Chapter Five
Principles of Voice Leading

Introduction

The compositional process, being a creative one, is not entirely understood. It is reasonable to assume that a composer thinks of several aspects more or less simultaneously—melody, harmony, rhythm, and so on. Naturally, a complete analysis of a composition must take all these factors into account. For the most part, however, this text concentrates on questions relating to the harmonic aspect of tonal music because it is this aspect that most clearly delineates tonal music from other types.

We could say that the basic vocabulary of tonal harmony consists of triads and seventh chords and that its grammar involves the ways in which these chords are selected (**harmonic progression**) and connected (**voice leading**). In this chapter and the next we will concentrate on some of the basics of the voice-leading aspect: How does a composer write out a given succession of chords for some combination of performers? How does he or she decide in which direction each vocal or instrumental line should go?

Voice leading (or **part writing**) may be defined as the ways in which chords are produced by the motions of individual musical lines. A closely related term is **counterpoint,** which refers to the combining of relatively independent musical lines. Naturally, the style of voice leading will depend on the composer, the musical effect desired, and the performing medium (for example, it is easier to play a large melodic interval on the piano than it is to sing it). However, there are certain voice-leading norms that most composers follow most of the time, and our study will concentrate on these norms.

For various reasons, many theory texts have based their approach to voice leading on the style of the four-voice choral harmonizations by J. S. Bach. Although the Bach chorales epitomize the late Baroque approach to choral writing, most musicians today feel the need to study other textures and styles as well. To answer this need, our study of voice leading will deal with a variety of textures in both vocal and instrumental styles.

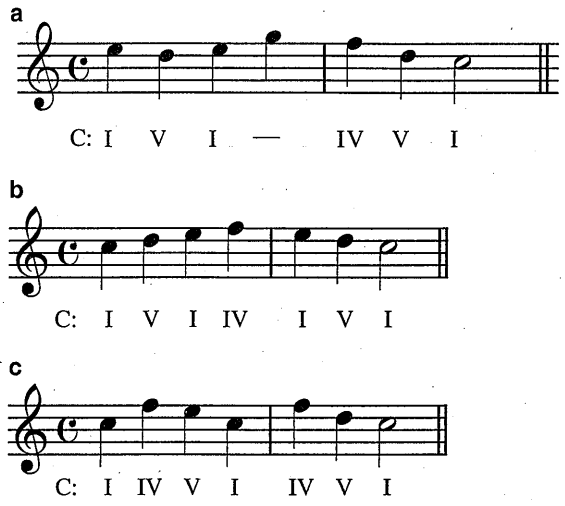
The Melodic Line

Our beginning exercises will make use of short and simple melodies in vocal style in order to avoid, for now, the complications involved with more ornate vocal and instrumental melodies. The following procedures should be followed for Chapters 5 through 9.

1. **Rhythm.** Keep the rhythm simple, with most durations being equal to or longer than the duration of the beat. The final note should occur on a strong beat.
2. **Harmony.** Every melody note should belong to the chord that is to harmonize it.
3. **Contour.** The melody should be primarily **conjunct** (stepwise). The shape of the melody should be interesting but clear and simple, with a single **focal point,** the highest note of the melody.

Example 5-1a is a good example of the points discussed so far. Example 5-1b is not as good because it has an uninteresting contour. Example 5-1c, although more interesting, lacks a single focal point and contains one incorrectly harmonized tone (E5).

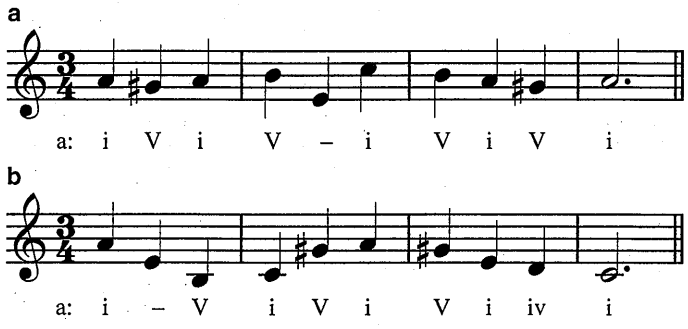
Example 5-1



4. **Leaps.**
   a. Avoid augmented intervals, 7ths, and intervals larger than a P8. Diminished intervals may be used if the melody changes direction by step immediately after the interval.
   b. A melodic interval larger than a P4 is usually best approached and left in the direction **opposite** to the leap.
   c. When smaller leaps are used consecutively in the same direction, they should outline a triad.
5. **Tendency tones.** In tonal music $\hat{7}$ has a strong tendency to move up to $\hat{1}$. An exception to this is the scalewise line descending from $\hat{1}$: $\hat{1}$–$\hat{7}$–$\hat{6}$–$\hat{5}$. The only other tendency tone that needs to be considered is $\hat{4}$, which often moves down to $\hat{3}$, but not with the regularity with which $\hat{7}$ goes to $\hat{1}$.

