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A STRUCTURAL APPROACH TO THE ANALYSIS OF ROCK MUSIC

by

DREW F. NOBILE

A dissertation submitted to the Graduate Faculty in Music in partial
fulfillment of the requirements for the degree of Doctor of Philosophy,
The City University of New York

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This manuscript has been read and accepted for the Graduate Faculty in
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Doctor of Philosophy

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ABSTRACT

A STRUCTURAL APPROACH TO THE ANALYSIS OF ROCK MUSIC

by

DREW F. NOBILE

Advisor: Professor Mark Spicer

This dissertation situates itself in the middle of an ongoing debate about the applicability of Schenkerian analytical techniques to the analysis of pop and rock music. In particular, it investigates ways in which the standard conceptions of voice leading, harmonic function, and counterpoint may be updated to better apply to this new repertoire. A central claim is that voice-leading structure is intimately related to formal structure such that the two domains are mutually informing.

Part I of the dissertation focuses on harmonic and melodic theory. Chapter 2, “Harmonic Syntax,” advocates for a conception of harmonic function based on syntax and form rather than the identity of specific chords. In this conception, chords other than V, such as IV, II, \flat VII, or even some versions of I, can often be said to function syntactically as the dominant. Chapter 3, “The Melodic-Harmonic Divorce,” explores contrapuntal paradigms in which the domains of melody and harmony seem to be operating independently. This chapter outlines three types of melodic-harmonic divorce: “hierarchy divorce,” “rotation divorce,” and “syntax divorce.” Part II of the dissertation aims to devise voice-leading models for full song forms. Chapter 4 focuses on AABA form, Chapter 5 on verse–prechorus–chorus, and

Chapter 6 on verse–chorus forms. These chapters demonstrate that these common forms are associated with general voice-leading structures that act in dialog with the specific voice-leading structures of songs that exhibit these forms. This part of the dissertation is largely analytical, and has the secondary goal of demonstrating a Schenkerian analytical methodology applied to rock music.

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The roots of this dissertation go back to a seminar paper written for Mark Spicer's Beatles class in my first year as a doctoral student at CUNY. At the time, I was expecting to write my dissertation on mathematical models for post-tonal music, but the subject of form and voice leading in rock music captivated me and, with Mark's encouragement, I embarked on the project that culminated in this dissertation.

Foremost thanks go to Mark, whose constant encouragement from that early seminar through the last stages of dissertation work was vitally important to my ability to finish in a timely fashion without losing my mind. My first reader William Rothstein's meticulous and insightful comments helped me refine my theories, and his keen analytical ear constantly opened my eyes to new aspects of the songs analyzed in these pages. With the addition of Poundie Burstein and Christopher Doll to round out the committee, I cannot imagine a better team of scholars to oversee a dissertation on Schenkerian approaches to pop and rock music, and I am immensely grateful to all four of them for their guidance and inspiration.

A supportive scholarly community is vital to anyone completing a dissertation, and the community of faculty and students at the CUNY Graduate Center is unrivaled in this regard. In particular, I would like to thank Joseph Straus for his mentorship in all aspects of my professional life, as well as my classmates Drew Wilson, Zack Bernstein, and Loretta Terrigno,

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CHAPTER 1

INTRODUCTION

MUSIC THEORISTS FINALLY AGREE that pop and rock music is worth studying. This is in evidence through the myriad contributions to the theoretical literature on this topic throughout the past decade and a half: from edited collections such as Covach and Boone 1997, Everett 2008b, Spicer and Covach 2010, and a special issue of *Music Theory Online* (17/3, 2011), to theoretical monographs such as Everett 1999 and 2001, Stephenson 2002, Moore 2012, and Doll (forthcoming), to numerous individual articles, it is clear that the study of this previously marginalized repertoire has finally entered the mainstream.¹ Despite this surge in popularity, though, a consistent methodology for the analysis of pop and rock music has yet to emerge. In particular, scholars disagree on the applicability of traditional analytical techniques to this new repertoire. (By “traditional analytical techniques” I mean techniques originally devised to study common-practice tonal music, and by “common-practice tonal music” I mean European art music composed between about 1720 and 1885, the so-called “Bach to Brahms” canon.) Especially contentious is the application of Schenkerian analysis to rock songs. While Schenkerian approaches to pop and rock music are common (see Kaminsky 1992, Brown 1997, O’Donnell 2005, Burns 2008, Koozin 2008, and numerous

¹On the marginalization, see Covach 1998.

publications by Walter Everett and Naphtali Wagner), so are criticisms of this methodology (see Middleton 1990, Moore 1995 and 2001, and Stephenson 2002).² These criticisms often argue that because rock music is fundamentally different from common-practice music, we cannot and should not analyze the two repertoires in the same way. Yet few authors have attempted to explain exactly *how* rock and common-practice tonality differ. Moore 1995 suggests that one fundamental difference is rock’s use of the “so-called ‘flattened seventh’” (i.e., $b\hat{7}$ or $bVII$), which Moore argues is normative and therefore should not be viewed as aberrant in this repertoire. Stephenson 2002 suggests that rock and common-practice tonality differ because their harmonic successions proceed in opposite directions, with rock preferring root motion by descending fourths and seconds as opposed to the common-practice norms of ascending fourths and seconds. Whether or not these claims are true—and I would argue that they are much less true than these authors imply—these differences are relatively minor; that we can even use the terms “flattened seventh” or “root motion” in both contexts shows that the two repertoires share some fundamental principles. But I do not wish to assert that rock and common-practice music are essentially the same; that claim is easily discredited. Rather, I would state that they share sufficient structural principles that we should not throw out common-practice analytical techniques such as Schenkerian analysis but instead should modify and update our methodology to apply to this new repertoire.

This is exactly what I aim to do with this dissertation. Specifically, I wish to investigate ways in which traditional Schenkerian analytical techniques can be updated to better reflect

²Though it does not deal with pop and rock music, Allen Forte’s 1995 book *The American Popular Ballad of the Golden Era, 1924–1950* is an important study in the application of Schenkerian analysis to popular music.

the stylistic tendencies of pop and rock music. Rather than modifying conventions on an ad hoc basis, as is common, I will attempt to specify exactly how the current methodology differs from traditional analysis, focusing on harmonic function (Chapter 2) and contrapuntal relationships between melody and harmony (Chapter 3).

Any theorist wishing to apply Schenkerian analytical techniques to the pop and rock repertoire must situate his or her work in relation to the theories of Walter Everett. Everett's Schenkerian approach to rock music goes back at least to 1985, and is particularly evident throughout his two-volume monograph on the music of the Beatles (Everett 1999 and 2001a). Compared to others who take this approach, including myself with this dissertation, Everett is relatively traditional, especially in his assertion that I–V–I remains the fundamental harmonic structure of rock music. Everett writes,

If a song seems to be based on a I–IV–I relationship, and V does not appear at all, this does not mean that I–IV–I substitutes for I–V–I, nor does it suggest a different underlying system. My hearing of such a structure would classify it as [a] prolongation of tonic within an incomplete I–V–I articulation of the tonal system, and therefore more static and less dynamic than a full hearing of the usual bass arpeggiation. If V does not appear, it may lie dormant, or be referred to by implication (in which case it would make sense to use V in a graph to suggest such a relationship between system and surface), or it may be irrelevant (in which case any reference to V in a graph would have to clearly show it is part of an unarticulated norm). (Everett 2008a, 139)

As will become evident in Chapter 2, I do not share Everett's belief that I–V–I underlies every rock song (even in absentia), though it is the most common tonal axis in this repertoire. I am often inclined to hear songs based on I–IV–I to be just as complete and dynamic as those built on I–V–I, and I find Everett's reliance on that single axis overly restrictive. Most other aspects of Everett's general approach, though, are fundamentally in line with my own. I

wholeheartedly agree with Everett’s claim that “pitch relationships are of central importance” in pop and rock music (2008a, 111) despite some theorists’ argument that a focus on timbre and instrumentation, for example, is more appropriate (e.g., Zak 2001 and Blake 2012). I would, however, place form on equal footing with pitch (which Everett does not).

I also share Everett’s focus on the foreground and middleground levels and their relationships to the musical surface rather than reductions to the background level. With a few exceptions (e.g., the analysis of the *Abbey Road* medley in Everett 1999, 264–65), Everett rarely pursues voice-leading reductions to deep levels. The graphs in this dissertation will likewise show foreground and shallow middleground voice leading, only rarely positing deeper structures. Schenker’s well-known theory that pieces are derived from a small set of background structures applies to the music of a specific set of “genius” composers writing within the Austro-German tradition in a specific era (see, for example, Schenker 2004 [1921–23], 21–24). A common misinterpretation of Schenkerian theory is that every piece of music has a background structure just by virtue of being a piece of music, even though Schenker is quite clear about his belief that most composers—even most German composers—do not have possession of the background. I will avoid talk of background structures in pop and rock songs in this dissertation. However, many theorists including Everett have demonstrated the usefulness of investigating foreground and middleground prolongations in pop and rock music.³ These prolongations often follow the same principles as those in the common-practice tonal music described by Schenker, but there are some significant differences that must not

³Such techniques have been adequately defended in the literature, both explicitly (Covach 1997, Burns 2008) and implicitly (through their implementation in successful analyses), and so I do not find it necessary to provide such a defense here.

be overlooked. This dissertation, especially Part I, will attempt to codify these differences in a systematic way.

THE STRUCTURE OF THE DISSERTATION

This dissertation is organized into two parts: the first, comprising Chapters 2 and 3, investigates ways in which we must update traditional analytical methodologies to apply to pop and rock music, and the second, comprising Chapters 4–6, investigates the interaction of large-scale voice leading and full-song formal structures. The two chapters in Part I divide into harmonic theory (Chapter 2) and melodic theory (Chapter 3). The former, entitled “Harmonic Syntax,” expands our notion of harmonic function to be based on aspects of syntax and form rather than the identity of specific chords. Though traditional notions of harmonic function often assign, for example, dominant function to a V chord because it contains the leading tone and is built on $\hat{5}$, this chapter argues that this notion of function is inappropriate for pop and rock music, in which chords such as IV, II, \flat VII, or even some versions of I can be said to function, syntactically, as dominants in specific musical contexts. Pop and rock music also displays a looser relationship between melody and harmony, as described in Chapter 3, “The Melodic-Harmonic Divorce.” This chapter investigates how we might interpret the relationship between melodic and harmonic structure when they do not seem to be acting in strict counterpoint. This chapter delineates three common types of melodic-harmonic divorce, which I will call a “hierarchy divorce,” a “rotation divorce,” and a “syntax divorce.”

Part II of the dissertation investigates the voice-leading structures of the three most common full-song forms, AABA (Chapter 4), verse–prechorus–chorus (Chapter 5), and verse–chorus (Chapter 6). This part argues that these forms are associated with specific melodic and harmonic outlines such that the formal and voice-leading structures act in reference to one another. In these chapters, I develop a general voice-leading model for each of these forms; while not all songs that project these forms fit their respective models, I argue that the majority act in *dialog* with these models.⁴ A consideration of form in terms of its relationship to voice leading reveals several interesting features, not least the realization that verse–prechorus–chorus and verse–chorus (with no prechorus) forms are fundamentally different. Part 2 is largely analytical, containing several close readings of individual songs. As such, it serves a secondary purpose of advocating for deep analyses, even of mainstream three-and-a-half-minute pop songs. While some theorists engage in such close readings, many seem wary of applying this level of analysis to the pop and rock repertoire, perhaps out of an implicit belief that this music does not display the level of complexity nor the unity of structure of, say, a Beethoven sonata or a Schubert *lied*. As John Covach points out, sometimes it is those who staunchly defend the practice of rock analysis who end up perpetuating the notion of rock music’s inferiority to common-practice tonal music; speaking about Susan McClary’s analysis of an Earth, Wind, & Fire song (McClary 1989), Covach writes:

What is troubling about McClary’s reading of Earth, Wind, & Fire is that she seems to have accepted uncritically the notion that popular music is uncomplicated in the traditional sense. . . . In fact, McClary seems to be saying to . . . avant-garde critics of popular music: “OK, you’re right, this stuff isn’t very interesting structurally, so here are some ways in which it *is* interesting.” (Covach 1997, 80)

⁴See Hepokoski and Darcy 2006 and Hepokoski 2009 for more on “dialogic” form.

By stating that traditional analytical techniques are inappropriate for pop and rock music, McClary and others imply that these analytical techniques *cannot* apply to pop and rock music. In the decade and a half since Covach wrote these words, the study of pop and rock music has gone from a fringe subject within the discipline of music theory to a burgeoning subfield, but the notion that this repertoire lacks the depth of the Classical masterworks stubbornly persists. It is my hope that the analyses in Part II will help put this notion to rest.

ON POP, POP/ROCK, POP-ROCK, POP AND ROCK, AND ROCK MUSIC

Whether there is a quantifiable difference between music that is best described as “pop” and that best described as “rock” is the subject of an ongoing debate. Mark Spicer traces the origins of the two terms to a shortening of “popular music” to “pop music” in the late 1950s, the latter of which was synonymous with “rock and roll” (Spicer 2011b, xii–xiv). Allan Moore claims that “rock and roll” became “rock” in the late 1960s specifically to differentiate it from “pop” (Moore 2001, 3; see also Clarke 1989, 996), with rock referring to music that is deemed *authentic*—containing “integrity, sincerity, [and] honesty” (Moore 2001, 199)—and pop referring to music whose main goal is to achieve widespread *commercial* success. The authentic/commercial differentiation is important in a sociological sense, as it has profound implications for reception, but it does not have much to say about musical style. That is, the songs produced both by authentic rockers and commercially-minded pop stars are,

stylistically, not that different.⁵ For the purposes of this dissertation, then, I will generally not differentiate between pop music and rock music, treating both as equally valid subjects for analysis. I will not even treat them as separable repertoires; for this purpose, music scholars have taken to using various catchall terms for music that can be described either as pop or rock or as an amalgamation of the two, including the too-broad “popular music” as well as “pop/rock,” “pop-rock,” or simply “pop and rock.” I prefer the last of these, namely pop and rock, but I will frequently abbreviate this simply to “rock music” (as in the title of the dissertation) with the understanding that this is broadly construed to include music best categorized as pop.

The repertoire that makes up the focus of this dissertation is the subset of pop and rock music that can be considered the classic rock canon, as far as one can be defined. This repertoire can be loosely described as English-language pop and rock music that enjoyed widespread success in the United States and/or England beginning with the Beatles’ first commercial recordings in 1963 and extending to the rise of grunge music in the early 1990s. I stop in the early 90s for several reasons: first, the advent of grunge and the subsequent rise of alternative rock created such an extreme style shift, especially in harmonic and melodic structures, that many theories devised for pre-1990 rock would falter under this new paradigm; second, as John Covach notes, it takes at least twenty years for scholars to gain a reliable historical perspective on an era, and so it is likely the case that the 1990s are simply too recent (Covach 2009, 523); and third, the early 1990s was when I personally

⁵Beginning in the late 1970s, the term pop began being associated with keyboard and synthesizer-based songs while rock referred to songs that primarily used guitars. Yet instrumentation alone is hardly a satisfactory criterion for categorization; do we really want to say that Billy Joel is a pop artist while Bon Jovi is a true rocker?

began independently listening to contemporary popular music, and so focusing on earlier rock music avoids the possibility that personal associations will cloud my objectivity.⁶ That said, I will occasionally extend these repertoire boundaries on both ends, most notably into the 90s and 2000s in the discussion of chord rotations in Chapter 3, with the understanding that the songs chosen from outside this core repertoire should be understood to follow the same conventions as those within it. As a measure of “widespread success,” I will use a combination of chart performance (as measured by the *Billboard* Hot 100 and R& B charts), discussions in textbooks on the history of rock music (most notably Covach 2009), and inclusion in writings by music scholars or journalists (based informally on my own impressions). On the whole, I try to choose musical examples that few would hesitate to include in a list of canonical rock songs. For example, I consider any song recorded by the Beatles, including those that were never released as singles and therefore not individually named in the *Billboard* charts, to fit this bill, as well as songs from top-selling albums such as Fleetwood Mac’s *Rumours* (1977) or Michael Jackson’s *Thriller* (1983).⁷

TRANSCRIPTIONS AND GRAPHS

Any discussion of a particular song in this dissertation will be accompanied by a transcription of the relevant section. All transcriptions are my own from the original recordings;

⁶For exemplary work on the analysis of post-1990 rock music, see Osborn 2010, 2011, and 2013.

⁷While the repertoire just described is vast, there are several genres of popular music that are excluded from the current discussion, most notably country and western music, hip-hop, most forms of electronic dance music, and all types of jazz. Examples of music-theoretical studies on country music include Neal 2007 and 2008; on hip-hop, Krims 2003 and Adams 2008 and 2009; and on electronic dance music, Butler 2006. There is a large number of theoretical work on jazz—too large to list here—but I will point interested readers to Larson 2009, which analyzes jazz music through a Schenkerian lens.

♩ = 136

8 E A E G A B E

Last night I said these words to my girl: "I know you ne-ver e-ven

7 A E A (come on) F#m (come on) C#m (come on)

try, girl." Come on, come on, come on, come

12 A (come on) E A B7 E A B7

on, please please me, whoa yeah, like I please you.

Example 1.1: Transcription of the first verse of the Beatles' "Please Please Me" (1963).

published scores were not consulted in the preparation of these transcriptions. Most transcriptions are in lead-sheet format, i.e., with the main vocal line(s) on a single staff and chord symbols above. If there are multiple vocal lines, the primary line will be written in full-sized noteheads with subsidiary lines in small noteheads. A sample transcription is shown in Example 1.1, which gives the first verse of the Beatles' "Please Please Me" (1963). These transcriptions are intended to be as free of analytical interpretation as possible. This is sometimes difficult because, since the primary texts are recordings rather than scores, issues such as choosing a meter and key signature and assigning barlines become the responsibility of the transcriber. In these issues I aim for consistency; meter signatures and barlines are assigned based on the drumbeat, which as a general rule hits beats 2 and 4 in $\frac{4}{4}$ time (see Moore 2001, 41–44, and deClercq 2012, 35–38). In the few songs that do not contain a drumbeat, there is usually some other percussive sound (e.g., finger snaps or an acoustic guitar strumming muted strings) that articulates the backbeat. All songs transcribed in this

dissertation articulate a $\frac{4}{4}$ meter, though some include individual measures in other meters. Vocal lines sung by post-pubescent males will use an “octave dropped” treble clef (indicated with the numeral “8” below the clef, as in Example 1.1) while vocal lines sung by females will use the standard treble clef.

Choosing a key signature is perhaps a more nuanced decision than choosing a meter. The case can be made that rock music does not limit itself to just major and minor keys, and many theorists have argued for a modal interpretation of many rock songs.⁸ While pitch collections used in certain rock songs are often derived from modal diatonic collections, I still believe that rock songs are fundamentally either in major or minor, with the vast majority in major. The key signatures used in the transcriptions herein will therefore reflect the standard major and minor key signatures; in other words, a song whose tonic is E will have either four sharps (for E major) or one sharp (for E minor). It is sometimes difficult to discern major from minor; blues-based songs, for example, generally mix minor-pentatonic melodies with chords containing the major third above the tonic note (see, for example, Example 2.29, page 73). In these cases, I have chosen to follow the harmony; if the tonic chord contains the major third I consider the song to be fundamentally major, even if $b\hat{3}$ is the more prevalent melodic pitch.⁹ In especially ambiguous cases (of which there are few), the default mode will be taken to be major.¹⁰

⁸In particular, theorists note the prevalence of $b\hat{7}$ and $bVII$ in an ostensibly major-mode song, thus suggesting a Mixolydian modality. See especially Moore 1995 and Biamonte 2010. Christopher Doll uses modal key signatures in his dissertation (2007); thus, for example, his transcription of Radiohead’s “Lucky,” which uses an E-minor chord as its tonic, has two sharps (Example 1.1, p. 9) reflecting the preference for $C\sharp$ s rather than $C\flat$ s in the melody and the fact that all chords built on A are major.

⁹Scale-degrees will be inflected with accidentals based on this modality; thus, in a song in E major, $\hat{3}$ denotes $G\sharp$ and $b\hat{3}$ denotes $G\flat$.

¹⁰Christopher Doll discusses various issues with the definition of “chord” in rock music in Doll 2013.

Chord symbols on the transcriptions signify the chords played by the instruments that make up the accompaniment (usually guitars and/or keyboard instruments), including the bass. In situations where the melody articulates a note that is not part of the band's chords, this note is *not* reflected in the chord symbol (such situations will be discussed in Chapter 3). The symbols used are based on the standard lead-sheet symbols; for example, "D" represents a D-major triad, "Gm/D" represents a G-minor triad with a D bass note, and "A5" represents a power chord on A (i.e., a chord that consists of root and perfect fifth only). Some less commonly used symbols include "sus4" and "sus2," signifying root/perfect fourth/perfect fifth and root/major second/perfect fifth respectively, and "add9," representing a major or minor triad with an added ninth. In situations where the accompaniment contains a complicated texture inadequately described by chord symbols alone, a reduction of the instrumental parts is added to the transcription (see, for example, Example 2.16, page 58).

Roman numerals, as opposed to chord symbols, *are* interpretive, reflecting an analysis of the *Stufe* projected by a specific chord.¹¹ In most cases, the analysis presented through a Roman-numeral label is trivial; for example, labeling the E chord at the beginning of Example 1.1 as a I chord does not require much interpretive thought. Yet this Roman numeral carries more meaning than simply labeling it "E"; calling it I states that we perceive the root of this chord to be the tonic note within an E-major tonality. The analytical element of Roman numerals comes to the fore when we call a given chord $IV^{\text{add}6}$ as opposed to II_5^6 ; though these two chords contain the same notes, the interpretation is different. In this dissertation,

¹¹ *Stufe* is often translated as "scale-step" and refers to the diatonic scale degree that is perceived as the root of a harmony or series of harmonies.

I will use only capital Roman numerals, which will represent diatonic chords (based on the major or minor key in question) unless otherwise indicated. Thus, the G chord in measure 4 of Example 1.1 is labeled $\flat\text{III}$ and the $\text{C}\sharp\text{m}$ chord in measure 11 is labeled VI. Inversions and other alterations will be indicated with standard figured-bass symbols; thus, for example, the chord A/B (i.e., an A-major triad with a B bass note) in the key of E major will be labeled $\text{V}\frac{9}{4}$.¹²

Most of my analyses will be accompanied by a voice-leading graph. Graphing procedures specific to the analysis of pop and rock music will be discussed in Chapters 2 and 3; otherwise, the graphs in this dissertation will generally follow the conventions of Schenkerian analysis as currently practiced in North America. There are two issues that I would like to discuss here, though: parallel fifths and octaves and pentatonic progressions. Schenker occasionally allows middleground parallel fifths and octaves so long as they are obscured on the musical surface, but these traditionally forbidden contrapuntal motions pose no problem at any level in pop and rock music and are actually quite common at all levels. As Example 1.2 shows, the verse of Otis Redding’s “(Sittin’ On) The Dock of the Bay” is based entirely on parallel octaves between bass and melody (the example shows just the first phrase, but the parallel octaves continue for most of the song). Graphs in this dissertation will frequently contain parallel fifths and octaves, and I will present these without comment with the understanding that these are entirely acceptable contrapuntal motions. Pentatonic progressions are like linear progressions but through a pentatonic rather than a diatonic scale. Given the prevalence

¹²This chord is what Mark Spicer calls the “soul dominant” and is interpreted as an altered V chord, as indicated by the numeral V (Spicer 2009). I use the figures $\frac{9}{4}$ rather than $\frac{11}{7}$ to emphasize the fact that the chordal fourth substitutes for the third rather than being an upper extension.

a) First phrase of verse

Musical notation for the first phrase of the verse of "Sittin' On The Dock of the Bay". The tempo is 100. The key signature is one sharp (F#). The time signature is 4/4. The melody is in G major. The lyrics are: "Sit-tin' in the mor-ning sun; I'll be sit-tin' when the eve-ning comes." The notation includes a treble clef, a key signature of one sharp, and a tempo marking of 100. The melody is written on a single staff with a treble clef. The lyrics are written below the staff. The notation includes a treble clef, a key signature of one sharp, and a tempo marking of 100. The melody is written on a single staff with a treble clef. The lyrics are written below the staff.

b) Reduction of outer-voice counterpoint

Musical notation showing the reduction of outer-voice counterpoint. It consists of two staves, treble and bass, with a grand staff bracket. The treble staff has a key signature of one sharp and a 4/4 time signature. The bass staff has a key signature of one sharp. The notation shows four measures of music with notes in the outer voices of the treble and bass staves. The notes are: Measure 1: G4 (treble), G2 (bass); Measure 2: A4 (treble), A2 (bass); Measure 3: B4 (treble), B2 (bass); Measure 4: C4 (treble), C2 (bass).

Example 1.2: Otis Redding, “(Sittin’ On) The Dock of the Bay” (1968): parallel octaves underlie the outer-voice counterpoint in the verse.

of pentatonic scales in pop and rock music, especially in melodies, one can often hear the minor thirds within these scales as steps rather than skips. Pentatonic progressions are most common when the melodic interval of a perfect fourth is filled in with a single passing tone, such as $\hat{5}-\hat{6}-\hat{8}$ or $\hat{5}-\flat\hat{7}-\hat{8}$. Example 1.3 gives an example of the former progression from the chorus of the Jackson 5’s 1970 hit “ABC” (discussed in detail in Chapter 6). This chorus begins with the melodic motive $E\flat-F-A\flat$, which outlines the consonant harmonic interval from $\hat{5}$ to $\hat{8}$. The F can here be considered a pentatonic passing tone, as shown in Example 1.3b.¹³

¹³See also Heinzelmann 2008, 28–29 and 273, for a discussion of pentatonic progressions in Ravel.

a) Beginning of chorus

♩ = 90

Ab Bbm7 Ab/C

Ab Bbm7 Ab/C

A, B, C. Ea - sy as one, two, three.

b) Graph of upper voice showing pentatonic passing tones

PT (pent.)

PT (pent.)

Example 1.3: The Jackson 5, “ABC” (1970): pentatonic passing tones in the chorus.

FORM: TERMINOLOGY

Although this dissertation, especially Part II, discusses formal structure in great detail, it is not intended to provide definitions of basic formal terms, as this has been adequately achieved elsewhere (e.g., Covach 2005, Everett 2009, Summach 2012, and deClercq 2012). I will simply provide an overview of the terminology used in this dissertation here; readers are invited to consult the sources listed above for more thorough definitions.

Formal units will be described at three distinct levels: phrase, section, and section cycle. The phrase level contains the smallest self-contained melodic groupings, which are commonly four bars long. (My definition of phrase follows William Caplin’s [1998, 2004] and is not based on any tonal features, such as the common requirement that a phrase terminate with a cadence. This definition of phrase will be discussed in Chapter 2.) Phrases combine into *sections*, examples of which include verses, choruses, prechoruses, and bridges;

sections in turn group into *section cycles*, or simply *cycles*.¹⁴ Cycles denote an ordered succession of the main sections of a song; thus verse, prechorus, and chorus combine to form a verse–prechorus–chorus cycle, and verses (A sections) and bridges (B sections) combine to form an AABA cycle. Section cycles denote the core form of a song, but it is rarely the case that an entire song consists of just one single cycle; a song’s literal succession of sections might be intro–verse–verse–prechorus–chorus–verse–prechorus–chorus–guitar solo–chorus–coda, but since the succession verse–prechorus–chorus contains the core sections of the song, it will be considered the basic cycle of the song. Introductions, codas, outros, interludes, and similar sections are considered to be auxiliary and generally do not participate in a section cycle; see Summach 2012, Chapter 3, and deClercq 2012, §3.6.

The terms “verse,” “chorus,” and “prechorus,” among others, signify specific *roles* that certain sections play within a given song’s form (see deClercq 2012, Chapter 3). These roles are analogous to Caplin’s *formal functions*, in that they primarily designate a section’s relationship to the form as a whole rather than the internal organization of that section (Caplin 1998 and 2009).¹⁵ Labels such as **srdc** or **aaba** signify the arrangement of phrases that make up these sections. I will use lowercase and bold letters to denote phrases within a section, reserving capital letters to denote sections within a cycle (e.g., AABA). Thus, “**srdc**” refers to a section consisting of four phrases, beginning with a **s**tatement of a melodic motive, followed by a **r**estatement or **r**esponse, **d**eparture, and **c**onclusion (see Chapter 4 as well as Everett 1999, 16, and 2009, 140–41). Each of these letters denotes the role a particular *phrase*

¹⁴The term “cycle” is taken from Summach 2012.

¹⁵There are, of course, internal characteristics that make verses sound like verses and choruses sound like choruses; deClercq 2012, 114–16 provides a summary of these.

plays in the context of the entire section, while the full notation of **srdc** denotes the *formal type* of this section as a whole (see Caplin 2009).¹⁶

WHY SCHENKERIAN ANALYSIS?

This question should, by all rights, be adequately answered in the analyses and theories in the following pages. Yet the aforementioned disagreement as to appropriate methodologies for pop and rock music warrants a brief visit to this question here. The question is not whether Schenkerian analysis is superior to other methodologies (it isn't) but whether it can reveal the same sorts of relationships in this repertoire as it can in common-practice tonality. I believe that it can. I further believe that these relationships are just as fundamental to rock music's identity as they are to the music of Haydn, Beethoven, and Schubert. A frequent criticism against rock analysis is that it fails to take into account socio-cultural aspects, and that these socio-cultural aspects are so vital to the pop and rock repertoire that any discussion in which they are not at the fore is wholly inappropriate.¹⁷ This argument echoes similar criticisms leveled in the early days of the Society for Music Theory against so-called "formalist" analysis (see especially Kerman 1980), and I believe the activities of the society over the next three and a half decades have sufficiently defended such analytical practices

¹⁶One particularly common label for a phrase's role within a section is "refrain"; a refrain is a single phrase, usually occurring at the end of a verse, that acts as a centralizing motive, often containing the title of the song in the lyrics and leading to a cadence. The term is widely used but definitions have been varied in the past; see deClercq 2012, 57–59. The current definition, quickly becoming standard in the music-theoretical literature, is explained in Everett 2009, 140–47.

¹⁷This view is most explicitly laid out in several essays appearing in Middleton 2000, especially in Middleton's introduction and Philip Tagg's "Analysing Popular Music: Theory, Method, and Practice" (a reprint of Tagg 1982). See also Walter Everett's review of this collection (Everett 2001b).

that I need not address the issue here.¹⁸ Other criticisms, as mentioned above, claim that form and pitch structures are not as important in this repertoire as in common-practice pieces, often arguing that a focus on timbre and instrumentation is more appropriate for rock music.¹⁹ Everett argues for the primacy of pitch relationships in Everett 2008a, to which I would add that while timbre and instrumentation differentiate among various pop and rock styles, form and pitch structures unify them. That is, though rock musicians often seek to create a unique sound through manipulations of timbre (through both instrumentation and studio techniques), rock music—at least the core repertoire analyzed in this study—exhibits certain conventions of pitch and form throughout its various sub-genres. Finally, the fact remains that Schenkerian analysis of rock music will never be as neat as its traditional usage simply because rock music does not exhibit the consistency of style seen in the music of the small set of composers appearing in Schenker’s own analyses. As John Covach points out, “Schenker’s writings are as powerful as they are because he was able to draw out generalizing principles from a body of musical works that he knew were related to one another before he ever began” (1997, 77). Alas, we may never find a structure in rock music as far-reaching as the *Urvlinie* is for Schenker’s repertoire. Yet far from being a reason to throw out Schenkerian methodology in our study of pop and rock music, this instead presents an exciting challenge to rock analysts, one that promises to reveal key features of the rock repertoire and one that I approach with enthusiasm.

¹⁸For specific rejoinders aimed at Kerman’s article, see McCreless 1997 and Agawu 2004.

¹⁹Cf. Moore 2012, 3: “[structural analysis] is not adequate to the discussion of popular song . . . because popular song neither exhibits stylistic complexity (on the basis of which its success can be evaluated) nor necessarily results from carefully considered, artistic creation”; and O’Donnell 2006, 138–39: “it is instrumentation (including timbre and production) and attitude, rather than pitch structures, that create the apparent kinship” among various rock songs.

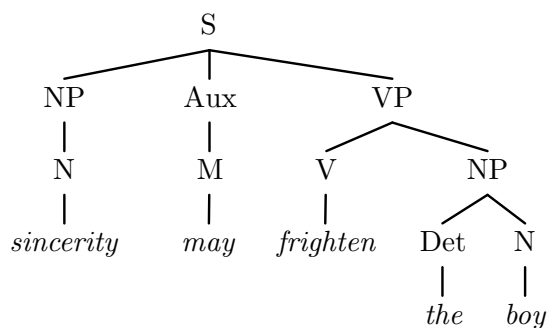
Part I

Harmonic and Melodic Theory

HARMONIC SYNTAX

THE OXFORD ENGLISH DICTIONARY defines “syntax” as “an orderly or systematic arrangement of parts or elements.” In linguistic syntax, these “parts or elements” are words, and the “orderly or systematic arrangement” involves assigning to these words grammatical functions within a sentence (e.g., subject, main verb, etc.; see Chomsky 1957 and 1965). Musical syntax is more complicated, first and foremost because it is not clear what the “parts or elements” that are to be arranged should be. They might be as simple as individual pitches (Boretz 1970) or as abstract as levels of tension and relaxation (Swain 1997). According to Lawrence Zbikowski, the basic elements of musical syntax vary from piece to piece (2002, 52–54 and Chapter 4). However, most discussions of syntax in music center on *harmonic* syntax, which uses as its basic elements individual harmonic structures, or *chords*. Harmonic syntax is therefore the “orderly or systematic arrangement” of these chords into formal units such as a musical phrase.

Two important elements of any theory of syntax are the notions of *hierarchy* and *function*. The presence of a hierarchy allows for relationships to exist among constituents that are not immediately adjacent. Consider Example 2.1, which is Noam Chomsky’s “tree structure” for



Example 2.1: Noam Chomsky’s “tree structure” diagramming a hierarchical arrangement of constituents in the sentence “sincerity may frighten the boy.” (Adapted from Chomsky 1965, 65.)

the sentence “sincerity may frighten the boy” (1965, 65). The hierarchical organization of this sentence is clear from this diagram: the base constituents “the” and “boy” combine to make a noun phrase (NP) that functions as the direct object of the verb “frighten.” The constituent that directly follows “frighten” is not “the” but the whole NP “the boy”; there is no direct relationship between “frighten” and “the” because they are at different levels of the hierarchy. The musical analogy to this hierarchy is grouping chords via *prolongation*. Thus we can say that the progressions I–V–I and I–V₃⁴–I⁶–V_{4–3}^{6–5}–I have equivalent syntactical structures because the first three chords of the latter progression prolong I and the next two prolong V such that at a deeper level in the hierarchy, both progressions are I–V–I. According to Charles Smith, a “prolongation vocabulary” combines with a “progression system” (i.e., a set of well-formed orderings of functions) to compose the essential elements of musical syntax (1981, 171). Though the concept of prolongation is Schenkerian in its roots, it is today employed in all corners of the music-theoretical literature.¹

¹There is a small faction of music theorists who attempt to construct a harmonic syntax without prolongation; see especially Tymoczko 2011. These studies end up devising rules for chord-to-chord successions that are often accompanied by statistics such as “[in rock music,] the most frequent chord to precede the tonic is IV” (de Clerq and Temperley 2011, 61). Though these studies are sometimes informative, especially as to differences among various musical styles, I do not consider them to be discussing syntax given that they

Function is arguably the most important element of syntax. A syntactical function defines a given constituent's role within the overall structure and implicitly defines its relationship to other constituents. For example, the word "sincerity" in the sentence from Example 2.1 functions as the *subject* of the sentence; knowing this, we can figure out this word's relationship to the noun phrase "the boy" or to the verb "frighten." Music theorists who speak of harmonic function, however, are not always using a syntactical definition of the term. Many theorists use a definition that I will call "function as chord identity," in which individual chords are interpreted as tonic, subdominant, or dominant based not on their arrangement within a musical phrase but instead on their own internal structure. Thus, for example, a II chord is said to *have* subdominant function and a V chord is said to *have* dominant function. This definition of function derives from Hugo Riemann's late writings, and I will discuss several theories, including Riemann's, that rely upon this definition in the following section. However, in this chapter I wish to argue for a different definition of harmonic function, one that can truly be said to be syntactical. In this definition, chords gain their function by virtue of their formal position and their relationship to other chords rather than through any internal characteristics of the chords themselves. Thus a given V chord might function as the dominant in a phrase, not because it contains the leading tone but because it resolves to the tonic and forms an authentic cadence. Such a syntactical definition of harmonic function allows for chords besides V to function as the dominant. While chords other than V rarely fulfill the dominant function in common-practice Western tonal music, they very commonly do so in pop and rock music. For example, consider the verse to the Eagles' 1975 hit "Lyn'

generally do not take into account form or larger contexts, nor do they consider relationships between non-adjacent chords.

Verse

♩ = 132

8 Ci - ty girls just seem to find out ear - ly how to o - pen

6 8 doors with just a smile. A rich old man, and she won't have to wor - ry;

12 8 she'll dress up all in lace and go in style.

Example 2.2: The Eagles, “Lyn’ Eyes” (1975): a sixteen-bar parallel period in which V functions as dominant in the antecedent and IV functions as dominant in the consequent.

Eyes,” transcribed in Example 2.2. This sixteen-measure verse follows the formal layout of a parallel period, with two similar eight-measure phrases, the first of which ends with a half cadence and the second of which ends with an authentic cadence. However, the authentic cadence that ends the second phrase is not based on the typical V–I progression but instead uses IV–I. The use of IV rather than V does not make this moment sound any less final, and so it would seem misguided to claim that this is not a true cadence. Furthermore, the argument that IV–I cadences are the norm in rock music and that a V chord would be out of place in this position is invalidated both by the antecedent phrase of this verse, which ends with a half cadence on V, and by this song’s chorus (not shown), which ends with a V–I authentic cadence. In this verse, then, the best interpretation is that the V chord in measures 7–8 functions as the dominant of the first phrase and that the IV chord in measure 14 functions as the dominant in the second phrase; these two chords have the same *syntactical function* despite having no tones in common.

Before detailing a syntactical definition of harmonic function, I will summarize several theories of harmonic function that are *not* syntactical. These theories use the terms “tonic,” “subdominant,” and “dominant” the way linguists use “noun,” “adjective,” and “verb,” namely as descriptions of some aspect of the constituent to which they refer. Following this, I will apply a syntactical definition to the analysis of pop and rock music as well as common-practice tonal music, with the goal of showing that this definition is preferable in all contexts. A final section will reconsider the notions of cadence and closure based on this syntactical definition of function.

FUNCTION AS CHORD IDENTITY: THE RIEMANNIAN TRADITION

Any theory of harmonic function in tonal music can ultimately trace its roots back to Riemannian *Funktionstheorie*, which in turn traces back to the theories of Jean-Phillipe Rameau.² Riemann’s theory of harmonic function was not fixed throughout his career; Daniel Harrison has extracted two different strains in this theory, the first considering function to be “an abstract category to which various chords belong,” and the second considering function to be “essentially a primary triad and those chords derived from it under certain transformations” (Harrison 1994, 265–66). In the former strain—most explicitly laid out in Riemann’s first theoretical publication, “Musical Logic” (Riemann 2000 [1872])—Riemann

²Rameau foreshadows Riemann’s concept of the three harmonic functions *T*, *D*, and *S* in his 1726 treatise *Nouveau système de musique théorique*, identifying three chord-types: *tonique*, *dominante*, and *sous-dominante*. Rameau’s theory does not link different triads under the same functional umbrella, though, as does Riemann’s; David Damschroder suggests that this idea most likely originates with Johann Friedrich Daube’s 1756 treatise *General-Bass in drey Accorden* (translated in Wallace 1983; see Damschroder 2008, 9–17).

applies the Hegelian dialectical terms *thesis*, *antithesis*, and *synthesis* to fundamental harmonic progressions, claiming that “thetic is the tonic, antithetic the lower dominant [subdominant], and synthetic the upper dominant” (Riemann 2000 [1872], 102; see also Harrison 1994, 267).³ These thetic functions are often carried by several chords rather than a single chord; Riemann’s “princicipal” cadence is the progression I–IV–I₄⁶–V–I, in which the first I chord is *thesis*, the IV–I₄⁶ progression is *antithesis*, and the final V–I is *synthesis*. This progression can be made longer by the processes of *extension*, *repetition*, and/or *embedding* (Harrison’s terms), creating multiple structural levels on which these three functions operate.

Riemann’s theory of “function as abstract category” approaches a syntactical definition of harmonic function, but this theory was quickly replaced in Riemann’s writings by the “function as chord” theory, which abandons the earlier theory’s syntactical nature.⁴ It is this second, chord-based theory of function that has been adapted most by modern scholars. This theory dispenses with the dialectical labels and instead simply uses “tonic,” “dominant,” and “subdominant” as the three primary functions. Each of these functions is associated with a specific triad—I for tonic, V for dominant, and IV for subdominant—such that other, “secondary” chords are considered to be modifications or “transformations” of these primary chords.⁵ The two most common such transformations are the *parallel* and *leittonwechsel* (leading-tone exchange) transformations; the parallel transformation turns a major triad into the minor triad whose root is a minor third lower and a minor triad into the major

³Riemann’s use of Hegelian dialectical terms represents a conscious effort to expand on the theories of Moritz Hauptmann, who had previously adapted Hegelian language to the theory of harmony.

⁴Ironically, Riemann’s transition away from a syntactical definition of function begins with his 1877 treatise *Musikalische Syntaxis*; see Harrison 1994, 270–73.

⁵This function-as-chord theory has its roots in Riemann’s *Skizze einer neuen Methode der Harmonielehre* of 1880 and is explicitly laid out in *Harmony Simplified* (1896 [1893]).

triad whose root is a minor third higher, and the leading-tone exchange turns a major triad into the minor triad whose root is a major third higher and a minor triad into the major triad whose root is a major third lower. Thus in a major key, the VI chord can be analyzed as the parallel of the tonic (symbolized by ***Tp***) or the leading-tone exchange of the subdominant (symbolized ***S***). Riemann's palette of transformations is varied enough such that any chord can theoretically be labeled as based on any of the three functions; to decide which is the correct interpretation, one must take into account harmonic context. For example, a III triad in a major key would be ***Dp*** if it came between V and I but would be ***T*** if it came between I and IV.⁶ Yet Harrison points out that "this attempt at reviving the syntactic model of 'Musikalische Logik' goes no further than this textbookish prescription; the numerous occurrences of improperly sandwiched parallel chords, in both examples and exercises, are passed over without comment" (1994, 288). It is clear that Riemann is concerned primarily with labeling individual chords rather than devising a theory of chord progression and syntax.

The idea that function is an inherent property of individual chords rather than a feature of syntax and form has caught on with modern music theorists. In the remainder of this section, I will briefly summarize two such "function-as-chord-identity" theories, one by Eytan Agmon (1995) and the other by Daniel Harrison (1994), followed by a look into two adaptations of this type of theory to pop and rock music by Nicole Biamonte (2010) and Christopher Doll (2007 and forthcoming). Agmon's theory is based on Riemann's idea that each function is associated with one specific triad that "embodies [its] essence," namely I for tonic function, V

⁶See Riemann 1896 [1893], 74 and 79–80, and Harrison 1994, 288.

for dominant, and IV for subdominant (Agmon 1995, 197). Agmon calls these three primary triads “prototypes” of their associated functions and analyzes all other triads based on the number of common tones they share with these prototypes. As a result, the VI chord is equally tonic and subdominant, given that it has two tones in common with both I and IV, and similarly the III chord is equally tonic and dominant. Although the II and VII chords are generally analyzed as subdominant and dominant respectively, the II chord is also “weakly dominant” and the VII chord is “weakly subdominant,” given that they share one common tone with the prototypes of these functions. An analogy is made with color categorization: we have conceptual prototypes for “red” and “orange,” and an in-between color (“burnt orange,” for example) might be strongly orange and weakly red. One of Agmon’s strongest statements in this article is that the theory of harmonic function can and should be entirely separated from the theory of harmonic progression. In other words, a chord’s function has nothing to do with the chords that precede and follow it nor with its context within a given piece of music; IV chords are always subdominants and I chords are always tonics. This statement goes farther than Riemann in defining function as an inherent property of a chord; Agmon claims that his theory is “static” such that the “T–S–D–T paradigm of functional succession (a venerable component of *Funktionstheorie*) is not within its scope” (204).⁷ In his published response to Agmon’s article, John Rothgeb (1996) accuses Agmon of saying nothing at all, since labeling chords with T, S, or D with no attention paid to the context is simply a less specific version of Roman-numeral analysis.

⁷See also Kopp 1995, [10], who interprets Riemann’s idea of *Funktion* as having “next to nothing to do with chord progression.”

