

CHAPTER 8

Species Counterpoint

TOPICS

Voice Leading
Species Counterpoint
Cantus Firmus
Counterpoint
First Species

Second Species
Third Species
Fourth Species
Fifth Species
Modal Scales

Final
Musica Ficta
Nota Cambiata

IMPORTANT CONCEPTS

Voice leading is the term used to describe the linear aspect of musical writing. The individual melodic lines (called voices) that make up a composition interact to create harmony. The vertical aspect (chords) and the horizontal aspect (voices) are equally important in western European art music. This chapter will focus on the melodic aspects of voice leading using a modal two-voice approach. Chapter 9 will deal with the interaction of melody and harmony in a tonal four-voice context.

Species Counterpoint

Species counterpoint is an approach to counterpoint through the addition of contrapuntal voices to a given melody called the *cantus firmus*. Species counterpoint begins with simple note-against-note counterpoint and progresses to complex counterpoint in five stages, called the *five species*.

The Cantus Firmus

A cantus firmus is a fixed melody, one phrase in length, that terminates in a melodic cadence. It serves as the basis for other independent, but related, melodies.

Figure 8.1

A Cantus Firmus.



The Counterpoint

The *counterpoint* is a second voice, created according to specific principles, that accompanies the cantus firmus. For each note in the cantus firmus (c.f.), the counterpoint (cpt.) will have one or more notes.

First Species Counterpoint

First species counterpoint consists of one note in the counterpoint for each note in the cantus firmus.

Figure 8.2

Fux: Example of First Species Counterpoint.

The image shows two staves of music. The top staff, labeled 'Counterpoint', contains a sequence of ten half notes: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. The bottom staff, labeled 'Cantus Firmus', contains a sequence of ten half notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4. The counterpoint notes are placed directly above the cantus firmus notes, illustrating a one-to-one relationship.

Second Species Counterpoint

In *second species* there are two tones in the counterpoint for each tone in the cantus firmus.

Figure 8.3

Fux: Example of Second Species Counterpoint.

The image shows two staves of music. The top staff, labeled 'Counterpoint', contains a sequence of twenty notes: G4, A4, B4, A4, G4, F4, E4, D4, C4, B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2. The bottom staff, labeled 'Cantus Firmus', contains a sequence of ten half notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4. The counterpoint notes are placed in pairs above each cantus firmus note, illustrating a two-to-one relationship.

Third Species Counterpoint

Third species counterpoint has four tones for each tone in the cantus firmus.

Figure 8.4

Fux: Example of Third Species Counterpoint.

The image shows two staves of music. The top staff, labeled 'Counterpoint', contains a sequence of forty notes: G4, A4, B4, A4, G4, F4, E4, D4, C4, B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, G2, A2, B2, C3, B2, A2, G2, F2, E2, D2, C2, B1, A1, G1, F1, G1, A1, B1, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0, F0. The bottom staff, labeled 'Cantus Firmus', contains a sequence of ten half notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4. The counterpoint notes are placed in groups of four above each cantus firmus note, illustrating a four-to-one relationship.

Fourth Species Counterpoint

The *fourth species*, often called *syncopation* or *ligature*, consists of tied notes over nearly every bar in the counterpoint, creating a syncopated effect with the cantus firmus. Many of the tied notes are suspensions.

Figure 8.5

Fux: Example of Fourth Species Counterpoint.