Example 5-2a illustrates a good melody in the restricted style with which we are beginning. Example 5-2b, on the other hand, breaks all of rule 4 as well as rule 5.

Example 5-2

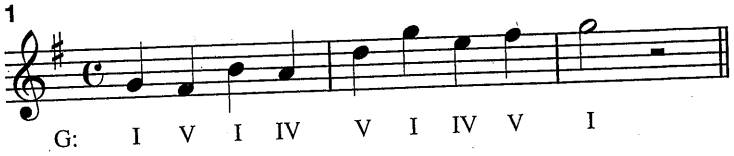


Self-Test 5-1

(Answers begin on page 573.)

A. Criticize each melody in terms of the rules for simple melodies discussed under "The Melodic Line" on pages 71–72.

1



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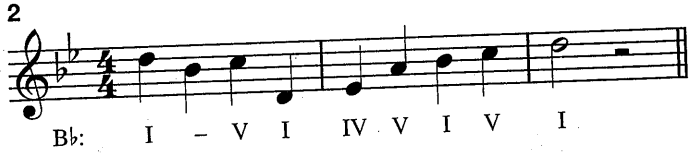

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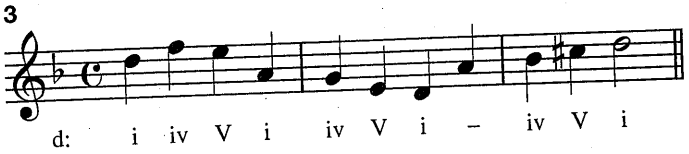


B. Compose simple melodies that will conform to the given progressions. Slashes represent bar lines, and every chord except the last takes one beat.

1. D: I V I / IV I I / vi ii V / I //
2. e: i iv i i / V V i i / iv V i //
3. F: I V vi IV / I IV ii V / I //

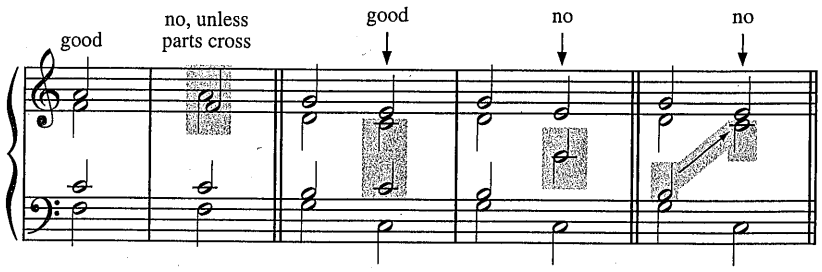
Exercise 5-1 See Workbook.

Notating Chords

A **musical score** is a tool used by a composer, conductor, or analyst. A score shows all the parts of an ensemble arranged one above the other, enabling the experienced reader to "hear" what the composition will sound like. In a **full score** all or most of the parts are notated on their own individual staves. Any musician should be able both to read and to prepare a full score, and some of your theory exercises should be done in full score. However, a **reduced score,** notated at concert pitch on as few staves as possible, might be more practical for daily theory exercises. Your choice of full or reduced score will depend partly on the sort of musical texture that the exercise will use. That is, if you are composing for four parts in chorale style, two staves will probably suffice. On the other hand, four active and independent instrumental lines might require four staves.

When you are notating more than one part on a single staff, be sure that the stems of the top part always point up and those of the bottom point down, even if the parts have crossed. Example 5-3 illustrates some common notational errors. The score in this case is the familiar SATB (Soprano, Alto, Tenor, Bass) reduced score.

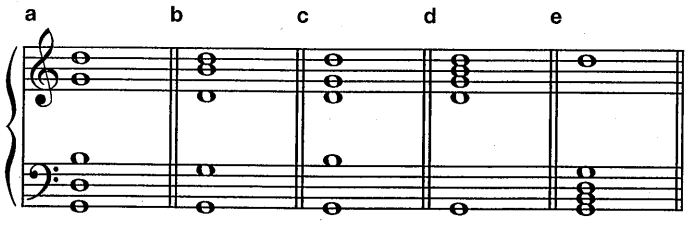
Example 5-3



Voicing A Single Triad

Once you have settled on the combination of instruments and voices for which you are writing and have selected the opening chord, the next consideration is **voicing:** how the chord is to be distributed or spaced. The way in which a chord is spaced has a great deal of influence on its aural effect. To convince yourself of this, play Example 5-4 at the piano. Each chord in the example contains five parts and covers the same range, but the aural effects are quite different. An even wider variety of effects could be obtained by playing Example 5-4 on various combinations of instruments. Although each of these spacings might be appropriate under certain circumstances, the spacing in Example 5-4e is the least commonly used because of its "muddy" effect.

