

*The*  
**Bobtail  
Method**  
*for Composing Unique Pop Melodies*



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This book is dedicated to my family and friends,  
and to the memory of my grandfather,  
Hungchi Huang (1924-2007)

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## PREFACE

I had just returned home from college for the winter break and was riding in the car with my mother when I turned on the radio and tuned to the local alternative rock station. The song playing was some guy singing in a monotone, “Mouth... mouth...” over and over. My mother stopped conversing to listen intently to the music. Finally she turned to me and said, “Don’t you ever write crap like this!”

This was when I first realized just how important it is for me to make art that would have my parents’ approval, and for better or worse, I have no better story to offer in explanation of my band’s unwavering commitment to accessible pop melodies, even as our experimental tendencies have led us to work with Shepard tones or write lyrics in doublespeaker rhyme. A child of hard-working immigrants who struggled and sacrificed all their lives to raise him in this land of opportunity does not then blithely dismiss their expectations with a canon of atonal dissonances and lengthy two-chord droners. But I never felt creatively compromised, because I always recognized that exploring the boundaries of pop friendliness can be a lifelong challenge in its own right.

So without any formal training in music theory, I set about trying to understand what constitutes an interesting and original pop melody by studying the music of Chopin, Tchaikovsky, Hoagy Carmichael, Tom Jobim, The Beatles, The Kinks, Nirvana... even bands that held no cred with anyone else I knew, like Stone Temple Pilots. If the melodies were objectively good, I listened. And as the years went by, my understanding of the interactive relationship between melodies and chord progressions continued to grow.

A year ago, I made the decision to go back to school and earn a master’s degree in music composition, which meant taking two years of prerequisite undergraduate courses. However, with the limitless time and energy now afforded me by my newfound sobriety, I was able to test out in one year.

During that time, I began to analyze my songwriting approach using the concrete terms and concepts I was finally acquiring from my belated studies, and decided to write it down as a springboard for an innovative musical form I am currently developing called amnesticism.

At some point along the way, it occurred to me that I was laying down practical wisdom that would have proven immensely useful to me in the early stages of my songwriting development, and that some budding young musician out there might appreciate having it available as a handy resource today. After all, I know firsthand how difficult it is to find effective instructional guidance in the art of songwriting. Music theory textbooks tend to emphasize analysis over creative application and focus mostly on classical genres of music, while how-to guides geared towards amateurs are always so devoid of technical information that they're useless for writing anything beyond disposable Top 40 contenders.

By contrast, Bobtail method is based on the strict standards I have established for my own music, and contains only pure, practical information for creative purposes. For beginners, it represents the best of all possible worlds: a lesson plan that immediately allows them to apply effective songwriting techniques, even when those techniques are rooted in theoretical concepts that they may not yet grasp. And for more experienced songwriters, it can provide supplemental tips and advice, while helping to reveal gaps in their musical understanding. Either way, Bobtail method is certainly open-ended enough to accommodate any personal creative approach, and it is my hope that it will spur within the reader a passion to continue exploring the amazingly rich and diverse world of musical knowledge.

On a final note, some of the examples used in this book are musical excerpts taken from two officially unreleased Bobtail Yearlings album titles. For those who are curious, I'll offer a brief explanation. In 2006, we put out a double album entitled *Yearling's Bobtail*, which was rejected by all the indie labels and ignored by the press. Consequently, it proved to be a

total failure. Then last year a fellow from some artist management company convinced us to split it into two single albums, under the new album title *For Scapegirls and Tetherboys I and II*, and release each one separately. We released the first single album and it was an even more spectacular failure, so we never bothered to release the second one. I won't get into the reasons why I hate the new title so much, but if we ever get a chance to have the album properly released, it will be two single albums under the original title: *Yearling's Bobtail I and II*. In the meantime, we are working on our next album, tentatively entitled *Rosalind Franklin and the Pepper's Ghost*, which will be released sometime in 2009.

# INTRODUCTION

It is a widespread notion that creativity comes from being blessed with a constantly flowing stream of insight over which the artist exercises little control, and enjoys primarily as the result of good fortune. According to this view, all creative work must come to a halt once the valve is shut off, and the only recourse for escaping the ensuing writer's block is to wait for it to reopen, allowing the stream to resume.

Sudden bursts of insight should certainly be welcomed as the precious gems that they are, but in actuality, a strong work ethic is the only resource needed to keep the creative process running along at a steady pace. The creation of any artistic work simply involves dismantling the challenge and systematically reducing it into multiple smaller tasks that are readily tackled and solved, one at a time. The process may be time-consuming, but is never unmanageable. This is the general philosophy behind Bobtail method.

## USEFUL TERMS

The title on the cover of this book reflects the popular notion of melody as some abstract combination of various musical elements. However, for the remainder of this book we shall use definitions more specific to musicians. The term **melody** shall refer specifically to a sequence of single notes of definite pitch and duration over time—in other words, what one voice can sing unaccompanied. The term **harmony** shall refer to the effect created by the simultaneous sounding of various pitches. It refers not just to the tones that make up a single chord, but also to how those tones interact with each note in the melody above it. It is helpful to visualize melody as progressing along the horizontal axis, and harmony as a value occurring along the vertical axis. A sequence of chords of any length is a **harmonic progression**.

## BOBTAIL METHOD

Bobtail method is a systematic approach for writing music that places the utmost importance on having a symbiotic and equal



partnership between melody and harmony. Bobtail method does not discourage the postminimalist tendency of many contemporary musicians to treat melody and harmony as layers of sound that are created in succession and placed one over another. After all, the most successful artists are those who can successfully navigate contradictory creative ideals to their own advantage. However, before the student can treat Bobtail method as one more songwriting tool at her disposal, she must first learn to use it correctly and effectively. Thus, while doing so, she is asked to prioritize those principles which constitute its foundation.

The goal of Bobtail method is to help the student develop the skills needed to write music at a consistent and reliable pace, while simultaneously building up a collection of musical ideas for her to draw from and work with. This in turn will give her the confidence to spread those ideas liberally throughout a single artistic work. After all, it is not a single melodic phrase which makes a song unique, but rather the diversity and arrangement of its ideas in totality. (Though modern copyright infringement laws try to tell us otherwise!)

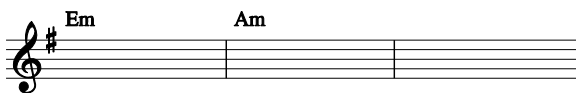
## BARLINE PAIRS

It is instinctive to treat a harmonic progression as a mere sequence of chords. However, this kind of thinking can easily lead to music that feels more like random collections of still snapshots: sometimes pretty, other times nonsensical, but generally motionless at its core. In order to write songs that live and breathe, the student must learn to recognize that a harmonic progression is actually a series of interconnected chords and chord changes. This is accomplished with the barline pair, a creative exercise unique to Bobtail method.

Conventionally, a **barline** refers to the physical line separating two bars in music notation. Because barline pairs proceed at the rate of one chord per bar, we may also think of a barline as the actual chord change itself between the two chords surrounding it. This visual representation subtly reinforces the idea in the student's mind that a chord change is

a distinct entity, one that contributes a particular character and mood of its own to the overall musical fabric.

While a single musical work may consist of multiple barline pairs, the barline pair in turn comprises several small-scale tasks, making it naturally situated to be the central focus of Bobtail method. It is exactly what its name implies: two barlines, signifying a harmonic progression of three bars, with one chord per bar. It begins with the chords for two successive bars predetermined, while the last bar remains chordless.



A melody is constructed over the two chorded bars and extended into the chordless bar. A chord is then chosen for this bar, based on how well it supports the melody above while contributing to the overall harmonic progression.



The concept is simple, yet effective. While one barline represents a predetermined harmonic change, the other is chosen based on melodic considerations. Thus, contained within each barline pair is the means to ensure that melody and harmony serve as equal partners, with neither one subordinate to the other, leading to a seamless musical work whose manner of creation is more difficult for the ear to deconstruct.

## RECOMMENDED PROCEDURE

It is recommended that the student work with a keyboard, which provides the most comprehensible visual layout. Of course, any other instrument that can sound out a harmonic progression, such as a guitar, is also perfectly acceptable. The student is also advised not to rely on the voice alone to create and shape an interesting melody. Every musical idea should first be deliberated mentally or visually, after which the voice, along with the ear, can then serve as the final judge.

Blank barline pairs can be photocopied from pages 94 and 95 in this book, or printed from the Method page of the Bobtail Yearlings website ([www.bobtailyearlings.com](http://www.bobtailyearlings.com)). These barline pairs contain an extra staff at the bottom, to be used by the student as a workspace or to note alternate choices. (The examples shown in this book do not include the bottom staff.)

## **BASIC SKILLS**

Bobtail method is designed to be accessible to beginning songwriters who are not grounded in traditional Western music theory. However, for the sake of communicating ideas clearly and effectively, it is unavoidable to expect the student to be able to read simple music notation, such as note placement in treble clef, note duration values, and key signatures and accidentals. She would also be well served to understand some basic musical concepts, such as scales (major and natural minor) and pitch intervals (generic and specific). An Internet search of “music theory” will turn up several useful websites to help the beginning student get started.

Additionally, it should be understood that Bobtail method focuses solely on the interaction between melody and harmony, and does not delve into rhythm, song structure, or musical styles and genres.

The student should always remember that creativity is a path of self-discovery, for originality cannot be taught by a paint-by-numbers approach, only guided and encouraged. Thus, the effectiveness of Bobtail method depends heavily upon the student’s own initiative, which might lead her to feel lost or overwhelmed as the material grows increasingly complex. In such situations, she is gently reminded that any seemingly daunting challenge can always be broken down into multiple smaller, more manageable tasks. Therefore, her best course of action is to relax her pace and concentrate her focus on mastering more basic material.

Bobtail method can only help illuminate the pathway. Any credit for the work and effort expended belongs solely to the student. Now let us begin!

## CHAPTER ONE: MELODIC CHARACTERISTICS

In this chapter, we will learn the basic concepts needed to start creating barline pairs. We will also begin by working with the first category of barlines: those between closely related chords.

### USEFUL TERMS

If we sing the scale “do, re, mi, fa, so, la, ti, do,” then we are in the key of “do” major and “la” minor. A major chord and minor chord that share the same key are called **relative chords**. For example, C major and A minor are relative chords. Any other chord is said to be **diatonic** to that key if the three tones that make up the chord’s triad all belong in the scale of that key.

Thus, D minor is diatonic to the key of C major, because if “do” is C, then the D minor triad is “re, fa, la.” The reverse will also always hold true. C major is diatonic to the key of D minor because if “la” is D, then the C major triad is “so, ti, re.”

In any key, there are six diatonic major and minor chords, constituting three pairs of relative triads. In the key of C major, those relative triads are C major and A minor, G major and E minor, and F major and D minor.

### BARLINE PAIRS

There are twenty-four major and minor chords total. Thus, any major chord can progress into twenty-three other chords. The same is true for any minor chord, which gives us a total of forty-six possible barlines. Bobtail method classifies each barline into one of five categories, based on the relative complexity of its chord change. In time, the student will develop a thorough familiarity and ease working with all the barlines from every category.

### CLOSELY RELATED CHORDS

We will begin with barlines between closely related chords. When two chords are closely related, they are diatonic in

several keys, including their own. Thus, closely related chords represent a good starting point for us because they offer several intuitive possibilities. The first set of barlines in this category involves those between relative triads.

CR-I: C major to A minor

CR-i: A minor to C major

The rest of the barlines between closely related chords are:

CR-II: C major to G major

CR-ii: A minor to D minor

CR-III: C major to F major

CR-iii: A minor to E minor

CR-IV: C major to E minor

CR-iv: A minor to F major

CR-V: C major to D minor

CR-v: A minor to G major

A capitalized Roman numeral means that the first chord is major, while a lower-case one identifies it as minor.

Note that we label C major or A minor as the first chord in each barline simply for the sake of clarity. Since a barline represents a particular type of chord change, it is intuitively understood that it can be transposed to any key. Thus, G major to A minor is considered the same barline as C major to D minor. The student is encouraged to work in a different key for each barline pair, as this habit will prove useful in later chapters when our harmonic progressions will not always fit within a single key signature.

**Example 1.1:** Assorted barline pairs of closely related chords.

a) E minor to C major (CR-iv).



b) G minor to D minor (CR-iii).



c) A major to B minor (CR-V). "Didi," Yearling's Bobtail I.



d) C major to E minor (CR-IV).



## FUNDAMENTAL MELODIC CHARACTERISTICS

### USEFUL TERMS

When describing a melody by its physical characteristics, it is sometimes preferable to think of the distance between its pitches in very general terms. Thus, we shall use the term **step** to refer to a whole step or a half step (C to D, E to F). A **skip** is any third or fourth between two consecutive triad tones (C to E, G to C), and a **leap** can be as narrow as a fourth, but is usually a fifth or greater (C to G, D to B). The span of pitches between the highest pitch of a melody and the lowest is called its **pitch range**. A general area within that pitch range is called a **register**.

### POINTS OF EMPHASIS

Before we begin, it is important to recognize what constitutes a point of emphasis in a melody. Let us play the following melody with harmonic accompaniment, counting each triplet as one beat.

*Example 1.2: B minor to E minor (CR-ii).*



The student may notice that some notes carry a greater impact than others in shaping the character and feel of this melody. For example, the rhythmic flow compels us to hear an accent on the first note of each beat, while the first note of each bar draws even more attention since it also introduces each new chord statement. This is especially true in the first bar, which introduces the entire melody. Looking elsewhere, we see that our ears naturally linger on the quarter notes, simply because they are of longer duration. And since a longer note is also a period of less dynamic activity, it can feel like a

rest. Thus, the note immediately following a longer note also receives some emphasis, since it seems to pick up the melody again.

That takes care of rhythmic contexts. What about those related to pitch? We notice that when we approach a note by skip or by leap, it has a more lasting impact because it is the first note within a new register of the pitch range. In a similar way, the top note of a peak, the apex, and to a lesser extent the bottom note of a valley, the nadir, also linger in our minds by momentarily presenting themselves as the outer limit of the pitch range.

All of these are called points of emphasis. Crafting a unique, engaging melody involves carefully choosing which notes to place at points of emphasis. There is no definitive rule for measuring the prominence of one point of emphasis relative to another. If the student should ever feel the need to make such a distinction, she is advised to trust her ear as the final judge.

### GUIDELINES

A melody's points of emphasis are:

- the first note of the melody, and of each bar and each beat
- any note of longer duration, and the note immediately following
- any note that follows a skip or a leap
- an apex or nadir

### CONTOUR AND VARIETY

Let us compare the melody in Example 1.2 with the one in the following example.