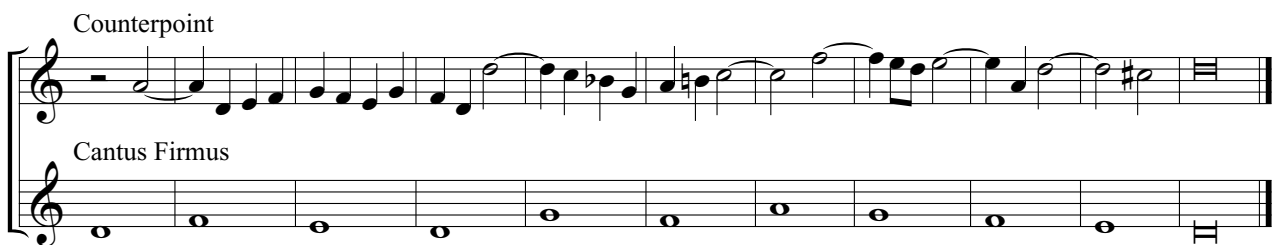


Fifth Species Counterpoint

The *fifth species* is called *florid counterpoint* and combines elements of all the other species. This species introduces rhythmic variety into the counterpoint.

Figure 8.6

Fux: Example of Fifth Species Counterpoint.



History

Johann Joseph Fux (1660–1741) was Kapellmeister to the court in Vienna when he wrote *Gradus ad Parnassum* in 1725. In his preface to the work, Fux says that he intended to invent “a simple method by which the novice can progress gradually, ascending step by step to attain mastery in this art.” He was well aware that in 1725 musical styles had changed fairly drastically from those of the Renaissance. In fact, he laments that he cannot “call back composers from the unrestrained insanity of their writing to normal standards.” Fux’s work greatly influenced the Viennese classical composers. Haydn worked through all the exercises and it is likely that Mozart studied the work and used it as a text with his students. Beethoven studied *Gradus*, first with Haydn and later with Johann Schenk and Johann Georg Albrechtsberger.

The text, originally in Latin, was translated into German in 1742 and to Italian in 1761. A paraphrased French version appeared in 1773 and an English paraphrase in 1791. Thus *Gradus ad Parnassum* came to be the standard approach to counterpoint throughout Europe. A complete English translation by Alfred Mann appeared in 1943.

The book consists of a dialog between a master and his willing pupil. Fux tells us that the master, Aloysius, is none other than Giovanni Pierluigi da Palestrina (c. 1525–1594), the most famous Renaissance composer. The pupil, Josephus, is a brilliant student who remembers everything his teacher tells him and yet manages to time his mistakes perfectly to allow the master to introduce the principles in a logical manner. The book is interesting reading quite aside from its pedagogical value.


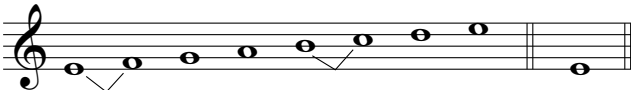

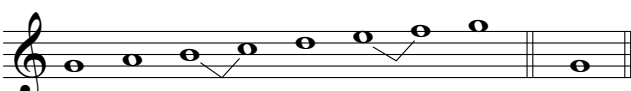


APPLICATIONS

This section presents the five species of two-voice writing in order. Although it is important that you achieve some mastery of each species before progressing to the next, you must first be thoroughly familiar with the modal scales and the basic elements of writing a melody.

Modal Scales

The *cantus firmi* and contrapuntal melodies of species counterpoint are composed using *modal scales* (see Chapter 2, Figures 2.34 and 2.35). Each mode is identified by its beginning tone, called the *final*, and consists of a specific arrangement of whole and half steps.