Example 5-4



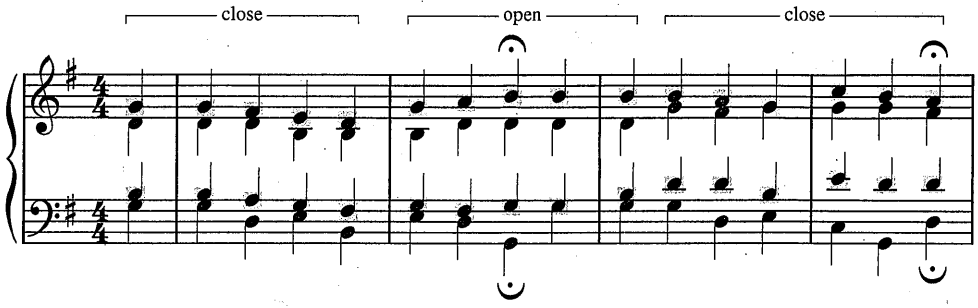
Because so much attention has been paid to four-part textures by authors of harmony texts, a terminology concerning the voicing of chords in four-part textures has been developed:

Close structure: less than an octave between soprano and tenor

Open structure: an octave or more between soprano and tenor

Example 5-5 illustrates these spacings in traditional hymn style.

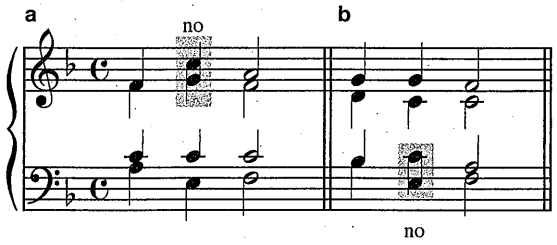
Example 5-5 *"Old One Hundredth"* (Protestant hymn)



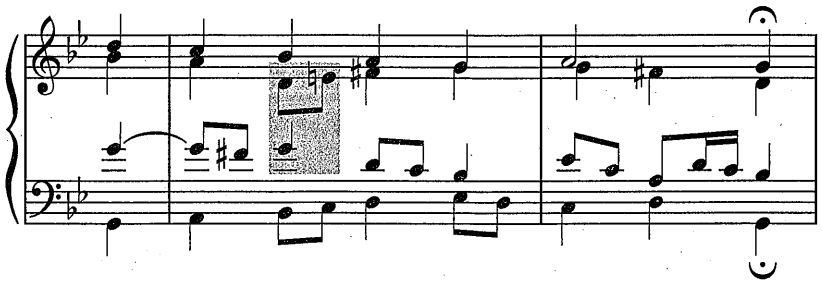
In your beginning part-writing exercises, it would be advisable for you to follow two simple conventions concerning spacing.

1. *Crossed voices.* Do not allow any part to cross above the soprano or below the bass because the essential soprano/bass counterpoint might become unclear (see Example 5-6). The alto and tenor lines may cross briefly if there is a musical reason to do so (see Example 5-7).

Example 5-6

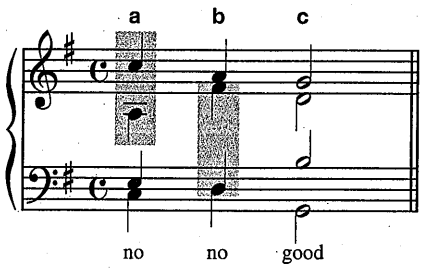


Example 5-7 *Bach,* "Gott, der du selber bist das Licht"



2. *Spacing.* When writing for three or more parts, avoid overly spacious sonorities by keeping adjacent upper parts (excluding the bass) within an octave of each other. For example, in a four-part texture there should be no more than an octave between soprano and alto (Example 5-8a) or between alto and tenor (Example 5-8b), although there might be more than an octave between tenor and bass (Example 5-8c).

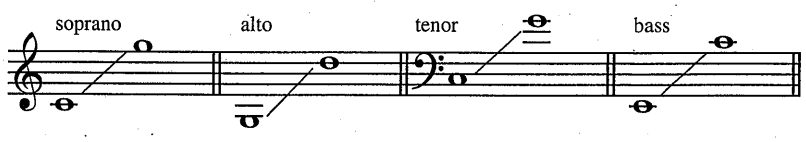
Example 5-8



After you have gained some experience in composing, you may begin to experiment with exceptions to these conventions.