**Example 1.3:** *Bb major to D minor (CR-IV). "Grasshoppers Lie Heavy," Yearling's Bobtail I.*



What makes the melody in the first barline pair so much more interesting than the one in the second? Let us examine the first

example as an illustration of the general characteristics of an interesting melody, while keeping in mind that these are merely guidelines and not strict rules.

First, we notice that the first melody avoids being a static line by having a well-balanced distribution of different pitch intervals. In general, a melody sounds more natural and unforced when it proceeds mostly by steps and skips. Leaps help lend an air of spontaneity and excitement, but should be used sparingly. Similarly, we notice that the melody incorporates a variety of pitches across a wide pitch range. Even as it wanders, however, it does not do so aimlessly. Instead, it will settle into different registers here and there, staying focused on each one long enough for us to feel a satisfactory sense of completion within that segment of the pitch range before moving on. We also notice that notes of longer duration are scattered throughout to lend variety to the rhythmic pace.

As the melody progresses, it changes direction in several places. However, we notice that it does so at unevenly spaced intervals, presenting an asymmetrical set of peaks and valleys that keeps the melody unpredictable. The student might also wish to ensure that no two apexes fall on the same pitch, if possible, and that one of those apexes, called the climax, is higher than all others. This conveys a feeling of forward momentum, with a fluid pitch range that continually expands and recedes. A similar rule might also be suggested for each nadir, although the effect is much less noticeable.

All of these characteristics will help a melody stay lively and dynamic, thus keeping the listener's ear engaged. Naturally, there will always be interesting melodies that blatantly violate these suggested guidelines. The student may find it useful to examine the barline pairs used as examples throughout this book to get a better idea of the myriad possibilities for an effective melodic contour. As always, she is advised to trust her ear as the final judge.



## GUIDELINES

As a general rule, an interesting melodic contour should include the following:

- a variety of pitch intervals, with mostly steps and skips, and occasional leaps
- a variety of note pitches
- a wide pitch range
- a variety of registers, with a focus on each one for a certain duration of time
- a fair distribution of notes of longer duration
- unevenly distributed changes in direction
- a variety of apexes and nadirs, with one climax

## USEFUL TERMS

The term **pitch** refers to a specific sound frequency, and is specified by a letter and sometimes an accidental (C, F $\sharp$ , B $\flat$ ). A chord will always be identified by the pitch of its root (the first tone) plus its chord quality (C major, F $\sharp$  minor, B $\flat$  diminished). A **note** is any specific instance of a pitch sounded in a melody—in other words, a notehead attached to a stem. The term **tone** refers to the function of a given pitch relative to some chord, and is specified by an ordinal number and sometimes quality (root, third, minor second, diminished seventh). A chord's **triad** consists of its root, third and fifth tones.

## TRIAD AND NONTRIAD TONES

Let us sing the following melody, without harmonic accompaniment.

*Example 1.4: A minor to C major (CR-i). "Ash Wednesday," Yearling's Bobtail I.*



Even without sounding out the chords, the student may feel that she has a good general idea of the underlying harmonic progression, to the point of being able to hear it in her head. Let us sing or play the melody again, this time accompanied by

the chords, to confirm our intuition.

When we hear a single pitch unaccompanied, our ear will naturally try to place it within a logical harmonic context by imagining it as the tone of some chord. Each subsequent pitch we hear then gradually fills in the missing information in our head, either further confirming or else clouding our preconceptions about the underlying harmony. This is why when a melody contains only triad tones at all its points of emphasis, as in this example, our expectations are never challenged. There is little push or pull between the melody and the harmony, as each fits the other perfectly. The result can be pleasantly harmonious, but also unimaginative and dull.

By contrast, an interesting melody constantly plays with our expectations by strategically positioning a variety of nontriad tones at certain points of emphasis. When our ear hears a melodic note that does not belong to the chord beneath it, we sense a momentary tension, and feel the need for resolution. Either the melody will resolve to meet the harmony, or vice versa. They may also meet halfway, or perhaps they will continue to diverge, thus prolonging the tension. Like a roller coaster that drops us in a sudden free fall only to unexpectedly scoop us back up again, an interesting melody feels exciting because we never know whether our expectations will be thwarted or rewarded. That uncertainty is what keeps us engaged.

**Example 1.5:** *A major to E major (CR-II). "Pchelka's Starry Journey," Yearling's Bobtail I.*



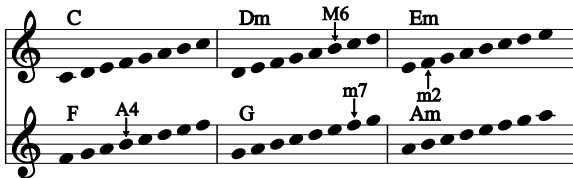
Several notes, including the first note of each bar, are nontriad tones. Notice that while D# is a nontriad tone in both A major and E major, it carries a different tonal function relative to each. (The last chord, C major, is actually not diatonic to the given key of E major. It is a mixture chord, which we will cover in Chapter 3.)

# USEFUL TERMS

The generic nontriad tones of a chord are the second, fourth, sixth and seventh tones. We can also specify the tonal quality. That is, when a tonal second or sixth is a whole step above the root or tonal fifth, respectively, we call it a **major second** or **major sixth**. If it is only a half step above, we call it a **minor second** or **minor sixth**. A tonal seventh is a **major seventh** when it is a half step below the root, and a **minor seventh** when it is a whole step below. A tonal fourth is a **perfect fourth** when it is a whole step below the tonal fifth. When it is a half step below, it is called an augmented fourth, or **tritone**.

Within a diatonic context, a major chord and a minor chord in its own key will both have major second and perfect fourth tones. By contrast, while the sixth and seventh tones take on a major quality in the major chord, they are minor in the relative minor chord. Figure 1.1, which is in the key of C major and A minor, shows that this is indeed the case for those two chords. But what about the other chords shown that are also diatonic to this key?

*Figure 1.1: Scales of diatonic chords.*



When we sing the scale in the D minor chord starting on “la,” we see that the B, which should be “fa,” actually sounds sharp. It is a tonal major sixth. In the F major chord, the relative major of D minor, the sharp “fa” makes B a tritone. Similarly, in the E minor chord, the F is a minor second tone, while in G major its tonal function is a minor seventh.

The student should always note the specific tonal quality of each nontriad tone in her barline pairs. The insight to be gained from this habit will prove useful when working with pitches that are not diatonic in the scale of the key signature. While we will cover this subject in later chapters, there might

be situations like the following example where the student will prefer to use a nondiatonic pitch now, for aesthetic reasons. As a general rule, the student is encouraged to always follow her artistic inclinations, trusting that the knowledge to adequately analyze such situations will eventually come at a later stage.

**Example 1.6:** *A minor to G major (CR-v).*



G major carries a minor seventh tone in the diatonic scale of A minor. However, the first note in this G major bar strongly feels like it should be a tonal major seventh instead, just like the first note in the F major bar.

The student should keep in mind that it is not the individual tones by themselves that shape the character and feel of the music, but rather the dynamic interaction between melody and harmony which continuously plays with the listener's subconscious expectations at any given moment. Thus, we should remember that while nontriad tones in the melody help add excitement to the listening experience by intermittently veering away from the harmony, triad tones give sense and meaning to those excursions by keeping the music anchored to a broader, stable framework. A melody without enough triad tones will feel just as tiresome as one with too many, as we can see in the following example.

**Example 1.7:** *F major to C major (CR-II).*



In the end, the student is reminded to evaluate her work according to her own personal judgment, and always remember that each note should be chosen deliberately.

## SAMPLE DEMONSTRATIONS

We have learned that an engaging melody consists of a contour with diverse features, resulting in an optimal distribution of

points of emphasis upon which a variety of triad and nontriad tones can be strategically placed. Yet, tones are determined by pitches, and it is the pitch intervals between notes that help shape the melodic contour in the first place. Where do we even begin, when all the defining elements of an interesting melody are so heavily interconnected?

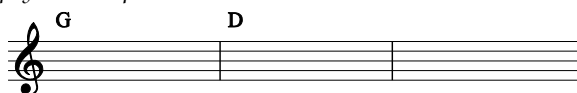
Like a sketch artist who starts each illustration with simple geometric shapes and patterns, we can begin by first shaping a general triadic outline, then gradually revising and refining it into something elegant while remembering the basic concepts and guidelines explained in this chapter. Let us watch this performed in action by proceeding step by step through the following demonstration.

## DEMONSTRATION ONE

We begin with a barline pair of G major to D major, electing to place the two known chords over the first barline.

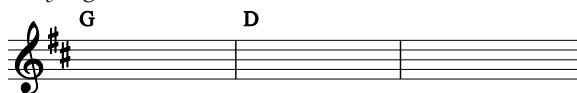
**Example 1.8:** *G major to D major (CR-II). "Tobacco Mosaic Virus," Rosalind Franklin and the Pepper's Ghost.*

a) Empty barline pair.



Now we must choose a key signature. We repeatedly play through these two chords and sound out possible melodies, while occasionally sweeping through a wide pitch range by stepwise motion. This gives us an idea of which pitches feel natural in this scale. While certain pitches are obvious, the choice between C and C# feels arbitrary. We pick C#, which means our barline pair will be in the key of D major.

b) With key signature.



We now begin to fill out a melody over the chorded bars.

Let us limit ourselves to using triad tones for the time being, such that we may direct our focus towards creating a suitable basic structure. We settle on a triadic melody that incorporates a variety of note pitches and note durations, a wide pitch range, and a couple of unevenly spaced changes in direction.

*c) Rough melody over chorded bars.*



Because the next barline is to be determined by the melody, we now extend the melodic contour into the chordless bar in an aesthetically logical fashion. This can be accomplished with a stepwise descent from the D to a C#. We then cautiously fill out the chordless bar with a few more uneven changes in direction, while staying within a triadic framework.

*d) Rough melody completed.*



Now we must choose the chord that best completes the harmonic progression while complementing the melody above. We play through the barline pair several times, each time trying out a different diatonic chord for the last bar. Some of these possible options sound rather adventurous, which may suit us at a later stage. But for now, we decide that A major sounds the most natural and provides the best fit.

*e) Chord chosen for chordless bar.*



Now that the general melodic structure is complete and the last chord has been chosen, let us begin making some revisions, proceeding one at a time. First, there should be more stepwise motion. This can easily be done by filling in the

spaces between some skips. We insert a C $\sharp$  eighth note between B and D in the G major bar, thus shifting greater focus towards that register. We also place a B between A and the second C $\sharp$  in the A major bar, giving it a quarter note length to emphasize its function as a major second tone.

*f) More stepwise pitch intervals.*



We notice that a D note is repeated across the barline from G major to D major. The extra time spent on this pitch feels extraneous, especially since it does not fulfill a nontriad tonal function in either bar. We decide a good alternative would be to replace the D with a C $\sharp$  in the D major bar. As a quarter note placed at the start of a bar, its major seventh tonal function receives a heavy amount of emphasis, which is satisfyingly resolved when the C $\sharp$  is restated in A as a triad tone.

*g) Triad tone modified to nontriad tone.*



We move on to our next problem. Our two highest apexes both fall on the same D pitch, so neither one serves as a unique climax. Unfortunately, we can't really change either note without creating new issues to resolve. However, we can shift the location of the second apex by placing an E eighth note before the D. This is a terrific solution, for not only does it give us a single climax on a nontriad tone, with no two apexes falling on the same pitch, but it also creates a new and unexpected change in direction.

*h) Climax created.*



Our melody now follows the suggested guidelines for contour, variety, and tonal context, but we may continue to make alterations for purely artistic purposes. For example, we notice that the pitch range of the melody seems to be expanding outward as it progresses, so we continue that trend by squeezing in a low E between C# and A in the A major bar, which gives us a new nadir, two more leaps, and another unexpected change in direction. Having made this final modification, we now decide we are happy with the present form as our final result.

*i) Final alteration.*



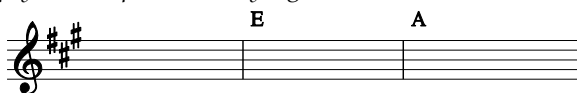
The last step is to make an analysis of the melodic contour and define the tonal function of each nontriad tone. This is left as an exercise for the student to complete, as described at the end of this chapter.

## DEMONSTRATION TWO

As we have just seen, starting with a triadic framework is a reliable creative approach which we can always revert to whenever desired. But the student probably also recognizes that it isn't necessary to proceed in such a methodical, step-by-step manner every time. Let us work through one more demonstration, this time proceeding in a more fluid manner, while starting with nontriad tones already present within the general framework. We begin with a barline pair going from E major to A major across the second barline, and determine the key signature to be A major.

**Example 1.9:** *E major to A major (CR-III).*

*a) Empty barline pair with key signature.*





Our next task is to construct an interesting melodic contour over the chorded bars. We decide to proceed cautiously for now by staying close to a triadic framework, using nontriad tones mostly to fill in space and create stepwise motion. However, there is one nontriad tone deliberately placed at a point of emphasis: a B quarter note at the start of the A major bar, where it functions as a tonal major second.

*b) Rough melody over chorded bars.*



We now extend the melody across the first barline. A stepwise ascent from an F# in the chordless bar to the G# in the E major bar would create a smooth chord change while introducing F# as a new pitch. Without fully knowing the harmonic underpinning of this first bar, we then cautiously fill out the rest of the melody above it, settling for a stepwise descending line starting at C#, while maintaining the same rhythmic pattern found in the other two bars.

*c) Rough melody completed.*



The next task is to complete this harmonic progression by choosing a diatonic chord. While F# minor represents the closest fit for the melody above, we decide to go with D major, thus opening the melody with the satisfying, forceful impact of a major seventh tone on the beginning C# quarter note.

*d) Chord chosen for chordless bar.*



Notice that by constantly seeking variety as we extended the melodic contour, and by choosing the final chord partly for the tonal context it created, we have greatly reduced the need

for any further modification to the melody! There seems to be only one issue that might require our attention: two apexes that fall on the same C# pitch. This is acceptable since neither one is the climax, which is safely located on another peak, the high E. Still, it would be preferable to have a greater variety of pitches at the apexes. Since we would sacrifice too much to change either C# note, we elect simply to add a new apex: a D eighth note at the start of the E major bar, where it functions as a tonal minor seventh. We also modify the preceding stepwise descent of three notes into an ascent by switching the F# and A notes, creating a peak that gradually rises to our new apex, making its appearance feel less sudden and more natural.

