

Chapter Eight

Triads in First Inversion

Introduction

Listen to the short phrase below, paying special attention to the bass line.



Example 8-1

D: I V 7 I ii V⁷ I

It's not bad, but it could be improved. The melody line is fine, having both shape and direction, but the bass seems too repetitive and too rigid. Compare Example 8-1 with Example 8-2.



Example 8-2 *Haydn, Sonata No. 33, III*

D: I 6 5/3 V 6/5 I ii⁶ V⁷ I

Now the bass line is improved through the use of inverted chords (indicated by highlighted notes in the example). Although the harmony is the same, the inverted chords have created a bass line with a more interesting contour and with more variety.

Most phrases of tonal music contain at least one inverted chord, and the inversions usually serve the purposes that we have just demonstrated. We are not saying that a phrase without inverted chords is poorly composed—it just depends on what effect the

composer is after. For example, minuets from the Classical period often contain phrases with chords that are all in root position.

Bass Arpeggiation

One way in which first inversion triads often originate is simply through bass arpeggiation. If you look back at the first measure of Example 8-2, you will see that D4 is the primary bass note in the measure. The F# 4 serves the dual purpose of providing the 3rd of the chord and of giving the bass some variety. A similar situation is found in the first two beats of the second measure. When you analyze a bass arpeggiation such as these, you should identify the arpeggiations only with arabic numerals (as in Ex. 8-2) or omit symbols altogether (as in Ex. 8-3).

Accompaniment figures in keyboard music often involve faster arpeggiations. Two examples by Haydn are shown below (Ex. 8-3 and 8-4). In both, the real bass line is the one shown in the textural reduction. The other pitches played by the left hand should be considered as inner voices that are simply filling in the chords. They are not part of the bass line, so we would not consider these notes to be creating inversions at all.



Example 8-3 Haydn, Sonata No. 43, I

12

p

Ab: I v6 I

Textural reduction



Example 8-4 Haydn, Sonata No. 45, I

19

Bb: I v6/5 I

Textural reduction

Textural reductions such as those of Examples 8-3 and 8-4 appear throughout this text. Their purpose is to simplify the texture and make the voice leading easier to understand. Notice that in the reduction of Example 8-4 the E \flat 5 in m. 20 has been transposed up one octave from the original. The octave transposition helps clarify the essentially conjunct (stepwise) nature of the melodic line.

Substituted First Inversion Triads

First inversion triads are often used as *substitutes* for root position triads instead of coming about through bass arpeggiation. One reason for using such inversions is to improve the contour of the bass line. Another is to provide a greater variety of pitches in the bass line. A third reason is to lessen the importance of V and I chords that do not serve as goals of harmonic motion. Instances of this third type can be seen in Examples 8-3 and 8-4, where dominant chords are inverted. Example 8-5 contains a substituted inverted triad in the V 6 , which allows the stepwise motion of the bass to continue and which also lessens the effect of this interior V-I progression. The I 6 in the second measure is an example of an arpeggiation following a more important root position chord. The use of the I 6 provides variety and allows the bass to imitate the soprano figure from the previous beat (A-B-C).



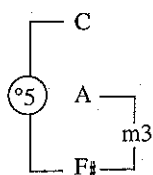
Example 8-5

Bach, "Schmücke dich, o liebe Seele"

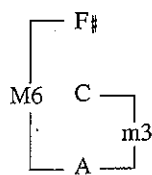
F: I V vi v 6 I 6 V 7 I

The diminished triad was used almost exclusively in first inversion throughout much of the tonal era. Earlier composers had considered a sonority to be acceptable only if all the intervals above the **bass** were consonant, and, as the diagram illustrates, a dissonant $^{\circ}5$ or $+4$ occurs above the bass of a diminished triad unless it is in first inversion.

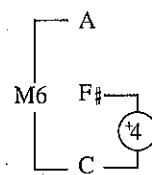
Root position



First inversion



Second inversion



Tonal composers, although perhaps being unaware of the historical background, accepted for a time the tradition of using the diminished triad only in first inversion.

