis of their form and structure, but such analysis is useful only if it is grounded culturally and historically and if it acknowledges its interests forthrightly.

(Walser 1993, 31)

⁴ Schenker derived his theory from the great German masterworks of the 18th and 19th century. Recently, theorists have used this theory to analyse music outside of Schenker's original German repertoire (Burns 1995; Everett 1987; Forte 1993; Koozin 1998; Moore 1997). For an excellent discussion of the controversial use of Schenkerian analysis in popular music studies consult Covach (1997) and Everett (forthcoming).

⁵ John Covach, "We Won't Get Fooled Again: Rock Music and Music Analysis," in *Keeping Score: Music, Disciplinary, Culture*, ed. David Schwarz, Anahid Kassabian, and Lawrence Siegel (Charlottesville and London: University Press of Virginia, 1997), 77.

Walser suggests that the musical details of a song should be interpreted and analysed according to socially grounded meanings. In other words, musical structure in and by itself is not meaningful. However, the ways by which society interprets these structures are valuable and relevant.

One commonality that exists between both poles of musical analysis is the reliance on convention as a means of interpreting musical codes. As will be seen in Chapter 5, David Brackett's investigations of pop/rock music are explicitly influenced by the conventional meanings for musical codes.

Brackett is a popular music analyst whose research focuses on musical meaning. In his book, *Interpreting Popular Music* (1995), Brackett endorses a cultural and historical approach to the study of pop/rock music where extra-musical factors, rather than musical structure, plays a major role in formulating meaning in a song. Brackett argues that musical meaning is a function of context –for instance, musical codes, stylistic conventions, and the biography of the song's author.⁶ In order to determine the meaning of a song, an analyst must be familiar with the context of the song. Brackett's analyses examine how musical events of a pop/rock song conform to or defy convention. As Brackett states, the “‘meaning’ [of a particular song] derives at least partially from its [the song's] similarity to and difference from contemporary styles, as well as from a connection to stylistic precursors” (Brackett 1995, 6).

Brackett's approach has been criticized for being "reductionist" (Brackett 1995, 11). Critics such as Jean-Jacques Nattiez, argue that by reducing a song to a number of codes there is a risk of creating an analysis that is generalized (Brackett 1995, 11). In other words, the end result is a loss of meaning (Brackett 1995, 11). In response to this criticism, Brackett argues that the system of codes or categories allows for the discussion of meaning (Brackett 1995, 12). He writes, "without the concept of the 'code' there can be no connotation, meaning, or 'communication,' which throws the emphasis from meaning back to structure" (Brackett 1995, 11). The code also provides an established set of norms that can be used when comparing musical events. Further, it promotes or facilitates musical discussion among analysts.

Criticisms have been raised of both extreme methodologies (the approach based on musical structure and the one focused on extra-musical meaning) for the analysis of pop/rock music. As Roy Shuker writes, those who dismiss the traditional musicological approach to the study of pop/rock music believe that the approach "operates according to a different criteria" that are not necessarily pertinent to this music (Shuker 1998, 209). Shuker further states:

[these critics assert that] traditional musicology neglects the social context, emphasizes the transcription of music (the score), and elevates harmonic and rhythmic structure to pride of place as an evaluative criterion. Popular music, on the other hand, emphasizes interpretation through performance, and is received primarily in terms of the body and emotions rather than as pure text.

(Shuker 1998, 208-209)

⁶ A more comprehensive discussion of musical codes in relation to Brackett will be presented in Chapter 5. It will explore Brackett's interpretation of musical codes inherent in the voice such as inflections, stresses and vocal flips.

Critics also dismiss approaches that strictly emphasize musical meaning and cultural or social theory (Biddlecombe 1992). They claim that the approach is too subjective. For example, the analyst's conclusions regarding the affective musical properties of a song are dependent on his personal experiences and biographical background. The general criticism against this methodology is that it lacks systemization.

An integration of musical structure and meaning: An alternative to the two extremes

Somewhere between the two extreme approaches for the analysis of pop/rock music, there exists a methodology that borrows elements from both poles. There are a number of music theorists who focus both on musical structure and musical meaning of a pop/rock song and they are explored in this thesis. Moore, Burns, and Everett fall into this category. All three theorists use voice-leading analysis in order to discover the musical and/or textual meaning of a song. This is the subject of Part I of the thesis.

Moore is a pop/rock scholar who is notable for his analysis of the Beatles album *Sgt. Pepper's Lonely Hearts Club Band* (Moore 1997) and his comprehensive rock music book entitled *Rock: The Primary Text* (Moore 1995). At the core of Moore's analyses is the study of musical syntax.⁷ The syntax of a song is analysed according to harmony and melody via a reductive sketch. The sketch, which will be fully discussed in Chapter 3, identifies structural tones but does not consider small-scale voice-leading processes. Moore asserts it is difficult to form a voice-leading sketch of pop/rock music because often the pitches of an accompaniment merely serve the purpose of filling in harmonies

⁷ Although Moore writes about the importance of investigating cultural and social issues when studying pop/rock music, he does not put his theory to practice in the form of a social/cultural analysis of pop/rock music.

(Moore 1995, 190). Usually, the pianist or guitarist fills in the notes *ad libitum*. Upon observing his sketches, I conclude that Moore does identify large-scale voice-leading processes in the music. Moore's analytical sketches borrow some of the graphical notation found in Schenkerian analysis. For instance, prolonged notes (notes that are tonally or structurally significant) are stemmed and labeled with caretred Arabic numerals. By adopting Schenkerian notation, Moore's analytical sketches portray the hierarchical structural levels of a song –the stemmed notes and plain note heads represent the background and foreground respectively. Although Moore's sketches are similar to Schenkerian diagrams in some respects, they differ in others. For instance, Moore's analytical graphs do not necessarily identify a complete fundamental line –i.e. a linear descent from a *Kopftön* to scale-degree 1. His graphs highlight either linear or non-linear movement between structural tones.

Moore also forms a “compressed contour analysis” of the melodic material of a pop/rock song (Moore 1995, 188). The sketch that accompanies the analysis “draws out common features from successive phrases,” “ignores local repetitions,” and summarizes intensions⁸ and extensions with respect to phrase structure (Moore 1995, 188 and 190).

Moore uses the quasi-Schenkerian melodic and harmonic sketch or the compressed contour graph to illustrate and identify musical processes such as formal design, melodic range, motivic relationships, and tonal/modal centres. The sketches contain most of the

⁸ As Moore writes, “‘intension’ signifies ‘internal’ [melodic] development, recognisable on repetition ... and distinguishable from both ‘ornamentation’ and ‘elaboration’” (Moore 1995, 199-200).

notes of the piece. Moore also uses his sketches as a tool to highlight text-music or extra-musical associations of songs to a reader. A full score is unnecessary.

Moore's approach has received its share of criticism. One such critic is David Brackett, who criticizes Moore's approach for placing too much emphasis on pitch and metre (Brackett 1994, 122). Brackett asserts these two parameters may be significant for Western art music, but this is not necessarily true for pop/rock music (Brackett 1994, 122). Brackett also argues that "Moore seems unwilling to acknowledge the importance of specific socio-historical formations that may articulate aesthetic criteria that differ from those of Western art music" (Brackett 1994, 122). Brackett believes Moore's structuralist approach neglects the "socially constructed human subject" who perceives the music (Brackett 1994, 122).

Lori Burns has made an extensive contribution to the research of pop/rock music of female singer-songwriters such as k.d. lang, Tori Amos, and Sarah McLachlan (Burns 1997; 1998; forthcoming).⁹ Her analytic interest lies "in the extra-musical meaning of a popular song, in particular the ways in which issues of gender are negotiated" (Burns forthcoming b, 2). However, Burns explicitly states that her approach is structuralist or formalist (Burns forthcoming b, 1). In her excellent and path-breaking pop/rock studies, Burns uses voice-leading analysis as a primary analytical procedure to investigate the musical and textual narratives of a song. Her analytical methodology will be examined in Chapters 2 and 3.

⁹ Lori Burns generously made available to me and gave me permission to cite her forthcoming articles. Much of my thesis has been inspired and informed conceptually by the work of Burns.

Burns studies the voice-leading structure of a song with linear reductive techniques. With the aid of an analytical sketch, Burns examines the contrapuntal relations between the notes of the melody and bass. She investigates the following concepts in relation to codes and conventions: tonal/modal language, harmonic progressions, consonance/dissonance treatment, and overall linear connections between structural notes. Burns interprets the song by examining how codes and conventions are manipulated. As Burns states,

Music has the power to bear meaning precisely because it is a language that is based on conventional idioms. If the music is analyzed according to formalist paradigms, and is found to conform, then that is worth noting, and possibly even interrogating. If the music distorts conventions and codes, that is also worth interrogation... For the interpretation of text and music relations, the treatment of codes and conventions is very important. The choices made by a composer can be clues to the meaning of a song, and the way in which the actual music negotiates its way through the system of conventions gives it the power to enact the text.

(Burns forthcoming b, 3-4)

In other words, Burns does not consider unconventional musical gestures to be deviant or trivial. Rather, she believes these anomalies are worthy of attention and they possibly provide insight into the song's narrative. Chapters 4 and 5 delve into the subject of codes and conventions in pop/rock music.

The analytical diagrams that accompany Burns's voice-leading analysis resemble Schenkerian sketches. I purposely use the word "resemble" in order to emphasize that Burns's sketches are not completely identical to their Schenkerian counterparts. Yes, the notation is equivalent and Burns adheres to general Schenkerian principles. Nevertheless,

Burns slightly alters the Schenkerian paradigm in order to accommodate the unique identity of pop/rock music. For instance, a Burns graph represents each section of a song separately –the verse, pre-chorus, refrain, coda –instead of identifying one fundamental line for an entire song.

Walter Everett is a leading figure in the field of popular music. Among his significant contributions is his thorough analysis of the music of the Beatles. Recently, he published a chronological study of the British band's musical repertoire (Everett 1999). In some of his musical analyses, Everett uses Schenkerian analysis as one means to learn about the organization of a composition and explore text-music relations in a song.¹⁰ He is often criticized for using common-practice tools to analyse music that is created by “those who cannot read notation or have any conscious understanding of tonal relationships,” (Everett forthcoming, 1). In response to this criticism Everett states,

...every listener should be given the freedom to categorize and conceptualize the relationships in all of those musics [pop/rock music] in whatever ways he or she finds appropriate, significant, and satisfying. For me, a Schenkerian hearing of tonal events is useful toward these ends.

(Everett forthcoming, 41)

Although the Schenkerian approach is regarded as objective in nature, Everett claims that his interpretations reflected in the graphs are subjective. He writes, “my conclusions are very often of an interpretative nature, and tied to the subjective nature of reading expressive cues in various musical parameters that suggest to me the inner dynamics of emotions, ideas, and images” (Everett forthcoming, 40).

¹⁰ Everett also uses other means to analyse pop/rock songs. For instance in his forthcoming article, Everett examines “vocal and instrumental colour” and “temporal relationships” (Everett forthcoming, 13-36).

Unlike Moore and Burns, Everett does not make many alterations to Schenkerian theory when he applies it to pop/rock music. Everett believes in the Schenkerian notion of “directed voice-leading” where melodic lines may be stripped to a background level through the removal of elaborations (Everett forthcoming, 41). The background level of the melody portrays a linear descent from the *Kopfton* to scale-degree 1. When the bass part of the song is stripped of its elaborative tones, a large-scale I-V-I movement appears. In other words, every melodic and bass pitch prolongs the tonic or is directed toward the tonic. In traditional Schenkerian fashion, Everett analyses an entire song on one graph and identifies one fundamental line.

Although Everett widely uses the Schenkerian methodology to study pop/rock music, he does not claim that voice-leading analysis is the sole means for examining this music. Some songs are governed harmonically, rather than melodically, and require an analytical approach that places emphasis on harmony. In other compositions, the organizing force is the counterpoint. In such cases, non-triadic tones and/or dissonances may provide “an implied harmonic drive” and the analysis of the dissonance treatment in the song may be quite revealing (Everett forthcoming, 51). Consequently, context determines whether a harmonic or melodic analytical approach is required. Also, Everett does not claim that all pop/rock songs have one “single overriding tonal center” and that they are completely governed by Schenkerian principles (Everett forthcoming, 50). Not every song can be reduced to a background structure of I-V-I. Not every song presents a “typical” fundamental line.

The multi-disciplinary approach

Richard Middleton is an acclaimed musicologist in the field of popular music studies. He is most famous for his groundbreaking book entitled *Studying Popular Music* (1990) which provides an introduction to the field. The book describes the approaches used by several popular music analysts and highlights problematic issues associated with either a strict formalist or musicological approach. In direct response to these underlying issues, Middleton advocates a full spectrum of approaches in the study of pop/rock music (Middleton 1993). His multi-disciplinary approach explores cultural and social theory, retains elements from traditional analytical methods derived from traditional musicology and music theory,¹¹ and investigates semiotics (Middleton 1990).¹²

Middleton recommends the examination of sound “as a primary level of signification” (Middleton 1993, 177). He claims that music itself is capable of possessing cognitive, affective, and kinetic properties and should be analysed accordingly (Middleton 1993, 177). Middleton’s theory of gesture is directed towards these means (Middleton 1993). The objective of this theory is to categorize musical structures or processes that affect the somatic system. In other words, the theory acknowledges the participation of the listener as significant to the analytical process. Through the method of “inter-subjective comparison,” it is possible to compare the somatic response of various listeners to the same musical event (Middleton 1993, 180). Middleton also suggests there is a

¹¹ In his book, *Studying Popular Music*, Middleton suggests that a “modified Schenkerianism” may be useful in popular music analysis (Middleton 1990, 196).

¹² Middleton’s approach is diverse and I do not claim to summarize all of it here.

“hierarchical ‘tree’ relating the spectrum of structural levels in the music with the spectrum of somatic equivalents” (Middleton 1993, 180).

3) The use of common-practice terms in the analysis of pop/rock music

There is a tendency for theorists and musicologists to use common-practice terms to describe musical events in pop/rock songs (Hamm 1979; Mellers 1973). For example, the words “closure,” “tonal,” “cadence,” and “dissonance” frequently appear in their writings. At times as Peter Van der Merwe suggests, some of these scholars do not reflect upon the meanings and ideologies inherent in these terms (Van der Merwe 1989, 4). Van der Merwe writes, “the great trouble with loaded terms is that they lead to endless arguments about definitions and applications” (Van der Merwe 1989, 4). Further, he states that

Well-established terms raise endless difficulties. They are too broad, or too narrow, or too vague, or misleadingly precise, or offensive to somebody. Very often, a name refuses to be just a name and acquires laudatory or pejorative overtones, if it has not been burdened with these from the start.

(Van der Merwe 1989, 4)

Middleton also describes the problems associated with using musicological terminology to analyse pop/rock music. In particular, he states that this terminology possesses ideological connotations that are inappropriate for analysing popular music (Middleton 1990, 103). I will quote Middleton at length in order to illustrate how misunderstandings are inevitable when an analyst applies musicological terminology or criteria to popular music:

[Musicological] terms are commonly ideologically loaded. ‘Dissonance’ and ‘resolution’ immediately suggest certain harmonic procedures, and a string of associated technical and emotional associations. ‘Motive’ immediately suggests Beethovenian symphonic development technique. Compare

‘melody’ (something graceful? Mozart?) and ‘tune’ (you whistle it in the street)... If this terminology is applied to other kinds of music, clearly the results will be problematical. In many kinds of popular music, for example, harmony may not be the most important parameter; rhythm, pitch gradation, timbre and the whole ensemble of performance articulation techniques are often more important; ‘dissonance’ and ‘resolution’ may be produced by non-harmonic means (stop-time in rhythm and blues, for instances); ‘motives’ may be used not for ‘development’ but as ‘hooks’ or ‘riffs’...

(Middleton 1990, 104)

Although Van der Merwe’s and Middleton’s concerns are valid, discourse about music cannot escape the use of pre-established terminology. Communication between musicologists, theorists, and other scholars of music relies on the use of words such as *closure*, *tonality*, and *dominance*. Therefore, I use these terms in this thesis. The pending issue here is whether a new set of terms appropriate for pop/rock music should be invented. Perhaps the solution is for an author to reduce the number of ambiguous musical terms in his discussions by providing thorough explanations of controversial and clouded words. In this thesis, I have provided explanations of terms that may otherwise appear ambiguous to the reader. Most of these explanations are found in the Foreword and this introductory chapter.

4) Common-practice expectations and the analyst

In their analysis of pop/rock music, many scholars consciously or unconsciously search for musical constructs that fulfill common-practice expectations. As previously mentioned, cadential closure is one of these expectations. Theorists tend to draw attention to occasions when dominant resolution does not occur. Although this is a rarity

in common-practice music, popular music has many examples of this phenomenon.¹³

Theorists who wish to test whether their expectations are fulfilled or denied in a piece of music probably agree that most tonal listeners possess relatively similar expectations and therefore can relate to such analyses. Moore (1995) and Burns (forthcoming b) are among those theorists who strongly encourage analysts to consider events that deny expectations as unique, instead of deviant, features of the music.

5) Harmonic language: The tonal versus modal dilemma

There is much discussion regarding the tonal/modal language of pop/rock music. Some common-practice theorists analyse popular music according to the tonal system. Timothy Koozin represents this majority. For example, he prioritizes a tonal interpretation when a modal/tonal duality appears in the Sarah McLachlan song “Ben’s Song” (Koozin forthcoming).¹⁴ Koozin reduces a modal reference to trivial surface details and suggests that the tonal harmony corresponds to the background level of the music. In contrast to Koozin’s methodology, Allan Moore rejects tonal explanations and favours modal interpretations. He acknowledges that the diatonic leading-tone of a scale is often absent in pop/rock music (Moore 1995, 187). The converse is also true: the flattened-seventh scale-degree is widely present in this music. Moore is concerned that the tonal system is unable to fully account for the $\flat$ VII. He looks to the medieval church modes as a means to rectify this analytical problem. Moore believes that interpreting pop/rock music according to the modes is more reasonable since five out of the seven

¹³ The case studies included in this thesis provide examples of unresolved dominant chords.

¹⁴ Consult Koozin’s analysis of the Sarah McLachlan song “Ben’s Song” (Koozin forthcoming).

medieval church modes have the flattened-seventh scale-degree (Moore 1995, 188). An either/or situation for harmonic interpretation is problematic. Context –i.e. the musical gestures themselves –should dictate the type of analytic interpretation essential for a piece of music. Lori Burns and John Covach address this issue when they give equality to the tonal and modal systems (Burns forthcoming e; Covach 1997b). Both harmonic interpretations are present in their analyses.

6) What constitutes closure?

Another issue that arises in popular music studies involves the concept of closure. What constitutes closure? Should we apply common-practice models of closure when we analyse pop/rock songs or do we need to re-evaluate our traditional definition? Some common-practice theorists have a tendency to equate closure in a tonal song with a perfect authentic cadence (Everett forthcoming, 41). Since pop/rock music often lacks the V-I cadence, these theorists conclude that there is no sense of repose. Such restricted views of closure may not adequately describe events observed in popular music. The sensation of tension followed by relaxation may also represent closure in a piece of music. In common-practice art music, a dominant chord often depicts tension. The later appearance of the tonic releases this tension and affords relaxation. In pop/rock music, other progressions, as well as V-I, may provide closure. For instance, Moore and Burns agree that the $\flat$ VII chord and I chord may represent tension and relaxation respectively. Middleton claims that the IV chord can also provide relaxation (Middleton 1993, 183). It is essential for popular music analysts to redefine the conventional model of musical closure.

The preceding discussion reviewed the theoretical issues that surface in popular music studies and gave a clearer understanding of the challenges which pop/rock analysts face. One main challenge for these scholars is to account for the similarities and differences between pop/rock and “classical” music. Theorists such as Moore, Burns, and Everett meet this challenge by modifying common-practice methodologies when they apply them to pop/rock songs. In Part I of this thesis, I will examine their modifications in depth and find common elements that may contribute toward a standardized approach to the study of popular music. Specifically, I will focus on the modifications made to voice-leading analysis.

PART I: Musical Structure

CHAPTER TWO

Voice-Leading Analysis and the Tonality/Modality Issue: A study of the Music of Sarah McLachlan

Voice-leading analysis is one of the primary procedures exercised by music theorists in the study of “classical” repertoire. By examining contrapuntal textures and how one chord leads to the next, this methodology provides insight regarding the tonal organization of a musical work. Recently, voice-leading analysis has been used in the study of pop/rock music. For instance, Lori Burns and Timothy Koozin explore voice-leading structures, as well as harmony, in their respective investigations of Sarah McLachlan’s music in order to identify the tonality or modality of specific songs.¹⁵ Reductive techniques direct both of their analyses.

In interpreting the key of the McLachlan song “Possession,” Burns faces a tonality/modality dilemma (Burns forthcoming e). Specifically, the key of the verse is ambiguous. As can be seen from figure 2-001, the bass voice of the verse comprises an ostinato pattern based on the following notes: B-C♯-E-E (Burns forthcoming e, example 004). Burns questions whether the verse’s key is B Aeolian or E Mixolydian (Burns forthcoming e, 13-14). The former interpretation acknowledges an ostinato progression of i-VII-IV and the latter a progression of v-IV-I (Burns forthcoming e, 18). Once the ostinato takes a break at the end of the verse, the notes G, F♯, and E are heard in the bass (Burns forthcoming e, example 004). Therefore, the verse opens with a B and ends with an E and the identity of the tonic remains unclear.

¹⁵ Both Burns and Koozin have forthcoming articles on the music of Sarah McLachlan. Consult the bibliography for details.

By subjecting the verse of “Possession” to a voice-leading analysis, Burns reveals the true identity of the verse’s tonic. As a point of departure for this voice-leading study, Burns identifies instances of consonance and dissonance in the song. She concerns herself with the duration of a consonant event and whether it provides a sense of stability or repose in the song (Burns forthcoming e, 18). She also identifies the notes emphasized by recurring consonant support. Instances of dissonance are equally important to Burns. She studies discordant events, such as suspensions, and their resolution or lack of resolution (Burns forthcoming e, 18).