Yet the idea that individual chords *have* function even in the absence of any musical context is a commonly held view. Daniel Harrison's 1994 book *Harmonic Function in Chromatic Music* outlines another such theory based not on individual chords' similarity to prototypical triads but instead on their scale-degree content. Harrison does not entirely dispense with the idea of primary triads, though, claiming that each function "has only one pristine expression: the primary triad," and other chords are perceived in relation to these primary triads (37). However, Harrison stresses that function and primary triad are not the same thing; function is an "attitude" of a chord (in the aeronautic sense of "orientation in reference to an axis or axes") and thus is a "perceptual judgment on the part of the listener" (37–38). In this way, the question shifts from "how much does this chord sound like this primary triad?" (as Agmon asks) to "how similar is the expression of this chord's functional attitude to that expressed by this primary triad?" (38–39). Harrison concludes that harmonic function "may be a product not of chords but rather of the constituents of chords," i.e., scale degrees (41). Each of the three primary triads contains "base," "agent," and "associate" scale degrees (see Example 2.3), and each of these three scale-degree roles has a specific relationship with the attitude of the function in question. For example, when the base of a function is the lowest-sounding voice of a chord, that function's attitude will be strongly projected regardless of the pitch content of the upper voices. It is for this reason that the cadential six-four is primarily a dominant-functioning chord despite having only one tone in common with the V chord and containing all the tones of the I chord. Using this theory, Harrison is able to analyze chords as assemblies of scale degrees, which helps him achieve his goal of analyzing late-nineteenth-century chromatic music, which often contains non-triadic sonorities. These

1	5	2	← associates
6	3	7	← agents
4	1	5	← bases
Subdominant	Tonic	Dominant	

Example 2.3: Daniel Harrison’s table of scale degrees and their functional descriptions.
(Reproduction of Figure 2.1 from Harrison 1994, 45.)

non-triadic sonorities necessarily include elements of two or more functions, and different voicings and contexts can tip the scales towards one of these functions. The diminished seventh chord built on the leading tone, for example, contains the agent and associate of the dominant function as well as the base and agent of the subdominant function. Usually, Harrison notes, stepwise bass motion ensures this sonority is heard as dominant-functioning, but in certain uncommon situations, such as a $\hat{4}-\hat{1}$ bass motion accompanying VII_3^4 to I, this chord’s subdominant qualities come to the fore. In this way, Harrison is more sensitive to musical context and chord progression than Agmon, but Harrison’s theory remains primarily chord-identity-based in that one can generally assign a chord its function even when removed from its musical context. Harrison furthermore shows his disdain for syntactical definitions of function by dismissing the terms “pre-dominant” and “dominant preparation” as “syntactic somethings” that serve merely to connect tonic and dominant rather than representing a true harmonic function (48–49).

Despite some scholars’ resistance to applying analytical techniques originally devised for common-practice tonal music to the analysis of other repertoires, several theorists have adapted Riemannian theories of harmonic function to the analysis of pop and rock music. Nicole Biamonte’s 2010 article “Triadic Modal and Pentatonic Patterns in Rock Music”

<u>Artist, Title (Year), Formal Section</u>	<u>Mode</u>	<u>Progression</u>	<u>Function</u>
The Doors, “The End” (1967), A section	Mixolydian	I– ^b VII	T–D
Steppenwolf, “Born to be Wild” (1968), chorus	Mixolydian	I– ^b VII	T–D
J.J. Cale, “Cocaine” (1976), verse	Mixolydian	I– ^b VII	T–D
Grateful Dead, “Fire on the Mountain” (1978)	Mixolydian	I– ^b VII	T–D
The Doors, “Break on Through” (1967)	Aeolian	i– ^b VII	T–D
Black Sabbath, “Paranoid” (1970), verse	Aeolian	i– ^b VII–i	T–D–T
Deep Purple, “Child in Time” (1970)	Aeolian	^b VII–i ^b VI– ^b VII	D–T S–D
R.E.M., “The One I Love” (1987), A section	Aeolian	i ⁷ – ^b VII ^{sus2} –i ⁷	T–D–T
Santana, “Evil Ways” (1969)	Dorian	i–IV	T–S
The Doors, “Riders on the Storm” (1971), main riff	Dorian	i–IV–i ⁷ –IV	T–S–T–S
Styx, “Renegade” (1978), verse	Dorian	i ⁷ –IV ⁶ ₄	T–S
Pink Floyd, “Another Brick in the Wall” (1979), verse	Dorian	i–IV	T–S
Grateful Dead, “Brokedown Palace” (1970), refrain	(Lydian)	I–III [#] –IV–I–II [#]	T–D–S–T–D

Example 2.4: Nicole Biamonte’s functional analyses of several short modal progressions in rock songs. (Reproduced from Biamonte 2010, 97.)

updates the traditional (chord-identity-based) theory of harmonic function to apply to modal progressions—progressions that Biamonte argues are common in rock music.⁸ Example 2.4, reproduced from this article, gives functional analyses of several short, repeated chord progressions in various rock songs from the 1960s, 70s, and 80s. This example shows that Biamonte considers the ^bVII chord—which is common in rock music but rare in major-mode common-practice tonal music—to have dominant function because it contains versions of $\hat{7}$ and $\hat{2}$ (97; see also Doll 2007, 23–24); the progression I–^bVII–I is therefore interpreted as T–D–T.⁹ The final analysis of her example, dealing with the Grateful Dead’s 1970 gospel ballad “Brokedown Palace,” is an interesting case study. Biamonte analyzes the III[#] chord in this progression to have dominant function such that the I–III[#]–IV–I progression exhibits the

⁸See also Biamonte 2012, which discusses modal progressions in metal in addition to rock.

⁹See Moore 1995 for a discussion of the ^bVII chord and, more generally, $b\hat{7}$ in rock music. Moore believes that the flattened version of this scale degree is normative in this repertoire and therefore should not be interpreted as a non-diatonic pitch.

functional succession T–D–S–T, the opposite of the standard T–S–D–T. Biamonte does not say why she does not analyze this III[#] chord to have tonic function (seemingly allowed by her diagram on page 96), but more interesting is her analysis of the final II[#] chord as having dominant function. Her rationale for this analysis is that this chord “occupies the normal position of a dominant” and can therefore be heard as “a substitute dominant that offers the ‘wrong’ leading tone, to scale-degree $\hat{5}$ instead of to $\hat{1}$ ” rather than as a subdominant which would be more typical of II chords (98). This analysis is overtly syntactical: this II[#] chord is a dominant not because of any intrinsic quality but instead because of its position within a phrase.¹⁰ Yet this is the only time Biamonte invokes syntactical considerations in assigning functional labels to chords; in general, her theory remains in the function-as-chord-identity tradition.

While Agmon, Harrison, and Biamonte’s conceptions of harmonic function are varied, they all use a type of definition that I have called “function as chord identity.” In other words, all three of them define a chord’s function mostly in terms of intrinsic properties of that chord—whether it be the number of common tones shared with a primary triad or the chord’s scale-degree content. In contrast, Christopher Doll’s theory of harmonic function in rock music is essentially a theory of chord progression and thus approaches a syntactical definition of function (Doll 2007, Chapter 1; 2009, 96; and forthcoming, Chapters 1–2). Doll, similarly to Harrison, defines functions as “chordal effects” rather than individual chords. Specifically, Doll’s definition of harmonic function is based on *prediction* and *stability*. If

¹⁰Although Biamonte implies that this II[#] chord concludes a self-contained chord progression, the phrase actually continues with a I–II[#]–IV–I progression in its third and fourth measures. There is admittedly an articulated melodic stop over the II[#] chord in question, but this moment is not a half cadence, and so it is not entirely clear why one would “normally” find a dominant in this position.

a chord is stable enough that it does not predict resolution to a more stable chord, this chord projects tonic function; tonic-functioning chords must contain the “centric pitch class” (i.e., $\hat{1}$) (forthcoming, Chapter 1, “Tonic Function”).¹¹ A chord that predicts resolution to tonic exhibits *pre-tonic* function. “Dominant” and “subdominant” are two types of pre-tonic chords, the difference stemming from their differing voice-leading motions toward a I chord: dominant chords contain some version of $\hat{7}$ and $\hat{2}$, which lead by step to $\hat{1}$ or to both $\hat{1}$ and $\hat{3}$; subdominant chords contain some version of $\hat{6}$, which leads by step to $\hat{5}$ (Chapter 1, “Pre-Tonic Function”).¹² The distinction between subdominant and dominant is a matter of chord identity, but these functions retain a syntactical aspect by being tied to pre-tonic function. A IV chord is only a subdominant if it progresses to I; if it were to progress to a V chord that then progresses to I, it would be a *pre-dominant* chord.

Doll stresses that pre-tonic function is not given to any chord that precedes a I chord, but only to chords that *predict* resolution to tonic. A listener must hold this prediction before he or she hears what chord actually follows. More specifically, “the function is not a summary rationalization of how the music happened to turn out . . . so much as it is an anticipatory impression of which notes might follow” (Chapter 1, “Pre-Tonic Function”). A listener’s predictions might change as he or she becomes more familiar with a particular song; “harmonic prediction is just as much about guessing what might happen as knowing

¹¹Dr. Doll was kind enough to share with me a draft of the first two chapters of his forthcoming book; this draft, though, is not paginated the way the published book will be and so I will cite quotations from this draft with the chapter number and section title rather than a page number.

¹²Doll differentiates between dominants that contain the leading tone, which he calls “lead dominants,” and those that contain $b\hat{7}$, which he calls “rogue dominants.” In addition to dominant and subdominant, Doll discusses “mediant” pre-tonic chords, which are chords that contain $\hat{7}$ but not $\hat{2}$ (these are generally III chords of some type).

Chorus

♩ = 68

8 Pull me out of the air - crash, pull me out of the wake.

4 8 'Cause I'm your su - per-he - ro. We are stan-ding on the edge.

Example 2.5: Radiohead, “Lucky” (1997), chorus.

exactly what does happen” (Chapter 2, “Additional Functions”). So, on first listen one might expect a particular IV chord to progress to V, making it a “hypo-pre-dominant,” but if it turns out that that IV chord actually progresses to I, a listener might hear that chord as projecting subdominant (pre-tonic) function on future hearings. Yet Doll’s analyses rarely analyze a chord as predicting something other than what actually follows. His first example is Radiohead’s “Lucky” (see the transcription of the chorus, in the key of E minor, in Example 2.5). In his analysis of the chorus, he claims that the A and B7 chords “are pre-tonics because they sound as though resolution to tonic is right behind them, regardless of whether their predictions turn out to be correct” (Chapter 1, “Pre-Tonic Function”). In the case of the B7 chord at the end, this analysis is not contentious; we are well aware of the V7 chord’s voice-leading pull towards I, and even though this chord does not resolve to I in the final chorus of the song, the predictive effect remains. Yet it is not so clear why the A chords (IV) predict resolution to tonic. As I will show in Chapter 6, a chorus that begins on a IV chord frequently does *not* lead back to tonic but instead prolongs IV, leading eventually to a dominant-functioning chord. Example 2.6 provides a recomposition of the

Chorus (recomposed)

Pull me out of the air - crash, pull me out of the wake.
 'Cause I'm your su - per-he - ro. We are stan-ding on the edge.

Example 2.6: Recomposition of the chorus from “Lucky” with no return to tonic.

chorus to “Lucky” that does exactly this: the IV chord unfolds into its chromatic upper third, \flat VI, before leading to \flat II and V, never returning to the tonic. A first-time listener would not know which version is coming upon hearing the beginning of the chorus, and so it is entirely possible that this listener would not expect IV to resolve to I. In this case, under Doll’s definition, IV would no longer have pre-tonic function. Of course, after the listener hears IV progressing to I a few times, he or she would begin to predict that this pattern will continue. And once a listener has heard the complete song once, his or her predictions are indistinguishable from the literal chord progression.

As a theory of chord progression, Doll’s is robust and informative. His distinction between subdominant and dominant in terms of their voice leading extends to larger predictive chains; thus we have *pre-pretonic* function, which can express either *pre-dominant* or *pre-subdominant* function depending on the type of pre-tonic chord that it leads to. And since the voice leading of these pre-pretonics can model that of a dominant or of a subdominant, we get the terms *hyper pre-dominant* (for dominant of the dominant) and *hypo pre-dominant* (for subdominant of the dominant), and so on. (For example, a IV chord that leads to V

would be a hyper pre-dominant because it contains notes a step below and a step above the root of the following V chord.) While Doll's terminology is sometimes cumbersome, his ideas that there are two basic types of chord succession based on voice leading and that both are in common use in rock music are novel and merit further exploration.¹³ Furthermore, his three basic functions of "anchoring," "pre-anchoring," and "post-anchoring" allow for hierarchical interpretations of long chord progressions.

TOWARDS A SYNTACTICAL DEFINITION OF FUNCTION

I believe that a chord-identity-based definition of function like Agmon's, Harrison's, or Biamonte's is inadequate to explain the harmonic structure of pop and rock music. In this repertoire, the IV chord, for example, arises in so many different situations that it is too reductionist to label all instances of that chord "subdominant." Conversely, there are many different chords that can precede a I chord in an authentic cadence—not just V—all of which perform the same function within a phrase; this similarity is missed by giving them different functional labels. Doll's progression-based theory of function invokes syntactical considerations and thus accounts for rock music's varied treatment of certain chords. However, there is one crucial aspect to a syntactical definition of function that Doll omits from his theory: form. I submit that in pop and rock music, a chord's function is given more by formal considerations—i.e., what role it plays within the form—than by its internal structure or any specific voice-leading motion. I will call a definition that assigns function

¹³In his dissertation (2007, 34–38), Doll called these two types of motion "authentic" (for dominant-type motion) and "plagal" (for subdominant-type motion), but he abandons these terms for his monograph to avoid the implication that subdominant-type motion is inauthentic.

based on formal considerations a “function as syntax” definition. This is the type of definition that I will espouse in this dissertation. Several music theorists tend towards a syntactical definition of function rather than one based on chord identity, but this tendency often goes unacknowledged because the difference is subtle in the context of common-practice tonal music. In rock music, however, the two definitions lead to vastly different analyses, and as we will see, analyses based on a syntactical definition are far more convincing.

In a syntactical definition of harmonic function, chords may *represent* functions but do not inherently *have* specific functions. Functions are inherently “relational notions,” as Noam Chomsky put it in his seminal treatise *Aspects of the Theory of Syntax* (Chomsky 1965). Chomsky, discussing linguistic syntax, differentiates between “grammatical function” and “grammatical category”; the latter is an inherent property of a word or group of words whereas the former is entirely dependent on context. Speaking about the sentence “sincerity may frighten the boy,” Chomsky explains:

The notion “Subject,” as distinct from the notion “NP” [noun phrase], designates a *grammatical function* rather than a *grammatical category*. It is, in other words, an inherently relational notion. We say, in traditional terms, that in [the example sentence] *sincerity* is an NP (not that it is the NP of the sentence), and that it is (functions as) the *Subject-of* the sentence (not that it is a Subject). (Chomsky 1965, 68)

Functions, according to Chomsky, only exist in reference to a specific context. The word “sincerity” might *function as* a subject in certain sentences, but in others it might function as direct object (e.g., “the boy may lack sincerity”). Individual words do not have innate function in the absence of a specific context; thus one cannot say that “sincerity” *is* a subject. The function is not entirely unrelated to the word itself, though, as “sincerity”

can never function as a main verb, for example. Yet it should be clear that functions are a result of interrelations among constituents within a given sentence rather than aspects of the constituents themselves.¹⁴

This is also true of harmonic function when we adopt a syntactical definition. In this case, the constituents are chords as they exist within a given key—i.e., *Stufen*—and the contextual analogue to a sentence is a musical phrase or other self-contained formal unit. One might argue that specifying a key is already giving these chords a context, and therefore that a Roman numeral such as “IV” is a true function since it defines a chord in relation to others. However, defining a key does not provide a *syntactical* context, merely a general framework for interpreting chords, not unlike choosing a language (English, French, etc.) as a framework for interpreting specific words. It is not until the chords are arranged into a phrase or group of phrases that they can be said to have a syntax.

What are the possible syntactical functions that harmonies can project once they are arranged in this way? In fact, they are not at all unfamiliar to music theorists. I will begin with the clearest example: the pre-dominant function. The pre-dominant is a wholly syntactical function; the word “pre-dominant” itself invokes syntax, as it explicitly mentions succession (*pre*) and a relationship to another function (*dominant*). Furthermore, pre-dominant function can be carried by a number of different harmonies and is not linked to a specific chord; while

¹⁴Daniel Harrison uses this same analogy to explain the difference between Riemann’s early conception of “function as abstract category” and his later conception of “function as chord.” Harrison writes, “In musical terms, the parts of speech are like fundamental-bass analyses of individual chords: any occurrence of the supertonic triad is analyzed as II, its position within a phrase notwithstanding. The analysis of logical meaning—harmonic function—*does* depend on context within a phrase and is thus analogous to analysis of sentence elements [i.e., grammatical functions]” (Harrison 1994, 268).

Allegro con brio

I ii^6 I^6 ii^6 I^6 IV^6 (9) IV I^6 V

ii^6 chords as neighboring chords,
not pre-dominants IV chord as neighboring chord,
not pre-dominant

Example 2.7: Haydn, Keyboard Sonata in D major, Hob. XVI:37, I: this phrase contains examples of both ii^6 and IV chords *not* functioning as pre-dominants.

most theorists will admit that the II_5^6 chord and its two triadic subsets $II^{(6)}$ and IV are by far the most common representatives of pre-dominant function (at least in common-practice Classical music), there are numerous others that can fulfill that role, such as applied chords to V (e.g., V_5^6/V or VII^7/V), augmented sixth chords, VI, or other chords. Conversely, typical pre-dominants such as II^6 and IV do not always represent pre-dominant function and thus cannot be said to *be* pre-dominants, much as “sincerity” cannot be said to *be* a subject (see Example 2.7). The pre-dominant is therefore a syntactical function, dependent on form and phrase structure rather than chord identity. This distinguishes it from “subdominant,” which is a non-syntactical term that can apply to chords in isolation, as discussed in the previous section.

The three primary syntactical functions are tonic (T), pre-dominant (PD), and dominant (D), which arrange themselves into the paradigmatic progression T–PD–D–T.¹⁵ While the term “pre-dominant” always refers to a syntactical function, “tonic” and “dominant” are the

¹⁵Some theorists differentiate between the first and second iterations of tonic function, calling them “opening tonic” and “closing tonic” respectively; see Guck 1978, 34, Aldwell and Schachter 2011, 118, and Caplin 1998, 27 (Caplin calls them “initial” and “final” tonics).

same terms used by function-as-chord-identity theorists to denote non-syntactical functions. Herein lies a source of confusion in music-theoretical discourse: we have two different definitions of these two commonly used terms, one of which reflects a conception of function as chord identity and the other as syntax. In a function-as-chord-identity definition, “dominant” is something a chord *is*, whereas in a function-as-syntax definition, it is something a chord *represents* in a specific context. In the syntactical case, there are V chords that do not represent dominant function, and there may be dominant functions that are not represented by a V chord, nor even by a widely recognized variant such as VII or III. This situation rarely arises in Classical-era tonality; in this repertoire, syntactical dominant function is virtually always represented by a V or VII chord, and therefore the two definitions of “dominant” are rarely in conflict. However, in other repertoires, especially pop and rock music, other chords not necessarily derived from the V chord can represent syntactical dominant function, such as IV, II, \flat VII, or some other chord. In these cases, it is best to separate the notion of syntactical dominant function from the V chord, the leading tone, the fifth scale degree, etc. I further submit that a separation of chord identity and syntactical function even in the analysis of common-practice repertoires will not only aid in our understanding of those repertoires but will also demonstrate the syntactical similarities between rock music and the common practice—similarities that devotees of the function-as-chord-identity definition insist do not exist.¹⁶

¹⁶Cf. Justin London: “It might well be said that popular music has its own set of harmonic conventions, and that we commit an analytical error in construing pop harmony in terms of common-practice chord grammar” (1990, 112); and Ken Stephenson: “With regard to harmonic succession, as with cadence placement, rock has, from its beginning, used a style opposed to that of the common practice” (2002, 103). These authors are commenting on the fact that successive root relations are often different in rock music than in the common practice. While this is not entirely untrue (though it is less true than these authors imply), I will argue that

Although syntactical considerations arise in many discussions of function, two authors have particularly robust syntactical definitions of function: William Caplin and Steven Laitz. Caplin's theory of harmony is most prominently laid out in Chapter 2 of his treatise *Classical Form* (1998), though it comes up in his later work as well (2004, 2009). Caplin's work, of course, focuses mostly on form rather than harmony, but this chapter, a self-described "brief *Harmonielehre*" (23), outlines Caplin's views on the three harmonic functions (tonic, pre-dominant, and dominant) and differentiates among three types of harmonic progression: prolongational, cadential, and sequential. Because of Caplin's limited repertoire—drawn exclusively from the music of Haydn, Mozart, and Beethoven—he does not run into situations in which, for example, chords other than V or VII function as dominant, and therefore he can generally use both definitions of function interchangeably. However, certain of his formulations betray his syntactical bias: besides his use of the term "pre-dominant" instead of "subdominant," his definition of dominant function as harmonies "whose primary role is to progress to the tonic" shows that he is more concerned with chord progression than identity, and his statement that dominant function "*is most often represented* by a major triad or a major-minor seventh chord built on the fifth scale degree" shows that he considers function to be something a chord can represent but not something it *has* (23; emphasis added).

Laitz's presentation is in a pedagogical context, through his textbook *The Complete Musician* (2011), and so the theoretical aspects of his work are more implicit than explicit. Nevertheless, his concept of the "phrase model" and his inclusion of the T–PD–D–T symbols

root relationships are immaterial in musical syntax, and that a syntactical analysis will show that the two repertoires are based on the same principles.

below standard Roman-numeral analyses clearly relate function to form and therefore to musical syntax. One of Laitz's signature contributions to music theory pedagogy is the "second-level analysis" (the first level being traditional Roman numerals), which consists of labeling the functional progression that occurs within a phrase as T, PD, D, and T. Laitz outlines various rhythmic layouts of these functions within a four-bar phrase, which he terms "phrase models." For Laitz, every phrase contains exactly one succession of these functions; no matter how many different chords the phrase may contain, it has at most one pre-dominant function and one dominant, each of which may be prolonged by a series of chords.¹⁷ Laitz's conception of these functions as syntactical rather than chord-based is evidenced by his explanation of the pre-dominant function: he begins by defining this function as "connective tissue between the tonic and the dominant" and later states that "composers frequently choose the subdominant as the pre-dominant" (not that the subdominant *is* a pre-dominant) and that "the supertonic is the most common pre-dominant chord" (190–93). Laitz later discusses subdominant chords that do *not* function as pre-dominants (238–39) and mentions that submediant chords can function either as tonic-prolonging chords or as pre-dominants (268–73). Since these chords achieve their pre-dominant status not by virtue of their inherent properties but based on their context within the harmonic progression of a phrase, it is clear that Laitz's definition of harmonic function is a syntactical one.

Both Caplin and Laitz employ a specific conception of *prolongation*—a hallmark of syntactical analysis.¹⁸ Prolongation, of course, has deep roots in Schenkerian theory, and

¹⁷Laitz does allow for "embedded phrase models," which are apparent T–PD–D–T progressions that occur within a phrase and prolong the tonic (see pp. 251–53). Laitz, however, minimizes these progressions by calling them "noncadential" and subsuming them within the main phrase model's initial tonic (T).

¹⁸Laitz generally uses the term "contrapuntal expansion" rather than prolongation.

both authors reveal Schenker's influence in their formulations. Yet the addition of functional considerations adds an extra layer of complexity: in Schenkerian analysis, the elements that are prolonged are *tones* and *Stufen*, but we can now talk of the prolongation of *functions*.¹⁹ The difference is subtle but important: while tones are the same type of thing as the literal elements of the score (the notes), functions are fundamentally different entities. As Charles Smith points out, "prolongations do not necessarily contain a literal manifestation of the thing prolonged," and "in certain kinds of prolongations the thing prolonged is not even comparable to any set of events in the segments in question" (1981, 144). Tones are prolonged by tones (i.e., the thing prolonged is of the same type as the things doing the prolonging), but functions are prolonged by chords (i.e., the thing prolonged is *not* the same type as the things doing the prolonging).²⁰ Chords within a functional prolongation are either *representatives* of the function (e.g., a I chord usually represents tonic function) or *prolongational* chords (e.g., neighboring and passing chords). Prolongational chords do not project any of the three syntactical functions (T, PD, D) and reside at a lower level than functional representatives; as Marion Guck puts it, "some common means of prolongation, e.g. neighboring and passing chords, are considered not as functional but rather as linear successions" (Guck 1978, 34 n. 3). Thus the V⁶ chord in the first measure of Example 2.8 is not a syntactical dominant but a passing chord. Similarly, the IV chord in measure 2 is not a pre-dominant chord but a passing chord within the overall motion from I to I⁶.²¹ The opening I and closing I⁶ chords

¹⁹According to Joseph Dubiel, in *Counterpoint* (Schenker 1987 [1910/1922]) "the kind of entity that gets prolonged is a *rule*" as opposed to "the standard latter-day application of the concept to pitches and harmonies" (Dubiel 1990, 293).

²⁰Smith gives the example of formal functions, such as "A" or "second-theme group," as examples of prolonged things that are different than the things doing the prolonging (1981, 144).

²¹As discussed in the following section, I employ William Caplin's definition of passing chords, in which a literal passing motion is not necessarily present in any voice; see Caplin 1998, 25. In Example 2.8, the

Adagio

	I	V ⁶	IV ⁶	$\frac{5}{3}$	I ⁶
Syntactical function:	T	(p)	(p)		
Function-as-chord-identity:	T	D	S	T	??

Example 2.8: Mozart, Piano Sonata in F major, K. 332, II: a I–V–IV–I progression prolongs the tonic. In a syntactical definition of harmonic function, the V and IV chords do not project dominant or pre-dominant function but instead are passing chords within a tonic prolongation. A function-as-chord-identity definition would analyze this progression as T–D–S–T.

are representatives of tonic function. This short passage can be interpreted to prolong three different entities: the bass tone B \flat , the I *Stufe*, and the tonic function.

A function-as-chord-identity definition, on the other hand, would assign dominant function to the V⁶ chord and subdominant function to the IV chord in Example 2.8, such that the “progression” is T–D–S–T. Some theorists point to passages such as these as proof that the T–S–D–T (or T–PD–D–T) paradigm is faulty (e.g., Tymoczko 2011). But this is a result of mixing the two definitions of function: as we saw in the previous section, a function-as-chord-identity theory generally makes no prescriptions about chord progression. In a function-as-syntax definition, the T–PD–D–T order “is not reversible,” as Laitz asserts (2011, 203). This does not mean that progressions such as I–V–IV–I are disallowed, though; they can be interpreted as prolongational as above, or, if this progression were to last an entire phrase, the V chord could represent pre-dominant function and the IV chord could

passing motion is obscured on the surface but exists in the underlying voice-leading structure: the bass note G of IV⁶ participates in the passing descent B \flat –A–G–F and the bass note E \flat of the IV $\frac{5}{3}$ chord participates in the passing descent F–E \flat –D. Both of these descents outline a consonant interval of the prolonged I harmony.

represent dominant function. While this particular arrangement is rare, the idea that the T–PD–D–T arrangement is conceptually prior to literal chord progressions allows us to interpret chord progressions in pop and rock music as syntactical even though they seem to violate prescriptive rules based on chord succession in Classical-era tonal music.

Syntactical functions are analogous to Caplin’s concept of “formal functions,” which stand in contrast to “formal types” (Caplin 1998 and 2009). An example of a formal function is “main theme” and an example of a formal type is “sentence”; the primary difference between the two is that formal functions are defined in relationship to a larger whole, while formal types are inherent properties of the passage in question. For example, the first eight measures of Beethoven’s Piano Sonata Op. 2, No. 1 can be said to *be* a sentence, but they *function as* the main theme of the first movement (rather than *being* a main theme). This is the same distinction referred to in relation to linguistic syntax—“sincerity” *is* a noun phrase but *functions as* the subject of the sentence “sincerity may frighten the boy”—and is also the same as the distinction between function-as-chord-identity (a IV chord *is* a subdominant) and function-as-syntax (a particular IV chord *functions as* the pre-dominant). Formal functions gain their meaning by a combination of their internal features and their context. Thus a main theme generally contains certain features that identify it as thematic—e.g., containing a tight-knit formal type or (more abstractly) containing a beginning, middle, and end—but a main theme can never appear after a subordinate theme within a sonata exposition, for example. In the same way, the pre-dominant function can be associated with certain internal characteristics of chords—e.g., IV and II are more likely heard as pre-dominants, while I chords are virtually never heard as such—but it can never follow the syntactical

dominant function. Just as formal functions are defined in relation to a whole (e.g., main theme in relation to sonata exposition or antecedent in relation to parallel period), syntactical functions are defined in relation to a single expression of the T–PD–D–T sequence. While many theorists (Laitz included) would define this sequence as a phrase, it will be useful to separate the notion of harmonic completion and phrase structure. I will instead use the term “functional circuit” to refer to a complete formal-harmonic structure.

THE FUNCTIONAL CIRCUIT

In some of his writings, Schenker uses the term *Stufenkreis* to refer to progressions that begin and end on the same harmony and consist of “circular motion comprising the two phases of departure and return,” as described by Robert Snarrenberg (1997, 28). The specific progressions described as *Stufenkreise* are usually either I–IV–V–I or I–II–V–I; Schenker occasionally uses the term for longer progressions such as I–IV–II–V–I, but it never refers to just I–V–I.²² In other words, a *Stufenkreis* always includes initial tonic, pre-dominant, dominant, and final tonic. For Schenker—who does not use these functional terms—the members of a *Stufenkreis* are specific *Stufen* (often translated as “scale-step”), not syntactical functions as I am defining them. If we adapt the terminology to refer to functions rather than *Stufen*, we might use the term *Funktionskreis*, which we could loosely translate to

²²Schenker uses “*Stufenkreis*” to refer to a I–IV–V–I progression in Schenker 1994 [1925], 9 and 54, and Schenker 1996 [1926], 89, and to refer to a I–IV–II–V–I progression in Schenker 1994 [1925], 63. See also Schenker 1954 [1906], 216–17, for a discussion of the same phenomenon. Schenker’s later writings prefer the terms *Stufenrund* or *Kadenzrund* for this concept; all three of these terms emphasize the circular nature of the progression.

become “functional circuit.”²³ A *functional circuit* (or simply *circuit*) is therefore defined as a complete statement of the syntactical functions T–PD–D–T. We can also define a *functional half-circuit* (for half cadences) that ends on the syntactical dominant—i.e., T–PD–D. (Half cadences will be discussed later in this section.)

The concept of the functional circuit is level-specific, meaning that it applies only to progressions that span a complete formal unit. Generally a circuit will cover one section (e.g., a verse or chorus), but often several sections will contain a single circuit; as we will see in Chapter 5, this is common in a verse–prechorus–chorus cycle. Foreground progressions that span shorter passages will be interpreted as prolongational; the only exception occurs when a single section contains a period structure, in which case the section will contain two circuits, the first of which will generally be a half-circuit. In the graphs throughout this dissertation, the main representatives of each function within a circuit will be indicated with open noteheads in the bass staff, and the pre-dominant representative will be flagged (following Schenker’s practice with *Stufenkreise*), as shown in Example 2.9. In this example, which graphs the verse to the Beatles’ “Nowhere Man” from *Rubber Soul* (1965), the opening I–V–IV–I progression is interpreted as prolongational, just like the I–V–IV–I progression in the Mozart example above (Example 2.8), and the overall functional circuit is I as tonic, II as pre-dominant, IV[♯] as syntactical dominant, and then back to I as the closing tonic. These chords are the *primary representatives* of the syntactical functions; the primary representative of a syntactical function is the most stable harmony within that function’s span. Other chords

²³I use the word “circuit” rather than the more literal translation of *kreis* to “circle” to emphasize the completion of the circuit that occurs when the tonic returns after PD and D.

he's a real nowhere sitting in nowhere making nowhere for no-body
man his land all his plans

I → V IV → I APT
"syntax divorce" (Chap. 3)

I T II PD IV^b D I T
prolongational

Example 2.9: The Beatles, “Nowhere Man” (1965): a I–II–IV^b–I functional circuit with a prolongational I–V–IV–I progression at the beginning.

within that span can therefore be considered to be subsidiary to the primary representative.²⁴

This example’s functional circuit supports an upper-voice descent through the octave from $\hat{8}$ to $\hat{1}$, in which the syntactical dominant IV^b supports $\hat{3}$ (as accented passing tone) and $\hat{2}$ (as locally stable tone); the idea that a IV chord can support $\hat{2}$ as a locally stable tone is what I will call a “syntax divorce” between melody and harmony, and will be discussed in detail in the following chapter.

Tonic function and prolongational progressions

Out of the three main syntactical functions, tonic function is the most closely associated with a specific chord, in that it is most often represented by a triad built on the first scale degree (i.e., a I chord). Caplin points out that a VI chord can also have tonic function as a

²⁴Different analyses will sometimes lead to different choices for the primary representative of a given syntactical function. For example, in an overall I–VI–IV–V progression, one could choose IV as the primary representative of the pre-dominant, thus encompassing VI within a tonic prolongation, or one could choose VI as the primary representative of the pre-dominant, which would be prolonged by the following IV chord via a 5–6 shift. Even though the former analysis is more in line with traditional analytical thought, if the VI chord is particularly emphasized rhetorically the latter might be the more appropriate. See, for example, my analyses of the Beatles’ “Ticket to Ride” (Example 6.23, page 235) and Fleetwood Mac’s “Go Your Own Way” (Example 6.27, page 238) in Chapter 6.

a) Transcription of first verse

(guitar) **Verse**

When-e-ver I want you a-round yeah, all I got-ta do is
call you on the phone and you'll come run-ning home; yeah, that's all I got-ta do.

b) Voice-leading graph

VI II IV^b I

Example 2.10: The Beatles, “All I’ve Got to Do” (1965): VI represents the initial tonic in this verse’s functional circuit.

substitute for I (1998, 23), especially as the deceptive resolution of a V chord. The VI chord is the most common representative (besides I) of the initial tonic of a functional circuit as well, as in the Beatles’ “All I’ve Got To Do” from their 1965 album *A Hard Day’s Night*, transcribed and graphed in Example 2.10. The C \sharp -minor chord that opens the verse might at first be heard as a I chord, as the ambiguous augmented chord that opens the track could easily lead to a song in C \sharp minor. As the verse proceeds, however, E major emerges as the true tonal center, solidified by the IV \flat –I progression supporting the title of the song in the

lyrics and the completion of a stepwise descent to $\hat{1}$ in the upper voice. This progression is the cadence of the section, and the minor IV chord represents the syntactical dominant function. Even though the opening $C\sharp$ -minor chord is later revealed not to be a I chord, it still represents syntactical tonic function in this verse's functional circuit. The full circuit is therefore VI–II–IV \flat –I, representing T–PD–D–T.

The most common way to prolong the tonic function is through the use of *neighboring* and *passing* chords. These prolongational chords do not represent a syntactical function but connect two chords that do. My concept of neighboring and passing chords is based on Caplin's, in which these prolongational chords are not necessarily a result of neighbor and passing tones in the bass but are instead defined based on what chords they connect. Neighboring chords are prolongational chords that occur between two instances of the same chord with the same bass note. Caplin points out that in a neighboring progression, “a melodic neighbor-tone motion is usually (but not necessarily) present in one or more of the voices” (1998, 25). Two common neighboring progressions in both Classical and rock idioms are I–IV–I and I–V–I (see Caplin's Examples 2.2a and 2.2e, p. 24)²⁵; another common progression in rock that is rare in the Classical style is I– \flat VII–I. Examples of all three of these neighboring progressions are shown in Example 2.11. In the voice-leading graphs in this example and in all subsequent graphs in this dissertation, a complete neighboring progression will be slurred

²⁵Caplin generally considers V chords that occur between two root-position I chords to be neighboring chords, stating that I–V–I progressions are “often better understood to be prolongational” (25). While he does not explicitly say that these neighboring V chords do not have dominant function, he clearly implies that these V chords are fundamentally different from V chords that participate in a cadential progression (i.e., V chords that represent the syntactical dominant).

together in the bass staff, even if the bass voice does not display a literal neighbor tone, and the bass note of the neighboring chord will be flagged.

Passing chords are just like neighboring chords except that they connect two *different* chords. Passing chords can arise between two different inversions of the same chord (Example 2.12a) or between two different representatives of the same function (Example 2.12b).²⁶ Passing chords can also connect representatives of two *different* functions, as in the “softening” IV chord inserted between V (as syntactical dominant) and I (as tonic) at the end of some twelve-bar blues progressions (Example 2.12c; see also Everett 2004, §18, and 2009, 228–30, and Doll, 2009, 14–16).²⁷ Passing and neighboring chords are sometimes nested such that an overall neighboring progression, such as I–IV–I, is filled in with passing chords (Example 2.12d). As with neighboring chords, passing chords do not necessarily contain a literal passing motion in any voice (as Caplin points out).

Dominant function

In rock music, it is very common for the primary representative of the syntactical dominant to be a chord other than V. We saw this earlier in “Nowhere Man” and “All I’ve Got To

²⁶In rock music, the bass line $\hat{1}-\hat{2}-\hat{3}$ is most often harmonized by I–II⁽⁷⁾–I⁶, as in Example 2.12a, as opposed to the Classical-style I–VII⁶–I⁶ or I–V⁴₃–I⁶. The rock harmonization is not unheard of in Classical music, though, and represents what eighteenth-century German theorists called “the chord of the stationary seventh” given that its seventh does not resolve. Caplin allows this progression as well (see his Example 2.3c, p. 24), but cautions that the passing chord “should not be analyzed as a II⁷ harmony” because of the unresolved seventh and because the progression I–II⁷–I is “nonfunctional” (25). Caplin is probably citing the historical prohibition of II–I progressions, as there is nothing in his own theory that would necessarily define I–II–I to be nonfunctional. Since II–I progressions are not uncommon in rock music and the resolution of sevenths is not adhered to as strictly as in Classical music, I have no qualms with labeling this passing chord II⁷ in the current context.

²⁷The function of the IV chord in V–IV–I progressions is a subject of heated debate among rock-music scholars and will be discussed in more detail below.

a) V chords as neighboring chords to I: Marshall Crenshaw, “Someday, Somehow” (1982)

Transcription of verse

I can't stand to see you sad, I can't bear to hear you cry.
 If you can't tell me what you need, all I can do is wonder why.

Harmonic structure

I

b) IV and ♭VII chords as neighboring chords to I: The Beatles, “A Hard Day’s Night” (1964)

Transcription of beginning of verse

It's been a hard day's night, and I've been working like a dog.

Harmonic structure

I

Example 2.11: Neighboring chords.

a) Passing chords between two inversions of the same harmony: The Allman Brothers Band, “Melissa” (1972)

The musical notation for "Melissa" is in 4/4 time with a key signature of three sharps (F#, C#, G#). The melody is written on a treble clef staff, and the bass line is on a bass clef staff. The lyrics are: "Cross - roads seems will come and go, yeah". Above the melody, the chords are labeled: E, F#m7, Emaj7/G#, and F#m7. The bass line starts with a whole note chord labeled 'I' (E major) and has two passing notes marked with 'P' (pedal point) indicated by a dashed line.

b) Passing chords between two representatives of the same function: Bob Marley and the Wailers, “No Woman No Cry” (1974; live version 1975)

The musical notation for "No Woman No Cry" is in 4/4 time with a key signature of three flats (F, C, G). The melody is on a treble clef staff, and the bass line is on a bass clef staff. The lyrics are: "Said I re-mem-ber when we used to sit ___". Above the melody, the chords are labeled: D♭, A♭/C, B♭m, G♭, and D♭. The bass line starts with a whole note chord labeled 'I' (D♭) and has two passing notes marked with 'P' and 'N' (neighbor) indicated by a dashed line.

c) Passing chords connecting two different harmonic functions: last two measures of a twelve-bar blues progression

The musical notation shows the last two measures of a twelve-bar blues progression on a bass clef staff. The first measure contains a whole note chord labeled 'V' (dominant), and the second measure contains a whole note chord labeled 'I' (tonic). A passing note marked with 'P' is shown between the two chords, indicated by a dashed line.

d) Nested passing and neighboring chords: The Beatles, “Here, There, and Everywhere” (1966)

The musical notation for "Here, There, and Everywhere" is in 4/4 time with a key signature of one sharp (F#). The melody is on a treble clef staff, and the bass line is on a bass clef staff. The lyrics are: "Here, ma-king each day ___ of the year ___". Above the melody, the chords are labeled: G, A m, B m, C, and G. The bass line starts with a whole note chord labeled 'I' (G) and has two passing notes marked with 'P' and 'N' indicated by a dashed line.

Example 2.12: Passing chords

Do” (Examples 2.9 and 2.10), both of which contained a minor IV chord functioning as the syntactical dominant. A chord’s status as a representative of the syntactical dominant function is earned not by any intrinsic characteristics (e.g., the presence of a leading tone) but by its position in the overall progression. Syntactical dominants are those chords that resolve to the tonic to complete a formal unit and a functional circuit. Certain chords are more likely to function in this way than others—V is still the most common in rock music, with IV common as well—but theoretically any chord has the potential to represent the syntactical dominant (even I, as we will see later). Example 2.13, which transcribes and graphs the main section of Pink Floyd’s “Wish You Were Here” (1975), gives an example of II functioning as syntactical dominant. This section begins with an auxiliary progression IV–(V)–II–I leading to the opening tonic of the circuit; this auxiliary progression foreshadows the PD–D–T progression IV–II–I that follows.²⁸ The fact that the pre-dominant and dominant chords (IV and II) have two tones in common does not diminish the feeling of functional progression; II has a tonic-predicting function that IV does not, given the resolution of the melodic suspension D to C—the first unstable structural tone—in measure 7 as well as the fact that II arrives in the third bar of a four-bar phrase, so we expect a cadence in the following measure. One could replace that II chord with virtually any other chord without changing the functional analysis (even another IV chord, in which case IV would be the representative of both pre-dominant and dominant functions!).

Chords other than V, IV, II, and \flat VII—the last of which we have not discussed but is commonly cited as a common dominant chord in rock music (see Moore 1995, Doll 2007, and

²⁸See Burstein 2005 for a discussion of auxiliary cadences.

a) Transcription of main section (primary vocal line only)

starts at 3:15
♩ = 64

How I wish, how I wish you were here. _____ We're just two lost souls swim-ming in a fish-bowl

year af-ter year, run-nin' o-ver the same old ground. What have we found? ___ The same old

fears; wish you _____ were here. _____

b) Graph of this section, showing II as the syntactical dominant

I IV II I

Example 2.13: Pink Floyd, “Wish You Were Here” (1975): II as syntactical dominant.

a) Al Green (1974)

Bridge

8 **C#m** **A7** **C#m** **A7**

Hold me, love me, please me, tease me

5 **G/D** **B7**

'till I can't 'till I can't, can't take no more ah ah!

b) Talking Heads (1978)

Bridge

8 **C#m** **A7** **C#m** **A7**

Hold me, squeeze me, love me, tease me,

5 **Em7** **Chorus** **Em**

'till I can't 'till I can't I can't take no more. Dip me in the wa - ter

Example 2.14: “Take Me to the River”: different representatives of the syntactical dominant at the end of the bridge section in versions by Al Green and the Talking Heads.

Biamonte 2010)—less frequently represent the syntactical dominant function. They are not unheard of as dominant representatives, however; even a I chord can sometimes fulfill this role. For an example, consider the Talking Heads’ 1978 cover of Al Green’s “Take Me to the River.” The bridge sections of both the Talking Heads’ version and Al Green’s original are transcribed in Example 2.14. As I will discuss in Chapter 4, bridge sections in rock songs typically end with a retransitional dominant, which is nearly always represented by a V chord.²⁹ Al Green’s version fits this trend, ending the bridge with a V⁷ chord (B7) with $\hat{2}$ in the melody. Yet in the Talking Heads’ version, the bridge ends with an extended I⁷ chord

²⁹See also Everett 2009, 147–49, for a discussion of the harmonic aspects of bridge sections in early rock music.

The image shows two musical staves side-by-side, illustrating voice leading. The left staff is labeled 'traditional V-I voice leading' and shows a treble clef with a key signature of one sharp (F#). The first chord is a triad with notes G4, B4, and D5. The second chord is a triad with notes E4, G4, and B4. Arrows indicate the voice leading: the G4 in the first chord moves up to G4 in the second, the B4 moves up to B4, and the D5 moves down to B4. The right staff is labeled '"Take Me to the River"'s voice leading' and shows a bass clef with a key signature of one sharp (F#). The first chord is a triad with notes G2, B2, and D3. The second chord is a triad with notes E2, G2, and B2. Arrows indicate the voice leading: the G2 in the first chord moves up to G2 in the second, the B2 moves up to B2, and the D3 moves down to B2. Both staves have a brace on the left side.

Example 2.15: The I^7-I cadence in the Talking Heads’ version of “Take Me to the River” exhibits directed voice leading towards $\hat{1}$ in the upper voices, similar to a traditional V–I cadence.