One first inversion triad that should *not* be freely substituted for the root position is vi^6 (or VI^6). A good rule to remember is that V in root position should not be followed by vi^6 . The reason for this can best be understood by playing Example 8-6 and comparing the effect of the V– vi and V– vi^6 progressions. The V– vi sounds fine—a good example of a deceptive progression—but the vi^6 sounds like a mistake.

Example 8-6

C: I IV V vi ii⁶ V vi⁶

One correct use of the vi^6 chord is between a root position I and a root position ii, as in Example 8-7a. The vi^6 will also occur occasionally as part of a sequential pattern, as in Example 8-7b.

Example 8-7

Bb: I vi⁶ ii V I I⁶ V vi⁶ iii IV⁶ I

Parallel Sixth Chords

Most passages use a reasonable balance of root position and first inversion triads, but there are many passages in which this is not true. Some styles call for a preponderance of root position chords. On the other hand, a whole series of parallel first inversion triads (or **sixth chords**, from figured bass symbols) is often found, especially in sequences. Chords used in parallel motion in this way generally do not function in the usual fashion. Instead, they serve as passing chords, connecting some chord at the beginning of the passage to some chord at the end of it. In Example 8-8 the parallel motion connects the root position I chord in m. 4 with another root position I chord in m. 7. The roman numerals in the sixth-chord passage are in parentheses to show that the chords are not functioning in their usual manner.



Example 8-8

Haydn, Symphony No. 104, I

Allegro

Bsn. *p*

VI. *p*

Vla. *p*

Vc. D.B. *p*

D: I (IV vii°) I $v\frac{6}{5}$ I (v^6)

5

IV^6 iii^6 ii^6 i^6 vii^{o6} I $I\frac{6}{4}$ V

Textural reduction

I $v\frac{6}{5}$ I I V

In the textural reduction of Example 8-8 the line in mm. 2–3 connecting D3 to C#4 shows that a simplified version of the bass line would have stepwise motion here (m2 down) instead of the leap. Notice also the parallel 5ths in mm. 5–7. Haydn disguised the 5ths in the original through the use of non-chord tones. The usual technique used to avoid parallel 5ths in a sixth-chord passage is to put the root of each chord in the melody, thus producing acceptable parallel 4ths instead of objectionable parallel 5ths (Example 8-9a). In a four-voice texture, at least one voice will have to use leaps to avoid parallels, as in Example 8-9b.

Example 8-9

a
 b
 D: (IV)⁶ iii⁶ ii⁶ I⁶ vii^{°6} (IV)⁶ iii⁶ ii⁶ I⁶ vii^{°6}

CHECKPOINT

1. What are the three uses of first inversion triads discussed in this chapter?
2. What type of triad (major, minor, or diminished) is usually used in first inversion rather than in root position?
3. How are inversions indicated in lead sheet symbols (review p. 48).

Part Writing First Inversion Triads

Composition exercises using triads in first inversion as well as in root position are much more satisfying musically than are exercises restricted to root position only. Previous suggestions concerning spacing and voice leading still apply, of course, and should be considered together with those that follow.

FOUR-PART TEXTURES

Inverted triads are nearly always complete in four-part textures. Because there are four voices and only three chord members, one of the members obviously will have to be doubled. The following suggestions should prove helpful.

1. In a contrapuntal texture—that is, in a texture consisting of relatively independent melodic lines—the doubling to use is the one that results from the best voice leading.

2. In a homophonic texture—that is, one that is primarily chordal or consists of a melody with chordal accompaniment—the doubling selected should be the one that provides the desired sonority.
3. In any texture, it is usually best not to double the leading tone.

The first of these suggestions probably needs no further explanation. Concerning the second suggestion, you should play Example 8-10, listening carefully to the different sonorities produced. If possible, you should also hear the example sung and performed by several combinations of instruments. The four parts of the example are presented in what is generally considered the order of preference on the part of composers of tonal music. However, this ordering is *not* to be interpreted as a rule. The quality of the sonority is affected as much by spacing as it is by doubling, as you will discover by comparing the last two chords in Example 8-10.

