# Interlude: Tonal Counterpoint

**Introduction**

In the previous counterpoint interlude, we suggested that most tonal music could be analyzed as an elaboration of a simple two-voice texture when combined with certain harmonic norms like cadences and root motion by fourth or fifth. We learned how to emphasize harmonic consonances, effectively shape melodies, maintain independent voices, and prepare and resolve passing tones (the most basic type of dissonance). Now that we are also familiar with basic principles of part writing, voice leading, and harmonic progression, we can return to the subject of counterpoint and examine the ways that it interacts with, and is affected by, these principles of tonality. This interlude is concerned with *tonal counterpoint*, the study of counterpoint in the context of functional tonality. To see how counterpoint is affected by tonal principles, consider the following pair of examples (the first of these appeared in the previous interlude).

Example C-1: Two-to-One Counterpoint



Example C-2: Tonal Counterpoint (with weak-beat motion)



These two examples utilize more-or-less the same techniques. For example, the strong beats feature consonances, while the weak beats contain consonant leaps, (dissonant) passing tones, or 5-6 (or 6-5) motion. Likewise, the conventions for good melodies have been followed in each case, as have those for motion between voices. The differences between the two examples fall into four categories, all of which involve the interaction between counterpoint and harmony:

1. Instead of a cantus firmus that can appear in either voice, tonal counterpoint includes a *bass line that implies an effective harmonic progression*. Chord changes occur on each

strong beat, which contain only chord tones, and the progression as a whole proceeds according to the principles of harmonic progression summarized in Chapter 7.

2. The ending formulas are expanded to include *harmonic cadences* (perfect authentic, root-position imperfect authentic, and half cadences) as well as the *melodic cadences* ($\hat{2}$-$\hat{1}$ over $\hat{7}$-$\hat{1}$ or vice-versa) employed in the first two units.

3. In the minor mode, the *melodic minor* is used throughout. (The qualities of the chord labels are determined by the versions of $\hat{6}$ and $\hat{7}$ that are used.) We have used the melodic minor in the previous two units, but we can now consider this topic in harmonic terms as well: essentially, the leading tone appears with dominant-function harmonies (V and vii$^{\text{o}}$), and the raised version of $\hat{6}$ is used to avoid augmented seconds in the melody when it occurs near the leading tone. In melodic terms, the ascending form of melodic minor is used in ascending contexts, while the descending form is used in descending contexts.

4. Instead of confining the weak-beat motion to the contrapuntal voice, embellishments are *shared between both voices*, such that at least one voice (and sometimes both voices) is moving on every weak beat until the cadence. The bass line thus possesses contrapuntal as well as harmonic characteristics (good melodic shaping, embellishments, and a mixture of inversions as well as an effective harmonic progression). No matter what the voice, weak-beat motion follows the principles laid down in the last unit (consonant leaps, passing tones, 5-6 or 6-5 motion).

In this interlude, we will begin working with harmonically organized bass lines, gradually proceeding to exercises in which you will compose the entire contrapuntal phrase in both voices. Along the way, we will consider the four points described above in more detail. First, let us consider how to write an effective bass line given a harmonic progression.

## Constructing a Bass Line from a Given Harmonic Progression

1. Like the cantus firmi from the last two interludes, this bass line will consist of short phrases of 7-15 pitches, using notes of equal value (say, half notes in a 4/4 meter) up to the final pitch.

2. Each phrase will begin and end with *tonic* or *dominant* harmonies.

3. Some exercises will consist of only one phrase, while others will form a two-phrase period. In the latter case, treat each phrase as a separate exercise with its own cadence, in the sense that you do not have to try to make the end of the first phrase join up contrapuntally or harmonically with the beginning of the second phrase.

*STEP 1: COMPOSING THE BASS LINE*

1. **Notate in Root Position:** Notate the bass line in root position using the given progression.

2. **Range:** Stay within the approximate range of E2 to C4, and use leaps larger than a fifth only occasionally.

Example C-3 illustrates a root position bass line. The given progression is shown below the example. Note that the progression has been constructed using the principles given in Chapter 7.

Example C-3: Root Position Bass Line

g:   i          vii°       i        iv       ii°       V        i

*STEP 2: DETERMINING CHORDS THAT MUST REMAIN IN ROOT POSITION*

There are certain chords that should always be left in root position for the purposes of these exercises.

1. **First and Last Chords**: The first and last chords of each phrase should be in root position.

2. **V in a V-I Cadence**: In addition, if the cadence (the last two chords of the phrase) is V-I, the V should also be in root position. The melodic cadence—$\hat{2}$-$\hat{1}$ combined with $\hat{7}$-$\hat{1}$—used in the earlier interludes is considered weak in tonal counterpoint and should be seldom used.