The issue here is whether traditional notions of consonance and dissonance are applicable in popular music studies. In tonal counterpoint, intervals of a 3rd, 6th, 5th, and 8^{ve} are considered consonant and those of a 2nd, 4th, and 7th are dissonant. Dissonant tones are used sparingly in common-practice tonal music. When they do occur, analysts tend to highlight them as “unusual” musical events –usual events being those that are consonant. In pop/rock music, dissonant events are a recurrent phenomenon almost to the point of being the norm. As Everett suggests, chords are often ornamented with added tones that form dissonant 2^{nds}, 7^{ths}, 4^{ths}, and 9^{ths} (Everett forthcoming, 51-52). Is a dissonant musical event in pop/rock music necessarily an important event, worthy of mention? Does it function in the same manner as it does in common-practice music –i.e. does it highlight or accent a particular moment in a song? Walter Everett answers this question in the affirmative. He writes,

Dissonance treatment is just as crucial to most rock styles as it is to the classics. Tension is created by exposed leading tones that seem to have been left hanging, and relief is afforded when their resolution is finally attended.

(Everett forthcoming, 51)

In her analysis of “Possession,” Burns creates a voice-leading reduction of the song’s transcription. As Burns states, the voice-leading sketch “attempts to represent as closely as possible the actual moments (within a given measure) when melodic pitches arrive in relation to the bass” (Burns forthcoming e, 17). Two-voice counterpoint is the focus of her study. Figure 2-002 lists and defines the notation observed in Burns’s voice-leading sketch.

Figure 2-002: The notation employed in a Burns voice-leading sketch

Notation	Meaning
Stems	Pitches with clear harmonic support
Plain note-heads	Elaborative pitches
Dotted slurs	Suspensions or anticipations
Solid slurs	Linear events (neighbour patterns, melodic progressions)

(Burns forthcoming e, 17)

As already discussed, figure 2-001 illustrates Burns’s voice-leading graph of the verse as presented in her forthcoming paper. Burns examines the contrapuntal strength of the melodic D as a consonance in the verse of the song. She studies the 4-3 suspension in the top voice of measure 9 illustrated in the graph of figure 2 (Burns forthcoming e, 17). The dissonant 4th results from an E in the top voice heard against B in the bass. The E immediately resolves downward to D. Burns suggests that a B minor seventh chord supports the 4-3 suspension-resolution (Burns forthcoming e, 17). The next occurrence of the melodic D happens in measure 11. Burns notes the dissonant 7th created when the

D is pitted against E in the bass (Burns forthcoming e, 17). The dissonance that is created does not resolve upward to the expected E. A similar dissonance is created in measures 13 and 17 (Burns forthcoming e, 17). Burns concludes that after the brief consonant support for the D in measure 9, D never receives this type of harmonious support again (18). The pitch is often heard against an E in the bass. Burns suggests that D, through its repeatedly dissonant support, is an emphasized pitch in the verse (17). Does the emphasized melodic pitch D support a B Aeolian interpretation of the verse? Burns suggests the B Aeolian/E Mixolydian dilemma still persists since the pitches of the top voice, which outline the B minor triad, do not receive B Aeolian harmonic support (18-19). Since the key of the verse is still difficult to ascertain, Burns studies the refrain's voice-leading graph to gain further insight.

Figure 2-003 displays Burns's voice-leading graph of the refrain. As the Burns analytical graph illustrates, the goal of the refrain's opening bass line is B (Burns forthcoming e, 19). Although at first glance the G, F $\sharp$, and B seem to participate in a VI-V-I progression in measures 25-26, this is not the case (19). The F $\sharp$ is not heard against the notes of the dominant chord in the melody (20). Instead, D and B are presented in the top voice and provide the context for a B^{6/4} chord (20). The result is a VI-(V^{6/4})-I progression –in other words, Burns states there is only one harmonic change, from G to B (19).¹⁶ The lack of the dominant chord (measure 33) in this instance is balanced by an actual dominant chord that appears at the end of the refrain. Burns explains that the final

¹⁶ The bracket indicates that Burns views the F $\sharp$ as part of a "weak tonic 6/4 or as a neighbor to G" (Burns forthcoming e. 19).

notes of the refrain's bass create the fifth progression that was hinted at in the opening measures of the section, but with the appropriate melodic notes. The F# of the bass is heard with E and the identity of the dominant chord is established (20). The following bass note, B, is heard in conjunction with D and fulfills the common-practice requirements of a dominant-tonic cadence in B Aeolian (20). As a result, Burns suggests that the modality in the refrain is clear.

Burns's B Aeolian interpretation of the refrain of "Possession" is also influenced by her study of dissonance and consonance in the section. For instance, she comments on the discordant counterpoint between various statements of E in the melody against various notes in the bass. In most cases, the melodic E is a neighbour note (D-E-D) or a passing note (F#-E-D) and resolves to D, a member of the B Aeolian tonic chord (Burns forthcoming e, 20). In one instance, the melodic E creates an interval of a 7th over an F# chord (measure 33). This time, the dissonance may be interpreted as part of a V⁷ chord in B Aeolian (20). Once again, E resolves down to D, a pitch belonging to the tonic chord. As the result of her voice-leading analysis of the refrain, Burns concludes that the B Aeolian interpretation overrides the E Mixolydian possibility (Burns forthcoming e, 21).

In summary, Burns's voice-leading analysis of "Possession" focuses on consonance and dissonance treatment in the song. Burns studies the strength of dissonant events, such as 4-3 suspensions and how they are resolved. The harmony that accompanies the resolution reveals the identity of the song's governing key.

Koozin, like Burns, uses voice-leading analysis as a means to determine the key areas in a McLachlan song (Koozin forthcoming). Figure 2-004 provides an example of Koozin's analytical sketch for the McLachlan song "Building a Mystery." As can be seen from the figure, the notation Koozin uses in his analytic sketches resembles traditional Schenkerian notation.

Modal/tonal conflicts common in the music of McLachlan challenge Koozin's analytical process. For instance in his analysis of "Building a Mystery," Koozin describes a "competition between D major tonality and B minor modality (Koozin forthcoming, 2). The bridge section presents an ascending stepwise movement from E to B that makes B a likely candidate to be the tonic (2). When a D major chord is stated just before the phrase endings in both the verse and chorus, Koozin suggests that B loses its role as the tonic and is replaced by D (2). The modal/tonal ambiguity is most evident when Koozin considers the identity of the verse's last chord (2). He questions whether an A major chord functions as a V of D major or a $\flat$ VII neighbour to a modal B minor chord (2). By creating a voice-leading sketch, one that differentiates between foreground and background, Koozin suggests that the A major chord has a dual role. At a surface level the chord is a modal auxiliary to B and at a deeper level it is a dominant of D (2).

Although Koozin's D major interpretation of the deep key structure of "Building a Mystery" is reasonable, I decided to investigate the possibility that B is the tonic. At first glance, a B minor chord (i) begins both the verse and chorus and all sections end with an

A major chord ($\flat$ VII). As each section moves into the next, the $\flat$ VII chord resolves to the tonic chord and forms a closure in B minor.¹⁷ In order to support my hypothesis for a B minor interpretation, I attempted to create my own voice-leading graph of the song. Immediately, I realized that the melodic line did not present a strong B. The lack of a structural B made it difficult to reveal an authentic cadence in B minor and create a fundamental line according to Schenkerian theory. In Koozin's sketch, figure 2-004, the structural tonic or D is heard in the top voice. Although this is the case, there is no clear V-I cadence in D major. In this respect, neither a D major or a B minor interpretation is fully supported.

As one can see from the short comparison of Koozin's sketch and my attempt to create an alternative sketch, a voice-leading analysis is useful when one confronts a modal/tonal conflict in the study of popular music. A voice-leading analysis of "Building a Mystery" helped me to dissolve my argument for a B minor interpretation of the song and support Koozin's D major analytic sketch.

Koozin also conducts a voice-leading analysis in his study of McLachlan's "Ben's Song." Once again, competing modal/tonal centres are at issue. According to Koozin, the verse of the song exhibits a conflict between D major and D Dorian (Koozin

¹⁷ According to Allan Moore, the $\flat$ VII or $\flat$ VII is a common chord found in popular/rock music (Moore 1995). He states that through the "local articulation of flattened seventh harmonies (built on $\flat$ VII in the diatonic major scale, e.g. the chord of B $\flat$ in C major)" traditional concepts of cadence are "appropriated" (Moore 1995, 185). In other words, Moore concedes that a $\flat$ VII-I progression simulates traditional notions of cadence. He does not claim that the $\flat$ VII-I cadence is a substitute for an authentic cadence (V-I), but I noticed that many of his analyses identify the modal cadence at the end of phrases (Moore 1995, 191-193).

forthcoming endnotes, 17). In order to explain the dual nature of the verse, Koozin creates a harmonic and linear reduction of the song. The modal centre (D Dorian) of the verse is emphasized by the following descending perfect 4th pattern in the bass line: C♯-G-D (Koozin forthcoming, 5). Koozin suggests these bass notes, in conjunction with the melody of the top voice, appear to create a IV/IV-IV-I progression in D Dorian (Koozin forthcoming, 5).¹⁸ He also asserts that the modal interpretation is reinforced by the modal linear descent in the vocal melody from C♯2 to C♯1 (5). The tonal centre (D major) of the verse is supported by an A major chord (V of D major), the goal of the section (Koozin forthcoming, 5). Koozin writes, the “arrival of the dominant serves to clarify the large-scale tonal structure... The A major chord ending the verse provides for the tonal orientation of D major without ever resolving to the tonic” (Koozin forthcoming, 5). In the chorus, a secondary tonal centre is introduced. The chorus, with its C♯ and G♯ accidentals and its strong F♯-C♯-F♯ movement in the bass, clearly implies a tonality of F♯ minor (or Aeolian) (Koozin forthcoming, 5 and 13). Koozin states that the last chord of the verse, the A major chord, provides the link that allows for a smooth modulation from D major to F♯ minor (Koozin forthcoming, 5). The A major chord is both the dominant of D major and the mediant of F♯ minor.

¹⁸ I do not understand why Koozin considers a D Dorian interpretation of the verse rather than a D Mixolydian one. I believe that the presence of F♯ and C♯ in the verse establish a D Mixolydian context. C♯ only occurs once, at the end of the verse. With this in mind, I will now refer to the D Dorian or Mixolydian interpretation as a D modal one.

In conclusion, Koozin attributes the Dorian passages of the verse to modal inflection and views D major as the tonal centre of the section. The shift to F#minor in the chorus is closely linked to D major –it is the mediant of the key. The F# minor context of the chorus cannot be explained in terms of the D modal interpretation of the verse. Koozin also suggests that the goal note of the chorus, G#, creates tension with the goal note, A, of the previous section (Koozin forthcoming, 6). He is implying that there is a large-scale linear connection between the two goal notes. The A major harmony that supports the A is best understood in the context of D major. The G# is best described as a minor 9th above F# minor harmony, the mediant of D.

I would like to challenge Koozin's view that the verse is in D major. I am aware that Koozin's primary purpose is to reveal the "global influence of D major" in the song, but why is he so reluctant to acknowledge a D modal interpretation of the verse? (Koozin forthcoming endnotes, 17). When I study Koozin's Schenkerian graph of the verse of "Ben's Song," figure 2-005, I see an abundance of C naturals. The only statement of C# occurs at the end of the verse. Although I hear C# in this instance, it is expressed in the accompaniment. The voice does not sing the pitch. McLachlan possibly added the C# for the purpose of tonal inflection or tonal colouring in the D modal context. This modal interpretation of the verse is also supported by the sheet music of the song, as published by the Hal Leonard Corporation (1990). The sheet music clearly indicates a key

signature of one sharp for the verse.¹⁹ Thus, a D modal interpretation is reasonable.²⁰ If we reconsider Koozin's linear analysis of the verse this time within a D modal context, the perfect 4th pattern in the bass and the modal linear descent from C ♯ 5 to C ♯ 4 appear as strong modal signifiers. The only signifier for D major is the C ♯ at the end of the verse –a sharp that I attributed to tonal inflection. The D modal context of the verse does not smoothly shift to F ♯ minor, the key of the verse, but I do not feel the need to understand how the D modal interpretation of the verse relates to other sections of the song. This opinion is greatly influenced by Burns's thoughts on how to sketch sections of pop/rock songs when conducting linear analysis –a topic further discussed in Chapter 3.

¹⁹ It is not clear how much authority we should give to the published score.

²⁰ A D major context would most likely exhibit itself through a key signature of two sharps.

**A Case Study: A Voice-Leading analysis of Sarah McLachlan's
"Do what you have to do"**

At this point, it is useful to explore the voice-leading analytical strategies used by Burns and Koozin in the study of pop/rock music. The following is a case study of the McLachlan song "Do what you have to do."²¹ Figure 2-006 presents my voice-leading reduction of the piece. I will adopt the analytical notation used by Burns, rather than Koozin, because Burns's notation was clearly defined in the beginning of this chapter.

Without an instrumental introduction, "Do what you have to do," plunges immediately into a statement of verse 1. As is the case for "Ben's Song," although the sheet music indicates a key signature of two sharps, there is much ambiguity regarding the tonal centre of the verse. Upon hearing the first three chords of the song, the tonal listener is uncertain whether the key is D major or E Aeolian. In general, the melodic material of the verse does not present a C# which would make the identity of the key more clear.

The musical accompaniment provides two instances of C# –both being lower neighbours to D.

An investigation of the phrase structure in "Do what you have to do" will facilitate the proceeding discussion of the modal/tonal problem within the song. Figure 2-007 presents the phrase divisions of the song.

²¹ The analysis is based on the Hal Leonard published piano sheet music (1997).

Figure 2-007: The phrase structure of McLachlan's "Do what you have to do"

The verse:

Phrase	Measures
1	1-4
2	5-8
3	9-12
4	13-16

The chorus:

Phrase	Measures
5a (first ending)	17-22
5b (second ending)	17-22[+ 4 measures of extension]
5c (third ending)	17-22 [+2 measures of extension]

The coda:

Phrase	Measures
6	26-31

As can be seen from figure 2-007, the phrase structure of the verse is regular –it constitutes four 4-bar phrases. The chorus presents only one phrase, six bars in length. Upon the second statement of the chorus, an extension of 4 bars is added to the already existing 6 bars. The third statement of the chorus, the one that leads to the coda, presents a 2 bar extension. The coda consists of one phrase, 6 measures in length.

Let us consider one case where D is the tonal centre. Immediately the published key signature of two sharps supports a D major (or B minor) reading of the song. Verse 1 begins with D, a pickup. The pitch is presented by the voice and is unaccompanied. On

the down beat of measure 1 D is heard again, this time as a dissonant 7th above the E of the bass line. The discordant entry of D instantly questions the pitch's role as the tonic of the verse. In fact, none of the statements of D in the verse's melody receive tonic support from the bass. Although pitch D is emphasized through dissonant support, the verse does emphasize the tonic and dominant chords of D major. The D major chord (I) in measures 3-4 and 11-12 and the A major chord (a V chord lacking its third) in measures 15-16 are highlighted in the verse with respect to harmonic rhythm. They are the only chords that are spread over two measures. All other chords occupy merely one bar. Another interesting point is that both the D and A major chords are presented at the ends of phrases (phrase 1 & 3 for D major and phrase 4 for A major). D as a tonal centre is also emphasized through the highest and lowest points of the melodic line. The melody generally descends from D to A, which represents the first and fifth scale-degrees of D major. Scale-degree 3 is highlighted in phrase 1 when the melody descends to F#. Figure 2-006 shows how the verse, within the framework of D major, does not follow common-practice voice-leading rules. For instance, the I-ii⁷-I progression in measures 11-13 is unconventional in common-practice tonality. Another case in point is the atypical movement from ♭VII to ii in measures 8 and 9.

Let us now consider E Aeolian as the key of the verse. In support of an E Aeolian interpretation, all phrases begin with an Em⁷ chord (m. 1, 5, 9, and 13). Each phrase ending creates tension by either a ♭VII or v chord in E Aeolian.²² The only exception is

²² The leading tone (D) embedded within the ♭VII and v chord produces tension that needs to be resolved.

the last phrase (m. 13-16) which concludes with a IV chord. The tension is relieved upon hearing the tonic chord presented at the beginning of each subsequent phrase. The lack of C# in the melody and the presence of a C $\flat$ chord in measure 8, further reinforces an E Aeolian interpretation of the verse and weakens a D major one. The only C# stated in the verse is by the accompaniment in measure 4. Since the C# does not belong to the D major chord that occupies the bar, its significance is greatly reduced. Perhaps if dominant harmony supported the C#, the C# would reinforce a D major reading of the verse. The E Aeolian interpretation is also reasonable since the A chords in measures 15-16 fail to present the third or C#.

A study of the consonance and dissonance treatment in the verse of "Do what you have to do" may be useful in determining the key of the section. Figure 2-008 provides a summary of dissonant events that occur in the verse.

Figure 2-008: Dissonant events in the verse of “Do what you have to do”

Dissonance/consonance	Measure number	Governing harmony
7-5	1	Em7
4-5	1	Em7
4*	2	G
7-3	2-3	G-D
7-8	5	Em7
7-6	6	G
2*	6	G
7-5	6-7	G-Bm
2-1	9	Em7
7-5	9	Em7
2-1	10	Em7
7-3	10	Em7
2-1	13	Em7
7-5	13	Em7
7-6	14	G
2-1	14-15	G-A

* These dissonant events are left unresolved.

By studying figure 2-008, it appears that the majority of dissonant events resolve to consonance with E minor harmonic support. The E minor harmony provides stability to the verse that is otherwise threatened by the presence of unstable dissonant events.

As in the case of Burns’s analysis of “Possession” and Koozin’s study of “Ben’s Song,” an investigation of the chorus may provide insight regarding the modal/tonal conflict in the verse. Chorus 1 comprises one phrase (m. 17- 21 [+ 22])²³ that has the following harmonic movement: Bm-G-D-Em⁷-[D-G]²⁴. From 2-006, it is evident that the

²³ The square brackets [] identify phrase extensions.

²⁴ Please note that the melody of the chorus ends on beat one of measure 21. The remainder of this measure, along with the following one, serves as a link that connects the chorus 1 with verse 2.

structural notes of the top voice (those notes which have consonant support and have stems on the sketch) outline the root and third of a B chord. Also, the first and last notes of the chorus' melody are D and B respectively. As for chord functions, the harmonic movement (Bm-G-D-Em⁷-[D-G]) of the chorus is intelligible in a B Aeolian context as: I-VI-III-iv⁷-[III⁶-VI]. Another element in the song that supports the B Aeolian interpretation is the modulatory link between the verse and the chorus. The last chord of the verse (A major) is easily perceived as ♯VII in B Aeolian. This chord leads nicely into the first chord of the chorus (the B chord). As previously mentioned (footnote 12), ♯VII-I progressions are common in pop/rock music. The chorus modulates back to E Aeolian in bar 21 with an Em⁷ pivot chord. The chord functions as iv⁷ and i in B Aeolian and E Aeolian respectively. In the remaining two bars of the chorus (m.21-22), the bass line presents the notes E-F♯-G which translates into the progression I-♯VII⁶-III in E Aeolian.²⁵ At this point in my analysis, I am satisfied to state that the chorus is indeed in B Aeolian and the verse in E Aeolian.

I would like to further support my conclusions regarding the key of the verse, by studying the coda of "Do what you have to do." This last section (m.26-31) of the song merely consists of a two bar idea, borrowed from m.21-22 of the chorus. The idea, consisting of the linear movement in the bass from E to G, is repeated three times. The first two presentations are an exact repetition. The last one is unexpectedly modified. The bass line does not move from E up to G, instead it avoids G and returns back to E.

The repetition of pitch E in the bass line and the fact that the song ends with E, suggests to me that the coda's key is E Aeolian. This belief reinforces my earlier conclusion that the verse is also in E Aeolian.

An interesting musical feature of the coda is the unresolved seventh –D in the voice pitted against E in the bass (measure 26). The D never resolves upward to E. Once the vocal part ends, the instruments prolong the dissonance. The end result is the dissonant sound of D left ringing in our ears at the close of the song.

In sum, the voice-leading strategies of both Burns and Koozin prove useful to determine the key of pop/rock songs –in this case the songs of Sarah McLachlan. Hence, voice-leading analysis may be an appropriate methodology to solve the tonal/modal problem apparent in pop/rock music. A thorough examination of various pop/rock songs by other artists is necessary to support this argument. I do not claim that a voice-leading analysis will always facilitate the process of interpreting the key of every rock/pop song. Rather, I promote the use of this strategy as one possible method to analyse pop/rock songs. Many pop/rock songs are not governed by harmony alone. Contrapuntal relations may also play an important role in songs. Therefore, an analyst should not rely on harmonic analysis as the sole means to understand the organization of a song. In fact, an analyst who only conducts a harmonic analysis may do an injustice to the song by

²⁵Please keep in mind that I am using the harmonies written for the piano accompaniment and the guitar symbols indicated on the sheet music to determine chord functions.

formulating inaccurate analytic conclusions. The voice-leading methodology is an invaluable strategy and can potentially be included in the “standardized” approach to the study of pop/rock music. The next chapter will further discuss voice-leading analysis and examine elements of the methodology that are commonly modified to suit the unique characteristics of pop/rock songs.

CHAPTER THREE

Musical Form and Voice-leading Analysis: A comparison of Everett's and Moore's reductive analysis of "She's Leaving Home"

Pop/rock music of the 1990s is based on a verse/chorus formal design, which has its origins in the music of the Tin Pan Alley Era.²⁶ Consequently, it is a worthwhile venture to study the structural divisions of the popular songs of the past. Charles Hamm distinguishes the verse and chorus through their lyrical content (Hamm 1983, 358). The verse typically presents a dramatic situation and the chorus elaborates on the situation (Hamm 1983, 358). The verse also exhibits more frequent harmonic shifts than the chorus. However with respect to melody, the chorus presents the most important musical material (Hamm 1983, 360). It is the part of the song that may be easily sung by a listener.

Allan Moore, in his book *Rock: The Primary Text*, accounts for the formal structures witnessed in rock music (1993). He lists the following categories as conventional sections evident in this genre of music: verse, refrain (or chorus), bridge, introduction, coda and solo (break) (Moore 1993, 47). Moore affirms that the verse tends to be twice as long as the refrain. The bridge, introduction, coda, and solo are shorter in length. The lyrics of the verse vary upon each return of the section. The lyrics of chorus recur upon each statement. In reference to the music of the Beatles, specifically the music from *Sgt. Pepper's Lonely Hearts Club Band* (1967), Moore describes the standard format of

²⁶ The Tin Pan Alley Era occurred between 1900 and 1940 in New York City (Shuker 1998, 304). During this period, there was an enormous production of American popular sheet music. Shuker writes, the

popular music sections. He states that the standard consists of “two verse/refrains followed by a bridge (what is often called a ‘middle eight’, although it is frequently not of eight bars’ length); a third verse/refrain and bridge; and a final (altered) refrain” (Moore 1997, 30).