Figure 8.7

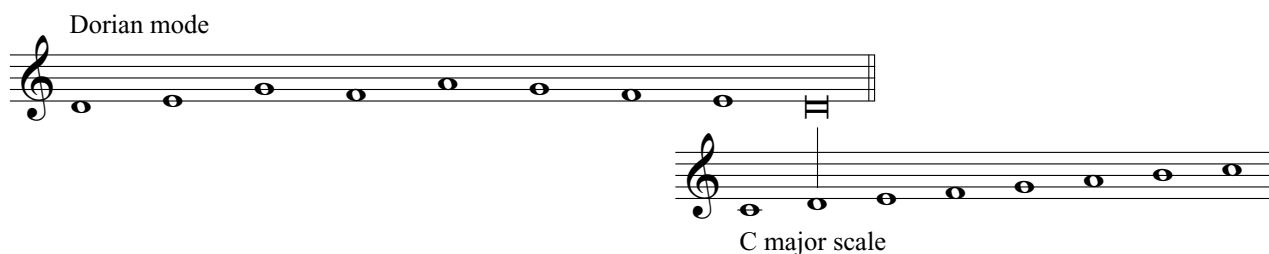
Mode Name	Range	Final	Half Steps Between	Tonal Scale Comparison
Dorian		G	$\hat{2}-\hat{3}, \hat{6}-\hat{7}$	Natural minor scale with raised sixth degree
Phrygian		F	$\hat{1}-\hat{2}, \hat{5}-\hat{6}$	Natural minor scale with lowered second degree
Lydian		F	$\hat{4}-\hat{5}, \hat{7}-\hat{8}$	Major scale with raised fourth degree
Mixolydian		F	$\hat{3}-\hat{4}, \hat{6}-\hat{7}$	Major scale with lowered seventh degree
Aeolian		G	$\hat{2}-\hat{3}, \hat{5}-\hat{6}$	Same as natural minor scale
Ionian		G	$\hat{3}-\hat{4}, \hat{7}-\hat{8}$	Same as major scale

Like the major and minor scales, the modes may begin on any tone as long as the arrangements of whole and half steps remain the same. Since the final of each transposed mode lies in the same relationship to the tonic of the major scale with the same key signature, the identity of a transposed mode can be quickly determined.

1. The final of the Dorian mode is always the second degree of a major scale.
2. The final of the Phrygian mode is always the third degree of a major scale.
3. The final of the Lydian mode is always the fourth degree of a major scale.
4. The final of the Mixolydian mode is always the fifth degree of a major scale.
5. The final of the Aeolian mode is always the sixth degree of a major scale.
6. The final of the Ionian mode is always the first degree of a major scale.

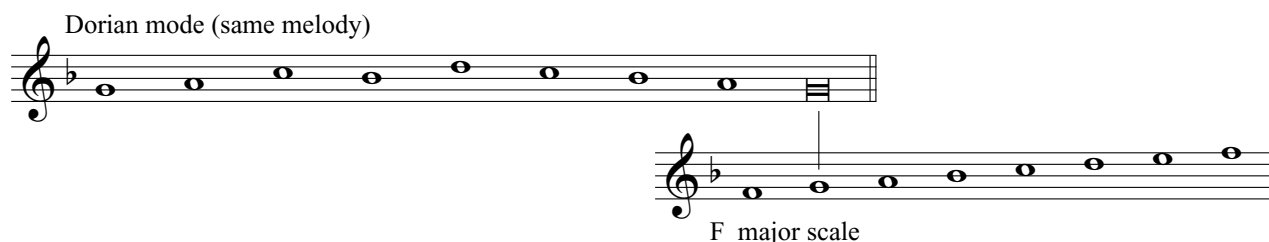
To illustrate, the final of nontransposed Dorian is the second degree of a C major scale.

Figure 8.8



The final of Dorian transposed to G is the second degree of an F major scale.

Figure 8.9

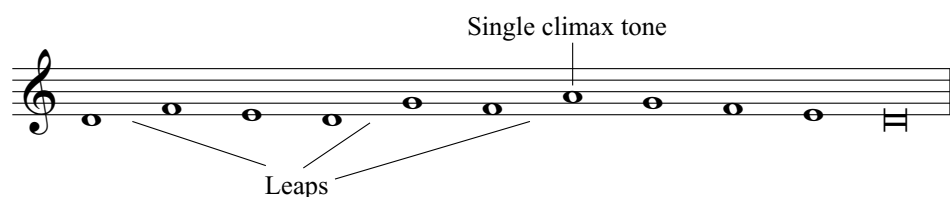


Melodic Characteristics

Melodies in species counterpoint (both the cantus firmus and the contrapuntal melody) consist primarily of conjunct motion with an occasional leap. For example, the cantus firmus presented in Figure 8.10 contains seven steps and only three leaps. The best general contour is a rise to a single climax tone followed by a descent.