3. **vi in a V-vi Progression**: If a progression contains the deceptive progression V-vi (or V-VI in minor), at least the vi (or VI) should be in root position.

The bass line from Example C-3 is shown again below, with circles around the notes that should remain in root position.

Example C-4: Mandatory Root Position Chords

g:   i          vii°       i        iv       ii°       V        i

*STEP 3: DETERMINING CHORDS THAT MUST BE USED IN FIRST INVERSION*

Next, there are a few triads that should be used in first inversion rather than in root position.

1. **ii° and vii°**: These include the ii° in minor keys and the vii° in major and minor. (Review Chapter 8: "Use of First Inversion Triads.")

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Example C-5: Mandatory First Inversion Chords



g:    i        vii°⁶        i        iv        ii°⁶        V        i

2. **Either V or I (but not both) in an Internal V-I Progression**: If the progression contains a V-I *within* the phrase (not at the very beginning or at the cadence), it is usually best to keep it from sounding too final by using V⁶—I or V—I⁶ (but not V⁶—I⁶).

Example C-5 shows our bass line with the vii° changed to a vii°⁶ and the ii° to a ii°⁶.

*STEP 4: IMPROVING THE BASS CONTOUR*

Here are a few additional suggestions concerning the overall flow and contour of the bass line.

1. **Repeated Bass Notes**: First, it is a good idea to avoid repeating bass notes across the barline because such repetitions tend to confuse the harmonic rhythm. There was a repetition across the barline in Example C-5 (the two C3's), which Example C-6 corrects by inverting the iv chord.

Example C-6: Repeated Note Avoided



g:    i        vii°⁶        i        iv⁶        ii°⁶        V        i

2. **Focal Point**: Also, it is best if the bass line contains a focal point, a single highest point or a single lowest point in the line. In Example C-6 above, the Eb3 provides the focal point.

3. **Convert Large Leaps**: Inversions (use first inversions only) are often used to convert large leaps into smaller leaps or stepwise motion. The sixth between G2 and Eb3 in Example C-6 becomes a fourth in Example C-7 when the i chord is inverted.

4. **Tonal Variety**: Notice that inverting the i chord also helps the bass line in another way: where we once had three G's (out of seven pitches), we now have only two, and we have added a new pitch class, Bb, to the line. This is called "tonal variety," and it is preferred over "tonal redundancy," the overuse of a single pitch class.

Example C-7: Leap Converted and Tonal Variety Achieved



g:    i        vii°⁶        i⁶        iv⁶        ii°⁶        V        i

5. **Change of Direction**: If a large leap occurs in the line, change the direction of the line after the leap (and, if possible, before the leap as well).

6. **Dissonant Intervals**; Avoid the use of augmented intervals, sevenths, and any interval larger than an octave. The only diminished intervals used are the $^{o}4$ ($\hat{3}$-$\hat{7}$-$\hat{1}$ in minor) and the $^{o}5$ ($\hat{4}$-$\hat{7}$-$\hat{1}$ in major or minor). In either case, the line changes direction after (and usually before) the leap.

Example C-8: Allowable $^{o}4$ and $^{o}5$



7. **Melodic Minor**: In minor keys, remember to use melodic minor. This may occasionally change the quality of the triad. For example, in the progression iv-V-I, if you invert the first two chords, you should change iv$^6$ to IV$^6$ to avoid an augmented second in the bass. Likewise, in the progression i-V-iv-V, if you invert the middle two chords, you should change V$^6$ to v$^6$.

Example C-9: Use of melodic minor



The study of tonal counterpoint, however, is an excellent place to review melodic minor, since the use of this scale involves the interaction of harmony and melody. Determining which variants of $\hat{6}$ and $\hat{7}$ to employ in different contexts can often be difficult. You might recall that the so-called "ascending" form is used in ascending contexts and the "descending" form in descending contexts, but this maxim is not always quite as straightforwardly helpful as it sounds. Let us again review the important features here.

The most common minor-mode variant of $\hat{7}$ is the raised form, the leading tone. The leading tone has a harmonic and a melodic function. Harmonically, it appears with those chords that have a dominant function—essentially V and vii$^o$ chords—that typically proceed to tonic harmonies or as the penultimate harmony of a deceptive progression. The flip side of this principle is that you should not use the *lowered* form of $\hat{7}$ if you need the chord in question to have a dominant function. When dominant function is not necessary, the lowered form of $\hat{7}$ can be used. This is why, for example, the III or VII chords in minor do not require a leading tone. Apart from the fact that the III chord becomes augmented when the leading tone is used, it does not typically have a dominant function.