Questions arise concerning the ways of representing the formal division of pop/rock music in a Schenkerian or voice-leading analytical graph. Specifically, one may ask how analysts treat the repetitive musical form. Both Walter Everett and Allan Moore create voice-leading graphs in their respective studies of the Beatles song “She’s Leaving Home.” This chapter compares their graphical analyses for the same song and provides insight regarding how to deal with the structural divisions of popular music. Also, by examining Everett’s and Moore’s graphs it is possible to observe their theoretical principles and approaches in practice. The chapter opens with a discussion of Everett’s and Moore’s methodologies and reveals their common Schenkerian influence. It also revisits the harmonic and structural voice-leading issues that were presented in Chapter 2, this time in relation to form.

How is Schenkerian analysis useful in the study of pop/rock music?

In order to address this question, I would like to examine in depth Everett’s and Moore’s separate studies of “She’s Leaving Home.” Both investigations rely on Schenkerian methodology to some extent. Everett explores the ways in which the musical structure, illustrated in the form of a Schenkerian graph, is associated with or

songs “catered to popular tastes, incorporating and homogenizing elements of new musical styles as they emerged” and “focused on romantic love” (Shuker 1998, 304).

represents the text (Everet 1987). For example, by examining the foreground, middleground, and background structures of the song, he relates surface details (pandiatonic voices) to the textual idea of “distance” and the “generation gap.”²⁷ He also states that the breakdown of the fundamental line corresponds to the concept of a “broken home” and the “girl leaving home” (Everett 1987, 120).

Moore’s use of the Schenkerian methodology in his study of “She’s Leaving Home” is implicit. His analytical graph functions like a reduced score that highlights the primary harmonies and voice-leading connections of the piece. Structurally significant notes are identified with caretted Arabic numbers, as in traditional Schenkerian sketches. Although this is the case, the numbers do not necessarily decrease in linear order and fail to represent a traditional fundamental line. The Moore graph provides an economical means for sketching the phrase structure of the piece and illustrating the basic vocal contour.²⁸ Moore defines the boundaries of a phrase by drawing a square bracket with a number that indicates the amount of measures involved in the structure. He incorporates unstemmed notes in his graph to identify specific chords. There is no tangible theoretical reason why Moore implicitly uses the Schenkerian methodology in his analysis of “She’s Leaving Home.” However, it seems to me that Moore employs the approach in other studies of Beatles songs to highlight structural relationships in the

²⁷ Pandiatonic sonorities are dissonant diatonic harmonies a 6th, 7th, or 9th above the root of a chord (Randel 1986, 605).

²⁸ I use the word economical in both the physical and financial sense. The sketch provides a concise version of the musical score that occupies a minimum amount of space on the page. The graph is financially preferable since the author does not have to pay expensive copyright fees for reproducing the entire song.

music. For instance, in his study of “Sgt. Pepper’s Lonely Hearts Club Band,” Moore creates a graph to show motivic relationships throughout the song (Moore 1997, 29).

The Problems of using Schenkerian Analysis for popular music

Neither Everett nor Moore mention that their methodology used in the study of “She’s Leaving Home” is based or derived from Schenkerian analysis. Everett states that his analytical sketch of the song compares the “various levels of its structure” (Everett 1987, 9). He does not refer to his sketch as a Schenkerian graph.²⁹ However, it is clear that Everett’s sketch satisfies the fundamental criteria of a typical Schenkerian analysis: the identification of the background, middleground, and foreground structures, the graphing of the entire song, the use of Schenkerian notation (stems, open-note heads, and slurs), and the delineation of the *Ursatz*. Everett does not reflect upon the implications of his actions, i.e. using Schenkerian analysis to study a repertoire for which it was not designed.³⁰

In contrast, Moore explicitly addresses the problems of conducting Schenkerian analysis to study the pop/rock repertoire. As Moore states,

The attentive reader will notice that much of my graphic vocabulary is borrowed from Schenkerian analysis. The diagrams are not, however, intended to function as Schenkerian analyses of these songs: I have discussed elsewhere my unease at the growing tendency to treat popular music as the linear continuation of classical tonality.

(Moore 1997, 27)

²⁹ In his more recent manuscript entitled “Confessions from Blueberry Hell,” Everett explicitly states that the analytical methodology used to study “She’s Leaving Home” depended on a Schenkerian tonal hearing (Everett forthcoming, 38).

³⁰ Heinrich Schenker derived his theory and methodology from his analysis of the great German masterworks of the 18th and 19th century.

The above quote expresses Moore's concern for conducting linear analysis on pop/rock music, but Moore does not explain why he is indeed using linear analysis in his study of the Beatles song. Further, Moore does not disclose which aspects of the Schenkerian methodology he is employing. Although Moore borrows the Schenkerian vocabulary, he does not comment on the implications of using it.³¹

Musical form and the *Ursatz*:

The formal sections of "She's Leaving Home"

"She's Leaving Home" comprises the verse-refrain format typical of pop/rock music – ie. the song consists of alternating verse and chorus sections. There are three verse/refrain statements. Prior to the first statement of the verse of "She's Leaving Home" is an instrumental introduction played by harp. The song concludes with a coda.

The fundamental line

Everett and Moore differ in their perception of the fundamental line in the Beatles song "She's Leaving Home." As figure 3-001 illustrates, the former interprets the song as a $\wedge^3\text{-}\wedge^2\text{-}\wedge^1$ line in E major and the latter describes both a $\wedge^5\text{-}\wedge^4\text{-}\wedge^3\text{-}\wedge^2\text{-}\wedge^1$ line and a $\wedge^5\text{-}\wedge^6\text{-}\wedge^7\text{-}\wedge^8$ line. Before studying the details of Everett's and Moore's graphs, we must understand the source that they use for their investigations. Indeed, both theorists analyse the song "She's Leaving Home," but what are their objects of study?

³¹ Lori Burns raises the issue of methodological problems associated with applying Schenkerian analysis to popular music (Burns 1997, 99).

As Peter Winkler states, “many Western musicians think of a piece of music not in terms of musical sounds but in terms of a musical score: not as an aural phenomenon but as a visual representation” (Winkler 1997, 171). Everett is among these musicians. He derives his analysis of “She’s Leaving Home” from an orchestral transcription. He explicitly states that his object of study was transcribed by George Martin from the “American-released stereo mix” (Everett 1987, 7).³² Thus, Everett’s analytical sketch is derived from a fixed physical score –a secondary source fixed by Martin’s aural experience of the song. As is the case for any secondary source, the transcription loses “the distinctive features of a song and artist” (Schwartz 1993, 285). Winkler writes, “the most scrupulously detailed transcription is full of guesses, suppositions, and arbitrary decisions” (Winkler 1997, 193). Everett chooses to chart the song’s instrumental introduction, verse, chorus, and coda.

Unlike Everett, Moore does not identify the raw material from which he derives his analysis. A physical score does not accompany Moore’s graph. His constant reference to CD numbers in his discussions possibly indicates his dependence on an aural experience of a recording rather than on a physical score. Thus, Moore’s analysis is derived from a personal hearing of a primary source –the recording of the song. Moore restricts his study to the verse and chorus sections of the song. He chooses not to investigate the instrumental introduction and coda.

³² Apparently, the British release of the song is in the key of F major and the American release is “slowed down” to E major (Everett 1987, 6-7).

In his 3-line analysis of “She’s Leaving Home,” Everett claims there is an interruption or *Unterbrechung* and places it at the end of the first verse (Everett 1987, 10). Hence, the verse presents $\hat{3}$ and $\hat{2}$. The tonic supports scale-degree 3. The bass note, B (V of E+) provides consonant support for scale-degree 2. The complete 3-line is observed in the subsequent chorus section of the graph. The *Kopftön* is restated and there is a structural descent to $\hat{1}$. Everett’s decision to identify an interruption in this song abides by the rules of conventional Schenkerian analysis for two-part forms –that is if you consider the verse as part one and the chorus as part two. As Allen Forte states, “pieces of this type [two-part forms] begin with the combined melodic-harmonic motion 3-2 [over I-V respectively], then follow with a second beginning which retraces and completes the opening gesture, perhaps with some elaboration” (Forte and Gilbert 1982, 201). In “She’s Leaving Home,” Everett suggests the chorus retraces the musical ideas of the verse. Hence, the chorus presents $\hat{3}$. Although Everett’s interruption typifies the model for Schenker’s 2-part form, how does Everett account for the repetition that occurs in the song? How can he explain the subsequent interruption of the fundamental line that occurs when another verse is heard after the chorus? Traditionally after the interruption, the fundamental line is supposed to resume with a restatement of the *Kopftön* and continue down to scale-degree 1.

Moore’s 5-1 line and 5-8 line analysis of “She’s Leaving Home” does not include an interruption (Moore 1997, 38). Unlike Everett’s, Moore’s analysis does not typify the patterns usually observed in Schenkerian sketches of 2-part forms.³³ Also, Moore’s

³³ Consult chapter 16 of *Introduction to Schenkerian Analysis* by Allen Forte and Steven E. Gilbert for Schenkerian sketches of 2-part forms.

diagram attributes a 5-3 descent and 5-6 ascent to the verse. Ascents are not typically observed in the fundamental line of Schenkerian sketches. The remaining scale-degrees of the fundamental line, $\hat{2}$ to $\hat{1}$ and $\hat{6}$ to $\hat{8}$, are observed in the chorus. Another element of Moore's graph that defies conventional Schenkerian analysis is the presence of two structural lines. Moore identifies competing structural pitches that belong to the same hierarchical level. For instance, in the refrain $\hat{6}$ competes with $\hat{1}$. Hence, Moore does not force his diagram to meet the conventional criteria associated with Schenkerian analysis.

The primary tone

Both Everett and Moore identify the same *Kopftön* and recognize the tonic chord as the supporting harmony. As stated earlier, Everett's analysis presents a 3-line with an interruption at the end of the verse (Everett 1987). The primary tone, G $\sharp$, is approached by an initial stepwise descent from B, the 5th of the E major scale (Everett 1987, 10). The primary tone is supported by tonic harmony. Moore's graph presents B as the primary tone of the song. This 5th degree of the scale is supported by tonic harmony. Since Moore chooses to exclude the instrumental introduction of the song from his sketch, the graph does not indicate how the primary tone is approached.

Consonant support for the notes of the fundamental line

In Everett's analysis of "She's Leaving Home," every note of the fundamental line has consonant support. The graph illustrates the classic *Ursatz* such that scale-degrees 3 and 1 are underpinned with tonic harmony and scale-degree 2 receives support from the

dominant (Everett 1987, 10). Moore's presentation of the *Ursatz* in the Beatles song departs significantly from Schenkerian principles. For instance, tonic harmony does not always support scale-degree 1. Moore's graph indicates scale-degree 1 with support from VI (Moore 1997, 38). Once again, Moore understands the need to modify the traditional notions of Schenkerian analysis.

Implied notes

Both Everett and Moore propose implied notes on their voice-leading graphs. Everett places an implied V chord under scale-degree 2 of the coda. Everett not only places this implied V on the graph to give support to $\hat{2}$, but it seems that he prefers to have a V-I cadence rather than the actual IV-I cadence at the conclusion of the piece. It seems that Everett is analysing the music according to *a priori* assumptions. Moore's diagram indicates an implied V chord under scale-degree 4 of the verse. Is dominant harmony implied in this instance? George Martin's orchestral transcription of the song shows the supporting chord to consist of the notes F#, A, and D natural.³⁴ These notes spell a $\flat$ VII chord instead of a V chord.

Can the repetitive musical form of pop/rock music be accurately translated unto a continuous voice-leading graph?

Both Everett's and Moore's sketches do not emphasize the differences between the various statements of the verse and chorus of "She's Leaving Home." Instead, only one statement of the verse and chorus is exhibited on their graphs. Although this is the case,

³⁴ I am consulting Everett's orchestral transcription of "She's Leaving Home." as presented in his *In Theory Only* article (1987).

the written discussion that accompanies Everett's analysis reflects upon the slight differences between the three verses and refrains. After my brief comparison of the Everett's and Moore's methodology as employed in the analysis of "She's Leaving Home," the following question come to mind: As an analyst, should I be concerned with the subtle differences between the various musical statements of the verse and chorus?

A Case Study: A Reductive Analysis of Madonna's "Frozen"

Theorists readily use linear reductive techniques, such as Schenkerian analysis, to study pop/rock songs. Does this methodology have the potential to be included in a “standardized” approach to the study of popular music? Before answering this question, I should delve further into the issue of form and analysis. Should each section of a song – the introduction, verse, refrain, coda – be sketched on separate graphs or should the entire song be sketched on one continuous graph?

In the form of a case study, I shall respond to this pending question by continuing to explore and critique Everett’s, Moore’s, and Burns’s methodology. I will analyse Madonna’s “Frozen” (1998), according to their principles and provide three interpretations of the Madonna song all based on reductive analysis. The first adopts Everett’s methodology and creates an analysis of the entire piece as a continuous structure. The second uses Moore’s approach and allows the music to retain its distinct features – features which traditional analysts may call “aberrant.”³⁵ The third interpretation applies Burns’s voice-leading approach, as described in Chapter 2, and graphs the verse and chorus as separate entities.

Linear Reductive Analysis and Musical Form

In their application of linear reductive analysis, Everett, Moore, and Burns treat formal divisions differently. Everett adopts a conventional Schenkerian approach as he creates a graph that represents the entire music of “She’s Leaving Home” (Everett 1987, 10). He

³⁵ Moore discusses his reluctance to classify elements in rock which defy common-practice rules as “aberrant” in his article “The so-called flattened seventh of rock” (Moore 1995, 186)

identifies one fundamental line that spans the following sections: verse, chorus, and coda. Although Everett's graph is continuous, he does not redraw these sections when they are repeated in the song. Only verse 1 and chorus 1 are illustrated on the graph. This graphical approach, which omits repetitions of the verse and chorus sections, is also applied in Everett's analysis of "Strawberry Fields Forever" and "Here Comes the Sun" (Everett 1986, 372; Everett 1995, 183). In addition to endorsing Schenker's concept of the fundamental line, Everett also acknowledges Schenker's concept of organicism. For instance, Everett's linear analysis of "She's Leaving Home" consists of a series of graphs that separately explore the following hierarchical levels: foreground, middleground, and background.

Unlike Everett, Moore has a diversified analytical sketching style. Moore's graphical methods differ with each study. For instance, in his analysis of "Being for the Benefit of Mr. Kite" he identifies two structural descents ($\hat{7}-\hat{6}-\hat{5}$) in order to reveal the melodic similarities between the verse and chorus (Moore 1997, 40). Here, Moore sketches both sections on one graph but does not respect Schenker's notion of one complete fundamental line per song. In his investigation of "Lucy in the Sky with Diamonds," Moore creates a graph that illustrates both the verse and refrain (Everett 1997, 33). Although this method appears similar to Everett's, there is one main difference. Moore's graph presents a fundamental line that does not end with scale-degree 1. Rather, it depicts the following linear descent: $\hat{3}-\hat{2}-\hat{1}-\hat{7}-(\hat{6})-\hat{5}$ (Everett 1997, 33). Moore uses the graph to identify all structural notes in order to trace the "ambiguous tonics" which form the piece (Moore 1997, 32-33). In his analysis of "Fixing a Hole," Moore identifies

the structural notes of the verse in order to differentiate between two strains³⁶ of the musical section (Moore 1997, 36). The refrain is not sketched.

In general, musical form is a driving idea in Moore's reductive analyses. Moore's graphs identify one or more of the following structural divisions of a pop/rock song: phrases, strains, and large sections –verse, refrain, bridge, etc. Similar to Everett, Moore does not redraw each section on his sketches as it is repeated in a song. Unlike Everett, Moore does not create graphs that represent the foreground, middleground, and background structural levels respectively. Although this is the case, Moore does indicate a hierarchy of structural levels within his graph –the stemmed notes versus the open note heads. This is typical of all traditional Schenkerian sketches. In any event, Moore's graphs, which include guitar-based inner parts, are comparable to Everett's middleground sketches.

Burns traces the verse and chorus as separate entities on her analytic diagrams. In fact, she sketches each section of a song individually. Burns explicitly rejects “the notion of organicism” and concerns herself with “musical continuities, discontinuities, contrasts, and contradictions” evident in a particular song (Burns 1998, 11). Burns's linear analyses include three types of graphs: the “Normative Progression,” the “Voice-Leading Graph,” and the “Reduction.” Burn's voice-leading graph and reduction could correspond to a foreground and middleground sketch respectively.

³⁶ Moore does not define the term “strain.” By reading Moore's discussion about “Fixing a Hole” and studying the published musical score, I conclude that a strain is a distinct musical idea. It should not be confused with the common-practice notion of “phrase.” The verse of “Fixing a Hole” consists of two strains: the first melodic idea generally descends and the second melodic idea tends to ascend.

Before I begin my case study of “Frozen,” we should reflect upon and compare the analytic approaches employed by Everett, Moore, and Burns. The common elements between the approaches could be included in a standardized methodology for studying popular music. All three theorists use a graph to represent a song and all of them study the middleground structural level of the music. In addition to studying this level, Everett examines the foreground and background levels and Burns explores the foreground level. Both Everett and Burns chart the entire song, whereas Moore only graphs sections of the song that are directly related to his particular investigation. Although Burns sketches the entire song, she creates a graph for each major section of the song. All three theorists do not draw on their diagrams the repetition of sections of the song (verses and refrains). One of the issues that I would like to raise as I consider these various methodologies is whether a given sketching style provides an accurate reading of a song. The following questions come to mind:

1. Does the section-by-section sketching style represent the song adequately? Are we justified in taking a musical section out of its context –the context of the entire song –and studying it as an independent entity? In other words, are we justified in breaking the musical continuity of a song by simply studying each section on its own? Alternatively, should we propose one diagram that represents each major section of a song?
2. Does the analyst force his/her graph to fit the Schenkerian paradigm (the model of the *Ursatz*)? Does he/she generalize the song’s identity by overlooking its unique features?

In my study of “Frozen,” I will consider these questions by comparing the sketching styles of Everett, Moore, and Burns. I will separately apply each approach to one object of study, “Frozen.” In doing so, I will consider the analytic results obtained from a graph of the entire song, as well as a sketch of the verse and chorus sections. Through this same song analysis, it is possible to assess the validity of each graphical method.

It is useful to identify the primary sections of the song “Frozen.” The piano sheet music of the piece performs this task.³⁷ The score clearly identifies the verse (16 bars), chorus (20 bars), and coda (16 bars) sections. An instrumental introduction (16 bars) precedes the first statement of the verse and an instrumental bridge (16 bars) intervenes between chorus 2 and verse 3. Figure 3-002 defines the formal divisions of “Frozen.”

Figure 3-002: The formal divisions of Madonna’s “Frozen”

Musical Section	Number of Measures
Instrumental Introduction	16
Verse 1	16
Chorus 1	17 + 3 (extension)
Verse 2	16
Chorus 2	17
Instrumental Bridge	16
Verse 3	8
Chorus 3 + Coda(based on a motive from the verse)	16 + 16

“Frozen” basically alternates between verse and chorus sections. The verse section consists of two phrases, each which ends with a $\flat$ VII-I cadence in f Aeolian. The chorus

³⁷ Madonna, “Frozen,” in *Ray of Light* (Miami: Warner Bros. Publications, 1998), 56-60.

comprises two large phrases. The first phrase (8 bars) ends with $\flat$ II-III and provides no sense of closure or finality. The second large phrase (9 bars + 3 bars of extension) closes with a III-I cadence.

Everett's methodology and the analysis of "Frozen"

Figure 3-003 presents my analytical graph of Madonna's "Frozen" which simulates Everett's methodology. I identified the introduction, verse, chorus, bridge, and coda of the song and graphed them in one continuous sketch. As figure 3-003 illustrates, the song may be sketched as a 3-line, with an interruption, in f Aeolian. The introduction of the piece presents an arpeggiation that leads to the primary tone ($A\flat 4$) of verse 1. This *Kopfton* or scale-degree 3 is prolonged throughout verse 1 and chorus 1. At a more surface level of the verse, a small-scale $\hat{3}-\hat{2}-\hat{1}$ line is heard in an inner voice, such that scale-degree 2 (G) receives consonant support from a $\flat$ VII chord. This lower level structural descent foreshadows the large-scale one that spans the entire song. The repeat sign embedded in the graph takes into account the statements of verse 2 and chorus 2. The harmonic and melodic features of verses 1 and 2 are similar. Chorus 1 and 2 are comparable in the same manner. In the piano sheet music and the CD version of the song, there are no significant differences between the two verse/refrain statements.³⁸ Among the more trivial differences are slight rhythmic alterations and added background instrumentals. Both of these modifications do not effect the graphical method (voice-leading analysis) that concerns itself with the pitches heard in the forefront of the musical

³⁸ I am referring to the recording of "Frozen" as pressed on the CD *Ray of Light* (1998), recorded by Warner Bros. Inc.

soundscape. In the verse and chorus sections of “Frozen,” the vocal part and bass line occupy the forefront.

During the bridge section there is a vocal break and the instruments (synth violins) become part of the musical forefront. Scale-degree 2 is heard in the upper octave with dominant support. I sketched an interruption between the bridge and the statement of verse 3. Everett also places interruptions at this point in pop/rock songs. For instance, he makes a similar decision in his analysis of Beatles song “Here Comes the Sun” (Everett 1995, 178-185). In this Beatles song, Everett identifies an interruption between the bridge section and the next statement of the verse (Everett 1995, 183). Scale-degree 3 is prolonged by a verse-chorus combination and scale-degree 2 is presented in the bridge section (Everett 1995, 183).

Before continuing with my analysis, I would like to reflect on the formal significance of the bridge section in pop/rock music. In common-practice repertoire, the bridge usually creates a modulatory link between two key areas of a song. In pop/rock repertoire, the bridge may serve another purpose. In the case of “Frozen,” and “Here Comes the Sun,” the bridge section foreshadows events that will happen in the coda of the song (this will be discussed later in the case study). In Schenkerian terms, the bridge section is an ideal place for an interruption of the fundamental line. After the bridge, the statement of the last verse can allow for the fundamental line to begin again. The *Kopfton* can be presented one more time by the verse and the Schenkerian model for interruptions is reflected.