Figure 8.10

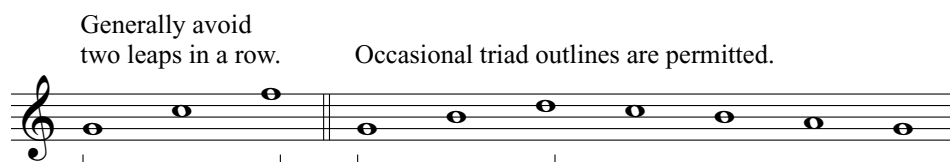
Example of a Good Melody.



Two successive leaps in the same direction are usually not a part of the style, unless they outline a triad.

Figure 8.11

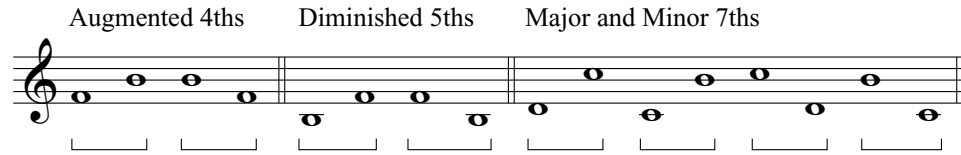
Successive Leaps.



Melodies should never leap by diminished or augmented intervals or by a seventh. The octave is the largest leap that should appear in a melody.

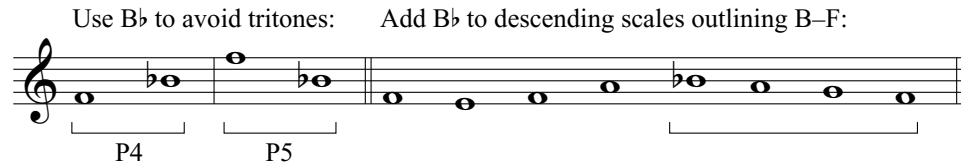
Figure 8.12

Leaps to Be Avoided.



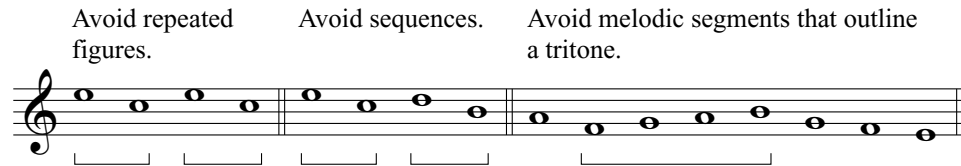
You can avoid the tritone (A4 or d5) occurring between the pitches F and B by flattening the B. In species counterpoint, descending scale motion often includes B \flat to avoid exposing the B to F tritone. As a general rule, avoid using B \flat too closely to B \natural by separating them by three or more measures.

Figure 8.13



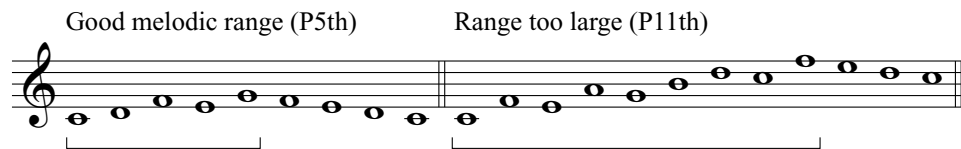
Avoid repeated figures, sequences, and melody segments that outline a tritone (A4 or d5).

Figure 8.14



The total range of a melody should rarely exceed an octave and should never exceed a tenth.