Melodically, the function of the leading tone is to progress to the tonic pitch. This principle is why the "ascending" form of the melodic scale uses the leading tone, but not the "descending" form: only when a line ascends toward the tonic is the leading tone

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necessary. In descending lines, by contrast, the use of the leading tone would falsely suggest to the listener that an ascent to the tonic was coming. Thus, in the bass scale-degree pattern $\hat{1}$-$\hat{7}$-$\hat{6}$-$\hat{5}$, it is appropriate to use the harmonization i-v$^6$-iv$^6$-V. The v$^6$ chord over $\hat{7}$ is appropriate because it does not have a dominant function—it does not proceed to tonic.

The use of the leading tone can also affect which variant of $\hat{6}$ is used. When $\hat{6}$ occurs immediately before a leading tone, the use of the typical lowered form would result in an overly dissonant augmented second between the two pitches—hence the use of the raised form of $\hat{6}$ in the "ascending" melodic minor scale. This raised form isn't necessary when descending, because the leading tone is not present to create the augmented second interval. Thus, in the bass scale-degree pattern $\hat{5}$-$\hat{6}$-$\hat{7}$-$\hat{1}$, it is appropriate to use the harmonization V-IV$^6$-V$^6$-i. In this case, the IV$^6$ instead of iv$^6$ over scale-degree 6 prevents the augmented second from appearing in the bass line.

The same principles apply to upper-voice lines that ascend or descend as in the scale-degree patterns $\hat{6}$-$\hat{7}$-$\hat{1}$ or $\hat{7}$-$\hat{6}$-$\hat{5}$.

However, there are less obvious situations where it will be more difficult to tell which form of $\hat{6}$ or $\hat{7}$ to use. In most such cases, a long-term melodic trend contradicts the immediate context. (Review Chapter 4: "The Minor Scale.")

8. **Six-Four Chords**: You may have noticed that all of the inverted triads we have used have been first inversion triads. When you begin writing your own progressions, you may include cadential 6/4 chords before the cadential dominant. For now, however, *avoid using 6/4 chords*.
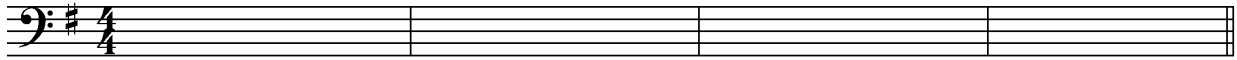
**Self-Tests**

*Self-Test C-1*

A. Review the paragraphs above, and compose bass lines to the following progressions.
Follow the suggested procedures and explain your decisions.

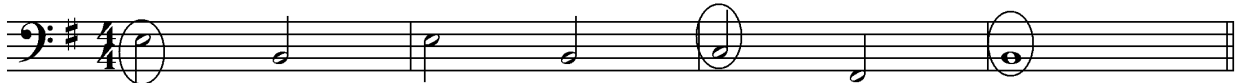Example:

Given:
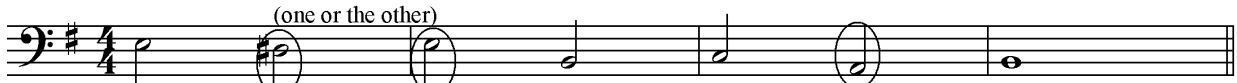


e:  i          V          i          V          VI        ii°        V
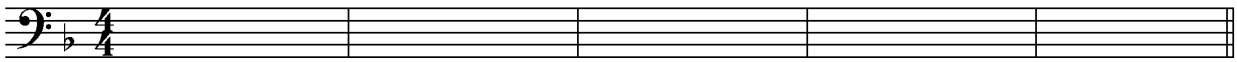
Mandatory root position pitches:



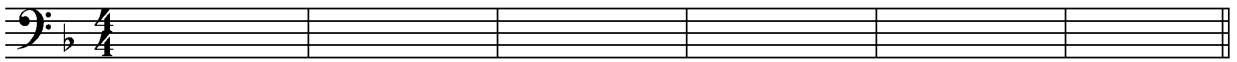e:  i          V          i          V          VI        ii°        V

Mandatory first inversion pitches:
(one or the other)



e:  i          V⁶         i          V          VI        ii°⁶       V

1.



F:     I        vii°      I        vi       V        I        ii       V        I

2.



d:   i      ii°      V      VI      iv      V      i      vii°      i      V      i

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**Composing a One-to-One Counterpoint above the Bass Line**

Now that we have composed harmonically conceived bass lines to a given progression, we can compose the contrapuntal line above it, just as we did with the cantus firmi in the first two interludes.