When you are composing for vocal ensembles, use the ranges given in Example 5-9.

Example 5-9

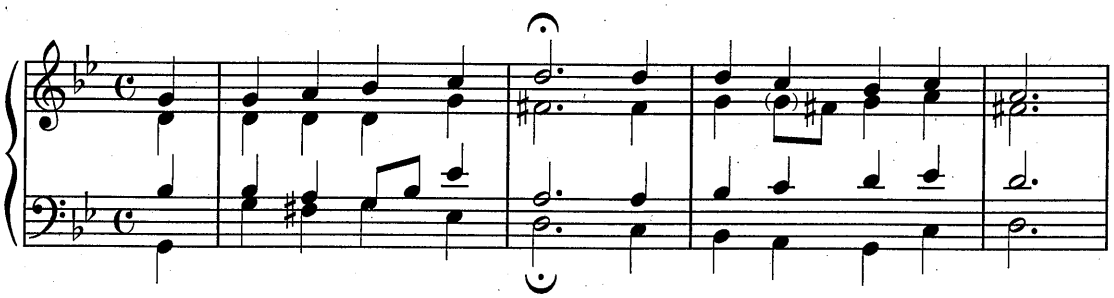


Self-Test 5-2

(Answers begin on page 574.)

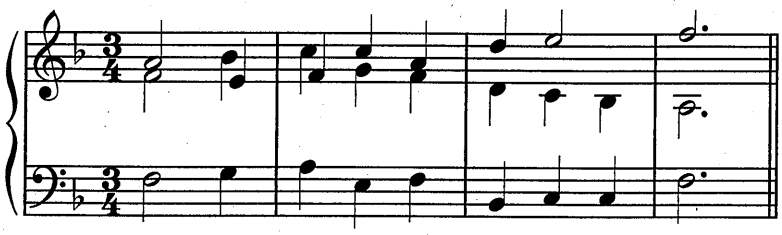
A. Analyze the excerpt from a Bach chorale below, using roman numerals. Then show beneath each roman numeral the structure of the chord by writing "O" or "C" for open or close structure. The note in parentheses in m. 3 is not part of the chord and should be ignored for the purpose of harmonic analysis.

Bach, "Wo soll ich fliehen hin"

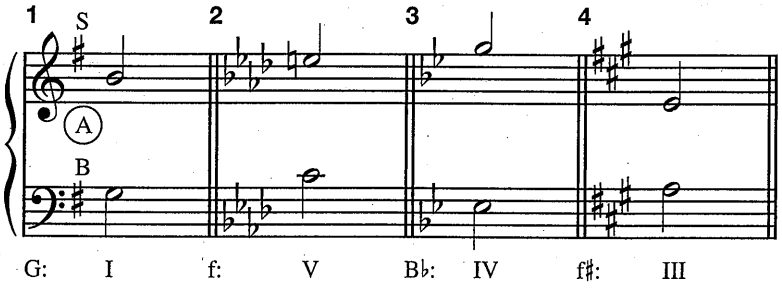


g: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

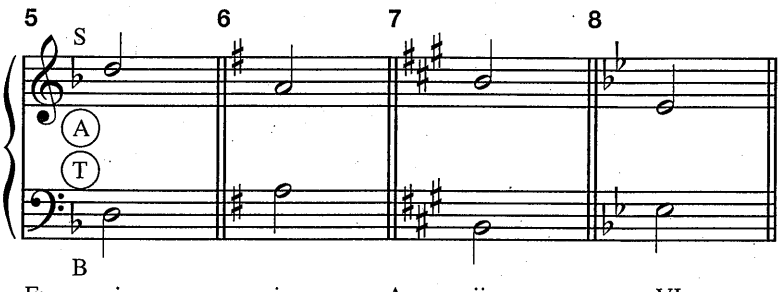
B. Review the two conventions concerning spacing on pages 75–76. Then point out in the example below any places where those conventions are not followed.



C. Fill in the circled missing inner voice(s) to complete each root position triad, being sure that each note of the triad is represented. Follow the spacing conventions and stay within the range of each vocal part.



G: I f: V B♭: IV f♯: III



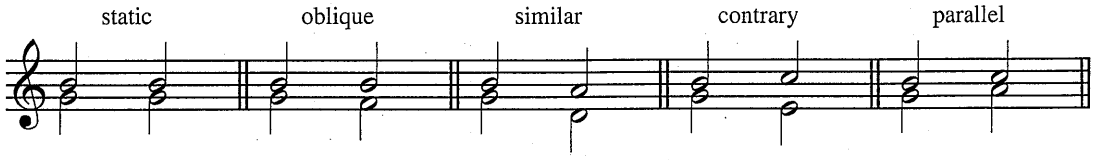
F: vi e: iv A: ii g: VI

Exercise 5-2 See Workbook.