Example 8-10

Inner voice doubles soprano Inner voice doubles bass Soprano and bass doubled Inner voices doubled

a b c d

or or or

more common

A doubled leading tone usually results in or implies parallel 8ves because of the strong tendency of $\hat{7}$ to resolve to $\hat{1}$. If you play Example 8-11a through c, you will probably agree that Example 8-11c produces the most pleasing effect. Example 8-11a is obviously incorrect because of the parallel 8ves. However, Example 8-11b, which avoids the parallels, still produces an unpleasant effect, probably because the parallels are still implied by the doubled leading tone.

Example 8-11

a no b ? c good

(8)

F: I V⁶ I I V⁶ I I V⁶ I

THREE-PART TEXTURES

Inverted triads are usually complete in three-part writing. Although incomplete inverted triads do occur, they are not used with the same frequency as incomplete root position triads. If a member of the triad is omitted, it will almost always be the 5th. The omitted member obviously cannot be the 3rd because that is the bass note. If the root is omitted, the resulting sonority might be heard *not* as an inverted triad but as a root position triad, as in Example 8-12.

Example 8-12

Bb: I^6 $ii^6?$ V
IV?

Example 8-13 is from a composition for TTB (Tenor, Tenor, Bass) chorus. The tenor parts sound an octave lower than written. There are two incomplete I^6 chords in this excerpt. In the first of these the 5th is omitted, as we would expect. In the second incomplete I^6 , however, the root is omitted, but the listener recognizes the sonority as representing a I^6 because it follows a V chord. Notice also that the IV at the beginning of m. 46 could also be analyzed as a ii^6 , as in Example 8-12. Since IV and ii^6 have the same function in this context, either analysis is correct. All the other inverted triads in the excerpt are complete.



Example 8-13

Schubert, "Bardengesang"

Bb: V I V I^6 V I^6 IV vii^6 I^6 ii^6 I^6_4 V I

Soprano-Bass Counterpoint

Now that we will be using triads in first inversion, the bass lines of your exercises can be much more interesting and musically satisfying than they were when you had only root position triads available. This brings us back to the subject of **counterpoint**, which was mentioned briefly on page 71, where it was defined as “the combining of relatively independent musical lines.” We will now consider the idea of counterpoint a little more closely.

The words *relatively independent* are crucial to the understanding of counterpoint. The word *relatively* has to do with the style of the music in which the counterpoint is found. In tonal music, contrapuntal relationships are governed by certain voice-leading rules (restrictions against parallel fifths, and so on) and by conventions of harmonic progression. It would be unthinkable in tonal music, for example, for two lines to be in different keys. The word *independent*, in our definition of counterpoint, means that each line in a contrapuntal texture will ideally have its own unique contour and rhythm. Of these, the more important is contour. Let's begin with a counterexample. The opening of Haydn's Symphony No. 8, shown in Example 8-14, is pleasing and effective, but it is not contrapuntal because the lines have identical contours and rhythms and move in parallel motion throughout.



Example 8-14 Haydn, Symphony No. 8, I (violins only)

Allegro molto

Violin I *p*

Violin II *p*

The instruments in Example 8-15 also have identical rhythms and contours, but they are offset by one measure, creating a contrapuntal form known as a **canon**. You no doubt have sung **rounds**, which are canons that are perpetual—there is no notated ending for the ensemble, as there is for Haydn's canon (not shown). Canons and rounds make use of a special type of counterpoint called **imitative counterpoint**. Most of the counterpoint discussed in this section is not imitative or is only incidentally imitative.