(Em7) over which the melody composes out the third between G and E. This Em7 chord functions as the syntactical dominant in this bridge. Out of context, it might seem like an unmistakable tonic chord, but its placement at the end of the bridge imbues it with so much tension that it is entirely unstable. Adding to this tension are the frantic lyrics (“till I can’t ... ’till I can’t ... I can’t take no more!”); the drums, which replace their standard rock beat with incessant eighth notes on the bass drum and hi-hat; and the guitar and organ’s sustained fourth D–G. This fourth fulfills the same voice-leading function as a V chord’s $\hat{7}$ and $\hat{2}$, with the D ($b\hat{7}$) resolving upward by step to E ($\hat{1}$) and the G ($b\hat{3}$) resolving downward by *pentatonic step* to E (see Example 2.15). Christopher Doll (2007, 23) argues that $b\hat{3}$ can “predict stepwise resolution downward to $\hat{1}$ ” since it lies just one step away from $\hat{1}$ in the minor pentatonic scale.³⁰

The bridge is not the only place in which the Talking Heads use a I^7 chord as the syntactical dominant in “Take Me to the River.” This same chord acts as the syntactical dominant in the functional circuit that spans the verse–prechorus–chorus cycle. This cycle is

³⁰Doll mentions that, by the same logic, $\hat{6}$ can predict stepwise resolution upwards to $\hat{1}$ within the *major* pentatonic scale. Jeremy Day-O’Connell (2009) calls a $\hat{6}$ that leads to $\hat{1}$ the “plagal leading tone” and discusses its use in Debussy’s music. Melodic motion from $\hat{6}$ to $\hat{1}$ is common at cadences in rock music, even when the progression is V–I.

transcribed in Example 2.16, with an accompanying voice-leading graph in Example 2.17. The verses of this song are relatively static harmonically, with the signature bass riff accompanying essentially a single chord, which is indicated as Em even though both G \sharp and G \natural appear in the organ part.³¹ The prechorus begins with a C chord (VI), which functions as the syntactical pre-dominant and is prolonged by motion to its upper fifth (G) and sixth (A).³² The prechorus ends with the same Em7 chord that ended the bridge, along with the sustained D–G fourth in the organ. This chord is the syntactical dominant of the circuit and resolves to the syntactical tonic—a very similar Em chord—on the downbeat of the chorus. The outline of tonic in the verse, pre-dominant to dominant in the prechorus, and a resolution to tonic at the downbeat of the chorus is the standard layout of a functional circuit in a verse–prechorus–chorus cycle, as will be discussed in detail in Chapter 5. Over this circuit, the upper voice expresses the overall neighboring motion $\hat{1}-\hat{3}-\hat{1}$, which as discussed above derives from the minor pentatonic scale. The neighboring quality of this melodic line is not undermined by the $\hat{3}-\hat{1}$ motion at the cadence being filled in by a diatonic passing tone $\hat{2}$ (F \sharp), just as a whole-step neighbor remains a neighboring tone even if the whole step is filled in chromatically. It is interesting to note that, as in the bridge, Al Green’s original version does not use Em7 as the syntactical dominant at this point, but instead uses an A7 chord

³¹Split-third chords such as this are frequently found in blues-based keyboard riffs, as for example in Paul McCartney’s “Maybe I’m Amazed” (at 0:53 in the original recording from the 1970 album *McCartney*).

³²This is, admittedly, only one of several plausible analyses of the prechorus section. An alternative would be to read III as the primary representative of the pre-dominant (i.e., the G chord in measure 10), with the VI chord (C) that opens the prechorus functioning as an appoggiatura chord resolving to III. This would give the prechorus some symmetry in its harmonic organization, with the falling fourth from VI to III answered by IV–I $\bar{7}$, with the first chord of both acting as a neighboring chord to the second. I prefer the analysis given in Example 2.17 largely because of the melody, which remains on E over the G chord in measure 10, thus suggesting that this chord might be at a lower structural level than the preceding C chord (see the discussion of “hierarchy divorce” in Chapter 3).

Verse
♩ = 100
Em

I don't know why I love you like I do All the chan-ges you put me through Take my mo-ney,

Prechorus
C G

my ci-ga-rettes I ha-ven't seen the worst of it yet and I wan-na know, can you tell me, am

Chorus
A Em7 Em

I in love to stay? Take me to the ri-ver Drop me in the wa-ter

Take me to the ri-ver Dip me in the wa-ter wa-shing me down wa-shing me down

Example 2.16: The Talking Heads, “Take Me to the River” (1978), transcription of first verse–prechorus–chorus cycle.

Example 2.17: Graph of the verse–prechorus–chorus cycle of “Take Me to the River” showing a I^7 chord functioning as syntactical dominant.

(IV). While Green’s chords are more typical of 70s pop and rock music, it is noteworthy that the Talking Heads’ substitutions do not change the overall syntactical progression.

Prolongation of the syntactical dominant

In common-practice music, the most common embellishment of the dominant occurs through the use of the cadential six-four chord delaying the arrival of the complete V chord, which is always the primary representative of dominant function in this style (see Caplin 1998, 27). In rock music, the primary representative of dominant function is often embellished in a similar way, but the cadential six-four is far less common than it is in the Classical style (though it is certainly not unheard of; see Everett 2009, 208–209, for some early examples). More common is for the delaying chord to be a *root-position* I chord, which I have previously called the “cadential I” (Nobile 2011, §3). The cadential I most often behaves exactly like a cadential six-four, appearing on a metrically (or hypermetrically) strong beat and leading to a root-position V chord on a weaker beat. A classic example is the verse of the Beatles’

Verse

I got e - very rea - son on Earth _____ to be mad _____ 'cause I just lost the on -
 - ly girl I had. _____ If I _____ could get my way, _____ I'd get my - self locked
 up to - day, _____ but I can't, _____ so I'll cry _____ in - stead. _____

Example 2.18: The Beatles, “I’ll Cry Instead” (1964), transcription of first verse.

“I’ll Cry Instead,” transcribed in Example 2.18, whose cadential phrase (measures 13–16) occurs over the progression I–V–I. Because the preceding phrase (measures 9–12) prolonged the syntactical pre-dominant (represented by the IV chord), the I chord in measure 13 is not a return to syntactical tonic but an example of the cadential I. In other words, this I chord is unstable and resolves to the following V chord, which is the primary representative of the syntactical dominant. The dominant prolongation begins with this cadential I chord in measure 13, just as a dominant prolongation might begin with a cadential six-four chord. In voice-leading graphs, I will indicate the cadential I with an upward stem along with a bracketed Roman numeral under the staff, as shown in Example 2.19.³³

The concept of the cadential I arises in Walter Everett’s discussion of Bob Dylan’s 1983 song “License to Kill” (Everett 2008a, 153) and also relates to the idea of the “inverted cadential six-four” discussed by William Rothstein (2006) and Timothy Cutler (2009).³⁴

³³See Nobile 2011 for more examples of the cadential I in early Beatles songs.

³⁴See also Doll 2007, 112–30, who discusses IV–I–V progressions in which the I chord can be considered a “passing plagal pre-dominant” elaborating an underlying IV–V progression.

$\hat{5}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$
 I IV [I] V I
 T PD D — T

Example 2.19: Graph of the verse of “I’ll Cry Instead” showing the cadential I prolonging the syntactical dominant function.

Rothstein and Cutler, who discuss exclusively common-practice repertoire, note that certain first-inversion and root-position I chords are best interpreted as cadential six-fours with the “wrong” voice in the bass, usually resulting from a voice exchange. An example comes from Schumann’s harmonization of Bach’s G-minor Sonata for Unaccompanied Violin, in which an apparent I^6 chord represents a cadential six-four and thus dominant function (see Example 2.20).³⁵ Rothstein traces the idea that a cadential six-four can be inverted to a passage from Schenker’s original (unpublished) draft of *Der freie Satz*. In that draft, Schenker writes, “Thus, for example, even a root-position triad, five-three, can under certain circumstances denote nothing other than a six-four suspension, owing to the progression of the *Stufen*.”³⁶ As Schenker’s last clause implies, the overall progression—the *Stufenkreis*—can dictate whether a root-position I chord stands for a true tonic or an inverted cadential six-four. In our current terminology, this means that a I chord that follows a pre-dominant

³⁵This example was originally cited in Rothstein’s earlier article “On Implied Tones” (1991) and was later resurrected in Cutler 2009.

³⁶Translation by William Rothstein (2006, 272). The original (German) quote from the early version of *Der freie Satz* can be found in the Oster Collection at the New York Public Library, file 51, items 1328–29.

I IV V₄⁶ I
(NOT I⁶)

Example 2.20: Bach (arr. Schumann), Sonata No. 1 in G minor for Unaccompanied Violin, BWV 1001, IV, measures 79–82. Analysis after Cutler 2009, 197.

prolongation and precedes a chord representing the syntactical dominant is potentially a cadential I.³⁷ This is the case in “I’ll Cry Instead”: in that example, the cadential I occurs after a pre-dominant IV chord and before a dominant V chord, and thus participates in a prolongation of the dominant function.³⁸

The concept of the cadential I can extend to larger chord progressions. Rothstein 2006 and Cutler 2009 both cite a passage from Beethoven’s Third Piano Concerto in which an entire I–VI–II–V progression represents a prolonged dominant (see Example 2.21). Both Cutler and Rothstein analyze the I⁶ chord on the downbeat of measure 7 as an inverted cadential six-four; neither, however, mentions the intervening VI and II₅⁶ chords between this inverted cadential six-four and its resolution at the end of the measure. Though I certainly agree with their analysis that dominant function arrives at this downbeat, a contrapuntal explanation

³⁷Of course, there are other factors that must be taken into account before settling on such an analysis, such as metrical placement and melodic structure.

³⁸Though the cadential I generally leads to V as primary representative of the syntactical dominant, it occasionally resolves to other chords instead, as is the case in the Beatles’ “The Night Before” (1964), where a cadential I resolves to IV as syntactical dominant; see Nobile 2011, [4.6] and Example 14.

♩ = 136 C

S **R**

8 E-very night I hope and pray ___ a dream lo-ver will come my way. ___ A girl to hold

6 in my arms, ___ and know the ma-gic of her charms, 'cause I want a girl to call ___ my

12 own. ___ I want a dream lo-ver so I don't have to dream a-lone. ___

Chord symbols: C, Am, C (yeah yeah yeah), G7, C, C, Am, F, G7, C, G7

Example 2.22: Bobby Darin, “Dream Lover” (1959), transcription of first verse: an **srdc** phrase structure in which the **c** phrase contains an expanded dominant progression.

An example of this kind of “expanded dominant progression” in rock music comes from Bobby Darin’s 1959 hit single “Dream Lover,” the first verse of which is transcribed in Example 2.22. This verse is in **srdc** form, meaning that there are four phrases, the first two of which are similar (**s**tatement and **r**estatement), the third of which increases the tension (**d**eparture), and the last of which comes to a **c**onclusion (these phrase boundaries are indicated above the staff in the transcription).⁴⁰ The **s** and **r** phrases contain a tonic prolongation via an alternation of I and VI chords, with the VI chord acting as a neighboring chord. This tonic prolongation continues into the **d** phrase, with a I–V⁷–I progression in stop time, leading to the pre-dominant IV chord in measure 12 accompanying the melodic peak on F. The I–VI–IV–V⁷ progression in measures 13–14 is an expanded dominant progression:

⁴⁰The term **srdc** is Walter Everett’s and refers to the pop/rock version of the classical sentence. See Everett 1999, 16, and 2009, 140–41. This form and its associated voice-leading models will be discussed in detail in Chapter 4.

$\hat{3}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$

s/r *d* *c*

I IV [I VI IV] V I
 T PD D T

Example 2.23: Graph of “Dream Lover” showing the I–VI–IV progression as an expanded dominant progression that resolves to V.

because they follow the pre-dominant, the first three chords of this progression are unstable and resolve into the V^7 chord, which represents the syntactical dominant. This progression furthermore summarizes the harmonic material of the earlier phrases: I to VI echoes the neighboring progression from the *s* and *r* phrases, and IV echoes the syntactical pre-dominant from the end of the *d* phrase. In this way, the *c* phrase encapsulates the verse’s entire functional circuit within a prolongation of the syntactical dominant. The entire verse is graphed in Example 2.23; the syntactical functions are given below the graph, showing that the prolongation of the syntactical dominant begins at the onset of the *c* phrase.

The Beatles’ “Please Please Me” (1962) offers a similar example of an expanded dominant progression in its *c* phrase. The first verse is transcribed in Example 2.24. Walter Everett offers a graph of this verse in the first book of his two-volume set *The Beatles as Musicians*; his graph is reproduced here as Example 2.25 (Everett 2001a, 132). Everett interprets the *c* phrase (after the single barline in his graph) to contain an inverted cadential six-four (the

♩ = 136

S **R**

E A E G A B E

8 Last night I said these words to my girl: "I know you ne - ver e - ven

7 A E **D** A (come on) F#m (come on) C#m (come on)

8 try, girl." Come on, come on, come on, come

12 A (come on) **C** E A B7 E A B7

8 on, please please me, whoa yeah, like I please you.

Example 2.24: The Beatles, “Please Please Me” (1962), transcription of first verse.

B + 2 3 4 **C** + 2 3 4 5 6 7

5 4 3 2 1

5 8 5 8

(I VI III I) 6 5 3 I

V⁴ I

E: I

Example 2.25: Walter Everett’s graph of the verse of “Please Please Me” showing an implied cadential six-four at the onset of the *c* phrase (reproduced from Everett 2001a, 132).

E chord in measure 13) followed by a neighboring IV chord (the A chord in measure 14) and finally a resolution to V that cadences to I (measures 14–15). With this analysis, Everett recognizes that the I chord in measure 13 is not a true tonic chord but is instead part of a dominant prolongation that spans measures 13–14. I am not so sure, however, that Everett is justified in positing an implied bass note B ($\hat{5}$) below this I chord. First, the cadential six-four itself is not particularly stylistic in early 60s rock 'n' roll; Everett himself points out that a true cadential six-four does not appear in the Beatles' repertoire until 1965, at the end of the bridge section of *Rubber Soul's* "I'm Looking Through You" (Everett 2001a, 324). I prefer a syntactical explanation for the instability of the I and IV chords in this phrase, allowing that their "true" bass notes are the roots but that they *resolve* to the eventual V chord in a syntactical sense. The entire progression thus prolongs the syntactical dominant.

Pre-dominant function

The syntactical nature of the pre-dominant function is already evident in discussions that relate to common-practice tonality. As most theorists note, the main purpose of the pre-dominant function is to connect the tonic and dominant; in the syntax of the progression, the pre-dominant function represents the simultaneous states of no-longer-tonic and not-yet-dominant. Most theorists discussing the pre-dominant have related it to chords whose bass note is $\hat{4}$, such as IV, II^6 , and II_5^6 (in the function-as-chord-identity manner), but many allow that several other chords can fulfill the pre-dominant role. Marion Guck, who calls this function "P" for "post-tonic/plagal/pre-dominant," claims that "no one chord is particularly characteristic of P" and that, compared to T and D, "P is the most context-determined and

least convention-constrained” (1978, 37). Guck implies that any chord besides I and V has the potential to function as P, but a chord’s status as P-functioning is given by context rather than its identity. (Guck states, for example, that III is “often found as P in large-scale progressions” [36] but later analyzes III[#] as part of an expansion of D [41].) Charles Smith’s definition of “dominant preparation” (DP) function is essentially equivalent to Guck’s definition of P function (Smith 1981). An interesting extension in Smith’s article, though, is his positing of a parallel “plagal chord progression system,” in which the three functions are tonic (T), plagal (P), and plagal preparation (PP), as opposed to tonic, dominant, and dominant preparation (165). In this system, plagal function is carried primarily by the IV chord, and possible plagal preparation chords are III, V, and \flat VII. Thus the progression I–V–IV–I could represent the functional progression T–PP–P–T. By presenting the plagal system as parallel to the tonal system, Smith is essentially equating the *syntactical* functions plagal and dominant, and plagal preparation and dominant preparation; the difference between his P and D is entirely chord-identity-based. Using the current (syntactical) definition of T, PD, and D functions, we could describe a I–V–IV–I progression to outline a functional circuit in which V represents the syntactical pre-dominant and IV represents the syntactical dominant. While this might seem an outlandish proposition to classically minded readers, there are many passages in pop and rock music in which this analysis is appropriate. Example 2.26 gives one instance in the verse of the Eagles’ “Take it Easy” from 1972. This verse has a period structure in which both phrases use IV to represent the syntactical dominant preceded by V as syntactical pre-dominant; the harmonic rhythm, which places V on a weaker (hyper)beat than IV in both phrases, ensures that V is heard as an intermediate chord between I and

a) Transcription of verse

Verse

$\text{♩} = 136$

Well I'm a - run-nin' down the road tryin' to loo-sen my load, I've got se - ven wo-men on my mind. Four
 ___ that want to own me, two ___ that want to stone me, one ___ says she's a friend of mine. ___

b) Harmonic structure

I V IV // I V IV I
 T PD D T PD D T

Example 2.26: The Eagles, “Take it Easy” (1972): V as syntactical pre-dominant and IV as syntactical dominant in both parts of a parallel period.

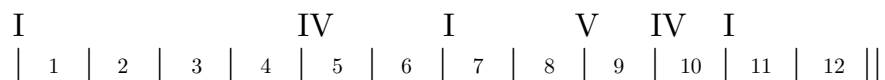
IV. This situation stands in contrast to the typical twelve-bar blues progression, in which V is on a *stronger* beat than IV such that IV is generally heard as a prolongational chord between V (the syntactical dominant) and I.

The Schenkerian concept of “intermediate” harmonies is related to pre-dominant function but is not entirely the same.⁴¹ For one, intermediate harmonies exist at a shallower level of structure than tonic and dominant harmonies, whereas T, PD, and D are equivalent in status (even though PD is sometimes omitted in a functional circuit). Specifically, intermediate harmonies come about via “contrapuntal-melodic prolongation in the ascending

⁴¹Schenker himself does not use this term, but it comes from Allen Cadwallader and David Gagné’s description of Schenker’s theories in their textbook *Analysis of Tonal Music: A Schenkerian Approach* (2011).

arpeggiation,” i.e., filling in the overall bass motion from $\hat{1}$ to $\hat{5}$ (Schenker 1979 [1935], 29). Possible intermediate harmonies between I and V include II, II⁶, and IV (the common pre-dominants), but also diatonic and chromatic versions of III and even I⁶ (see Schenker 1979 [1935], 29–33 and Figures 14–16). Given that Schenker allows for chords whose root is $\hat{1}$ to function as intermediate harmonies, it would be imprudent to disallow chords built on $\hat{1}$ to represent the the pre-dominant in our syntactical definition of the term (though I have not encountered a situation in which such an analysis seems justified). In other words, any *Stufe* can theoretically represent the syntactical pre-dominant, just as any *Stufe* can theoretically represent the syntactical dominant as discussed above.

It is even sometimes the case that the primary representatives of the syntactical pre-dominant and dominant functions are the same chord in a single functional circuit. In these cases, rhythmic and melodic considerations alone differentiate the functions. When the same chord fulfills both functions, there is usually a prolongational chord progression that separates the two instances such that the change in function from pre-dominant to dominant accompanies a *return* to this chord. Consider the Eagles’ “Lyin’ Eyes,” which we encountered briefly at the beginning of this chapter (see the transcription in Example 2.2, page 23). In the verse—a parallel period—the antecedent phrase contains a standard I–IV–II–V progression, with the IV chord turning into a II chord via a 5–6 shift and V representing the syntactical dominant. The consequent phrase contains the same 5–6 shift, but the II chord leads this time to another IV chord, which represents the syntactical dominant. Example 2.27 graphs this verse; the consequent’s functional circuit is I–IV–IV–I, but the two IV chords are separated



Example 2.28: A standard twelve-bar blues progression

to I at any level. Ken Stephenson even uses this chord progression as evidence that chord successions in rock music follow the *opposite* patterns from their common-practice counterparts, calling rock’s successions “retrogressions” (2002, 102–104).⁴² Stephenson and others accuse scholars such as Everett of artificially privileging V–I progressions in a repertoire that does not depend on them and suggests that the descending-fourth progression IV–I is more stylistically representative.⁴³

Since the V–IV–I progression at the end of a twelve-bar blues is generally cadential, the disagreement boils down to which of the two chords, V or IV, represents the syntactical dominant. What we must realize when discussing the twelve-bar blues is that it is simply a chord progression and does not necessarily produce the same analysis every time it occurs. As with the sentence “I saw the man in the park with a telescope”—was I in the park or was the man?—the syntax of the blues progression can be analyzed in multiple ways depending on context.⁴⁴ But there are several twelve-bar blues songs in which nobody can argue that IV

⁴²Evidence to counter this claim comes from the myriad rock songs that follow typical norms of common-practice chord succession, as well as the many songs that freely mix these successions with so-called “retrogressions” (such as “Lyn’ Eyes” [Example 2.27]).

⁴³Mark Spicer sums up this disagreement in his review of Everett 2001a by first agreeing with Everett that V most naturally progresses to I but then playing devil’s advocate to argue that, given the ubiquity of double-plagal (bVII–IV–I) progressions, “surely it is the falling fourths in the bass rather than the successive neighboring motions in the upper voices that command the driver’s seat in such a progression.” Spicer then asks, “might then the V chord of the similarly bass-driven V–IV–I progression ending a 12-bar blues function instead as a large upper neighbor to the IV chord?” (Spicer 2005, [8]).

⁴⁴An analogy arises with the so-called “deceptive cadence,” a V–VI progression whose multiple possible interpretations are discussed in Schachter 2006. Schachter provides several different analyses of this progression but gives no general rules as to which is the most “correct”; the best analysis is always dependent on context.

Verse

Kick off your shoes, start lo - sin' the blues; this old house ain't got
no-thin' to lose. Seen it all for years, start sprea-din' the news. We got a
room on the floor, come on ba - by shake some - thin' loose.

Example 2.29: Stevie Ray Vaughan and Double Trouble, “The House Is Rockin’” (1989), transcription of first verse: a twelve-bar blues progression that omits the IV chord between V and I.

functions as the syntactical dominant: those twelve-bar blues songs that skip the IV chord such that the V chord lasts for two measures and leads directly to I. A classic example is Stevie Ray Vaughan’s “The House Is Rockin’” from his 1989 album *In Step*, the first verse of which is transcribed in Example 2.29. This song, like most of Vaughan’s, is based on the twelve-bar blues progression, but the V chord in measure 9 does not lead to IV, instead lasting for two measures and leading straight back to I. Example 2.30 graphs this verse, showing that the functional circuit is I–V–I with no syntactical pre-dominant and V as syntactical dominant.⁴⁵

In general, I consider the progression of “The House Is Rockin’” to be the basic twelve-bar blues progression. The IV chord that is often inserted between V and I is heard as an insertion

⁴⁵Other twelve-bar blues songs that end with V–I progressions include Chuck Berry’s “Rock And Roll Music” and “Johnny B. Goode” (both later recorded by the Beatles). Another Chuck Berry song, “No Particular Place To Go,” omits the IV chord in the verses but includes it underneath the guitar solos.

Example 2.30: Graph of “The House Is Rockin’” showing a I–V–I functional circuit.

that does not alter the fundamental syntax of the progression. In most cases, therefore, I agree with Walter Everett that the IV chord serves to “soften” the V–I cadence. Rarely, though, melodic considerations give more emphasis to the IV chord and encourage hearing V as syntactical *pre-dominant* and IV as syntactical dominant. One of the least blues-sounding twelve-bar blues songs, Michael Jackson’s 1991 single “Black Or White” (Example 2.31), may serve as an example. While this song lacks the dominant seventh chords and minor-pentatonic melodies characteristic of blues songs, the chord progression is a typical twelve-bar blues that includes IV between V and I at the end. Example 2.32 graphs the verse of this song; the example shows that the functional circuit is I–V–IV–I, with V as pre-dominant and IV as dominant. The justification for this analysis lies in the melody: the cadential gesture $\hat{2}-\hat{1}$ occurs with the title lyric “black or white,” harmonized with backup singers. This gesture is the melodic goal of the verse and occurs over the IV–I progression; one can conclude both that the IV–I progression represents the cadence and that melodic $\hat{2}$ does not resolve to $\hat{1}$ when V moves to IV but instead remains active until the I chord occurs.⁴⁶

⁴⁶This F# could be considered an added sixth to IV, which resolves down rather than up, or could be seen to represent a “syntax divorce” between melody and harmony, in which melody and harmony approach

Verse

They print my mes-sage in the Sa-tur-day Sun. I had to tell them I ain't
 se-ond to none, and I told a-bout e-qua-li-ty, and it's true, ei-ther you're wrong or you're right. ____
 But if you're thin-kin' a-bout my ba-by, it don't mat-ter if you're black or white. ____

Example 2.31: Michael Jackson, “Black or White” (1991), second verse.

“black or white”

I V IV I

Example 2.32: Michael Jackson, “Black Or White,” verses: A twelve-bar blues progression in which IV is the syntactical dominant and V is the syntactical pre-dominant.

CADENCES AND CLOSURE

A syntactical definition of harmonic function allows us to interpret several progressions as *cadences* that under traditional definitions would not be classified as such. In this definition, any progression from syntactical dominant to tonic that closes a functional circuit represents an authentic cadence, even if there is no V–I motion. Yet a cadence is not exclusively a harmonic phenomenon; in order to have a true cadence, the melody must complete some structural motion as well. In general, this melodic motion involves an interval of the tonic triad composed out linearly, such as $\hat{3}-\hat{2}-\hat{1}$, $\hat{5}-\hat{4}-\hat{3}$, or $\hat{5}-\hat{6}-\hat{7}-\hat{8}$. While the Schenkerian models of linear descents to $\hat{1}$ remain common in pop and rock music, there are many instances where the upper voice leads to some other tone and/or is based on a linear *ascent* rather than a descent. Non-linear upper-voice motions are also possible, such as a neighboring progression (e.g., $\hat{3}-\hat{4}-\hat{3}$) or an arpeggiation (e.g., $\hat{3}-\hat{5}-\hat{8}$). For these reasons, the distinction between “perfect” and “imperfect” authentic cadences is not as meaningful in this repertoire as it is in common-practice tonality, since an authentic cadence whose upper voice ends on $\hat{3}$, for example, can provide closure that is just as strong as if it ended on $\hat{1}$.

A syntactical definition of function, in addition to expanding our database of cadences, also allows us to *disqualify* certain moments from being cadences. Consider the opening of Schubert’s song “Am Meer,” which appears as Example 2.33. After a two-measure introduction, measures 3–10 contain a parallel period, with the antecedent phrase ending in a half

their cadential goal in different ways (see Chapter 3). The melody on the lyric “black or white” could easily have been harmonized with a V–I progression rather than IV–I by adding a B chord in the second half of measure 10. In this case, the IV chord would be considered a neighboring chord to V.

The image shows a musical score for Schubert's "Am Meer" (measures 1-10). The score is in G major, 4/4 time, and marked "Sehr langsam." It features a vocal line (Singstimme) and a piano accompaniment (Pianoforte). The piano part is marked "p" and "pp molto legato". The lyrics are: "Das Meer erglänzte — weit hinaus im letz-ten A-bend - schei - ne, wir sassen am ein - samen Fi-scherhaus, wir sa - ssen stumm und al - lei - ne."

Example 2.33: Schubert, “Am Meer,” measures 1–10.

cadence in measure 6 and the consequent phrase ending in a perfect authentic cadence (PAC) in measure 10. That is an obvious analysis; also obvious to the trained analyst is that the V–I progressions in measures 4 and 8 are *not* PACs, even though they fit the definition given by most undergraduate theory textbooks.⁴⁷ A syntactical definition, on the other hand, requires that a cadence *end* some formal unit; as Caplin puts it, “while the presence of a cadential progression is a necessary condition for cadential function, it is not a sufficient one” (1998, 43). Caplin continues that a cadence must “represent the structural *end* of broader harmonic, melodic, and phrase-structural processes.” The progression in measure 4 of “Am Meer” simply

⁴⁷Indeed, as if to avoid the issue, Kostka and Payne’s *Tonal Harmony* text allows that a student “might hear two-measure phrases in this excerpt instead of the four-measure phrases we have analyzed,” in which case “this would be a parallel *double period*” (Kostka & Payne 2013, 155). This concession reveals a fundamental flaw in this textbook’s definition of cadence: analyzing these eight measures to contain four phrases is highly unsatisfying, yet a definition of cadence based on chord progression does not differentiate between measures 4 and 10.

Heinrich Schenker claims, similarly, that measures 4 and 6 of “Am Meer” do not contain a final conclusion because the voice-leading structure is not complete; see Schenker 1994 [1925], 199–200.

comes too early in the phrase to be a cadence, whether the explanation for that is rhythmic (it comes after only two bars) or form-functional (we do not have initiating, medial, and cadential functions).

The idea of defining cadence as a formal characteristic of music is not new; it goes back at least as far as Antón Reicha's 1814 *Treatise on Melody* (Reicha 2000 [1814]). In Reicha's formulation, formal position trumps harmonic/melodic profile in determining cadence types. For example, a passage that resembles a "perfect cadence" (by ending on $\hat{1}$ and containing root-position V–I motion) can in fact represent a half cadence if it occurs in the fourth bar of an eight-bar period (Example 2.34a) or a "quarter cadence" if it occurs in the second bar of an eight-bar period (Example 2.34b). More recently, Lerdahl and Jackendoff (1983) speak of a "cadenced group" consisting of two elements, the second of which is a cadence; a cadence cannot exist unless it groups in this way. In other words, "a cadence must be a cadence *of something*; a group that consisted only of the articulation of its ending would be unsatisfying" (168). Caplin 2004 represents the most significant discussion of a formal definition of cadence to date, in which he holds that "cadence is best understood as a *syntactical* component of music, as distinguished from the wide variety of musical forces that are, broadly speaking, *rhetorical* in function" (52). Yet a formal definition of cadence has not taken hold in the instructional literature; in Ann Blombach's survey of textbook definitions of "cadence," she remarks that only five percent mention completion of a formal unit, while 70 percent mention chord progression (Blombach 1987, 227).⁴⁸

⁴⁸Admittedly, several new textbooks have been published since Blombach's article was written, but an informal survey of these shows that the definition has not changed much since 1987.

Example 2.34 consists of two musical examples, a and b, each in G minor (one flat). Example a shows a quarter cadence (1/4 cad.) and a half cadence (1/2 cad.) with fingerings 6, 5, 5, 6, 7. Example b shows a quarter cadence (1/4 cad.) and a half cadence (1/2 cad.) with fingerings 7, 6, 5.

Example 2.34: Reicha’s examples of quarter and half cadences. (Reproductions of Examples K and L from Reicha 2000 [1814], 124–5.)

Phrases

On the other hand, 54 percent of the textbooks in Blombach’s sample mention “end of phrase” in their definition of cadence. Yet Blombach also notes that 48 percent of these same textbooks define a phrase as something that is “terminated by [a] cadence” (228). While it is mathematically possible that very few of these definitions overlap, the reality is that these two concepts are often defined circularly in terms of each other, as Blombach herself points out (226–27; see also Schmalfeldt 1997). I will not provide an overview of theorists’ various definitions of phrase here (for that, see Schmalfeldt 1997); I will simply state that for the purposes of this dissertation, I follow Caplin in divorcing the concepts of phrase and cadence. For Caplin, cadence is “a manifestation of formal functionality,” whereas phrase is “a functionally neutral term for grouping structure (embracing approximately four measures of music)” (2004, 59). The concept of phrase does not carry with it any specific harmonic or

Phrase 1 (4 bars) **Phrase 2 (4 bars)**

C7

8 Turn off your mind, re - lax, and float down - stream. It is not dy - ing,

Phrase 3 (4 bars)

6 it is not dy - ing. Lay down all thoughts, sur - ren - der to the void.

Phrase 4 (4 bars)

12 It is shi - ning, it is shi - ning.

Example 2.35: The Beatles, “Tomorrow Never Knows” (1966), opening of first verse: four-bar phrases are based on melodic groupings rather than harmonic elements. None of these phrases contains a cadence.

melodic implications but refers instead to rhythmic and melodic groupings. Thus the melodic groups in Example 2.35 are phrases despite containing only a single chord and no structural melodic motion. Even though the melody occasionally ends in the third bar of these groups, they all represent four-bar phrases by virtue of their rhythmic spans.⁴⁹

Closure

A cadence provides a strong measure of closure to a phrase or formal unit, but “not all closure in music is cadential,” as Caplin asserts (2004, 56). Consider the verse of the Rolling Stones’ 1965 single “Get Off of My Cloud,” transcribed in Example 2.36. This verse consists of four four-bar phrases that are nearly identical in their melodies, all occurring over a repeating I–

⁴⁹A prime example of the opposite definition of phrase—one based on harmonic and melodic completion—can be found in Rothstein 1989, Chapter 1. See also Attas 2011 for a discussion of phrases in rock music.

Verse

Phrase 1

E A B A E A B A

8 I live in a-part - ment on the nine - ty-ninth floor of my block. I

Phrase 2

E A B A E A B A

5 8 sit at home loo-king out the win - dow i - ma-gi-ning the world has stopped. Then

Phrase 3

E A B A E A B A

9 8 in flies a guy who's all dressed up just like a U-nion Jack, says I've

Phrase 4

E A B A E A B A

13 8 won five pounds if I have his kind of de-ter - gent pack. I said

Chorus

E E/G# A B

(Hey!) (You!)

17 8 "Hey, you! Get off of my cloud!"

Example 2.36: The Rolling Stones, “Get Off of My Cloud” (1965), first verse: four nearly identical phrases in which the fourth achieves a weak sense of closure by completing a sentence in the text.

IV–V–IV progression prolonging the tonic.⁵⁰ Yet at the end of the fourth phrase we feel that this verse has come to some sort of a close and that we are ready for something new; the song obliges by leading us into the chorus at this point. The closure that we perceive at the end of this verse does not come from the completion of a functional circuit or through any other harmonic/melodic means, since there has been no structural motion at all, but comes from rhythmic elements as well as the text. It is not until the fourth line of text that we understand what the singer is talking about; after this line, we know that the singer is complaining about an unwelcome salesman who invades his daydreaming. This both concludes the verse’s lyrics and sets up the chorus’s, which consist of the plea to “get off of my cloud!” (also the title of the song). Yet some measure of closure is obtained simply by presenting a set of four phrases; even without this textual conclusion, this verse would have sounded somewhat complete in measure 16. The chorus to the Steve Miller Band’s “Take the Money and Run,” from their 1976 album *Fly Like an Eagle*, has four identical two-bar phrases that present the same harmony, melody, and text (see the transcription in Example 2.37). Although there is nothing to distinguish one phrase from the next (besides some minor ornamentations), the fourth phrase sounds relatively final simply by virtue of being the fourth phrase. The magical quality of the number 4 in metrical grouping is seen at several levels: $\frac{4}{4}$ is the most common time signature, and four bars is the most common phrase length. This reflects the more general understanding that *binary* divisions of meter and hypermeter are more common than others; as William Rothstein points out, “most theorists, whatever their conceptual framework and vocabulary, have recognized that phrases of two, four, eight, and sixteen

⁵⁰Christopher Doll traces this common tonic-prolonging progression to the Kingsmen’s 1963 single “Louie Louie” in Doll 2011b.

Chorus

8
Go on, take the mo-ney and run. Go on, take the mo-ney and run. Hoo - hoo-

5
hoo! Go on, take the mo-ney and run. Go on, take the mo-ney and run.

Example 2.37: The Steve Miller Band, “Take the Money and Run” (1976): four identical phrases achieve weak closure simply by virtue of occurring four times.

measures enjoy a privileged status in tonal music” (1989, 33). Theorists do not agree on why this is the case; some have posited corporeal reasons, noting the binary cycle of the human heartbeat and the symmetry of the human body, while others relate the phenomenon to dance music; see Rothstein 1989, 34. The specific primacy of groupings of four phrases reflects the impression that a group of two phrases is underdeveloped while a group of eight phrases is too long (imagine if there were eight repetitions of the phrase in “Take the Money and Run!”).

Half cadences

A half cadence occurs when a functional circuit ends on the syntactical dominant and does not contain a concluding tonic, thus becoming a functional half-circuit. There are two situations in which functional half-circuits typically occur: at the end of a section that is not the main section of the song, such as a bridge or a verse that leads to a chorus; or halfway through a section, splitting it into two circuits and generally creating a period structure. Traditional bridge sections nearly always end with a half cadence via their “retransitional dominant,”

Verse

A E/G# G D/F# Bm7(b5)/F A/E D/F# D

8 And when I see the sign that points one way, — the love we used to pass by e - very day.

Chorus

B A F#m D A E

8 — Just walk a - way, — Re - née, you won't see me fol - low you — back home.

13 The emp - ty side - walks on — my block are not the same. — You're not to blame. —

Example 2.38: The Left Banke, “Walk Away Renée” (1966), transcription of first verse and chorus.

which is usually represented by a V chord. It is not uncommon as well for verse sections to end with a half cadence, especially when they precede a chorus that ends with an authentic cadence, as in The Left Banke’s 1966 single “Walk Away Renée” (see the transcription in Example 2.38). This song’s eight-measure verse begins with a tonic prolongation via a sequence and a chromatic descent in the bass that lasts six measures. Measure 7 contains a pre-dominant IV chord, which leads to a major II chord in measure 8. This II chord represents the syntactical dominant and creates a half cadence. The upper voice in this verse contains a typical stepwise descent from $\hat{5}$ to $\hat{2}$, followed by an interruption before the line can conclude to $\hat{1}$ (see the graph in Example 2.39).

The chorus that follows this verse is a ten-measure parallel period with a four-bar antecedent and an expanded six-bar consequent. The antecedent phrase has a typical structure, with a descent from $\hat{5}$ to $\hat{2}$ in the upper voice ending with a half cadence on a V chord; in

Example 2.39: Graph of “Walk Away Renée” showing a half cadence on II^\sharp at the end of the verse and a parallel period in the chorus.

this case, $\hat{3}$ is harmonized by the cadential I in measure 12. The consequent phrase begins just like the antecedent, but after arriving on the pre-dominant IV chord the harmony sinks to a confusing III chord (measure 16) with the melody following in parallel octaves. The next two measures (measures 17–18) contain an authentic cadence to the tonic, this time with IV representing the syntactical dominant. The melody beats the harmony to its goal, arriving at $\hat{1}$ in measure 17 over the dominant IV chord and skipping over $\hat{2}$. In this verse–chorus cycle, we see three different harmonies represent the syntactical dominant: II^\sharp at the end of the verse, V in the antecedent of the chorus, and IV in the consequent.

CONCLUSION

I have argued in this chapter for the separation of the notions of harmonic function and chord identity, preferring to conceive of harmonic function as purely syntactical. This reconsideration gives us a functional framework through which to analyze pop and rock songs that do not adhere to common-practice norms of chord succession. Yet removing any notion

of chord identity from the definition of harmonic function raises several questions that are perhaps not satisfactorily answered in this chapter. What is it that makes a chord function as a pre-dominant if it isn't its scale-degree content or similarity to the IV chord? Earlier, I claimed that the pre-dominant function represents the syntactical state of no-longer-tonic and not-yet-dominant. But what makes us perceive this syntactical state? Our perception results from a variety of factors, including melodic, harmonic, phrase-rhythmic, and lyrical procedures, all of which combine to give us the impression that we have departed from our initial syntactical state (tonic). It is my hope that further research will investigate the specific ways in which these factors create this impression, thus exploring the *qualia* of the pre-dominant function.⁵¹

It is not my intention to claim that the application of a syntactical definition of harmonic function is restricted to discussions of popular music. I claim, more broadly, that these definitions are preferable in discussions of *all* Western tonal repertoires. Rock music simply forces our hand: since this repertoire's specific chord progressions are far less uniform than those of common-practice tonality, we find that labeling all IV chords as subdominants, for example, or restricting our definition of structural cadence to V–I progressions yields unsatisfactory analytical results. It is my hope that the evidence from rock music leads us to employ syntactical definitions of function and cadence in discussions of common-practice tonal music as well. These definitions will not change many of the specific labels we use—those V–I progressions in Mozart and Beethoven will still be cadences, and we will most likely

⁵¹ *Qualia* is a philosophical term referring to, loosely, the way things seem (in this case, to a listener perceiving pre-dominant function). The concept of qualia is familiar to music theorists through Boretz 1995 and, more recently, Rings 2011 (neither of whom use the term in relation to harmonic function).

never label a IV chord as the dominant in Schubert—but they will shift our understanding of exactly *why* these elements are labeled as they are. We have already seen a shift toward a syntactical understanding of these concepts in the work of William Caplin and Steven Laitz, among others. Yet these authors still retain several elements of the function-as-chord definition, and as a result the syntactical features of their theories are largely unacknowledged even within their own work. The analyses of pop and rock songs in this chapter and the chapters that follow are intended to reveal the benefit of a full separation of syntactical and chord-identity-based definitions of harmonic function. This chapter further seeks to demonstrate that if we focus on syntax rather than chord-to-chord succession, we will find that the structures of rock music and common-practice tonal music are not so different.

THE MELODIC-HARMONIC DIVORCE

IT HAS BEEN NOTED several times that the relationship of melody to harmony is looser in popular music than in common-practice tonal music. Allan Moore (1995, 189) is the first to refer to this as a “divorce,” noting its prevalence in blues songs. Several other authors have discussed the divorce, including Ken Stephenson (2002, 74–82), who shows that $\hat{1}$ and $\hat{5}$ often act as stable tones even if they are dissonant with the underlying chords, and Peter van der Merwe (1989, 225–32), who offers a more historical approach that traces the origins of the melodic-harmonic divorce back to nineteenth-century Viennese music.¹ In the most extensive study of the topic to date, David Temperley (2007) attempts to enumerate the specific conditions under which this divorce usually occurs. Specifically, Temperley claims that the divorce is most common “in pentatonically based melodies, and in verses rather than choruses” (323). What is missing from these studies, however, is a systematic method of *interpreting* the melodic-harmonic divorce: since the traditional rules of counterpoint do not apply in these situations, what processes, if any, govern melodic and harmonic structure?

¹See also Stoia 2008, 34–40, for a discussion of dissonance treatment in blues songs.

To answer this question, I will outline three types of melodic-harmonic divorce; each type gives rise to its own voice-leading interpretation. Type 1, which I will call a “hierarchy divorce,” is the most common and occurs when the melody exists at a deeper level of structure than the harmony. In other words, the foreground *chords* participate in embellishments while the melody continues to outline a prolonged harmony. (Such phenomena in jazz and ragtime are discussed in Winkler 1978, 16–18.) Type 2, which I will call a “rotation divorce,” arises when the harmony contains a “chord rotation”—a progression of two to four chords that leads back to its own beginning. The lack of goal-oriented harmonic motion in these songs places the onus on the melody to create formal structure and delineate phrases independently of the underlying chords. And Type 3, which I will call a “syntax divorce,” arises when both melody and harmony participate in a cadence or other structural motion, but in incompatible ways; for example, when a IV–I cadence supports $\hat{2}$ – $\hat{1}$ in the upper voice.

All three types have one thing in common: when the melodic-harmonic divorce exists, the melody nearly always revolves around the tonic triad. This combines Stephenson’s claim that $\hat{1}$ and $\hat{5}$ are the most common melodic “pedals” above a changing harmonic backdrop and Temperley’s claim that melodies that are divorced from harmony are generally pentatonic in nature: to Stephenson’s $\hat{1}$ and $\hat{5}$ I add $\hat{3}$, and Temperley’s pentatonic melodies I interpret as the tonic triad with embellishing tones. Essentially this means that the notes of the tonic triad, which are always stable at the deepest structural level, can under certain circumstances act as stable tones even if they are dissonant with the foreground harmonies.

The melodic-harmonic divorce is often a structurally significant feature of a rock song, and often a song's progression between "loose" and "tight" melodic-harmonic relationships (i.e., more divorced or more in sync) can have formal significance. The terms "loose" and "tight" regarding the melodic-harmonic divorce are Temperley's, used specifically in his claim that songs often contain "loose verses" and "tight choruses" (2007, 335–40). As we will see, though, there are several examples that do not follow the loose verse/tight chorus paradigm, such that this principle does not hold as a general theory. What is often true, however, is that the moment at which the melodic-harmonic relationship "tightens" coincides with an important formal event, such as a cadence. The final section of this chapter will discuss the rhetorical effect of loosening and tightening the melodic-harmonic relationship.

Before discussing the three types of melodic-harmonic divorce, I would like to clarify the meaning of the term "melodic-harmonic divorce." This term is potentially problematic. First, it assumes that melody and harmony are separable layers of a piece of music. In Temperley's article, it is clear that by "harmony" he means the chord progression that is implied by the accompaniment alone without taking into account the vocal melody. The divorce occurs when the melody does not follow this chord progression (e.g., by not resolving non-chord tones by step). The word "divorce" is also problematic, as it implies both that the melody and accompaniment are not related at all (which is rarely the case) and that they were at some prior point "married." The latter assumes a historical lineage from common-practice tonality to rock music—a lineage that is dubious at best (this assumption surfaces in van der Merwe 1989). To avoid multiple terms for the same concept, I will retain the term "melodic-

harmonic divorce” with the understanding that I am using it to mean a stratification of the melodic and accompanimental layers.

TYPE 1: HIERARCHY DIVORCE

In classical harmony, we recognize that harmonies can serve an embellishing function akin to melodic passing and neighboring tones. There is an important difference, though, between embellishing harmonies and melodic embellishments: the latter can occur without harmonic support, while the former must support a locally stable melodic tone. Consider Example 3.1: in Example 3.1a, we have a typical embellishing progression, with the melodic passing tone D ($\hat{2}$) harmonized by V_5^6 , embellishing the tonic. In this case, both melody and harmony participate in the embellishment. In Example 3.1b, the melody participates in the embellishment with its passing tone, but the harmony does not—a typical occurrence as well. Example 3.1c shows the opposite: the harmony participates in the embellishment, but the melody does not. This is considered incorrect in Classical practice due to the unresolved non-harmonic tone over the second chord (marked with an asterisk in Example 3.1).² In pop and rock music, however, this process is common and is responsible for the first type of melodic-harmonic divorce.