Parallel Motion

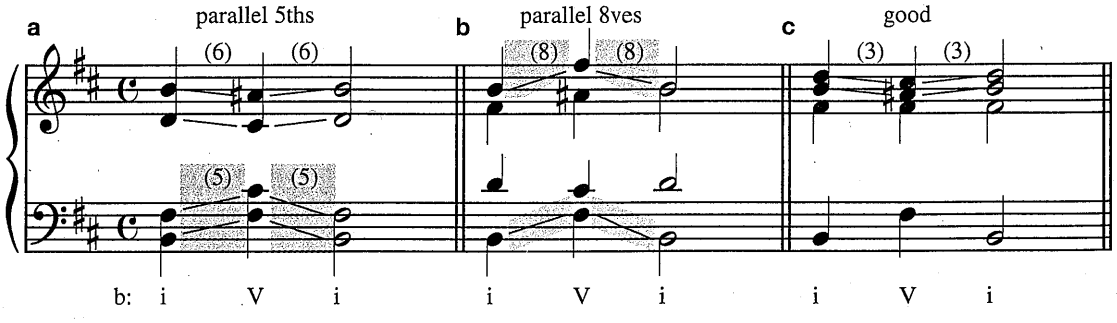
As we will see, in tonal music it is important to consider the relationships between any voice in the texture and every other voice in the texture. So, for example, in a four-part texture we would look at the relationships between the soprano and alto, soprano and tenor, soprano and bass, alto and tenor, alto and bass, and tenor and bass. The relationships we are looking at have to do with how each pair of voices moves from chord to chord. There are five possibilities, each of which is illustrated in Example 5-10: static, oblique, similar, contrary, and parallel. Of these, parallel motion is most pertinent to the present discussion.

Example 5-10



One of the basic goals of voice leading in tonal music is to maintain the relative independence of the individual parts. Because of this, voices moving together in parallel motion must be given special attention. Look at Example 5-11, and you will see that it consists of three versions of the i-V-i progression in the key of b. Each version uses the same chords, and each version contains parallel voice leading (indicated by the diagonal lines in the example). However, only one version, Example 5-11c, would be considered acceptable by a composer of tonal music.

Example 5-11



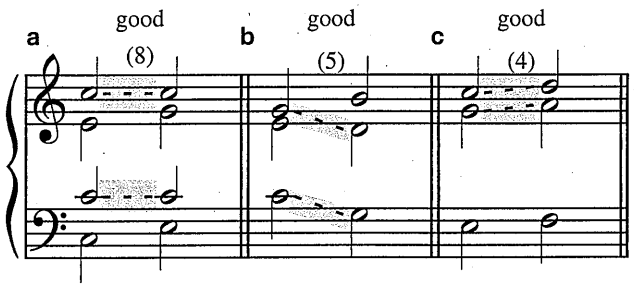
The reason that Examples 5-11a and 5-11b are unacceptable in the tonal style is that they contain parallel 5ths and 8ves. Although such parallels regained acceptance in the twentieth century, composers of tonal music generally followed the convention, dating from around 1450, of avoiding parallel 5ths and 8ves as well as their octave equivalents, such as 12ths and unisons. Note that this does *not* rule out the *duplication* of a line at the 8ve, which was common in orchestral writing (for example, see Ex. 7-8 on page 103, in which the bass line is doubled at the 8ve because the double basses sound

a P8 lower than written). The reason for avoiding parallel 5ths and 8ves has to do with the nature of counterpoint. The P8 and P5 are the most stable of intervals, and to link two voices through parallel motion at such intervals interferes with their independence much more than would parallel motion at 3rds or 6ths. We can deduce a rule of parallel motion:

Objectionable parallels: result when two parts that are separated by a P5 or a P8, or by their octave equivalents, move to new pitch classes that are separated by the same interval.

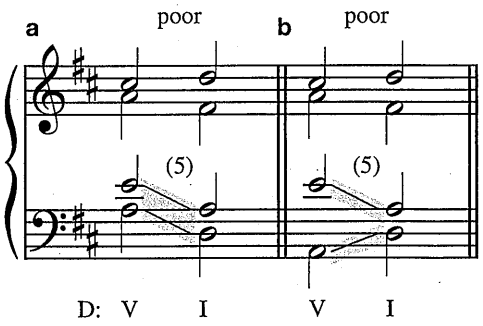
If you apply this rule to the three parts of Example 5-12, you will find that all of them are acceptable. In Example 5-12a the soprano and tenor do not move to new pitch classes, whereas in Example 5-12b the 5ths do not occur between the same pair of parts. Finally, the parallel 4ths in Example 5-12c are allowed, even though a P4 is the inversion of a P5. (Incidentally, remember that the unison is the octave equivalent of the P8, so parallel unisons should also be avoided.)