*e) New apex and rearrangement of notes.*



All that is left now is to make some final alterations according to personal taste. We decide to add a B eighth note to the start of the D major chord, giving the first beat in both D major and A major bars a similar feel. However, this shortens the beginning quarter note into an eighth note, making the rhythmic pace feel a bit rushed now. We solve this problem by eliminating the clumsy G# in the D major bar and extending the preceding F# into a full quarter note.

*f) Final alterations.*



As we make our final analysis, notice that our last alteration created the single repetition of a melodic pattern consisting of an ascending skip of a third followed by a leap of a fourth: first “F# to A to D,” followed by “G# to B to E.” (Because the restatement is offset from the start of the beat by an eighth note, the effect is not as immediately visible on paper as it is heard by the ear.) And as was already noted, the B

eighth note placed at the start of the melody helps tie the first beat of both the D major and A major bars together thematically. It is recurrent patterns such as these that keep a melody feeling internally consistent, making for a more rewarding listening experience. We will learn techniques for developing a melody in this fashion in the next chapter.

But now, let us make one final observation. The student may notice that we have completely changed certain features which were pivotal to our decision-making in the early stages. For example, the original stepwise ascent from F# to G# across the first barline helped us select the D major chord, yet it is nowhere to be found in the final result! This is a natural part of the creative process, and the student should remember not to get so attached to the importance of one particular feature that it clouds her judgment regarding what is best for the music as a whole. After all, we cannot admire our tower until we have dismantled the crane that helped erect it.

#### PROCEDURE

The general procedure for creating a barline pair, in no strict order, is as follows:

- place the two chords on any two consecutive bars
- determine the key signature
- create a rough melody in the chorded bars while considering guidelines for tone and contour
- extend the rough melody into the chordless bar
- determine a chord for the chordless bar
- modify the melody according to guidelines for tone and contour
- alter and embellish the melody according to artistic taste
- make an analysis of tone and contour for easy future reference

#### HELPFUL TIP

In the construction of individual barline pairs, the interaction between melody and harmony is the primary focus. Thus, while rhythmic pulse is not altogether discounted, it should not be a high priority. Bobtail method recommends writing in compound duple meter, with two beats per bar and three

eight notes per beat, totaling six eighth notes per bar. This is an optimal number for creating an interesting melodic contour that feels neither too sparse nor too crowded. It also provides greater flexibility for consolidating a fluid melodic pace when different barline pairs are assembled into a single musical work, which can then be converted to common time (four quarter notes per bar) all at once.

## EXERCISES

1. Examine each barline pair used as an example in this chapter, including the final result of both sample demonstrations. Label the tonal quality of each emphasized nontriad tone, and point out instances where the melodic contour conforms to suggested guidelines. What makes each barline pair work, in terms of the interaction between melody and harmony? How would you modify it to fit your own personal taste?
2. Construct a barline pair for each of the barlines between closely related chords listed below, following the suggested guidelines for tonal context and contour described in this chapter. Remember that barline pairs may be transposed to any key, with the original chords placed on any two consecutive bars.

CR-I: C major to A minor  
CR-II: C major to G major  
CR-III: C major to F major  
CR-IV: C major to E minor  
CR-V: C major to D minor

CR-i: A minor to C major  
CR-ii: A minor to D minor  
CR-iii: A minor to E minor  
CR-iv: A minor to F major  
CR-v: A minor to G major

## CHAPTER TWO: MELODIC DEVELOPMENT

In this chapter, we will learn to apply simple but effective techniques for developing a natural and thematically cohesive melody. We will also finish up all the possible barlines between two chords in the same key.

### BARLINE PAIRS

#### DISTANTLY RELATED CHORDS

Distantly related chords are two chords that are both diatonic in some key other than their own. For example, neither C major nor D major is diatonic in the key of the other, but they are both diatonic in the key of G major and E minor. Barlines between distantly related chords may be more limited in the choice of key signatures available, but otherwise pose no new conceptual difficulties. They are:

DR-I: C major to D major	DR-i: A minor to G minor
DR-II: C major to B $\flat$ major	DR-ii: A minor to B minor
DR-III: C major to B minor	DR-iii: A minor to B $\flat$ major
DR-IV: C major to G minor	DR-iv: A minor to D major

*Example 2.1: Assorted barline pairs of distantly related chords.*

a) B minor to C major (DR-iii).



b) A minor to G minor (DR-i).



c) G major to F major (DR-II).



d) E minor to A major (DR-iv). “Good Night, Sita,” Yearling’s Bobtail I.



## MELODIC DEVELOPMENT TECHNIQUES

### CHROMATIC EMBELLISHMENT

A **chromatic** pitch lies outside the diatonic scale of the indicated key (which means it is always marked in notation with an accidental), and is naturally a nontriad tone within every chord related to that key. However, unlike with diatonic nontriad tones, the ear finds it difficult to place a chromatic note in an immediate harmonic context, and will often hear it simply as an embellishing feature of the melodic contour instead. In this chapter, we will treat chromatic notes as melodic embellishments, and ignore any possible tonal context for the time being.

A chromatic note can help shape the melodic contour in one of two ways. It can behave like an extension of a neighboring note, usually separated by the interval of a half step. Indeed, it can be useful to treat the chromatic note and the note it embellishes as a single note of longer duration with a shifting pitch. The tonal context, if any, is mostly transitory.

**Example 2.2:** C minor to E $\flat$  major (CR-i). “Willy the Cocoa,” Yearling’s Bobtail I.



The B $\natural$  in the C minor bar seems to be easing the leap down from C to G into a more gradual descent, while extending the time spent in that register. Our ear may also hear the B $\natural$  as simply the previous note of C being drawn out and “bent” down by a half step.

A chromatic note can also fill in the space between two

notes that are separated by a whole step, thus creating two adjacent half steps, as demonstrated twice in the following example. The effect is similar to a pitch slide on an instrument, and in this case is almost absent of any tonal context.

*Example 2.3: C major to D minor (CR-V).*



## PITCH RESTATEMENT

Pitch restatement occurs when the pitch of a note in one bar is repeated within another bar. Since the new bar will have a different chord, the tonal function of the pitch will change with each restatement. Ideally, it should serve as a nontriad tone in at least one instance of expression. The following example demonstrates the different ways a pitch restatement may be articulated.

*Example 2.4: F major to C minor (DR-IV).*



The pitch of B $\flat$  is featured prominently in the F major bar, where it functions as a tonal minor seventh. It resolves to a triad tone in its restatement in the C minor bar. The C pitch has the opposite effect, starting off as a stable triad tone in the first two bars before diverging as a nontriad tone in its final restatement in the third bar. The minor seventh tone B $\flat$  in the C minor bar resolves to a triad tone in the B $\flat$  major bar, but since its restatement is not at a point of emphasis, the effect is less noticeable. Finally, the major second tone D in the C minor bar is not restated at all in the melody of the next bar. However, we do hear its restatement as a triad tone in the underlying harmony of B $\flat$  major. The effect in this case is especially subtle.

A pitch restatement can sound especially satisfying when the pitch functions as a nontriad tone in each instance of its expression. In this case, the restated pitch simply prolongs the

tension instead of giving us the resolution we expect to hear, as in the following example.

**Example 2.5:** *D major to G major (CR-III). "Grasshoppers Lie Heavy," Yearling's Bobtail I.*



The E in the G major bar is a major sixth tone. It does not resolve, but instead is restated as a tonal major seventh in the F major bar. (Note that F major is not diatonic to the key of D major.)

## PITCH SEQUENCE

A pitch sequence is a series of notes within a melody that follows a recognizable linear progression of pitches, oftentimes a stepwise ascent or descent. The notes may recur at regular rhythmic intervals, or at prominent points of emphasis such as the apexes. A pitch sequence can provide a large framework for the construction of a cohesive melody, with both tonal context and melodic contour playing a role in its utility.

**Example 2.6:** *Bb major to A minor (DR-III).*



An ascending pitch sequence occurs on the first note of each triplet, starting at C in the Bb major bar, passing through D, and arriving on E at the start of the A minor bar. The sequence pauses here for an extra beat, then continues on to F and G in the G minor bar.

## STATIC MOTIF

A **motif** is a brief, distinct melodic segment, which makes it an effective building block for organizing a melody into a unified structure. The concept of pitch restatement can also be applied to an entire motif. Like a restated pitch, a static motif retains the same pitches as it is repeated into another bar over a



different chord, where its tonal context is completely changed. Naturally, it may be modified to suit the student's artistic tastes.

**Example 2.7:** C major to G major (CR-II). "Constellations," Yearling's Bobtail II.



The entire melodic segment within the C major bar is restated twice as a static motif. In the G major bar it is repeated as an exact copy, while it is slightly modified in the D major bar.

## TRANSPOSSED MOTIF

A motif can be identified not just by its note pitches, but also by the unique pattern of its note intervals and durations. Thus, it may still be recognizable even when it is restated in a transposed form. This can happen in several ways.

A transposed motif will retain the same generic tonal functions when it changes in pitch by the same degree and in the same direction as the underlying chord change. This is acceptable, but far from ideal. As we have learned, a variety of different tones is crucial for maintaining the listener's interest. Thus it is best to modify the transposed motif to create a slightly different tonal context whenever possible, as in the following example.

**Example 2.8:** E $\flat$  major to D $\flat$  major (DR-II). "Didi," Yearling's Bobtail I.



A descending triadic motif is restated twice, each time being transposed in the same direction as the chord change, such that it retains the same tonal context. To help rectify this lack of tonal variety, the first note in the first E $\flat$  major bar is raised from B $\flat$  to C, changing its tonal context from a fifth to a major sixth.

It is far preferable to have a transposed motif change in pitch by a different degree from the chord change beneath, such that the entire tonal context is changed as well. This can easily be done by switching between relative chords to our advantage. Remember that relative chords share the same key and are closely related. Thus, when a chord is switched with its relative counterpart, the melody above it will usually still feel appropriate, even though the tonal context has been changed. Of course, a transposed motif can also simply have a different tonal context right from the start. Both situations are shown in the following example.

**Example 2.9:** *D major to F# minor (CR-IV).*



The entire melodic segment within the D major bar has been restated twice as a transposed motif. In the G major bar, the motif has been transposed without further modification, and has a different tonal context. In the F# minor bar, the motif has been slightly modified, but we recognize it because its first two notes help complete a prominent descending pitch sequence across the three bars. Notice that if F# minor were to be switched with A major, its relative counterpart, then the motif above it (before any modification) would have the same tonal context as the one in G major.

## MELODIC TRIAD

A melodic triad is any arrangement of several notes in a melody that gives the unmistakable impression of a different chord from the one underneath. Naturally, some or all of these notes will be nontriad tones. We have previously noted that the ear will subconsciously try to place a nontriad tone in the context of a chord into which it belongs. Thus, a melodic triad simply helps to specify and magnify that tonal context.

A melodic triad can be used to keep the listener focused on one particular chord, even as the harmonic progression ventures elsewhere. For example, it may anticipate the chord in

the next bar, or else linger on the chord from the previous one, as in the following example.

**Example 2.10:** *C major to B $\flat$  major (DR-II).*



The first three notes in the B $\flat$  major bar imply a C major melodic triad, as if the melody continues to linger on the chord it has just left. (Note that A major is not diatonic to the key of F major.)

## COMPOUND MELODY

A compound melody is a single melody that can be separated by the ear into two distinct melodic lines that progress independently of each other. This may happen because the two lines occupy different registers, or because they alternate expression at regular rhythmic intervals, as in the following example.

**Example 2.11:** *C major to D major (DR-I).*



This compound melody consists of a recurring static motif in the first half of each bar, combined with a transposed motif ascending by step in each second half. The transposed motif is slightly modified in the third bar.

## PERMUTATIONS

A permutation is any rearrangement of melodic elements within a motif, such as note intervals, pitches, and note durations. Permutations are simply helpful tools for suggesting further creative options, and need not be understood or analyzed in any deeper context. In fact, oftentimes they are

most effective when they can contribute to a fluid, cohesive melody while their presence remains hidden to the ear.

A motif can be rearranged in several different ways. It can be inverted like an upside-down mirror image, such that the highest pitch becomes the lowest, or else retrograded like a backward mirror image, such that the first note becomes the last. It can be offset, maintaining the same sequence but not at the same relative location. A note can be transposed up or down an octave, or it can be lengthened or shortened in duration. Naturally, permutations may also be combined.

*Example 2.12: B minor to C# minor (DR-ii).*



The entire melody consists of transposed restatements of an initial three-note motif consisting of a leap down by a fourth followed by a step up (“E to B to C#”) found in the first half of the B minor bar. The restatement immediately following is its inversion (“F# to B to A”). The next three are retrogrades of that inversion (“G# to A to E,” “B to C# to G#,” “E to F# to C#”). The last motif is an offset of that retrograde inversion, with the third note placed at the front of the sequence (“A to C# to D”).

## SAMPLE DEMONSTRATIONS

### DEMONSTRATION ONE

Let us become familiar with the application of these melodic development techniques by seeing them put into practice. We will start with a barline pair changing from E minor to A minor at the first barline, with E minor as our determined key signature. We proceed cautiously by staying close to the triadic framework we are familiar with, and create a short melodic motif over the E minor bar consisting of an ascending triplet of triad tones, then a step up, followed by a descending triplet of nontriad tones that implies a D major melodic triad. Since this by itself already gives us a wide variety of note pitches, we

decide to simply repeat the entire melodic segment as a static motif in the A minor bar, where it creates a completely different but equally rich tonal texture.

**Example 2.13:** *E minor to A minor (CR-ii). "Rosalind's Mosaic Path," Rosalind Franklin.*

*a) Rough melody over chorded bars.*



Restating the static motif a second time to extend the melody might seem like a lackluster option, but the melody can always be modified later, and for the time being it keeps the barline pair feeling unified as a whole. We do so, then decide that a C major chord in this last bar provides the best overall tonal context, by prolonging the lack of resolution in the descending D major melodic triad. We do note however, that it isn't a completely perfect fit: the F# sounds excessively dissonant over the C major chord, and we may wish to change it.

*b) Rough melody completed and chord chosen for chordless bar.*



Now onto the necessary modifications. The first problem is that the three highest apexes are all on the same pitch. We correct this problem by shifting the entire descending triplet in the E minor bar down a third, changing it to a B minor melodic triad, while making G the new highest pitch within that peak. Meanwhile, we raise our dissonant F# note in the C major bar up to a B, making this our unique climax. Notice that in both cases, we have shifted the relative location of the apex as well, creating more uneven changes in direction. (We have also unwittingly created an ascending pitch sequence!)