Let's begin with one-to-one counterpoint. *We can use the same guidelines that were given in the first counterpoint interlude* (review it if you need to), along with *four additional points*:

1. **Chord Tones on Strong Beats**: The one-to-one counterpoint interlude employed pitches only on the strong beats; the resulting harmonic intervals were all required to be consonances. This is still true with tonal counterpoint, but with the additional restriction that both pitches should be chord tones (that is, they should both belong to the chord whose label appears beneath them).

2. **Cadences**: Remember that we can now use PACs, root-position IACs, HCs, and (more rarely) the melodic cadences that we have already been using. For now, the given progression will indicate which to use. Avoid using $\hat{5}$ above a final I (or i) chord in an IAC.

The following examples illustrate common cadential patterns as they might appear at the end of contrapuntal phrases.

Example C-10: Examples of Harmonic Cadences



Other examples are possible, although the cadences above are the most effective and therefore the most common. Many involve stepwise motion in the upper voice. The larger number of half-cadence examples results from the greater variety of chords that can precede V. Note also that no IAC ending on upper-voice $\hat{5}$ is shown: this pitch would

normally be approached by common tone and provides a weak degree of closure. Like the melodic cadences, all of these cadences should be placed so that the final chord is located on beat 1.

3. **Melodic Minor and Harmonic Progression**: In minor keys, use melodic minor, and *change the triad qualities of the chords as needed*. For example, given the progression i-iv-V-i, using sol-la-ti-do in the upper voice will change the progression to i-IV-V-i.

4. **Awkward Doublings:** Avoid doubling the bass pitch in the upper voice whenever a $I^6$, $IV^6$, or $V^6$ ($i^6$, $iv^6$, or $V^6$ in minor) chord is used. In the case of the $V^6$ chord, this pitch is the leading tone, which should never be doubled. The other doublings are awkward and should also be avoided.

## Writing Your Own Harmonic Progressions

In some of the exercises that follow, you will be asked to write your own progressions, using the harmonic progression guidelines in Chapter 7. You can either write out the progression entirely with root-position triads, then follow the procedure in the last section, or you can include inversions from the beginning, making sure to create an effective bass line as described above.

**Self-Tests**

*Self-Test C-2*

1. Compose a good one-to-one counterpoint to the following bass line. Indicate the harmonic intervals formed by the two voices. You may either write a PAC or a root-position IAC as the final cadence. Indicate the harmonic intervals formed by the two voices.



G:  I    iii    vi    ii⁶    V    vi    IV    V    I

2. Compose a good bass line using the root-position progression below, inverting harmonies as necessary. Then compose a good one-to-one counterpoint above the bass line. Use a PAC for the final cadence. Indicate the harmonic intervals formed by the two voices.



f:    i    VI    ii°    V    i    iv    V    i

3. Invent a harmonic progression in half notes (except for the final pitch, which should be a whole note) following the instructions below. Then compose a good bass line and add a good one-to-one counterpoint above that bass line.

a. F major, one four-measure phrase in 4/4 meter with a half-note pickup

b. G minor, two four-measure phrases with cadences appropriate for a period in 4/4 meter

**Embellishing the One-to-One Counterpoint on the Weak Beats**

In tonal counterpoint, changes of harmony occur on the strong beats, with all strong-beat pitches functioning as chord tones. Once we have written a one-to-one counterpoint, we can embellish the weak beats (beats 2 and 4) with consonant leaps, passing tones, or 5-6 (or 6-5) motions, just as we did with two-to-one counterpoint. (Review the section entitled **The Weak Beat** in the two-to-one counterpoint unit.) Unlike two-to-one counterpoint, where we practiced embellishing only one voice, we will now extend our embellishments to *both voices*.

This creates several new issues with respect to the principles discussed in the two-to-one counterpoint unit. There will, for example, be times when both voices will be moving simultaneously on a particular weak beat. Additionally, it will be necessary to account for the relationships between these embellishments and the underlying harmonic progression. To account for these changes, consider the following guidelines:

1. **Simultaneous Embellishments**: It is possible for both voices to embellish a particular weak beat. In such cases, the two weak-beat pitches should be consonant with one another. In other words, dissonances should only appear in these examples when a single voice moves by passing tone on a weak beat. Example C-11 illustrates appropriate and inappropriate uses of simultaneous embellishments (the latter are marked with "NO"). Remember that the underlined harmonic intervals indicate that these intervals appear on the strong beats.