Figure 8.15



Writing First Species Counterpoint

In first species counterpoint you will write one note in the counterpoint for each note in the cantus firmus (c.f.). You will be asked to write counterpoints both above and below each given cantus firmus. In this book we will use only the treble and bass clefs, but in *Gradus ad Parnassum* Fux employed soprano, alto, tenor, and bass clefs.

Beginning the Counterpoint

If the counterpoint is above the cantus firmus, the first note of the counterpoint should be a P1, a P5, or a P8. If the counterpoint is below the cantus firmus, the first note of the counterpoint should be a P1 or a P8.

Figure 8.16

Correct Intervals at the Beginning of a Counterpoint.

For counterpoint above:

Three musical examples showing counterpoint above the cantus firmus. Each example consists of two staves: the top staff is labeled 'cpt.' and the bottom staff is labeled 'c.f.'.
 1. Interval P1: The counterpoint starts on the same pitch as the cantus firmus.
 2. Interval P5: The counterpoint starts on a perfect fifth above the cantus firmus.
 3. Interval P8: The counterpoint starts on an octave above the cantus firmus.

For counterpoint below:

Two musical examples showing counterpoint below the cantus firmus. Each example consists of two staves: the top staff is labeled 'c.f.' and the bottom staff is labeled 'cpt.'.
 1. Interval P1: The counterpoint starts on the same pitch as the cantus firmus.
 2. Interval P8: The counterpoint starts on an octave below the cantus firmus.

Ending the Counterpoint

The cantus firmi of species counterpoint are in Dorian, Phrygian, Lydian, Mixolydian, Aeolian, or Ionian modes. In every case the cantus firmus will end with a descent by step to the final of the mode. There is a fixed formula for ending the counterpoint in each mode, as shown in Figure 8.17.

Figure 8.17

Six musical examples showing the ending formulas for different modes. Each example consists of two staves: the top staff is labeled 'cpt.' and the bottom staff is labeled 'c.f.'.
 1. Dorian Mode: Counterpoint ends with a half note on the second line (F#) and a quarter note on the first line (F).
 2. Phrygian Mode: Counterpoint ends with a half note on the second space (G) and a quarter note on the second line (F).
 3. Lydian Mode: Counterpoint ends with a half note on the second space (G) and a quarter note on the second line (F).
 4. Mixolydian Mode: Counterpoint ends with a half note on the second space (G) and a quarter note on the second line (F).
 5. Aeolian Mode: Counterpoint ends with a half note on the second space (G) and a quarter note on the second line (F).
 6. Ionian Mode: Counterpoint ends with a half note on the second space (G) and a quarter note on the second line (F).

Notice that a raised leading tone is required in the Dorian, Mixolydian, and Aeolian modes. The raised leading tone (sometimes called *musica ficta*) is used only at the end of the exercise, and it is best to avoid using the natural form of the seventh scale degree in near proximity to the raised form. A good principle is to avoid the seventh scale degree in the last four tones before the raised leading tone.

Figure 8.18

Filling in the Remaining Notes

With the beginning and the end of the exercise completed, it is time to fill in the remaining notes. In first species counterpoint, the only intervals allowed between the two voices are M3, m3, P5, M6, m6, P8, M10, and m10. The unison is not acceptable in any place other than the first and final measure of the exercise.

Figure 8.19

Allowable Intervals in First Species Counterpoint.

As stated by Fux, the four basic principles for voice leading in first species counterpoint are:

1. From one perfect consonance (P1, P5, P8) to another perfect consonance, proceed in contrary or oblique motion.

Figure 8.20

2. From a perfect consonance (P1, P5, P8) to an imperfect consonance (M3, m3, M6, m6, M10, m10), proceed by similar, contrary, or oblique motion.

Figure 8.21

Similar	Contrary	Oblique

3. From an imperfect consonance to a perfect consonance, proceed in contrary or oblique motion.

Figure 8.22

Contrary	Oblique

4. From one imperfect consonance to another imperfect consonance, proceed in contrary, parallel, similar, or oblique motion.