*c) Modified apexes.*

The next problem is similar, in that there are too many nadirs on the same B pitch, especially the one repeated across the first barline. We can correct this problem while addressing two others: the need for more stepwise motion, and the lack of note length variety. We eliminate the first nadir completely by changing the first note in the E minor bar to an F# quarter note, thus starting the melody off with a bold major second tone. The nadir in the A minor bar is then raised to a C quarter note, introducing a new pitch to our melody.

*d) Modified nadirs.*

Our melody now possesses an interesting contour and tonal character, so we move on to our final alterations. We decide to lower the E in the C major bar down to a C, making the melody across the second barline an offset restatement of the melodic segment across the first barline. We also raise the last note in the C major bar from D to E, which turns out to be the only instance of an E pitch left throughout the melody. Since E is the only triad tone that all three chords have in common, this feels like a satisfactory way to end this particularly unstable barline pair.

*e) Final alterations.*

## DEMONSTRATION TWO

Now that we are feeling more adventurous, let us see if we can apply these melodic development techniques without starting

from a triadic framework. We will work on a barline pair going from E $\flat$  major to B $\flat$  major at the first barline, with B $\flat$  major as the chosen key signature. We first sound out the various diatonic nontriad tones for each chord—the second, fourth, sixth, and seventh—to get an idea of the general mood we wish to establish. We then settle on a descending pitch sequence of two notes per bar that starts on a C, a tonal major sixth in E $\flat$  major. The sequence passes through B $\flat$ , then arrives at the B $\flat$  major bar on an A, a tonal major seventh, before stepping down to G, a major sixth tone in B $\flat$  major.

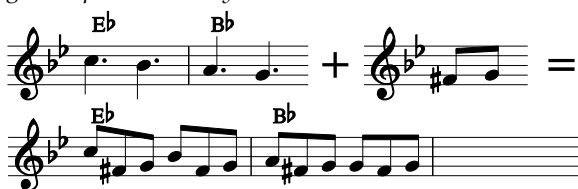
**Example 2.14:** *E $\flat$  major to B $\flat$  major (CR-II).*

*a) Rough melodic framework.*



We now consider possible ways to flesh out this bare-bones framework. Since G is a triad tone in E $\flat$  major, it can be used as a restated pitch, and an embellishing chromatic F $\sharp$  note placed before it would add a particularly ethereal feel. We combine this “F $\sharp$  to G” static motif into our original stepwise descending line to form a single compound melody.

*b) Rough compound melody over chorded bars.*



The next step is to extend the melody into the chordless bar. We start with an F $\sharp$ , the next logical pitch of the compound melody, but then discontinue the pattern, as the two melodic lines have now crossed to the point of confusion. Instead, we extend that F $\sharp$  note by restating the first triplet in the B $\flat$  major bar, “A to F $\sharp$  to G,” as the transposed motif “F $\sharp$  to D to E,” then continue by stepwise ascent while passing through the chromatic F $\sharp$  pitch one last time. After carefully

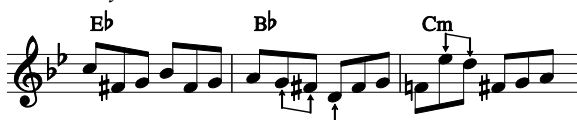
screening each possible diatonic chord choice for the last bar, we decide that C minor best completes the harmonic progression and provides the most satisfying tonal texture.

*c) Rough melody completed and chord chosen for chordless bar.*



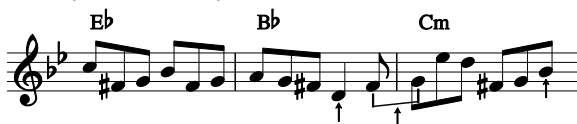
Our next task is to modify the contour. We remove the extraneous second G note in the B $\flat$  major bar by dropping it down to a D, then switch the preceding G and F $\sharp$  notes for a more gradual descent. However, we already have another nadir at D in the C minor bar, so we take this opportunity to create a new apex with an unexpected leap by transposing the original D nadir and its neighboring E note up an octave, switching the two pitches to create a more balanced contour.

*d) Contour modifications.*



Our melody still feels a little dense. We break up the rhythmic pace by allowing it to rest for a quarter note on the low D in the B $\flat$  major bar. To make room, we offset the next two pitches, F $\sharp$  and G, delaying them by an eighth note. This eliminates the F $\sharp$  in the C minor bar, which might be for the best. The chromatic F $\sharp$  preserves its potency without an unsharpened F $\sharp$  present, and the leap from G to high E now feels more natural. We make one final adjustment, raising the last note in the C minor bar from A to B, purely for artistic taste.

*e) More modifications and final alteration.*





## PROCEDURE

The following techniques may be used to develop the melody in a barline pair:

- chromatic embellishment
- restated pitch
- pitch sequence
- static motif
- transposed motif
- melodic triad
- compound melody
- permutations

## HELPFUL TIP

While singing a melody may be an effective way to test its compatibility with the human voice, it is not an ideal approach for crafting the melody by itself. Remember, our music will sound more exciting when it runs counter to our natural inclinations and expectations.

**EXERCISES**

1. Examine each barline pair used as an example in this chapter, including the final result of both sample demonstrations. Label the tonal quality of each emphasized diatonic nontriad tone, and point out instances where the melodic contour conforms to suggested guidelines. What makes each barline pair work, in terms of the interaction between melody and harmony? How would you modify it to fit your own personal taste?
2. Construct barline pairs for each of the barlines between distantly related chords listed below, following the suggested guidelines for tonal context and contour while using any of the melodic development techniques described in this chapter. Barline pairs may be transposed to any key, with the original two chords placed on any two consecutive bars.

DR-I: C major to D major

DR-II: C major to B $\flat$  major

DR-III: C major to B minor

DR-IV: C major to G minor

DR-i: A minor to G minor

DR-ii: A minor to B minor

DR-iii: A minor to B $\flat$  major

DR-iv: A minor to D major

3. Construct more barline pairs for each of the barlines between closely related chords from the last chapter, under the same conditions described in the previous exercise.

## CHAPTER THREE: HARMONIC MODIFICATION

In this chapter, we will learn to modify our harmonic progressions, drawing from an expanded chord vocabulary that ventures beyond just major and minor triads. Harmonic modification helps to add greater nuance and character, while keeping a barline pair sounding musically cohesive. This will come in handy as we begin working with **mixture chords**, which do not belong in any key together. Our next category of barlines will be those between close mixture chords.

### BARLINE PAIRS

With the introduction of mixture chords in this chapter, we can no longer rely solely on the diatonic scale to shape our harmonic progressions, as there will always be at least one triad tone present in the harmony that is chromatic to the original key of the barline pair.

The importance of mixture chords for the purpose of writing an engaging melody should not be undervalued. The presence of a mixture chord, by itself, has a similar effect to a nontriad tone: it goes against our expectations, thus keeping us alert as we await the pending resolution. While the nontriad tone jars our senses along the vertical axis of melody sounded against harmony, the mixture chord stirs up the same reaction along the horizontal axis, as the music progresses through time.

### CLOSE MIXTURE CHORDS

We will begin by working with barlines between close mixture chords. The first set simply involves those between **parallel chords**, which are major and minor chords that share the same root, and differ only in the quality of the third tone.

CM-I: C major to C minor

CM-i: A minor to A major

In the second set of barlines, the chords would be closely

related if either one were switched with its parallel equivalent. For example, C major can be switched to C minor, which is diatonic to the key of F minor. Or F minor can be switched to F major, which is diatonic to the key of C major.

CM-II: C major to F minor

CM-ii: A minor to E major

In the next two sets, only the second chord can be switched with its parallel equivalent to make the chords closely related. For example, A major can be switched to A minor, which is diatonic to the key of C major. But switching C major won't work, because C minor is not diatonic to A major.

CM-III: C major to A major

CM-iii: A minor to C minor

CM-IV: C major to E major

CM-iv: A minor to F minor

Similarly, in the last two sets, the first chord can be switched, but not the second.

CM-V: C major to E $\flat$  major

CM-v: A minor to F $\sharp$  minor

CM-VI: C major to A $\flat$  major

CM-vi: A minor to C $\sharp$  minor

**Example 3.1:** Assorted barline pairs of close mixture chords.

a) F $\sharp$  minor to C $\sharp$  major (CM-ii). "Kyon?", Yearling's Bobtail II.



b) C major to C minor (CM-i).



c) G major to E $\flat$  major (CM-VI).



d) C minor to A minor (CM-v). "Willy the Cocoa," Yearling's Bobtail I.



## NEW HARMONIC CONCEPTS

### EXTENDED CHORDS

We can better understand the relationship between chords by examining extended chords as they apply to generic pitch intervals. We see that the root and third tone of a triad are separated by the interval of a third, as are the third and fifth tones. Thus, the third and fifth tones of one triad can also serve as the root and third tone of some other triad. By combining these two triads, we get a seventh chord. We can continue adding more triads by this same process to get other extended chords: ninth chords, eleventh chords, and so forth.

Thus, we can see that a diatonic melodic triad can also be thought of as simply implying the extended tones of the chord beneath it.

**Example 3.2:** *F# minor to B minor (CR-ii).*

*a) Original barline pair.*



A melodic triad of A major is implied throughout the melody. In the F# minor bar, this results in an implied seventh chord, and in the D major bar and B minor bars, a ninth and eleventh chord, respectively.

Whether to indicate the extended quality of a chord in the harmonic progression itself is a decision left up to the student's personal judgment. A melody retains its pop sensibility when it disguises its complexity. So while a notated seventh or ninth chord here and there will add expressive richness to a song, too many extended chords will lend the song a needlessly dissonant and complex character.

*b) With extended chord.*



Shall we extend these chords? We decide on a strong start by

keeping F# minor as an unambiguous triad. In the B minor bar, the A is missing from our implied melodic triad of A major. But we can incorporate the A into the harmony as an extended tone, so we modify the chord into a B minor seventh. With D major, we decide that the E in the melody works best as a tonal major second, and thus we disguise its extended function by keeping D major as a triad.

This gives us better insight into how chords are related. If two chords share two triad tones in common, such that it's possible for them to be combined into a seventh chord, they are **triad neighbors** of each other. Note that relative chords, such as C major and A minor, are naturally triad neighbors. C major and E minor are also triad neighbors, as are A minor and F major.

## AUGMENTED AND DIMINISHED TRIADS

An **augmented triad** has major third intervals between the root and the third tone, as well as between the third and fifth tones. A **diminished triad** has minor third intervals between both the root and third tone and the third and fifth tones. Augmented and diminished chords convey highly unstable moments of tension that indicate an immediate need for resolution. Aesthetically, augmented chords seem to expand outward, while diminished chords seem to contract inward.

*Figure 3.1: Augmented and diminished triads.*



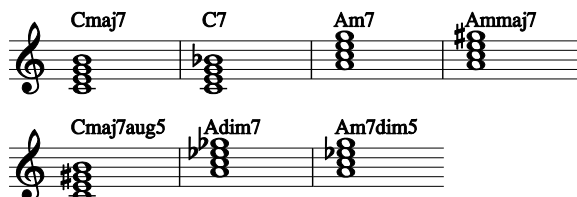
Notice that in the C augmented triad in the above figure, the tonal fifth of G# would be the same distance from a C above it as it is from the E below it: a major third. Thus, we can see that an augmented chord will sound the same regardless of which of its triad tones is considered the root.

## SEVENTH CHORDS

Now that we understand both extended chords and augmented

and diminished chords, let us take a look at the seven types of seventh chords, both diatonic and otherwise, that can be created through all the different combinations of overlapping major, minor, augmented and diminished triads. Seventh chords are sonically rich, but not to the point of sounding excessively dissonant, which gives them a unique role in adding character to a harmonic progression. Thus, the student should develop an instinctive familiarity with the aesthetic feel and harmonic context of each seventh chord, which will come naturally with steady practice and analysis.

*Figure 3.2: Seventh chords.*



- major seventh (maj7): major triad plus minor triad
- dominant seventh (7): major triad plus diminished triad
- minor seventh (m7): minor triad plus major triad
- minor major seventh (mmaj7): minor triad plus augmented triad
- augmented major seventh (maj7aug5): augmented triad plus major triad
- diminished seventh (dim7): diminished triad plus diminished triad
- diminished minor seventh (m7dim5): diminished triad plus minor triad

Notice that in the A diminished seventh chord in the figure above, the diminished seventh tone, G $\flat$ , would be the same distance from an A above it as it is from the E $\flat$  below it: a minor third. Thus, just like an augmented triad, a diminished seventh chord will sound the same regardless of which of its chord tones is considered the root.

Four of these seventh chords can be found in the diatonic scale. In the key of C major and A minor, C major and F major both extend as major seventh chords, G major extends as a

dominant seventh chord, and all the minor chords—D minor, E minor, and A minor—extend as minor seventh chords.

Within the diatonic scale, there are no augmented triads. However, there is one diminished triad, which extends as a diminished minor seventh. In the key of C major, it is B diminished.

**Example 3.3:** *F major to G major (DR-I).*



In this barline pair, a G major chord in the middle bar has been replaced with a triad neighbor, B diminished minor seventh, which is still diatonic in the key of C major. Thus, there are no accidentals in the harmonic progression.

A seventh chord can also be thought of as a sixth chord, with its third, fifth, and seventh tones as the triad of the sixth chord, and its root transposed an octave above to become the tonal sixth. For example, a C major seventh chord can be thought of as an E minor sixth chord (with C as the minor sixth tone). For the sake of simplifying the learning process, Bobtail method recommends that the student should think of a sixth chord as simply a seventh chord with the bass sounding the third tone instead of the root, and notate it as such.

**Figure 3.3:** *Notation for sixth chord.*



The seventh chord on the left and the sixth chord on the right consist of the same chord tones. We choose to label the second chord as Cmaj7/E rather than Em6. Both chord names indicate the same tones, with the bass treating E as the root.

## HARMONIC MODIFICATION TECHNIQUES

Harmonic modification involves extending a chord, or replacing it with a different chord in the harmonic progression. By now, the student may have already developed an intuition



for this as a basic concept. For example, in the process of choosing a chord for the chordless bar in the barline pair, she may have noticed that a chord can easily be exchanged with its relative counterpart or a triad neighbor, which might retain a similar harmonic consonance while introducing a more artistically satisfying level of unpredictability. Let us examine some more harmonic modification techniques, while drawing from the new harmonic concepts we have just learned.