Example 5-12



Consecutive perfect 5ths and 8ves by contrary motion were also generally avoided, at least in vocal music. This means that the composer usually did not "correct" parallels (Ex. 5-13a) by moving one of the parts up or down an octave (Ex. 5-13b).

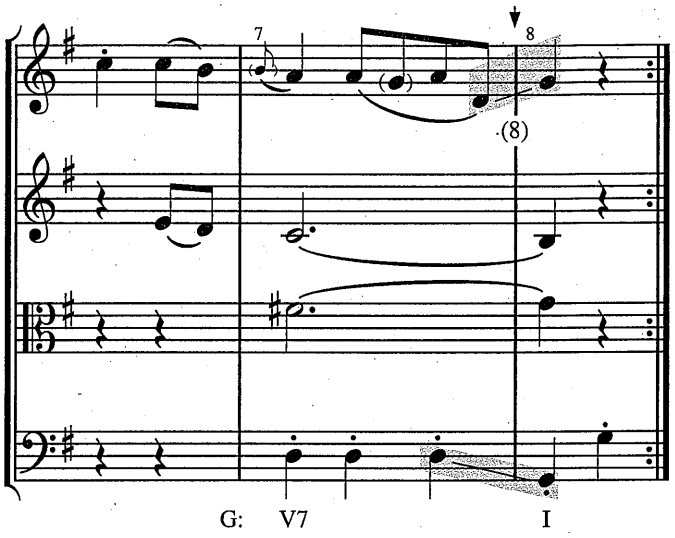
Example 5-13



Octaves by contrary motion are occasionally found at cadences in instrumental music and especially in vocal writing, when both melody and bass outline $\hat{5}$–$\hat{1}$. You will see that this occurs in Example 5-14, below the arrow, but the listener probably understands that A4

and G4 are the basic notes of the melody in mm. 7–8, whereas the D4 is only a quick arpeggiation. Notice also in Example 5-14 that some of the notes are in parentheses. In many of the examples in this book, notes that do not belong to the chord are put in parentheses. Non-chord tones will be discussed in more detail in Chapters 11 and 12.

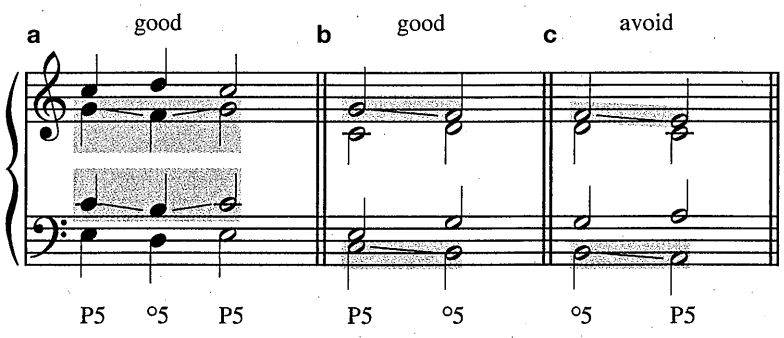
Example 5-14 *Haydn,* Quartet Op. 64, No. 4, II



Unequal 5ths: result when a P5 is followed by a $^{0}5$, or the reverse, in the same two voices.

Apparently, some tonal composers avoided unequal 5ths involving the bass, and others used P5-°5 but not °5-P5, yet neither of these restrictions holds true for tonal music in general. For the purposes of our part-writing exercises, we will consider unequal 5ths acceptable *unless* they involve a °5-P5 between the bass and another voice. Several sets of unequal 5ths are illustrated in Example 5-15, with all but the last being acceptable.

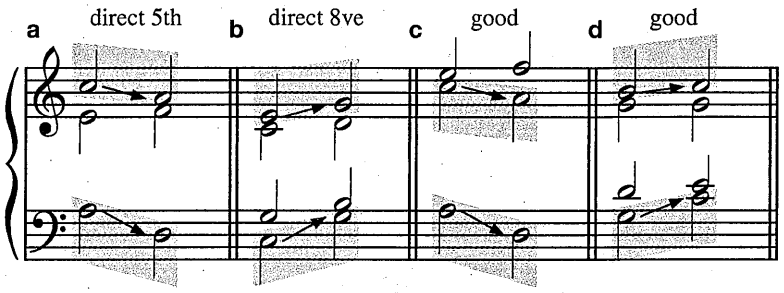
Example 5-15



Direct (or hidden) 5th or 8ve: results when the outer parts move in the same direction into a P5 or P8, with a leap in the soprano part.