Figure 8.23

Contrary	Parallel	Similar	Oblique

In general, there should be no more than two tied (or repeated) notes in a single exercise. Therefore, you should use oblique motion sparingly.

Figure 8.24

Too many repeated notes (bottom voice):

Avoid extended passages in parallel motion. For the most part, there should be no more than three successive parallel thirds or sixths.

Figure 8.25

Figure 8.25 illustrates three examples of counterpoint. The first two are labeled "Avoid:" and the third is labeled "OK:". Each example shows a cantus firmus line and a counterpoint line with fingerings indicated below the notes.

**Writing
Second Species
Counterpoint**

**Beginning the
Counterpoint**

In second species counterpoint you will write two notes for each note of the cantus firmus except for the final note, which will be a single note (see Figure 8.3). The basic principles presented in the previous sections on melodic writing and first species counterpoint still apply here.

At the beginning of the exercise, the first measure may contain two half notes or a half rest and a single half note.

Figure 8.26

Figure 8.26 illustrates two examples of counterpoint. The first is labeled "Two notes in first measure:" and the second is labeled "One note in first measure:". Both examples show a cantus firmus line and a counterpoint line with fingerings indicated below the notes.

The first note in the counterpoint must form a perfect consonance with the cantus firmus whether it is on the first beat or after a half rest. The allowable consonances are the same as for first species counterpoint.

Figure 8.27

Figure 8.27 illustrates examples of counterpoint above and below the cantus firmus. The top row shows counterpoint above the cantus firmus for intervals P1, P5, and P8. The bottom row shows counterpoint below the cantus firmus for intervals P1 and P8.

Ending the Counterpoint

The cadence pattern (2–1 in the cantus firmus and 7–8 in the counterpoint) established in first species is maintained in the second species. The second half note in the next to last measure of the counterpoint must be the leading tone. The cadence patterns in the counterpoint for second species are shown in Figure 8.28. As you can see, it is possible to revert to first species in the cadence.

Figure 8.28

For counterpoint above:

For counterpoint below:

Filling in the Remaining Notes

1. The first half note in each measure must be a consonance (perfect or imperfect).
2. The second half note in each measure may be a consonance or a dissonant passing tone. Leaps to or from a dissonance are not allowed. Allowable dissonances are M2, m2, P4, A4, d5, M7, m7, M9, and m9. The only allowable dissonance in second species is the passing tone.

Figure 8.29

Dissonant passing tones:

3. If two successive measures have the same perfect consonance (P1, P5, P8) on the first beat, the ear will hear them as if the intervening note was not present. The result is unacceptable parallel perfect consonances.

Figure 8.30

This counterpoint: Has this effect: This counterpoint: Has this effect:

4. You may use a unison on the second half of the beat in second species but never on the first beat.

Figure 8.31

Correct: Incorrect:

5. It is best to approach and depart from leaps greater than a third in contrary motion. Stepwise motion is preferred because it usually results in a better melodic line.

Figure 8.32

Step Leap Step Step Leap Step
down up down up down up

6. Repeated notes, tied notes, sequences, and repeated melodic figures are not allowed in second species counterpoint.

Figure 8.33

Incorrect: Incorrect: Incorrect: Incorrect:

Repeated note Tied note Sequence Repeated figure

Writing Third Species Counterpoint

Beginning the Counterpoint

In third species counterpoint you will write four notes for each note of the cantus firmus. You may wonder why there is no species with three notes in the counterpoint. This is because species counterpoint is based entirely on common time and three-against-one counterpoint would require triplets.

The first measure of the exercise may contain four quarter notes or a quarter rest and three quarter notes.

Figure 8.34

The first note in the counterpoint must form a perfect consonance with the cantus firmus whether it is on the first or second beat (see Figure 8.34). The allowable consonances are the same as for the first notes in first and second species counterpoint.