Example C-11: Simultaneous Embellishments



In Example C-11, the simultaneous passing tones in measure 1, beat 2 are consonant with each other, and so are acceptable. The same is true of the combined passing tones and consonant leaps in measure 1, beat 4 and measure 2, beat 4. However, in measure 2, beat 2 and measure 3, beat 2, the leaps that would otherwise have been consonant become dissonances when combined with the 6-5 motions in the other voice, and so these combinations should be avoided. Either embellishment would have been acceptable on its own, but in these cases the two do not work well in combination.

The object, however, is *not* to add motion over *every* chord in *both* voices. As you know, the term "counterpoint" implies a certain amount of rhythmic independence between the voices, so it would be best if they did not both move in steady quarter notes. On the other

hand, if one part has all or almost all of the quarter-note motion, it tends to be heard as the "melody," while the other becomes the "accompaniment," even if the embellished part is the bass line. For now, try to keep the quarter-note motion distributed fairly evenly between the two parts, with the overall effect being a nearly constant flow of quarter notes when both voices are heard together. Example C-12 illustrates this even distribution of embellishments.

Example C-12: Embellished Counterpoint



2. **Consonant Leaps as Chord Tones**: Consonant leaps should move to pitches that belong to the chord established on the strong beat. In other words, the pitch after the leap should not contradict the harmony of the previous beat.

In Example C-11, for example, the upper-voice consonant leap in measure 1, beat 4 belongs to the vi chord established in beat 3. Likewise, the upper-voice leap in m. 2 belongs to the prevailing V chord, while the leap in m. 3 belongs to the prevailing $I^6$ chord. The bass-voice leap in measure 2 belongs to the $ii^6$ chord—we have kept the chord label the same (not changed it to "ii") to show the importance of metric placement in identifying chord inversion.

3. **Descending Consonant Leaps in the Bass**: The bass line should not contain consonant leaps that *descend* to the fifth of the chord. Leaping down to create an implied 6/4 chord suggests that inversion too strongly, and it should be avoided. Leaping up to a fifth of the chord is often less problematic, but you should listen to the result to determine its effectiveness. Thus, in Example C-11, the bass line could not leap down to A2 in measure 2, beat 4, even though it is part of the prevailing V chord.

4. **Unaccented Passing Tones**: For the purposes of these exercises, passing tones should only appear on weak beats.

5. **5-6 and 6-5 Motion in the Bass:** Use 5-6 or 6-5 motion in the bass voice only when you can proceed by step (in either direction) to the next strong beat. In other words, don't use this embellishment in the bass voice if you have to leap away from the weak beat. Such leaps create confusion about whether the strong- or weak-beat pitch is a chord tone.

## Embellished Cadences

It is musically effective to embellish beat 4 in the upper voice immediately prior to the final cadence chord as long as no errors are introduced or the line is made excessively disjunct. Several such embellished cadences are shown in Example C-13 below.

Example C-13: Embellished cadences (upper voice)



With respect to the bass line, certain cadence types are more effective to embellish than others. Half cadences can feature embellished bass lines on beat 4 as long as no errors are introduced. However, a change of pitch on beat 4 in the bass would weaken the fifth-motion of an authentic cadence. The most effective way to embellish the bass line of an authentic cadence is to leap by an octave to the same pitch class. This preserves the strong bass note but also provides rhythmic interest. Embellished bass lines of cadences are shown below. As the last example shows, if both voices are embellished simultaneously, the simultaneous embellishments need to be consonant with each other.

Example C-14: Embellished cadences (bass voice)



## Writing Embellished Counterpoints

When writing your own embellished counterpoints, you may follow the procedure above (write a one-to-one counterpoint using the given progression/bass line, then embellish), or you may write the embellishments at the same time as you add the upper voice. If you choose the latter strategy, however, be sure that you remember that all strong-beat pitches (and all weak-beat consonant leaps) need to be chord tones. In the following exercises, you will have a chance to practice all of these techniques.

**Self-Tests**

*Self-Test C-3*

1. Embellish the one-to-one counterpoint given below. Indicate the harmonic intervals formed by the two voices.



F:    I        ii⁶      V        I⁶       vi       IV       V        I

2. Compose a good one-to-one counterpoint for the progression given below. Then embellish with passing tones, consonant leaps, and/or 5-6 (6-5) motions. Indicate the harmonic intervals formed by the two voices. Turn in both versions.



e:    i        vi       ii°      V        i        vii°     i        V

3. Make up a progression with the following parameters: a two-phrase period in G major and a 4/4 meter, with the two phrases ending with a HC and a root-position IAC, respectively. Then compose a good one-to-one counterpoint and an embellished version. Indicate the harmonic intervals formed by the two voices. Turn in both versions.