Let me illustrate this point with two examples, both of which are mentioned in Temperley 2007: “Jumpin’ Jack Flash” by the Rolling Stones (1968) and “Rock’n Me” by the Steve

²Some theorists recognize the possibility of pedal tones in non-bass voices (sometimes called “inverted pedals”) within the Classical repertoire, and so this C could possibly be explained in this manner if it remained stationary when the tonic chord returns. Because this voice moves to an E, however, this interpretation is not possible in this case.

Example 3.1: (a) The middle harmony is an “embellishing harmony” that harmonizes a melodic passing tone. (b) The same melodic passing tone can occur unharmonized, creating a dissonance. (c) However, the harmony cannot embellish while the melody does not.

Miller Band (1976). The first verse of “Jumpin’ Jack Flash” is transcribed in Example 3.2a.³

The verses of this song alternate between a tonic triad and a \flat VII chord with no third over a tonic pedal.⁴ The latter chords are clearly embellishing chords, functioning as neighboring harmonies to the tonic on weak beats in the hypermeter. The melody does not participate in this neighboring motion, remaining on $\flat\hat{3}$ throughout. Example 3.2b gives a voice-leading reduction of the verse, which shows the A5 chord to be a product of inner-voice neighboring tones. The $\flat\hat{3}$ in the melody is therefore consonant with the prolonged harmony, and the apparent subtonic chord contains the non-chord tones.

In “Jumpin’ Jack Flash,” the harmonic embellishment is at a very surface level—it is over a tonic pedal and returns to the chord that preceded it—and so it is not difficult to hear the melody as consonant with the underlying harmonic progression (or lack thereof, since a first-

³This transcription differs from Temperley’s in several ways: most noticeably, mine is in B major while his is in $B\flat$ minor. The original recording is about halfway between $B\flat$ and B, but videos of the Rolling Stones in concert show that they play it in B. I consider this song to be in major despite the blues-inflected $\flat\hat{3}$ and $\flat\hat{7}$ that frequently occur in both melody and harmony because the tonic chords are always major; Temperley transcribes them as “ $B\flat 5$,” but most of the time (though not every time) the major third is heard in the guitars.

⁴The notation “A5” stands for a chord whose root is A that contains only root and fifth; such chords are common in guitar-based rock music.

a) Transcription of verse 1

I was born in a cross - fire hur - ri - cane
And I howled at my ma in the dri - vin' rain

b) Reduction of verse 1

I

Example 3.2: The Rolling Stones, “Jumpin’ Jack Flash” (1968).

level reduction would show the verse containing the tonic chord throughout). “Rock’n Me” contains an example of a more prominent embellishing harmony that connects two different chords (see Example 3.3). Temperley characterizes the melody of this song’s verse as “freely traversing the pentatonic scale without much regard for the underlying chord changes” (2007, 331). However, as the transcription in Example 3.3a shows, the melody is consonant with the underlying harmonies with the exception of the A5 chord in the third and fourth measures. In these measures, the melody seems to outline the tonic triad (embellished with pentatonic neighbor and passing tones) while the harmony has proceeded to the subtonic. This melodic-

a) Transcription of verse 1

Well I been loo-kin' real hard and I'm tryin' to find a job but it just keeps get-tin' tou-gher ev-'ry day but I got to do my part 'cause I know in my heart I got to please my sweet ba-by yeah

b) Reduction of verse 1, showing the A5 chord as a harmonized passing seventh in the bass prolonging the tonic harmony

I⁸ — IV⁽⁷⁾ I

Example 3.3: The Steve Miller Band, “Rock’n Me” (1976).

harmonic divorce suggests that the A5 chord is an embellishing harmony and that the basic progression of the verse is I for four bars, IV for two bars, and back to I for the final two bars. Example 3.3b gives a reduction of this verse showing the A5 harmony as a harmonized passing seventh connecting I and IV but ultimately prolonging the tonic harmony. The divorce continues into the chorus, which contains the same chord progression as the verse with three-part vocal harmonies over the main melodic line (see Example 3.4). Interestingly, the vocal harmonies are different in the first and second choruses over the A5 chord, and in neither chorus do they match the underlying chord. The harmony in the second chorus reflects the analysis given in Example 3.3b (with the tonic prolonged for four bars), but the harmony in the first chorus suggests that perhaps the subdominant harmony arrives in

CHORUS 1

So keep on roc kin' me ba - by Keep on a roc-kin' me ba - by Keep on a -
roc - kin' me ba - by Keep on a - roc - kin' me ba - by

CHORUS 2

Keep on a - roc kin' me ba - by Keep on a roc kin' me ba - by Keep on a -
roc-kin' me ba - by Keep on a - roc-kin' me ba - by ba - by ba-by ba - by keep on roc-kin'

Example 3.4: The Steve Miller Band, “Rock’n Me,” chorus 1 and chorus 2, with different vocal harmonies indicated, neither of which is consonant with the underlying harmony.

the third bar, with the A5 harmony acting as an appoggiatura chord.⁵ Indeed, even in the verse (Example 3.3a), the melody hints at the E-major harmony in measure 3 with its G \sharp -B motion before returning to outline the tonic triad. Whichever interpretation one prefers, it is clear that the A5 chord represents a transition between the B and E chords in both harmony and melody.

Examples like “Jumpin’ Jack Flash” and “Rock’n Me” demonstrate situations in which the melody exists at a deeper level of structure than the harmony. This phenomenon therefore

⁵This interpretation is at odds with the hypermeter, though; appoggiaturas are generally on stronger hyperbeats than their resolutions, but measure 3 is weaker than measure 5, the latter being the downbeat of a four-bar hypermeasure.

All mixed up, you don't know what to do, next thing you turn a-round and find the per-son is you

Example 3.5: 311, “All Mixed Up” (1995), first two bars of the chorus: the melody remains on the tonic during the neighboring subtonic harmony.

I ————— IV —————

Example 3.6: J. Geils Band, “Centerfold” (1981): transcription of guitar riff (top staff); harmonic reduction on lower staff showing subtonic chords as passing harmonies.

sheds light on the harmonic organization of the passage as a whole by helping to identify which harmonies are structural and which are embellishments. In both examples given above, a subtonic chord was shown to be an embellishment of the tonic harmony, either as a neighboring harmony (“Jumpin’ Jack Flash”) or a passing harmony (“Rock’n Me”). The subtonic is a common embellishing harmony, especially in one of these two progressions, and frequently participates in a melodic-harmonic divorce. Some other examples of its use as a neighboring harmony include the chorus of 311’s 1995 single “All Mixed Up” (Example 3.5) and the verses of Sublime’s “Wrong Way” from the following year. Examples of its use as a passing harmony between I and IV include the coda to the Beatles’ “Hey Jude” (1968) and the J. Geils Band’s “Centerfold” (1981); in the latter, $bVII$ is used as a passing harmony from I to IV and also from IV back to I (see Example 3.6).

G C G

It's been a hard day's night

Example 3.7: The Beatles, “A Hard Day’s Night” (1964), opening of verse 1: $\hat{5}$ remains in the melody over the progression I–IV–I.

Besides $\flat VII$, the most common embellishing chord is IV acting as a neighboring chord to the tonic. This chord usually occurs in a weak hypermetric position and the melody often remains on the tonic. An early example is the opening of the Beatles’ “A Hard Day’s Night” (1964), in which the melody remains on $\hat{5}$ over the progression I–IV–I (Example 3.7). A more elaborate example is found in Ben Folds’ “Still Fighting It” from his 2001 album *Rockin’ the Suburbs*. The first verse of this song is transcribed in Example 3.8. In the first seven measures, the harmony essentially alternates tonic and subdominant chords in various inversions (the second-inversion tonic in measure 5 is a consonant I_4^6). The melody, however, remains on notes of the tonic chord throughout these eight measures, outlining the sixth between G and E. We can therefore interpret the subdominant chords, all of which are hypermetrically weak, to be neighboring chords prolonging the tonic harmony. We probably do not need the melodic-harmonic divorce to come to this conclusion. However, this hierarchy divorce sets up the moment when the structural pre-dominant arrives (measure 10), which is also the moment that the divorce ends and the melody moves for the first time to an unstable tone ($\hat{4}$). The effect of this re-marriage of melody and harmony is a strengthening of the pre-dominant function of the IV chord: measures 9–12 contain what Caplin would call an “expanded cadential progression” (1998 and 2004), beginning with a first-inversion

tonic chord and proceeding through IV functioning as pre-dominant to the dominant, which is here represented by a cadential six-four that only half resolves.⁶ The achievement of the melodic peak in measure 9 sets up the end of the divorce in measure 10, in which IV supports $\hat{4}$. Although we have already heard the IV chord numerous times in this verse, this time it brings the melody along with it, causing this IV chord to be heard as more than a simple neighboring harmony and instead as the representative of the pre-dominant function, driving the music toward the cadence. Example 3.9 gives a reduction of the verse, showing a tonic prolongation through the climactic achievement of the *Kopfton* $\hat{5}$ in measure 9, leading into the cadence.

It is not always the case that the structural harmony occurs on hypermetrically strong beats; Examples 3.10 and 3.11 give examples of hypermetrically accented IV chords that embellish the tonic. In Example 3.10, from the chorus of Third Eye Blind's "Losing A Whole Year" (1997), the IV chord acts as an appoggiatura chord to the following I chord; above this IV chord, the melody holds $\hat{3}$, which is consonant with the "resolution" of IV to I in the harmony. The reduction in Example 3.10b shows the basic progression of this passage as I-V supporting $\hat{3}$ - $\hat{2}$. Example 3.11 transcribes the first verse of the White Stripes' 2002 song "We're Going To Be Friends." This verse contains a twelve-bar blues progression over six bars instead of twelve; the final two bars are repeated to create an eight-bar phrase. The song itself is not very bluesy, though, since the melody and harmony remain strictly within the tonic

⁶The verses use the *Dominantparallel* (i.e., a V chord with a sixth substituting for its fifth; see Riemann 1896 [1893]) twice, as $\hat{3}$ seems unwilling to descend to $\hat{2}$. The melody in the chorus then centers on $\hat{2}$ (even over tonic and subdominant harmonies) and finally descends to $\hat{1}$ at the end, though over a IV chord. In this way, the verse's half cadence extends into the chorus, which prolongs the dominant, creating a sense of continuity from the beginning of the verse through the end of the chorus.

Good mor - ning son I am a bird wea-rin' a brown po-ly-es - ter shirt

You want a Coke? May-be some fries? The roast beef com - bo's on-ly nine nine-ty five.

It's o - kay, you don't have to pay, I've got all the cha - nge

Example 3.8: Ben Folds, “Still Fighting It” (2001), first verse.

I 6 IV V $\frac{6}{4-3}$

Example 3.9: Reduction of the verse of “Still Fighting It”.

a)

b)

Example 3.10: Third Eye Blind, “Losing A Whole Year” (1997). (a) Opening of the chorus. (b) Reduction of (a).

major scale. The IV chord in the third measure of the example embellishes the tonic while the melody above it continues to outline the third $\hat{5}-\hat{3}$, creating another hierarchy divorce. This neighboring function of IV is common to most twelve-bar blues progressions, and it is common for the melodic phrase over this chord to be identical to that of the first phrase over a tonic chord.⁷ The melodic-harmonic divorce ends at the refrain in the fifth measure, when the head motive $\hat{5}-\hat{4}-\hat{3}$ appears in rhythmic augmentation supported by V–IV–I. The simplicity of the melody reflects the text’s youthful innocence: the narrator, a boy excited about meeting a new friend at the beginning of a school year, is not hardened enough to sing $\hat{b}\hat{3}$ or even $\hat{b}\hat{7}$ (which would be typical in a blues song), but instead manages only a simple third-progression outlining the tonic triad.

In the above examples, the melodic-harmonic divorce comes about by the two domains existing on different levels of structure. Specifically, the melody projects a *deeper* level than the harmony. In this interpretation, the two are not “divorced” per se; their marriage might

⁷Temperley (2007, 332) discusses this phenomenon in relation to the melodic-harmonic divorce, citing Titon 1994 as well.

G C
 Fall is here, hear the yell, back to school, ring the bell, brand new shoes, wal-king blues
 G D Cadd9 G D Cadd9 G
 climb the fence, books and pens. I can tell that we are gon-na be friends I can tell that we are gon-na be friends

Example 3.11: The White Stripes, “We’re Going To Be Friends” (2002), first verse.

be going through a rough period, but in the large scale they work together. The chords that participate in the divorce are analogous to melodic non-chord tones and are either prepared by or resolve into the structural harmony. While I have not discussed “rules” for the preparation and/or resolution of these embellishing harmonies like those for melodic non-chord tones, the resolutions shown in the examples (root motion down by fourth or up by whole step) are the most common, though others are possible as well (for example, root motion down by third might indicate a 5–6 shift). As mentioned, when the melodic-harmonic divorce exists, the melody most often outlines the tonic triad. In other words, when the melody and harmony exist at different structural levels it is usually within an overall tonic prolongation; during pre-dominant and dominant prolongations, the melody is much more likely to be consonant with the foreground chords. (A significant exception is when IV supports $\hat{2}$ in a cadence, which is common in a syntax divorce, discussed below.)

TYPE 2: ROTATION DIVORCE

Rock songs are often based on repeated sequences of two to four chords that lead back to their own beginning rather than to any sort of structural goal. This phenomenon is often called a “vamp” or a “loop” (see Tagg 2009, 199), but in this dissertation I will prefer the term *chord rotation* to emphasize the circular nature of these progressions. Chord rotations go against the usual model of goal-directed harmonic progression in that they do not really “end,” instead simply circling endlessly. These rotations are more metrical than tonal in their structure: a four-chord rotation acts similarly to a four-beat measure or hypermeasure in that both move away from and towards their initiating points; they are not progressions from point A to point B, but instead from point A back to point A (see also Rothstein 1989, 28). There is a distinct beginning—the downbeat—but no real end. Chord rotations became more and more common in rock music throughout the 1970s and 80s so that by the 90s it was not uncommon for an entire song to consist of a single repeated rotation. In these cases, because of the constant repetition, the harmony is not very effective at generating form. The formal structure is therefore often generated by the melody alone with no harmonic support. This is the process that underlies Type 2 of the melodic-harmonic divorce, which I call a “rotation divorce”: the melody delineates phrases and sections through voice-leading and motivic means while the harmony is static. A divorce is therefore necessary; otherwise the melody and harmony would both rotate forever, and the result would risk being formless and monotonous.

a) Transcription of verse 1

S R

G A G A G A G A G A G A

Jane says, "I'm done with Ser-gi-o. He treats me like a rag - doll." She hides the te-le-vi - sion.

D

7 G A G A G A G A

Says, "I don't owe him no - thin'. But if he comes back a-gain, tell him to wait right here for me,

C

11 G A G A G A G A G A G A

or try a-gain to-mor - row I'm gon-nakick to-mor - row I'm gon-na kick to-mor - row."

b) The structure of the melody projects a descent from $\hat{5}$ to $\hat{1}$ in the verse

$\hat{5}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$

Example 3.12: Jane's Addiction, "Jane Says" (1988), first verse.

A striking example is Jane's Addiction's "Jane Says" from their 1988 album *Nothing's Shocking*.⁸ This song contains the chord progression G–A for the entire song (a half-measure per chord), and so the harmony does little to clarify the phrase structure. Nevertheless, the vocal line in the verse projects an overall **srdc** phrase structure, as shown in Example 3.12a. The **srdc** phrase structure is most clearly seen in the motivic content, as **s** and **r** both begin with the head motive A–F \sharp , **d** fragments the motivic units to a length of one measure each,

⁸A live version of the song was released on their self-titled debut album the previous year, but the studio recording is better known.

and **c** is the refrain.⁹ This melody is distinctly in D major, despite the absence of a D-major chord throughout the song, as it revolves around the D-major triad and uses the D-major scale exclusively.¹⁰ The melody's voice leading further projects its **srdc** structure: the **s** and **r** phrases outline the tonic triad, focusing on the third between A and F \sharp ; the **d** phrase moves to unstable melodic tones, now outlining the third between G and E before returning to the A–F \sharp motive in measure 12; and the **c** phrase outlines the dyad A to E, with B acting as an upper-neighbor to A. The gesture in the verse's final measure, which moves to the leading tone C \sharp , to my ear implies a resolution to D, making an authentic cadence despite the fact that this tonic note does not literally appear. From this melody alone, then, we can interpret an overall linear descent from $\hat{5}$ to $\hat{1}$, as shown in Example 3.12b. One can easily imagine a reharmonization of this melody in which the chords follow the melody's voice-leading structure, prolonging I in the **s** and **r** phrases, II in the **d** phrase, and V–I in the **c** phrase. Yet the fact that the harmony does not follow the melody but instead simply shuttles back and forth between IV and V triads does not remove the impression of the upper voice's goal-directed descent; in this song, the melody simply runs the show on its own, creating form with no help from the harmony.

“Jane Says” shows a true divorce between melody and harmony. The chord rotation does not participate in the phrase structure and essentially acts as a groove, like a drum beat, that doesn't generate form. Even at moments when the melody arrives on a note that is consonant with the underlying chord, we don't hear the two as working together;

⁹See Summach 2011 and Nobile 2011 for discussions of the motivic qualities of **srdc** structures.

¹⁰Mark Spicer (2009) has discussed this song as an example of an “absent tonic.”

Bridge

She gets mad and she starts to cry. She takes a swing man she can't hit. She don't mean no harm, she just don't know what else to do a-bout it.

Example 3.13: Jane’s Addiction, “Jane Says,” bridge: the melody outlines the dominant triad.

we’ve essentially decided to let the melody run the show on its own, with everything else simply providing the texture. Further evidence of this structure occurs in the bridge section, transcribed in Example 3.13. As this example shows, the melody in the bridge outlines the V chord—A major—while the harmony remains stuck in the same two-chord loop. Although one of the two chords in this loop is indeed an A-major chord, this bridge section does not constitute a remarriage of melody and harmony, as it is clear that the melody is following its own path, ignoring the chords. Outlining the dominant in the bridge is furthermore consistent with conventional voice-leading patterns, as bridge sections almost always end with a “dominant retransition” and frequently prolong a V chord throughout (see Nobile 2011 and Everett 2009). “Jane Says” thus creates a full AABA form in which the verses contain **srdc** phrase structures with absolutely no harmonic differentiation, all by virtue of its melodic-harmonic divorce.

Chord rotations are especially common in pop music of the last fifteen years, and as a result this repertoire provides copious examples of this type of melodic-harmonic divorce. In these songs, the specific chords that make up the rotation are generally of secondary

importance, and one can often substitute a different rotation without significantly affecting the song's structure. To demonstrate, let us consider the song that became the pop anthem of 2012: Carly Rae Jepsen's "Call Me Maybe." The melody of the first phrase of the chorus is transcribed in Example 3.14; as shown in the transcription, this melody essentially outlines the tonic triad with $\hat{3}$ on top, ending with a $\hat{3}-\hat{2}-\hat{1}$ descent. In the original release of this song, the chord progression is similar to "Jane Says": essentially a shuttle between IV and V chords, in this case with a few connecting chords inserted in between, as shown above the transcription. This chord progression repeats throughout the entire song and thus acts as a chord rotation. Below the staff are four alternative chord rotations that could easily substitute for the original without altering the overall melodic structure of a descent from $\hat{3}$ in the key of G major. The first alternative is what journalist Marc Hirsh famously dubbed the "Sensitive Female Progression": VI-IV-I-V, with one chord per measure (Hirsh 2008).¹¹ The second alternative is the same as the first but shifted to start on the I chord—a common rotation as well (heard for example in U2's "With or Without You" [1987]). The third breaks out of the G-major diatonic scale with a \flat VII chord in the second measure, creating an intense amount of dissonance with the melody; however, because of the divorce this dissonance goes largely unnoticed.¹² Finally, the fourth alternative is again the Sensitive Female Progression but with a doubled harmonic rhythm such that the rotation occurs twice rather than once in this phrase. These rotations are very different from the original chord progression, but the

¹¹This progression, especially when used as a chord rotation, is very common, especially in the 1990s, and not only in songs sung by sensitive females. It is a favorite chord progression of the 90s pop-punk band The Offspring, heard in most of their singles (e.g., "Self Esteem" [1994], "All I Want" [1996], "The Kids Aren't Alright" [1999], and even their more recent "You're Gonna Go Far, Kid" [2008]), and so it could have just as easily been called the "Angry Male Progression."

¹²This progression is the same as in "Rock'n Me" (Example 3.3, page 94), with a similar dissonance over the \flat VII chord.

original
version: C (G) D (Em) C (G) D

Hey, I just met you, and this is cra - zy, but here's my num-ber, so call me may-be.

alternatives {

Em	C	G	D
G	D	Em	C
G	F	C	G
Em C	G D	Em C	G D

Example 3.14: Carly Rae Jepsen, “Call Me Maybe” (2012), first phrase of chorus: one could easily substitute a number of different chord rotations for the original without affecting the melodic structure.

melody’s structure remains the same over all of them, further demonstrating that melody and harmony are completely divorced in this song.

TYPE 3: “SYNTAX DIVORCE”

Sometimes when both melody and harmony exhibit structural motion—such as a descent to $\hat{1}$ in the melody and a cadence in the harmony—the two do not work together. Consider the Beatles’ “Nowhere Man” from their 1965 album *Rubber Soul*, which we encountered briefly in Chapter 2; the graph of this verse is reproduced in Example 3.15. As this example shows, the melody descends from $\hat{8}$ to $\hat{1}$ throughout the verse, while the harmony expresses the functional circuit I–II–IV $^{\flat}$ –I. For most of the verse, the melodic descent has consonant harmonic support: $\hat{8}$ – $\hat{7}$ – $\hat{6}$ – $\hat{5}$ is supported by I–V–IV–I on the surface, while at a deeper level this harmonic progression prolongs the tonic while the melody composes out the fourth $\hat{8}$ – $\hat{5}$. As the piece move towards the cadence, however, the melody and harmony are not so

a) Transcription of the first phrase of the chorus.

A \flat Fm E \flat D \flat A \flat

You live, you learn, you love, you learn, you cry, you learn, you lo - se, you learn

b) Reduction of (a).

I IV I

Example 3.16: Alanis Morissette, “You Learn” (1995).

of “You Learn,” the vocal part of which contains a melody and a descant harmony above it. The $\hat{1}$ – $\hat{5}$ motive that Stephenson mentions repeats in each of the first two measures. Then the melody begins to climb, to $\hat{2}$ over V in measure 3 and to its peak, $\hat{3}$ over IV in measure 4. Following the arrival on $\hat{3}$, the melody reverses course and quickly descends stepwise to $\hat{1}$ over the title lyric “you learn.” This $\hat{3}$ – $\hat{2}$ – $\hat{1}$ descent is the structural motion of the phrase, as shown in the reduction in Example 3.16b. Nevertheless, neither of the descent’s first two tones is consonant with the harmony: as in “Nowhere Man,” $\hat{3}$ and $\hat{2}$ occur over a IV chord. This IV chord is furthermore a structural harmony, participating in the overall progression I–IV–I. So although at this moment the melody and harmony are divorced, both are participating in the same structure, namely directed motion toward the tonic. Once again, as in “Nowhere Man,” the two are contrapuntally divorced but syntactically consonant.

In both of the previous examples, one might be inclined to analyze $\hat{3}$ as an accented non-chord tone and $\hat{2}$ as a true chord tone, making the harmony not IV but II_5^6 . Alternatively,

one could consider it to be an added-sixth chord, $IV^{\text{add}6}$, making what Rameau would call an “irregular cadence” (later, “imperfect cadence”) leading back to the tonic (see Rameau 1971 [1722], 74–75). These explanations are unsatisfying, though, because both consider this chord to be dissonant: calling it II_5^6 indicates that the E in Example 3.15, as the seventh, would tend to resolve downwards, and calling it $IV^{\text{add}6}$ indicates that the $F\sharp$, as the added sixth, would tend to resolve upwards. While it is not the case that rock music always follows the traditional rules for resolving dissonances, these rules at least represent inclinations of tones, and in the case of “Nowhere Man,” these inclinations do not reflect the musical structure. Furthermore, it is often the case that considering the melodic notes to be true chord tones creates unwieldy analyses. Consider Maroon 5’s “Sunday Morning” from their 2002 album *Songs About Jane*.¹⁵ This song contains a II–V–I progression (often with various chord extensions added) throughout. In the chorus, transcribed in Example 3.17a, the first three iterations of this chord progression occur under the melodic figure $\hat{5}-\hat{3}-\hat{1}$, as shown in Example 3.17b. The melodic-harmonic divorce is apparent here, as the first two melodic tones are not supported by the chords. However, both melody and harmony participate in a similar structure: a three-step process directed toward the tonic. The melody does this by arpeggiating the tonic triad downward, aiming toward $\hat{1}$, and the harmony does it by expressing a typical II–V–I progression. So although melody and harmony do not work together contrapuntally, they have parallel structures that lead toward the same goal—in

¹⁵There are two versions of this album: its original release in 2002 and a rerelease from the following year, the latter of which is better known. The original version is currently available as the second disc of the 2012 tenth anniversary edition of *Songs About Jane*, with all songs labeled as “demo.” There are a few notable differences between the choruses of the two versions of “Sunday Morning”: in the original, the piano chords are simpler (often just two notes) and the lowest vocal line of Example 3.17a is an octave higher and is more prominent in the mix. Example 3.17a transcribes the later release.

a) Transcription of the chorus

Chorus

That may be all I need. In dark-ness she is all I see.
Come and rest your bones with me. Dri-vin' slow on Sun-day mor - ning, and I ne-ver want to leave.

b) Reduction of the first measure, showing that both melody and harmony present a three-step process directed towards the tonic, but the two do not work together

Example 3.17: Maroon 5, “Sunday Morning” (2002).

other words, they participate in a syntax divorce. Considering these melodic tones to be chord extensions and thus a part of the harmony overlooks the melody’s structure as a tonic arpeggiation; in other words, considering the G to be a eleventh and the E to be a thirteenth, both unresolved, really seems to miss the point. Moreover, the backup vocal harmonies also arpeggiate the tonic triad, so the entire triad is heard at all times, as shown in Example 3.17a. It is much more likely that one would hear the melody’s arpeggiation of the tonic triad as stable tones divorced from the harmonies than as dissonant chord extensions.

LOOSENESS AND TIGHTNESS

Most songs that exhibit a melodic-harmonic divorce do not do so for the entire song; songs like “Jane Says” are rare, and most songs will “tighten” the relationship between melody and harmony at some point. (As mentioned above, the loose/tight metaphor is taken from David Temperley [2007, 335ff.].) This tightening point often occurs at an important structural moment; Temperley gives several examples where the relationship tightens for the chorus after a loose verse, but there are several examples of the opposite situation as well—tight verse/loose chorus, as is the case in “You Learn” (Example 3.16, page 109). A particularly common schema, which I will discuss later in this section, is a loose verse, tight prechorus, and loose chorus. However, I would first like to look at a song in which the progression from looseness to tightness occurs within a single section. Two previous examples from this chapter exhibit this layout: “Still Fighting It” (Example 3.8, page 99) and “We’re Going to be Friends” (Example 3.11, page 101). In “Still Fighting It,” the melody and harmony come together on the pre-dominant IV chord within an “expanded cadential progression”; in “We’re Going to be Friends,” they come together for the final cadence. The verses of Coldplay’s “The Scientist” from their 2002 album *A Rush of Blood to the Head* follow a similar pattern, beginning with a divorced melody and harmony that ultimately remarry for the final cadence. The first verse of this song is transcribed in Example 3.18. (This song contains no chorus, but simply consists of two verses followed by an extended instrumental outro.) This verse is in **ssrddc** form—**srdc** where **s**, **r**, and **d** each occur twice—and features a chord rotation in the **s** and **r** phrases. This chord rotation is based on the standard VI–IV–I–V progression—the “Sensitive

S/R (x2): melody outlines tonic triad, divorced from the chord progression

8 *repeat 4x*

Come up to meet you, tell you I'm sor - ry, you don't know how love - ly you are.
 I had to find you, tell you I need you, tell you I set you a part
 Tell me your se - crets, and ask me your ques - tions, oh let's go back to the start
 Run - nin' in cir - cles, co - min' up tails, heads on a sci - ence a - part

Dm7 Bb F C sus4/F

D (x2): divorce continues: melody remains on tonic triad, with pentatonic passing tone D inserted between F and C

5

pentatonic passing tone

No - bo - dy said it was ea - sy it's such a shame for us to part

Bb F C sus4/F

7

2.

C: melodic-harmonic relationship "tightens" for the cadence

No - one e - ver said it would be this hard oh take me back to the start

F C sus4/F C F

first appearance of leading tone in either melody or harmony

Example 3.18: Coldplay, "The Scientist" (2002): annotated transcription of first verse.

Female Progression” mentioned earlier—though the last chord, which contains F, G, and C over an F bass note, is a sort of hybrid I/V chord; because of its basis in the VI–IV–I–V rotation, I analyze this chord as V_4^5 over a tonic pedal (Csus4/F) rather than I_2^5 (Fsus2).¹⁶ Over this chord rotation in the **s** and **r** phrases, the melody continually outlines the tonic triad and doesn’t follow the chord progression—in other words, we have a rotation divorce. At the onset of the **d** phrase, measure 5, the harmony moves to an emphasized IV chord for the first two measures and then recapitulates the final two chords from **s** and **r**’s rotation. Although the melody includes $\hat{6}$ (D) over the IV chord, that tone acts as a pentatonic passing tone from F to C, suggesting that the melody hasn’t given up the tonic triad yet. The **d** phrase thus contains a hierarchy divorce, as the IV chord ultimately functions as a neighboring chord to the tonic. At the onset of the **c** phrase, the harmony moves to V in root position for the first time and the melody joins, landing on $\hat{7}$ (E). This marks the first appearance of the leading tone in either melody or harmony, and also the first time the melody ventures outside the tonic pentatonic scale.¹⁷ It is also the first time the melody articulates the downbeat of a phrase. From $\hat{7}$, the melody leaps up to $\hat{4}$ (B \flat , the only diatonic tone yet unheard in the melody), which then descends to $\hat{3}$ (A) as the harmony cadences to I. Example 3.19 gives a reduction of this verse, showing a tonic prolongation through the **s** and **r** phrases (via the chord rotation) and interpreting the IV chord at the beginning of the **d** phrase as a large-scale neighbor to the tonic.

¹⁶In later verses, synthesized strings sometimes play $\hat{7}$ (E) over this chord, making it sound much more V-like.

¹⁷Naphtali Wagner (2004) has discussed such “suppressed notes” that appear for the first time in structurally significant locations in reference to the music of the Beatles. Like “The Scientist,” Wagner’s Beatles examples usually stick to the pentatonic scale at first, “suppressing” the remaining two notes of the diatonic scale and then emphasizing them in some way when they finally do appear.

Example 3.19: Coldplay, “The Scientist,” reduction of verse.

As mentioned above, a particularly common schema is for a song in verse–prechorus–chorus form to begin with a loose verse, tighten for the prechorus, and eventually loosen again for the chorus. This layout is expressed in an interesting way by Katy Perry’s 2010 pop hit “Firework.” Example 3.20 transcribes the first verse, prechorus, and chorus of this song. This entire song is based on chord rotations: I– \flat VII–VI–IV in the verse, and the similar I–II–VI–IV in the prechorus and chorus. During the verse, the melody projects an **aaba** phrase structure—similar to **srdc** in which **c** recaps **s** and **r**—and revolves around the tonic triad divorced from the chords, thus exhibiting a rotation divorce. The melodic-harmonic relationship tightens in the pre-chorus, as the melody’s long notes generally correspond with the harmony (with the possible exception of measure 15). The tightening at the pre-chorus allows the melody to rise by step from its static position in the lower vocal register, gaining tension and driving the music toward the chorus. In the final measure of the pre-chorus (measure 20), the melodic goal of $D\flat$ is at first denied as the melody arpeggiates downward from C to F, but then the melody shoots above it to $E\flat$ in the anacrusis to the chorus. This climactic moment was set up by the dissolution of the melodic-harmonic divorce at the

Verse (aaba)

Ab Gb Fm Dbsus2

Do you e-ver feel like a plas-tic bag, drif-ting through the wind, wan-ting to start a - gain?
Do you e-ver feel, feel so pa-per thin, like a house of cards, one blow from ca-ving in?

5 Ab Gb Fm Dbsus2

Do you e-ver feel al-rea-dy bu-ried deep, six feet un-der screams but no-one seems to hear a thing?

Pre-chorus

9 Ab Gb Fm Dbsus2 Ab

Do you know that there's still a chance for you? 'Cause there's a spark in you, you just got-ta ig nite the light

14 Bbm Fm Db Ab Bbm Fm Db

and let it shine, just own the night like the fourth of Ju-ly 'Cause ba-by you're a

Chorus (parallel period)

21 Ab Bbm Fm Db Ab

fi - re-work, come on show 'em what you're worth Make 'em go "oh, oh, oh"
fi - re-work, come on let your co - lors burst Make 'em go "oh, oh, oh"

1. 2.

Bbm Fm Db Fm Db

as you shoot a - cross the sky - y - y Ba-by you're a
you're gon-na leave them all in awe awe awe

Example 3.20: Katy Perry, “Firework” (2010). Tight prechorus with loose verse and chorus.

onset of the pre-chorus, which allowed the melody to climb to a higher register and achieve its climactic peak. Once this register is achieved, the divorce reappears for the chorus. The apparent parallel ninths in measures 21–22 show the divorce: the B \flat on the downbeat of measure 21 is a long suspension that resolves to A \flat on the third beat, which then skips up to C. This C is stable because it is part of the tonic triad, despite being dissonant with the underlying II chord. The chorus proceeds to express a parallel period structure in the melody while the chords keep rotating around their four-chord module: the antecedent ends unstably on $\hat{2}$ in measure 27, while the consequent completes the descent to $\hat{1}$ in the final measure. The looseness and tightness of the melodic-harmonic relationship is thus responsible for the phrase structure of this song, giving it shape despite the relatively inane lyrics and repetitive chord progression.

The three types of melodic-harmonic divorce described above provide a first step toward understanding the structural origins of the divorce itself.¹⁸ Rather than conclude that songs that exhibit the divorce lack large-scale structural motion, we should ask ourselves what structural process gives rise to such a conflict. In a hierarchy divorce, the divorce arises from a conflict of structural levels. While the melody lives in a deep middleground, swimming around the stable tonic triad, the harmony engages in foreground embellishments. This is a true conflict to be sure, but in such cases we are only one or two reductive steps away from resolving the conflict, showing that the two musical domains are perfectly compatible at a deeper level. In a rotation divorce, we find that while the harmony is stuck in a rotation the

¹⁸By “structural origins,” I do not mean to imply any historical or chronological process, but instead a conceptual process akin to the Schenkerian process in which foreground phenomena “originate” in the background.

melody makes up for it by creating its own independent structure. This conflict is usually resolved when the harmony escapes its rotation and joins the melody's structural motion. A syntax divorce gives us a conflict that extends into the deepest structural levels, when structural motion in melody and harmony do not line up contrapuntally. To resolve this conflict, we must invoke the concept of syntactical function: melody and harmony might not be contrapuntally consonant, but when they are participating in motion toward the same goal, they are consonant in their syntax.

Part II

Full Song Forms

CHAPTER 4

AABA AND **srdc**

THE FINAL THREE CHAPTERS of this dissertation explore the relationship of voice-leading structure and large forms with the goal of devising a methodology for deep analysis of pop and rock songs. The current chapter focuses on AABA form—a particularly common form in rock music of the late 1950s and 1960s, tracing its roots back to Tin Pan Alley songs, which were virtually always in 32-bar AABA form.¹ Rock’s AABA structures consist of verses (the A sections) and bridges (the B sections), the latter of which are sometimes called the “middle eight” (even when the section is not eight bars long). As Walter Everett points out, rock songs generally extend their core AABA structure by repeating some of the sections at the end, making the full form AABABA or sometimes AABAABA (2009, 143). The early music of the Beatles (defined to begin with their first EMI recordings in late 1962 through their 1965 album *Rubber Soul*) makes particular use of extended AABA forms, and due to the Beatles’ broad influence, these forms came to define the pre-psychedelic era of rock music. The forms certainly did not disappear in later decades, but their popularity was supplanted by verse–chorus and verse–prechorus–chorus forms, which, as Jay Summach

¹See Covach 2005, 69–71, and Everett 2009, 141–45, for more on AABA form in rock music. Covach includes a brief discussion of the similarities and differences between the AABA forms of rock and Tin Pan Alley.

points out, increased their share of the *Billboard* Annual Top 20 from about 30% in 1960–65 to about 90% in 1985–89 (Summach 2011, §24 and Example 26).

The AABA forms employed by the Beatles tend to follow a specific pattern in their verses: a four-phrase structure that Walter Everett has called “Statement–Restatement–Departure–Conclusion,” or **srdc**.² (Recall that lowercase bold letters denote phrases within sections, such as the **s** phrase within **srdc**, whereas capital letters are reserved for full sections, such as the A section.) In a typical **srdc** structure, a phrase is stated (**s**) and restated (**r**), possibly with variations, followed by a third phrase that departs from the first two (**d**) and a concluding phrase (**c**), which often contains the title of the song in the lyrics. The **c** phrase usually corresponds to what is commonly called the “refrain,” though sometimes the refrain comprises both the **d** and **c** phrases. Everett points out that AABA is a type of large-scale **srdc**; AABA forms in which the A sections exhibit the **srdc** pattern thus maintain a hierarchical consistency in their formal structure.³

For an example, consider the Beatles’ 1963 single “From Me to You,” one of their first hits. The formal plan of the entire song is given in Example 4.1. The overall form is AABAABA, flanked by an intro and outro; the form extends the song’s 32-bar AABA core by adding a harmonica solo and repeating the bridge and final A sections. The first verse is transcribed in Example 4.2, which explicitly shows its **srdc** structure. In this verse, each of the four phrases is two measures long, with the melodic groupings beginning on the pickup beat. The **s** phrase

²Everett’s earliest definition of **srdc** is in Everett 1999, 16. He discusses it in reference to the Beatles’ music throughout that volume as well as in Everett 2001a, and more generally in Everett 2009, especially 140–41.

³In a previous article, I called this “**srdc**–B” form (Nobile 2011). That article is an investigation of the relationship between voice leading and form in the music of the early Beatles; the current chapter is an expansion of that article.

(Intro)

A { s If there's anything that you want
 r If there's anything I can do
 d Just call on me, and I'll send it along
 c With love, from me to you

A { s I've got everything that you want
 r Like a heart that's oh, so true
 d Just call on me, and I'll send it along
 c With love, from me to you

B { I got arms that long to hold you
 and keep you by my side
 I got lips that long to kiss you
 and keep you satisfied (ooh)

A { s If there's anything that you want
 r If there's anything I can do
 d Just call on me, and I'll send it along
 c With love, from me to you

A *(harmonica solo)*

B I got arms that long to hold you...

A If there's anything that you want...

(Outro)

Example 4.1: The Beatles, "From Me to You" (1963): AABAABA form with an **srdc** structure in each verse.

The musical score is written in G major and 4/4 time. It consists of two staves. The first staff contains the first two lines of the verse, with a melodic line above the lyrics and a chord line below. The first line is labeled 'S' and the second line is labeled 'R'. The second staff contains the last two lines of the verse, with a melodic line above the lyrics and a chord line below. The third line is labeled 'D' and the fourth line is labeled 'C'. Chord diagrams are provided for each line: C, Am, C, G, F, Am, C, G, C.

Example 4.2: The Beatles, “From Me to You”: **srdc** structure in the first verse.

is restated as the **r** phrase, with variations to its second half, followed by a contrasting and fragmented **d** phrase and a concluding **c** phrase that contains the title lyric and serves as the refrain. This form is also reflected in the lyrics: the first two lines express the same idea (“If there’s anything that you want, / if there’s anything I can do”), the third continues this idea (“just call on me, and I’ll send it along”), and the fourth concludes it (“with love, from me to you.”).

Discussions of **srdc** structure, such as Everett 1999, 2001a, and 2009 and Summach 2011, generally consider this phrase structure to be based primarily on melodic groupings and thematic relationships. There is, of course, an implicit rhythmic element, as each phrase is generally the same length, usually two or four bars, combining to make an eight- or sixteen-bar section (this is discussed briefly in Summach 2011). However, **srdc** structures also give rise to a harmonic structure that supports the melodic and rhythmic profile. In general, **s** and **r** prolong the tonic, **d** destabilizes the tonic (usually through motion to the pre-dominant), and **c** cadences.⁴ This general model gives rise to three specific models, which are shown

⁴This is analogous to BaileyShea 2004’s “essential features” of the Classical sentence—of which **srdc** is essentially the rock version—which are that **s/r** is the “presentation,” **d** provides “momentum,” and **c** provides

Model 1:

s	r	d	c
T		PD D	T

Model 2:

s	r	d	c
T		PD	D T

Model 3:

s	r	d	c
T		N T (PD)	D T

Example 4.3: The three harmonic models for **srdc** structure. “N” stands for “Neighboring chord.”

in Example 4.3. (These models assume an authentic cadence rather than a half cadence at the end of the section, which is by far the more common situation.) In all three models, **s** and **r** prolong the tonic, while the ensuing PD–D–T progression is arranged in various ways. In Model 1, the **d** phrase contains both pre-dominant and dominant functions, with the final tonic coinciding with the beginning of the **c** phrase. Model 2 is similar to Model 1, but **d** contains only the pre-dominant, with **c** containing the dominant and tonic of the final cadence. In Model 3, **d** begins off-tonic but returns shortly thereafter, with the first chord acting as an accented neighboring chord. After the return to tonic, the **d** phrase may or may not proceed to a pre-dominant, with the **c** phrase containing the dominant–tonic cadence.

This chapter will investigate these three harmonic models for **srdc** in detail, with several representative analyses demonstrating each model. Some of these analyses will not fit any model perfectly, and it will be instructive to study the ways in which these songs depart from

“completion.” BaileyShea, like Everett and Summach, is mainly concerned with thematic relationships, but his form-functional language can easily be adapted to apply to harmonic function.

the models. It is my contention that, in general, sections that exhibit an **srdc** structure are at least in *dialog* with one or more of these models, and those that depart from the models are heard as deviations from a norm. After discussing the three models for **srdc**, I will conclude this chapter by considering the voice-leading structure of bridge sections; in combination with the **srdc** models, this will give us a framework for analyzing complete songs that follow an overall AABA form.

MODEL 1: **d** CONTAINS PD–D; **c** RETURNS TO T

In Model 1 for **srdc**, the cadence occurs on the downbeat of the **c** phrase such that the **d** phrase contains both pre-dominant and dominant functions. The entire **srdc** verse generally spans eight measures, with two measures per phrase, though a sixteen-bar verse with four-measure phrases is not uncommon. A prototypical case is offered by the Jackson 5's 1970 single "I'll Be There," the first verse of which is transcribed in Example 4.4. In this verse, the **r** phrase is not an exact repetition of the **s** phrase but is instead a sequential repetition transposed down by a diatonic third, effecting a descending 5–6 sequence with a stepwise descent in the bass.⁵ The sequence ends in measure 5, which is the beginning of the **d** phrase and contains a 5–6 shift above $\hat{4}$ in the bass, prolonging the pre-dominant IV harmony, as shown in the graph in Example 4.5. Measures 6–7 contain $\hat{5}$ – $\hat{1}$ in the bass, representing the cadence, and the moment of cadential arrival—the downbeat of measure 7—coincides with

⁵The stepwise descent breaks in measures 3–4, where the bass moves a fourth from D to A (filled in with foreground passing tones). This A is essentially a "cast-out" root, and this root-position III chord is best considered to substitute for a $\frac{6}{3}$ chord with C in bass, which would be consistent with the sequence. This implied C is shown in the graph in Example 4.5.

Example 4.5: The Jackson 5, “I’ll Be There,” graph of verse.

substitute for the leading tone, resolving *up* a minor third to $\hat{1}$ rather than down by step.⁷ The voice leading of the cadence is shown in the lower staff of Example 4.5 with arrows; the upward resolution of the ninth is explicit in the melody over the title lyric “I’ll be there.” The melody further complicates the situation with its emphasized A on the downbeat of measure 6, which might imply a cadential six-four in the absence of any other harmonic cues. In the current context, however, this A is best considered an accented passing tone, effecting a 6–5 motion over the bass note C. The resolution of A to G is, of course, merely implied in the melodic voice, though G is present in the accompaniment. This situation is akin to the more typical melodic figure $\hat{3}-\hat{7}-\hat{1}$ over $V_{4-3}^{\hat{6}-\hat{5}}-I$, in which case an implied $\hat{2}$ (likely present in the accompaniment) would certainly be read over the second chord.

The Police’s “Every Breath You Take” from their 1983 album *Synchronicity* offers a slight variation on Model 1. As John Covach (2005, 75) points out, this song represents a

⁷The voice leading $\hat{6}-\hat{1}$ is common in rock cadences, even over V–I progressions, and has roots in the pentatonic scale. Day-O’Connell 2009 calls a $\hat{6}$ that rises to $\hat{1}$ the “plagal leading tone” and notes its prevalence in Debussy’s music.