Example 8-15 Haydn, String Quartet Op. 76, No. 2, III

(Vn. II; Vn. I 8^{va}) *f*

(Vla.; Vc. 8^{va} basso) *f*

In Example 8-16, Bach gives the soprano and bass different contours, although they have identical rhythms, so this is an example of counterpoint as well. Under the music, we show the relationships between the two lines as *p*, *s*, or *c*, for parallel, similar, or contrary (review p. 78). Notice that the prevailing relationships between the voices are contrary or similar.


Example 8-16

Bach, "Ermuntre dich, mein schwacher Geist" (outer voices only)

p c c c s s

Counterpoint, like that in the previous example, in which the two parts move with identical rhythms, is called 1:1 (one-to-one), or first species, counterpoint. In another harmonization of the same melody, shown in Example 8-17, Bach allows a little more rhythmic variety between the voices. Notice that he also uses a different time signature here.


Example 8-17

Bach, "Ermuntre dich, mein schwacher Geist" (outer voices only)

It is often instructive to simplify a texture by removing repetitions and embellishments to reveal the simpler underlying counterpoint. This is the approach frequently taken in the reductive examples in this text. For instance, the reduction following Example 8-18 shows that the music begins with a step down and back up in the soprano and a step up and back down in the bass—figures that are known as **neighbor motions**. This is followed in the melody by a leap to $\hat{5}$ in the soprano and a stepwise descent to $\hat{7}$, against which the bass unfolds a somewhat more complicated counterpoint.


Example 8-18 Beethoven, Rondo, Op. 51, No. 1

Moderato e grazioso

p dolce

C: I v_3^4 I v_6 IV_6 v_5^6

I ii^6 I_4^6 V

Textural reduction

C: I v_3^4 I v_6 IV_6 v_5^6 I ii^6 I_4^6 V

So, where in tonal music are we apt to encounter counterpoint? The music of the Baroque period (roughly 1600–1750) is known for contrapuntal textures. Although not all Baroque music is contrapuntal, much of it is, and it is not unusual in Baroque music for all the voices in a contrapuntal texture to have that relative independence that we have been talking about. This is also true in tonal music after the Baroque when the composer is working within one of the traditionally contrapuntal forms, such as the canon, discussed earlier. Another example is the **fugue**, a piece in which each voice states a short theme (the **subject**) in turn, after which it is tossed about among the voices, fragmented, and developed. However, in most tonal music *after 1750*, the greatest contrapuntal interest is found between the outer voices (the soprano and bass lines). This is true not just of vocal music but of tonal music in general. The inner voice or voices in tonal music are frequently “filler” for the most part. In the previous Beethoven example, the inner voice comes to the fore only in m. 3, where it continues the eighth-note arpeggiations begun by the bass at the beginning of the measure.

When you are composing your harmony exercises, whether from scratch or with a given bass or soprano line, you should first try to create a good soprano/bass counterpoint, and only after that is accomplished should you fill in the inner parts. The melodies should be simple, like the ones you learned to write in Chapter 5. The bass line should also be

effective, although bass lines tend to be more disjunct than soprano lines, especially at cadences, and the bass should move contrary to the soprano whenever practicable. Later, when you have learned more about adding embellishments, the results will be more musical if the basic contrapuntal framework between the soprano and bass is a good one.

As a final illustration, listen to Example 8-19 and the reduction that follows it. You can see that the counterpoint between the outer parts is basically quite simple. In fact, the reduction could easily be further simplified so that the top line would consist of $\hat{5} \hat{1} \hat{2} \hat{3}$ in the first four measures and $\hat{5} \hat{1} \hat{2} \hat{1}$ in the last four. The counterpoint is very effective, however; notice that there is *no* parallel motion between the two parts. Mozart took this contrapuntal framework and embellished the top line to create a pleasing and interesting melody.


Example 8-19
Mozart, Quintet for Horn and Strings, K. 407

5 6 7 8 *tr* 9

Horn

Strings

p *p* *f* *f* *p*

E♭: I V⁷ vi I⁶ ii₅⁶ V⁷ I f V p I V⁷

10 11 12

Horn

Strings

vi I⁶ ii₅⁶ V⁷ I

Textural reduction

5 6 7 8 9 10 11 12

Self-Test 8-1

(Answers begin on page 584.)