Upon return to verse 3 of “Frozen,” the primary tone is restated with the conventional tonic support. Once again, the subsequent chorus prolongs the primary tone. The structural descent, $\hat{2}-\hat{1}$, from the primary tone occurs in the coda. A similar $\hat{2}-\hat{1}$ progression in the coda was observed in Everett’s analysis of “She’s Leaving Home” (Everett 1987, 10). In the coda of “Frozen,” scale-degree 2 is heard against a III^7 chord, rather than the traditional V^7 chord. I would like to argue that III^7 is a substitute for V^7 since the two chords share three common tones (see figure 3-004). When the III^{+2} chord is heard in the bass, there is a greater illusion that a V^{+3} is present.

The decision to recognize III^7 as a substitute for V^7 coincides with Everett’s belief regarding harmonic substitutions or literal versus implied chords. Everett writes, “one can never take harmony literally, but must depend instead upon an awareness of a multitude of degrees of deviations from norms to be able to judge what is implied when it does not occur” (Everett forthcoming, 60). For instance, the “ $\flat\text{VII}$ chord is often tied directly to dominant function, even when that chord [the dominant] is absent” (Everett forthcoming, 68). Everett asserts that the $\flat\text{VII}$ chord can fulfil the contrapuntal role of the V^7 because its 3rd, 5th, and 7th all resolve by step just like those notes of the V^7 chord (Everett forthcoming, 68).

The linear analysis of “Frozen” derived from Everett’s methodology raises the issue concerning the repetitive nature of popular music and how it may be depicted on a Schenkerian sketch. Should all statements of the verse and chorus be illustrated

separately on the graph, or is one statement adequate? My analytical diagram graphs verse 1, chorus 1, verse 3, and chorus 3. I excluded verse 2 and chorus 2 from the diagram because they were very similar to verse 1 and chorus 1. As argued earlier, I included verse 3 and chorus 3 in the sketch because their harmonic and melodic environments were altered by the presence of the bridge and the coda respectively. Hence, they required a new interpretation and space in the Schenkerian graph.

The following two methodological questions surface from figure 3-003: Is an analyst influenced by the tonal paradigms proposed by Schenker? Does he/she fit the song into the paradigm and in the process eradicate its unique characteristics?³⁹ These questions were already posed in relation to the harmonic and voice-leading issues of Chapter 2. In the analysis of “Frozen,” the issue at stake is how to define a structurally significant note and how the overall form influences this decision. In the analysis of the chorus, I debated whether scale-degree 1 or 3 was the fundamental melodic tone of the section. F or scale-degree 1 opens the section. The note is sustained for a long rhythmic value (three beats) and is placed on downbeat of the bar. The bass provides tonic support for F. Scale-degree 1 initiates every phrase of the chorus. A $\flat$ or scale-degree 3 is first heard in the third measure of the chorus. It is the apex of the phrase and occurs on the down-beat. It receives indirect (provided two bars earlier) tonic support from the bass. Although it seems as though scale-degree 1 is accentuated in the chorus, I opted for scale-degree 3 as the prolonged note. Interpreting scale-degree 1 as the note of prolongation creates a

³⁹ Moore presents this question in his article entitled “The So-called ‘Flattened-seventh’ in Rock (1995).

jagged fundamental line—one that omits scale-degree 2. According to Schenkerian principles, the fundamental line must descend linearly. By omitting scale-degree 2, the fundamental line would have to jump from scale-degree 3 to 1. With A $\flat$ as the prolonged tone, the fundamental line adheres to the Schenkerian model. Also, by allowing scale-degree 3 to prevail over scale-degree 1 in the chorus, the fundamental line appropriately continues by descent to scale-degree 2, the structural pitch of the next formal section (the bridge).

The register transfer of the fundamental line, exhibited in 3-003, does not comply with Schenker's principle of obligatory register. Forte, who paraphrases Schenker, states that "the fundamental line should present itself within a single octave."⁴⁰ In figure 3-003, the primary tone or scale-degree 3 is A $\flat$ 4.⁴¹ A traditional Schenkerian analyst would expect G4 to be scale-degree 2. G5; however, supplants G4 in the bridge section of "Frozen" and assumes a position in the fundamental line. An identical register transfer occurs in the coda of the song. My decision to allow the register transfer in the fundamental line corresponds with Everett's decision to do the same. For example, in his sketch of Don Henley's "The Last Worthless Evening" (figure 3-005) a register transfer of an octave occurs between scale-degrees 4 and 3 (Everett forthcoming, example 15). As can be seen from figure 3-005, scale-degree 5 or A4 should follow scale-degree 4 or B4. Instead, A5 follows B4. From this case study of Frozen and Everett's investigations of other

⁴⁰ Forte and Gilbert, *Introduction to Schenkerian Analysis*, 169.

⁴¹ Please note that the following system is used to identify pitch and register: middle-C is C4, an octave above middle-C is C5, and an octave below is C3.

pop/rock songs, it seems appropriate for popular music analysts to allow for transfers within the fundamental line.

In summary, the Everett simulated analytical graph of “Frozen” loosely resembles a Schenkerian sketch of a 3-line with an interruption. The formal design of the song and the desire to uphold the Schenkerian paradigm influenced the decisions regarding how to identify structural pitches. I took into account that the verse and chorus are heard in a different light after the bridge section –i.e. verse 3 and chorus 3 differ from previous statements of the verse and chorus. Because they do present the musical material of their counterparts, it was appropriate to identify $\wedge^3$ as the prolonged structural pitch of verse 3 and chorus 3. In the coda, the resumed fundamental line continued to the expected $\wedge^2$ and $\wedge^1$. Among some of the modifications to traditional Schenkerian graphical methods were the register transfer in the fundamental line and the unorthodox support (III) for scale-degree 2.

Moore’s methodology and the analysis of “Frozen”

Figure 3-006 represents my analytical sketch of “Frozen” which simulates Moore’s methodology. Upon glancing at the graph, you will notice that it looks like a pseudo-transcription of the song. The entire song is sketched on one graph from the introduction to the coda. The inner harmonies of the music appear on the diagram in the form of open note heads. The stemmed notes are structurally significant pitches. The square brackets under the staff identify phrases and their length in measures.

As can be seen from figure 3-006, the instrumental introduction comprises two 4-bar phrases. Both end with a VI- $\flat$ VII-I progression in f Aeolian. Moore labels this type of progression as an “extended perfect cadence” (Moore 1995, 191). The progression establishes the key of f Aeolian. The verse prolongs scale-degree 3 or A $\flat$ 4 that is supported by the tonic. It also presents a $\wedge^3$ - $\wedge^2$ - $\wedge^1$ movement at the surface. As was the case in the graph of figure 3-003, the task of analysing the refrain was challenging. I contemplated whether scale-degree 1 or 3 was the prolonged note. I will not reiterate the reasons that support each case since I dealt substantially with that issue in the previous section. In figure 3-006, I have identified scale-degree 1 as the prolonged note rather than scale-degree 3. I think Moore would concur with my decision because I did not trivialize the distinct features of the song. I did not regard the presence of F4 or $\wedge^1$ as a trivial event in the refrain. I was not enticed by the idea of creating a smooth fundamental line and choosing A $\flat$ 4 or $\wedge^3$ as the structural pitch of the section. My concern here was to identify the structurally significant notes of the song, rather than force the analysis to match the Schenkerian paradigm of the descending *Urlinie*.

The bridge section of “Frozen” prolongs scale-degree 2 or G5 that is supported by dominant harmony. As in the graph of figure 3-003, this structural pitch is presented in a higher register than those of $\wedge^3$ and $\wedge^1$ observed in the verse and refrain respectively. Moore would probably support the register transfer of the fundamental line in my analytical sketch. In his analysis of “Lucy in the Sky with Diamonds,” he identifies a register transfer between $\wedge^2$ and $\wedge^1$ (Moore 1997, 33).

Like their earlier counterparts, verse 3 and refrain 3 of “Frozen” prolong scale-degrees 3 and 1 respectively. The coda presents scale-degree 2 and 1. As in figure 3-003, scale-degree 2 is supported by III harmony. Moore, like Everett, asserts that non-conventional chords may support scale-degrees of the fundamental line. For instance in his analysis of the Beatles songs “Sgt. Pepper’s Lonely Hearts Club Band” and “She’s Leaving Home” Moore supports scale-degree 2 with a II and $\flat$ VII chord respectively (Moore 1997, 29 & 38).

In summary, the simulated Moore analytical graph retains all of the unique features of “Frozen.” I permitted a register transfer in the structural line and a III chord as support for $\wedge^2$. I did not allow the formal design of the song to dictate the voice-leading analysis.

Burns’s methodology and the analysis of “Frozen”

Figure 3-007, based on Burns’s methodology, illustrates an alternative graphical analysis of “Frozen.” It considers each structural division of the song as a separate musical unit. Figure 3-007 comprises three types of sketches: a “Normative Progression,” a “Voice-Leading Graph,” and a “Reduction” (Burns 1998, 12). The Normative Progression exhibits the harmonic progression evident in “Frozen.” The Voice-Leading Graph shows the “contrapuntal relations between bass and voice as they articulate this basic progression, including elaborative pitches and unique voice-leading events” (Burns 1998, 13). The Reduction indicates “the principal voice-leading connections and harmonic prolongations for each section of the song” (Burns 1998, 13).

The voice-leading graph of figure 3-007a illustrates the verse's $\hat{3}-\hat{2}-\hat{1}$ progression in f Aeolian. As in the graphs of figures 3-003 and 3-006, scale-degree 3 or A $\flat$ 4 receives immediate tonic support. The reduction of figure 3-007a identifies the subsequent note of the progression as G or $\hat{2}$ in a lower register. Scale-degree 1, supported by tonic harmony, accompanies scale-degree 2 in the lower register. As shown in the Voice-Leading Graph of figure 3-007a, a lower-level structural descent, presented in measures 21-23, foreshadow the large-scale $\hat{3}-\hat{2}-\hat{1}$ progression of verse. Unlike the large-scale linear progression of the verse, this lower-level progression respects Schenker's principle of obligatory register. After A $\flat$ 3 or scale-degree 3 is presented with tonic support, G3 and F3 follow in the same register and are harmonized by $\flat$ VII and I respectively.⁴²

The graph of figure 3-007b presents a voice-leading analysis of the refrain of "Frozen" according to Burns's analytic method. The graph identifies F4 as the most structurally significant note. There is no movement from scale-degree 1 during the refrain; therefore, this section is simply a prolongation of tonic harmony. The maximum and minimum points of the melody (A4 and C4 respectively) are members of the tonic chord and confirm this perception.

⁴² Moore, in his article "The so-called 'flattened seventh' in rock," discusses the prevalence and importance of the $\flat$ VII chord in rock music (1995). It is not uncommon for Burns to identify the $\flat$ VII as the supporting harmony for $\hat{2}$. For instance in her analysis of Tori Amos' "Crucify," the lower seventh chord supports $\hat{2}$ in the key of g $\sharp$ Dorian (Burns forthcoming a).

The graph of figure 3-007c provides an analysis of the bridge section of “Frozen” according to Burns’s methodology. As seen in the Reduction, this section exhibits a $\wedge^3\text{-}\wedge^2$ movement. Scale-degree 3 or $A\flat^5$, supported by tonic harmony, is immediately heard at the beginning of the bridge. Scale-degree 2 (G) is heard at the end of the section and is harmonized by the dominant. Although the support is traditional, the scale-degree is not presented in the expected register. We expect to hear G5 after $A\flat^5$. Instead, we hear G3. The register transfer in the fundamental line coincides with that observed in the verse.

As illustrated in the graph of figure 3-007d, a $\wedge^3\text{-}\wedge^2\text{-}\wedge^1$ scalar progression is evident in the coda of “Frozen.” As in the case of the verse and refrain, the principle of obligatory register is not followed in the coda. Scale-degrees 2 and 1 are heard an octave higher than expected. As with figures 3-003 and 3-006, the second scale-degree receives support from a III^7 chord.

In summary, by considering each formal section of “Frozen” as a separate unit, the simulated Burns graph retained the unique characteristics of the music. Consequently, formal design did not impinge on the voice-leading analysis. Among the modifications applied to traditional Schenkerian theory, the simulated Burns graph did not respect the principle of obligatory register of the fundamental line and identified non-traditional chords ($\flat\text{VII}$ and III^7) as support for $\wedge^2$. Also, there were no linear connections between the various sections of the song.

A comparison of the various analyses of “Frozen”

It is worthwhile to compare the analyses presented in figures 3-003, 3-006, and 3-007 because we need to know what modifications to voice-leading analysis should be included in a standardized approach for the study of popular music. What is common among the three analytic sketches formulated for the same song? What are the analytical differences and are they significant? In answer to the first question, figure 3-008 presents a table that summarizes the analytical results of the three graphical analyses in the case study of “Frozen.”

Figure 3-008: A summary of analytical results achieved from my separate Everett, Moore, and Burns simulated sketches of Madonna’s “Frozen”

Musical Section	The analytical results of the various sketches		
	Everett (figure 3-003)	Moore (figure 3-006)	Burns (figure 3-007)
Introduction	Arpeggiation to <i>Kopfton</i>	Arpeggiation to <i>Kopfton</i>	N/a
Verse 1	$\wedge^3$ [i]	$\wedge^3$ [i]	$\wedge^3$ - $\wedge^2$ - $\wedge^1$ [i-b VII-i]
Chorus 1	$\wedge^3$ [i]	$\wedge^1$ [i]	$\wedge^1$ [i]
Verse 2	$\wedge^3$ [i]	$\wedge^3$ [i]	N/a
Chorus 2	$\wedge^3$ [i]	$\wedge^3$ [i]	N/a
Bridge	$\wedge^2$ [V]	$\wedge^2$ [V]	$\wedge^3$ - $\wedge^2$ [I-V]
Verse 3	$\wedge^3$ [i]	$\wedge^3$ [i]	N/a
Chorus 3	$\wedge^3$ [i]	$\wedge^1$ [i]	N/a
Coda	$\wedge^2$ - $\wedge^1$ [III ⁷ -i]	$\wedge^2$ - $\wedge^1$ [III-i]	$\wedge^3$ - $\wedge^2$ - $\wedge^1$ [i-III ⁷ -I]

* The square brackets indicate the supporting harmony for the structural pitches.

Figure 3-009 presents a table that summarizes all of the modifications to Schenkerian theory that each analytical graph reflects.

Figure 3-009: A summary of the modifications to Schenkerian theory that each analytical graph reflects.

Modification to Schenkerian Theory	The analytical sketch		
	Everett (figure 3-003)	Moore (figure 3-006)	Burns (figure 3-007)
Register transfer in the fundamental line	Yes	Yes	Yes
Non-traditional support for $\wedge^2$	Yes; III ⁷	Yes; III ⁷	Yes; $\flat$ VII & III ⁷
A non-continuous sketch of the entire song	No	No	Yes
Non-linear <i>Urlinie</i>	No	Yes	Yes (per section)

As can be seen from figures 3-008 and 3-009, all of the graphs disregard Schenker's notion of obligatory register. The fundamental lines or structural descents do not remain in one register. Scale-degrees 2 and 1 are always heard an octave higher or lower than scale-degree 1. Although this is the case, scale-degrees 2 and 1 always stay in the same register. Another similarity between the graphs in figures 3-003, 3-006, and 3-007 is the *Kopftón*. With the exception of the simulated Burns analysis of the refrain, all graphs identify scale-degree 3 (A $\flat$) as the primary tone of the song. This pitch always receives support from tonic harmony. All graphs also recognize the III⁷ chord as sufficient to support scale-degree 2 of the coda.

At first glance, the differences between the sketches proposed by the three sets of methodologies appear to be numerous. The most obvious difference is the descent from the primary tone. In the simulated Everett graph of figure 3-003, the *Kopfton* is prolonged throughout the verse and chorus. Scale-degree 2 is presented in the bridge section. Although scale-degree 2 is heard, the descent does not proceed to scale-degree 1 until the coda. In fact, there is an interruption between the bridge and verse 3. The fundamental line is $\hat{3}-\hat{2} // \hat{3}-\hat{2}-\hat{1}$ and adheres to the Schenkerian model for interruptions. One expects scale-degree 3 to return after the interruption and to be followed by scale-degrees 2 and 1. In the simulated Moore graph of figure 3-006, the structural pitches do not descend linearly from the *Kopfton*. Rather a $\hat{3}-\hat{1}-\hat{2}-\hat{3}-\hat{1}-\hat{2}-\hat{1}$ progression of structural pitches is exhibited. In the simulated Burns analysis, a $\hat{3}-\hat{2}-\hat{1}$ progression is completed in both the verse and the coda. In contrast to this melodic descent, the refrain is stagnant and lingers around scale-degree 1 (F4). The bridge section also differs from the verse and coda since it presents an incomplete descent. Scale-degree 1 is absent.

Tonal analysts have a tendency to comply with traditional models in an analysis of a song. In the graph of figure 3-003, an analyst may desire to conform to the conventional $\hat{3}-\hat{2} // \hat{3}-\hat{2}-\hat{1}$ format. In order to avoid creating a gap in the melodic line from scale-degree 3 to 1, an analyst may consider scale-degree 1 as an unlikely structural tone in the chorus section. In the simulated Burns analysis, the chorus was examined as a separate melodic unit. The analytical decisions of other sections did not influence those of this section.

In conclusion, the case study of “Frozen” suggests that the results of a voice-leading analysis depend on how strongly the analyst adheres to Schenkerian principles. The same song analysis also shows that formal sections emerge as important divisions for the analytic interpretation; however, repetitions of these sections do not. The repetition of sections in “Frozen” were analysed and drawn as separate units on the Everett and Moore simulated sketches. As you recall, both of these graphs illustrated a difference between verse 3/chorus 3 and their earlier counterparts. In contrast, the Burns simulated graph did not consider any repetitions of sections. The analytical results suggest that an analyst does not necessarily have to acknowledge the various repetitions of sections. The Burns graph did not recognize the repetitions of sections, yet it had analytical results that were very similar with the Moore graph. For instance, the Burns graph attributed $\hat{1}$ as the note of prolongation in the chorus. It is implied that every chorus prolongs this same scale-degree. The Moore sketch supported the results of the Burns sketch and identified scale-degree 1 as the structurally significant pitch of the chorus.

In all three versions of my sketches of “Frozen” similar modifications to Schenkerian theory were observed. All of the sketches commonly indicated a register transfer in the fundamental line. Also, the sketches identified non-traditional support for scale-degree 2. For example, III and $\flat$ VII chords provided support for $\hat{2}$.

As discussed in Chapter 2, voice-leading or Schenkerian analysis has the potential to be incorporated in a “standardized” approach to the study of pop/rock music. My case study indicates that various approaches linked to this methodology create similar analytical results. I would like to emphasize that I do not advocate a strict Schenkerian approach. As discussed in this chapter, modifications to the approach are essential – Everett, Moore, and Burns all make basic modifications to Schenkerian theory. Consequently, any standardized approach to pop/rock music must also accept these modified elements.

PART II: Musical Structure/Musical Meaning

CHAPTER FOUR

Musical Structure/Musical Meaning: Text-music relations in pop/rock music studies

In Part I, I discussed how various music theorists analyse the structural component of pop/rock music. The aforementioned theorists were unified in their application of voice-leading analysis and/or Schenkerian analysis to songs. The analytical data achieved through their approach can be generally classified under the following headings: formal structure, harmonic language (tonal or modal), harmonic progression, overall linear structure, and consonance/dissonance. It is now useful to contemplate over the value of collecting such structural data. What is the significance of the data? How can we interpret the meaning of the musical structure in a pop/rock song?

Part II responds to these questions by investigating the analytical data collected by theorists and how they are generally interpreted. This chapter focuses on the relationship between a song's lyrics and musical structure. It examines pop/rock musical analyses of theorists such as Burns, Everett, Covach, and Moore. These theorists commonly study the relationship between text and music to gain a greater understanding of a pop/rock song. For instance, Burns explores the "ways in which the musical structure 'enacts' the text and its social message" (Burns forthcoming b, 2). She focuses on the treatment of "codes and conventions" in the musical structure and the song's text (Burns forthcoming b, 4). According to her, one can interpret meaning by exploring how a song conforms to or defies convention. Burns suggests that both cases are equally significant to the analyst. She also stresses that a composer may intentionally "manipulate" conventional codes in order to "enact" particular textual or cultural ideas (Burns forthcoming b, 2).

Everett explicitly deals with textual ideas and their representation by musical structure. He frequently uses a formalist approach –Schenkerian analysis –to illustrate text/music associations, finding musical relations that are analogous to textual ideas.

Equating musical gestures with extra-musical ideas is a subjective act, but is none the less widely performed. For example, some analysts associate the minor and major keys with sadness and happiness respectively. Some assert that the first theme of a sonata-form is masculine and the second is feminine. One must keep in mind that these text-music associations are not absolute. They appear to be fixed because they have become part of convention. Although Burns, Everett, Covach, and Moore highlight associations between words and musical structure in their analyses, they also move beyond these simple relationships in order to convey greater meaning.

This chapter will identify a number of musical constructs that are frequently explored by pop/rock music analysts in their text/music studies –constructs that could potentially be investigated in a standardized approach to the study of popular music. The following musical gestures will be examined: phrase structure, the unresolved dominant chord, modal inflection, formal divisions, contrapuntal-rhythmic dissonance, and surface sonorities. By no means is my list complete. Nor do I claim that the meanings attributed to the constructs are absolute. I will investigate the meanings of each musical gesture according to context. The presentation of musical constructs and their musical meanings will be prefaced with a brief discussion of musical codes and conventional meanings

according to the theoretical principles of Lori Burns. The chapter will end with a text/music case study of the song “Foolish Games,” by Jewel Kilcher (1994).