♩ = 118

8 E-very breath you take, e-very move you make, e-very bond you break,

5 e-very step you take, I'll be wat-ching you. E-very sin - gle day,

Example 4.6: The Police, “Every Breath You Take” (1983): **srdc** structure in the first verse, with the melodic groupings “out of phase” with the harmonic and hypermetrical groupings.

clear pastiche of a older style in its 1950s-esque I–VI–IV–V progression and its standard 32-bar AABA form (though this form is complicated somewhat through the addition of a second, contrasting bridge section, discussed later in this chapter). In the eight-bar verses, each phrase of the **srdc** structure is two bars long, though the melodic groupings are out of phase with the harmonic groupings, beginning three beats before the harmonies, as shown in Example 4.6.⁸ The harmonies follow the metrical structure, with chord changes occurring every two measures on strong hyperbeats, and so the melody’s pickups are best considered to “belong” to the following chord. For example, the melody’s prolongation of the note C (♩) in the pickup measure is supported by the $A\flat^{(add\ 9)}$ chord in measure 1 even though these do not occur at the same time (see the graph in Example 4.7). By the time the **c** phrase comes around, the melody is so out of phase with the harmony that it completes its entire phrase before the **c** phrase’s harmony arrives: the lyric “I’ll be watching you” constitutes the

⁸The term “out of phase” is taken from Lerdahl & Jackendoff 1983 and relates to what Frank Samarotto has called “shadow meter” (1999; see also Rothstein 1995).

The image shows a musical score for the verse of "Every Breath You Take" by The Police. The score is in 4/4 time and features a key signature of two flats (B-flat and E-flat). The melody is written in the treble clef, and the bass line is in the bass clef. Above the treble clef, a graph of the verse is shown with notes 3, 4, (3), 2, 1, and 3. Below the bass clef, chord progressions are indicated: I, IV, V, (VI), and I. The phrases are labeled with letters: s, r, d, c, and s. The s and r phrases are essentially identical in their melodies, but the r phrase contains a VI chord (Fm^(add9)) rather than a I chord. The d phrase contains a V chord, which resolves deceptively to VI, delaying the appearance of I. The c phrase contains a I chord, expressing a more conventional perfect authentic cadence.

Example 4.7: The Police, “Every Breath You Take,” graph of verse.

c phrase, but this line occurs in measure 6, whereas the **c** phrase proper does not begin until measure 7. It would be misguided to analyze this melodic line to belong to the **d** phrase since its text is clearly conclusive and the two previous lines, “every bond you break, every step you take,” group together as a fragmentation of the **s** and **r** phrases, which is typical of **d** phrases (see Summach 2011).

This verse’s **s** and **r** phrases are essentially identical in their melodies, but the **r** phrase contains a VI chord ($Fm^{(add9)}$) rather than a I chord. This is a common occurrence in **srdc** verses; I–VI progressions in **s** and **r** generally lead to IV at the beginning of the **d** phrase, making a bass arpeggiation $\hat{1}-\hat{6}-\hat{4}$ connecting the initial tonic to the pre-dominant IV chord. Otherwise, “Every Breath You Take” generally follows the harmonic structure of Model 1 of **srdc**, prolonging tonic through **s** and **r** followed by pre-dominant and dominant in **d** (see Example 4.7). There is one exception, however: at the **c** phrase, the dominant V chord resolves deceptively to VI, which in this case merely delays the appearance of I and does not represent a “failed” cadence. (At the end of the second verse, the **c** phrase contains a I chord, expressing a more conventional perfect authentic cadence.) This VI chord is best

considered a neighboring chord, with its root F resolving to E \flat , the fifth of the following I chord, as shown in the graph. The melodic structure also follows the general trends of Model 1, though as mentioned above the melody is out of phase with the harmony and so its motion tends to precede the chord changes. The upper-voice tone $\hat{3}$ is prolonged through **s** and **r**, moving to an upper neighbor $\hat{4}$ in **d** over the IV chord, which passes down to $\hat{2}$ over the V chord and resolves to $\hat{1}$ in the **c** phrase on the lyric “I’ll be watching you.” (Notice that this overall $\hat{3}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ melodic shape is replicated in the foreground in the first two lines of text.) Because the melody is out of phase with the harmony, its resolution to $\hat{1}$ precedes the deceptive harmonic progression to VI, and so we actually perceive an authentic cadence in measure 6 before we realize that the harmony does not cooperate.

Because the cadence in **srdc** verses that express Model 1 occurs on the downbeat of the **c** phrase, that phrase does not contain any internal structural motion, instead simply prolonging the final tonic of the functional circuit. In both of the examples seen so far (“I’ll Be There” and “Every Breath You Take”), the melody is complete on the downbeat of the **c** phrase and the harmony simply extends the final chord for two measures. Some songs, however, engage in “postcadential” material within the **c** phrase, defined by William Caplin as “music that follows the point of cadential arrival,” prolonging the final harmony of the preceding cadence—in this case, the tonic (Caplin 1998, 16). For example, the Beatles’ “A Hard Day’s Night” from their 1964 album of the same name contains a postcadential I–IV–I progression in its **c** phrase that prolongs the tonic through a neighboring motion (see the transcription in Example 4.8). This verse is twelve measures long, with four-measure **s** and **r**

♩ = 140

S
G C G F G

8 It's been a hard day's night, — and I've been wor - king — like a dog. — It's been a

R
5 G C G F G

8 hard day's night, — I should be slee - ping — like a log. — But when I

D
9 C D G C7 G

8 get home to you, I find the things that you do will make me feel — al - right —

Example 4.8: The Beatles, “A Hard Day’s Night” (1964): first verse.

phrases prolonging the tonic followed by shortened two-measure **d** and **c** phrases.⁹ Following the typical outline for Model 1, the **d** phrase contains the progression IV–V, representing pre-dominant and dominant functions, leading to a resolution on tonic on the downbeat of the **c** phrase in measure 11. Because the **c** phrase begins with a return to tonic after the syntactical dominant, this moment represents the completion of this verse’s functional circuit, and so the ensuing I–IV^{b7}–I progression is best interpreted as postcadential.¹⁰ The graph in Example 4.9 shows this structure: the I–IV–I progression in the **c** phrase prolongs the final tonic, and the structural cadence is the V–I progression from the **d** phrase into the **c** phrase (measures 10–11). The upper voice projects an overall *ascent* from $\hat{5}$ to $\hat{8}$: $\hat{5}$ in **s**

⁹Recall the “hierarchy divorce” between melody and harmony in the I–IV–I progressions in **s** and **r**, as the melody remains on $\hat{5}$ over the neighboring IV chord, as discussed in the previous chapter.

¹⁰Temperley 2011 considers this final IV–I progression to be the structural cadence because it accompanies the end of the vocal phrase. However, this I–IV–I progression echoes the same progression at the beginning of the **s** and **r** phrases, which was a clear neighboring progression prolonging tonic.

The image shows a musical score for the Beatles' "A Hard Day's Night". It consists of two staves: a treble clef staff for the vocal line and a bass clef staff for the piano accompaniment. Above the treble staff, a horizontal line represents a graph of structural ascents, with notes labeled $\hat{5}$, $\hat{6}$, $\hat{7}$, and $\hat{1}$ above it. Below the treble staff, the letters *s/r*, *d*, and *c* are placed under the first, second, and third measures respectively. Below the bass staff, the chord progressions I, IV V, and I are indicated under the first, second, and third measures. The score includes various musical notations such as notes, rests, and slurs.

Example 4.9: The Beatles, “A Hard Day’s Night,” graph of verse.

and \mathbf{r} , $\hat{6}\text{--}\hat{7}$ in \mathbf{d} , and $\hat{8}$ in \mathbf{c} .¹¹ This final $\hat{8}$ does not literally appear in the vocal line but represents the implied resolution of the leading tone in measure 10; the lead-in to the bridge after the second verse contains a high G representing the delayed realization of this implied $\hat{8}$ (on the lyric “when *I’m* home”).

My final example of a Model-1 **srdc** verse is longer than the others, at sixteen measures, and furthermore does not divide into four phrases of equal length. Example 4.10 transcribes the first verse to the Allman Brothers’ “Melissa” from their 1972 album *Eat a Peach*; as this example shows, the **s** phrase is four measures long, followed by a truncated **r** phrase that lasts only two measures before being interrupted by a six-bar **d** phrase leading to a four-bar **c** phrase. There are several pieces of evidence that support reading the **d** phrase to begin in measure 7 rather than measure 9 (the latter of which would produce four equal phrases): the harmonic rhythm doubles in measure 7 to two chords per measure from one, and the three two-bar units that begin at this point group together by virtue of their three rhyming

¹¹Structural ascents in common-practice tonal music have been discussed by David Neumeyer (1987), who posits that, in particular, $\hat{5}\text{--}\hat{6}\text{--}\hat{7}\text{--}\hat{8}$ as a background structure has “both theoretical and contrapuntal justification” (275).

lines of text: “knowing many, loving none / bearing sorrow, having fun / but back home he’ll always run.” Furthermore, measure 7 represents the onset of a pre-dominant prolongation via a bass ascent through the octave from A to A ($\hat{4}$ to $\hat{4}$) in measures 7–10. The graph in Example 4.11 shows that this irregular **srdc** structure outlines the voice leading of Model 1: **s** and **r** prolong tonic, **d** begins with the pre-dominant and ultimately leads to the dominant (V), cadencing to I at the onset of **c** over the title lyric “to sweet Melissa.”

MODEL 2: **d** CONTAINS PD; **c** CONTAINS D–T

Model 2 is probably the most common layout for **srdc** structures, especially in longer verses (16 measures or more). In this model, the **d** phrase prolongs the pre-dominant for the entire phrase, with the syntactical dominant not arriving until the onset of the **c** phrase. “From Me to You,” seen earlier in Examples 4.1 and 4.2 (pages 122 and 123), has this structure in its verses. Example 4.12 graphs this song’s **srdc** verse; the example shows the tonic prolonged through **s** and **r**, with pre-dominant IV arriving at the beginning of the **d** phrase, and **c** containing dominant–tonic. The syntactical dominant function, which is properly carried by the V chord, is prolonged by an initial “cadential I” chord, which as readers will recall from Chapter 2 acts as an inverted cadential six-four chord and does not represent the syntactical tonic.¹² The use of the cadential I is particularly common in the **srdc** structures of the early Beatles that follow Model 2, such as “I’ll Cry Instead” (Example ??, page ??) and “The Night Before,” graphed and discussed in Nobile 2011; in “The Night

¹²As noted in Chapter 2, the concept of an inverted cadential six-four is discussed in Rothstein 2006 and Cutler 2009. Everett 2008a mentions root-position tonic chords acting as cadential six-fours in pop and rock music.

$\text{♩} = 84$

S
E F#m7 E maj7/G# F#m7

Cross - roads seems will come and go, yeah

R **D**
E F#m7 A Bm7

5 The gyp - sy flies from coast to coast — kno-wing ma-ny, lo - ving

8 A/C# D E F#m7 E maj7/G# A C

none; bea-ning sor-row, ha-ving fun. — But back home he'll al-ways

12 B C E F#m7 E maj7/G# F#m7 E

run to sweet Me-lis - sa. — Mmm —

Example 4.10: The Allman Brothers, “Melissa” (1972): irregular **srdc** structure in the first verse.

5 6 5 4 3

m.: 1 2 3 4 5 6 7 8 9 10 11 12 13 (14 15 16)

s r d c

I IV VI⁷ V⁷ I

Example 4.11: The Allman Brothers, “Melissa,” graph of verse.

Example 4.12: The Beatles, “From Me to You”: Model 2 for **srdc** with the cadential I chord in the **c** phrase.

Before,” the cadential I resolves to a IV chord, which functions as syntactical dominant in the verse, rather than to a V chord.

While “From Me To You”’s verses are eight measures long—essentially the shortest possible length for a full **srdc** structure—verses that follow Model 2 are often significantly longer, with each phrase lasting four or more bars. This is because Model 2, unlike Model 1, is conducive to a longer **c** phrase: recall that in Model 1, the **c** phrase contains no structural motion, since the final tonic arrives at its onset, making a long **c** phrase uncommon, whereas in Model 2, the **c** phrase contains the structural motion from syntactical dominant to tonic, and therefore can better support a longer phrase. The Monkees’ 1966 single “Last Train to Clarksville” contains an **srdc** verse that lasts a total of 33 measures, transcribed in Example 4.13.¹³ This 33-bar verse is based on a 16-bar prototype, with four four-measure phrases, but in which the **d** and **c** phrases are expanded to last six bars each and **sr**d is

¹³Due to the fast tempo, readers might be inclined to hear every two measures of Example 4.13 as one single measure; recall, however, that measures are usually defined by the drum beat, which hits beats 2 and 4 on the snare drum and in this case corresponds to the note values in Example 4.13.

Intro
play 4x
guitar
voice
last time
S
G7
2x: rhythm varies

Take the last train to Clarksville and I'll meet you at the station. You can see you again. We'll have

R
D
C7

be here by four thirty 'cause I've made your reservation, don't be slow. Oh no, no, no, one more night together 'till the morning brings my train and I must go.

C
D7

oh no, no, no! 'Cause I'm And I don't know if I'm ever coming

Interlude
G7
guitar
home.
(Take the...)

hypermeter: 1 2

3=1 2 3 4

Example 4.13: The Monkees, “Last Train to Clarksville” (1966): expansion of a 16-measure **srdc** structure following Model 2.

repeated before proceeding to **c**. There are only three chords in this entire verse: I, IV, and V, all of which are major-minor seventh chords as is typical in blues-influenced songs. This verse furthermore follows Model 2’s voice leading: the **s** and **r** phrases contain tonic throughout, while **d** contains IV (as PD) and **c** contains V–I (D–T). Over this slow harmonic rhythm, the melody creates interest via register coupling in the **s**, **r**, and **d** phrases (see the graph in Example 4.14): it begins on F♯ (b $\hat{7}$), which is prolonged for five measures before descending stepwise through the octave, bisected by B (3), finally resolving to E in the lower register at the onset of the **d** phrase in measure 9.¹⁴ This E arpeggiates up to C and then,

¹⁴The initial b $\hat{7}$ in the melody is best considered a passing tone from an implied $\hat{8}$ (as shown in Example 4.14), which is present in the guitar riff in the instrumental introduction that precedes this verse, shown in Example 4.13.

Example 4.14: The Monkees, “Last Train to Clarksville,” graph of verse showing Model 2 for **srdc**.

in the two-bar extension that makes **d** last six bars instead of four, all the way up to E an octave higher. At this point, the **s**, **r**, and **d** phrases repeat with a new set of lyrics that explain why the narrator’s lover—he is presumably talking to his lover—must take the last train to Clarksville.¹⁵ The **c** phrase that follows contains the cadential V–I progression and a quick stepwise descent in the melody from $\hat{5}$ to $\hat{1}$ which in Jay Summach’s words “settles the formal debt” (2011, [17]). This **c** phrase lasts six measures, but as Summach points out, the last four measures repeat the instrumental opening and may be considered an “interlude” between the verses rather than simply an extension of the **c** phrase (see Covach 2005, 73–74). In either interpretation, there is a hypermetrical reinterpretation at measure 20 such that this measure begins a new four-bar hypermeasure (shown below the staff in Example 4.13). Reinterpreting the cadential goal as a hyperdownbeat is common in **srdc** structures that follow Model 2, and we will see this technique in several of the songs analyzed below.

¹⁵Summach 2011 discusses some text/music relations in this song ([17]).

$\text{♩} = 112$ **S** **R**
 B \flat /E \flat A \flat /E \flat B \flat /E \flat A \flat /E \flat B \flat /E \flat A \flat /E \flat B \flat /E \flat A \flat /E \flat
 Wel-come to your life, there's no tur-ning back. E-ven while we sleep, we will find you
D **C**
 Fm7 Gm A \flat Gm Fm7 Gm A \flat B \flat B \flat /E \flat A \flat /E \flat
 ac-ting on your best be-ha-vior, turn your back on mo-ther na-ture. E-very-bo-dy wants to rule the world.
 1 2 3=1 2 3 4

Example 4.15: Tears for Fears, “Everybody Wants to Rule the World” (1985), first verse.

While the layout of “From Me to You” and “Last Train to Clarksville” is the most common for Model 2, with the pre-dominant arriving at the beginning of **d** and the dominant arriving at the beginning of **c**, some variations of this schema exist. One common variation is for the pre-dominant to encroach upon the beginning of the **c** phrase, delaying the arrival of the dominant and giving **c** an overall PD–D–T progression. An example of this is Tears for Fears’ 1985 hit “Everybody Wants to Rule the World,” the first verse of which is transcribed in Example 4.15 and graphed in Example 4.16. The **d** phrase of this verse begins on the pre-dominant II^7 chord, which is expanded through a passing motion up to IV and then back down again. The **c** phrase begins on the return to II^7 over the title lyric, at which point the passing motion resumes upward from II^7 to III to IV , this time pushing ahead to V , which falls to I for the cadence.

The upper voice of “Everybody Wants to Rule the World” has an abnormal structure: rather than moving to an unstable melodic tone in the **d** phrase over the pre-dominant harmony, the high G ($\hat{3}$) remains as an upper-voice pedal, which is dissonant with the pre-

Example 4.16: Tears for Fears, “Everybody Wants to Rule the World”: verse exhibits Model 2 for **srdc** but the pre-dominant function encroaches into the **c** phrase delaying the arrival of the dominant.

dominant II⁷ chord. In fact, the melodic structure of the **s**, **r**, and **d** phrases is rather static, with the high G remaining suspended over an inner-voice oscillation between C and B \flat . At the cadence, on the lyric “rule the world,” $\hat{3}$ is thrown an octave lower and moves for the first time, completing a quick $\hat{3}-\hat{2}-\hat{1}$ descent. Despite the melody’s static voice leading, the rhythm and text patterns provide some interest. The **s** and **r** phrases begin with three five-syllable lines of text that alternate strong and weak syllables (“WEL-come TO your LIFE / THERE’S no TUR-ning BACK / E-ven WHILE we SLEEP”) which are arranged rhythmically as upbeat patterns such that their final syllable arrives on a hyperdownbeat. The fourth line also follows this structure but its final syllable elides to become the first syllable of the **d** phrase: “WE will FIND you AC-” elides with “AC-ting ON your BEST be-HA-vior.” In a clever poetic trick, this elided syllable “AC-” provides the rhyme to “BACK” from the second line. The **d** phrase’s text consists of two eight-syllable lines in trochaic tetrameter (“AC-ting ON your BEST be-HA-vior / TURN your BACK on MO-ther NA-ture”), shortening the length of rhyming couplets from eight bars to four (as is common in **d** phrases) and increasing the

rhythmic activity by omitting any rest between adjacent lines of text. Because of the elision at the beginning of **d**, the poetic lines shift from being end-accented in **s** and **r** to beginning-accented in **d**. The **c** phrase consists of one single line of text, the non-rhyming title lyric “E-very-BO-dy WANTS to RULE the WORLD,” which adds a ninth syllable to the trochaic tetrameter of the **d** phrase’s lines, thus ensuring that the cadence will arrive on a strong beat. This final line of text is both beginning- and end-accented, as a hypermetrical reinterpretation causes both measures 13 and 15 to be hyperdownbeats, which—as mentioned above in the discussion of “Last Train to Clarksville”—is a rather common occurrence in Model 2.

Another interesting feature of “Everybody Wants to Rule the World” is that the tonic triad does not appear at all in this verse. In fact, both the initial and final tonics of the functional circuit are carried by the groove transcribed in Example 4.17. Of course, the tonic pedal in the bass strongly projects tonic function, and the fact that the upper voices do not round out the triad should not be taken to mean that the tonic function is absent or even “fragile,” in Spicer 2009’s terms. Rather, the groove shown in Example 4.17 carries the full weight of tonic function, and the cadence in measure 15 is indeed of the perfect authentic variety. The $\hat{3}$ upper-voice pedal tone that persists in **s**, **r**, and **d** is technically dissonant with the inner voices (chords on roots of F and A \flat) but it nevertheless acts as the primary tone, and the background third-progression $\hat{3}-\hat{2}-\hat{1}$ should be considered to outline a consonant harmonic interval even though the chord that contains this interval does not appear on the musical surface. This demonstrates that syntactical tonic function is fundamentally distinct from a tonic *chord* (see Chapter 2). The inner-voice oscillation between the dyads A \flat -C and B \flat -D continues into the **d** phrase, which now prolongs the pre-dominant II chord, while the

Example 4.17: “Everybody Wants to Rule the World”: verse groove that carries tonic function despite not containing a tonic triad.

Example 4.18: Harmonic reduction of “Everybody Wants to Rule the World” showing that the inner voices oscillate between the dyads $A\flat-C$ and $B\flat-D$ for the entire verse while the melody projects a $\hat{3}-\hat{2}-\hat{1}$ descent and the harmony outlines a I-II-V-I functional circuit.

upper voice remains on $\hat{3}$ (see the reduction in Example 4.18). The functional circuit and melodic structure are entirely carried by the outer voices while the inner voices remain stuck in this oscillation; even the inner voice implied by the melody, which alternates C ($\hat{6}$) and $B\flat$ ($\hat{5}$), follows this oscillation. The graph in Example 4.16 shows that this inner voice prolongs C for **s**, **r**, and **d**, only resolving down to $B\flat$ when the harmony arrives at the syntactical dominant V in the **c** phrase.

Just as the pre-dominant function can encroach forward into the **c** phrase, as in “Everybody Wants to Rule the World,” it can likewise encroach *backward* into the **r** phrase. In my final analysis exhibiting Model 2, the **d** phrase begins on a V chord, but as we will see,

♩ = 96

S
A G/A A G/A

8 Ear - ly one mor - ning the sun was shi - nin' I was layin' in bed,

R
A G/A D A G/A

3 won - d'rin' if she'd changed at all, if her hair was still red. Her folks they set our lives to - ge - ther,

6 A G/A A G/A D

8 sure was gon - na be rough. They ne - ver did like ma - ma's home - made dress, pa - pa's bank book was - n't big e - nough.

D
E F#m A D E F#m

9 I was stan - din' on the side of the road, rain fal - lin' on my shoes, hea - din' out for the East coast, Lord

C
E G D A Asus4 A Asus4 A Asus4 A Asus4

12 knows I've paid some dues get - tin' through. Tang - led up in blue.

1 2 3=1 2 3 4 3=1 2 3 4

1 2 3 4

Example 4.19: Bob Dylan, “Tangled Up in Blue” (1975), first verse.

this V chord can be analyzed as subordinate to an overarching prolongation of IV beginning before the onset of **d**. Example 4.19 gives a transcription of the first verse of Bob Dylan’s “Tangled Up in Blue” from his 1975 album *Blood on the Tracks*. This verse contains a sixteen-measure **srdc** structure but with an extended **c** phrase containing a two-level (hyper)metrical reinterpretation (3=1 on both the quarter-note level and the bar level, both shown below the staff in Example 4.19). The **s** and **r** phrases both contain a simple tonic prolongation for three bars and a IV chord for their fourth bar. In the **s** phrase, this IV chord acts as a neighboring chord, returning to I at the beginning of **r**, but this is not the case at

The image shows a musical score for a four-measure passage. The treble clef staff contains the melody with notes and stems up. Above the treble staff, pitch accents are marked: $\hat{3}$, $\hat{4}$, $\hat{2}$, and $\hat{1}$. The bass clef staff contains the bass line with notes and stems down. Below the bass staff, chord symbols are marked: I, IV, V, and I. The lyrics 's', 'r', 'd', and 'c' are placed under the notes in the treble staff. A dashed line connects the $\hat{4}$ accent to the $\hat{2}$ accent, indicating a melodic path.

Example 4.20: Bob Dylan, “Tangled Up in Blue”: the pre-dominant IV chord arrives *before* the onset of the **d** phrase and the rhetorically-emphasized V chord that does begin **d** is shown as a passing chord prolonging IV.

the end of the **r** phrase since **d** does not return to I. In fact, the IV chord at the end of **r** represents the syntactical pre-dominant, which arrives earlier than expected. The emphasized V chord at the beginning of **d** might initially sound like the syntactical dominant, but as the phrase progresses we become aware that IV is still active at a deeper level (see the graph in Example 4.20). When the IV chord returns at the end of measure 11, we realize that the chord progression from measures 8–10, IV–V–VI–I–IV, results from a composing-out of the IV triad in the bass with the V chord harmonizing a passing tone between $\hat{4}$ and $\hat{6}$, as shown in Example 4.20. Furthermore, the upper voice in this passage outlines the fourth-progression from A to D ($\hat{1}$ to $\hat{4}$), which culminates in the delayed realization of the implied neighbor tone to the earlier primary tone C \sharp ($\hat{3}$).¹⁶ Therefore, the metrically emphasized V chord that begins the **d** phrase actually represents a passing chord that ultimately prolongs IV; it is not until measure 13, the onset of the **c** phrase, that the syntactical dominant arrives. Once

¹⁶Notice that in measures 11–12, which repeat measures 9–10, Dylan’s vocal line does not articulate this D but instead reaches above it to E (on the lyric “dues”). Dylan is known for a free treatment of pitch and rhythm, and this E can be adequately analyzed as an upper neighbor that never resolves down to the more stable D.

this syntactical dominant arrives, we get the cadence on the title lyric, accompanied by the bluesy “double plagal” progression $\flat\text{VII-IV-I}$, which in this case embellishes the “softening” V-IV-I progression discussed in Chapter 2 that ultimately represents motion from V to I.¹⁷

MODEL 3: **d** BEGINS WITH A NEIGHBORING CHORD

One aspect of **srdc**’s harmonic structure that is common to all three models is that the **d** phrase begins off-tonic. In Model 3, unlike Models 1 and 2, this off-tonic chord does not represent the arrival of the syntactical pre-dominant function but acts instead as a large-scale neighboring chord that returns to tonic. In other words, the large-scale tonic prolongation does not end at the beginning of **d** but extends beyond it. Nevertheless, the rhetorical emphasis on a non-tonic chord at the beginning of **d** provides harmonic momentum—one of BaileyShea 2004’s “essential” features of the continuation phrase of a (classical) sentence—driving the music forward toward the eventual cadence. Consider the Beatles’ “You Won’t See Me” from their 1965 album *Rubber Soul*, the first verse of which is transcribed in Example 4.21. The **d** phrase of this song begins with a destabilized tonic chord, V_5^6/IV , resolving to IV, which returns to I after turning into a minor triad (see the graph in Example 4.22).¹⁸ This progression supports two upper voices moving in parallel sixths, the highest voice moving $\text{E-D-C}\sharp$, representing $\hat{5}-\hat{4}-\hat{3}$ of the background descent,

¹⁷See Biamonte 2010 for a discussion of double-plagal progressions in rock music. Everett 2008a interprets double-plagal progressions as essentially $\frac{6-5}{4-3}$ progressions on IV with a root-position triad standing in for the first six-four chord.

¹⁸This is a different interpretation of this verse from that in Nobile 2011, where I interpreted the I chord in measures 12–13 not as a return to tonic but instead as the upper fifth of IV. In that interpretation, the **d** phrase does prolong the pre-dominant, making this verse an example of Model 2 rather than Model 3. Although both readings are my own, I prefer the current reading because of the parallelism between measures 13–14 and 1–2, which supports reading measure 13 as a true tonic.

♩ = 116

S **R**

A B7 D A A B7

8 When I call you up, your line's en-gaged. I have had e-nough, so act

D

D A A7/C# D Dm A

7 your age. We have lost the time that was so hard to find, and I will

(C?)

13 B7 D A D A

8 lose my mind if you won't see me (you won't see me) you won't see me (you won't see me)

Example 4.21: The Beatles, “You Won’t See Me” (1965), first verse.

and the middle voice moving chromatically $G\flat-F\sharp-F\flat-E$, as shown in Example 4.22. These parallel sixths continue into the **c** phrase, as the inner voice continues its chromatic descent from E to $D\sharp$, then $D\flat$, and finally to $C\sharp$ for the cadence while the upper voice completes its descent to $\hat{1}$.¹⁹

“You Won’t See Me” is based on a 16-bar **srdc** structure, but there is a question as to where the **c** phrase begins. On the one hand, this verse divides neatly into four four-bar phrases, which would place the beginning of the **c** phrase at measure 13. Measure 13 seems to return to the melody of the **s** and **r** phrases (“and I will lose my mind” = “when I call you up” and “I have had enough”), and this reading would make the **srdc** structure similar to a small-scale **aaba** (discussed later in this chapter). However, measures 15–16 contain the title lyric, add a vocal harmony, and have a clear cadence (with IV acting as syntactical dominant), suggesting that measure 15 is the beginning of the **c** phrase. The fact

¹⁹Note the “syntax divorce” between melody and harmony for the cadence, in which IV–I supports $\hat{2}-\hat{1}$; see Chapter 3.

5̂ 4̂ 3̂ 2̂ 1̂

s/r *d* *c*

I V⁶/₅ IV I II[#] IV I

T ————— PD D T

Example 4.22: The Beatles, “You Won’t See Me”: Model 3 of **srdc** in which the **d** phrase’s IV chord acts as a large-scale neighboring chord within the tonic prolongation.

that this two-measure idea is repeated in measures 17–18 supports this reading, as it allows for measure 15 to be retrospectively heard as the downbeat of a four-bar hypermeasure. On first hearing, one might be tempted to read measure 13 as the beginning of the **c** phrase, but measure 15 would most likely overturn that hearing, making the “final” hearing one that contains a six-measure **d** phrase.²⁰

The title track of Van Morrison’s 1970 album *Moondance* contains a 32-bar **srdc** structure in its verses demonstrating a larger example of Model-3 voice leading. The first verse of this song is transcribed in Example 4.23. Example 4.24 shows that the verse’s 32-bar structure is a result of each of the four **srdc** phrases occurring twice, making an overall **ssrddcc**

²⁰Followers of Janet Schmalfeldt’s process-based theory of form might say that measures 13–14 “become” an extension of the **d** phrase; see Schmalfeldt 2011. The idea of form as the process of becoming essentially rejects the container-based approach to form in which we must settle on a single, “final” reading rather than the more phenomenological approach in which our analyses of past, present, and future events are constantly in flux as we listen in time. According to Schmalfeldt, a passage that at first projects one formal function but is later retrospectively heard as a different one is at its core in the process of “becoming” and should not be analyzed as entirely one or the other formal function.

♩ = 132

S

Am7 Bm7 Am7 Bm7 Am7 Bm7 Am7 Bm7

8 Well it's a mar-ve-lous night for a moon - dance, with the stars up a-bove in your eyes. ____ A fan -

R

5 Am7 Bm7 Am7 Bm7 Am7 Bm7 Am7 Bm7 Am7 Bm7 Am7/C Bm7

8 ta-bu-lous night to make ro - mance 'neath the co-ver of Oc - to-ber skies. And all the leaves on the trees are fal-ling to the

11 Am7 Bm7 Am7/C Bm7 Am7 Bm7 Am7 Bm7 Am7 Bm7 Am7 Bm7

8 sound of the bree-zes that blow. And I'm try-ing to please to the cal - ling of your heart-strings that play soft and

D

16 Am7 Bm7 Dm6 G9 Am7 Dm6 G9 Am7 Dm6 G9

8 low. You know the night's ____ ma gic seem to whis - per and hush. You know the soft ____ moon-

C

22 Am7 Dm6 E7 Am7 Dm7 Am7 Dm7

8 - light seems to shine ____ your blush. ____ Can I ____ just have one more moon - dance with you,

27 Am7 Dm7 Am7 Dm7 Am7 Dm7 Am7 Dm7 Am7 Dm7 Am7 Dm7 Am7 E7

8 ____ my love? Can I ____ just make some more ro - mance with you, ____ my love?

Example 4.23: Van Morrison, “Moondance” (1970), first verse.

S $\begin{matrix} \sphericalangle \text{s} \\ \sphericalangle \text{s} \end{matrix}$ Well it's a marvelous night for a moondance, with the stars up above in your eyes.
A fantabulous night to make romance 'neath the cover of October skies.

R $\begin{matrix} \sphericalangle \text{r} \\ \sphericalangle \text{r} \end{matrix}$ And all the leaves on the trees are falling to the sound of the breezes that blow.
And I'm trying to please to the calling of your heart-strings that play soft and low.

D $\begin{matrix} \sphericalangle \text{d} \\ \sphericalangle \text{d} \end{matrix}$ You know the night's magic seems to whisper and hush.
You know the soft moonlight seems to shine in your blush.

C $\begin{matrix} \sphericalangle \text{c} \\ \sphericalangle \text{c} \end{matrix}$ Can I just have one more moondance with you, my love?
Can I just make some more romance with you, my love?

Example 4.24: Van Morrison, “Moondance”: double **srdc** form in the first verse.

outline. In the **s** and **r** phrases, the minor tonic is embellished by a neighboring II chord (both chords are minor-seventh chords following Morrison’s jazzy style) while the melody composes out the third between $\hat{3}$ and $\hat{1}$ (see the graph in Example 4.25). The **d** phrase begins with the chord progression Dm6–G9–Am7, which is an embellishment of a IV–I neighboring progression. “Dm6” refers to a D-minor triad with added major sixth (i.e., D–F–A–B) and so would normally represent a II_5^6 chord, but in this case it is best analyzed as $\text{IV}^{\text{add}6}$ because it returns to I.²¹ The G9 chord that follows it is not a functional chord; rather, it arises from a passing motion in the bass while holding the upper voices static, as shown in Example 4.26. The graph in Example 4.25 therefore omits reference to the G9 chords. Over the Dm6–(G9)–Am7 progression, which occurs three times in the **d** phrase, the melody leaps up to $\hat{6}$ acting as a large-scale appoggiatura resolving down to $\hat{5}$. The fourth time that the Dm6 chord appears (measure 23), it leads to V^7 , making it a true II_5^6 chord functioning as syntactical pre-dominant. At the downbeat of the **c** phrase, the dominant V^7 chord resolves to I for the cadence, as the melody leaps up to $\hat{8}$, decorated with a subtonic neighbor tone.

²¹This is what Rameau would call an “irregular” (later “imperfect”) cadence; see Rameau 1971 [1722].

The musical score for Example 4.25 consists of two staves: a treble staff and a bass staff. Above the treble staff, a melodic line is marked with circled numbers 3, (6), 5, and 8. Below the bass staff, a bass line is marked with Roman numerals I, IV^(add 6), I, II₅⁶, V, and I. The letters *s/r*, *d*, and *c* are placed between the staves to indicate phrase boundaries.

Example 4.25: Van Morrison, “Moondance”: Model 3 for **srdc**.

The musical score for Example 4.26 consists of two staves: a treble staff and a bass staff. Above the treble staff, chords are marked as Dm6, G9, and Am7. The bass staff shows a bass line with a passing motion.

Example 4.26: The chords in the **d** phrase of “Moondance” embellishes a IV–I neighboring progression through passing motion in the bass.

The melodic line of this verse outlines an ascending arpeggiation $\hat{3}-\hat{5}-\hat{8}$ rather than a more typical linear progression.

BRIDGE SECTIONS

In terms of their harmonic structure, bridge sections are less varied than verses and other main sections. The main function of a bridge section in AABA forms is to provide contrast to the verses (A sections) in multiple domains: texture, melody, key, lyrics, etc. (see Everett 2009, 147–48). In the harmonic realm, this contrast is generally achieved by beginning

the section away from the tonic and leading to a dominant retransition on V.²² The overall functional progression of the bridge is therefore syntactical pre-dominant to dominant, and this dominant generally represents a half-cadence and a large-scale interruption not unlike the dominant retransition at the end of a development section of a sonata-form movement. As Everett 2009 points out, the presence of a V chord at the end of a bridge section is one of the more universal harmonic features of 1960s rock music (148); furthermore, this V chord is often tonicized through the use of $\sharp\hat{4}$ (within II^\sharp , or V/V), intensifying the half cadence and the retransitional nature of the end of the bridge section. This tonicization of V often balances a tonicization of IV (using $\flat\hat{7}$) at the beginning of the bridge; in Everett’s words, “the dual alterations allow the bridge to take a relaxed initial step back from the major scale, falling flat to emphasize IV, as if to recoil for a farther jump through a raised scale degree to move up two fifths . . . to the sharp side, emphasizing V” (148). “From Me to You,” whose verse was analyzed above, does exactly this in its bridge section, transcribed in Example 4.27: the first four-bar phrase contains a $\text{II}-\text{V}-\text{I}$ progression tonicizing F major, which is IV of the home key of C major, while the second phrase contains a $\text{V}-\text{I}$ progression in G major (V).²³ (Note that the typical length for a bridge section is eight bars, hence its alternative name “middle eight,” and it generally divides into two four-bar phrases.)

“From Me to You”’s bridge exemplifies the overall PD–D structure that is typical of bridge sections in AABA forms. By coupling the analysis of this bridge section with the analysis of

²²Several theorists have pointed out this general schema, including Everett 2009, 147–49, Stephan-Robinson 2009, 161–62, and deClercq 2012, 70–85.

²³This bridge section exhibits the pattern that Joseph Riepel called a *Monte*: a sequential pattern that first tonicizes IV and then V, with the second half transposed up a step from the first. This pattern is best known today via Robert Gjerdingen’s study of mid-18th century schemata entitled *Music in the Galant Style* (2007).

starts at
0:35

Bridge

I got arms that long to hold you and keep you by my side. I got

5 lips that long to kiss you and keep you sat - is - fied Ooo

Example 4.27: “From Me to You,” bridge.

the verse shown in Example 4.12 (page 135), we can arrive at a structural analysis of the entire song, given in Example 4.28. AABA forms are, for the most part, “sectional” forms, meaning that each individual section is harmonically closed (in other words, ends with a perfect authentic cadence).²⁴ This, of course, does not apply to the bridge section, which ends on a harmonically open half cadence, but the A sections (verses) are closed in the tonic key. What this means in terms of large-scale voice leading is that the first two A sections will prolong the tonic and the primary upper-voice tone through complete middleground progressions—what Schmalfeldt 1991 (following Schenker) would call “*Ursatz* replicas”—and the B section (bridge) will connect this prolonged tonic to its pre-dominant and dominant, ending with an interruption in the background structure. The final A section will then restart the background progression and complete it with a structural close on tonic. Raising the final A section’s cadence to the background level even though it is a literal repetition of the earlier A sections, which lived in the middleground, demonstrates that the structure cannot be complete until the verses have been tested by the contrasting bridge section. Accordingly, Example 4.28 shows that “From Me to You”’s first two verses and bridge end with an interruption and that

²⁴See Green 1979 for a discussion of sectional versus continuous forms.

The musical score for "From Me to You" is presented in a grand staff with treble and bass clefs. The melody is in the treble clef, and the bass line is in the bass clef. The score is divided into sections: A (measures 1-4), B (measures 5-6), and A (measures 7-8). Above the staff, there are numerical annotations: a '3' above the first A section, a '4' above the B section, and a '2' above the second A section. A double bar line with two slashes (//) indicates an interruption after the B section. The final A section (measures 9-12) is marked with a '3' above it. A 'cadential I' chord is indicated in the first A section. Below the staff, the chord progression is written as I, IV, V, // I, IV, V, I.

Example 4.28: Middleground graph of “From Me to You” showing its AABA structure with an interruption after the B section.

the final A section contains the entire second branch.²⁵ This graph interprets the complete form to be AABA, even though the literal form is AABAABA (recall Example 4.1, page 122); the final ABA (the first A of which is partly instrumental) essentially repeats the form *da capo* without repeating the verse, as is typical in common-practice dance movements, such as the minuet, that contain *da capo* repeats.

A common elaboration of the typical PD–D structure of bridge sections is a return to tonic at the end of the first phrase, giving an overall structure of PD–T|PD–D. Trevor deClercq discusses this structure at length (2012, 74–81), citing three common schemas which he calls “classic” bridges, shown in Example 4.29. DeClercq cites several examples of songs that contain one of these exact chord progressions, most of which were released in rock’s foundational years between 1955 and 1963.²⁶ As deClercq notes, even though a return

²⁵The chromatic motion from $\hat{2}$ of the interruption back up to the primary tone $\hat{3}$ is an example of what Yosef Goldenberg (2012) calls an “interruption-fill.”

²⁶It is likely that these schemas trace their influence to country and western music of the early 1950s rather than to earlier blues or R & B, as they are widely used in the music of Hank Williams and his contemporaries.

a)
 IV I IV V

b)
 IV I V/V V

c)
 IV I IV I IV I V/V V

Example 4.29: Trevor deClercq’s three models of “classic” bridges (reproduced from deClercq 2012, 77).

to a tonic chord is a central aspect of classic bridges, in all three schemas this tonic chord “is downplayed with regard to its placement within the section overall” (79), as it always arrives in a weak hypermetrical position and subsequently returns to the pre-dominant. In a structural interpretation, then, these I chords are best considered to participate in an overall prolongation of the pre-dominant function, which in all three cases is represented by IV, making the I chords act as the latter chord’s upper fifth (see Example 4.30). In deClercq’s second model, IV–I–V/V–V, the harmonies unfold two fifths, first prolonging IV and then V (see Example 4.30b). Sometimes the IV chord in a classic bridge is replaced by a different pre-dominant chord, such as VI (as in the Beatles’ “Misery,” shown in Example 4.31), but it is rarely the case that the final chord of a classic bridge section is anything other than V.

“Every Breath You Take” contains a classic bridge that follows deClercq’s second classic bridge schema (Example 4.29b), as shown transcribed in Example 4.32. The only deviation from the model chord progression is the addition of a \flat III chord in measure 2, which is a foreground embellishment that connects IV to I (this chord is so easy to miss that deClercq actually leaves it out of his transcription [2012, 86]). This bridge is graphed in Example 4.33,

a)

b)

c)

Example 4.30: Interpretations of deClercq’s classic bridge models showing the tonic chords to be subsumed within an overall prolongation of IV.

a) Transcription

Bridge

$\text{♩} = 132$ Am C Am G

I'll re-mem-ber all the lit-tle things we've done. *piano* Can't she see she'll al-ways be the on-ly one? On-ly one.

b) Graph

VI V
PD D

Example 4.31: The Beatles, “Misery” (1963), transcription and graph of bridge showing VI as pre-dominant within a PD–T|PD–D framework.

starts at 0:48

Bridge

D^b C^b $A^b(\text{add } 9)$ $B^b(\text{add } 9)$ E^b

Oh, can't you see you be-long to ___ me? How my poor heart ___ aches with e-very step you _ take.

Example 4.32: “Every Breath You Take,” bridge.

bridge

(I) IV V //

Example 4.33: “Every Breath You Take,” graph of bridge section.

which shows the unfolded fifths characteristic of classic bridges in the lower staff. The upper voice is slightly more complicated than the bass, as the overall third-progression from $\hat{4}$ to $\hat{2}$ is obscured by inner voices reaching over this main voice and a shift in register making structural $\hat{2}$ the melodic peak of the entire song.

Sting and the Police could have constructed a tight-knit AABA form out of the verse shown in Example 4.6 (page 128) and the bridge shown in Example 4.32 that would, in 1983, have been an appropriate homage to the pre-psychedelic rock music of the early Beatles and others. However, their song contains what seems to be a second bridge section after the AABA form is complete; this second bridge is much more in the style of early-80s New

“Bridge 2”

starts at 1:22

Since you've gone I've been lost with-out a trace, I dream at night I can on -

ly see your face. I look a-round but it's you I can't re-place, I feel so cold and I

long for your em-brace. I keep cry-in' "ba-by, ba-by, please!"

Verse
Ab^(add 9)

Example 4.34: The “second bridge” in “Every Breath You Take.”

Wave music than the other sections of this song (see the transcription in Example 4.34). This section contrasts with the others in timbre, with its distorted electric guitars; harmony, with its focus on the chromatic submediant; and lyrics, shifting to a personal plea for salvation (“baby, baby, please!”) from the verses’ more aggressive and threatening tone. Because of the stark contrast between this second bridge and the other sections, John Covach describes the overall form of this song as “compound ABA,” with each of the large A sections containing a full AABA structure and large B section comprising the second bridge (see Example 4.35, which is deClercq’s example summarizing Covach’s interpretation; see deClercq 2012, 86, and Covach 2005, 75). Trevor deClercq, on the other hand, considers this second bridge to be only the beginning of the large-scale bridge, which in his interpretation also includes the next two verses, both of them instrumental. DeClercq defends his interpretation by claiming that “this organization (AABA–instrumental–BA) is quite common for songs from the 1950s and ’60s” (88), thus further linking this song with earlier styles. What neither Covach nor deClercq mentions, however, is that the first AABA structure that precedes the second

Start	Section	Group
0:17	Verse	A
0:33	Verse	
0:49	Bridge 1	
1:06	Verse	
1:22	Bridge 2	B
1:43	Verse	A
1:59	Verse	
2:15	Bridge 1	
2:32	Verse	

Example 4.35: Covach’s interpretation of the form of “Every Breath You Take” as “compound ABA” form. (Reproduced from deClercq 2012, 86.)

bridge is harmonically incomplete: the third verse (the third A) ends deceptively on a VI chord that leads right into bridge 2, which begins on bVI . (This third verse has the same chord progression as the first verse, which was shown in Example 4.6.) The second bridge then oscillates between bVI and $bVII$ before eliding into the next (instrumental) verse with a resolution to I. Since a final tonic was withheld at the end of the third verse, the resolution at the end of the second bridge represents the delayed conclusion of the functional circuit spanning the entire AABA structure. This suggests that this second bridge is not really a “bridge” but an interpolation *within* the AABA framework that serves to compose out a deceptive cadence, delaying the structural close on tonic at the end of the final A section.