Ending the Counterpoint

The next to last note of the counterpoint must be the leading tone, just as in first and second species counterpoint. Fux suggests the following standard patterns for the next to last measure. Feel free to use these patterns or make up your own. (The dissonance in Figure 8.35b will be explained in item 3 of the next section.)

Figure 8.35

For counterpoint above:

For counterpoint below:

Filling in the Remaining Notes

1. The first note in each measure must be a consonance (perfect or imperfect).
2. The remaining three notes may be dissonant or consonant, but one of the last two notes in each measure must be a consonance.

Figure 8.36

Acceptable practice: first quarter and one of the last two quarters are consonant.

3. Allowable dissonances include the accented and unaccented passing tones, the upper and lower neighboring tones, and a figure called the *nota cambiata*. The *nota cambiata* occurred primarily in Renaissance music. It is the only dissonance in species counterpoint in which there is a leap away from a dissonance.

Figure 8.37

Unaccented PT: Accented PT: Upper NT: Lower NT: Nota cambiata:

8 (7) 6 5 5 6 (7) 8 3 (4) 3 6 3 (2) 3 1 8 (7) 5 6

The *nota cambiata* always has the same interval pattern: a step down, a third down, and a step up. The first and third notes in the pattern must be consonant, but the second and fourth may be dissonant. (Note that in Figure 8.35b you see the *nota cambiata* as part of a cadence formula.)

Figure 8.38

Step down Third down Step up Must be consonant
May be consonant or dissonant

The *nota cambiata* must begin on the first or third quarter of the measure.

Figure 8.39

NC beginning on first quarter: NC beginning on third quarter:

8 (7) 5 6 3 (4) 5 (4) 3 (4) 5 8

4. Allow at least two notes between perfect fifths and octaves to avoid the effect of parallel perfect intervals.

Figure 8.40

5ths OK with two notes between: 5ths not OK with one note between:

3 5 6 3 5 ④ 3 1 3 6 5 3 5 ④ 3 1

5. Watch out for melodic designs of four to six notes that are repeated or transposed elsewhere in the exercise. Avoid repeated melodic motives.

Figure 8.41

Avoid repeated melodic motives:

3 ④ 5 3 6 5 ④ 3 3 ④ 5 3 6 ⑦ 8 6

6. Do not write melodic motives that are simple arpeggios. Remember to use leaps sparingly in species counterpoint.

Figure 8.42

Avoid obvious arpeggiations:

5 8 5 3

**Writing
Fourth Species
Counterpoint**

Fourth species counterpoint is a study in suspensions, and the goal is to include as many of these devices as possible. The fourth species is the first that allows, and even encourages, dissonance on the first beat of the measure. Figure 8.43 shows a typical fourth species example.

Figure 8.46

3. If you cannot arrange a suspension on the first beat of a measure, write tied consonant notes, if possible.

Figure 8.47

4. If neither a suspension nor a tied consonance is possible, it is permissible to break the fourth species pattern and write untied half notes. Notice that the examples of fourth species counterpoint presented in Figure 8.5 and in Figure 8.43 have one instance where the ties are broken. Try to limit the number of such exceptions to one or two per exercise.
5. In fourth species it is sometimes possible to write sequences where successive fifths have only one note between. These patterns are not considered incorrect if no leaps are involved. Leaps tend to place undue emphasis on the fifths and are unacceptable.

Figure 8.48

**Writing
Fifth Species
Counterpoint**

**Beginning the
Counterpoint**

Fifth species counterpoint combines the basic elements of the other four species, accompanied by several requisites to accommodate the shift from one species type to the next. Fifth species also introduces the rhythmic value of the eighth note.

The exercise should begin with either second or fourth species (see Figures 8.26–8.27 for second species and Figure 8.44 for fourth species). Although it is permissible in these two species to begin with a half note, fifth species most often begins with a half rest.