The interpretation of musical codes

Various musical codes are embedded in pop/rock songs. As Burns writes, codes can take the form of specific musical processes such as harmonic progressions and phrase design or “aspects of stylistic expression” such as vocal strategies and range of intensity (Burns 1999b, example 2). The topic of stylistic codes and their affective meanings will be addressed in Chapter 5. Analysts who discover codes in the music are faced to interpret them. Burns studies whether particular musical codes reflect the conventions of pop/rock music. Conventional meanings are attributed to those musical codes that are “clichés” (Burns forthcoming b, example 2). Burns cites the popular example of a minor key representing a “gloomy” atmosphere. Associative meanings are attributed to those musical constructs that are repeatedly linked to specific textual ideas in the song (Burns forthcoming b, example 2). For instance, if a $\flat$ VII chord always appears simultaneously with the textual notion of “happiness,” then by sheer repetition the chord will adopt the associative meaning of “happiness.” For Burns, contextual meaning refers to the meaning of a particular musical code at a specific moment in a song (Burns forthcoming b, 13). Burns studies whether this moment treats a code consistently or inconsistently with previous or future presentations of the code. Burns also examines the “oppositional values” in pop/rock songs. She analyses the “musical strategies interpreted in binary opposition (major/minor, consonant/dissonant, directionality/stasis” (Burns forthcoming b, example 2). Oppositional values may also be evident in lyrics in the form of conflicts,

such as evil versus good, or concrete oppositions, such as dark and light. The subject/(direct) object perspective is a grammatical oppositional value that may be observed in a song's text.⁴³ I would like to introduce one more interpretive category that Burns investigates in her text-music analyses. Burns studies musical structure and structural anomalies for their potential as "expressive musical device[s]" (Burns forthcoming b, example 2). She considers deviations from conventional musical structures as "strong signifiers" (Burns forthcoming b, 15).

**Phrase structure, closure and the V-I progression:
Irony and expectations of stability**

The examination of phrase structure may provide a wealth of information regarding the textual notions of irony, stability, or instability. Before entering into a discussion about how phrase structure can illuminate the lyrics, we should discuss what the term "phrase" means to a tonal analyst. A phrase consists of a group of measures, usually in multiples of two, which lead from an initial to a goal state. The goal is marked by a cadence that provides a sense of stability and closure. Melody, harmony, rhythm, or repetition may be used to characterize the phrase (Randel 1986, 629). Phrases may be paired into groups of two –that is, one antecedent and one consequent phrase –and form a period structure. The antecedent phrase usually ends with a weak cadence, such as a half-cadence (HC) or inauthentic cadence (IAC). The consequent phrase parallels the antecedent phrase except that it usually ends with a strong cadence, such as a perfect authentic cadence (PAC). Thus, the final arrival of the tonic is the supreme goal within a period structure.

Moore discusses the types of phrase structures prevalent in pop/rock music. An “open/closed” pairing of phrases often forms a period, such that an open phrase ends with a non-tonic chord (usually the dominant) and a closed phrase ends with a tonic (Moore 1993, 52). Other types of period structures include a “closed/closed” and an “open/open” pairing of phrases (Moore 1993, 53). The latter is less frequent than the former. Moore has not encountered a musical example that illustrates a “closed/open” pairing of phrases (Moore 1993, 53). Although cadences often establish phrase endings, Moore warns popular music analysts that harmonic or rhythmic patterns may also define formal structures (Moore 1993, 47).

In his study of the Beatles song “She’s Leaving Home,” Everett shows how phrase structure enhances the meaning of lyrics (Everett 1987). I discussed in Chapter 3 how the text of “She’s Leaving Home” describes a young girl who is unhappy with her home situation and decides to run away with her boyfriend. The cause of her unhappiness is the generational gap between the girl and her parents. Everett states that the last musical phrase of the chorus-coda is quite telling of the young girl’s predicament. It consists of an asymmetrical length of seven measures and lacks a dominant chord. Everett believes that the eighth bar is “hypothetically” present and represents “something inside that was always denied for so many years” (Everett 1987, 12). Thus, the missing measure and the lack of the dominant chord creates an instability that emphasizes the emptiness felt by the young girl in the lyrics.

⁴³ Burns presents a detailed discussion of the subject/object perspective in the introduction of her forthcoming book *Disruptive Divas: Critical and Analytical Essays on Feminism, Identity and Popular*

Burns also explores phrase structure in order to find meaning in a pop/rock song. She suggests that some common-practice theorists may have a tonal bias when they analyse phrase structure (Burns forthcoming a, 2). Burns writes,

When we [common-practice theorists] identify a chord as “I” or “tonic,” this evokes a host of associations of tonic as generator of harmonic activity, tonic as goal of directed motion, tonic as source of unity. These functions of tonic are dependent upon the presence of another harmony, “V” or “dominant.” If we cannot locate dominant-tonic patterns, we are likely to assert that the music is “static,” “non-directional,” unconventional.”

(Burns 1999, 2)

The tonal bias extends into the study of period structure. In common practice an antecedent phrase is followed by a consequent phrase. Usually, the two phrases are melodically related to one another, sometimes in a question/answer format. With respect to the antecedent/consequent paradigm, Burns highlights cases where her common-practice expectations are denied. For instance in her analysis of the Amos song “Crucify,” Burns reports how a consequent phrase fails to create closure (Burns forthcoming a). The antecedent phrase consists of a movement from scale-degree 3 to 2. According to Burns, the listener wants to hear scale-degree 1. The consequent phrase provides a second attempt for completing a linear descent to scale-degree 1. Unfortunately, it does not fulfill the listener’s expectations. After some disruption, scale-degree 1 is heard, but without the conventional tonic support. Instead, a subdominant chord provides support for the scale-degree. Burns attributes the lack of closure to “an ironic expression that matches the ironic commentary in the text” (Burns 1999, 24).

The unresolved dominant chord: The creation of tension and ambiguity

The dominant or dominant seventh chord is crucial in establishing the tonality of common-practice repertoire. This chord is particularly significant because its third is the leading-tone of the key. As the name implies, the leading-tone naturally leads or resolves upward to scale-degree 1. The seventh of the V^7 chord also has a strong tendency to resolve downward to scale-degree 3. Hence, the tonic chord, having both scale-degrees 1 and 3, is an ideal candidate to lead smoothly from dominant harmony.

Dominant harmony can also be significant in pop/rock music of the 1990s, although the harmonic language of pop/rock admits a more diverse vocabulary and syntax. Everett writes, “tension [in pop/rock music] is created by exposed leading tones that seem to have been left hanging, and relief is afforded when their resolution is finally attended” (Everett forthcoming, 51). Sometimes conventional resolutions of the V chord are not witnessed. As a theorist, it is important to reflect upon the meaning of the unresolved dominant chord, a musical event that defies common-practice. The following question comes to mind: How do analysts evaluate the presence of dominant harmony in its resolved and unresolved forms?

Many theorists discuss the significance of the unresolved dominant chord in their text-music analyses of pop/rock music (Everett forthcoming; Burns forthcoming e; Koozin forthcoming). They collectively agree that the lack of resolution generally creates tension in the listener and concomitantly intensifies textual ideas. In her analysis of the

McLachlan song “Possession,” Burns explores the unresolved dominant chord in relation to the text (Burns forthcoming e). Burns’s analysis goes beyond the mere exposure of direct relationships between musical events and textual notions. She comments on McLachlan’s conscious compositional decision, the inclusion of the unresolved dominant chord, which creates tension and concomitantly allows her to explore a social problem. In Burns’s opinion, McLachlan purposely does not abide by the common-practice rules of harmony in order to musically identify gender roles and focus on the social problem of abuse (Burns forthcoming e). Burns also believes that McLachlan, through the unconventional musical structure in “Possession,” provides a feminist revaluation or social statement of the cultural “model of dominance and submission” (Burns forthcoming e, 3).

As already described in Chapter 2, the text of “Possession” describes a stalker/victim relationship. Burns believes the abusive or violent relationship depicted in the text is irresolvable (Burns forthcoming e, 21). Burns supports her interpretation by referring to the musical structure of the song. She associates the “end of the violent act” with closure or a release of tension provided by a perfect authentic cadence (PAC)⁴⁴ (Burns forthcoming e, 21). Since “Possession” fails to present a PAC at the end of the song, the tension of the dominant chord persists. Consequently, Burns suggests the abusive relationship continues to exist.

⁴⁴ A perfect authentic cadence (PAC) is a harmonic movement from V to I such that scale-degree 1 of the tonic chord is presented in the top voice. An imperfect authentic cadence (IAC) differs from a PAC such that scale-degrees 3 or 5 of the tonic chord are presented in the top voice.

In common practice, theorists agree that a dominant chord followed by a tonic chord helps to confirm or define the key area of a song. Conversely, an unresolved dominant chord can dismantle the sense of directionality in a composition. For example, Burns believes the verse of “Possession” lacks clear and strong statements of the dominant-tonic progression and consequently exhibits tonal ambiguity and non-directionality. Burns relates the static and ambiguous musical structure with the verse’s textual themes of “alienation and stasis” (Burns forthcoming e, 15).

Modal inflection, mood, and textual notions of rebellion and irony

It is common practice to borrow elements from one mode and place them in the context of another, a procedure which tonal theorists refer to as modal mixture. The major/minor alternation is probably one of the more frequently used types of mixtures. Composers often use the modal duality as a means to portray opposing textual ideas. For example, Mendelssohn uses a major/minor mixture in the Overture to *A Midsummer Night’s Dream* as a musical parallel to the opposing textual settings of the supernatural world and reality respectively.⁴⁵

Modal mixture is equally prevalent in pop/rock music.⁴⁶ Although harmonic minor inflections are rarely found, Aeolian inflections in major-mode songs are quite common (Everett forthcoming, 66). They are often witnessed at cadence points in the form of

⁴⁵ Edward Aldwell and Carl Schachter, *Harmony and Voice Leading* (New York: Harcourt Brace Jovanovich, 1989), 376.

⁴⁶ Everett (1999) provides a list of a number of pop/rock songs that have modal inflections.

$\flat$ VI- $\flat$ VII-I, in songs ranging from groups such as the Beatles to Bon Jovi (Everett forthcoming, 66). Everett attaches extra-musical associations of rebellion with instances of modal mixture in a song where the main key is major. He states,

...the lowered seventh scale degree packs a rebellious punch against the major key that the polite and instantly subservient dominant-support leading tone lacks. This, I think, is probably a central factor as to why the teenagers of the 'fifties unconsciously identified so strongly with rhythm and blues, which was nearly always a major-mode system with melodic inflection from either the pentatonic-minor or other modes featuring the lowered seventh degree.

(Everett forthcoming, 66)

As the above quotation indicates, inflections of the pentatonic-minor mode are also apparent in pop/rock music. Everett believes such mixtures enhance textual ideas of rebellion by providing “an intrinsic dirty quality” against the “squeaky-clean leading-tone of the major scale”(Everett forthcoming, 68). In his analysis of Bill Haley’s “Rock Around the Clock,” Everett suggests that the pentatonic-minor mode aptly corresponds to the rebellious lyrics “I’m gonna take you girl and hold you and do all the things I told you in the midnight hour” (Everett forthcoming, 68).

Another type of modal inflection observed in rock/pop music is the “blue third” or $\flat^{\wedge}3$. Frequently, the blue third is cited for its effects on mood. For instance in his analysis of the Beatles song “Strawberry Fields Forever,” Moore associates a flattened third with darkness (Moore 1997, 41).

Formal divisions: A musical means to convey dialectics or contrasting textual ideas

The alternating verse/refrain format typically found in pop/rock music is ideal for representing the contrasting or binary⁴⁷ textual ideas or themes in a song. Hence, many text-music analyses include a study of formal sections in association with the text. For example, Burns explores the alternating verse/refrain scheme in accordance with the textual narrative. In her examination of McLachlan's "Possession," Burns writes:

...this particular song form –alternating verse and refrain statements – promotes a structural contrast which allows McLachlan to illustrate the two fundamental issues in the social relationship that she is exploring: in essence, the verses focus on the poet's alienation and the refrain expresses the poet's efforts to exert social (indeed, sexual) control.

(Burns forthcoming e, 9)

The formal design of a pop/rock song may also comprise a sophisticated verse/refrain scheme. This is the case in "Close to the Edge," a song by the progressive rock group Yes (Covach 1997a, 14). John Covach writes, the song comprises an "overarching 2-part design" with the following four sections: AA'BA" (Covach 1997a, 14). Each section provides one or more statements of the verse and refrain. The four sections are divided into two parts, such that the second part (BA") is a recomposition of the first (AA') (Covach 1997a, 15). Covach conducts his text-music analysis of "Close to the Edge" by making connections between the formal design of the music and a novel that inspired the lyrics. In his analysis, Covach demonstrates how the A and B sections of the music relate to the dialectic tension between the spiritual and real world depicted in the novel (Covach 1997a, 17 and 20). Covach also observes the same relation between the music and text at

⁴⁷ The word "binary" refers to ideas that relate or compliment one another. They are not contrasting ideas.

a lower structural level. For instance, the verse and the bridge of section A represent chaos and the spiritual world respectively. Covach believes the verse represents chaos through its rhythmic tension and the Dorian mode (Covach 1997a, 18). The bridge, representing the spiritual world, presents a “conventional melodic contour” in a major key with no rhythmic tension (18).

The formal structures of many pop/rock songs can be defined by textural growth. Mark Spicer describes textural growth as the increased “interlocking” of musical components such as “drum rhythm, bass line, [and] guitar vamp” (Spicer 1998, 25). A “complete groove” is formed once all of the components are added to the texture (Spicer 1998, 26). Everett studies how contrasting formal structures, defined by textural growth, are related to opposing textual ideas. For instance in his analysis of “Amazing Journey” from The Who’s rock opera Tommy (1969), Everett indicates how the song’s formal contrasts created by textural growth relate to contrasting ideas conveyed by the text. Specifically, the “pensive reversed guitar articulations” of one section and the “wild drumming” of another relate to Tommy’s “quiet dreams” and his “bold thoughts” respectively (Everett forthcoming, 6).

Contrapuntal-rhythmic dissonance: Tension or Parody?

Contrapuntal-rhythmic dissonance may intensify the textual meaning of a song. I group the two types of dissonance under one heading because they can be interrelated.

Contrapuntal-rhythmic dissonance refers to the deliberate misalignment between the pitches of the voice and accompaniment. The clashing of pitches may be avoided if the

rhythmic values of the pitches are shifted and consonance is created between the voice and accompaniment. Contrapuntal-rhythmic dissonance is potentially valuable in text-music analyses because it creates a general feeling of tension. Also, a composer may consciously use it to parody textual ideas. Burns explores how the contrapuntal alignment and misalignment of the voice (or lyrics) and accompaniment enhance the textual meaning in the Tori Amos song “Crucify” (Burns forthcoming a, 7). She writes, “the tension apparent between subject and object perspectives in the text and video is represented musically through this tension between the voice and bass” (Burns forthcoming a, 20). Specifically, the voice and bass line are aligned –i.e. consonance is created when the pitches of the voice and bass line are heard simultaneously –in the first two phrases of the verse and displaced metrically in the third and fourth phrases (Burns forthcoming a, 19). Burns believes the tension created by the dissonance reflects how the protagonist feels –who is “being watched in a room filled with people” (20).

Burns also investigates the relationship between contrapuntal-rhythmic dissonance and text in her study of lang’s “Johnny Get Angry” (Burns 1997). She states that this type of dissonance, created between lang’s voice and the accompaniment, reinforces lang’s parody of the subordination of women (Burns 1997, 98).

Everett discusses the impact of contrasting rhythmic structures on the text of the Beatles song “She’s Leaving Home” (Everett 1987). He makes a parallel between a contrast in rhythm and a contrast in mood. Everett writes, the off-beat or syncopated rhythm in the song is a parody of the tension created between the girl and her parents

respectively (Everett 1987, 9). Moments of regular rhythm reflect the young girl's optimism as she runs off with her boyfriend (8).

Surface sonorities versus the background structure: The textual idea of "distance"

A Schenkerian sketch is a useful tool that can illuminate text-music relationships in a song. For instance, Everett studies how the background structure of "She's Leaving Home," relates to the lyrics. From his graph, Everett learns that the background structure of the piece blurs as it progresses in real time (Everett 1987). He concludes that the structure becomes more and more concealed as the girl leaves home. In other words, a clear background structure represents the closeness, both physical and mental, between the girl and her parents (Everett 1987, 12).

My brief introduction to the musical constructs often depicted in text/music analyses and the accompanying summary of text-music analyses conducted by Burns, Everett, Covach, and Moore suggest that the interpretation of musical constructs in a pop/rock song is highly dependent on convention. Analysts examine whether a given musical event adheres to or defies convention and consider both situations to be meaningful. This analytical process unifies all of the text/music analyses discussed thus far. All of the theorists explicitly or implicitly rely on conventional meanings to interpret a musical event in a pop/rock song.

Case Study: Text-music relations in the Jewel song “Foolish Games”

The following is a case study that explores the relationship between musical structure and text in an attempt to achieve a better understanding of a song. I will concentrate on the musical constructs that are the core concern in current text-music analyses of pop/rock music and that were described earlier in this chapter. The object under study is the pop/rock song “Foolish Games” by singer-songwriter Jewel Kilcher.⁴⁸

I will use Burns’s methodology for text-music analysis as a point of departure for my study of “Foolish Games.” Burns studies how musical processes, such as those outlined in the previous section, “represent/signify/enact” a text (Burns forthcoming b, 11). The first step is to identify the general narrative of both domains –text and music. In order to explore the narrative, I will adopt Burns’s analytical method and consider the following: codes, conventions, conventional meaning, associative meaning, contextual meaning, subjective/object perspective, and structure and structural anomalies (Burns forthcoming b, 13-17).

TEXTUAL ANALYSIS AND NARRATIVE

Before exploring the text-music relations in “Foolish Games,” it is useful to review and understand the lyrics of the song. Figure 4-001 presents the lyrics, as printed in the published score. The first verse introduces the listener to the uncomfortable relationship that exists between a protagonist or poet and her significant “other” or boyfriend.⁴⁹ With

⁴⁸ My analysis is based on the sheet music published by the Warner Brothers Music Corporation and Wiggly Tooth Music (1995) and the CD *Pieces of You* recorded by the Atlantic Recording Corporation (1994).

respect to grammatical structure in the verse, the protagonist and her boyfriend alternate as the subject of sentences. For example in the line “You took your coat off and stood in the rain,” the boyfriend is the subject. In the line “And I watched from my window,” the protagonist is the subject. The last line of the verse –“Always felt I was outside looking in on you” –differs from previous lines such that it presents the protagonist as the subject and the boyfriend as the direct object. The narrative of the first verse is as follows. The protagonist refers to her boyfriend as “always crazy.” The word “always” presumes familiarity –you have to know people for a long time before you can tell them that they are “always” a certain way. Most likely, the relationship between the protagonist and her significant “other” has lasted for quite some time. The word “crazy” has both connotations and denotations. The word could be used as a compliment, such that the protagonist is in awe of her boyfriend. On the other hand, “crazy” could be an insult. Perhaps the protagonist believes her boyfriend is unreasonable and outlandish. We learn from the lyrics, that the poet is peering out of a window and looking at her boyfriend. There is a physical distance between the woman and her boyfriend, but there is also an emotional distance between them. Even though she is inside looking out at him, the protagonist feels like an outsider “looking in” at him. Perhaps the protagonist prefers this vantage point because it provides her with some control over her predicament. She is the subject “looking in” at her object (the boyfriend). A theme of truth versus untruth or reality versus unreality evolves. The reality is that the woman is in a relationship with a man. The woman’s feeling of being an outsider even though she is involved with the

⁴⁹ I assume that the protagonist is female because it is Jewel who is singing. The “other” is most likely a male, although the lyrics do not refer to him as such. I will consider all uses of the word “I,” “my,” and “me” as references to the protagonist and the word “you” as reference to the significant “other.”

man constitutes an unreality. One wonders whether the protagonist speaks the truth or whether she is confused and speaks the untruth.

Verse 2 temporarily ends the grammatical conflict for the role as subject between the protagonist and her boyfriend. In this section, the boyfriend prevails as the subject in all sentences. The woman does not explicitly play the role of subject or object. Although this is the case, the woman's role as direct object is implied. The following alterations to lines 2 and 3 will illustrate this point of view: "You were fashionably sensitive but too cool to care [for me]" and "You stood in my doorway with nothing to say [to me]." It is implied that the boyfriend's actions affect the poet. The narrative of the second verse proceeds as follows. The poet describes her significant "other" as "mysterious" with "dark eyes and careless hair." The use of the word "mysterious" suggests that the woman has not discovered the whole truth about her boyfriend. Perhaps the man has many secrets. The word "careless," just like "crazy" could be positive or negative. The protagonist may find his "carelessness" endearing or she could find it annoying. The former conclusion is probable since the woman is still involved with the man. She likes him no matter how he looks. The next line of the verse presents the following opposition: "sensitivity" versus "too cool to care." The protagonist claims that her significant "other" is only sensitive to material things and does not provide her with emotional support. Since we are restricted to the protagonist's perspective in the lyrics, we cannot be certain whether she is being realistic or unrealistic about her situation. The remainder of verse 2 indicates that the man does not adequately communicate with the protagonist. Perhaps the two people share nothing in common.

The pre-chorus reveals that the woman is emotionally hurt –her heart is “bleeding.” She tries to draw her boyfriend’s attention by getting “down on [her] knees.” The image of kneeling expressed in the text conjures the image of a vulnerable female who is involved in a relationship of male dominance and female submission.⁵⁰ The woman appears powerless.

The refrain differs grammatically from the verse. Now, the protagonist assumes the role of a direct object. The shift in grammatical structure reveals how the foolish games and her insensitive boyfriend, that collectively assume the role of subject, affect the protagonist. From the chorus, we learn that the protagonist is in emotional pain. She confesses that she is tired of being in her situation –i.e. being involved with the man. She is tired of playing all “these foolish games.” It is uncertain whether the protagonist believes that she is a fool. It is possible that she views her boyfriend as the fool. The line “your thoughtless words are breaking my heart” indicates that the protagonist is suffering emotionally from her situation. She admits she is in emotional upheaval.