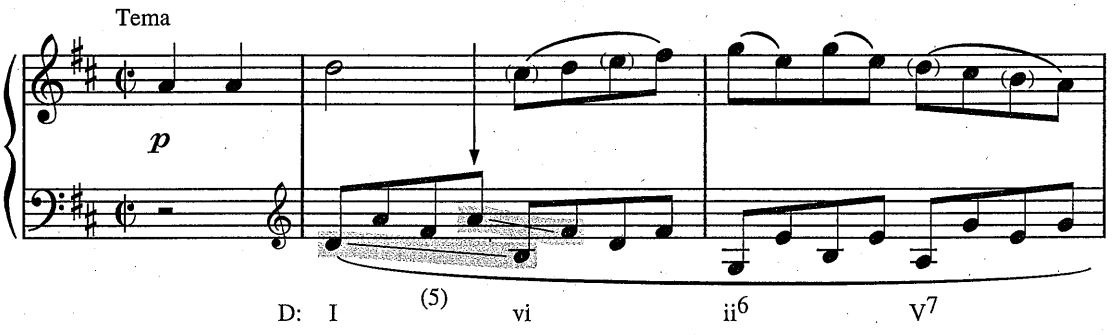
The aural result is similar to parallel 5ths and 8ves. In Examples 5-16a and 5-16b the interval of a P5 or P8 between the outer voices is approached from the same direction with a leap in the soprano. In Example 5-16c the 5th involves the bass and alto, not the bass and soprano, whereas in Example 5-16d the soprano moves by step, not by leap. Both Examples 5-16c and 5-16d are correct.

Example 5-16



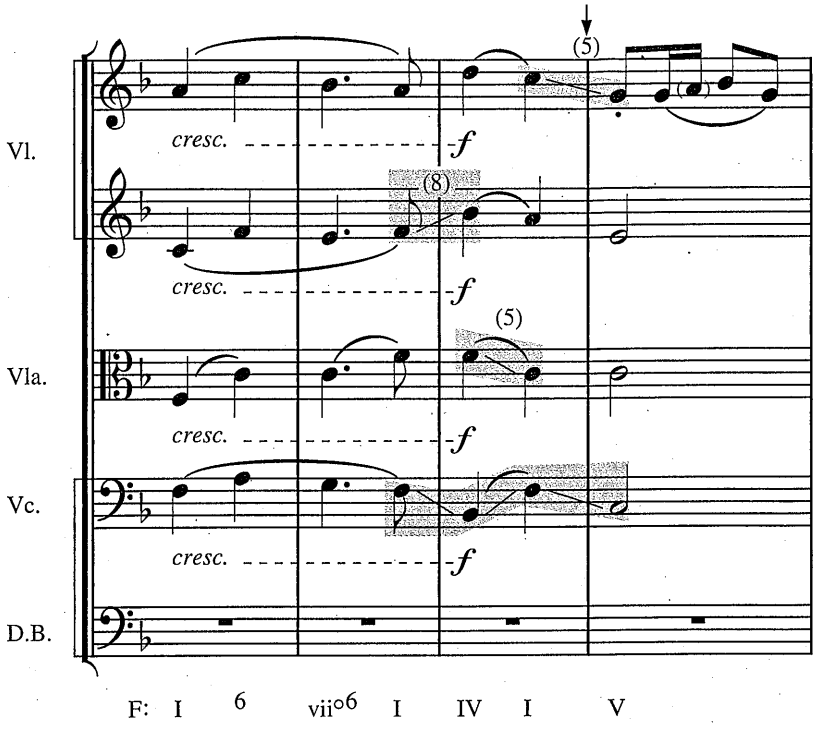
The avoidance of parallels of all types was somewhat less strictly maintained in instrumental than in vocal music. In piano writing, for instance, accompaniment figures frequently outlined 5ths or 8ves, as in Example 5-17.

Example 5-17 *Mozart, Sonata K. 284, III*



In most cases, such instances of parallels are confined to those textures and instrumental lines in which they are not obvious to the ear. When you attempt to compose music in the tonal style, you should use parallel 5ths and 8ves very sparingly, if at all, and in such a way that the listener's attention will not be drawn to them. Parallels involving both of the outer parts are especially rare and should be avoided. The few instances of such parallels, such as in Example 5-18, do not contradict the general validity of the rule. Possibly Beethoven was trying to evoke a rustic, unsophisticated atmosphere through the use of the parallels—the example is, after all, from the beginning of the *Pastoral* Symphony.