### PARALLEL SUBSTITUTION OF MIXTURE CHORDS

Constructing barline pairs of mixture chords can be a fairly straightforward process. Because mixture chords would be related if one of the chords were switched with its parallel counterpart, we may use that parallel chord as a temporary substitute, thus enabling us to work in a familiar diatonic context. Then when we switch the chord back to its original form, we simply change the tonal third back to its original quality. Naturally, this includes any instance of its statement in the melody over the mixture chord. The following example demonstrates this approach.

**Example 3.4:** *G major to B major (CM-IV).*

*a) With parallel substitution.*



We temporarily switch the mixture chord B major to B minor, which is diatonic to the key of G major. We proceed in the usual manner, filling out the chord progression and completing the melody.

*b) Switched back to original chord.*



We switch back to B major, which includes changing the quality of the tonal third in the melody above it, from D to D#. Note that this applies only to the melody over the mixture chord. Instances of D in the other bars remain unchanged.

In the previous example, the presence of the chromatic triad tone in the melody gives the mixture chord an especially forceful impact, as melody and harmony work together to move the listener. When the chromaticism is not reinforced in the melody, however, the effect is much more subtle. In some sense, it is a role reversal of the typical scenario, with the melody providing the stable, diatonic context from which the harmony deviates. This can be heard in the following modification to the melody from the previous barline pair.

c) *No chromaticism in the melody.*



## AUGMENTED AND DIMINISHED MODIFICATION IN DIATONIC CONTEXTS

In a diatonic harmonic progression, any major or minor chord can be converted into an augmented chord by retaining the two triad tones that are a major third apart, then adding the missing augmented triad tone. Similarly, a diminished triad can be formed by retaining the two triad tones that are a minor third apart, then adding a third diminished tone. We can then take harmonic context into consideration if we wish to include either a diminished seventh tone or a minor seventh tone. The following example demonstrates this procedure.

**Example 3.5:** *A major to B minor (CR-V). "Didi," Yearling's Bobtail I.*



The original B minor chord has been modified into a B diminished triad, with the F# in the melody lowered to an F $\flat$  accordingly. We decide to keep the A in the melody above it as a minor seventh tone, and indicate the chord as a diminished minor seventh.

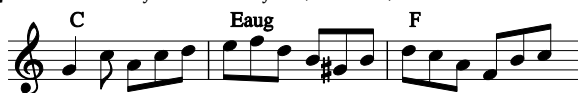
The process of modifying a chord into an augmented or diminished chord in this manner will always introduce a chromatic triad tone or two. As with parallel substitution of mixture chords, it is the overwhelming diatonic context of the surrounding music that helps keep the chromaticism anchored to a broader, stable framework.

## HARMONIC PITCH RESTATEMENT

How do we modify a chord when we aren't working in a diatonic context that provides an immediate semblance of musical cohesion? While an augmented or diminished triad can always be placed in any context that the student finds artistically appealing, she will find it easiest to discover possible opportunities by keeping in mind two related concepts: harmonic pitch restatement and harmonic pitch sequence.

A harmonic pitch restatement happens in the harmonic progression when two or more consecutive chords share the same pitch as a chord tone. Any musically coherent harmonic progression will most likely include a restated pitch here and there, whether intentionally created or not, as the student will quickly discover upon examining her own work thus far. A common harmonic pitch acts like a pivot across the barline, keeping the harmony stable in one area even as it changes in another. Thus, we can use this effect to our advantage by creating harmonic pitch restatements across chords that do not share a common key, as demonstrated in the following example.

### *Example 3.6: C major to E major (CM-IV).*



E major is a mixture chord in the key of C major, but the chord progression will feel less disjunct if we raise the triad tone of B in E major to C, thus changing the chord to E augmented. This creates a harmonic pitch restatement, with C as the common pitch in all three chords of this barline pair.

## HARMONIC PITCH SEQUENCE

A harmonic pitch sequence happens in the harmonic progression when a chord tone from one chord can be lined up with a single tone from each subsequent chord to form a distinct linear melody, oftentimes a stepwise ascent or descent. The tonal context of each chord tone is irrelevant, as the goal is simply to create a discernible physical contour. As with harmonic pitch restatements, harmonic pitch sequences already occur naturally in any musically cohesive chord progression, but we can also create them intentionally to make a harmonic progression feel more conjunct, as in the following example.

**Example 3.7:** *E major to C# major (CM-III). “On a Golden Cord,” Yearling’s Bobtail II.*



We raise the root of C# major, modifying it into a D diminished triad, thus creating a harmonic pitch sequence of a stepwise descent, “E to D $\flat$  to C#.” As a result, the resolution into A major now feels more insistent and inevitable. We also extend the D diminished chord to include the diminished seventh tone, which is B.

## KEY MODULATION

In every example we have seen thus far, the barline pair has returned to its original key after leaving the mixture chord. What should happen if we decide that the chromaticism introduced by the mixture chord represents a more permanent change, such that it compels us to hear the subsequent melody in a different scale? In such situations, we might notate a **key modulation**, which is a change in the key signature.

While a key modulation may take place in any artistically sensible situation, the transition will sound smoothest when it is introduced through a bar that contains elements of both

keys. For example, a melody that fits in one key might be placed over a chord that fits in the other key. This can be accomplished quite naturally with barlines between mixture chords, which are already ambiguous in their key designation, as shown in the following example.

**Example 3.8:** *A major to D minor (CM-II).*



D minor does not belong in the key of A major, yet the melody over that bar implies an A major melodic triad. (Notice that the A major bar in turn implies a D minor triad, thus anticipating that mixture chord.) Meanwhile, the D minor chord underneath introduces the chromatic tone of F into the harmony. Its impact is so overpowering that we continue to hear it even after we leave the D minor bar, indicating that we have changed the key of the barline pair. We notate the new key signature of A minor, and accordingly choose the last chord to be F major, which is diatonic in the new key.

The student should keep in mind that the limited duration of a barline pair prevents us from understanding the full context of its key modulation. Once a barline pair has been developed into an entire song section, the music might stay in the new key for the remainder of that section, but it could just as easily return to the original key immediately after the last bar of the original barline pair. The student is reminded that the notation of a key modulation is strictly for her own purposes, to help her decide how and when to transpose each barline pair as she develops each one into phrases. Thus, the matter of deciding which contexts merit this notation is also left to her discretion.

## MELODIC DEVELOPMENT TECHNIQUES REVISITED

### CHROMATIC TONAL CONTEXTS

In the last chapter, we used chromatic notes only to embellish

a melodic contour. Now that we have expanded our harmonic vocabulary, we are better equipped to incorporate chromatic notes into all the other techniques of melodic development, where their tonal context must be taken into consideration. While this significantly increases the musical possibilities now open to the student, she should rest assured that the concepts behind the techniques themselves remain unchanged. Let us look at some examples.

**Example 3.9:** *B $\flat$  major to G major (CM-III). "Whale Fall,"*  
*Rosalind Franklin.*



In the G major bar, the melody implies a B diminished melodic triad. Notice that if G were substituted with its parallel minor to become diatonic in the key of B $\flat$  major, the B $\sharp$  in its melody would be changed to a B $\flat$ . The implied triad then would be B $\flat$  major, the preceding chord. In the C minor bar, the melody also implies a melodic triad, G augmented. This is simply a byproduct of a restatement of the B pitch, a subtle aftertaste of the mixture chord we have just left. Notice that other chromatic notes can still function purely as melodic embellishments, such as the F $\sharp$  in the G major bar.

As the student continues to use chromatic notes in various tonal contexts, she will develop an intuitive understanding of their different artistic applications, which in turn will allow her to recognize musical opportunities that would not have been immediately apparent to her before. For example, in the previous barline pair, we can hear how the B $\sharp$  in the melody over C minor produces a notably discordant effect. In this situation, B $\sharp$  is a major seventh tone in a minor chord, and we can reproduce the mood of that tonal context in a different barline pair, as shown in the next example.

**Example 3.10:** *G major to E minor (CR-I).*



There is no immediate context for the inclusion of the chromatic D $\sharp$  in this barline pair, where all the chords and every other note in the melody are diatonic to the given key of D major. While the first D $\sharp$  note does serve to buttress a descending pitch sequence that occurs on the first note of each triplet, its primary function is tonal. As a major seventh tone in a minor chord, it achieves exactly the feeling of tension and dissonance that we intended.

## SAMPLE DEMONSTRATIONS

With steady practice, the student will gradually develop an insight into the interconnected nature of harmony. Since the easiest way to learn the techniques for harmonic modification is to see them applied in action, let us work on a couple more barline pairs, starting with one going from G minor to E $\flat$  minor across the first barline.

### DEMONSTRATION ONE

Because G minor is closely related to E $\flat$  major, the parallel major of E $\flat$  minor, we can use the technique of parallel substitution for these particular mixture chords. We determine the key to be in G minor, and decide to incorporate tones of a major second and a major seventh into the substitute E $\flat$  major bar. This is accomplished with a pitch sequence descending stepwise from G to C across the barline pair, with occasional triadic skips. We then choose D minor for the final chord.

*Example 3.11: G minor to E $\flat$  minor (CM-iv).*

*a) Rough melody completed and chord chosen for chordless bar, with parallel substitution.*



With this as our general outline, we consider possible modifications to the melody, and decide to highlight the pitch sequence by having it rest upon a triadic framework underneath. We do so, and include an E $\flat$  between the D and F

at the first barline, anticipating the arrival of Eb major while making the chord change feel smooth.

*b) With modification.*



Our last step is to switch Eb major back to Eb minor, making the necessary adjustment of changing the tonal major third G to the minor third tone Gb. As a final alteration, we add an embellishing F# note to the G in the G minor bar, which enhances our descending pitch sequence while foreshadowing the chromatic tone of the upcoming mixture chord. (Remember that F# and Gb are the same pitch, just notated differently!)

*c) Switched back to original chord, with final alterations.*



In addition to making an analysis of tonal context and contour after completing each barline pair, the student should now examine it for further harmonic possibilities. This is beneficial not just for making immediate modifications to the harmony, but also for the sake of creating variations when we incorporate the barline pair into a larger work. Thus, after considering potential options with relative counterparts and triad neighbors, parallel counterparts, extended chords, and augmented and diminished chords, we note that the D minor bar could also work as a D major chord. After all, changing the F to F# would make it a restatement of the Gb note in the Eb minor bar. We mark this in our notes for future reference.

## DEMONSTRATION TWO

It needs to be pointed out that unlike the melodic development techniques of the previous chapter, opportunities to combine various harmonic modifications may not manifest themselves



as immediately or obviously to the student, and must be actively sought out. We will understand this better with the next barline pair, going from G major to E major across the first barline and having G major as the chosen key signature.

These two chords are related by mixture, but let us have confidence in our ability to skip the parallel substitution step, and begin working with the chromatic tone already present. We decide to create a simple descending pitch sequence containing F $\sharp$ , a tonal major second, in the E major chord. We support it with a triadic framework underneath, smoothing out the contour with occasional stepwise motion. We then extend the melody into the last bar as a slightly varied transposed restatement of the first bar, and choose A minor as its chord to resolve the dissonance from the previous bar.

**Example 3.12:** *G major to E major (CM-III). "Rosalind's Mosaic Path," Rosalind Franklin.*

*a) Rough melody completed and chord chosen for chordless bar.*



We see that we have implied a G $\sharp$  diminished minor seventh in the melody of the E major bar, and we try out that chord as a possible harmonic replacement. Not only would this create a stepwise root sequence of “G to G $\sharp$  to A,” but our “G to F $\sharp$  to E” pitch sequence on the apexes can also be heard as a harmonic pitch sequence in the harmony, with F $\sharp$  belonging to the G $\sharp$  diminished chord underneath as a tonal minor seventh.

But a diminished chord can also have a diminished seventh tone, which in this case would be F $\flat$ . Since there is no other element present in the melody or harmony that should make us loyal to either F $\flat$  or F $\sharp$ , we experiment by switching to the tonal diminished seventh. The pitch sequence on the apexes now becomes “G to F $\flat$  to E” in both melody and harmony, giving it a more driving, insistent character.

*b) Harmonic modification.*



Naturally, a chromatic tone can introduce a long-term change in the key signature. We decide that the melody may continue to progress indefinitely with F $\flat$  instead of F $\sharp$ , so we notate a modulation to the key of C major at the first barline. With this change, we explore further options for harmonic modification, and replace A minor with its extended triad neighbor, F major seventh, helping to reinforce the new key signature.

*c) Key modulation and new harmonic modification.*



Having just eliminated our ascending root sequence, the subtext for having the G $\sharp$  diminished chord has been weakened considerably, so we switch it back to E major, extending it as a dominant seventh. We then make some final alterations to taste by smoothing the contour with more stepwise motion, while adding an F $\sharp$  in the G major bar that enhances the melodic pitch sequence and presents a glaring contrast against the forthcoming key change.

*d) Final alterations.*



Of course, we need not forget about our ascending root sequence with the G $\sharp$  diminished seventh and A minor chords. It shall remain in our notes as a harmonic variation for possible future use.

## PROCEDURE

In the final analysis for each barline pair, possibilities for harmonic modification include the following:

- relative counterparts and triad neighbors
- parallel counterparts
- seventh and extended chords
- augmented and diminished chords

**EXERCISES**

1. Examine each barline pair used as an example in this chapter, including the final result of both sample demonstrations. Label the tonal quality of each emphasized nontriad tone, and point out instances where the melodic contour conforms to suggested guidelines. Note the use of melodic development techniques such as chromatic embellishment, pitch or motif restatement, pitch sequence, melodic triad, and compound melody. Finally, explore possibilities for further harmonic modification. How would you modify each barline pair to fit your own personal tastes?

2. Construct barline pairs for each of the barlines between close mixture chords listed below, following the suggested guidelines for tonal context and contour while using any of the melodic development techniques we have learned thus far. Consider the various possibilities for harmonic modification, and make any desired changes. Barline pairs may be transposed to any key, with the original two chords placed on any two consecutive measures.

CM-I: C major to C minor

CM-i: A minor to A major

CM-II: C major to F minor

CM-ii: A minor to E major

CM-III: C major to A major

CM-iii: A minor to C minor

CM-IV: C major to E major

CM-iv: A minor to F minor

CM-V: C major to E $\flat$  major

CM-v: A minor to F $\sharp$  minor

CM-VI: C major to A $\flat$  major

CM-vi: A minor to C $\sharp$  minor

3. Construct more barline pairs for each of the barlines we have worked with in this book thus far, under the same conditions described in the previous exercise.

## CHAPTER FOUR: BARLINE PAIRS TO PHRASES

At this point, the student should feel relatively comfortable and familiar with the barline pair construction process. However, while barline pairs are invaluable as learning tools, and serve well as efficient storage units for creative ideas, there is no immediate way to place them in the context of a large musical work. For that purpose, we will need to work with phrases. A **phrase** is a complete, independent musical idea which can be repeated, altered, and joined with others to form full songs.