This interpretation of the second bridge is shown in Example 4.37, which gives a middle-ground graph of “Every Breath You Take.” This graph interprets the second bridge (marked “B2”) as a prolongation of bVI representing a chromatic inflection of the previous VI chord. The progression $VI \rightarrow bVI \rightarrow I$ contains the inner-voice motion $\hat{6} \rightarrow \hat{b6} \rightarrow \hat{5}$, with $\hat{5}$ arriving over the final I chord. This is similar to the $\hat{6} \rightarrow \hat{5}$ neighboring motion seen from the end of the first A section into the second. In other words, the second bridge is subsumed within the V–I

Start	Section	Lyrics	Subgroup	Group
0:17	Verse	“Every breath you take...”	AA	AABA
0:33	Verse	“Every single day...”		
0:49	Bridge 1	“Oh can’t you se...”	BA	
1:06	Verse	“Every move you make...”		
1:22	Bridge 2	“Since you’ve gone...”	Modern Bridge	Bridge
1:43	Verse	---	Instrumental Bridge	
1:59	Verse	---		
2:15	Bridge 1	“Oh can’t you se...”	BA	abbreviated reprise
2:32	Verse	“Every move you make...”		

Example 4.36: Trevor deClercq’s alternative reading of the form of “Every Breath You Take” with an expanded bridge that comprises the “second bridge” as well as the two subsequent instrumental verses. (Reproduced from deClercq 2012, 88.)

cadence in the final A section and therefore represents a structural interpolation within the song’s overall AABA form.

After the second bridge gives way to the return of the vocal-less verse, we get the entire AABA pattern again without the interpolated second bridge. In this cycle, the final A section still ends deceptively on VI, but it leads to a coda that provides the closing tonic (beginning at 3:00). In the interpretation given in Example 4.37, this repeat of the AABA structure essentially prolongs the final tonic and does not represent background structural motion, similarly to how the final ABA in “From Me To You” was considered a *da capo* repeat. Therefore, the overall structure of “Every Breath You Take” is essentially AABA, with “B2” subsumed within the final A section. One final feature to notice about this song is that the $\hat{3}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ motive is present at three structural levels: it is the background structure to both structural branches, with the first branch interrupted after reaching $\hat{2}$; it exists in the middleground in the first two A sections; and the title lyric “every breath you take”

The image shows a musical score for the song "Every Breath You Take" in a key with three flats (B-flat major/C minor). The score is divided into two systems. The first system shows the first A phrase (measures 1-4) and the B phrase (measures 5-6). The second system shows the second A phrase (measures 7-8) and the final A phrase (measures 9-10). Above the treble clef, figured bass notation indicates the harmonic structure: 3̂, 4̂, 3̂, 2̂, 1̂, (1̂). Below the piano part, chord symbols are provided: I, IV, V, I, IV, V (VI bVI), I. The structure is labeled as AABA, with the second A phrase containing an interpolation labeled "B2".

Example 4.37: Interpretation of “Every Breath You Take” in which the “second bridge” is an interpolation within the overall AABA framework that delays the structural close on tonic with a chromaticized neighboring progression $\hat{6}-\flat\hat{6}-\hat{5}$ in an inner voice.

that begins the first verse—and is repeated twice in each verse with various lyrics—sets this motive in the foreground.

SMALL **aaba**

It is not uncommon for the **r** phrase of an **srdc** verse to be harmonically open, ending on a V chord or other non-tonic harmony. We saw this earlier in “From Me to You” (Example 4.2, page 123). In these cases, the V chord that ends the **r** phrase is back-related such that the pre-dominant chord that follows in the **d** phrase connects to the opening tonic rather than to this V chord.²⁷ The interpretation of this chord as back-related has more to do with its formal position than its voice leading; a similar situation occurs in the Beatles’ “Misery,” in

²⁷Compare Cadwallader & Gagné 2011’s analysis of the first eight bars of Beethoven’s Piano Sonata, Op. 26 (54–56). Based on the definition of cadence offered in Chapter 2, the presence of a back-related dominant does not necessarily signal a half cadence since it often does not coincide with a formal end.

Example 4.38: The Beatles, “Misery” (1963), first verse: the IV chord at the end of the **r** phrase is back-related and the true pre-dominant does not arrive until the **d** phrase.

Example 4.39: The Beatles, “Misery,” graph of verse: the IV chords in the **s** and **r** phrases are neighboring chords prolonging tonic.

which the **s** and **r** phrases end with a back-related IV chord followed by another IV chord at the beginning of the **d** phrase (see the transcription in Example 4.38). Although there is no change of harmony in measures 4–5, the arrival of the pre-dominant function occurs at the phrase boundary in measure 5; the IV chord in measure 4 functions the same way as the IV chord in measure 2, as a neighboring chord to the tonic (see the graph in Example 4.39).

When both the **s** and **r** phrases end off-tonic, the **srdc** structure sometimes turns into a small-scale **aaba** structure in which the final **a** phrase—which is also the **c** phrase—answers

the first two harmonically open **a** phrases by ending conclusively on tonic.²⁸ Although the small **aaba** begins just like an **srdc** verse, its overall voice-leading structure is more akin to large AABA than to small **srdc** because the **b** phrase generally ends with a half cadence, suggesting an interrupted structure with two branches. The four phrases in small **aaba** function as antecedent–antecedent–short bridge–consequent, making a sixteen-bar verse.²⁹ An example of small **aaba** is Badfinger’s 1969 single “Come and Get It”—written and produced by Paul McCartney—the first verse of which is transcribed in Example 4.40. The first two phrases of this verse are basically identical, both ending inconclusively on V. The third phrase functions as a bridge, beginning on the chromatic submediant and progressing through \flat II to a half cadence in measure 12. (The I chord in the first half of measure 12 is an example of the “cadential I” and elaborates the following V chord.) The final phrase is a recapitulation of the first phrase, but it leads to a perfect authentic cadence rather than a half cadence.

The graph of this verse in Example 4.41 is similar in overall structure to the graphs of large AABA forms such as “From Me to You” (Example 4.28) and “Every Breath You Take” (Example 4.37), except that in the small **aaba**, the first two **a** sections are harmonically open, meaning that the final **a** phrase is not an exact repetition of the earlier phrases because it is harmonically closed on the tonic. This difference is significant because it means that small

²⁸Matthew BaileyShea discusses similar **aaba** designs in reference to the Classical sentence (2004, 16–17). See also Callahan 2013.

²⁹This layout does not appear in William Caplin’s theory of formal functions for Classical-era instrumental music (1998) but is essentially a mixture of his “small ternary” and “small binary.” The former must, in Caplin’s theory, end with a perfect authentic cadence (which is not the case above), while the latter must not contain any sense of recapitulation (which the final **a** phrase certainly does). In comparing small **aaba** to Caplin’s taxonomy, I am equating “bridge” function with Caplin’s “contrasting middle,” although the correspondence is not perfect.

♩ = 100

A
E

If you want it, here it is, come and get it. Mm _____ make your mind up fast. _____ If you

A
E

want it a - ny time, I can give it, but you bet - ter hur - ry 'cause it may not last. _____

B
C Em7 F E B

Did I hear you say that there must be a catch? Do you walk a-way from a fool and his mo-ney? If you

A
E

want it, here it is, come and get it, but you bet - ter hur - ry 'cause it's go - ing fast. _____

Example 4.40: Badfinger/Paul McCartney, “Come and Get It” (1969), first verse.

aaba coheres into a single section—with the final **a** phrase answering the questions of the first two—whereas large AABA consists of four self-contained sections.³⁰ The harmonically open **a** phrases at the beginning of the section are more like the **s** and **r** phrases of an **srdc** verse; even when **s** and **r** end on tonic, as they usually do, this tonic is not part of a cadence and so these phrases do not sound complete on their own. The **b** phrase begins the same as would a **d** phrase, but its clear half cadence—which in the case of “Come and Get It” is emphasized by a written-out fermata in measure 13—ensures that this phrase has bridge function. Small **aaba** is therefore a true hybrid of **srdc** and large AABA; the overall form of “Come and Get It” reflects this hybridity, as it contains no large-scale bridge section but consists of two run-throughs of the small **aaba** plus a coda that recalls the **b** phrase’s modal

³⁰Jay Summach (2012) uses the word “module” for what I call a section. In his theory the difference between a phrase and a module is one of length, as modules cannot be shorter than eight bars (16).

The musical score shows a piano accompaniment for the song "Come and Get it". It is written in G major (one sharp) and 4/4 time. The score is divided into three measures. The first measure is labeled 'a/a' and features a melodic line starting on G5 and a bass line on G2. The second measure is labeled 'b' and features a melodic line starting on G4 and a bass line on G2. The third measure is labeled 'a' and features a melodic line starting on G5 and a bass line on G2. Above the staff, there are numbers 5, 4, 3, 2, 5, 4, 3, 2, 1 indicating fingerings or scale degrees. Below the staff, there are Roman numerals: I, VI, II, [I] V, I, IV, V, I.

Example 4.41: Graph of “Come and Get it” showing this verse’s small **aaba** structure.

mixture. In this song, the small **aaba** is self-contained enough not to require a contrasting bridge section, but it still needs to be repeated as a strophe rather than only partially, as in the AABABA-types derived from large AABA.

CONCLUSION

AABA and **srdc** structures abound in early rock music. While AABA is ultimately inherited from Tin Pan Alley, rock music made this form its own in the 1960s, aided by its ubiquity in the early music of the Beatles. Although rock songs approach this form in myriad ways, there are certain harmonic and melodic shapes that can be regarded as normative in the genre. This chapter represents an attempt to model these normative shapes and demonstrate the relationship between these forms and their voice-leading structures. A main contention of this dissertation is that the standard rock forms are associated with specific voice-leading structures; consequently, an understanding of the voice leading/form relationship is vital to a

thorough understanding of the genre. While the main focus of this chapter was large AABA form, the focus on the **srdc** structures that underlie many A sections will come in handy in the following two chapters, as the three models for **srdc** relate to several models of larger forms, specifically those that include a chorus section. As Jay Summach (2011) has pointed out, by the end of the 1960s the **srdc** structure had expanded to encompass not one but three distinct sections. This expansion gives rise to verse–prechorus–chorus form, which is the subject of the following chapter.

EXPANSION OF **srdc** INTO VERSE–PRECHORUS–CHORUS

AS THE PRESENCE of a full-fledged chorus became more and more common beginning in the mid-60s, the **srdc** phrase structure expanded to accommodate this new trend.¹ Specifically, the **srdc** model grew to comprise a verse, a prechorus, and a chorus. Jay Summach (2011) traces this expansion throughout the decade, from early enlargements of **d** phrases through the invention of the prechorus in 1964 and the continued expansion thereafter.² While the standard **srdc** phrase structure generally applies to a *single* section (usually a verse), its expanded form spans *three* sections. In this expansion, the **s** and **r** phrases make up the verse, the **d** phrase is the prechorus, and **c** is, of course, the culminating chorus. As we will see, the **d** and/or **c** phrases are usually proportionally enlarged so that their lengths are roughly the same as the length of **s** and **r** *combined*—in other words, the lengths of verse, prechorus, and chorus are equalized.

¹According to Summach 2012 (231), the percentage of songs with chorus in the *Billboard* annual top 20 increased from 27% in the decade from 1955–1964 to 84% in the 1980s.

²The relationship between the **srdc** pattern and verse–prechorus–chorus form was first pointed out by Walter Everett, who notes that “in songs that do not contain a chorus, ... the Departure-gesture [i.e., **d**] that precedes each refrain [i.e., **c**] ... has the same formal function as a prechorus, but clearly the stage is smaller” (Everett 2009, 146–7). Everett is also the author who cites 1964 as the invention of the prechorus; Summach instead considers there to be a continuum ranging from simple **d** phrases on one end to prechoruses on the other, with most 60s examples falling somewhere in the middle.

The expansion of **srdc** into verse–prechorus–chorus is not just a question of length, though; both **srdc** and verse–prechorus–chorus are built on the same voice-leading model. The previous chapter showed that an **srdc** verse contains one functional circuit in which the initial tonic is prolonged throughout the **s** and **r** phrases, the predominant arrives at the onset of the **d** phrase, and the cadence occurs in the **c** phrase (the exact placement of the cadence is different in the three models). When **srdc** expands into verse–prechorus–chorus, this same general outline applies: the verse prolongs an initial tonic, the prechorus begins on a predominant and the completion of the functional circuit occurs in the chorus. More specifically, the voice-leading layout of verse–prechorus–chorus cycles follows Model 1, in which the syntactical dominant arrives within the prechorus and resolves to tonic at the downbeat of the chorus. The chorus, therefore, prolongs this final tonic throughout the entire section and does not contain any internal structural motion. As we will see, this distinguishes verse–prechorus–chorus forms from verse–chorus forms that do not contain a prechorus; in the latter, the structural goal arrives at the *end* of the chorus rather than the beginning.

For an early example of the expansion of **srdc**, consider the Who’s 1966 single “Substitute.” The first cycle (verse–prechorus–chorus) of the song is transcribed in Example 5.1. In this song, an eight-measure verse is followed by a ten-measure prechorus and a ten-measure chorus. The verse divides into two four-measure phrases that are identical except for the different lyrics, thus demonstrating its relationship to **s** and **r** phrases. The prechorus begins with four similar two-measure ideas, exhibiting the fragmentation typical of both prechoruses and **d** phrases. These eight measures contain a single chord, the pre-dominant ii chord, which leads to the dominant V chord in the final two measures of the prechorus. This

Verse

♩ = 136

D G A D D

You think we look pret - ty good to - ge - ther — You think my

Prechorus

G A D Em

shoes are made of lea - ther — But I'm a sub - sti - tute for a - no - ther guy I

11

look pret - ty tall but my heels are high The sim - ple things you see are all com - pli - ca - ted

15

A

look pret - ty young but I'm just back - da - ted yeah —

Chorus

19 D A/D G/D D D A/D G/D D D A/D

Sub - sti - tute Sub - sti - tute Sub - sti - tute

your lies for fact I see right through your plas - tic mac — I look all white but my

24 G/D D D A/D G/D D

Sub - sti - tute

dad was black My fine loo - kin' suit's real - ly made out - ta sack —

Example 5.1: The Who, “Substitute” (1966), first verse, prechorus, and chorus: expansion of *srdc* into verse–prechorus–chorus.

V chord resolves to I when the chorus begins. The chorus, like the prechorus, consists of a two-measure idea repeated four times; this section is entirely over a tonic pedal and does not contain a cadence or other structural motion.

“Substitute” is a good example of an expanded **srdc** overlaying a verse–prechorus–chorus cycle. The verse’s two four-measure phrases could easily be the **s** and **r** phrases of an **srdc** verse. With its expansion to last ten measures, the **d** phrase then becomes its own separate section rather than a continuation within a verse. When we arrive at the chorus, then, we are not expecting a refrain, which usually contains simply a short cadential progression, but instead we expect a full culminating section. Also evident in this section is a voice-leading structure following Model 1 for **srdc** as discussed in the previous chapter. Specifically, the verse (=sr) prolongs the tonic, the prechorus (=d) begins on a pre-dominant and moves to a dominant, and the chorus (=c) prolongs the tonic. In “Substitute,” the verse’s progression I–IV–V–I, repeated twice, prolongs the tonic; the prechorus contains only two chords: first the pre-dominant ii, which lasts eight measures, and then the dominant V for the last two measures; and the chorus’s tonic pedal, of course, prolongs the tonic. This structure is shown graphically in Example 5.2; note this example’s similarity to graphs of **srdc** verses in the previous chapter, such as “Every Breath You Take” (Example 4.6, page 128). The upper voice follows the **srdc** model as well: the primary tone $\hat{3}$ moves to the unstable $\hat{2}$ in the prechorus, which descends to $\hat{1}$ at the beginning of the chorus.³

³This $\hat{3}$ – $\hat{2}$ – $\hat{1}$ descent is not as obvious on the foreground as it could be. Although $\hat{3}$ seems to be in an inner voice during the verses, in these sections I consider the middle vocal line to represent the main melody, while the upper line is a descant harmony and the lower line, though it is sung by lead singer Roger Daltrey, is a lower harmony. Similarly, in the chorus, the main melodic line is the one given on the lower staff in Example 5.1. This melodic line essentially contains the linear progression D–C♯–B–A, prolonging $\hat{1}$, although it begins

Example 5.2: The Who, “Substitute,” structure of verse–prechorus–chorus cycle. Illustration of the voice-leading model for verse–prechorus–chorus, which derives from the model for **srđc**.

One thing to notice about the verse–prechorus–chorus model is that the chorus does not contain any structural motion; the functional circuit has completed with the arrival of the initial tonic of the section, and the remainder of the section functions structurally as a coda. Since the chorus is the most memorable part of the song, one might expect it to be structurally significant, but in general it serves simply to prolong the final tonic chord. Choruses in verse–prechorus–chorus songs generally do not end with a cadence, nor do they contain structures such as periods or a small **srđc**. This is because the chorus itself is the structural goal of the song, and upon arriving at the chorus the structural motion is complete (this is in contrast to verse–chorus songs without a prechorus, in which the structural goal is often at the *end* of the chorus; see the following chapter). In other words, in verse–prechorus–chorus songs, the buildup to the chorus is more significant than the chorus itself. The chorus therefore acts as what James Hepokoski (1993, 78) would call a “*telos* theme,” in that its initial moment functions both as a structural end, as the completion of the song’s functional circuit, and a formal beginning, as the onset of the principal section of the song. This antithesis of structural

halfway through this progression; the D and C♯ are contained in the lower backing vocal line on the lyric “substitute,” shown on the top staff. The lead vocal presents the complete melodic figure in measures 21–22.

end and formal beginning becomes a remarkable synthesis in which the climactic moment is prolonged throughout the entire section. The energy of the song begins low in the verse, increasing through the prechorus and reaching its climax at the onset of the chorus. The *telos* section itself is constructed as a musical plateau, neither increasing nor decreasing the musical energy. Such choruses therefore often repeat a small motive or phrase several times as a sort of reaffirmation of the structural tonic. This is the case in “Substitute”: the chorus consists of four repetitions of a two-measure motive and does not lead to a cadence or any culminating gesture. A more extreme example of this from two decades later is Huey Lewis & the News’s “Hip To Be Square” from their 1986 album *Fore!*. The first verse, prechorus, and chorus of this song are transcribed in Example 5.3. The chorus of this song is practically over as soon as it begins: the title line “it’s hip to be square” is anacrusic, with the final syllable “square” arriving on the downbeat of the chorus. The chorus itself consists of four measures of the same groove as the verse (with the texture thickened by the addition of the organ) and a repetition of the title line. It is particularly clear in this case that the arrival of the chorus is the structural goal, and the chorus itself does not contain any structural motion.

THE PD–T|PD–D SCHEMA

Due to the lack of melodic interest in the chorus of “Hip to be Square,” one might be tempted to analyze measures 17–20 as a refrain instead, calling the entirety of Example 5.3 a verse in **srdc** form. The prechorus, however, is too expansive to be considered simply a **d**

Verse

$\text{♩} = 140$

E E7/G# A E E7/G# A

I used to be a re - ne - gade I used to fool a - round

5 E E7/G# A E E7/G# A

but I could - n't take pu - nish - ment, and had to set - tle down

Prechorus

9 A G A B E

Now I'm pla - yin' it real ___ strict, and yes, I cut my hair. ___

13 F#m7 E/G# A7sus4

You might think I'm cra - zy, but I don't e - ven care 'cause I can tell what's go - in' on:

Chorus

16 Bsus4 E E7/G# A A/B E E7/G# A A/B

It's hip to be square. It's hip to be square.

Example 5.3: Huey Lewis & the News, “Hip to be Square” (1986): first verse, prechorus, and chorus.

phrase and has the structure of an entire section. These eight measures divide into two four-measure phrases: the first begins on a pre-dominant IV chord, as expected, but then returns to I in its fourth measure (measure 12). The second phrase continues the tonic prolongation with a passing chord between I and I⁶ before returning to the pre-dominant IV chord in measure 15 and leading to the dominant V chord in measure 16. This illustrates a common schema in prechoruses, especially those that divide into two phrases of equal length: the first half contains PD–T and the second half contains PD–D.⁴ The I chord in measure 12 seems

⁴Trevor deClercq (2012, 76) describes a similar schema applying to *bridge* sections. Prechorus and bridge sections are similar in structure, but the main difference between them is that bridge sections typically end

Example 5.4: Huey Lewis & the News, “Hip to be Square,” structure of verse–prechorus–chorus cycle. Illustration of the PD–T|PD–D schema in the prechorus.

like a stable return to tonic harmony; the unstable $G\sharp$ resolves back to $G\sharp$, and the lyrics arrive at the end of a sentence. Yet this moment does not complete a functional circuit—there is no cadence, since this is not a formal end—and so it cannot represent a return to the syntactical tonic function on a deeper level (see Chapter 2). This I chord is therefore best interpreted to be subsumed within a prolongation of the syntactical pre-dominant function, which begins at the onset of the prechorus (measure 9) and lasts through measure 15 before giving way to the syntactical dominant. Example 5.4 gives a voice-leading graph of the entire cycle showing the PD–T|PD–D schema in the prechorus. In the upper voice, the primary tone $\hat{3}$ descends to $b\hat{3}$ for the prechorus, which represents the seventh of IV. This $b\hat{3}$ fails to resolve at first, and “wobbles” back up to $b\hat{3}$ when the harmony returns to the tonic.⁵ When IV returns in the second phrase, $\hat{3}$ falls back down to $b\hat{3}$ and this time successfully resolves to $\hat{2}$ over the V chord. Notice that the earlier B-major chord in measure 11 does not support

with a half cadence (i.e., an interruption, usually on a V chord), whereas the dominant that ends a prechorus resolves to the tonic chord in the chorus as part of an *authentic* cadence.

⁵The term “wobble,” which refers to a chromatic shift of a scale degree, is David Damschroder’s; see Damschroder 2010.

a chord tone in the upper voice—this B-major chord embellishes the motion from A major (IV) to E major (I), and so this is an a hierarchy divorce (Chapter 3), in which the harmony contains embellishments while the melody exists on a deeper structural level.

Genesis’s “Invisible Touch” from their 1986 album of the same name has a similar PD–T|PD–D progression in its prechorus. Example 5.5 transcribes the first cycle of this song. The eight-measure prechorus starts with a four-bar phrase that begins on a pre-dominant chord and ends back on I (measures 9–12), as in “Hip to be Square.” In this case, the initial pre-dominant II[#] dissolves into its upper (diatonic) third IV before continuing to I—a common chord progression that supports the melodic line ♯4–♯4–3.⁶ The next two measures, measures 13–14, repeat the previous two measures, measures 11–12, which continues the prolongation of I; the final two measures of the prechorus, measures 15–16, then return to the pre-dominant IV and lead to the dominant that sets up the chorus. Example 5.6 gives a structural graph of the verse–prechorus–chorus cycle. The graph shows a pre-dominant prolongation in the prechorus throughout the PD–T|PD–D progression. Note that when the pre-dominant returns after the intervening I chord, it is a IV chord rather than a major II chord as it was initially; this large-scale motion echoes the foreground II[#]–IV progression in the first three measures of the prechorus (measures 9–11).

The graph in Example 5.6 shows the verse of “Invisible Touch” to be tonic-prolonging despite beginning and ending off-tonic. The two parallel phrases in this verse both begin with a VI–IV–III progression; the first phrase concludes with a I chord and the second concludes

⁶Everett 1992, 28–31, points out this contrapuntal progression as a common device in early Beatles songs such as “Eight Days A Week” and “You Won’t See Me.”

Verse

$\text{♩} = 132$

Dm $\overset{3}{\text{—}}$ Bbmaj7 $\overset{3}{\text{—}}$ Am F Dm $\overset{3}{\text{—}}$ Bbmaj7 $\overset{3}{\text{—}}$

Well I've been wai-ting, wai-ting here so long — But thin-king no-thing,

Prechorus

7 Am C G $\overset{3}{\text{—}}$ Bb $\overset{3}{\text{—}}$

no-thing could go wrong — well now I know — she has a built-in a-bi-li-ty

12 F Bb $\overset{3}{\text{—}}$ F Bb C

to take e-very-thing she sees — And now it seems I'm fal-ling, fal-ling for her

Chorus

17 Fsus4 F Bb/F C/F Fsus4 F Bb/D Bb/C C

She seems to have an in - vi - si - ble touch, yeah. She rea-ches in and grabs right hold of your heart.

21 Fsus4 F Bb/F C/F Fsus4 F Bb/D Bb/C C

She seems to have an in - vi - si - ble touch, yeah. It takes con - trol and slow - ly tears you a - part

Example 5.5: Genesis, “Invisible Touch” (1986): first verse, prechorus, and chorus.

with a V chord. The final chord of each phrase is the goal, and so the main harmonic motion is I in the first phrase to V in the second phrase. The V chord at the end of the second phrase is back-relating and ultimately participates in the tonic prolongation over the *s* and *r* phrases (compare the analysis of the verse of “From Me to You” in the previous section [Example 4.12, page 135]). The pre-dominant harmony that begins the prechorus therefore continues the functional circuit that began with the tonic in the verse. This circuit concludes at the downbeat of the chorus with the arrival of the tonic supporting $\hat{1}$. The chorus, as usual,

The musical score illustrates the structure of the verse-prechorus-chorus cycle. The verse (measures 1-8) is in the key of B-flat major, starting on the tonic (I). The prechorus (measures 9-16) starts on the pre-dominant (II) and ends on the tonic (I). The chorus (measures 17-24) starts on the pre-dominant (II) and ends on the tonic (I). Above the staff, structural motion is indicated by numbers 5, 4, 4, 3, 2, 1. Below the staff, harmonic analysis is provided: I T for the verse; II - b PD, I T for the prechorus; IV PD, V D, I T for the chorus.

Example 5.6: Genesis, “Invisible Touch,” structure of verse–prechorus–chorus cycle.

does not stray far from the tonic in either melody or harmony, as the structural motion has completed its journey when the chorus begins.

PHRASE RHYTHM

The prototypical length of a verse–prechorus–chorus cycle as defined above is 24 measures, with each of the three sections lasting eight measures. In general, each eight-measure section divides into two four-measure phrases. The verse’s two phrases are generally similar, since they derive from the *s* and *r* phrases of an *srdc* verse. The chorus also usually repeats the same phrase twice, sometimes even repeating a single two-measure idea four times. The prechorus’s two phrases, however, are generally *not* the same. As we saw above, one common model is for the two phrases to express the PD–T|PD–D schema. In both “Hip To Be Square” and “Invisible Touch,” the prechorus’s first four-measure phrase begins on a predominant and ends on the tonic, after which the tonic prolongation pushes through the beginning of the second phrase before returning to the pre-dominant followed by the dominant. A simpler

Verse

A **D/A**

♩ = 144

4

Prechorus

A **F** **B♭/F** **F7**

E **G**

Chorus

A **G/A** **D/A** **A** *repeat 4x*

Got those high-way blues, can't you hear my mo-tor run-nin' Fly-in' down the road with my
foot on the floor — All the way in town they can hear me co-min' Ford's a-bout to drop, she won't

do no more — And I smell — my mo-tor bur-nin', un-der-neath the hood is smoke.

Can't stop, and I can't — stop, Got-ta keep mo-vin' or I'll lose my mind.

Oh — roc-kin' down the high-way

Example 5.7: The Doobie Brothers, “Rockin’ Down The Highway” (1972): first verse, prechorus, and chorus.

phrase division in the prechorus is for the first phrase to prolong the pre-dominant and the second phrase to prolong the dominant. This is illustrated in the Doobie Brothers’ “Rockin’ Down The Highway” from their 1972 album *Toulouse Street*, the first cycle of which is transcribed in Example 5.7. The first phrase of the prechorus (measures 9–12) begins on $\flat VI$, which functions as pre-dominant. This chord morphs into a German sixth in measure 11 (“F7” in the transcription), strengthening its status as pre-dominant with a dissonance that resolves into the dominant V chord in measure 13. This V chord begins the second phrase of

prechorus *chorus*
 #VI^{5-6-#6} V (bVII) I
PD **D** **T**

Example 5.8: The Doobie Brothers, “Rockin’ Down The Highway”: the dominant function is prolonged through an unfolding of V and its chromatic upper third $bVII$.

the prechorus; its dominant function is prolonged throughout this phrase by unfolding into its chromatic upper third $bVII$ (see Example 5.8). Several authors have pointed out that $bVII$ is frequently used as a dominant substitute in rock music, especially Allan Moore (1995), who claims that this chord and the associated scale-degree $b\hat{7}$ are so common that they should be viewed neither as aberrations nor departures from the norm, as well as Christopher Doll (2007), who dubs chords that include $b\hat{7}$ “rogue dominants,” which function in the same way as traditional dominants that include $\natural\hat{7}$. In “Rockin’ Down The Highway,” V and $bVII$ are juxtaposed and both participate in the prolongation of the syntactical dominant that ends the prechorus. Despite having just one common tone, the two chords can be considered contrapuntal variants of one another, and they generally carry the same function.⁷

Although it is rare for a prechorus to contain two parallel phrases, it is not unheard of; in such cases, both phrases usually move from the pre-dominant to the dominant, with the dominant at the end of the second phrase ultimately cadencing to the tonic at the beginning of the chorus. This is exactly what happens in Van Halen’s “Dance The Night Away” from their 1979 album *Van Halen II*, the first cycle of which is transcribed in Example 5.9. The

⁷As Example 5.7 shows, the lower vocal harmony adds an $F\sharp$ to the G-major chord in measure 16, making it a seventh chord. This $F\sharp$ at a deeper level represents the flatted ninth of the V chord, resolving to E in the next measure.

Verse

$\text{♩} = 124$

E_b E_b/B_b B_b A_b E_b

Have you seen her? So fine and pret-ty, fooled me with her style and ease

4 $\text{A}_b\text{maj}7$ B_b E_b E_b/B_b B_b A_b E_b

And I feel her from a-cross the room; yes, it's love in the third de-gree

Prechorus

8 $\text{A}_b\text{maj}7$ B_b B_b5 $\text{C}5$ B_b $\text{C}m$ B_b B_b5 $\text{C}5$

Ooh, ba-by ba-by won't ya turn your head my way? Ooh,

Chorus

14 B_b $\text{C}m$ B_b E_b B_b A_b

ah come on! Take a chance, you're old e-nough to dance the night a-way
ba-by ba-by

19 E_b A_b B_b E_b B_b A_b E_b A_b B_b

Whoa, ah come on g-girl, dance the night a-way

Example 5.9: Van Halen, “Dance The Night Away” (1979): first verse, prechorus, and chorus.

first phrase of the prechorus (measures 9–12) begins on VI and ends on V, with the melody portraying the characteristic gesture of $\hat{2}$ embellished by a hanging upper-neighbor $\hat{3}$. The second phrase (measures 13–16) begins the same way as the first phrase, but the melody in measures 16–17 ensures that this phrase’s V chord is heard to cadence to I. This authentic cadence was denied not only in the first phrase of the prechorus but also in both of the verse’s phrases; all three of these end with miniature half cadences on V accompanied by an interrupted descent in the melody from $\hat{3}$ to $\hat{2}$ (see the graph in Example 5.10).

Example 5.10: Van Halen, “Dance The Night Away,” structure of verse–prechorus–chorus cycle. The verse’s two phrases and the prechorus’s first phrase all end in half cadences, with an authentic cadence withheld until the lead-in to the chorus.

While the basic length of each section is eight measures, it is common for the prechorus in particular to be expanded beyond the length of the verse and chorus. We have already seen an example of this in “Substitute” (Example 5.1), in which the prechorus is ten measures long while verse and chorus each span eight measures. As we observed, this prechorus consists of four repetitions of a two-measure melodic idea over a II chord followed by two measures of V. The two “extra” measures arise from the repeated idea occurring one too many times; the section could be “normalized” by having this two-measure idea repeat *three* times.⁸ This would result in six measures of pre-dominant followed by two measures of dominant for an eight-measure prechorus. A more significant expansion is seen in Bob Dylan’s 1965 single “Like A Rolling Stone” (Example 5.11), in which the prechorus is expanded to twelve measures. This expansion results from this prechorus’s consisting of *three* four-measure phrases rather

⁸For more on the concept of phrase expansion and rhythmic normalization, see Rothstein 1989 (Chapter 3) and 1990.

Verse

♩ = 96

8 C Dm7 Em F G
Once u-pon a time you dressed so fine, threw the bums a dime in your prime, didn't you?

5 C Dm7 Em F G
8 Peop-le'd call, say, "be-ware, doll, you're bound to fall." You thought they were all kiddin' you.

Prechorus

8 F G F G F Em
You used to laugh a-bout E-very-bo-dy that was hang-in' out. Now you don't

14 Dm C F Em Dm C Dm7 F
8 talk so loud. Now you don't seem so proud a - bout ha-vin' to be scroun-ging your next

Chorus

19 G C F G C F
8 meal _____ How does it feel? How does it feel

24 G C F G C F G C F G
8 to be with-out a home, like a com-plete un-known, like a rol-ling stone?

Example 5.11: Bob Dylan, “Like A Rolling Stone” (1965): first verse, prechorus, and chorus.

than the typical two. The first two of these phrases consist of a two-measure idea repeated twice, and both prolong the pre-dominant, while the third has two measures of pre-dominant followed by two measures of dominant. So in a sense, both the first and second phrases function as the *first* phrase of a prechorus; therefore, the expansion can be seen to arise from the prechorus having two first halves.

The graph in Example 5.12 shows the expansive pre-dominant prolongation through the expanded prechorus of “Like A Rolling Stone.” The three phrases of the prechorus are

seventh of the chord rather than another instance of a hierarchy divorce because it is not consonant with a prolonged harmony. This seventh resolves correctly, moving down to $\hat{2}$ over the neighboring V chord and eventually down to $\hat{1}$ as the fifth of the prolonged IV chord, at which point the seventh disappears from the musical surface and IV becomes a simple triad.⁹ The emphasis on $\hat{3}$ in the verse and prechorus suggests a search for a structural $\hat{3}$ supported by I that is ultimately fulfilled only in the chorus. As is typical of choruses in verse–prechorus–chorus songs, this one does not develop or lead to a cadence, but simply repeats the anacrustic motive five times, creating a ten-measure section.¹⁰

BRIDGE SECTIONS: “PRIVATE EYES”

When **srdc** expands into verse–prechorus–chorus, a bridge section becomes less necessary to complete the form. There is enough contrast within these three sections that it is not too monotonous if they carry all of the melodic material of the entire song. Nevertheless, few verse–prechorus–chorus songs simply repeat the cycle as a strophic song—only one example from this chapter, “Like A Rolling Stone,” proceeds in this way. Most songs in this form move to a contrasting section after two iterations of the verse–prechorus–chorus cycle, but this section often does not function as a bridge. This section is usually instrumental only, with a guitar or other instrument playing a solo line and an accompaniment identical or

⁹In a larger scale, the seventh of IV remains active throughout the span of this IV chord, ultimately resolving to $\hat{2}$ over the V chord at the end of the prechorus.

¹⁰Subsequent choruses repeat the motive *six* times, making a twelve-measure chorus. Adding or subtracting repetitions of the motive does not change the basic structure of the chorus, and most listeners probably will never notice that the first chorus is shorter than later choruses. The basic structure of the chorus is that the two-measure motive repeats until it arrives at the lyric “Like a rolling stone,” which signals the last repetition. How many iterations of the motive there are is irrelevant.

similar to that of the verse. These sections function more to give the singer a break than to create formal contrast. This type of instrumental section occurs in all of the examples from this chapter except “Like A Rolling Stone”: in “Substitute,” the vocal lines are omitted in the third verse, and they pick up again in the subsequent prechorus; “Hip To Be Square” has an extended saxophone solo, first over a static tonic chord, then over the verse accompaniment, between the second and third iterations of the cycle; “Invisible Touch” leads from the second chorus into a synthesizer solo revolving around the \flat VII chord, recalling Genesis’s earlier days as a progressive rock band; “Rockin’ Down The Highway” contains almost a real bridge, as it begins on a pre-dominant II chord and includes a dominant retransition, but this formal function is weakened because the vocals are tacit; and “Dance The Night Away” simply alternates V and IV for eight measures after the second chorus.

There are, however, some verse–prechorus–chorus songs that do include a bona fide bridge section. In Daryl Hall & John Oates’ “Private Eyes” from their 1981 album of the same name, the bridge section helps resolve an ambiguity as to what key the song is in. This song juxtaposes verses in C major with choruses in A minor, and it is at first unclear which key, if any, is more structurally significant. Example 5.13 transcribes the song, with the melodic lines on the top staff, the piano ostinato on the middle staff, and a slightly simplified bass line on the bottom staff. The overall form of this song is intro–verse–prechorus–chorus–verse–prechorus–chorus–bridge–chorus. If we group each verse–prechorus–chorus cycle into a single compound section, this form resembles AABA, but the final A section consists only of the chorus. These verse–prechorus–chorus cycles arise from expanded **srdc** structures, as expected, but the expansion is less extreme than in the examples seen so far. In the previous

Intro
♩ = 120
electric guitar

6 **vocal**
I see_ you,

10 **Verse**

8 and you see me_ watch you blo - win' the lines_ when you're
you play with love_ you can twist it a - round, ba - by

13
8 ma - king a scene oh, girl,_ you got to know_ what my head o - ver-looks the
that ain't e - nough 'cause girl,_ I'm gon - na know_ if you're let - ting me in, or

Example 5.13: Daryl Hall & John Oates, “Private Eyes” (1981): transcription with melodic lines on the top staff, piano ostinato on the middle staff, and a simplified bass line on the bottom staff.

Prechorus

17

8

sen-ses will show to my heart when it's wat-chin' for lies — and you can't es-cape my
 let-ting me go Don't lie when you're hur-ting in-side — 'cause you can't es-cape my

Chorus

21

8

Pri-vate eyes, they're wat-ching you. They see your e - v'ry — move Pri-vate eyes,

26

8

they're wat-ching you. Pri - vate-eyes — wat-ching you wat-ching you wat-ching

30

8

you wat-ching you — You play with words

The musical score is presented in four systems. Each system includes a vocal line (treble clef) and a piano accompaniment (grand staff). The key signature has one flat (B-flat). The time signature is 8/8. The first system is the Prechorus, starting at measure 17. The second system is the Chorus, starting at measure 21. The third system continues the Chorus, starting at measure 26. The fourth system concludes the Chorus, starting at measure 30. The piano accompaniment features a consistent rhythmic pattern of eighth notes in the right hand and a more melodic line in the left hand. The vocal line is characterized by a steady eighth-note rhythm with some melodic variation and phrasing marks like slurs and breath marks.

Example 5.13 (cont'd)

33 ^{2.}

37

41 **Bridge**

8 Ooh, why you try to put up a front for me? I'm a spy, but on _ your side, you see.

45

8 Slip on in-to a-ny dis-guise I'll still know you look in-to my Pri - vate eyes

Go back to chorus, repeat, and fade

Example 5.13 (cont'd)

examples, the prechorus was at least as long as the verse, representing an expanded **d** phrase. “Private Eyes” does not contain such an expansion; **s**, **r**, and **d** are each four measures long. It is instead the expansion of the **c** phrase into a nine-measure chorus that puts this song into the verse–prechorus–chorus category rather than **srdc**. This expanded chorus is furthermore in a different key than the verse: the former is in A minor while the latter is in C major. The prechorus, though it ultimately leads to the chorus’s A-minor key, could easily have led instead to C major; the arrival at A minor is unexpected. One can imagine a situation in which the chorus remains in C major and is not expanded, making this whole passage an **srdc** verse rather than a verse, prechorus, and chorus. Example 5.14 provides a recomposition of the chorus as a **c** phrase that remains in C major. In this recomposition, the prechorus remains as in the original, but the chorus simply cadences to C major from its “soul dominant”—a IV triad on top of a $\hat{5}$ bass note—over the title lyric “private eyes.”¹¹ This line becomes a refrain rather than a chorus, and the next four measures simply remain on the tonic chord.

But the soul dominant does not cadence to C major, and instead leads to the nine-measure chorus in A minor, solidifying the previous four measures’ role as prechorus rather than a **d** phrase. The chorus’s strong A-minor tonality raises the question as to what the true tonic of the song is: is it the A minor of the chorus, the C major of the verse, or *both*, creating what Robert Bailey (1985) would call a “double-tonic complex”? In a double-tonic complex, the tonic would be represented by the four-note chord containing A, C, E, and G; this chord’s two triadic subsets—A, C, E and C, E, G—could each be central for stretches, but neither

¹¹The term “soul dominant” is Mark Spicer’s, from Spicer 2009.

20
8
you can't es - cape my pri - vate eyes.

23
8
You play with words

Example 5.14: Recomposition of the chorus of “Private Eyes” to make an **srdc** verse rather than a verse, prechorus, and chorus.

would emerge as superior to the other.¹² This is an apt description of the verse–prechorus–chorus cycle of “Private Eyes”: the song begins with an introduction in A minor, but the verse unequivocally projects C major, expressing the mixture-laden progression I– \flat VI– \flat VII–I. The ensuing prechorus does not contradict the verse’s C-major tonality; furthermore, the chord progression that ends it (measures 20–21) is A \flat –F/G, which can be interpreted only as \flat VI–V $\frac{9}{4}$ in C major. The resolution of the latter chord—the soul dominant mentioned above—to A minor is therefore unexpected. It is more than just a deceptive cadence, however; the structural weight of the downbeat of the chorus makes this sound like a syntactical dominant–tonic progression. It is not such a stretch for the F/G chord to function as dominant of A

¹²See also Krebs 1996.

a: I III IV⁷ VII⁹/₄ I IV⁹ V⁷_# I

Example 5.15: Structural interpretation of “Private Eyes” as projecting the single key of A minor.

minor—this chord is a type of \flat VII chord, which many authors claim actually functions as dominant more often than V in rock music, as mentioned above.¹³ Yet the inclusion of A \flat s in the A-minor chorus undermines A minor’s tonic status; these A \flat s can only be interpreted as mode-mixture within the key of C major.¹⁴ Further supporting a reading of a double-tonic complex is the chorus’s final cadence to an Am7 chord in measure 31—a full statement of the four-note tonic chord.

The bridge section, however, seems to support A minor as global tonic. As discussed in Chapter 4, bridge sections commonly end with a retransitional dominant, usually represented by a V chord regardless of the chords that function as syntactical dominant in the earlier sections. In “Private Eyes,” the bridge ends on a strong V⁷ of A minor (measure 48). This V⁷ leads back to A minor for the chorus; this is the only strong V–I motion in the entire song, and seems to solidify A minor as the primary tonic of the song. A monotonal interpretation in the key of A minor would give us the structure outlined in Example 5.15. This example shows a functional circuit that begins in the introduction and ends at the chorus, where the

¹³The soul dominant built on $\flat\hat{7}$ also appears in C major at the end of the introduction (measures 7–8). In this passage, the chord A \flat /B \flat functions as syntactical dominant of C major leading into the verse. The mode mixture of this chord foreshadows the mixture in the verse and prechorus, all of which involve an A \flat -major triad in some way.

¹⁴According to Gottfried Weber, the keys of A minor and C minor are both only one step removed from C major, while C minor bears no direct relation to A minor (Weber 1851 [1832], 307–317).

initial tonic unfolds into its upper third for the verse. With the exception of the soul dominant built on $b\hat{7}$ in the prechorus, this deep structure is a rather orthodox progression in A minor. However, as we examine the progression from this deep middleground to the foreground, we see some unconventional prolongation techniques. Example 5.16 gives middleground and foreground graphs of the song, interpreted in the single key of A minor. Looking first at the middleground graph (on the upper staff), we see that this generally reflects the deeper structure of Example 5.15 with a few additions: first, the progression from the A-minor harmony of the introduction to the C-major harmony of the verse is filled in with a passing Bb in the bass voice. This Bb corresponds to the $bVII_{b4}^9$ chord of C major—the soul dominant discussed above. The upper voice tone of this chord is shown as $D\sharp$ rather than Eb because it is interpreted as a passing tone from C to E, the latter being the primary tone of the song. Interpreting it as a $D\sharp$ also shows this motion as a transformation of parallel tenths; more typical would be the upper-voice motion $C-D\flat-E$ supported by $A-B\flat-C$, but the upper-voice motion instead divides into an augmented second and a minor second, with the soul dominant harmonizing the outer-voice interval of an augmented tenth. This same chord appears at the end of the chorus, but this time resolves to A minor rather than C major. The middleground graph shows chromatic neighbor tones in contrary motion in the outer voices: $E-D\sharp-E$ in the upper voice and $A-Bb-A$ in the bass voice. The foreground graph at the bottom of Example 5.16 shows that this chord is part of a miniature circuit in A minor in which it functions as the syntactical dominant; one could interpret this chord as an altered tritone substitute for V.

The musical score for "Private Eyes" is presented in two systems. The first system shows the middleground graph with chord symbols: I, III, IV⁷, VII⁹/₄, I, IV⁹, V⁷, I. The second system shows the foreground graph with chord symbols: I, III, IV⁷, VI⁹/₄, I, IV⁹, V⁷, I. The score is divided into sections: *intro*, *verse*, *prechorus*, *chorus*, *bridge*, and *chorus*. The key signature is one flat and the time signature is 4/4. The foreground graph includes a C: VII⁹/₄ I chord symbol at the beginning of the verse section.

Example 5.16: Middleground and foreground graphs of "Private Eyes."