Example 5-18 *Beethoven, Symphony No. 6, Op. 68, I*



CHECKPOINT

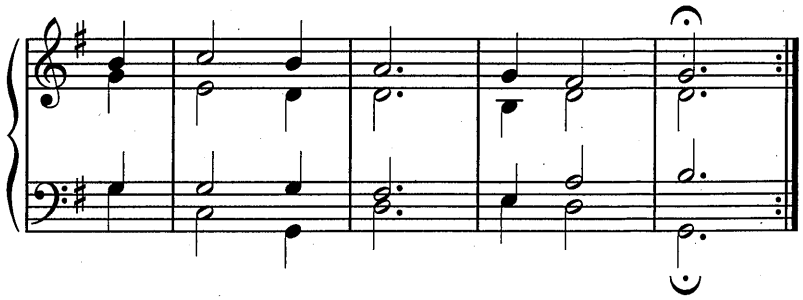
1. What do we mean by the focal point of a melody?
2. What scale degree is the strongest tendency tone in tonal music?
3. In a four-voice texture, adjacent upper parts should be kept within what interval?
4. Under what circumstances are unequal 5ths unacceptable?
5. What are direct octaves?

Self-Test 5-3

(Answers begin on page 575.)

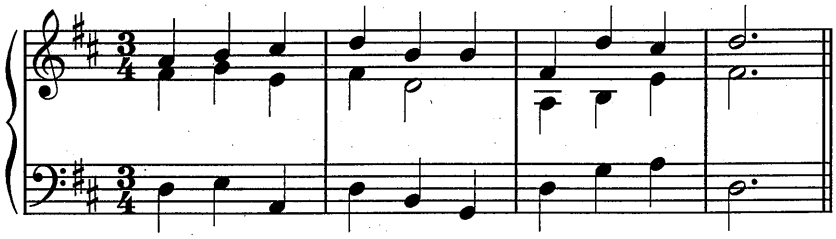
A. Label the chords in the excerpt below with roman numerals. Then label any examples of parallelism (objectionable or otherwise) that you can find.

Bach, "Ermuntre dich, mein schwacher Geist"



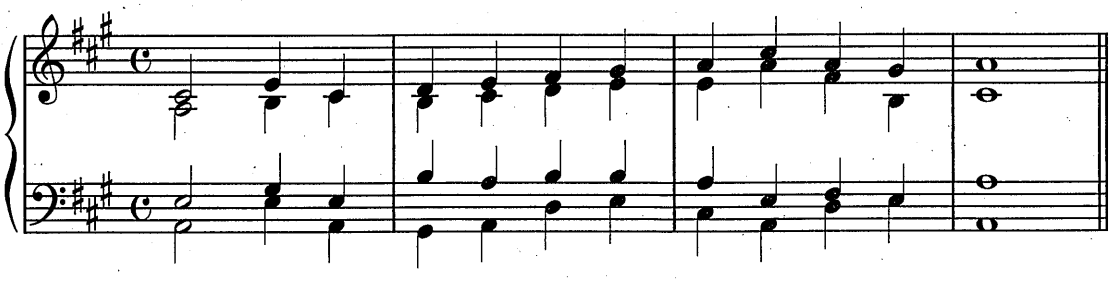
B. Find and label the following errors in this example:

1. Parallel 8ves
2. Parallel 5ths
3. Direct 5th
4. 5ths by contrary motion
5. Spacing error (review pp. 75–76)



C. Find and label the following errors in this example:

1. Parallel 8ves
2. Parallel 5ths
3. Direct 8ve
4. 8ves by contrary motion
5. Unacceptable unequal 5ths
6. Spacing error



Exercise 5-3 See Workbook.

Summary

Chords in tonal music are produced by the motions of individual musical lines, and the manipulation of these lines is called **voice leading** or **part writing**. A closely related term is **counterpoint,** which refers to the combining of relatively independent musical lines.

In your first exercises you will use melodies that are relatively short and simple and that conform to the suggestions given on pp. 71–72, and you will usually notate your exercises in **reduced score** rather than in **full score.** When two parts are notated on a staff, the stems of the top part always point up, and those of the bottom point down.

Spacing is an important consideration in voicing chords. In four-part textures, the space between the soprano and tenor parts categorizes a chord to be in **close structure** or **open structure.** Other suggestions regarding spacing are given on pp. 75–76.

Parallel 5ths and 8ves are avoided in most contexts in tonal music because they undermine the relative independence of the individual parts. Also generally avoided are **consecutive 5ths and 8ves by contrary motion** and, in certain circumstances, **unequal 5ths** and **direct 5ths and 8ves.** See pp. 76–82 for details.

Variations

For additional review and practice, please see Chapter 5 on our web site at **www.mhhe.com/tonalharmony5**.