Verse 3, like verse 2, presents the boyfriend as the subject of the sentence. At times, the boyfriend becomes both subject and object. A case in point is the line “Your philosophies on art, Baroque moved you.” Only in the last line of the verse does the protagonist assume the role of subject. The narrative of the third verse progresses as

⁵⁰ It is not uncommon for female singer-songwriters to depict this model of sexual interaction in their lyrics. For instance, Burns discovers that the lyrics of Sarah McLachlan’s “Possession”, Tori Amos’ “Crucify”, and k.d. lang’s “Johnny Get Angry” all express images of the male dominator/female victim relationship (Burns *forthcoming c*; *forthcoming a*, 1997).

follows. The protagonist describes a typical day with her significant “other.” The line “You’re always brilliant in the morning” suggests that after she spends the night with her boyfriend she views him in a better light. Through the conversations that take place during the day, the protagonist realizes that the significant “other” only cares about himself. His actions affect himself—i.e. he is both subject and object. He only talks about his personal interests and his “loved ones.” Because the poet refers to “his loved ones,” she probably believes that she is not one of these “loved ones.” This may be an unrealistic belief. We are uncertain whether the significant “other” actually feels this way. When the protagonist says the words “I clumsily strummed my guitar,” we learn that she views herself as insignificant in comparison to her boyfriend. She cannot converse with him about intellectual topics such as art, music, and philosophy. All she can do is play her guitar. The use of the word “clumsily” suggests that the protagonist is not a good guitarist and that she finds fault with herself.

In verse 4, the role of subject alternates between the protagonist and her significant “other.” In the first line, the boyfriend and the protagonist are subject and direct object respectively. The boyfriend “teaches” her of “honest things.” In the last two lines of the verse, the protagonist is the subject. The narrative of verse 4 is as follows. The section reveals how the protagonist views herself as “soiled” or “dirty” in contrast to “clean” and “honest” things. The protagonist criticizes herself and identifies her boyfriend as someone who sets a good example for her. She is embarrassed by her faults when she states “I hid my soiled hands behind my back.” Hiding her hands behind her back also suggests that the protagonist does not want to face reality. By proclaiming “I must have

gone off track with you” the protagonist admits there is a problem in the relationship. The woman and her significant “other” are not longer emotionally in line with one another.

In pre-chorus 2, the protagonist assumes the role of subject and the boyfriend is the object –“I’ve mistaken you.” This pre-chorus indicates that the protagonist mistook her boyfriend as “somebody who gave a damn.” The word “mistook” implies an untruth. The woman unrealistically believed that her boyfriend cared for her. Once again, it is difficult to accept everything the protagonist says. Her perspective about the relationship may be distorted. We do not know whether the boyfriend really cares for the woman and we have no way to determine this from the lyrics.

After the final statement of the chorus, the coda restates the first two lines of the first verse. The recurrence of these lines suggests the woman has not ended her relationship with the man.

In summary, the text of “Foolish Games” describes a woman who is discontent with the relationship with her boyfriend. She desires attention but only receives heart-ache. Although this is the case, she does not rid herself of the man who causes her so much pain. We do not know who represents the fool, the protagonist or the significant “other.”

The verse and refrain sections serve different purposes. The former describes the relationship under question. The latter presents a confession –the woman expresses how the relationship negatively affects her emotional state.

With respect to grammatical structure, the role of the poet and her significant “other” as subject and direct object shifts throughout the entire song. Since the poet voices the lyrics and constructs the sentences, the fluctuating grammatical structure possibly symbolizes the poet’s inner confusion and turmoil. In the poet’s mind, when the boyfriend assumes the role of subject the boyfriend has complete control over the poet (direct object). When the poet makes herself the subject of the sentence, notions of uncertainty, dissolution, and lack of self-confidence are developed through the lyrics. For example line 4 of verse 1 presents the notion of dissolution. The protagonist feels like she is “outside looking in.” We do not know whether her feelings are misguided. Is she really an outsider? Another example is line 3 of verse 4. The protagonist expresses her lack of self-confidence when she hides her “soiled hands.” She is embarrassed to reveal her faults. Perhaps the protagonist feels uncomfortable to play the role of subject and be in a position of control.

The theme of reality versus unreality is developed in the lyrics. We do not know whether the poet speaks the truth or whether she misinterprets her predicament. Throughout the song we are unsure whether the protagonist is speaking to herself or to the significant “other.” The protagonist addresses the second person singular, “you,” but this does not necessarily mean that she is talking to her boyfriend. She could really be talking to herself.

MUSICAL ANALYSIS AND NARRATIVE

I will organize my musical analysis of “Foolish Games” by exploring those elements and issues of pop/rock songs that are repeatedly highlighted in text-music analyses. Only those musical constructs that are exhibited in “Foolish Games” will be discussed. I will also look at the potential for each of these elements to project a narrative. At first glance, this approach may seem close-minded or narrow, but I prefer to see it as a point of departure for my text-music study. Along with these more common issues, I will examine the music as an idiosyncratic work of art. In other words, I will concentrate on musical elements that are particular to the piece.

Formal divisions

“Foolish Games” comprises three primary sections: the verse, pre-chorus, and chorus. The song also contains an instrumental introduction and a coda. Figure 4-002 summarizes the formal design of “Foolish Games.”

Figure 4-002: The formal design of “Foolish Games”

Section	Number of Measures	Number of Musical Strains	Number of Lines of Text
Introduction	8	1	0
Verse 1	16	1 x 2	4
Verse 2	16	1 x 2	4
Pre-chorus 1	8	1	2
Chorus	20	2	3
Verse 3	16	1 x 2	4
Verse 4	16	1 x 2	4
Pre-chorus 2	8	1	2
Chorus 2	20	2	3
Coda	8	1	2

The harmonic plan of “Foolish Games” is rather simple. The entire song –the verse, pre-chorus, chorus, and coda –is in the key of D Aeolian.⁵¹ There are no modulations to other keys. Also, there is little variety with respect to the types of chords used in the song –the song comprises i, VI, III, iv, and ♭ VII chords. In addition, there seems to be a harmonic emphasis on the ♭ VII chord. This chord will be further discussed under the section “Phrase structure: Closure and the V-I progression.”

Although D Aeolian harmony unifies all of the sections of “Foolish Games,” the three main formal divisions of the song remain distinct with respect to their melodic material. The verse, pre-chorus, and chorus differ according to the following criteria: musical strain, vocal contour, metre, and rhythm.

a) Musical strain:

The verse consists of an eight bar musical strain that is heard twice.⁵² Each strain constitutes one phrase and presents two lines of lyrics. The pre-chorus is composed of one musical strain. The strain, which forms one eight bar phrase, corresponds to two lines of text. The chorus consists of two musical strains that together form one long phrase. This section presents three lines of text.

⁵¹ I believe that “Foolish Games” is in the key of D Aeolian. At this time, I will not explain how I arrived at this conclusion. In chapter 2, I adequately discussed the tonality/modality issue and how to determine the key in pop/rock music.

⁵² A musical strain is a distinct musical idea or phrase. See Chapter 3.

b) Vocal contour:

The vocal contour differs in each section. In the verse, the contour of the phrases generally descends. In contrast, the pre-chorus presents a more stagnant melody that lingers around pitch G. The chorus exhibits a wave-like vocal contour.

c) Metre:

“Foolish Games” alternates between areas of weak and strong metric attacks. In particular, the metric emphasis of the vocal part shifts according to the three sections of the song –the verse, pre-chorus, and chorus. The voice enters the verse on an anacrusis or pickup. This weak metric attack is maintained throughout the entire section as the voice begins each line with an anacrusis. The first line of the pre-chorus also begins with a vocal entry on a weak beat. The second line; however, does not fit the model that was maintained thus far. The voice begins this line on a strong beat. The corresponding lyrics are “This is my heart bleeding before you, this is me down on my knees.” The refrain is associated with strong metric attacks. The voice makes each of its entries on a strong beat. Every line begins on a firm pulse. In retrospect, the pre-chorus serves as a transition from the weak ambiguous metric attacks of the verse to the strong regular attacks of the refrain.

d) Rhythm:

There is a subtle difference between the verse and the chorus sections with respect to the rhythm of the vocal part. The chorus presents rhythmically long

notes, such as the whole or half notes in measures 45–47, which contrast with the verse’s primarily quick moving vocal melody.

Phrase structure: Closure and the V-I progression:

The phrase structure of the introduction, verse, and pre-chorus of “Foolish Games” follows common-practice models –that is, all of the phrases are symmetrical, each consisting of eight measures. Figure 4-004 identifies the phrase structure of the song.

4-004: The phrase structure of “Foolish Games” by Jewel Kilcher

Instrumental Introduction:

Phrase	Number of Measures	Measures	Cadence
1	8	1-8	III-: VII

Verse 1:

Phrase	Number of Measures	Measures	Cadence
2	8	9-16	III-: VII
3	8	17-24	III-: VII

Pre-Chorus 1:

Phrase	Number of Measures	Measures	Cadence
4	8	25-32	III-: VII

Chorus 1:

Phrase	Number of Measures	Measures	Cadence
5	18 (+ 2 bars of extension)	33-50 (+ 2 bars of extension)	VI-I

Coda:

Phrase	Number of Measures	Measures	Cadence
6	8	53-60	III-: VII

Each phrase ends with a III- $\flat$ VII or VI- $\flat$ VII in D Aeolian, which in my belief, prevents the listener from feeling a strong sense of repose. Rather, the dangling $\flat$ VII of measures 8, 16, 24, and 31 produces a feeling of tension. Upon hearing the tonic chord in measures 9 and 17, the tension is released and brief moment of repose is achieved. The $\flat$ VII chord of M. 23 and M. 32 do not lead to tonic chords, but rather to a subdominant and submediant respectively. The tension continues to develop.

The chorus comprises one large phrase of 18 measures and closes with a VI-i progression.⁵³ The VI chord elaborates or prolongs the tonic chord by means of a $\wedge 6-\wedge 5$ melodic neighbour motion. Prior to this closure, a false sense of repose is created in measures 38 and 39 when a $\flat$ VII⁶-i progression is heard. I use the term “false” because the common-practice definition of closure requires that the chords involved must be in root position.⁵⁴

The coda consists of one phrase comprised of eight bars. The phrase ending exhibits a III- $\flat$ VII progression which is reminiscent of bars 14-15 and 22-23 of the introduction and verse respectively.

⁵³ Please note that measures 51 and 52 form a little interlude that links the chorus with the next statement of the verse.

⁵⁴ Some tonal analysts may use the term “medial” or “inverted” to describe a cadence where “one or both of the harmonies is sounded in inversion rather than root position” (Randel 1986, 121).

The unresolved dominant chord or natural seventh chord

To speak of the unresolved dominant chord in “Foolish Games” is not entirely appropriate. There are no dominant chords heard in the entire composition. The unresolved $\flat$ VII chord, however, is a recurrent musical event in the song.⁵⁵ As mentioned previously, the $\flat$ VII chord dangles at the end of phrases. The more notable or provocative statement of the unresolved $\flat$ VII occurs in the last measure of the song (measure 60). The tension created by the unresolved leading-tone of the voice does not have a chance to be released because there is no subsequent music for the voice. In the recording of the song, an instrumental melody heard after the vocal part ends. The melody, played by piano and cello, is derived from the introduction. The music fades with this incessant melody. As I will discuss later, the unresolved $\flat$ VII at the end of the song has great implications for my textual interpretation of the song.

The voice-leading graph

Figure 4-005 presents my voice-leading graph of “Foolish Games.” Initially, I graphed every structural division as an independent unit. Having done this, I realized that the sections were linearly connected, with the exception of the coda. The graph reflects the song’s melody as a scalar descent from $\wedge^5$ to $\wedge^1$ in D Aeolian. The introduction provides the initial ascent to the primary tone, scale-degree 5 or A4, through an arpeggiation of the

⁵⁵ In chapter one, I already discussed how some tonal analysts, such as Everett, agree that the $\flat$ VII chord is often “tied directly to dominant function” in pop/rock music (Everett forthcoming, 68). For more information about the function of the $\flat$ VII chord read Moore 1995.

tonic chord. The verse articulates a $\hat{5}$ to $\hat{4}$ (A4 to G4) scalar movement with supporting tonic and natural-seventh chords respectively. A register transfer occurs as the pre-chorus prolongs scale-degree 4 or G5. The chorus completes a linear descent from scale-degree 3 to 1. A tonic chord supports $\hat{3}$ and $\hat{1}$ and a $\flat$ VII chord supports $\hat{2}$. There is a register transfer between scale-degrees 2 and 1. The coda, derived from the melodic material of the verse's strain, reiterates the $\hat{5}$ - $\hat{4}$ movement that was established in the verse. The vocal part of the song concludes with a hanging scale-degree 4. We never hear scale-degrees 3, 2, and 1 in the coda.

The incomplete fundamental line presented in the coda could signify instability. The hanging scale-degree 4 projects tension. In other words, the lack of scale-degrees 3, 2, and 1 prevents closure and stability. This lack of closure is an unexpected event for the listener, who just heard a full $\hat{5}$ - $\hat{1}$ linear descent that occurs between the introduction and the last statement of the chorus. The listener is used to the feeling of closure and expects the song to maintain this closure till the end of the song.

Dissonance treatment

In "Foolish Games" there are a number of dissonant contrapuntal events between the voice and the bass parts, such as 2^{nds}, 4th, and 7^{ths}. Figure 4-006 presents a list of these dissonant intervals that occur in the song.

Figure 4-006: A list of the dissonant intervals and their accompanying harmonies that occur in the song "Foolish Games"

Dissonance/consonance	Measure Number	Lyrics
4-3 I	10	"took your"
7-8 VI	11	"coat off"
4-3 I	18	"watched from"
7-8 VI	19	"window"
7-8 VI	20	"always felt I was"
4-3 III	21	"outside"
7-8 & 2-1 iv	25	"In case you failed to notice"
2-1 III	29	"this is my"
7-2 * III	29	"heart"
4-3 ± VII	32	"my knees"
4-3 ± VII ⁶	38	"tearing"
2-1 ± VII ⁶	38	"me"
2-2 * ± VII	38	"apart"
2-1 I	39	"apart"
2-1 VI	41	"your"
2-3 ± VII	44	"words"
7-5 VI-I	48-49	"my"
4-3 I	54	"took your"
7-8 VI	55	"coat off"
4-3 III	58	"always crazy"

* identifies unresolved dissonance

In most instances, these discordant events immediately resolve by step according to common practice. Hence, there are 2-1, 4-3, and 7-8 resolutions. The 4-3 melodic movement is the most frequent example of dissonance/consonance in the song. The dissonant 4th sounds over the one of these harmonies –either i, III, or ♯ VII. In some cases, there is no conventional resolution to dissonant events in the song. For example, in measure 29 a 7th leads to a dissonant 2nd by skip. Also, the 2nd of measure 38 leads to the dissonant 2nd of measure 39.

In common practice, dissonance and consonance are often related to tension and relaxation respectively. The large number of dissonance/consonance resolutions in “Foolish Games” could signify restlessness. Although most dissonant events are immediately resolved to consonant ones, these moments of consonance are short-lived – i.e. another dissonant event returns.

TEXT-MUSIC ANALYSIS AT A BROAD LEVEL

Having examined the text and music of “Foolish Games” separately, I will now analyse how the two domains are related. I will examine how the conventional, associative, or contextual meanings of the song’s musical structure relate to those of the lyrics. In doing so, I am merging the text/music interpretive methods used by Burns, Everett, Covach, and Moore. All of these theorists explicitly or implicitly considered conventional interpretations of musical processes. Sometimes the conventional meanings attributed to these processes were applicable to their specific studies. At other times,

conventional meanings were inappropriate. Still at other times, associative or contextual meanings supported or overrode these conventional meanings.

In general, there are a number of musical constructs in “Foolish Games” that support the various ideas and themes represented in the lyrics. For example, all statements of the verse depict a woman’s relationship with her significant “other.” We learn through various accounts of their experiences together that the woman’s feelings towards her boyfriend are variable or unclear. At times we think that she is content with her relationship –“You’re always brilliant in the morning” –and at other times she is discontent –“Always felt I was outside looking in on you.” We do not know whether the woman’s sentiments are true or misguided. The metrical structure of the verse supports the idea of uncertainty expressed in the text. As already mentioned, the metrical attacks of the vocal line always appear on the offbeat or pickup. Metrical ambiguity results. The chorus also reinforces the relationship between text and metre. As was previously discussed, the chorus expresses a confession. The woman admits her unhappiness and the reason for it –her boyfriend’s actions or these “foolish games.” The confession requires much internal strength on the part of the woman. This strength is reinforced by the metrical design of the refrain. The refrain, unlike the verse, presents a strong internal pulse. The vocal line is assertive and always begins on a strong beat.

The harmonic scheme of “Foolish Games” seems basic –the entire song remains in the key of D Aeolian –but it does reveal much about the poet’s unfortunate situation. I already mentioned that the $\flat$ VII chord is prevalent throughout the song. In my opinion,

the tension created by this chord represents the tension of the relationship between the poet and her significant “other.” During the verse, the listener becomes acquainted with the $\flat$ VII chord and its resolution to the tonic. When the first two lines of the verse recur in the coda, the $\flat$ VII is left unresolved. Possibly, Jewel intentionally failed to resolve the $\flat$ VII chord. In doing so, she musically suggested that the unequal relationship between the woman and the significant “other” did not end. In the CD recording of the song, an excerpt from the introduction follows after the coda. Consequently, the song ends as it began. This cyclical nature resembles the cyclical nature of the relationship –at times the woman is content with her boyfriend and at other times she is discontent.

The voice-leading structure of the song also reinforces the interpretation that the relationship did not end. As illustrated in figure 4-004, “Foolish Games” presents a 5-line *Urlinie* which ends at the close of the final statement of the chorus. At this point in the music, it seems as though the poet has ended the relationship with her boyfriend. With the statement of the coda, the *Kopftön* or scale-degree 5 reappears and my conclusion loses some support. I ask myself, will there be another complete 5-line in the song? The music of the coda is derived from the first two lines of the verse. After listening to this familiar music, I expect to hear a complete 5-line. My expectation, however, is unfulfilled since the vocal part ends on scale-degree 4. I believe the hanging fundamental line signifies that the poet’s internal struggle of reality versus unreality is left unresolved. The tension created by the interrupted fundamental line also indicates to me that the

woman does not succeed in freeing herself from the relationship with her significant “other.”

There are a number of conventional musical processes, such as closure at the end of a song and the resolution of dissonance, that common-practice theorists expect to hear in the music which they analyse –be it classical or pop/rock. It is valuable to consider whether these expectations are fulfilled. Analysts of similar background –i.e. common-practice theorists with notation-centric training –will possess similar expectations that are ingrained in their minds and ears. As Middleton writes,

Notation-centric training induces particular forms of listening, and these then tend to be applied to all sorts of music, appropriately or not. An important part of conventional musicological training is in the skill of score-reading-with ‘inner-hearing.’ But what is ‘heard’ is strongly guided by what has been really –predominantly – heard in the past and by the score’s propensity, in its very layout and in the nature of the act of scanning, to privilege acts of aural abstraction, synchronization, blending and arranging in hierarchy.

(Middleton 1990, 105)

The universal expectations created by notation-centric training are a common ground or a point of reference for theorists and facilitate analytical discussions among them. The musical constructs that I identified as being frequently examined in text/music analyses, represent some musical areas which may challenge or satisfy the expectations of common-practice theorists. These standard musical constructs can be examined in all pop/rock songs and a unified approach to the study of popular music should include this analytical venture.

Conventional meanings are linked to a number of musical constructs. I use the word “conventional” in relation to common-practice theorists. For instance, a V-I cadence, with scale-degree one in the top voice, has a conventional meaning of closure or finality. In the text/music study of some pop/rock songs, conventional meanings may potentially be useful. However, in other songs, associative or contextual meanings may be more appropriate. In any case, examining the applicability of conventional meanings to a song may be a point of departure for an analyst conducting a text/music study.

In my case study of “Foolish Games,” I merged the analytical and interpretive methodologies of Burns, Everett, Covach, and Moore. I investigated the musical constructs commonly studied in their text/music analyses. Of these constructs, an examination of metre, rhythm, closure, and voice-leading processes proved useful in my text/music analysis of the Jewel song. As was the case for the aforementioned theorists, my interpretive process was dependent on my knowledge of conventional meanings attributed to musical constructs. For instance, I investigated the potential of the unresolved $\flat$ VII chord to create tension in “Foolish Games.” Although I admit to recognizing conventional meanings in my analytical process, I allowed the context of the music to ultimately influence my interpretive decisions. In the case of the unresolved $\flat$ VII chord, I felt that the conventional meaning of this musical event was appropriate for the song. The tension created by the unresolved chord mimicked the tension and inner turmoil within the poet’s mind.

CHAPTER FIVE

“Non-notational” musical codes: “Vocality,” musical affect, and meaning

In Chapter 4, I examined musical codes or constructs in relation to the conventional, associative, or contextual meanings attributed to them. The codes could be easily described and notated using common-practice musicological or theoretical methods. This chapter will focus on one aspect of pop/rock songs that is not easily notated on a score. Because of time constraints, I will only investigate and focus on “vocality” as a “non-notational” musical code and examine how analysts interpret its meaning and describe its musical affect. In doing so, I will draw from and extend the discussion of musical codes initiated in Chapter 4. I choose to concentrate on the voice because it occupies the foreground of the musical soundscape and carries the main melody in pop/rock songs. As Middleton writes,

...popular music is overwhelmingly a ‘voice’ music.’ The pleasure of singing, of hearing singers, is central to it.

(Middleton 1990, 261)

I borrow the term “vocality” from Leslie C. Dunn and Nancy A. Jones who use it to represent a “broader spectrum of utterance” (Dunn and Jones 1994, 1). Dunn and Jones write:

Too often “voice” is conflated with speech, thereby identifying language as the primary carrier of meaning. However, human vocality encompasses all the voice manifestations (for example, speaking, singing, crying, and laughing), each of which is invested with social meanings not wholly determined by linguistic content...“Vocality” also implies an emphasis on the performative dimension of vocal expression...

(Dunn and Jones 1994, 1)

Some readers may wonder why a study of musical affect is included in a thesis that promotes a standardized approach for the study of pop/rock music. Indeed, describing the affective properties of music is a subjective act. Although this is the case, a study of affect in relation to the “non-notational” aspects of pop/rock music can provide additional insight into or support the meanings of musical constructs in a song. Rather than adopting the case study approach once more, for this chapter I will instead see how a study of “vocality” can support the conclusions I made regarding the musical and textual meaning of Jewel’s “Foolish Games,” described in the previous chapter.