Ending the Counterpoint

It is recommended that you use fourth species to conclude the counterpoint (see Figure 8.45). Although any of the standard cadential patterns presented thus far may appear in concluding measures, fifth species examples frequently end with a suspension. As we will see later, you can decorate these concluding suspensions with embellishments.

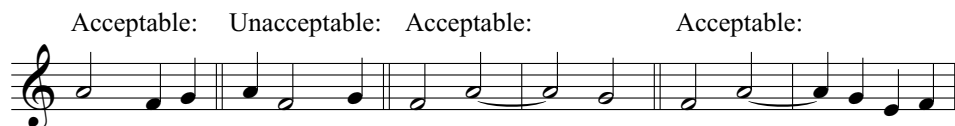
Filling in the Remaining Notes

Use second, third, and fourth species to fill in the remaining notes. It is important not to exploit one species type over the others. The counterpoint should be characterized by rhythmic variety, but within the context of good melodic contour and rhythmic flow. As a general rule, do not use one species type for longer than two and a half measures.

The note values associated with species one, two, three, and four receive very specific application in fifth species counterpoint.

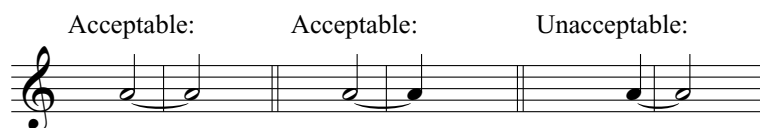
1. The whole-note value observed in first species will appear only in the last measure. Do not use whole notes to complete any other part of the counterpoint.
2. The individual half note from second species should emerge most often at the beginning of the measure (on the first quarter). Avoid positioning half notes on the second quarter because it will create syncopation—a rhythmic effect considered to be unstylistic. Half notes can begin in the second half of the measure (on the third quarter) but should be tied to a half note or quarter note at the beginning of the next measure.

Figure 8.49



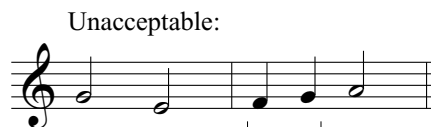
It is important to remember that if two notes are tied, the first note is required to be a half note. The second note may be a half or quarter note. No other note values may be tied together in fifth species writing.

Figure 8.50



3. Third species is frequently used to create forward momentum within a counterpoint. Quarter notes should never appear in isolated pairs in place of a half note.

Figure 8.51



4. The tied half notes and suspensions of fourth species maintain their original rhythmic placement when appearing in fifth species. The two half notes must be tied over the barline and should never be tied within the same measure together.

Figure 8.52

Acceptable: Unacceptable:

OK Not allowed

5. In addition to the duration values presented in the first four species, eighth notes may be included—but sparingly and as pairs. In general, no more than one eighth-note pair should occur every two measures. Eighth notes must be approached and left by step, and occur on the second or fourth quarters.
6. Eighth notes can appear as lower neighboring tones, but not as upper neighboring tones. The lower neighbor can occur as either the first or second note of an eighth-note pair.

Figure 8.53

PT allowed: Lower NT allowed: Upper NT not allowed:

PT NT NT

7. Suspensions are often decorated in fifth species. These embellishments are typically achieved through the use of a single quarter note or a pair of eighth notes.
 - a. The resolution pitch of a suspension may be anticipated by a quarter note.
 - b. The dissonant pitch of the suspension may be embellished with a quarter-note escape-tone type figure.
 - c. A quarter-note consonant leap to a consonant interval may follow the dissonant pitch.
 - d. Double eighth notes may be used to anticipate the resolution if the second eighth is a lower neighboring tone.

As you can see in Figure 8.54, the application of these ornaments requires you to alter the value of the dissonant pitch to accommodate the embellishment.

Figure 8.54

a. b. c. d.

3 6 7 6 6 3 6 7 8 6 3 6 7 3 6 3 6 7 6 5 6