Unlike barline pairs, phrases do not need to follow any rigid rules, as their primary goal is to fulfill artistic taste and utility first and foremost. For example, a phrase may contain several rests, and in fact its melody will rarely extend all the way through from start to finish. Also, while a phrase may follow the same spirit of balancing out those barlines determined by harmony with others determined by melody, it is not strictly bound to do so.

Converting barline pairs into phrases actually serves an additional purpose. An extra stage in the creative process allows us to distance ourselves from our original train of thought and biased judgment. We can then hear the music objectively with fresh ears, which may help us to recognize further possibilities for developing ideas that were not immediately visible the first time around.

In this chapter, we will learn how to develop the musical ideas contained within barline pairs into phrases. First, let us continue on to the next category of barlines: those between distant mixture chords.

### BARLINE PAIRS

#### DISTANT MIXTURE CHORDS

There are two types of chord relationships that we classify as distant mixture chords. In one type, the two chords would be

distantly related if one of the chords were switched with its parallel equivalent. In the first set of these barlines, this condition holds for either chord. In the second set, it applies only to the second chord; and in the third set, only to the first chord.

DM-I: C major to B $\flat$ minor	DM-i: A minor to B major
DM-II: C major to B major	DM-ii: A minor to B $\flat$ minor
DM-III: C major to D $\flat$ major	DM-iii: A minor to G $\sharp$ minor

In the other type of barline between distant mixture chords, the two chords would be close mixture chords if either chord were switched with its relative equivalent. We see that this is indeed the case for the remaining barlines.

DM-IV: C major to F $\sharp$ minor	DM-iv: A minor to E $\flat$ major
DM-V: C major to C $\sharp$ minor	DM-v: A minor to A $\flat$ major

**Example 4.1:** Assorted barline pairs of distant mixture chords.

a) A $\flat$  major to G major (DM-II).



b) A minor to G $\sharp$  major (DM-v).



c) F $\sharp$  minor to C major (DM-iv).



d) F $\sharp$  minor to F major (DM-v). "Kyon?", Yearling's Bobtail II.



## GENERAL MODIFICATION

Whether we are developing barline pairs into phrases or joining

phrases to create full songs, it will be useful to keep in mind the following general modifications, which can be applied at any stage of the process.

## HARMONIC RHYTHM MODIFICATION

Up to this point, our harmonies have always progressed at the rate of one chord per bar. We shall no longer limit ourselves to this rule. Now we may consider the possibilities of extending a chord across two or more bars, or fitting two or more chords into a single bar.

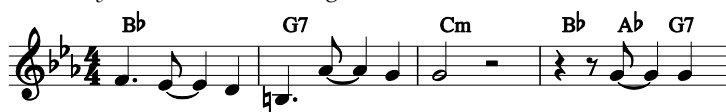
This might be done to create an even number of bars in a phrase, for example. We can also keep this change in rate of harmonic progression consistent throughout a song. And finally, we may change the time signature, or have certain bars contain an irregular number of beats. Some harmonic rhythm modifications are illustrated in the following examples.

**Example 4.2:** *Harmonic rhythm modifications.*

a) "Pchelka's Starry Journey," Yearling's Bobtail I.



b) "Willy the Cocoa," Yearling's Bobtail I.



c) "Shylock, My Friend," Rosalind Franklin.



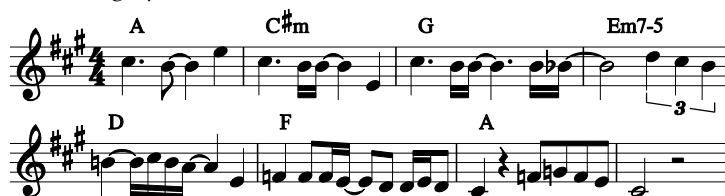
d) "On a Golden Cord," Yearling's Bobtail II.



## MELODIC RHYTHM MODIFICATION

When combining different barline pairs into phrases or joining phrases into songs, we will most likely need to modify the rhythmic pattern of the melody in order to make it consistent throughout the larger work. This is especially true if we alter the time signature or rate of harmonic progression. If the student has followed the Bobtail method suggestion of constructing barline pairs with six eighth notes per bar, she will not find the process of switching to common time difficult, since nothing needs to be subtracted, only added or expanded.

The student's final analysis of nontriad tones, melodic contour, and harmonic options for each barline pair will aid her in determining which notes to accent, which melodic features to keep, and so forth. There are various options she may wish to consider: changing the duration of a note, rearranging the placement of a note, and adding rests. The following examples demonstrate only a few of the many ways in which the rhythmic pulse of a melody might be altered.

*Example 4.3: Melodic rhythm modifications.**a) "Photograph 51," Rosalind Franklin.**b) "Kyon?," Yearling's Bobtail II.*

## CHORD MODIFICATION

In the last chapter, we learned that a harmonic progression in a barline pair can be modified by replacing a chord with its relative counterpart, a triad neighbor, or its parallel counterpart. A chord can also be extended, or modified into an augmented or diminished triad. Naturally, this option is still open to us as we construct phrases, but now that we are working under fewer constraints, we can explore additional possibilities. For example, the new chord does not necessarily need to replace the chord it modifies. Instead, it can simply follow in succession, as shown in the next example.

**Example 4.4:** *F# minor to G major (DR-iii). "Whale Fall,"*  
*Rosalind Franklin.*

a) *Original barline pair.*



b) *With restated and modified chords.*



We extend F# minor as a minor seventh chord in the first half of the bar, but replace it with the dominant seventh of its parallel major in the second half, creating an “A to A# to B” harmonic pitch sequence. We then alter the melody above it according to taste. Next, we decide to add a bar in E minor after the G major bar, its relative counterpart. The entire melody within the G major bar is restated as a static motif, but we remove the last A note in the G major bar, as it is no longer needed to transition into the next bar of A dominant seventh.

Chords can also be rearranged. For example, we could have switched the order of the G major and E minor bars in the last example. And finally, chords can simply be removed.



## CHORDAL EMBELLISHMENT

In the same spirit of a chromatic embellishment within a melody, a chordal embellishment is a transitory chord that is primarily used to add “shape” to a chord progression, with its actual harmonic function being of secondary importance. Because it is extremely temporary, there is no room for ambiguity. Thus, any emphasized melodic notes over an embellishing chord should consist only of its chord tones. Like chromatic embellishments, chordal embellishments can also be of the neighboring or the passing type, as shown in the next example.

**Example 4.5:** C major to G minor (DR-IV). “Photograph 51,” Rosalind Franklin.



The neighboring D $\flat$  major chord acts like a pitch bend into the C major chord, while the passing G $\sharp$  minor chord fills in the space between G minor and A minor. Both fulfill mostly ornamental purposes. The A diminished chord, on the other hand, might be seen to have a harmonic function in its own right, implying an “E to E $\flat$  to D” harmonic pitch sequence, as well as the “G to A to B $\flat$ ” sequence visible in the melody. Because it is so momentary, however, we may think of it as a chordal embellishment as well.

## SHORT PHRASES

We will begin our study of how to develop barline pairs into phrases by starting with short phrases. As a general rule, a short phrase can be constructed by modifying a single barline pair, while adding little new musical material.

## TWO-BAR PHRASE

Because two-bar phrases are so short, they are usually repeated, either as exact copies or as variations. Otherwise, they are usually heard as fragments of some longer phrase. A barline

pair can be transformed into a two-bar phrase by reducing two consecutive chords to a single bar, as in the following example. Naturally, the melody would need to be altered to some extent.

**Example 4.6:** *E<sup>b</sup> major to G minor (CR-IV). "Ruptures," Rosalind Franklin.*

a) Original barline pair.



b) Modified into two-bar phrase.



The two-bar phrase may also simply comprise two consecutive bars from the barline pair, with the remaining bar belonging to the phrase that comes before or after. Barline pairs that modulate to a new key are especially useful for this purpose, as the barline that introduces the new key can also conveniently serve to mark the point separating the two phrases, making the transition sound distinct. However, if the barline that marks the key modulation is located inside the two-bar phrase, or if there is no key modulation within the barline pair at all, then the transition into the new phrase can feel more understated. This difference in effect can be heard by playing the two following two-bar phrases that were made from the same barline pair, with each delineated by repeat signs placed at different locations.

**Example 4.7:** *C major to F minor (CM-II). "Didi," Yearling's Bobtail I.*

a) Two-bar phrase in same key.



b) Two-bar phrase in different keys.



We will continue our examination of key modulation between phrases in the next chapter.

### THREE-BAR PHRASE

Obviously, a barline pair can easily be treated as a three-bar phrase, which is also the shortest possible phrase to contain an odd number of bars. Because we are drawn to rhythmic symmetry, it is natural for us to hear music as conforming to even sets of bars. Thus, on its own, a three-bar phrase will most likely be interpreted by the ear as an extended two-bar phrase or an abridged four-bar phrase.

However, when repeated or placed alongside other phrases of irregular length, a three-bar phrase can create a satisfying sense of rhythmic ambiguity and endless drive towards resolution. The following example demonstrates this effect.

*Example 4.8: E major to G major (CM-V).*



### FOUR-BAR PHRASE

Most music is written and arranged in patterns of four bars, and consequently, we will find ourselves returning to the four-bar phrase time and time again. We classify a four-bar phrase under the short phrase category when it involves simply adding another bar to a single barline pair. During this bar, the melody will often come to a rest, or it can also simply be a restatement or permutation of previous material.

Because choosing this last chord is mostly a straightforward process, it is often useful not to designate an official chord for the fourth bar until we can fit the phrase into the context of a full section or song. This allows us the

freedom to have the four-bar phrase transition into several different phrases, each with its own particular first chord or key signature. We demonstrate this in the following example, where the first three chords in each phrase designate the original barline pair.

**Example 4.9:** *A minor to B major (DM-i). "Coffee in a Crucible,"*  
*Rosalind Franklin.*

*a) Repeat back to A minor.*



When repeating the phrase, a B minor chord in the last bar works well as an understated way to return to A minor in the first bar.

*b) Transition to C major of new phrase.*



By contrast, assigning G major to the last bar of the phrase makes the resolution into the C major chord of the next phrase much more definitive and satisfactory.

## LONG PHRASES

When a phrase requires adding substantial new musical material to a single barline pair, we categorize it as a long phrase. We can create long phrases through one or more of three possible ways: expansion, extension, and combination. We can expand a barline pair by stretching it out and filling in the gaps. We can also extend a barline pair by simply attaching extra bars to either end. And finally, we can combine several barline pairs or short phrases together to make a single long phrase. It is helpful to think of combination as two barline pairs being extended inward towards each other, or else as a single long phrase being expanded in the middle.

In the process of creating a long phrase, the student may wind up with an odd number of bars. Such irregular phrases help contribute an element of spontaneity. If this is not the

desired effect, the student may of course choose to modify the phrase length. However, she is advised to remember that this should be done to fulfill a genuinely artistic purpose, and not simply to create symmetry for its own sake.

## HARMONIC PITCH RESTATEMENT AND SEQUENCE

In the last chapter, we learned that harmonic pitch restatement and harmonic pitch sequence are useful tools for aiding in harmonic modification. Naturally, they can also be used to help expand, extend and combine barline pairs into phrases. A harmonic pitch restatement or sequence can start or end at any point along the phrase, and should be continued only insofar as it can help choose the most aesthetically suitable chords for each individual situation. The following example demonstrates how a barline pair can be extended using these creative tools.

**Example 4.10:** *C# major to B minor (DM-I).*

a) *Original barline pair.*



b) *Phrase extended by harmonic pitch restatement to fifth bar.*



By extending the C# major chord as a dominant seventh, we see that the first three chords all share B as a chord tone. We extend this harmonic pitch restatement by adding two more chords that carry B as a chord tone. We make C major seventh the fourth bar, over which the melody will rest, and make E minor the fifth bar, where the melody will pick up again.

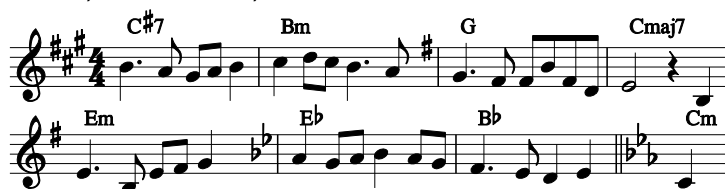
c) *Phrase extended by harmonic pitch restatement to sixth bar.*



We craft a melody over the E minor bar by restating the leap up a fourth and back found in the G major bar, transposing it

as an offset and inverted motif. We then see that our last three chords, G major, C major seventh, and E minor, all share G as a chord tone. We extend our melody into the sixth bar, and choose E $\flat$  major as the chord that provides the best harmonic underpinning while continuing the pitch restatement of G in the harmony.

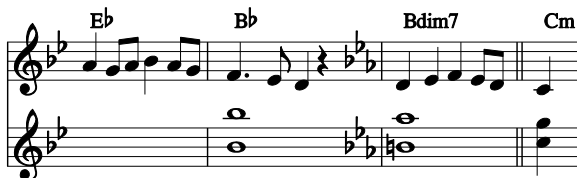
*d) Complete seven-bar phrase in common time.*



Continuing the melody, we choose the subsequent chords B $\flat$  major and C minor as we would normally choose a chordless bar, and designate C minor to be the first bar of the next phrase. We then extend the melody into these bars and change the rhythmic meter to common time, adjusting the melody accordingly. (We notated the constant key changes here to facilitate the composition process. In its final form within a song, we would probably elect to stay in one key for this entire phrase, adding accidentals to individual notes where necessary.)

We have just constructed a seven-bar phrase, which is of course perfectly satisfactory and acceptable. But what if we want to have an even length of eight full bars? Let us modify this phrase further.

*e) Alternate ending for full eight-bar phrase.*



We repeat the chord of B $\flat$  major in the eighth bar, then realize that by raising the root, we can change this second B $\flat$  major bar to B diminished seventh, giving us two harmonic pitch sequences: “B $\flat$  to A $\flat$  to G,” and “B $\flat$  to B $\sharp$  to C.” This gives us an especially strong resolution into the next chord of C minor.

We note that when taken as a whole, this entire phrase seems to lack musical cohesion. We do follow a consistent rhythmic pulse while restating several of the same motifs throughout, but because we keep pushing forward one bar at a time, only concerning ourselves with the coherent logic of the immediately surrounding chords, by the end of the phrase our ear has completely “forgotten” the key of the starting point.