A historical perspective:

Notational and “non-notational” musical codes and their affective properties

An interest in musical affect dates back to the time of Plato (427-347 BC), when the evaluation of music involved the following criteria: moral value and metaphysics. Plato regarded music as a civilized work of art because of its “beneficial moral effects.”⁵⁶ As Catherine Rau states, Plato believed that “a piece of music which represents morally good characters or actions has aesthetic value, while one with immoral subjects has aesthetic devalue.”⁵⁷ Plato applied aesthetic value to the Greek modes. He stated that the modes were beautiful because they had the ability to “temper behaviour” and create a perfect individual.⁵⁸ Rau attributes Plato’s aesthetic devalue to music that evokes the emotions of “pity and fear.”⁵⁹ This type of music “fosters [a] weakness of character.”⁶⁰ Plato also

⁵⁶ Catherine Rau, *Art and Society: A Reinterpretation of Plato* (New York: Richard R. Smith, 1951), 51.

⁵⁷ Ibid. 65.

⁵⁸ Julius Portnoy, *The Philosopher and Music: A Historical Outline* (New York: Da Capo Press, 1980), 221.

related the aesthetical components of art and the experience of art to metaphysics.⁶¹ He compared the rhythmic component of music to the metaphysical concept of universal rhythm. Julius Portnoy writes, Plato believed that “erratic rhythms and a cacophony of dissonant tonalities cause the human soul to clash with the ideal order of things.”⁶² Once, again, Plato described the aesthetical or emotional impact of musical sounds on a listener. Dissonant tones create emotional instability and disruption.

Aristotle (384-322 BC), Plato’s student, continued to attach emotional qualities to musical sounds. Portnoy describes Aristotle’s view of music:

In rhythm and melody we have the most realistic imitations of anger and calmness as well as of courage, temperance and all the opposites. Not only states of feeling but ethical qualities and mental dispositions were reproduced by musical imitation.⁶³

Evidently, Aristotle stressed the “homeopathic” effect of music.⁶⁴ He concerned himself with how a listener experienced music. In his book entitled *Politics*, Aristotle provided examples of the affect created by various Greek modes. He attributed “sadness,” “a moderate and settled temper” and “enthusiasm” to the Mixolydian, Dorian, and Phrygian modes respectively.⁶⁵ As Schaper states, Aristotle also believed that music “is structured

⁵⁹ Rau, 54.

⁶⁰ Rau, 54.

⁶¹ Eva Schaper, *Prelude to Aesthetics* (London: George Allen & Unwin Ltd. 1968), 15.

⁶² Portnoy, 221.

⁶³ *Ibid.* 23.

⁶⁴ *Ibid.* 24.

⁶⁵ *Ibid.* 25.

analogously to a living organism [and] has the capacity to deepen our understanding of life.”⁶⁶

A modern perspective: Musical codes and musical affect in pop/rock music

An interest in the affective properties of music continues into the present day. David Brackett and Richard Middleton are recent analysts who explore musical affect and meaning in their studies of pop/rock music (Brackett 1995; Middleton 1990). Their interpretations of music evolve from the investigation of musical codes –that is the structural elements embedded within the score and vocal nuances created in the performance or recording of a song. It is useful to revisit the definition of a “musical code” discussed in Chapter 4, this time with the “non-notational” parameters of musical sound in mind. Brackett writes:

A musical code “offers a way of theorizing the connections between musical sound and such ‘extra-musical’ factors as media image, biographical details, mood, and historical and social association; it can explicate the connection between an individual piece and the conventions of the period that surround it, the connection between a particular piece and the general *langue* from which it derives, and permit us to speculate about the connection between the musical sounds we hear and the ‘human universe’ implied by the lyrics.

(Brackett 1995, 9)

As the above quote indicates, a musical code signals the association between musical sound and extra-musical meaning. In no way is the relationship fixed or absolute. The signification of the code depends on several factors such as social conventions, biography, historical context, and style.

⁶⁶ Schaper, 13.

Middleton believes that musical codes may vary in strength (Middleton 1990, 173). Strong codes are “familiar” or “predictable” and have become part of convention (Middleton 1990, 173). For instance, analysts may associate a high pitched sound with freight or hysteria. Other codes may be “weak” or “newly invented” (Middleton 1990, 173). Middleton suggests that these lesser-known codes are typical of contemporary or avant-garde music (173). In reference to Umberto Eco’s classification of codes, Middleton introduces the notion of “undercoded” and “overcoded” songs (Middleton 1990, 173). Undercoded songs are those that contain unique or unfamiliar codes. Overcoded songs consist of traditional signs that are easily decoded by the general public. Middleton suggests that popular music is overcoded (Middleton 1990, 173). He further states that 8 levels of codes prevail in this type of music. Figure 5-001 lists and defines these levels of code.

Figure 5-001: The 8 levels of code that are prevalent in popular music, according to Richard Middleton

Code	Definition or Examples
<i>Langue</i>	A general Western music code of functional tonality
Norms	Mainstream conventions
Sub-norms	Era or period
Dialects	European, Euro-American, Afro-American
Styles	Music hall, Tin Pan Alley, country, rock, punk
Genres	Ballad, dance-song, single, album
Sub-codes	Beat, rhythm and blues, rock’n’roll
Idiolects	Associated with particular composers and performers

(Middleton 1990, 174)

Middleton admits that his system of codes is based on Gino Stefani’s model of musical competence that also categorizes codes presented in music (Middleton 1990, 175). As figure 5-002 indicates, Stefani’s model consists of five levels of codes.

Figure 5-002: Gino Stefani's five-tier model of musical codes, as described by Brackett

Code	Definition
General Code (GT)	Basic conventions through which we perceive or construct or interpret every experience
Social Practices (SP)	Cultural institutions
Musical Techniques (MT)	Theories, methods, and devices particular to music
Styles (St)	Historical, cultural
Opus (Op)	Single musical works or events in their concrete individuality

(Brackett 1995, 12)

Middleton's and Stefani's categories of musical codes are very similar. Both systems acknowledge the concept of convention and its role in the signification or decoding process. This concept was previously discussed in Chapter 4 in relation to the meaning of musical constructs. Parallel with Middleton's concept of over –and undercoded songs, Stefani introduces the notion of “competence types” with respect to the background of a listener (Brackett 1995, 13). As Brackett states, Stefani believes that there exists two types of listeners: those with “high competence” and those with “popular competence” (Brackett 1995, 13). Brackett writes:

High competence focuses on pieces as autonomous works, while popular competence experiences pieces more on the levels of the General Codes and Social Practices...“Competence” ...refers to the range of subject positions available to a listener dependent on that individual's history and memory.

(Brackett 1995, 13)

Deciphering musical codes: Context and musical meaning

Meaning is more likely to result from a song's similarity to and difference from other songs within the total musical field, from the codes it activates and from the subject positions and competences it makes available to listeners that permit them to identify with those codes.

(Brackett 1995, 23)

In the above quote, Brackett acknowledges that context establishes musical codes and their respective meanings. Before exploring the relationship between a code and its meaning, an analyst must situate the sound experience. He must relate the song or recording to existing genres, styles, periods of history, etc. Brackett also emphasizes that the analyst must situate himself for the benefit of his readers. Brackett writes "it is important to note who is speaking, to whom they are speaking, the context of the utterance itself" (Brackett 1995, 18). An analyst's background –i.e. his "position of class, gender, and culture" –may affect the way by which he or she decodes a piece of music (Brackett 1995, 22). Philip Tagg states that every analyst should present the reader with his "*curriculum vitae musicalis*," a resumé that describes his own musical experience and "value judgements" (Tagg 1979, 74). With this information, the reader can relate to the analyst and "accept or refute" conclusions about a piece of music (Tagg 1979, 74).

The "non-notational" musical code: "Vocality"

Western notation privileges pitch and rhythm and neglects aspects of musical sound such as timbre or gradations of pitch. With respect to "vocality," the score is incapable of accurately representing production techniques such as falsettos, multiphonics, vibrato, and tremolo (Everett forthcoming, 14–15). Yet, we feel that vocal sounds affect the overall experience of music. Everett believes a performer's voice serves as an

“expressive device” which can provide “rich musical meaning” to the listener (Everett forthcoming, 13). Roy Shuker suggests that the “‘grain’ of the voice (very broadly, its feeling)...conveys sets of emotions, often irrespective of the words they are singing” (Shuker 1998, 309). In other words, the voice is capable of constructing non-verbal or affective meanings. Middleton and Moore are among those analysts who explore the relationship between vocality, affect, and meaning in pop/rock songs (Middleton 1990; Moore 1993). This type of study relies heavily on the subjective. As Dunn and Jones write, “listening assumes a new importance in critical discourse, for the listener actively engages in the construction of the meaning of a vocal performance (Dunn and Jones 1994, 5).

Middleton examines the vocal strategies of two pop/rock performers: Madonna and Bryan Adams. In his investigation of the Madonna song “Where’s the Party,” Middleton examines vocal strategies in conjunction with their affective properties and ability to enhance the narrative of the song (Middleton 1993). For instance, Middleton describes how Madonna’s use of a “tremulous vibrato” on the word “fun” creates “nervous anticipation” (Middleton 1993, 183). Middleton suggests that her later “rasp” on the word “party” indicates that the “anticipation is sensually fulfilled” (Middleton 1993, 183). Middleton also makes general comments about Madonna’s vocality. He writes, “the girlish but provocatively knowing sound of Madonna’s voice calls up all kinds of associations, certainly in the male mind, standing in a long-established intertextual tradition (represented, for instance, by Marilyn Monroe)” (Middleton 1993, 186).⁶⁷

⁶⁷ It is important to note that Middleton’s views about Madonna’s vocality are placed in context. He acknowledges that his conclusions about Madonna are derived from a male perspective.

In his study of Bryan Adams's "Everything I Do," Middleton relates the singer's "husky [voice], limited in high frequencies (i.e. lacking energy and confidence, requiring assistance), [and] rich in dissonant 'noise'" as placing "us in the (imagined) world of concrete reality" (Middleton 1993, 186). Middleton further adds that Adams's voice-type, in conjunction with the sound of the piano and strings, signifies "sentiment, romance, [and] confession" (Middleton 1993, 186).

Middleton's discussion regarding Madonna's and Adams's voices is essentialist and therefore problematic. Barbara Bradby criticizes pop/rock music scholars who use structural homologies or essentialist definitions to describe vocal performances (Bradby 1993). In particular, she states that there is a gendering of voices such that the male voice is equated with "language" and "technology" while the female counterpart is equated with motherhood and the "expression of emotions" (Bradby 1993, 167).

Middleton does not "gender the voices" of Madonna and Adams in the manner described by Bradby, but he does equate their voices to extra-musical ideas. He suggests Madonna's voice is evocative of Marilyn Monroe and Adams's "husky" voice signifies "romance." How can Middleton account for Madonna's and Adams's voices when the singers perform other songs? Does Middleton assume that all of their songs conjure up the same images?

Moore, like Middleton, examines the vocal strategies used in pop/rock songs (Moore 1993, 41). However, Moore differs greatly from Middleton with respect to the process of

defining and interpreting vocal production techniques. Moore believes an analyst should consider a “multitude of factors” before characterizing a particular vocal performance (Moore 1993, 42). These factors include 1) register and range; 2) degree of resonance; 3) the singer’s attitude to pitch; and 4) the singer’s attitude to rhythm (Moore 1993, 43). Figure 5-003 provides examples of words that Moore uses to describe these factors.

Figure 5-003: Examples of words that Moore uses to describe the factors that characterize a vocal style

Register	Range	Degree of Resonance	The singer’s attitude to pitch	The singer’s attitude to rhythm
-high -medium -low	-large -narrow	-colourless tone -lack of overtones -thin tone -full tone	-deviation from the norm -the norm	-syncopation -anticipation -delaying of the beat -strict rhythm

(Moore 1993, 43)

Moore admits that he is limited in his ability to describe vocal techniques. Specifically, he states that he can only describe the sounds of the “male voice” because he is aware of how the male voice is produced. Moore writes,

I do not and cannot know what it feels like to produce the sounds of a female voice (informal discussion suggests that there are distinct, if hard-to-verbalize, differences between female and male vocal production), nor would I presume to do so.

(Moore 1993, 41).

Moore discusses how other analysts limit their examinations of vocal style by being essentialist. He criticizes those analysts, such as John Shepherd, who equate one aspect of vocality with extra-musical ideas (Moore 1993, 42). For instance, he disagrees with the Shepherd’s assertion that a female voice is comforting and motherly (Moore 1993, 42).

“Vocality” and authorship

Brackett suggests that the musical codes –notational or “non-notational” –in a song may have a strong link with the “inner experience” of the song’s author, be it the singer or the composer (Brackett 1995, 14). In other words, an author’s biography may prove useful in deciphering the meaning of musical structures in a song.⁶⁸ Joseph Kerman applies this concept in his study of Romantic music. For instance, he suggests that an analyst can only fully comprehend Schumann’s “artistic intentions” by understanding the composer’s “impulsive Florestan and introspective Eusebius” character (Kerman 1985, 330). Kerman’s analytical approach is valuable in the study of vocality. In order to interpret the significance of a given vocal style, an analyst should be familiar with the biographical background of both the composer and the singer.

Before an analyst can embark on a study that reveals a relationship between authorship and musical code, he/she must first tackle the issue of “authorship.” Who is the author of the song? Is it the composer or singer? Edward T. Cone reflects upon the issue of authorship in his book *The Composer’s Voice*.⁶⁹ Cone believes a composer creates a character and brings it to life in a song. The textual character may represent the composer’s voice and embody the “wills and desires” of the composer or it may reflect an entirely new persona.⁷⁰ The singer of the song transforms the textual or “poetic”

⁶⁸ Once again one must understand that the proposed link between biography and musical structure is not absolute. Also, one cannot assume that every song contains musical codes linked to biographical details of the author.

⁶⁹ Edward T. Cone, “Persona, Protagonist, and Characters,” in *The Composer’s Voice* (Berkeley: University of California, Press, 1974).

⁷⁰ *Ibid.* 22.

persona into a “vocal persona.”⁷¹ As a song is performed, the listener “shares the character’s experience” and is affected by the music.⁷² I believe that an analyst must decide whether the musical affect is related to the poetic persona, created by the composer, or the vocal persona created by the singer. In the unique case of a singer-songwriter, the composer and singer are the same person. Consequently, the poetic and vocal persona may be identical.

Brackett does not consider Cone’s issue of authorship when he analyses the musical codes in a song. In fact, he avoids discussing the poetic persona all together and completely concerns himself with the vocal persona of a song. For instance in his comparative analysis of separate recordings of the 1938 song “I’ll Be Seeing You” by composers Sammy Fain and Irving Kahal (Brackett 1995, 35-74), Brackett examines the vocal personae created by the two singers –Billie Holiday and Bing Crosby. He embarks on his study by providing a brief account of the critical commentaries and biographical material of both singers. Holiday is described as “an artist tormented by her struggles with drugs and personal relationships” (Brackett 1995, 38). She is also ranked inferior to Crosby’s musical crowd because of her gender (Brackett 1995, 39). Racial and sexist remarks surface in the writings about her (Brackett 1995, 41). Unlike Holiday, Crosby is described as a respectable family man with tremendous commercial success. He is considered to be the

⁷¹ Ibid. 26.

⁷² Ibid. 22.

‘everyman’ [who] possesses amazing powers: he never forgets his friends; he always knows precisely how to set people at ease, he is never impressed by his stature and fame, even if others inevitably are; he can quiet intemperate children; he can heal the sick; he is an unerring judge of talent; he participates in philanthropic causes ...

(Brackett 1995, 52)

The media controlled images of Holiday and Crosby are quite contrasting. Holiday is a “delinquent” and Crosby is “non-controversial” (Brackett 1995, 46 and 53).

Familiar with the biographical background of Holiday and Crosby, Brackett proceeds with his analysis of “vocality” in the two recordings of “I’ll Be Seeing You” (in actual fact, Brackett compares the transcriptions of the recordings). He studies these musical codes in conjunction with the published score. I summarized Brackett’s conclusions in figure 5-004.

Figure 5-004: Some of the musical codes discovered by Brackett in the published score and the separate recordings of the song “I’ll Be Seeing You” by Bing Crosby and Billie Holiday respectively

a) Sheet music Version (Brackett 1995, 61)

Notational musical codes	Meaning according to Brackett
“Movie musical scoring”	“creates the impression of someone playing a role in a film”
“the diction of ‘mornin’ sun””	“recalls Irish ballad singing”
Lyrics	Theme of generalized loss typical of the World War II period

b) Bing Crosby's Version (Brackett 1995, 61)

"Non-notational" musical codes	Meaning according to Brackett
Crosby's "crooning vocal style"	Conveys "a feeling of intimacy"
"Irish ballad singing"	Reminds the "audiences of the role of Father O'Malley that Crosby had recently played and won an Oscar for in the 1943 movie <i>Going My Way</i> "
The general sound of Crosby's voice	Felt as a consolation for families separated by the war

c) Billie Holiday's Version (Brackett 1995, 62-63)

"Non-notational" musical codes	Meaning according to Brackett
The general sound of Holiday's voice	"sadness"
A vocal flip on the word "lovely"	"accentuates the word and produces a distancing effect by emphasizing its sonic materiality"
Inflection and stress	Creates a "parodic effect of a 'dominant discourse'" and results "in the semantic reversal of clichés"
Slow jazz singing	"evokes the quality of 'sincere' expressivity"

The presence of multiple authorial voices (the composer's voice and the performer's voice) in a recording suggests that there are multiple meanings for musical codes. As a result, one must keep in mind that the information presented in figure 5-004 provides one interpretation of the "vocality" presented in the recordings.

Brackett states that the musical gestures created by Crosby and Holiday convey different "socially mediated constructions of affect" (Brackett 1995, 62). For instance, Crosby's general vocal sound is comforting because of his socially constructed image as a "family man." In contrast, Holiday's vocal sound conjures a feeling of "sadness" which coincides with the society's depressing view of Holiday as a delinquent drug addict.

Brackett writes that performers, such as Crosby and Holiday, activate certain musical codes in order to satisfy their audience's emotional needs and ensure commercial success (Brackett 1995, 49). One reservation with Brackett's study is that it suggests the performer is activating certain musical codes with the sole purpose of conveying particular affective meanings. Perhaps the production of a particular vocal technique is simply a creative or artistic act, devoid of meaning.

"Vocality" in relation to text/music analysis

So far, I discussed how "vocality" enhances the musical meaning of a song. It produces a particular affect that may support ideas portrayed by the lyrics. Now, I would like to consider "vocality" in relation to text/music analysis. Can a study of vocal production techniques enrich a text/music analysis? Upon reviewing the literature of popular music analysis, I did not come across any studies that fully integrate the concept of "vocality" and the analysis of musical structure. Middleton attempts to proceed in this manner as he describes the "vocality" of Madonna and Adams, but I believe his approach is unsystematic and essentialist. Burns, however, does offer a text-music analysis that considers the effect of "vocality" on the musical meaning of a pop/rock song. It is useful to briefly examine her analysis and investigate the value of integrating the concept of "vocality" in a text-music analysis.

Burns examines the relationship between lyrics, musical constructs, and "vocality" in her analysis of the k.d. lang song "Johnny Get Angry" (Burns 1997). In general, the song explores the inequality that exists between men and women in society. The lyrics

describe a woman who is a willing participant in an abusive relationship. The text of the refrain that particularly heightens the image of abuse is reproduced below:

Refrain:	
Line 1	Johnny get angry, Johnny get mad,
Line 2	Give me the biggest lecture I ever had,
Line 3	I want a brave man, I want a cave man,
Line 4	Johnny, show me that you care, really care for me.

(Burns 1997, 104)

At this point in the song, the woman or singer assumes a submissive role and begs “Johnny” to abuse her. Burns considers this the “dramatic climax” of the song (Burns 1997, 105).

Burns examines the musical constructs that appear simultaneously with the text of the refrain. Of particular interest to her is the harmony, metre, and rhythm that occurs during the statement of line 4 (Burns 1997, 104). At this point in the lyrics, we hear a V-I progression, only the second of its kind heard in the song. I will not go into detail regarding the tension created by the dominant chord and how a tonic chord can release this tension since they were adequately discussed in Chapters 1 and 3. The lyrics “Johnny, show me that you care, really care for me” is also emphasized by a shift in meter from 4/4 to 5/4 (Burns 1997, 105). The metrical distortion is accompanied by an interruption in rhythmic flow. As Burns writes, there is a full quarter rest at the beginning of the measure which presents the word “Johnny” (Burns 1997, 105). Following the rest, “Johnny” is uttered in an eighth-note rhythm (Burns 1997, 105). Burns declares this musical event –one with harmonic significance, metrical shift, and rhythmic interruption –the “musical climax” of the song (Burns 1997, 105).

The dramatic and musical climaxes of the song allow lang to comment on or criticize the social situation of gender roles and abuse. Generally, Burns interprets lang's social comment as the following: "an invitation to abuse can result in abuse" (Burns 1997, 97). Burns further supports this interpretation by examining lang's vocal strategies for the three statements of the refrain. Each statement of the refrain differs from another with respect to vocal production. As Burns writes, in the first statement lang utter the words "Johnny, show me" in a "low, unpitched register" (Burns 1997, 105). Upon the next statement of the refrain, the same words are sung in a higher register with a "screamlike quality" (Burns 1997, 105). The last statement of the refrain highlights these words with "a high-register shriek" (Burns 1997, 105). In sum, with each statement of the refrain there is a gradual intensification of lang's voice. The shrieks heard in the last statement of the refrain realize the singer's physical abuse. Thus, lang's vocal strategy highlights the dramatic and musical climaxes of the song.

This brief summary of Burns's text/music study in relation to "vocality" suggests that analyses in general may benefit from an investigation of "non-notational" parametres of the music. In the case of the lang song, a study of "vocality" added another layer to the text/music analysis. It supported or enhanced Burns's interpretation of the song. In this chapter, I chose to focus on "vocality," but there are several other parametres that may be of interest to analysts. For instance, an investigation of timbre or harmonics could possibly enhance the meaning of pop/rock songs.⁷³

⁷³ Everett discusses guitar harmonics in relation to form (Everett forthcoming, 21-23).

The case study of Jewel's "Foolish Games reconsidered

In Chapter 4, I presented a case study of Jewel Kilcher's "Foolish Games." The study took the form of a text-music analysis. Now, I will re-evaluate my analytical results and consider the concept of "vocality." My goal is to determine the difficulties and rewards in doing this kind of analysis –examining a non-notational musical parametre in conjunction with notational parametres.