A. Analysis.

1. Bracket the longest series of complete parallel sixth chords you can find in this excerpt. Do not attempt a roman numeral analysis. Does the voice leading in the sixth-chord passage resemble more closely Example 8-8 or Example 8-9?



Mozart, Sonata K. 279, III

21 *tr* 25 *p*

30 *pp* *f*

35 *f* *p*

40 *f* *p*

45 *f* *p*

2. Label all chords with roman numerals. Then classify the doubling in each inverted triad according to the methods shown in Example 8-10.



Bach, "Jesu, meiner Seelen Wonne"

3. Label all chords with roman numerals. Write out the contour of the bass line in quarter-note heads (without rhythm). Can you find part or all of the bass line hidden in the melody?



Beethoven, Sonata Op. 2, No. 1, I

Allegro

B. The following excerpt is from Mozart's *Eine kleine Nachtmusik*. Supply the missing tenor line (viola part in the original) and then compare your result with Mozart's (in Appendix D).

G: V⁷ vi ii⁶ V⁷ V I⁶ V I

C. Supply alto and tenor lines for the following excerpts.

Bb: I 6 V e: i V⁶ $\frac{5}{3}$ i D: vi ii⁶ V vi

Eb: IV V I⁶ IV⁶ f#: i V⁶ i iv d: i⁶ iv⁶ V i

E: I⁶ IV vii^{o6} I g: ii^{o6} V VI i⁶ F: I vi ii⁶ V

10 11 12

G: V⁶ $\frac{5}{3}$ vi ii⁶ b: i⁶ ii^{o6} V VI A: V I⁶ IV V

- D. Using the first six problems from Part C, add an alto line to each to create a three-part texture.
- E. Analyze the chords specified by these figured basses and then add alto and tenor parts.

6 6 6 6

6 6 6 # 6 6 #

- F. The excerpt below is from the Gavotte from Bach's French Suite No. 5. Supply the missing alto line (only) and then compare your result with Bach's original three-part version (Appendix D). Because this is written for a keyboard instrument, you do not need to worry about the range of the alto part, but the right hand should be able to reach both the melody and the alto part.

G: I V⁶ vi iii⁶ IV ii⁶ V ($\frac{6}{4}$ 6 7) I

- G. Analyze the chords implied by the soprano and bass lines below, remembering to use only triads in root position and first inversion. Then add alto and tenor parts to make a four-part texture.

- H. The following example is reduced from Beethoven's Sonata Op. 79, III. Analyze the implied harmonies (more than one good solution is possible) and add two inner parts, one on each staff.

- I. Continue your solution to Part H with a second four-measure segment, similar to the first.

- J. In what ways are Parts F and H similar? What example in Chapter 7 most resembles Part F and H?

Summary

Triads in inversion are not at all unusual in tonal music. In fact, most phrases include at least one. First inversions come about either as **arpeggiations** of triads by the bass or as **substitutions** for root position triads. First inversion triads are also called sixth chords, so **parallel sixth chords** is a term used for a passage that features first inversion triads in parallel motion.

Triads in first inversion are used for variety, to improve the bass line, and to lessen the weight of some I and V chords as well as for other reasons. First inversion also allows the use of diminished triads because these are not commonly used in root position.

Inverted triads in four-part textures are usually complete, with no tones omitted. In three-part textures, if a tone is omitted, it is usually the 5th of the chord. If a tone is to be doubled, any tone but the leading tone will do. In four parts, the most common doublings are soprano or bass with alto or tenor.

Counterpoint is an important element of music throughout the tonal era. Some pieces, such as canons and fugues, feature counterpoint throughout and in all the voices, but in much tonal music the counterpoint is borne mostly by the outer voices (soprano and bass lines).

Variations



To read more about species counterpoint, please see Chapter 8 on our website at www.mhhe.com/tonalharmony5.