As a general rule, we can establish a more aesthetically consistent harmonic progression by expanding a barline pair, thus preserving its internal logic throughout the final long phrase. We can also create recurring patterns by applying certain melodic development techniques such as transposed motifs to our harmonic pitch restatements and sequences. The following example demonstrates both situations.

**Example 4.11:** *G major to A<sup>b</sup> major (DM-III). “My 100,000th Dream,” Yearling’s Bobtail II.*

*a) Original barline pair.*



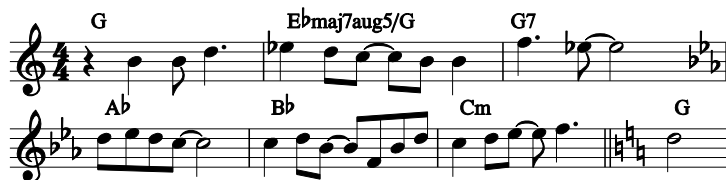
*b) Harmonic pitch sequence of expanded and extended phrase.*



We notice the minor sixth and minor seventh tones of E<sup>b</sup> and F found in the barline pair’s G major bar, and decide to expand the harmonic progression by restating the G major chord twice, each time using one of those pitches as an extended chord tone. (Remember that sixth chords are seventh chords with the tones rearranged in a different order.) We end up creating a harmonic pitch sequence of “D to E<sup>b</sup> to F to E<sup>b</sup>.”

We restate this sequence as a transposed motif, “C to D to E<sup>b</sup> to D,” starting at the A<sup>b</sup> major bar and ending with a return to the original chord of G major in the key of C major. This results in an empty bar between the B<sup>b</sup> major and G major bars that coincides with the E<sup>b</sup> tone of the harmonic pitch sequence. A C minor chord fills in this gap nicely.

c) Complete phrase in common time.



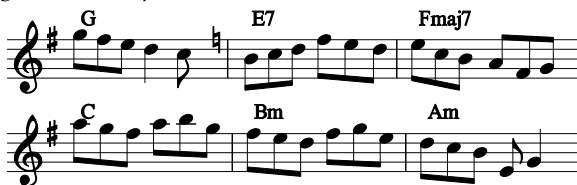
The rhythmic meter is switched to common time, and the melody is modified accordingly.

## ROOT SEQUENCE

Root sequences are a new concept in this chapter, but are not difficult to understand. They are simply the implied melodic line formed by each root note in a harmonic progression. Naturally, they can be treated like harmonic pitch sequences. However, the root is also much more easily distinguished from other chord tones by the ear. It is usually the lowest pitch sounded in the harmony, and a bass line can help isolate the root even further. Thus, there is more freedom to imply a disjointed, though still logically consistent, melodic line in a root sequence. The following example shows how this principle might be applied to the combination of two barline pairs that share the same starting key signature. (The student may remember the first barline pair from our demonstration in Chapter 3.)

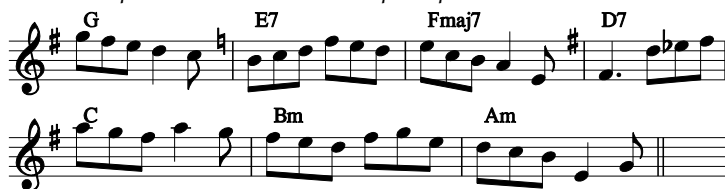
**Example 4.12:** *G major to E major (CM-III) from Example 3.11, C major to B minor (DR-III). "Rosalind's Mosaic Path," Rosalind Franklin.*

a) Original barline pairs.





*b) Barline pairs combined into complete phrase.*



We choose to combine these two barline pairs because they have some physical features in common: predominantly stepwise linear motion, with the recurring motif of a stepwise descent of three eighth notes. We see that the second barline pair already contains a stepwise, descending root sequence of “C to B to A.” We can extend this sequence by adding a D major bar in front. We then see that a D major placed after the F major seventh bar in the first barline pair would create another root sequence, this time a more disjunct melodic line that repeats a descent by minor third: “G to E, F to D.” Thus, we link the two barline pairs together with a D major bar, extending it as a dominant seventh chord to create a harmonic restatement of a C pitch that helps unite the two barline pairs.

Finally, we modify the melody to give it a consistent rhythmic pace and mood, adding an  $E\flat$  note in the D dominant seventh bar, in the same spirit that we added the  $F\sharp$  in the E dominant seventh bar.

Remember that certain chords have arbitrary or ambiguous roots, such as sixth chords, augmented chords, and diminished seventh chords. This may come in handy for the purpose of building a root sequence, as demonstrated by the following modification of the last phrase example.

*c) Alternate harmonic modification.*



The  $E\flat$  note in the melody over D dominant seventh inspires us to modify the chord into an  $E\flat$  diminished seventh in the first half of the bar. (We leave the second half alone to preserve the stepwise root sequence of “D to C...”.) What about our root sequence of descending minor thirds? We replace F major

seventh with A minor, its triad neighbor, and rename the diminished seventh chord with F $\sharp$  as its root, preserving the sequential pattern in a different form: “G to E, A to F $\sharp$ .”

### HELPFUL TIP

Combining barline pairs requires some finesse. The student should learn to quickly transpose keys and chords by sight, while hearing the music in her head. With practice, the development of this skill will allow her to recognize an opportunity where a key modulation might take place in the space between the two barline pairs.

## SAMPLE DEMONSTRATIONS

Let us witness firsthand the almost limitless ways in which phrases can be created, by using the same barline pair to develop two different long phrases in the following demonstrations.

### DEMONSTRATION ONE

**Example 4.13:** *A major to E minor (DR-IV). “Coffee in a Crucible,” Rosalind Franklin.*

a) Original barline pair.



We first notice the harmonic pitch sequence “A to G to F $\sharp$ ” in the harmonic progression. It seems intuitive to extend this stepwise descent with an E chord tone in the next bar. However, if we delay the sequence for an extra bar, then we can use the E to return to an A major in the fifth bar, creating a long phrase structure that consists of a four-bar segment followed by its variation. Thus, we make F $\sharp$  the next pitch of the series instead, and choose B $\flat$  major as the chord in the fourth bar, for the understated way that it transitions back into A major. (It almost feels like a chromatic embellishment.) We decline to complete the melody in this bar for the time being, as it will be mostly at rest.

*b) Harmonic pitch sequence of first four bars.*

We can make this long phrase feel internally consistent by simply reversing the harmonic pitch sequence in the next four-bar segment, starting our stepwise ascent from the E in A major. However, an F# moving up to G in the series would destroy the illusion that the song is centered around A major. (We are actually in the key of D major.) Thus, we decide to restate F# twice, choosing the relative chords F major and D minor. The sequence then passes through G on a G major, to finish on an A in A major, the first bar of the next phrase.

*c) Harmonic pitch sequence of next four bars.*

Since this next four-bar segment will be a melodic variation of the first, we maintain the same rhythmic pace, making just a few necessary pitch changes in the first two bars. In the D minor bar, we offset the “C# to D to C#” motif found in the D major bar and then restate it, transposed a skip down.

*d) Melody completed over next four bars.*

Our phrase is complete, but we decide to make one final modification: switching the rhythm to common time. After trying out several options, we decide on a simple melodic pulse of four steady beats per bar, keeping only the melody in the D minor bar as triplets, creating the satisfying feeling of a sprint to the finish.

e) Complete phrase in common time.



## DEMONSTRATION TWO

Let us create one more phrase by working from the same barline pair, yet trying a different approach. This time, we will expand it by squeezing in a B minor bar between A major and E minor. By replacing E minor with C major, its triad neighbor, we then form the ascending root sequence “A to B to C to D.” We restate the A major melody as a static motif in the B minor bar, then adjust note pitches throughout the phrase to accommodate the new harmonic progression while maintaining an interesting contour.

**Example 4.14:** “Coffee in a Crucible,” Rosalind Franklin.

a) Phrase expanded to four bars.



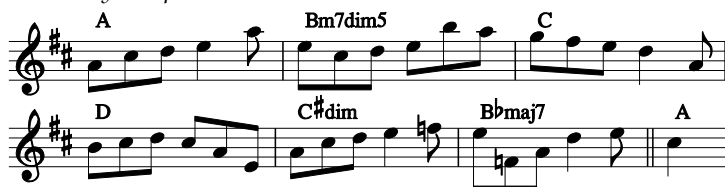
We decide to modify the B minor chord to a B diminished minor seventh, thus implying the harmonic pitch sequence “E to F# to E to D.” Our four-bar phrase can then be extended by two bars with a restatement of this pitch sequence as the transposed motif “D to E to D to C#,” starting on the D in the D major bar and ending on the C# in A major, the first bar of the new phrase. We also elect to continue our original root sequence by descending from D back down to A, this time passing through C# and Bb in the two new bars, pitches we skipped over in the ascent. We state the C# as a diminished chord to make it diatonic to the key of D major, and we extend the Bb as a major seventh chord to soften its presence as a mixture chord.

*b) Harmonic pitch sequence and root sequence.*



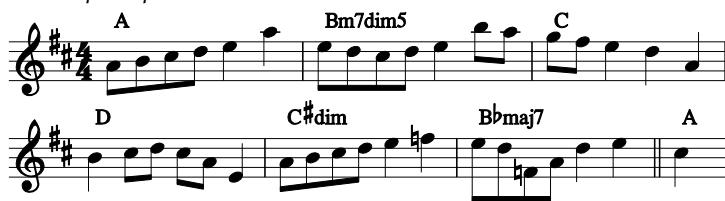
We fill in the melody by treating these last two bars as an abridged variation of the first four bars. Thus, the melody in the C# diminished bar is similar to the one over A major, and the melody over Bb major seventh is a combination of various elements from the B diminished minor seventh and C major bars.

*c) Melody completed.*



Finally, we switch the phrase over to common time, maintaining a dynamic but consistent rhythmic pattern, while emphasizing nontriad tones where possible and desired.

*d) Complete phrase in common time.*



## EXERCISES

1. Construct barline pairs for each of the barlines between distant mixture chords listed below, following the suggested guidelines for tonal context and contour while using any of the techniques for melodic development and harmonic modification we have learned thus far. Barline pairs may be transposed to any key, with the original two chords placed on any two consecutive measures.

DM-I: C major to B $\flat$  minor

DM-i: A minor to B major

DM-II: C major to B major

DM-ii: A minor to B $\flat$  minor

DM-III: C major to D $\flat$  major

DM-iii: A minor to G $\sharp$  minor

DM-IV: C major to F $\sharp$  minor

DM-iv: A minor to E $\flat$  major

DM-V: C major to C $\sharp$  minor

DM-v: A minor to A $\flat$  major

2. Develop one short phrase and one long phrase using any barline pair you have constructed from the previous exercises, while using the techniques for phrase development described in this chapter. Long phrases may result from combination with another barline pair or phrase. Repeat this process with each of your other barline pairs.

## CHAPTER FIVE: PHRASES TO SONG SECTIONS

Now that we have learned to develop barline pairs into phrases, we can treat those phrases as song sections, and arrange them to create full musical works. Remember that it is the unique combination of such ideas that helps give a song its original character. Thus, aside from offering general guidelines and a few example demonstrations, it is at this point that Bobtail method must now allow the student's own creative judgment and potential to have free rein.

### BARLINE PAIRS

#### UNRELATED CHORDS

First, let us finish the last category of barlines, those between unrelated chords. There are very few artistically sensible reasons for one unrelated chord to transition into another, and often one or both chords will need to be extended or modified for any common ground to be found between them. Nevertheless, the dissonance between unrelated chords can be useful for conveying an especially forceful impact, and should not be overlooked. At the very least, barline pairs of unrelated chords are excellent learning tools for helping the student to understand the interconnected relationships between all the different chords and keys.

U-I: C major to E $\flat$  minor

U-i: A minor to F $\sharp$  major

U-II: C major to G $\sharp$  minor

U-ii: A minor to D $\flat$  major

U-III: C major to F $\sharp$  major

U-iii: A minor to E $\flat$  minor

**Example 5.1:** Assorted barline pairs of unrelated chords.

*a) B minor to E $\flat$  major (U-ii).*



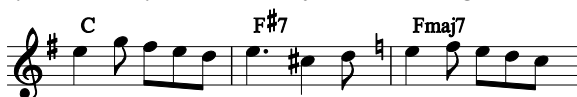
b) *E minor to C# major (U-i).*



c) *Bb major to F# minor (U-II).*



d) *C major to F# major (U-III). "Kyon?", Yearling's Bobtail II.*



## SONG SECTIONS

As a general rule, short phrases can be repeated or combined to form song sections (such as verse, chorus, or bridge), while long phrases can be thought of as complete sections by themselves. Song sections may then be joined in the same manner that barline pairs or phrases are combined. In general, the process involves no new conceptual difficulties.

## PHRASE REPETITION AND VARIATION

A phrase can be repeated as a variation in several ways. It can retain the same general structure while modulating to a new key, or the melody may be transposed to provide a completely different tonal context within the same key. Similarly, a different harmonic progression can be placed under the same melody. Perhaps just a single chord might be replaced, or the entire phrase may be heavily modified. Naturally, the possibilities are endless.

A phrase variation can also be used in different contexts. It may immediately follow the original phrase to form a single song section. Or it may be used later in the same work, as the development of a recurrent theme.



## BORDER REALIGNMENT

The barlines and chords that designate the beginning or end of a phrase or section can be moved or changed, as demonstrated in the next example.

*Example 5.2: Border realignment.*

Two four-bar phrases have been joined together to form a single song section, except the G minor bar at the end has actually been designated the first bar of the next section, making the present section an irregular seven-bar phrase.

This example also demonstrates several possibilities for phrase variation. The melody in the first four bars has been transposed a whole step down in the next four bars, with the key signature changed accordingly. We note that the chord progression in the second set of four bars has been rearranged to create a root sequence of a stepwise descent from F major to C minor seventh. Before the transposition took place, the first and third chords of the first four-bar phrase were switched, as were the second and fourth bars. This results in a subtle but noticeable difference in tonal context. The overall familiarity of the transposed melody helps make the arrival of the next section feel relatively natural, despite being unexpected.

## KEY MODULATION

Because song sections are more self-contained as independent musical ideas, a new section may modulate to another key more naturally and convincingly than one barline pair to another. For this reason, it may be useful to leave the last chord of a phrase or section undefined. The student is advised to take advantage of this liberty, and put extra thought into

each individual phrase transition to decide if and how a modulation might take place.

**Example 5.3:** “Dear Saskia,” Yearling’s Bobtail I.

a) Transition to next phrase in same key.



b) Transition to next phrase, modulated to new key.