The foreground graph also shows an interesting prolongation of the pre-dominant IV chord in the prechorus. The graph shows that this IV chord (Dm7) unfolds to its altered fifth $A\flat$ before proceeding to the soul dominant built on G, which functions as the syntactical dominant. It is surprising to see an $A\flat$ -major chord in the context of A minor; however, this $A\flat$ -major chord makes sense in the local context of C major as \flat VI. We have already heard this chord in a C-major context twice in the verse. Nevertheless, the foreground chord progression is odd: the chord progression $Em7-A\flat$ is highly chromatic—the two are what neo-Riemannian theorists call “hexatonic poles” because they have no common tones and together contain all members of a hexatonic scale.¹⁵

The bridge section of this song is eight measures long but contains relatively little harmonic motion (see measures 41–48 in Example 5.13); the first four measures contain a Dm7 chord with an E in the melody, combining to make a Dm9 chord, while the next four measures move from a G-minor chord to an E7 chord, the latter representing the dominant retransition discussed above. The foreground graph in Example 5.16 shows that the G-minor chord represents an altered upper third of the E7 chord, and so the overall progression is IV^9-V^7 of A minor, as shown in the middleground graph. The upper-voice tone $\hat{5}$ (E), which is suspended as the ninth of the IV chord, resolves to $\hat{4}$, which is also dissonant as the seventh of V^7 . This seventh does not get a chance to resolve, however, as the chorus takes the upper voice back up to the primary tone $\hat{5}$. As we saw in the voice-leading model for AABA form described earlier this chapter, the dominant retransition at the end of a bridge

¹⁵The hexatonic pole relation occurs between the *triads* Em and $A\flat$, without sevenths. The term “hexatonic pole” was first used in this context by Richard Cohn (1996). Cohn notes that a triad can connect to its hexatonic pole by moving each of its three pitch-classes by a semitone.

section generally functions as a half cadence rather than an elided authentic cadence into the next section, and so interpreting an interruption here, as shown in Example 5.16, is consistent with the model. Following the bridge, however, we do not get a recapitulation of verse–prechorus–chorus, but instead we get only the chorus, which repeats and fades out. This means that after the interruption, we do not have a full functional circuit but rather a looping progression that prolongs $\hat{5}_1$, the primary tone over the tonic.

EXPANDED VERSES

In the examples seen so far, the general model has been that each section—verse, prechorus, and chorus—is eight measures long such that the whole cycle contains a total of 24 measures.¹⁶ This model is an expansion of a 16-measure **srdc** section that arises by doubling the size of the **d** and **c** phrases from four to eight measures each. Sometimes the verse’s **s+r** phrase structure is also subject to expansion such that each of these two phrases is eight rather than four bars long. In such cases, the resultant verse–prechorus–chorus form is double the length of an **srdc** verse—32 measures. The expansion of the verse from eight to 16 measures often involves more than simply lengthening the phrases: two common processes are for the second phrase to *contrast* with the first while continuing the overall tonic prolongation, or for each of the two phrases to contain contrasting *subphrases* of four measures each.

The first of these processes is demonstrated in Def Leppard’s 1983 hit single “Photograph” off of their album *Pyromania!*. The first verse, prechorus, and chorus of this song are

¹⁶Out of the examples seen so far, only “Invisible Touch” and “Dance the Night Away” fit this model exactly; all of the others are expanded or contracted in some way.

transcribed in Example 5.17; these sections fit the 32-bar model, containing a 16-bar verse, an eight-bar prechorus, and an eight-bar chorus. The verse’s two eight-bar phrases, indicated on the transcription, contain contrasting melodic material over the same accompaniment. (In the first verse, the bass does not enter until the second phrase, but in later verses it plays throughout, and so I interpret the tonic pedal as existing conceptually in the first phrase as well as the second.) Structurally, the contrast between the two phrases allows the melody to rise to the primary tone $\hat{5}$ in the second phrase, as shown in the graph in Example 5.18. This graph points out an interesting feature of this song: the two key areas of the song, E major in the verse and G major in the prechorus and chorus, are equal in status with neither emerging as primary. Because of the verse’s expansion, each key takes up the same amount of time (16 measures); the strength of the verse’s E-major tonality—the tonic pedals throughout—makes it difficult to hear it as VI leading to an auxiliary cadence in G major, but the chorus completes the functional circuit with a strong V–I cadence in G major, which undermines E major as the global tonic. (The chorus’s chord progression does not contain a root-position tonic triad, but nevertheless effectively prolongs the tonic *Stufe*.) Due to the equal status of these two keys, I consider this song, unlike “Private Eyes” above, to be an example of Capuzzo’s “sectional tonality” (2009), in which two equal keys govern distinct sections of a song with neither emerging as primary. In this case, the primary tone B ($\hat{5}$) serves as the link between these two keys and arguably the unifying element of the entire song.¹⁷

¹⁷Compare Peter Kaminsky’s analysis of Schumann’s *Davidsbündlertanz* (1989, 216–25), in which he notes the unifying role of the pitch B4 linking the keys of G major and B minor/major. See also William Rothstein’s analysis of the second-act finale of Bellini’s *Norma* (2012, 266–77).

Verse
First Phrase

$\text{♩} = 120$
E5 B/E A5/E D5/E E5 B/E A5/E D5/E

I'm out-ta luck, out-ta love. — Got a pho - to - graph pic - ture of — pas - sion kil -

Second Phrase

5 E5 B/E A5/E D5/E E5 B/E A5 E5 E5 B/E

ler, you're too much. You're the on - ly one I wan - na touch I see your face e - very time

10 A5/E D5/E E5 B/E A5/E D5/E E5 B/E

— I dream, on e - very page, e - very ma - ga - zine. So wild — and free, so far

Prechorus

14 A5/E D5/E E5 B5 A5 Csus2 G/B

— from me. You're all I want, my fan - ta - sy. Oh, look what you've

19 D A D A G A Csus2 G/B D A D A G A

done to this rock - 'n' - roll clown. Oh — look what you've done

Chorus

25 G/B C Dsus4 Em G/B C Em Dsus4

Pho - to - graph Pho - to - graph

I don't want your — I don't need your

29 G/B C Dsus4 Em G/B C

Pho - to - graph Pho - to - graph —

— All I've got — is a pho - to - graph — it's not e - nough —

Example 5.17: Def Leppard, “Photograph” (1983): first verse, prechorus, and chorus. The verse is 16 measures long, consisting of two contrasting eight-measure phrases all over a tonic pedal.

The musical score is written in G major (one sharp) and 3/4 time. It is divided into three sections: verse, prechorus, and chorus. The verse is further divided into two phrases. The prechorus and chorus are also shown. Chord progressions are indicated below the bass staff.

Chord progressions for G major:

- Verse: I (measures 1-4), VI (measures 5-8)
- Prechorus: VI (measures 9-10), VII (measures 11-12)
- Chorus: III (measures 13-14), I (measures 15-16)

Example 5.18: Def Leppard, “Photograph”: the two keys E major and G major are equal in status with neither emerging as primary.

Michael Jackson’s pop hit “Billie Jean” from his 1982 album *Thriller* demonstrates an expanded verse in which each of its two eight-measure phrases divides into four-measure subphrases. Example 5.19 transcribes the first verse, prechorus, and chorus of this song. In fact, the verses of this song are *twenty* measures long, due to a four-measure extension at the end of the first eight-measure phrase (measures 9–12) resulting from a repetition of the second subphrase. The two subphrases follow the harmonic pattern of the first eight measures of a twelve-bar blues pattern: four measures of I (first subphrase, measures 1–4), followed by two measures of IV and two measures of I (second subphrase, measures 5–8). This 20-measure verse is followed by an eight-measure prechorus that expresses the progression VI–V (PD–D) leading into the chorus which resolves this V to the tonic.

Verse
First phrase

$\text{♩} = 116$
F#m G#m/F# F#m7 G#m/F# F#m G#m/F# F#m7 G#m/F#

8 She was more like a beau - ty queen from a mo - vie scene, I said don't mind, but what do you mean, I ___ am the one

Extension

5 Bm F#m G#m/F# F#m7 G#m/F# Bm

8 who will dance on the floor in the round She says I ___ am the one who will dance

Second phrase

10 F#m G#m/F# F#m7 G#m/F# F#m G#m/F# F#m7 G#m/F#

8 on the floor in the round She told me her name was Bil - lie Jean and she caused a scene,

15 F#m G#m/F# F#m7 G#m/F# Bm

8 then e - v'ry head turned with eyes that dreamed of be - ing the one who will dance on the floor in the round

Prechorus

19 F#m G#m/F# F#m7 G#m/F# D F#m

8 Peo - ple al - ways told ___ me, be care - ful what you do, ___ don't

23 D F#m D F#m

8 go a - round brea - king young girls' hearts ___ And mo - ther al - ways told me, be care - ful who you love be

Chorus

27 D C#7 F#m G#m/F# F#m7 G#m/F#

8 care - ful what you do, 'cause the lie be - comes the truth he - ey Bil - lie Jean is not my lo - ver,

31 F#m G#m/F# F#m7 G#m/F# Bm F#m G#m/F#

8 she's just a girl who claims that I ___ am the one, but the kid is not my son

36 F#m7 G#m/F# Bm F#m G#m/F# F#m7 G#m/F#

8 She says I ___ am the one, but the kid is not my son

Example 5.19: Michael Jackson, “Billie Jean” (1982): first verse, prechorus, and chorus. The verse is 20 measures long, consisting of two eight-bar phrases, the first of which is extended by four bars.

aaba STRUCTURES OF VERSE–PRECHORUS–CHORUS SONGS

The observant reader might have noticed that the chorus of “Billie Jean” is similar in both melody and harmony to the verse. The accompaniment is the same (with a thicker texture and louder dynamic, but over the same signature bass riff) and the melody is generally different, although it contains the same lyrical/melodic motive “I am the one” in measures 32 and 36 that appeared previously in measures 4, 8, and 16. Furthermore, the chorus’s 12 measures result from the same repetition of the second subphrase (measures 37–40) that occurred in the verse’s first phrase (measures 9–12). This structure is akin to an overall **aaba** structure, which is a particular subtype of **srdc** discussed in Chapter 4. Since verse–prechorus–chorus songs arise from expansion of **srdc** sections, it follows that a subtype of verse–prechorus–chorus form would be an expansion of **aaba**. “Billie Jean” is an example of the most common instantiation of this, in which the verse and chorus share the same harmonic content but with different melodic material.¹⁸ Rarely, however, a chorus will contain the same harmonic *and* melodic material from the verse, presenting a true AABA phrase structure. In such cases, the prechorus functions as a contrasting middle section that connects instances of the same material, not unlike a bridge section in the AABA songs of the 60s, as discussed in the previous chapter.¹⁹

¹⁸Some other more recent examples of this include Sarah McLachlan’s “Building a Mystery” (1997) and Katy Perry’s “Firework” (2010), the latter of which was analyzed in Chapter 3.

¹⁹I should point out an important difference between verse–prechorus–chorus as expanded **aaba** and 60s-style AABA songs: the bridge in the 60s AABA songs ends with an *interruption* such that its dominant retransition does *not* resolve to the tonic in the final A section, whereas the prechorus’s dominant *does* resolve to I into the chorus. So, although both sections are notated with the letter “B,” their structural functions are different.

An excellent example of this is Billy Joel’s “Uptown Girl” from his 1983 album *An Innocent Man*. As the transcription in Example 5.20 shows, the chorus recapitulates the melodic and harmonic material from the verse nearly exactly (with varied lyrics). In this case, what is it that makes it a chorus rather than just another verse? The answer lies in the voice-leading structure: the verse’s tonic prolongation initiates the functional circuit, which as expected continues in the prechorus with a pre-dominant to dominant progression, and completes at the beginning of the chorus (see Example 5.21). The chorus is therefore a structural *end* while the verse is a structural *beginning*. Given the **aaba** phrase structure, one might be tempted to read an interruption in measure 28 at the end of the prechorus, but that interpretation is contradicted by the melody, which clearly shows measure 28’s V chord resolving to the I chord that begins the chorus as part of an *authentic* cadence.

The cycle transcribed in Example 5.20 is 44 measures long, but is based on the 32-measure model described above. The verse is 16 measures long, consisting of *four* similar four-bar phrases, which group 2+2 to make two eight-bar halves, each of which starts with the title lyric “uptown girl.”²⁰ The prechorus is *twelve* measures long, divided into three four-bar phrases. The expansion from the expected eight bars comes out of a search for the “right” V chord on which to end. As shown in the foreground graph in Example 5.21, each of the prechorus’s three four-bar phrases ends on the V chord of a different key: the first on V of C, the second on V⁷ of A, and the third on V of the tonic E. The second phrase’s E7 chord—the second “wrong” V chord—resolves to A major (IV), which continues the pre-dominant

²⁰In the second verse (out of only two total), the verse is only eight bars long, making the second cycle based on the 24-bar model rather than the 32-bar model.

Verse

♩ = 128

E F#m7 E/G# A B E

8 Up-town girl she's been li-vin' in her up - town world I'll bet she's ne-ver had a back-street guy

6 F#m7 E/G# A B E F#m7

8 I bet her mom-ma ne-ver told her why I'm gon-na try for an up-town girl she's been li-vin' in her

11 E/G# A B E F#m7 E/G#

8 white bread world as long as a-ny-one with hot blood can and now she's loo-kin' for a down-town man

Prechorus

16 A B C Am7 Dm G7 C

8 that's what I am And when she knows what she wants from her ti - i - ime And when she

22 Am7 Bm7(b5) E7 A F#m Bm

8 wakes up and makes up her mi - i - ind, she'll see I'm not so tough just be-cause

Chorus

28 B E F#m7 E/G# A B

8 I'm in love with an up-town girl you know I've seen her in her up - town world, she's get-ting ti-red of her

Post-chorus

33 E F#m7 E/G# A B G

8 high-class toys and all her pre-sents from her up - town boys she's got a choice Oh _____

38 A F#/A# Bm A G A F#/A# B

8 Oh _____

Example 5.20: Billy Joel, “Uptown Girl” (1983): first verse, prechorus, and chorus. The chorus recapitulates the verse material, but functions as the chorus because of its position at the end of the functional circuit.

The image displays two musical graphs for the song "Uptown Girl." The top graph is a foreground graph showing a sequence of chords: I, \flat VI, IV, V, I. The bottom graph is a middleground graph showing a sequence of chords: I, \flat VI, IV, V, I, \flat III, V. The score is divided into sections: verse, prechorus, chorus, and post-chorus. The key signature is three sharps (F#, C#, G#).

Example 5.21: Middleground and foreground graphs of “Uptown Girl.”

prolongation from C major (\flat VI) at the beginning of the section; both of these pre-dominant chords are local key areas. A major modulates back to E major by chromatically shifting its II chord (B minor) to become V of E (B major) in measures 27–28, which allows the chorus to enter by completing the functional circuit. The chorus lasts the expected eight measures, but is expanded by an eight-measure “post-chorus” that recalls the B minor/B major duality seen at the end of the prechorus.²¹

²¹The origin of the term “post-chorus” is unknown, but it has entered the music theoretical lexicon, seen recently in both Spicer 2011a and Summach 2012.

THE STRUCTURAL IMPORTANCE OF THE PRECHORUS

The expansion of a 16-measure **srdc** section to become a 24- or 32-measure verse–prechorus–chorus cycle occurs in multiple dimensions. Several authors, especially Summach 2011, have pointed out the *temporal* expansion of the **d** phrase to become a prechorus section.²² The current study shows that the **srdc** voice-leading model also expands to overlay verse–prechorus–chorus forms. Specifically, the form projects a single functional circuit in which the verse prolongs the initial tonic, the prechorus begins on a pre-dominant and ends on a dominant, and the chorus concludes with the final tonic, which is based on Model 1 as described in Chapter 4. Interpreting a verse–prechorus–chorus cycle to contain a single circuit has two important implications: first, it implies that the dominant at the end of the prechorus is not a half cadence but instead resolves to the tonic in the chorus to effect an authentic cadence. Jocelyn Neal has suggested that prechorus sections end with “dramatic half cadence[s] and harmonic interruption,” which implies that the chorus’s opening tonic chord begins a new functional circuit, presumably concluding at the end of the chorus with a cadence (Neal 2007, 45). However, as we have seen, chorus sections that follow a prechorus generally do *not* contain full functional circuits, and often contain very little melodic or harmonic interest at all (recall especially “Hip to be Square,” page 171). This alone does not mean that the end of the prechorus is not a half cadence, though: more solid evidence comes from the melodic structure. Specifically, the melody projects a goal-oriented progression from the verse to the chorus; this progression is not interrupted at the end of the

²²See also Everett 2009, 146–7 and deClercq 2012, 173–6.

prechorus, but instead continues to reach its goal at the onset of the chorus. Most often, this progression is a descending linear progression from $\hat{3}$ or $\hat{5}$ —i.e., a Schenkerian *Urlinie*—as seen in “Substitute,” “Hip to be Square,” “Invisible Touch,” and “Dance The Night Away.” In these cases, an interpretation of an authentic cadence from the end of the prechorus into the chorus is strongly supported by the melodic motion from $\hat{2}$ to $\hat{1}$. In other cases in which the principal melodic motion is *not* a descending linear progression to $\hat{1}$, it is still the case that the melodic goal arrives at the beginning of the chorus, as seen in “Like A Rolling Stone,” in which the ascending progression $\hat{1}$ – $\hat{2}$ – $\hat{3}$ reaches its final tone over the line “how does it feel?,” and “Uptown Girl,” which contains the neighboring progression $\hat{1}$ – $\hat{7}$ – $\hat{1}$ concluding at the beginning of the chorus.²³

The second implication of the single-circuit model for verse–prechorus–chorus forms is that these forms are fundamentally different from verse–chorus forms that do not contain a prechorus. Verse–chorus forms are the subject of the next chapter, which will show that when there is no prechorus, the structural goal of the song generally occurs at the *end* of the chorus. Sometimes the verse and chorus together contain a single functional circuit, but more often each of the two sections contains its own circuit—in other words, they are *closed* sections. We have seen that when there is a prechorus, however, each section is *open* and the structural goal is at the *beginning* of the chorus. There is therefore a significant difference between chorus sections that follow a prechorus and those that do not: those that do not

²³In “Uptown Girl” in particular, the melody strongly connects the V at the end of the prechorus to the I at the beginning of the chorus. Reading a half cadence at the end of the prechorus is especially difficult in this example. Burstein 2014 investigates cases from the classical repertoire in which it is difficult to distinguish half cadences from authentic cadences.

lead towards a cadential goal at the end, while those that do act as codas with no large-scale structural motion.

As Trevor deClercq points out, several writings on form in pop and rock music omit any reference to the prechorus at all (2012, 89–90). Covach 2005, a self-described “primer” on form terminology, does not mention it, nor do earlier works such as Moore 2001 and Stephenson 2002. While the term has more recently found its way into the music-theoretical lexicon, theorists that discuss the prechorus generally do so only as an afterthought. Walter Everett dismisses the prechorus as “a very common way of joining separate verse and chorus” (Everett 2009, 146), implying that a song would work perfectly well if its prechorus were omitted and the verse proceeded directly to the chorus. However, by considering verse–prechorus–chorus forms as fundamentally *distinct* from verse–chorus forms with no prechorus, we can see the structural importance of the prechorus section and the effect its presence has on the verse and chorus sections surrounding it. This distinction, along with the general voice-leading model for verse–chorus forms, is the subject of the following chapter.

VERSE–CHORUS FORMS

THOUGH MOST music theorists consider verse–prechorus–chorus to be simply a subtype of general verse–chorus forms, the previous chapter showed that the former exhibits a significantly different voice-leading structure than the latter such that the two are best considered fundamentally distinct. In the current chapter, I will investigate the structure of verse–chorus songs that do not contain a prechorus. I will show not only that verse–chorus form is fundamentally different from verse–prechorus–chorus, but also that there are *two* types of verse–chorus forms that have entirely different harmonic and melodic structures. I will call these two types “sectional” and “continuous” verse–chorus forms, the main difference between them having to do with whether the chorus continues the harmonic and melodic structure begun by the verse or contains its own complete structure.¹ Specifically, chorus sections in continuous verse–chorus forms begin with the *pre-dominant* function—which connects backwards to the verse’s tonic—while choruses in sectional verse–chorus forms begin on the tonic. Continuous verse–chorus songs therefore contain a single functional circuit from

¹The terms “sectional” and “continuous” in reference to formal types are originally Douglass Green’s; see Green 1979. In Green’s definition, sectional forms occur when each section is closed in its tonic key, whereas continuous forms exist when at least one section is “open,” i.e., does not end with a PAC in the key in which it began.

the beginning of the verse through the end of the chorus, whereas sectional verse–chorus songs exhibit a full circuit in the chorus alone. Both types of verse–chorus position their structural goal at the end of the chorus section, as opposed to verse–prechorus–chorus form, which places it at the *beginning* of the chorus.

SECTIONAL VERSE–CHORUS FORM

Sectional verse–chorus is the most common type of verse–chorus form. In sectional verse–chorus form, both verse and chorus are self-contained sections; in other words, they both begin with what William Caplin (1998) would call an “initiating” formal function and achieve some measure of closure at their end. In general, the closure that ends the chorus will be stronger than that ending the verse; usually the chorus will end in a cadence, while the verse often will not (see Chapter 2 for a discussion of cadences and closure in rock music). This layout contrasts with the model for verse–prechorus–chorus form discussed in the previous chapter, in which neither the verse nor the chorus is self-contained, but the entire verse–prechorus–chorus cycle participates in a single functional circuit concluding at the downbeat of the chorus. In those cases, structural closure arrives at the onset of the chorus, and the chorus itself does not end with a cadence or other concluding gesture. However, in sectional verse–chorus forms, where each section is self-contained, the structural closure arrives at the *end* of the chorus. Verses and choruses in songs exhibiting sectional verse–chorus form are therefore fundamentally different from those in verse–prechorus–chorus songs.

The Jackson 5's 1970 number-one single "ABC" expresses typical sectional verse–chorus form. Example 6.1 transcribes this song through the end of its first chorus. The example shows an eight-measure verse and an eight-measure chorus preceded by a two-measure introduction. A tonic pedal persists in the bass throughout the verse, while the piano chords alternate tonic and neighboring subdominant triads. This, of course, means that there is no cadence at the end of the verse; the verse achieves weak closure by virtue of containing four phrases, but since neither melody nor harmony ends conclusively, the end of the verse also points forward toward the chorus. (The text, though it completes a sentence at the end of the verse, also points toward the chorus with the implied colon after "All you gotta do is repeat after me[:].") The chorus begins with the first bass motion, a simple scale from $\hat{1}$ (A_b) to $\hat{3}$ (C), in rhythmic unison with the title lyric "A, B, C." This three-note motive is the basis for the entire chorus, occurring at the beginning of measures 11, 12, and 13, and then fragmented and inverted in measures 13–14. This melodic motive sets the three-syllable lyric fragments "A, B, C," "one, two, three," "do, re, mi," and "you and me"; the fact that all four of these combinations are set to the same motive reinforces the idea that "you and me" belong together just like "A, B, C" and the others, representing the singer's main point. The punch line "you and me" also creates a cadence both melodically, by descending to $\hat{1}$, and harmonically, supported by IV–V–I. (Measures 11–14 represent the complete chorus; these four measures are repeated in measures 15–18 with a thicker texture to make the chorus last eight measures, but it is essentially a four-measure section cadencing in measure 14.) The end of the chorus is therefore the structural goal of the song; this moment completes

Intro **Verse**

♩ = 90

voices

ba ba ba ba ba ba ba ba ba ba You went to school to learn, girl, things you

piano

bass

4

ne-ver ne-ver knew be-fore li - ke I be-fore E - x-cept af-ter C and why two plus two makes four now now now I'm

7

gon-na teach you all a-bout love, dear. Sit your-self down, take a seat. All teach you teach you all a-bout love

Chorus

10

you got-ta do is re-peat af-ter me A, B, C. Ea - sy as one, two, three. Or sim - ple as do,

Example 6.1: The Jackson 5, “ABC” (1970): transcription through the first chorus

13

re, me, A, B, C, one, two, three, you and me! A, B, C. Ea - sy as one, ba - by, you and me, girl!

16

two, three. Or sim - ple as do, re, me, A, B, C, one, two, three, you and me! ba - by you and me, girl!

Example 6.1 (cont'd)

the functional circuit and melodic descent while providing the lyrical climax. Example 6.2 demonstrates this with a voice-leading graph of the chorus.²

“ABC” illustrates the typical model for verse-chorus form: a verse that ends with weak closure leads to a chorus that begins with a clear initiating function and ends with a cadence to effect strong closure. While both sections are self-contained in a general sense, they also combine to make a cohesive whole. The cadence at the end of the chorus of “ABC” completes the functional circuit that began at the onset of the chorus (as shown in Example 6.2), but it also completes a harmonic process that began at the beginning of the verse. The closure at

²As Mark Spicer points out, this song contains an early example of a “postchorus” section following the chorus proper; see Spicer 2011a, [9]. The postchorus is analogous to a codetta and follows the structural close of a verse-chorus cycle.

Example 6.2: Graph of the chorus of “ABC” showing a cadential goal at the end of the section.

the end of the verse was weak, and therefore the formal process was not finished at that point. The chorus, therefore, completes the formal process begun at the onset of the verse. Verses are not always as simple as in “ABC,” with its tonic pedal throughout; Simon and Garfunkel’s 1966 single “Homeward Bound” provides an example of a more harmonically active verse that nevertheless follows the same general plan as “ABC.” Example 6.3 transcribes this song through the end of its first chorus.

In the verse of this song, the tonic B \flat harmony is flanked by its upper and lower neighbor chords C m and A \flat before returning in measure 9. Up to this point, the melody has remained in the lower vocal register, mostly decorating F3, but in measure 10 it begins to rise through the B \flat major triad, ultimately reaching D4 while the band crescendos in anticipation of the chorus.³ This D4 is the primary tone of the song, reappearing in measure 15 and ultimately descending to B \flat 4 in measures 18–19; its appearance at the end of the verse serves to

³Although Art Garfunkel’s descant harmony is consistently the literal upper voice, it is clear that Paul Simon’s lower vocal line is the main melody and therefore carries the functional upper voice. The main voice is indicated with full-sized noteheads, while the subsidiary lines have smaller noteheads.

Intro $\text{♩} = 86$ *guitar*

Verse *voice* B^b B^b/A

8 I'm sit-tin' in the rail - way sta-tion, got a tic-ket for my des-ti-na - tion

5 B^b/A^b $G7$ Cm A^b
mm on a tour of one - night stands, my suit-case and gui-tar in hand, and

Chorus B^b E^b

9 e-very stop is neat - ly planned for a po-et and a one - man band. Home - ward bound. I wish I

13 B^b E^b B^b A^b/C B^b A^b B^b
 was home - ward bound. Home, where my thought's es - ca - pin',

16 A^b/C B^b A^b B^b B^b A^b/C B^b A^b B^b F B^b
 home, where my mu - sic's pla-yin', home, where my love lies wai-tin' si-lent-ly for me.

Example 6.3: Simon and Garfunkel, “Homeward Bound” (1966): transcription through the first chorus.

connect the voice leading of the two sections.⁴ Example 6.4 gives a voice-leading graph of the verse–chorus cycle, demonstrating that although the verse is somewhat closed off by the return to the tonic harmony in measure 9, it also leads smoothly into the chorus through its arpeggiation to the primary tone.

It is not uncommon for both verse and chorus to end in cadences. When this occurs, the chorus’s cadence is generally more emphatic than the verse’s, keeping with the general trend that a chorus has stronger closure than the verse that precedes it. One way for the chorus to achieve a more emphatic cadence than the verse is for the chorus’s cadence to end on

⁴The guitar’s introduction foreshadows this primary tone and the entire descent in the same register (D4–C4–B^b4).

The image shows a musical score for Simon and Garfunkel's "Homeward Bound." It consists of a piano accompaniment and a vocal line. The score is divided into a "verse" (4 measures) and a "chorus" (4 measures). The key signature is G major (one sharp) and the time signature is 4/4. The piano part includes a 6/4 chord symbol under the first measure of the verse. The vocal line has a graph above it with Roman numerals: I, I, V, I. The chorus is marked with a 3 over the first measure and a circled 3 over the second measure, indicating a triplet. The final measure of the chorus is marked with a 2 over the first half and a 1 over the second half, indicating a half note followed by a quarter note.

Example 6.4: Simon and Garfunkel, “Homeward Bound,” graph of verse and chorus.

a hypermetrically stronger beat than the verse’s. While the standard model for a four- or eight-bar phrase has the cadence arriving on the final bar, which as a rule is hypermetrically weak, it is often the case that a particularly important cadence will be delayed by one measure, thus landing on a hypermetrically strong beat. (This is often accompanied by a phrase elision, or “grouping overlap” to use Lerdahl & Jackendoff 1983’s term, where this strong beat simultaneously functions as the end of one phrase and the beginning of the next.) For example, the important perfect authentic cadence that ends the second theme of a sonata-form movement, which Hepokoski & Darcy 2006 call the “essential expositional close,” often occurs on a strong hyperbeat, while any cadences internal to the first or second theme tend to occur on the normative weak hyperbeats (see Temperley 2003 for a discussion and examples of this phenomenon).

The Eagles’ “Desperado,” from their 1973 album of the same name, provides an interesting example of this process. This song consists of two main sections, which I will call A and B, as well as an introduction and coda, both containing the song’s signature piano riff, such that

Intro
piano *voice*
 Des - pe - ra -

5 **A**
 G Dm/G C Cm6 G Em7 A7 D7
 - do, why don't you come to your sen - ses, you been out ri - din' fen - ces for so long now. Oh, you're a

9 G Gsus4 C Cm6 G/D B/D# Em7
 hard one, well I know that you got your rea - sons. These things that are plea - sin' you can

12 **B**
 A7 D G D/F# Em Bm7 C G G/F#
 hurt you some-how. Don't you draw the queen of dia - monds, boy, she'll beat you if she's a - ble you know the

15 Em C G G/F# Em Bm7
 queen of hearts is al - ways your best bet. Now it seems to me some fine things have been

18 **Verse**
 C G Em7 A7 C/D D G
 laid u - pon your ta - ble, but you on - ly want the ones that you can't get, des - pe - ra - do.

Example 6.5: The Eagles, “Desperado” (1973): transcription through the first chorus.

the overall form is Intro–ABABA–Coda. The introduction and first AB cycle are transcribed in Example 6.5. While it is tempting to call A the verse and B the chorus, there are several reasons to avoid this analysis. First, the lyrics of the B sections are different in each iteration, while choruses generally repeat the same lyrics each time through. (Walter Everett cites the repetition of lyrics as the “primary difference” between choruses and verses, which generally do not repeat lyrics [2009, 145], though Ken Stephenson rightly points out that repetition of lyrics “is an inefficient indicator of form for the listener” since one does not know that

the lyrics repeat until the second time through, whereas “most listeners are able to identify choruses intuitively as they begin” [2002, 125].) Second, the song ends with an A section (before the coda), whereas in most verse–chorus songs the final section is the chorus. Third, the harmonic profile of the B section is PD–T|PD–D (with VI functioning as pre-dominant), which as discussed in Chapters 4 and 5 is most commonly seen in bridge and prechorus sections. The B section is certainly not a prechorus—it does not lead to a chorus and the preceding verse is closed off with a cadence, an uncommon occurrence in verses that lead to prechoruses—and though it is somewhat plausible to call it a bridge, it would be odd for a bridge to arrive after just one verse. Furthermore, the cadence that ends this section is not a half cadence, which would be expected in a bridge section, but rather a PAC that elides into the beginning of the next A section.

The cadences on their own, though, *do* support interpreting the B sections as choruses and the A sections as verses. The introduction and first A section consist of four-measure phrases whose cadences arrive on the third beat of their respective fourth measures.⁵ This A section is a parallel period, with a half cadence in measure 8 and a PAC in measure 12, giving the verse strong closure.⁶ Measure 12 is extended by two beats to become a $\frac{3}{2}$ measure, resulting from the addition of a passing V⁶ chord between the I chord that ends the verse and

⁵Theorists following the ideas of Heinrich Christoph Koch (1793) would claim that these ostensibly four-measure phrases are actually *eight*-measure phrases and the “real” meter is $\frac{2}{4}$ because, according to Koch, cadences must occur on downbeats. While it is certainly plausible to transcribe this song in $\frac{2}{4}$ (which would obviate the awkward meter changes in measures 12–13), this would contradict the snare drum (entering in the second chorus), which as a general rule hits beats 2 and 4.

⁶The cadences are somewhat weakened by the rhythmic displacement of melody and harmony; the melody arrives at the goal note an eighth note before the harmony cadences, and so the melody is actually silent at the literal moment of cadential arrival. This displacement is very common in popular and rock music, so the weakening of the cadences is fairly minimal.

the VI chord that begins the chorus. (The beginning of the chorus is certainly a downbeat; this is especially clear in the second chorus, as the drum beat enters at this moment.) The B section is similar in design to the A section, with two parallel four-bar phrases, but there are some significant differences. First, the B section's first phrase ends on the downbeat rather than the third beat of its fourth bar (measure 16), and ends on the tonic rather than the dominant, though this weak IV–I progression functions like a half cadence in the form (see Chapter 2). A second and more important difference between the two sections lies in their second phrases: at first, it seems as though the B section's second phrase will be parallel to its first, with a cadence on the downbeat of measure 20. This measure contains a V chord, with a suspension chord C/D on the downbeat, which would make this moment a very weak cadence if a cadence at all.⁷ Nevertheless, the text at this point seems complete: the sentence “Now it seems to me some fine things have been laid upon your table, but you only want the ones that you can't get” is syntactically complete, with its final syllable “get” rhyming with the end of the first phrase, “bet.” However, the sentence becomes extended to include the word “desperado,” which also extends the melodic phrase to the beginning of the next measure, effecting a perfect authentic cadence. This cadence arrives on the fifth measure of the phrase, a hypermetrically strong measure that also functions as the first measure of the second A section. (This phrase elision beautifully parallels a text elision in which the word “desperado” simultaneously ends the sentence “...you only want the ones that you can't get, desperado.” and begins the sentence “Desperado, no you ain't gettin' no younger.”) The

⁷The chord C/D sometimes represents the “soul dominant,” but since in this case it ultimately resolves to a D-major triad it is best considered as a suspension chord. The soul dominant would furthermore be atypical of the Eagles' country-rock style.

placement of the B section’s final PAC on a hyperdownbeat provides stronger closure than the A section’s weak-beat cadence, illustrating the general trend that even when a verse ends with a strong cadence, the chorus will end with a yet stronger one.

Cadences that end sections are not always authentic cadences. As one might expect, it is common for verses to end with a half cadence, which is answered by an authentic cadence in the chorus; the Beatles’ “All You Need is Love” (1967) and Queen’s “We Are The Champions” (1977) are typical examples of this technique. However, it is not unusual for both verse *and* chorus to end with half cadences. The lack of harmonic resolution in such songs often reflects some element of the text. Another Eagles song, their signature hit “Hotel California” (1976), beautifully exemplifies this. The lyrics describe a mystical place that lures the protagonist with its seductive appearance but ultimately reveals itself as a prison from which, as the song’s last line cries, “you can check out any time you like, but you can never leave!” This mystical place, dubbed the “Hotel California,” refers to Los Angeles and its hedonistic allure in the mid-70s. Example 6.6 transcribes the first verse–chorus cycle of this song, showing that both sections end with a half cadence (in measure 16 and measure 24). These half cadences give the sense that the song is never-ending, reflecting the protagonist’s gradual realization that his temporary resting place is ultimately inescapable.⁸

Example 6.7 graphs the voice leading of the verse and chorus of “Hotel California.” In addition to the half cadences, the graph shows that the melody prolongs the single tone F \sharp ($\hat{5}$) throughout the entire cycle. In the verse, this F \sharp persists even when the harmony does not

⁸Certainly “his,” since even though the listener might not associate the narrator with singer Don Henley himself, it would be far-fetched to consider the narrator to be female given that the singer is male.

$\text{♩} = 75$ **Verse**

On a dark, de-sert high-way, cool wind in my hair, warm smell of co-li-tas
 ri-sing up through the air. Up a-head in the dis-tance, I saw a shim-me-ring light.
 My head grew hea-vy and my sight grew dim; I had to stop for the night. There she stood in the door-way,
 I heard the mis-sion bell, and I was thin-king to my-self, "this could be hea-ven or this could be hell."
 Then she lit up the can-dle, and she showed me the way. There were voi-ces down the corr-i-dor;
Chorus
 I thought I heard them say: "Wel-come to the Ho-tel Ca-li-for-nia, such a
 love-ly place (such a love-ly place) such a love-ly face. Plen-ty of room at the Ho-tel Ca-li-for-
 -nia, a-ny time of year, (a-ny time of year) you can find it here."

Example 6.6: The Eagles, "Hotel California" (1976): transcription of first verse and chorus.

Example 6.7: “Hotel California” contains no authentic cadences, and the melody remains on $\hat{5}$ throughout.

support it—an example of a hierarchy divorce (see Chapter 3). In measure 7, the $F\sharp$ drops to E ($\hat{4}$), which normally would continue to descend to D ($\hat{3}$), but instead it stubbornly rises back up to $F\sharp$ in parallel octaves with the bass. The chorus begins with a $IV-I$ auxiliary progression in D major, giving hope that the song might move away from its minor tonic to this more uplifting key.⁹ Hopes are dashed, however, as the phrase sinks back to the somber B -minor tonic in measures 19–20. The second attempt (measures 21–24) is similarly fruitless; the E -minor harmony in measure 23 might at first be interpreted as II in D major supporting E ($\hat{2}$) in the melody, setting up a PAC in D major. Instead, the melody returns to the pesky $F\sharp$ and the bass follows suit, rising to a V chord in the home key of B minor for a half cadence, just as in the verse. With a text describing a place that “could be heaven or ... could be hell” but ultimately in which “we are all just prisoners ... of our own device,” the chorus’s tease of a possible D -major “heavenly” resolution that is thwarted indicates that

⁹Doll 2011a discusses modulations to the relative major from verse to chorus.

the Hotel California is in reality more hell than heaven, supported by the incessant melodic F♯ from which “you can never leave.”

FEATURES OF SECTIONAL VERSE–CHORUS FORMS

Unlike in verse–prechorus–chorus forms, the chorus in a sectional verse–chorus song is a self-contained section, beginning with an “initiating” function (Caplin 1998) and ending with strong closure (usually a cadence). As a result of this, some songs actually begin with the chorus section as a sort of overture before beginning the form proper, which would be far less likely in a typical verse–prechorus–chorus song. (In such cases, the cycle should still be considered to consist first of the verse followed by the chorus.) Although this design could conceivably be applied to any sectional verse–chorus song, it is particularly common when the verse and chorus have similar melodic and harmonic profiles. Three archetypal examples are the Allman Brothers’ “Ramblin’ Man” (1973), Queen’s “Fat Bottomed Girls” (1978), and Twisted Sister’s “We’re Not Gonna Take It” (1984). “Ramblin’ Man”’s chorus begins the song (after a four-measure instrumental introduction) and declares itself as the chorus rather than the verse through the use of three-part harmony (absent in the ensuing verse) and the presence of the title lyric “ramblin’ man” at the end of the first and last lines of text (see the transcription in Example 6.8).¹⁰ The ensuing verse is based on a chord progression nearly identical to the chorus’s (omitting only the embellishing bVII chord in the second measure)

¹⁰The text also helps ensure that the first section is heard as the chorus, in that this section’s lyrics make general statements rather than telling a story, as the verse’s text does. The distinction is analogous to Raymond Monelle’s distinction between “lyric time,” in which time is arrested, and “narrative time,” in which time is passing (Monelle 2000, 115–21; see also Klein 2004, 37–44). It is common for choruses to exemplify lyric time and verses to exemplify narrative time.

Chorus

♩ = 168

8 Lord, I was born a ram - blin' man. Tryin' to make a li-vin' and

6 do-in' the best I can. When it's time for lea - vin', I hope you'll un-der-stand

12 Verse
8 that I was born a ram - blin' man. My fa-ther was a gam - bler down in

19 8 Geor - gia, and he wound up on the wrong end of a gun, and I was born in the

26 8 back-seat of a Grey-hound bus rol-ling down high-way for-ty-one.

Example 6.8: The Allman Brothers, “Ramblin’ Man” (1973): transcription of chorus and verse. The two sections are based on similar melodic and harmonic profiles.

and a similar melodic contour. Example 6.9 graphs the chorus of “Ramblin’ Man”; with only slight alterations, this graph could easily be the graph of the verse. (Notice the presence of the “cadential I” acting as an inverted cadential six-four; see Chapter 2 for a discussion of this chord.)

“Fat Bottomed Girls” and “We’re Not Gonna Take It,” like “Ramblin’ Man,” begin with the chorus and lead to a verse that is melodically and harmonically similar to the chorus (see the transcriptions in Examples 6.10 and 6.11). In addition, the opening choruses in “Fat Bottomed Girls” and “We’re Not Gonna Take It” are sung without instrumental accompaniment (except for the drums in “We’re Not Gonna Take It”), further confirming

The image shows a musical score for the chorus of "Ramblin' Man" in a key with three flats (B-flat major or D-flat minor). The score consists of two staves: a treble clef staff and a bass clef staff. Above the treble staff is a graph with a horizontal line and five vertical tick marks labeled 5, 4, 3, 2, and 1 from left to right. The treble staff contains a melodic line with notes corresponding to these fingerings. The bass staff contains a bass line. Below the bass staff, Roman numerals I, IV, V, and I are placed under the first, second, third, and fourth measures respectively. A box in the bass staff contains the notation $[I] = V_4^6 - 5_3$.

Example 6.9: Graph of the chorus of “Ramblin’ Man.” With very few alterations, this could also serve as the graph of the verse because of the two sections’ similarity.

$\text{♩} = 86$ **Chorus**
 (D) *lx: chords tacit* (C) (G/B) (D) (C) (A)

Are you gon - na take me home to - night? Ah, down be - side that red fire light.

5 (D) (G) (D) (A) (D) G5F5D5 D

Are you gon - na let it all hang out? Fat bot - tomed girls, you make the rock - in' world go 'round.

Verse
 D A

10 I was just a skin - ny lad, ne - ver knew no good from bad, but I knew life be - fore I left my nur - se - ry, huh! Left a - lone

15 D5 G D A D

with big fat Fan - ny, she was such a naugh - ty nan - ny; hey, big wo - man, you made a bad boy out - ta me!

Example 6.10: Queen, “Fat Bottomed Girls” (1978): transcription of chorus and first verse.

The image shows a musical score for the song "We're Not Gonna Take It" by Twisted Sister. It is written in 4/4 time with a key signature of three sharps (F#, C#, G#). The tempo is marked as quarter note = 144. The score is divided into three sections: Chorus, Verse, and Reduction.

Chorus: The melody starts on a downbeat. The lyrics are: "We're not gonna take ___ it! No, we ain't gonna take ___ it! We're not gonna take ___ it a-ny-more! ___". Chords above the staff are (E5), (B5), (E5), (A5), (E5), (B5), and E5.

Verse: The melody starts on a backbeat (beat 2). The lyrics are: "We've got the right to choose it; there ain't no way we'll lose it. This is our life, ___ this is our song. ___". Chords above the staff are E5, B5, E5, A5, E5, B5, E5, and (B5).

Reduction: This section shows the harmonic structure of the chorus and verse. The chorus is represented by chords I, V, I, IV, I, V, I. The verse is represented by chords I, V, I.

Example 6.11: Twisted Sister, “We’re Not Gonna Take It” (1984): the two sections are nearly identical (see the reduction) but the rhythm and lyrics make one sound like the chorus and the other sound like the verse.

these sections’ status as introductory and not part of the main form. The verse and chorus of “Fat Bottomed Girls” are more distinct than in the other two examples, and there is no ambiguity as to which is the chorus and which is the verse; the opening section’s three-part harmony and long notes as well as its eventual inclusion of the title lyric make it unmistakably the chorus. Despite the foreground differences between the two sections, though, their basic structure is the same: a parallel period which moves from $\frac{3}{I}$ to $\frac{2}{V}$ in the antecedent and $\frac{3-2-1}{I-V-I}$ in the consequent (see the graph in Example 6.12; as this graph shows, the cadential I embellishes the consequent’s V chord). “We’re Not Gonna Take It”’s two sections, on the other hand, are nearly identical (see Example 6.11). What differentiates chorus and verse in this case is the rhythm—the chorus’s melodic lines begin on downbeats, whereas the verse’s begin on beat 2—and the text—the chorus essentially contains three versions of the title lyric “we’re not gonna take it,” whereas the verse contains less memorable lyrics.

The image shows a musical score for the song "Fat Bottomed Girls" by The Chiffons. It is divided into two sections: "chorus" and "verse". Both sections are written in G major (one sharp) and 4/4 time. The score consists of a treble clef (upper voice) and a bass clef (lower voice). Above the treble clef, there are annotations for the upper voice line: "3̂" and "2̂" with brackets and arrows indicating intervals, and "3̂" and "2̂" with brackets and arrows indicating intervals. The bass clef line has chord diagrams below it, labeled with Roman numerals: I, V, I, IV, [I] V, I for the chorus, and I, V, I, IV, [I] V, I for the verse. The [I] V chords are marked as "(cad. I)". The score is divided into two systems, each containing a measure of the chorus and a measure of the verse, with double bar lines and repeat signs indicating the structure.