Authorship and "Foolish Games"

Before I can analyse Jewel's vocal production techniques, I must reflect upon Cone's issue of authorship. In other words, who is the author of the song? It is rather simple to answer this question since Jewel is both the composer and singer of the song. As Cone would put it, the poetic and vocal personae are identical in this case. However, it is uncertain whether Jewel's real life character is depicted in the text. The next step in my analysis is to familiarize myself with the biographical background of Jewel Kilcher the persona of the song.

Jewel is a 1990s North American singer-songwriter who received much fame for her multi-platinum debut CD *Pieces of You* (1994) (Childerhose 1998, 86). Before the media blitz for this album and her worldwide success, Jewel received a degree from the Interlochen Fine Arts Academy in Michigan. Upon graduation, she moved to San Diego and lived in a van. Jewel led a rather poverty stricken life with a passion for music. She preferred to spend her time writing songs in a van, rather than "playing three-hour sets in coffeehouses and working long hours" (Childerhose 1998, 85). Jewel persevered through this deplorable lifestyle by overcoming her fears –the fear that she could never get out of

poverty –and pursuing her dreams (Jewel 1998, 218). The pinnacle of Jewel’s career was her participation in *Lilith Fair*’97, a music festival that spotlighted North American female-singer-songwriters.⁷⁴

An examination of Jewel’s vocal strategies

I will consider Moore’s “multitude of factors” that characterize vocal performances as a point of departure for my study of the vocal strategies used by Jewel in her recording of “Foolish Games.”⁷⁵ As mentioned earlier in this chapter, these factors include register and range, degree of resonance, the singer’s attitude to pitch, and the singer’s attitude to rhythm. Figure 5-005 summarizes Jewel’s vocal strategies according to Moore’s factors.

Figure 5-005: A summary of Jewel’s vocal strategies in her performance of “Foolish Games”

Section	Register	Range	Degree of Resonance	The singer’s attitude to pitch	The singer’s attitude to rhythm
Verse	-high to medium	-large	-thin tone -some vibrato	N/a	-syncopation (delay and anticipation of the beat)
Pre-chorus	-high	-narrow	-more resonance and vibrato	N/a	-syncopation (delay and anticipation of the beat)
Chorus	-high to medium	-large	-vibrato -fuller tone (with added backup vocals)	N/a	-strict rhythm

⁷⁴ I do not claim to have summarized Jewel’s entire biographical background. Merely, I have presented elements of her biography that I feel are frequently highlighted in books, articles, television shows, and radio shows. These biographical details are well-known to her fans.

⁷⁵ I am using the recording of “Foolish Games” from the CD *Pieces of You* (Atlantic Recording Corporation 1994).

Since I am unskilled in vocal performance, I described the characteristics of Jewel's vocal style in general terms. Also, since a transcription of the vocal performance was unavailable, I did not make any claims about the singer's attitude to pitch. As you can see from figure 3-005, Jewel's vocal style shifts according to the each section of the song.

In addition to the data presented in figure 5-005, I would like to make some comments about Jewel's vocal production techniques in general. Jewel creates a melancholic singing style in "Foolish Games." This style, contemplative in nature, suits the soul-baring or confessional lyrics of 1990s female singer-songwriters such as Sarah McLachlan and Paula Cole.⁷⁶ Jewel's style also conjures up the image of the pre-successful Jewel during her years of hardship in San Diego –i.e. when she was poverty stricken and distraught. At certain points in the song Jewel produces a vocal sound that mimics someone who is crying –she abruptly gasps for air, adds tremolos on pitches, sings in a higher register. The shift to a "crying" vocal style is most noticeable in the pre-chorus and chorus of the song.

There is one more vocal strategy used in "Foolish Games" that is worthy of mention. At the end of the song –i.e. at the end of the coda –Jewel whispers the last two notes of the vocal line. It is almost impossible to hear. This is the first time in the song that Jewel's voice is not in the foreground of the soundscape.

“Vocality” in relation to the text-music analysis

Since my description of Jewel’s vocal techniques was general, I can only present a general study of “vocality” in relation to the text-music analysis presented in Chapter 4. Jewel’s vocal style of the pre-chorus and chorus –the style that mimics the sound of “crying” –highlights moments in the text when the singer presents a confession. The vulnerable character described in the lyrics becomes “a real person” for the listener when the lines “this is my heart bleeding for you” and “these foolish games are tearing me apart” are heard in conjunction with the simulated vocal sound of “crying.” At this point in the song, Jewel the singer becomes Jewel the vulnerable persona of the text.

Upon reviewing the musical structure of “Foolish Games,” it seems to me that Jewel’s vocal technique that simulates the action of “crying” highlights areas in the song where there is strict metre and clear rhythm. The relaxed uncontrolled sobbing sound of Jewel’s voice ironically plays against the controlled metric design and strong rhythm of the pre-chorus and chorus. Jewel’s use of tremolo to depict the act of “crying” is easily performed on the rhythmically long notes of these sections. The quick moving notes of the verse do not allow for such vocal antics.

Jewel’s vocal whisper for the last two notes of the coda highlights the lack of closure at the end of “Foolish Games.” As you may recall from Chapter 4, the song ends with an unresolved ♭ VII chord and an incomplete fundamental line –one with a hanging ^4.

⁷⁶ For a detailed summary of the lyrics of “Foolish Games” consult the case study of Chapter 4.

In sum, the study of “vocality” does add an extra layer of support to my text-music analysis of “Foolish Games.” Jewel chooses particular vocal strategies to highlight certain areas of the text and musical structure. Of course, my study of “vocality” was quite simple or basic. I had difficulty assessing the vocal strategies used by Jewel. Those analysts who are competent in vocal production techniques will be capable of a more thorough study of “vocality” in “Foolish Games.” Consequently, they may observe more relations between “vocality,” text, and music.

Theorists and musicologists are selective in the types of musical elements they analyse. The majority of scholars has notation-centric training and consequently conducts analyses that privilege pitch and rhythm. Their analytical results and conclusions are satisfying, but I wonder whether other aspects of music should be considered in the analytical process. In this chapter, I discussed the possibility to analyse “vocality” as a “non-notational” parametre of music. The voice is the primary vehicle in a song that carries the melody. After hearing a song, a listener often hums or sings back the melody presented by the voice. Recently, there are a number of scholars, such as Middleton and Brackett, who examine vocal techniques in their musical analyses of pop/rock songs. With an awareness of the conventional meanings for vocal strategies, these scholars determine the meaning of a performer’s vocal production style and the overall meaning of a song.

I ask myself, can an analysis of “vocality” stand on its own as a primary methodology to analyse pop/rock songs? The study of “vocality” draws on the subjective. The personal background of the analyst directly effects the conclusions that are made. From my brief examination of Burns’s analysis of a lang song, I learned that an investigation of “vocality” can be a fruitful when incorporated into a text/music study. Burns’s study of lang’s vocal techniques added another layer to Burns’s text/music analysis. Burns explored how particular vocal strategies supported or enhanced the meaning of the musical constructs and lyrics of the song.

A standardized approach to the study of pop/rock music should potentially include an investigation of both the notational –pitch and rhythm –and “non-notational” aspects of songs –“vocality,” timbre, harmonics, etc. These non-traditional areas of investigation may provide additional insight into the meaning of a song. They may also support the conclusions made through a notation-centred study.

CONCLUSION

Throughout this thesis, I explored the potential for a “standardized” approach to the study of pop/rock music. As a point of departure, I reviewed the current state of research in the field of popular music and discovered that several analytical methodologies used in the study of this music were directly derived from the fields of traditional theory and musicology. In other words, many scholars borrowed the approaches normally used to examine common-practice art music and applied them to the pop/rock repertoire. Among these scholars were those who acknowledged the differences between pop/rock and common-practice music and consequently modified conventional methodologies, goals, and assumptions to account for these variances. These analysts included Allan Moore, Walter Everett, and Lori Burns.

Upon my detailed investigation of Moore’s, Everett’s, and Burns’s analytical methodologies in Part I of the thesis, I revealed a number of common links that had the potential to be included in a “standardized” approach. One such commonality was their use of voice-leading analysis. They applied this reductive technique to pop/rock music in order to determine the organization of a song with respect to tonality/modality, harmony, melody, motives, etc. In addition, Everett and Burns used voice-leading analysis to illuminate text-music relationships in a song. All three theorists modified conventional voice-leading analytical methodology in order to accommodate the unique features of pop/rock music. For instance, they commonly exhibited register transfers in the structural voice-leading line of their sketches, identified non-traditional support for scale-degree 2, and considered the $\flat$ VII chord to be a significant musical event—one that

creates tension comparable to that formed by a dominant chord. I proposed that these alterations to traditional voice-leading analysis could also be incorporated into a “standardized” approach to the study of pop/rock music.

Although there were many similarities between the voice-leading methodologies of Moore, Everett, and Burns, I noticed one main discrepancy with respect to sketching style. I revealed a difference in the way they treated the formal divisions of pop/songs on their voice-leading graphs. Everett sketched an entire song on one graph, but did not acknowledge any repetitions of whole sections such as the verse or refrain. His graph illustrated one fundamental line. Burns sketched a separate graph for each section of a song, but did not draw repetitions. Every graph had its own fundamental line, although a full descent from the primary tone to scale-degree 1 was not always observed. Moore had a diversified sketching style. His graphical method differed upon each musical study. His voice-leading structural lines ascended or descended and sometimes failed to end with scale-degree 1. In addition, a complete linear voice-leading structure was not always observed. My case study of “Frozen” suggested that various sketching styles, with respect to the repetitive formal divisions of a song, did not form drastically different analytical results. In fact, the analytical results were quite similar. I believe that further study is necessary in order to determine how the formal design of a pop/rock song can be represented on a voice-leading graph. Restricted by time and paper length, I could not conduct a large number of “same song analyses” –i.e. apply all three sketching methods to one song.

In Part II of the thesis, I discussed musical structure in relation to musical meaning. Specifically, I examined how scholars interpreted the analytical data collected from their structural analyses of pop/rock music. Text-music analyses were a source for my investigations because they explicitly related musical structure to extra-musical ideas. I examined text-music analyses conducted by Moore, Everett, Burns, and Covach and revealed that they commonly explored and interpreted the following musical constructs: phrase structure, the unresolved dominant chord, modal inflection, formal divisions, contrapuntal-rhythmic dissonance, and surface sonorities. In addition, all of the analytical interpretations relied to some extent on common-practice meanings of musical processes. Moore, Everett, Burns, and Covach explicitly or implicitly examined whether particular musical processes conformed to or defied convention. They considered both events to be significant and meaningful. I agree that conventional meanings of musical constructs should be addressed in musical discourse because they are universally understood by those scholars who have similar training –in this case notation-centric training in the traditional fields of theory and musicology. Thus, conventional meanings facilitate communication among traditional theorists and musicologists and should be considered in a “standardized” approach to the study of pop/rock music.

The remainder of Part II discussed the meaning of musical codes that are not easily notated on a Western score. I focused on “vocality” as a non-notational parameter of music and examined how Richard Middleton and David Brackett interpreted it. As was the case in studying notational musical constructs, the interpretation of vocal production techniques in a song relied heavily on conventional meanings. In the case of “vocality,” these meanings were socially constructed. My inquiry of “vocality” led me to examine

whether a study of vocal production techniques could enrich a text-music analysis. I investigated one of Burns's text-music analyses that considered this non-notational parametre of music and learned that a singer may use specific vocal strategies to highlight a musical or dramatic climax of a song. The main challenge that still exists is to study other non-notational parametres of pop/rock music. How can an analyst systematically account for aspects of music such as timbre or pitch and rhythmic gradations? In any case, I believe that a study of non-notational parametres is a valuable exercise and should be included in a consolidated approach to the study of pop/rock songs. Such studies could create additional layers of meaning that support the interpretations attributed to the notational aspects of music.

The quest for a standardized approach to the study of popular music is by no means over. This thesis has provided a point of departure for this extensive project. Further study is required. For example, the modified version of voice-leading analysis should be applied to and tested on other types of pop/rock music –for instance, hard rock and heavy metal –from various eras. Also, it would be advantageous to conduct an investigation that examines the analytical results of various popular music scholars who use the modified voice-leading analytic methodology to analyse the same song –similar to what I did in Chapter 3. In this way, we could discover whether a given standardized approach has the potential to produce standardized results.

It is my hope that this thesis contributes to a better understanding of the analytical systems frequently used by theorists and musicologists to study music in general. Over the years, these systems become part of convention and analysts use them without

reflecting on their appropriateness for the task at hand. As was the case of pop/rock music, the basic tenets of traditional analytical methodologies should be re-examined or re-evaluated for their application to common-practice art music. Do the existing analytical methodologies that prioritize pitch and rhythm do justice to the music that is being studied? Perhaps we should extend our traditional theoretical or musicological interests and examine the non-notational aspects of music such as “vocality” and timbre.

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APPENDIX

CONTENTS

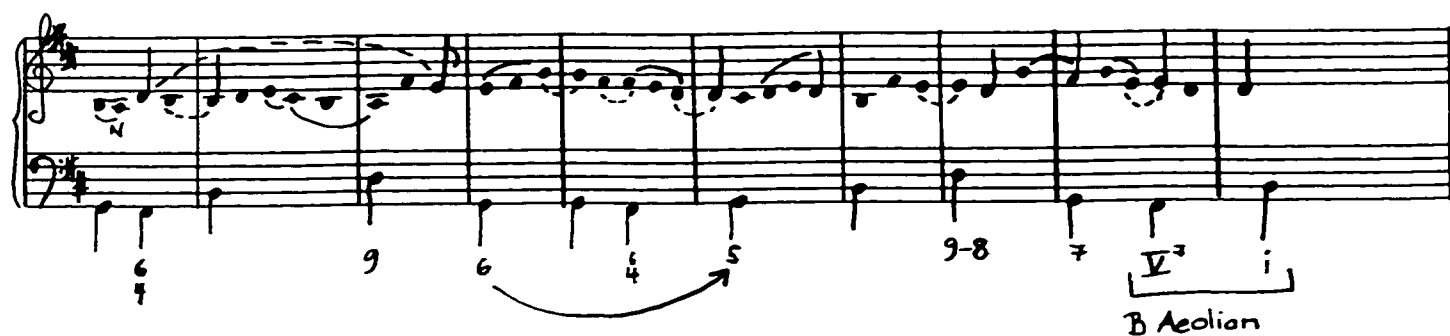
Figure 2-001.....	A2
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Figure 2-001: A reprint of Burns's voice-leading graph of the verse (mm. 9-24), as presented in her forthcoming paper entitled "Text-Music Relations in Sarah McLachlan's 'Possession'"

The image shows a handwritten musical score for Sarah McLachlan's 'Possession' (mm. 9-24). The score is written on two systems of grand staves (treble and bass clef). The first system contains measures 9 through 13, with measure numbers circled above the staves. The second system contains measures 17 through 21, with measure 17 circled above the staff. The music features various chords and melodic lines. Annotations include 'ostinato' under the first system, '4-3' and '7' under the second system, and 'N' and 'P' under the third system. The score is handwritten and includes various musical notations such as notes, rests, and accidentals.

(Burns forthcoming e, example 004)

Figure 2-003: A reprint of Burns's voice-leading graph of the refrain (mm. 25-34), as presented in her forthcoming paper entitled "Text-Music Relations in Sarah McLachlan's 'Possession'"



(Burns forthcoming e, example 004)

Figure 2-005: A reprint of Koozin's Schenkerian graph of the McLachlan's "Ben's Song"

Vocalise
 "On the hills of fire..."
 "Who will bring a light..."
 "...still breathing."

Vocalise (2nd time only)

Verse
 "On the hills of fire..."
 "Who will bring a light..."
 "...still breathing."

Chorus
 "On a windless day..."

Ending
 1 2

Figure 2-005: A reprint of Koozin's Schenkerian graph of the McLachlan's "Ben's Song"

The figure displays a Schenkerian graph for the song "Ben's Song" by McLachlan, as reprinted by Koozin. The graph is organized into three main sections: Vocalise, Verse, and Chorus, each with its own Schenkerian notation and chord symbols.

Vocalise Section:

- First Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are C, G, D, C, G, A. The bass line is marked with a 'V' and a '1'.
- Second Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are V, 1, and V.

Verse Section:

- First Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are V, 1, and V.
- Second Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are V, 1, and V.

Chorus Section:

- First Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are C#m, F#m, D, A/C#, D, A/C#, F#m, C#m7/B, F#m, F#m9, C#m, and F#m9.
- Second Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are C#m, F#m, D, A/C#, D, A/C#, F#m, C#m7/B, F#m, F#m9, C#m, and F#m9.

Ending Section:

- First Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are C#m, F#m, D, A/C#, D, A/C#, F#m, C#m7/B, F#m, F#m9, C#m, and F#m9.
- Second Time:** The vocal line is shown with a Schenkerian graph. The chord symbols are C#m, F#m, D, A/C#, D, A/C#, F#m, C#m7/B, F#m, F#m9, C#m, and F#m9.

Figure 2-006 (continued)

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Figure 3-001a: A reprint of Moore's reductive analysis of the Beatles song "She's Leaving Home"

(Moore 1997, 38)

Figure 3-001b: A reprint of Everett's reductive analysis of the Beatles song "She's Leaving Home"

(Everett 1987, 10)

Figure 3-003: A reductive analysis of Madonna's "Frozen" based on Everett's methodology

a) foreground sketch

Intro. (M. 1-16)

Verse ① (M. 17-32)

Chorus ① (M. 33-52)

Bridge (M. 53-60)

Verse ② (M. 25-32)

Chorus ② (M. 33-48)

Coda (M. 61-76)

f

Aedion

III⁷

IV

V

VII

b) middleground sketch

Intro Verse Chorus Bridge Verse Chorus Coda

The sketch is written on a grand staff (treble and bass clefs). It includes various musical notations such as notes, rests, and dynamic markings. The structure is labeled with sections: Intro, Verse, Chorus, Bridge, Verse, Chorus, and Coda. There are also handwritten annotations like 'f' (forte), 'Ad lib', and 'Ad lib' (Ad libitum). The sketch is a preliminary draft, showing the overall form and some melodic ideas.

Figure 3-004: The common tones shared between the III^7 and the V^7 chords.

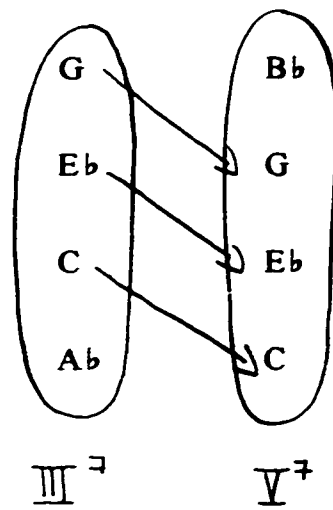
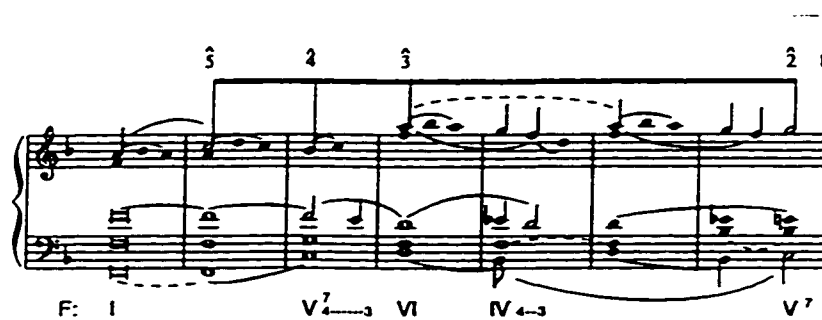


Figure 3-005: A reprint of Everett's Schenkerian graph of Don Henley's "The Last Worthless Evening"



(Everett forthcoming, example 15)

Figure 3-007: An alternative graphical analysis of "Frozen" based on Burns' methodology

a) The verse

The Normative Progression **The Voice-leading Graph** **The Reduction**

f Aeolian *i* VI *bVII* *i*

b) The refrain

The Normative Progression **The Voice-leading Graph** **The Reduction**

i VI III *bII* III IV III *bVII* III *i*

c) The bridge

The Normative Progression **The Voice-Leading Graph** **The Reduction**

The bridge section is analyzed across three staves. The first staff, 'The Normative Progression', shows a sequence of chords with a 'Phase 1' bracket. The second staff, 'The Voice-Leading Graph', shows the voice leading between these chords, with a 'Phase 1' bracket and a 'Phase 2' bracket. The third staff, 'The Reduction', shows the simplified harmonic structure. Roman numerals (I, II, III, IV, V, VI, VII, VIII) are used to denote the chords.

d) The coda

The Normative Progression **The Voice-Leading Graph** **The Reduction**

The coda section is analyzed across three staves. The first staff, 'The Normative Progression', shows a sequence of chords with a 'Phase 1' bracket. The second staff, 'The Voice-Leading Graph', shows the voice leading between these chords, with a 'Phase 1' bracket and a 'Phase 2' bracket. The third staff, 'The Reduction', shows the simplified harmonic structure. Roman numerals (I, II, III, IV, V, VI, VII, VIII) are used to denote the chords.

Figure 4-001: The lyrics of “Foolish Games” by Jewel Kilcher

Verse 1

You took your coat off and stood in the rain,
You're always crazy like that.
And I watched from my window,
Always felt I was outside looking in on you.

Verse 2

You're always the mysterious one with dark eyes and careless hair,
You were fashionably sensitive but too cool to care.
You stood in my doorway with nothing to say
Besides some comment on the weather.

Pre-chorus 1

In case you failed to notice, in case you failed to see,
This is my heart bleeding before you, this is me down on my knees.

Chorus 1

These foolish games are tearing me apart,
And your thoughtless words are breaking my heart.
You're breaking my heart.

Verse 3

You're always brilliant in the morning, smoking your cigarettes and talking over coffee,
Your philosophies on art, Baroque moved you.
You loved Mozart and you'd speak of your loved ones
As I clumsily strummed my guitar.

Verse 4

You'd teach me of honest things, things that were daring, things that were clean.
Things that knew what an honest dollar did mean.
I hid my soiled hands behind my back.
Somewhere along the line, I must have gone off track with you.

Pre-chorus 2

Excuse me, think I've mistaken you for somebody else,
Somebody who gave a damn, somebody more like myself.

Chorus

These foolish games are tearing me apart,
And your thoughtless words are breaking my heart.
You're breaking my heart.

You took your coat off, stood in the rain,
You're always crazy like that.

(Jewel 1997, 18-20)