The first four bars are part of a prechorus section that transitions into a chorus section. By keeping the last bar in the chord of G major, the second instance of the prechorus modulates to a new key, although the chorus remains the same, simply transposed a whole step down.

## SAMPLE DEMONSTRATIONS

Let us now examine some ways in which musical elements can be developed and combined into a full song. As we go through the following procedures, the student should understand that her own creative process will rarely proceed in such a clear and straightforward manner. Nevertheless, she should rest assured that her time spent meticulously crafting a work of master quality is never in vain. Even as she seems to be hopelessly steering through endless false starts and wrong turns, it is precisely this kind of invested effort that will help strengthen her knowledge and discipline as a songwriter in the long term.

### DEMONSTRATION ONE

We begin by constructing a verse section from the following barline pair, which the student may remember from Chapter 3.

**Example 5.4:**

a) Original barline pair: A major to D minor (CM-II) from Example 3.8.



We decide to extend this barline pair as a repeated four-bar phrase, choosing an E major chord for the fourth bar, thus allowing for a strong return to A major. The melody in the fourth bar is mostly at rest.

b) Verse section, first four-bar phrase.



Next, we repeat this phrase as a variation by keeping the melody consistent while switching the relative chords F major and D minor in the underlying harmony, with F major modified into an F augmented chord to accommodate the C# in its melody above. We then recognize an opportunity to create two simultaneous pitch sequences in the harmony. By restating D minor as its triad neighbor, B diminished minor seventh, in the fourth bar, then replacing it with its parallel major (and adjusting the melody accordingly) in the third bar, we can create both a root sequence that descends by generic thirds, “A to F to D to B,” and a harmonic pitch sequence of “E to F# to F#” and back that ends upon the return to A major.

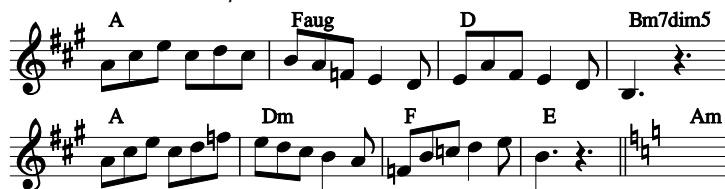
c) Verse section, second four-bar phrase.



After hearing both phrases in succession, we decide that this verse section works best with the variation as the first of the two four-bar phrases, and switch the order before

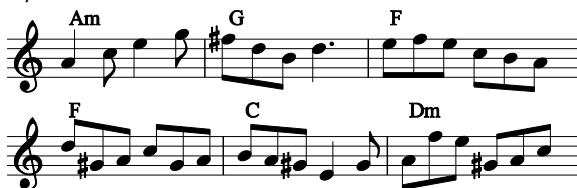
combining them. The overall melody is then modified to maintain a dynamic contour.

*d) Verse section completed.*



Our first song section is now complete. Because it includes many chords that are diatonic to the parallel key of A minor, we decide that the chorus section will also be in that key, and begin searching for suitable source material from our collection of barline pairs. We look for musical ideas that might share a similar character and mood, as well as the same general physical features, such as chromatic notes and prominent nontriad tones. The following two barline pairs, also used as examples in previous chapters, satisfy those conditions.

*e) Original barline pairs: A minor to G major (CR-v) from Example 1.6, F major to C major (CR-II) transposed from Example 2.14.*



We decide to combine these two barline pairs into a single section consisting of two four-bar phrases, which will then return to the first section. The first barline pair already contains the root sequence “A to G to F,” so we naturally extend it by continuing the sequence, adding a fourth bar of E minor in which the melody will mostly be at rest.

## f) Chorus section, first four-bar phrase.



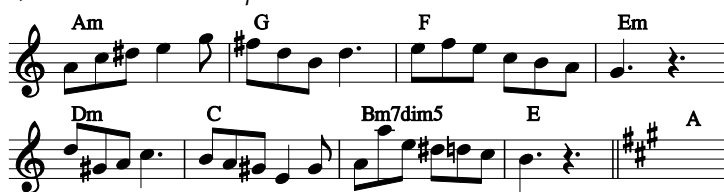
We see that we can easily continue the root sequence in the second barline pair, by replacing the F major bar with the relative D minor, and the D minor bar with its diatonic triad neighbor, B diminished minor seventh, to form “D to C to B.” In order to create a smooth transition into the A major chord that begins the returning verse section, we make the fourth bar of this phrase E major, a chord in the key of A major that also makes sense in the present context, as it follows a repeated G# pitch in the melody, which is its triad tone.

## g) Chorus section, second four-bar phrase.



Our last task for this chorus section is to modify the melody, making the two combined four-bar phrases thematically consistent. We split the difference between the two rhythmic patterns and make some adjustments to the contour, including the addition of an embellishing D# chromatic note in both the first and last bar.

## h) Chorus section completed.



Our verse transitions well into our chorus and vice versa, so we can easily consider this a full song and call it a day. We don't necessarily have to stop here, however. There are certainly plenty of opportunities to add further excitement and variety, such as an additional song section in another key. Once

again, we look into our collection of assorted musical ideas, and decide that Example 5.2 would work well as a prechorus, transposed up by a whole step.

With this final addition, we change the rhythm of the entire song to common time, and make extensive adjustments to the contour and rhythmic pace of the melody, which helps keep the music flowing smoothly and consistently throughout.

*i) Complete song in common time.*

The musical score is written in treble clef with a key signature of two sharps (F# and C#). The time signature is common time (C). The score is divided into three main sections: Verse, Prechorus, and Chorus.

- Verse:**
  - Line 1: Chords A, F#aug, D, Bm7dim5.
  - Line 2: Chords A, Dm, F, E.
- Prechorus:**
  - Line 3: Chords Em, Bm, G, F#m.
  - Line 4: Chords Fmaj7, Em, Dm7.
- Chorus:**
  - Line 5: Chords Am, G, Fmaj7, Em.
  - Line 6: Chords Dm, C, Bm7dim5, E, A.

Although our song is technically complete, it is always beneficial to immediately consider different song structure possibilities. Having these options will allow us a certain amount of freedom when we eventually combine the basic melody and harmony with lyrics, contrapuntal arrangements, and sonic textures. For example, since our verse transitions well into the chorus, we may decide to skip the prechorus for one rotation. And with a few minor melodic adjustments, we can return directly to the verse from the prechorus in another rotation.

## DEMONSTRATION TWO

Let us work through one more demonstration, this time following a slightly different approach and procedure. We begin with a complete section in mind for the chorus section: Example 4.12, the second demonstration in Chapter 3, which is in the key of G major. Because this melody feels particularly erratic and unrestrained, we decide to balance it with a more subdued verse section in the relative minor key. The following barline pair, used as a demonstration in Chapter 2, fits our purposes quite nicely. It shares a similar sweeping contour, yet is centered around a fixed register and thus feels more stable.

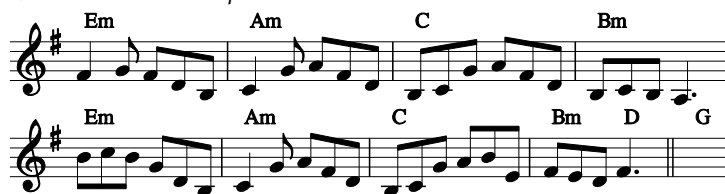
**Example 5.5:** “*Rosalind’s Mosaic Path*,” Rosalind Franklin.

**a) Original barline pair:** E minor to A minor (CR-ii) transposed from example 2.13.



We start by developing this barline pair into a section that consists of a four-bar phrase repeated as a variation. We decide on a B minor chord in both fourth bars, but split the bar between B minor and its relative counterpart, D major, in the second phrase to create a sense of forward momentum. The melody is then modified to maintain an interesting contour.

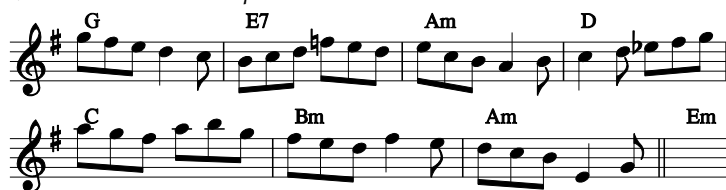
**b) Verse section completed.**



We now listen carefully to our two song sections repetitively played together in succession, and decide that the chromatic notes and implied key modulations of our previously chosen chorus do not mesh well with the more straightforward diatonic context of our verse section. However, this

complexity can be disguised by modifying the harmonic progression of the chorus to include only diatonic major and minor chords, with the natural exception of the prominent E dominant seventh mixture chord. We simply consult our previous notes for this phrase, and quickly make the appropriate harmonic adjustments.

*c) Chorus section completed.*



While our two sections transition well into each other, we decide to make the song more daring and unpredictable by having the verse modulate to the key of B $\flat$  major, a mixture key, into a prechorus section with a completely different feel and character. With that purpose in mind, we create the following barline pair on the spot.

*d) Original barline pair: B $\flat$  major to D minor (CR-IV).*



We decide to make this prechorus section another four-bar phrase with repeated variation. Extending the first phrase is a relatively simple task, as a diatonic C minor in the fourth bar easily brings the phrase back to the first B $\flat$  major seventh bar.

*e) Prechorus section, first four-bar phrase.*



However, the second four-bar phrase of this section must now modulate from the key of B $\flat$  major back to that of G major in the chorus. And because the transition from verse into prechorus felt so abrupt, it would be preferable to counter



that effect by having the prechorus ease into the mixture key of the chorus more smoothly. This can be done by having a chord in one key switch to its parallel counterpart in the other as an extra step in the modulation.

Thus, we choose to expand the area between the two sections with a D minor to D major chord change within a single bar. We then see that by first following E $\flat$  major with its parallel minor chord, we can imply the harmonic pitch sequence “G to G $\flat$  to F to F $\sharp$  to G.” (Note that G $\flat$  and F $\sharp$  are different spellings of the same pitch.)

*f) Prechorus section, harmonic pitch sequence of expanded second phrase.*



Although the introduction of the dissonant E $\flat$  minor chord introduces an extreme level of tension, it is adequately balanced out by the logical symmetry created by two consecutive sets of parallel chords. As a result, the transition between these two sections gives us the best of both worlds: a climactic ending for our prechorus, immediately followed by an understated segue into the chorus. We fill out the melody with a restated transposed motif, modifying the D major chord as a chordal embellishment to suit the overall mood.

*g) Prechorus section, second phrase.*



With all the sections established, we join them together to make a full song. We decide on a harmonic rhythm of four beats per bar and two bars per chord, and adjust the melodic pulse to make it consistent throughout. Finally, we add a chordal embellishment of B $\flat$  minor between the B minor and A minor chords in the chorus, and repeat the C major and B minor chords as a two-chord phrase.

*h) Complete song in common time.*

The musical score is written for guitar in common time (C) and features a key signature of one sharp (F#). The score is divided into three main sections: Verse, Prechorus, and Chorus.

**Verse:** The first section consists of 16 measures. The chords are: Em (measures 1-2), Am (measures 3-4), C (measures 5-6), Bm (measures 7-8), Em (measures 9-10), Am (measures 11-12), C (measures 13-14), and Bm (measures 15-16).

**Prechorus:** The second section consists of 8 measures. The chords are: D (measures 1-2), Bbmaj7 (measures 3-4), Dm (measures 5-6), Ebmaj7 (measures 7-8), 1. Cm (measures 9-10), 2. Ebm (measures 11-12), Dm (measures 13-14), D (measures 15-16), and G (measures 17-18).

**Chorus:** The third section consists of 16 measures. The chords are: E7 (measures 1-2), Am (measures 3-4), D (measures 5-6), Bm (measures 7-8), C (measures 9-10), Bm (measures 11-12), C (measures 13-14), Bm (measures 15-16), Bbm (measures 17-18), Am (measures 19-20), and Em (measures 21-22).

**EXERCISES**

1. Construct barline pairs for each of the barlines between unrelated chords listed below, following the suggested guidelines for tonal context and contour while using all the techniques for melodic development and harmonic modification we have learned thus far. Barline pairs may be transposed to any key, with the original two chords placed on any two consecutive measures.

U-I: C major to E $\flat$  minor

U-i: A minor to F $\sharp$  major

U-II: C major to G $\sharp$  minor

U-ii: A minor to D $\flat$  major

U-III: C major to F $\sharp$  major

U-iii: A minor to E $\flat$  minor

2. Develop two or three full song sections using any of the barline pairs or phrases you have constructed from the previous exercises, then create an entire song by joining two or more of these sections together.

# APPENDIX

## REFERENCE

### BARLINE PAIRS

#### CLOSELY RELATED CHORDS

CR-I: C major to A minor	CR-i: A minor to C major
CR-II: C major to G major	CR-ii: A minor to D minor
CR-III: C major to F major	CR-iii: A minor to E minor
CR-IV: C major to E minor	CR-iv: A minor to F major
CR-V: C major to D minor	CR-v: A minor to G major

#### DISTANTLY RELATED CHORDS

DR-I: C major to D major	DR-i: A minor to G minor
DR-II: C major to B $\flat$ major	DR-ii: A minor to B minor
DR-III: C major to B minor	DR-iii: A minor to B $\flat$ major
DR-IV: C major to G minor	DR-iv: A minor to D major

#### CLOSE MIXTURE CHORDS

CM-I: C major to C minor	CM-i: A minor to A major
CM-II: C major to F minor	CM-ii: A minor to E major
CM-III: C major to A major	CM-iii: A minor to C minor
CM-IV: C major to E major	CM-iv: A minor to F minor
CM-V: C major to E $\flat$ major	CM-v: A minor to F $\sharp$ minor
CM-VI: C major to A $\flat$ major	CM-vi: A minor to C $\sharp$ minor

#### DISTANT MIXTURE CHORDS

DM-I: C major to B $\flat$ minor	DM-i: A minor to B major
DM-II: C major to B major	DM-ii: A minor to B $\flat$ minor
DM-III: C major to D $\flat$ major	DM-iii: A minor to G $\sharp$ minor
DM-IV: C major to F $\sharp$ minor	DM-iv: A minor to E $\flat$ major
DM-V: C major to C $\sharp$ minor	DM-v: A minor to A $\flat$ major

#### UNRELATED CHORDS

U-I: C major to E $\flat$ minor	U-i: A minor to F $\sharp$ major
U-II: C major to G $\sharp$ minor	U-ii: A minor to D $\flat$ major
U-III: C major to F $\sharp$ major	U-iii: A minor to E $\flat$ minor

**BLANK BARLINE PAIRS**

(See next two pages.)