Example 6.12: Graph of “Fat Bottomed Girls”; both verse and chorus consist of a parallel period with an interrupted descent from $\hat{3}$ in the upper voice.

A common way to differentiate sections in sectional verse–chorus forms is for the verse and chorus to be in different keys. Doll 2011a lists several examples of songs that change keys from verse to chorus and ascertains that modulations upward by three and five semitones are the most common. Doll claims that such songs exemplify what Capuzzo 2009 calls “sectional tonality,” but I believe the reality is slightly more complicated. Capuzzo’s definition of sectional tonality requires both that two or more sections of a given song are in different keys and also that “the overall key succession is not governed by a single tonic” (157–58). While several of Doll’s examples exhibit sectional tonality according to this definition, some songs that modulate from verse to chorus *do* cohere under the umbrella of a single overall tonic. This is particularly common when the key of the verse is a perfect fifth above the key of the chorus (i.e., the modulation is upwards by five semitones). In such cases, the verse can often be considered to compose out V of the chorus’s tonic, making the chorus’s key the overall key of the piece. Furthermore, the verses in these songs typically emphasize the minor seventh degree of their tonic, creating a mixolydian context that may eventually be reinterpreted

Intro
♩ = 124 C7
bass ostinato
(continues through verse)

Verse
C7 voice
In this dir-ty old part of the ci-ty, where the sun re-fuse
to shine, peop-le tell me there ain't no use in try-in'

Chorus
37 F B♭ C F G C F
We got - ta get out of this place if it's the last thing we e-ver do. — We got - ta get out
42 B♭ C Dm F E♭ B♭ C F E♭ B♭ C
of this place. Girl, there's a bet-ter life — for me and you.

[Three varied repetitions of the verse follow]

Example 6.13: The Animals, “We’ve Gotta Get Out Of This Place” (1965): the verse projects C mixolydian while the chorus is firmly in F major.

as V^7 of the global tonic. The Animals’ 1965 single “We’ve Gotta Get Out Of This Place” exemplifies this: the verses contain an ostinato bass figure outlining a C-mixolydian modality, while the chorus is firmly in F major (see the transcription in Example 6.13). The overall motion of the song can therefore be considered to be $V^{(7)}-I$ in F major.¹¹

In these situations, it is important to distinguish between global and local functions. For example, the verses of “We’ve Gotta Get Out Of This Place” are not in F major but rather

¹¹A similar example is the Vogues’ 1965 single “Five O’Clock World,” which appears as Doll’s Example 8. The verses of this song alternate E-major and D-major chords, providing an E-mixolydian context, and the choruses alternate A-major and D-major triads, providing an A-major context. Doll relegates any mention of the possibility that the global tonic is actually A major to a footnote, and even there he dismisses this reading as implausible because “so much time is spent emphasizing E” (¶ 10). While it is true that more clock time is spent in E mixolydian, the rhetorical emphasis on A major more than makes up for that, especially given that the song’s first A-major chord supports the title of the song in the lyrics. I do not believe that the amount of time spent emphasizing a given key is a good indicator of its structural weight, and in the case of “Five O’Clock World” I find the reading of A major as the global tonic the more convincing.

C mixolydian, and the C7 chords represent tonic harmony. It is only in the global context of the entire song that this local key represents V of F major. A familiar and analogous situation occurs in Classical sonata-form movements: the second theme in a typical piece in C major is in G major; G-major triads within this theme are I chords, not V chords. In the *global* context, however, the key of G major functions as V of the overall C-major tonality. A classically minded theorist might argue that the presence of the minor seventh B \flat in the verses of “We’ve Gotta Get Out Of This Place” makes C sound like V rather than I, but mixolydian modality is quite common in rock music, and so the presence of B \flat does not destabilize C as tonic (see especially Moore 1995 and Tagg 2009). It is true, however, that when a mixolydian key proceeds to a major key whose tonic is a perfect fifth lower, this change will generally be heard as a resolution and the latter key will be heard as more stable.

ANALYTICAL INTERLUDE: MINIMAL VERSES

My next two analyses look at verse–chorus songs in which the verses carry little structural weight, so that the chorus is the sole focal point of the entire song. In both examples, the chorus comes first and the subsequent verses begin off-tonic and do not contain a full functional circuit. The first example is the Beatles’ 1967 single “Strawberry Fields Forever”; in this song, a short introduction that foreshadows the verse’s chord progression leads straight into the first chorus. The first chorus and first verse are transcribed in Example 6.14. Although the chorus is only slightly longer than the verse—ten versus eight measures—

Chorus

Let me take you down 'cause I'm going to Strawberry fields. No-thing is
real, and no-thing to get hung a-bout. Strawberry fields fo - re-ver.

Verse

Li-ving is ea-sy with eyes closed; mis-un - der - stan - ding all you see.
It's get-ting hard to be some - one but it all works out. It does-n't mat-ter much to me.

Example 6.14: The Beatles, “Strawberry Fields” (1967): chorus and first verse.

it is clear that the chorus carries the main thematic material of the song, while the verses seem more like interludes between successive choruses than full-fledged sections. As shown in the graph in Example 6.15, the verse composes out a large-scale V–I progression supporting $\hat{2}$ – $\hat{1}$ in the upper voice. The V harmony is initially prolonged through deceptive motion to VI, ultimately leading down to IV before returning to V in measure 17. The IV harmony, which acts as a middleground neighboring chord to V, is prolonged by the progression IV–V–I–VI–IV, which as Walter Everett suggests is derived from “I Want to Hold Your Hand” (1999, 83). This progression—a common way of prolonging IV in *continuous* verse-chorus songs—will be discussed in detail in the following section.

Whereas the verse represents an auxiliary V–I cadence, the chorus contains a full functional circuit with some very active voice leading. Example 6.16a gives a chordal reduction of

Example 6.15: The Beatles, “Strawberry Fields,” graph of verse.

the chorus. The first four measures of this reduction are straightforward, but measures 5–6 require some explanation. The transcription shows the chord in these measures as $G7^{(b9)}$, and indeed the bass plays a G while the upper voices play B–D–F– A^b . However, the melodic line A^b – B^b – C^b over the lyric “nothing is real” suggests that the interval from A^b to B^{\natural}/C^b is a *minor third* rather than an augmented second; this seems clear given the parallel motives on “Strawberry fields” (measures 3–4) and “nothing is real.” If this note is heard as C^b and not a B^{\natural} , then the chord in measures 5–6 is a fully diminished seventh chord on D with an added G in the bass. Since this chord leads to an E^b -major chord in measure 7, we can interpret it as VII_5^{o6}/IV , with the bass’s G substituting for F as an escape tone. Example 6.16b shows the underlying voice leading of the chorus following this interpretation. Yet the impression of some sort of G-major harmony in measures 5–6 is strong, especially in the first verse, which omits the horns’ A^b in this chord. Furthermore, an unequivocal G7 chord occurs only three beats later (measure 8), suggesting the possibility that VI^{\natural} is prolonged from measures 5–8 via a 5–6–5 motion along with what David Damschroder (2010) calls a “wobbly” third.

a)

b)

I
T

II⁷

VII⁶₅

IV

V

II⁶₃

I
T

PD

D

Example 6.16: a) Chordal reduction of the chorus of “Strawberry Fields”; b) Further reduction showing the underlying voice leading.

In some sense, the chord in measures 5–6 is simultaneously a G-major sonority (containing B♭) and a D diminished-seventh sonority, containing C♭, reflecting the sense that “nothing is real.”

The G7 chord in measure 8 leads ostensibly to an E♭ major seventh chord in measure 9. However, as suggested in Example 6.16a, the seventh of this chord (D) is best thought of as a suspension that resolves to C on the downbeat of measure 10. In fact, this resolution would have been within the purview of the E♭ bass note if it weren’t for the shifting meter; the recomposition in Example 6.17 gives a normalized version of the cadence that remains in $\frac{4}{4}$ time. In this recomposition, the B♭ chord arrives after the suspended D resolves to C resulting in the chord progression $\text{II}_5^{7-6}\text{-I}$. In the actual song, though, the B♭ chord

The image shows two staves of music. The top staff is a vocal line in 4/4 time, with lyrics "Straw-ber-ry fields fo-re-ver." The key signature has two flats (Bb and Eb). The bottom staff is a piano reduction, showing chords in measures 7 and 8. Measure 7 has a G7 chord (labeled '7') and measure 8 has a Bb7 chord (labeled '6').

Example 6.17: Recomposition in $\frac{4}{4}$ of the cadence at the end of the chorus of “Strawberry Fields”; here, the suspension resolves before the change of harmony.

encroaches backwards, making measure 9 a $\frac{6}{8}$ measure and making the C arrive over the Bb chord. Nevertheless, this C “belongs” to measure 9, meaning that the apparent IV^7 chord in this measure is actually a II_5^6 supporting $\hat{2}$, as shown in Example 6.16b. The G7 chord in measure 8, therefore, acts as V^7/II and resolves with jazzy voice leading to a minor seventh chord, with the leading tone B \sharp progressing chromatically downward to B \flat . The II_5^6 chord in measure 9 is the syntactical dominant of this chorus as it supports $\hat{2}$ at the cadence (with the rhythmic shift described above) within an overall descent from $\hat{3}$ to $\hat{1}$.

On the surface, Daryl Hall and John Oates’ 1977 single “Rich Girl” is similar to “Strawberry Fields Forever” in its construction, but as we will see its harmonic-melodic structure suggests a fundamentally different formal procedure. The first chorus and verse from this song are transcribed in Example 6.18; there is no introduction, so this transcription begins at the very beginning of the track. As was the case in “Strawberry Fields,” the chorus contains the main thematic material of the song with the verse clearly fulfilling a subsidiary role. In “Rich Girl,” the verse contains no root-position tonic chords and essentially composes out a IV^7-V progression throughout. The chorus, however, unlike that of “Strawberry Fields,” does

Chorus

$\text{♩} = 82$

8 **F** **Am** **Dm7** **F/C**
 You're a rich girl, and you're go-in' too far, 'cause you know it don't mat-ter a-ny-way.

3 **B \flat** **F/A** **Gm7** **B \flat /C**
 8 You can re-ly ___ on the old man's mo-ney, you can re-ly ___ on the old man's mo-ney. It's a

5 **F** **Am** **Dm7** **F/C**
 8 bitch, girl, but it's gone too far, 'cause you know it don't mat-ter a-ny-way. —

Verse

7 **B \flat** **F/A** **Gm7** **F** **Dm** **C** **B \flat maj7**
 8 Say "mo-ney" but it won't get you too far, get you too far. Don't you know, ___ don't you know

12 **Gm7** **F/C** **Gm7** **F/A** **Dm** **C** **B \flat maj7**
 8 ___ that it's wrong ___ to take what is gi-ven you? So far gone, ___ on ___ your own,

16 **Gm7** **Csus4** **C**
 8 ___ you can get a-long if you try to be strong, but you'll ne-ver be strong 'cause ___ you're a

Example 6.18: Daryl Hall and John Oates, “Rich Girl” (1977): chorus and first verse.

not contain a full functional circuit, as it does not end with a cadence and the upper voice essentially prolongs $\hat{1}$ throughout, as shown in the reduction in Example 6.19. This reduction shows two instances of a hierarchy divorce between melody and harmony (see Chapter 3): the second half of measure 1 contains an Am7 chord but the voice remains on F, suggesting that this chord substitutes for F/A (I^6); and the second half of measure 3 contains the chord F/A which is a consonant harmonization of the bass’s passing tone A within a pre-dominant prolongation, but the voice continues to sound D in addition to F, expressing the prolonged

The musical notation shows a chordal reduction of the chorus of "Rich Girl". It is written in 4/4 time with a key signature of one flat (B-flat). The upper voice (treble clef) consists of a single sustained chord, labeled with a hat over the number 1 ($\hat{1}$). The lower voice (bass clef) has a melodic line with notes corresponding to the chords below. The chords are labeled as I, IV, V // I, IV, and I. The word "chorus" is written in the first measure of the upper voice.

Example 6.19: Chordal reduction of the chorus of “Rich Girl” showing that the upper-voice prolongs $\hat{1}$ throughout.

pre-dominant itself. The first four measures of this section can thus be thought of as an antecedent phrase even though the upper voice remains on $\hat{1}$ throughout (culminating in the “soul dominant” in the second half of measure 4). The following phrase, which begins as the consequent to this antecedent, does not end with a cadence; although there is harmonic motion to the tonic in measures 8–9, the melody does not cooperate and peters out, with the prolonged $\hat{1}$ never moving at all.

In this way, “Rich Girl”’s chorus is not typical of sectional verse–chorus forms, whose choruses usually end with a strong cadence as discussed above. Neither is this section typical of *continuous* verse–chorus forms, in which the chorus generally begins on the pre-dominant (as we will see in the following section). This chorus’s structure is more typical of verse–prechorus–chorus songs, in which the structural cadence arrives at the downbeat of the chorus such that the chorus itself simply prolongs $\hat{1}$ throughout, as discussed in the previous chapter. But this song is not a verse–prechorus–chorus song; there are only two distinct sections, one of which is obviously the chorus, and so this song seems to be a verse–chorus form with no prechorus. However, if we look closely at the harmonic and melodic profiles

The musical score consists of two systems: a treble clef system and a bass clef system. The treble clef system shows a melodic line with notes G4, A4, Bb4, and G4. Above the notes are pitch classes 3, 2, and 1. The bass clef system shows a bass line with notes Bb3, C4, D4, E4, D4, C4, Bb3, and A3. A dashed line connects the first two notes of the bass line, with a '6' above and a '4' below. The first two measures are labeled 'prechorus!' and the last two measures are labeled 'chorus'. Below the bass line, chords are labeled IV⁷, V, and I. A double bar line with a repeat sign is shown after the chorus, with the text 'no PAC' below it.

Example 6.20: The harmonic and melodic structure of “Rich Girl” implies an overall form of prechorus–chorus with no verse.

of the non-chorus section—labeled “Verse” in Example 6.18—we see that this section has more in common with a typical *prechorus* section than with a typical verse. Specifically, it begins on the pre-dominant—in this case, IV⁷—and ends on the dominant—in this case, V—which resolves to tonic on the downbeat of the following chorus. Example 6.20 shows this progression graphically. At the beginning of this section we get the primary tone $\hat{3}$, which is dissonantly supported by IV⁷. This primary tone remains in the upper voice as the bass passes up to D (VI) and then back to Bb (IV⁷); the melodic line then descends to $\hat{2}$ over the V chord in measure 18, finally resolving to $\hat{1}$ for the chorus. Given this harmonic-melodic structure, “Rich Girl” seems to have the extremely atypical form of prechorus–chorus with no verse sections at all.

<i>verse</i>	<i>chorus</i>
T	PD D T

Example 6.21: The general model for continuous verse–chorus form.

CONTINUOUS VERSE–CHORUS FORM

In contrast to sectional verse–chorus form, in which both verse and chorus are relatively self-contained, continuous verse–chorus form involves a verse–chorus cycle in which neither section is complete on its own but both combine to project a single, complete functional circuit. In such songs, the chorus begins not on the tonic but on the syntactical pre-dominant, moving to the dominant and finally to tonic for the cadence. The verse provides the opening tonic of this circuit, and so the general outline is as given in Example 6.21. Like their sectional counterparts, continuous verse–chorus songs reach their structural goal at the end of the chorus, but unlike sectional verse–chorus songs, they are derived from an expansion of **srdc**, in which the four phrases of **srdc** cleave into two separate sections, with **sr** making up the verse and **dc** making up the chorus. (Compare verse–prechorus–chorus form, also derived from **srdc**, but in which the chorus is an expansion of the **c** phrase only, and the structural goal of the song arrives at the *beginning* of the chorus; see the previous chapter). Trevor DeClercq (2012, 161–65) discusses this process in reference to two early Beatles songs, “Ticket to Ride” (*Help!*, 1965) and “Drive My Car” (*Rubber Soul*, 1965). In “Ticket to Ride,” the eight-measure verse divides into two similar phrases of four measures each, followed

Verse

♩ = 120

8 I think I'm gon-na be sad, I think it's to - day, yeah. The

Chorus

5 girl that's dri-vin' me mad is go-ing a-way. She's got a tic-ket to ri - ide,

11 she's got a tic-ket to ri - i - ide, she's got a tic-ket to ride and she don't care.

Example 6.22: The Beatles, “Ticket to Ride” (1965): first verse and chorus.

by an eight-measure chorus (see Example 6.22).¹² The verse prolongs the tonic—its second phrase ends with a back-related V chord, common in *r* phrases (see Chapter 4)—and the chorus begins on the pre-dominant VI harmony, which leads to the final V–I cadence in measures 15–16 (see the voice-leading graph in Example 6.23).¹³ This harmonic outline is exactly like Model 2 for *srdc* as defined in Chapter 4; the melody also follows this model, remaining on primary tone $\hat{5}$ for the verse (=s/r), moving to the unstable $\hat{6}$ at the beginning of the chorus (=d), and continuing to ascend stepwise to $\hat{8}$ via the “structural blue note” $b\hat{7}$ (see Wagner 2003). As deClercq points out (2012, 161–62), some authors consider the sixteen measures shown in Example 6.22 to consist entirely of verse material, making a true *srdc* verse rather than a verse and chorus (see Pollack 2001, #65, and Stephenson 2002,

¹²The verses of continuous verse–chorus songs, because of their roots in *s* and *r* phrases, tend to contain two phrases, whereas the verses of sectional verse–chorus songs more often contain four.

¹³Wagner 2003’s graph of this song considers the IV chord in measure 10 to be the syntactical pre-dominant harmony (p. 361). While this reading is plausible, I prefer to read the VI chord as prolonged through this IV chord (via a 5–6 motion with a cast-out root) because of its hypermetrical emphasis and because the melody consistently outlines the fourth $C\sharp-F\sharp$, which would conflict with a IV harmony but is consonant with VI.

The image shows a musical score for "Ticket to Ride" by The Beatles, divided into a verse and a chorus. The score is in G major (one sharp) and 4/4 time. The verse (measures 1-8) features a tonic pedal on C4. The chorus (measures 9-16) features a pre-dominant IV chord (D major) and a hierarchy divorce. The graph shows the progression of chords: I (C major) in the verse, VI (F major) in the chorus, V (G major), and I (C major) at the end. Annotations include "N (pent.)" and "retardation" in the melody, and "11" in the bass line.

Example 6.23: The Beatles, “Ticket to Ride,” graph of verse–chorus cycle.

32). I ultimately agree with Everett 2001a (283–84) and Moore 2001 (52–53) that this song includes both verse and chorus, but the fact that there is any disagreement at all shows the affinity between continuous verse–chorus and **srdc** verses.

Survivor’s 1982 arena rock hit “Eye of the Tiger” (best known as the theme song to the film *Rocky III*) provides an example of continuous verse–chorus form in which the presence of two distinct sections is less disputable. Example 6.24 transcribes the first and second verses and the first chorus of this song. (I consider there to be two verses before the first chorus—a common occurrence in rock songs—with each verse lasting eight measures, rather than a single 16-measure verse. Subsequent choruses are preceded by a single eight-measure section.) The first verse, which follows a long introduction based on the song’s signature guitar riff, prolongs the C-minor tonic through the common minor-mode progression I– \flat VI– \flat VII–I all over a tonic pedal (in subsequent verses the bass abandons the tonic pedal and all chords appear in root position). The chorus then begins on a pre-dominant IV chord accompanying the first occurrence of the title lyric; the next occurrence of this lyric, at

Verse

$\text{♩} = 104$ C_m *1x: bass remains on C throughout verse* A_b B_b C_m C_m

Ri - sin' up, back on the street — did my time, took my chan - ces. Went the dis - tance, now I'm
So ma - ny times it hap - pens too fast — you change your pas - sion for glo - ry. Don't lose your grip on the

Chorus

6 A_b B_b C_m C_m F_m

back on my feet, just a man and his will to sur - vive. It's the eye of the ti - ger it's the
dreams of the past, you must fight just to keep them a - live.

10 E_b/G B_b F_m C_m B_b F_m

thrill of the fight, ri - sing up to the chal - lenge of our ri - val. And the last known sur - vi - vor stalks his

14 E_b/G B_b F_m E_b/G A_b (N.C.) C_m

prey in the night, and he's wat - ching us all with the eye of the ti - ger.

Example 6.24: Survivor, “Eye of the Tiger” (1982): an unambiguous example of continuous verse-chorus form.

the end of the chorus, is at the cadence, which appears to be a bVI -I progression. While it would be perfectly acceptable to consider the bVI harmony to function as syntactical dominant in this functional circuit (as does Temperley 2011), I am inclined to read an implied B_b ($bVII$) harmony at the end of measure 16. The band stops playing the A_b (bVI) chord halfway through the third beat of this measure (indicated by “N.C.” for “No Chord” in Example 6.24), and so the vocal line on the final beat of this measure is unaccompanied. This vocal line embellishes the note F, which does not belong to the A_b harmony. This moment could, of course, be considered to be an instance of a syntax divorce, in which melody and harmony take different routes to their structural goal (see Chapter 3). However, each two-measure unit of the chorus thus far has begun on an F-minor harmony with A_b in the melody and has ended on a B_b harmony with F in the melody. This final two-measure

Example 6.25: “Eye of the Tiger” illustrates the voice-leading model for continuous verse–chorus.

unit (measures 15–16) begins the same way and ends with *no* harmony and F in the melody. Because of this precedent, I believe that a B \flat chord is strongly implied on the last beat of measure 17, functioning as the syntactical dominant of this verse–chorus cycle’s functional circuit. The first three of the chorus’s four two-measure units therefore foreshadow the PD–D progression of this circuit, leaving the syntactical dominant \flat VII unresolved until the final cadence in measure 18. This interpretation is shown graphically in Example 6.25.¹⁴

Repeating the PD–D progression several times before resolving to T at the cadence is a common way of prolonging the pre-dominant function that begins a chorus. It is uncommon for a chorus to contain only the three chords representing the structural PD, D, and T harmonies, and it is the PD function that is most often expanded with several chords (recall from the discussion in Chapter 5 that the pre-dominant is also commonly expanded in pre-chorus sections). Fleetwood Mac’s “Go Your Own Way,” from their 1977 signature album *Rumours*, gives an example of this. The chorus is transcribed in Example 6.26. This

¹⁴Although this verse–chorus cycle coheres in C minor, the chorus hints at E \flat major, especially in the melody. The chorus seems like a parallel period in E \flat major, with an interruption on $\frac{2}{V}$ in measure 12 and a descent to $\hat{1}$ concluding in measure 17. If the final C-minor chord were replaced with E \flat major, this entire section would most likely be heard in the key of E \flat . While my interpretation comes down firmly on the C-minor side, there is perhaps an element of a double-tonic complex in this cycle (compare the analysis of “Private Eyes” in Chapter 5; see also Bailey 1985 and Krebs 1996).

Chorus
 ♩ = 136
 Dm B \flat C Dm B \flat
 You can go your own way, go your own way. You can call it a no-

7 C Dm B \flat C Verse F
 - ther lone-ly day. You can go your own way, go your own way.

Example 6.26: Fleetwood Mac, “Go Your Own Way” (1977): transcription of chorus.

3̂ (3̂) 2̂ 1̂
 verse chorus verse
 m-h divorce
 I VI⁵⁻⁶ V I
 T PD D T

Example 6.27: Fleetwood Mac, “Go Your Own Way”: the PD–D progression repeats in the chorus before resolving to T.

section contains three similar four-bar phrases over the chord progression VI–IV–V. In this progression, the VI chord (Dm) functions as the pre-dominant and V (C) functions as the dominant, with IV (B \flat) prolonging VI via a 5–6 shift, as shown in Example 6.27. (Note the hierarchy divorce over the IV chord, as the melody remains on $\hat{3}$ and outlines the tonic triad with leaps to C and F.) The PD–D progression is stated three times, resolving to tonic on the hypermetrically strong 13th measure of the chorus, which is simultaneously the first measure of the second verse via a phrase elision. That this chorus contains three phrases rather than the more typical four is hardly noticeable on first hearing, owing to the repetition of the

Verse

Oh yeah I'll ___ tell you some-thing I think you'll un-der-stand when I ___ say that some-thing

Chorus (or refrain)

I wan-na hold your hand ___ I wan-na hold your hand ___ I wan-na hold your hand.

Example 6.28: The Beatles, “I Want to Hold Your Hand” (1963): these twelve measures can be considered a single verse with refrain or a verse plus a chorus.

PD–D progression in the manner of a chord rotation (see Chapter 3 for a discussion of chord rotations). Significantly, at the end of the song the chorus loops without resolving to the tonic and then fades out; during this loop, the phrases group in pairs as the lyrics “you can go your own way” and “you can call it another lonely day” alternate one phrase each.

A particularly common method of prolonging the syntactical pre-dominant involves a specific chord progression that most likely originates with the Beatles’ 1963 single “I Want to Hold Your Hand,” their breakout hit in the United States, which ultimately propelled them to world fame (see the transcription in Example 6.28). The progression in question is IV–V–I–VI–IV–V–I, which occurs in measures 9–12.¹⁵ In this progression, the first three chords hint at a PD–D–T progression but in a noncadential (hence inconclusive) manner, as the melody devolves into a long melisma in two-part harmony in measure 10. Following this, the harmony arpeggiates back down to IV (via VI) and tries again, this time achieving a IV–V–I cadence in measure 12. Example 6.29 graphs this passage, showing that the I chord in measure 10 is not a true return to tonic, but that the pre-dominant IV chord is prolonged

¹⁵Walter Everett (2001a, 201–2) relates this progression to some earlier Beatles songs (several of them covers).

The image shows a musical score for the Beatles' "I Want to Hold Your Hand". It consists of a piano accompaniment with a treble and bass clef. Above the score is a chord graph with a horizontal line and vertical stems. The graph is divided into two sections: "verse" and "chorus/refrain". The verse section has a chord progression of I, IV, (I), IV, V, I. The chorus/refrain section has a chord progression of IV, (I), IV, I. The (I) chord in the chorus is connected to the IV chord by a dashed line, indicating a pre-dominant expansion. The score includes a repeat sign for the chorus/refrain section.

Example 6.29: The Beatles, “I Want to Hold Your Hand”: graph of verse–chorus cycle showing the pre-dominant expansion in the chorus.

over the failed cadence in measure 10 through its recurrence in measure 11.¹⁶ This song, even more so than “Ticket to Ride,” lies in the gray area between **srdc** and continuous verse–chorus form: the twelve measures transcribed in Example 6.28 can be considered a single verse, ending with a four-measure refrain (following Everett 2001a, 200–1), or instead as two sections comprising an eight-measure verse and a short four-measure chorus.

The chord progression that underlies the chorus/refrain of “I Want to Hold Your Hand” became a schema, appearing in several songs in the 60s and 70s. When it appears in the chorus of a continuous verse–chorus song, the interpretation is generally the same as in “I Want to Hold Your Hand” (prolonging IV through motion to its upper fifth and back). This is the case with Van Morrison’s “Brown Eyed Girl” from 1967 and Creedence Clearwater Revival’s “Have You Ever Seen the Rain?” from 1970 (see Examples 6.30 and 6.31). In the latter example, the IV–V–I–VI progression occurs twice before cadencing on the third iteration

¹⁶Everett (2001a, 199) also graphs this song, and my reading of the upper voice is essentially the same as his. Our interpretations of the harmonic structure differ somewhat, as Everett seems to read a return to structural tonic in measure 10.

Chorus

♩ = 136

C D G Em C D G D

my brown eyed girl. You — my brown eyed girl

Harmonic structure:

verse chord

I IV (I) IV V I

Example 6.30: Van Morrison, “Brown Eyed Girl” (1967), transcription of chorus and summary of harmonic structure showing the “I Want to Hold Your Hand” schema prolonging IV.

(this is similar to the chorus of “Go Your Own Way,” discussed above). The chorus of the Youngbloods’ 1967 folk-rock anthem “Get Together” contains a similar harmonic structure (omitting the VI chord) but within the confines of a single phrase whose cadence arrives on the downbeat of its fifth measure (see Example 6.32).¹⁷

Tom Petty and the Heartbreakers’ “American Girl,” from their 1977 self-titled debut album, contains this same IV–V–I–VI–IV–V–I progression in its chorus (see the transcription in Example 6.33), but it is the verse section that contains the most analytical interest. This verse is sixteen measures long, but it contains only three phrases: a four-measure phrase (measures 1–4) followed by a five-measure phrase (measures 5–9) followed by a seven-measure phrase (measures 10–16). Each of these phrases begins on a I chord and ends on a V chord. Furthermore, every one of these phrases ends with the melodic motive E–F♯ ($\hat{2}$ – $\hat{3}$) over the V chord. In the first phrase, this motive is contained within a single measure (measure 4),

¹⁷This song was most likely written before “I Want to Hold Your Hand” was released in November of 1963; the earliest commercial recording seems to be on the Kingston Trio’s June, 1964 album *Back in Town*, but it is likely that songwriter Chet Powers had completed the song significantly earlier than that.

Chorus

Musical notation for the chorus of "Have You Ever Seen the Rain?". The piece is in 4/4 time with a tempo of 112. The melody is written on a treble clef staff. The lyrics are: "I wan-na know, have you e-ver seen the rain I wan-na know, have you e-ver seen the rain co-ming down sun-ny day?". Chords are indicated above the staff: F, G, C, C/B, Am, Am/G, F, G, C.

Harmonic structure:

Harmonic structure diagram for the chorus of "Have You Ever Seen the Rain?". The diagram shows a bass line with notes and chords. The structure is labeled as *verse* and *chorus*. The chord sequence is: I, IV, (I), IV, V, I.

Example 6.31: Creedence Clearwater Revival, “Have You Ever Seen the Rain?” (1970), transcription of chorus and summary of harmonic structure.

Chorus

Musical notation for the chorus of "Get Together". The piece is in 4/4 time with a tempo of 96. The melody is written on a treble clef staff. The lyrics are: "Come on peop-le now, smile on your bro-ther, e-very-bo-dy get to-ge-ther, try to love one a-no-ther right now.". Chords are indicated above the staff: D, E, A, D, E, A.

Harmonic structure:

Harmonic structure diagram for the chorus of "Get Together". The diagram shows a bass line with notes and chords. The structure is labeled as *verse* and *chorus*. The chord sequence is: I, IV, (I), IV, V, I.

Example 6.32: The Youngbloods, “Get Together” (1967), transcription of chorus and summary of harmonic structure.

Verse

$\text{♩} = 108$

Verse

D E G A D

Well, she was an A-mer-i - can girl, raised on pro-mi-ses. She could-n't help

E G A

thin - king that there was a lit-tle more to life some - where else; af - ter all it was a

D G Em A

great big world — with lots of pla-ces to run to. And if she had to die try - in' she —

Chorus

G A D

had one little pro-mise she was gon-na keep. ——— Oh yeah, al-right, take it ea-sy ba - by,

Bm G A D

make it last all night. She was an A-me-ri - can girl. ———

Example 6.33: Tom Petty and the Heartbreakers, “American Girl” (1977): rhythmic expansion of the verse in a continuous verse-chorus form.

but in the second phrase the motive expands to two measures (measures 8–9), lengthening this phrase to five measures instead of four. In the third phrase, the E–F \sharp motive is doubled yet again to last four measures: measures 13–14 prolong E and measures 15–16 prolong F \sharp , both embellished with their upper neighbors. Example 6.34a gives a durational reduction of the verse, with each of the reduction’s quarter notes representing a full measure of the transcription. This reduction shows that the verse is based on three four-bar phrases (creating three $\frac{4}{4}$ hypermeasures), with the fourth measure of the second and third phrases expanded as a result of lengthening the E–F \sharp motive over the V chord. The enlargement of the fourth measure of the third phrase (measures 13–16) creates a four-bar hypermeasure of its own on the surface, despite its function as a single measure at a deeper level (see the normalized

a) Rhythmic reduction of verse

b) Normalized rhythmic reduction of verse

Example 6.34: a) Tom Petty and the Heartbreakers, “American Girl”: the verse’s rhythmic expansion is a result of lengthening the E–F \sharp motive at the end of each phrase. b) The sixteen-measure verse is based on a twelve-measure prototype consisting of three four-bar phrases.

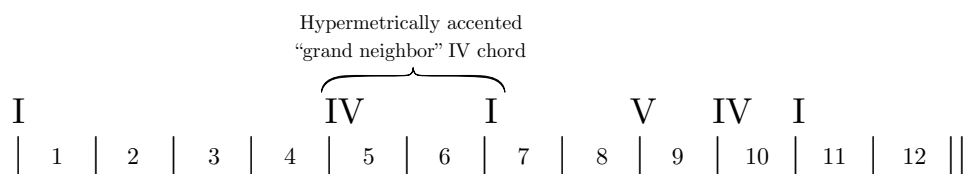
version in Example 6.34b). This is an example of what Schenker calls a *Dehnung* (expansion) (Schenker 1979 [1935], 124–5), a topic discussed in Schachter 1999 (62–65); Schachter’s analysis of the trio section of a Mozart minuet may be compared to my Example 6.34.¹⁸

The verse of “American Girl” is based on the **s** and **r** phrases of **srdc**, as is typical in a continuous verse–chorus song. In this song a third phrase is added, creating a **srr** structure; this third phrase (measures 10–16) is a slight variation of the first two phrases in which the second and third chords are switched. One might at first be tempted to call measures 10–16 the prechorus instead of the third phrase of the verse, but its similarity to the previous two phrases and its prolongation of tonic rather than pre-dominant make this a dubious reading. Following the reduction in Example 6.34b, we can see that the upper voice essentially rises by step from D to F \sharp ($\hat{1}$ to $\hat{3}$) in each of these three phrases. This F \sharp is not contained in the A-major harmony that sounds underneath it, but because of the prominence of the E–F \sharp motive in this song, it seems misguided to dismiss this note as a mere escape tone. One could

¹⁸See also Rothstein 1989, Chapter 3, for a discussion of phrase expansion in tonal music.

Example 6.35: Tom Petty and the Heartbreakers, “American Girl.”

instead consider this $F\sharp$ to be the primary tone $\hat{3}$, rhythmically displaced from its supporting tonic harmony. This would be an example of a hierarchy divorce (see Chapter 3), in which the melody is consonant with the prolonged tonic harmony but not with the foreground chords. The E that precedes this $F\sharp$, although it is consonant with the foreground harmony, actually functions as a middleground passing tone within the initial ascent $D-E-F\sharp$; see the voice-leading graph in Example 6.35. The chorus then begins by inverting the $E-F\sharp$ motive to $F\sharp-E$, bringing the fundamental line down to $\hat{2}$. This $\hat{2}$ occurs over the pre-dominant IV chord, so technically it is unsupported. However, it is so common for $\hat{2}$ to occur over a IV chord in rock music that this does not sound out of place, as discussed in Chapter 3 in reference to the syntax divorce. As mentioned, the chorus contains the same chord progression as the choruses of “I Want to Hold Your Hand,” “Brown Eyed Girl,” and “Have You Ever Seen the Rain,” with the same prolongational interpretation, shown in Example 6.35. In the upper voice, the $E-F\sharp$ motive from the verse appears in several guises, shown with brackets in Example 6.35; furthermore, the overall upper-voice motion in the chorus is the neighboring figure $E-F\sharp-E$, which rises back up to $F\sharp$ over the dominant V chord before falling to D to



Example 6.36: The grand neighbor IV chord is derived from the twelve-bar blues progression.

complete the fundamental line. Interestingly, despite the prominence of $F\sharp$ in the melody, it is never supported by a structural tonic harmony.

THE GRAND NEIGHBOR CHORD

Often, the chorus section of a verse–chorus song will begin on a IV chord, but this IV chord will subsequently return to the tonic and thus act as a neighboring harmony rather than the syntactical pre-dominant. This situation is more akin to continuous verse–chorus than sectional verse–chorus form, even though the chorus does not begin with a move to the syntactical pre-dominant, because the rhetorical emphasis on the *grand neighbor* IV chord gives the beginning of the chorus a medial rather than an initiating formal function (see Caplin 1998). Furthermore, this pattern derives from Model 3 of **srdc**, in which the **d** phrase begins on a neighboring chord and returns to tonic before proceeding to PD–D–T (see Chapter 4). The grand neighbor chord is almost always IV, demonstrating this pattern’s roots in blues progressions: the second phrase of a typical twelve-bar blues begins on a hypermetrically accented IV chord that subsequently returns to tonic (see Example 6.36).¹⁹

Elvis Presley’s 1957 single “Jailhouse Rock” (composed by Jerry Lieber and Mike Stoller)

¹⁹Minor-mode songs occasionally begin the chorus with a neighboring (b)VII chord rather than IV; an example is Bob Seger’s “Turn the Page” (1973).

Verse

♩ = 164

War-den threw a par-ty in the coun-ty jail, the pri-son band was there and they be-gan to wail. The band was jum-pin' and the joint be-

Chorus

gan to swing, you should have heard them knocked out jail-birds sing! Let's rock. E-v'ry-bo - dy let's

rock. E-very - bo-dy in the whole cell block was dan - cing to the jail-house rock.

Example 6.37: Elvis Presley, “Jailhouse Rock” (1957): a continuous verse–chorus form derived from the twelve-bar blues progression in which the chorus begins with a grand neighbor IV chord.

demonstrates this relationship (see Example 6.37): the first four measures of the blues progression are extended to eight measures, creating a sixteen-bar blues progression. These sixteen measures divide into a verse and chorus, each eight measures long, with the chorus beginning on the grand neighbor IV chord. Because the entire verse–chorus cycle expresses a single blues progression, the two sections are not self-contained, and so this song is best considered an example of continuous rather than sectional verse–chorus form. Although Covach 2005 analyzes these sixteen measures as a single verse rather than a verse plus a chorus (68–69), Doll 2011a argues convincingly that the textural shift from stop time to a standard rock-shuffle beat and the lyric “let’s rock” demarcate the two halves as distinct sections.

The Eagles’ soft country-rock song “Peaceful Easy Feeling,” from their 1972 eponymous debut album, gives an example of the use of the grand neighbor chord in a non-blues setting. Example 6.38 transcribes the first verse–chorus cycle of this song. The verse consists of

Verse

♩ = 144

8 I like the way — your spark-ling ear — rings lay a-gainst your skin — so brown.

7 And I wan-na sleep with you in the de - sert to - night — with a bil-lion

Chorus

14 stars all a - round. — 'Cause I got a peace - ful — ea - sy fee - ling and I know you won't

22 — let me down, — 'cause I'm al - rea-dy stan - ding on the ground. — 2

Example 6.38: The Eagles, “Peaceful Easy Feeling” (1972): the chorus begins with a grand neighbor IV chord.

two eight-measure antecedent phrases (both end identically on a V chord, so this is not a parallel period) containing several hypermetrically weak IV chords, which function either as neighboring chords to the tonic (in measures 2, 4, 10, and 12) or as pre-dominant chords leading to half cadences (in measures 6 and 14). The harmonic rhythm slows from one chord per measure to one chord every two measures in the chorus, which begins on a hypermetrically *strong* IV chord that resolves back to tonic (measures 17–20). This is the grand neighbor chord, and it marks this moment as the beginning of the chorus, accompanying the title lyric as well as the melodic climax on C♯. The chorus, like the verse, divides into two eight-measure phrases; the first (measures 17–24) ends in a half cadence on V and the second (measures 25–32) ends with a V–I PAC, the first of the song.²⁰ Example 6.39 graphs this

²⁰This PAC arrives on the downbeat of the fifth measure of this eight-measure phrase, making it hypermetrically accented (as is common for a chorus-ending cadence as discussed above) but also making this eight-measure phrase feel like it is much shorter than the others.

The image shows a musical score for the Eagles' "Peaceful Easy Feeling." It features a grand staff with treble and bass clefs. The key signature is three sharps (F#, C#, G#). The score is divided into a "verse" and a "chorus" section. Above the treble clef, a scale diagram shows the notes 5̂, 6̂, 5̂, 4̂, 3̂, 2̂, 1̂. The verse section is marked with a double bar line and a repeat sign. The chorus section begins with a grand neighbor chord (IV) and is marked with a double bar line and a repeat sign. The chord progression for the chorus is I, IV, I, IV(7), V, I. A note in the chorus is marked "6̂ subs. for 7̂".

Example 6.39: The Eagles, “Peaceful Easy Feeling,” graph of verse–chorus cycle showing the grand neighbor chord as a background feature.

The image shows a transcription of the chorus of "Crazy Love" by The Allman Brothers. The tempo is marked as ♩ = 156. The key signature is one flat (F major). The chorus begins with the chord F7. The lyrics are: "Cra - zy love, cra - zy love. love you, ma - ma, but you're too bad to change." The chord progression for the chorus is C7, G7, C7, I. The score is in 4/4 time and features a mix of eighth and sixteenth notes.

Example 6.40: The Allman Brothers, “Crazy Love” (1979), transcription of the chorus.

verse–chorus cycle, showing the grand neighbor IV chord as a background feature by virtue of its privileged position within the form.

When a chorus begins with a IV chord, it is sometimes unclear whether this is a grand neighbor chord or the syntactical pre-dominant, especially if the chord lasts for several measures. For example, the chorus of the Allman Brothers’ “Crazy Love,” from their 1979 post-reunion album *Enlightened Rogues*, begins with four measures of IV, followed by I–V–I (see the transcription in Example 6.40). At first glance, this IV chord seems to function

a) $\hat{3}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$ b) $\hat{3}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$

verse chorus verse chorus

I IV I V I I IV [I] V I

Example 6.41: The IV chord in the chorus of “Crazy Love” can be interpreted either as a grand neighbor chord returning to tonic (a) or as the syntactical pre-dominant (b).

as a grand neighbor chord, especially given this song’s strong blues influence. However, the return to tonic in measure 5 is fleeting, lasting only one measure compared to the IV chord’s four measures, and it leads immediately to the V–I cadence. It is possible to consider the I chord in measure 5 *not* to be a true return to tonic but as an example of the “cadential I,” a root-position tonic chord that functions as an inverted cadential six-four, as discussed in Chapter 2. The I–V–I–I progression in the last four bars of this chorus (measures 5–9) recalls similar progressions in the Beatles’ “I Saw Her Standing There” and “From Me to You,” both of which contain the cadential I (see Example 4.12, page 135, and Nobile 2011, Examples 7 and 8). Both interpretations are shown in Example 6.41. I prefer the interpretation that includes the cadential I, as shown in Example 6.41b, but both readings are valid.

CONCLUSION

The discussion in the last two chapters has I hope made the case that there is no single “verse–chorus” form, but instead that the various voice-leading structures of songs based on the verse–chorus paradigm give rise to several different harmonic-melodic layouts.

I have identified three such layouts that are particularly common in canonical pop and rock music, namely verse–prechorus–chorus, sectional verse–chorus, and continuous verse–chorus forms. Though the thematic profiles of all three are based on the contrast between verse and chorus sections, the ways in which these sections align with the overall harmonic and melodic structure is entirely different among them. It is therefore an oversimplification to label them all as simply “verse–chorus”; despite their similar thematic groupings, these forms differ at a fundamental level. Verse–prechorus–chorus sets itself apart from the other two by containing an entirely different teleology, affecting the structure of all sections involved. In these songs, the structural goal occurs at the beginning of the chorus such that the chorus acts as a *telos* theme (Hepokoski 1993). These choruses generally involve harmonic and melodic stasis, simply prolonging the final arrival point of the functional circuit rather than leading to a cadence or other structural goal. Sectional and continuous verse–chorus songs, on the other hand, place their structural goal at the *end* of the chorus. Yet the chorus sections of these two forms are not the same; choruses in sectional forms cohere as independent sections, containing a complete functional circuit and melodic structure, while choruses in continuous forms begin in the middle with the syntactical pre-dominant, continuing a process begun in the verse rather than starting anew. The mere presence of verse and chorus sections provides only a superficial link among these three forms; their differing voice-leading structures ensure that they are three fundamentally distinct forms.

This can be considered a main contention of this dissertation as a whole: form in pop and rock music is created as much by voice leading structure as by thematic relationships, instrumentation, lyrics, etc. Yet the influence runs both ways; as we saw in detail in Chapter 2,

formal structure defines the three main syntactical harmonic functions—tonic, pre-dominant, and dominant. The result is an intertwining of these various musical domains so that no single element emerges as conceptually prior to the others. Charles Smith has argued for the mutual influence of formal and voice-leading structures in common-practice music; Smith writes,

In selecting a background configuration for a passage, we should be at least as sensitive to formal shape as we are to contrapuntal configuration; the ideal procedure is to begin with formal instincts, to design structural paradigms so as to represent them as clearly as possible, and then to reconsider the formal pictures on the basis of what we learn from putting together background structures. (Smith 1996, 241)

If we begin to consider melody, harmony, and form not as three separable aspects of music but as a single complex in which all elements are interdependent, we will find that we arrive at more insightful analyses and a deeper understanding of the inner workings of musical structure. Especially in pop and rock music—with its free treatment of counterpoint, frequent avoidance of the I–V axis as tonal determinant, and considerable use of non-goal-oriented chord progressions such as chord rotations—we must be wary of discussions of harmonic or melodic structure that do not take into account form, and vice versa. It is my hope that the theories and analyses presented in these pages will provide the methodological groundwork for future studies involving a holistic view of musical structure. In particular, studies that extend this methodology beyond the classic rock canon (as much as one can be defined) promise to reveal interesting stylistic features of various other genres. I believe that the structural approach undertaken here is not limited to pop and rock music, but that its application to the analysis of common-practice tonal music and other repertoires will prove equally rewarding.

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