

Counterpoint in Two Parts

Introduction

The term counterpoint is derived from the expression *punctus contra punctum*, which means “point against point,” or “note against note.” The study of counterpoint involves the study of voice-leading principles. Voice leading is a process that controls the linear succession of tones in each voice (i.e., the melodic line), optimizing how each voice moves through time in relation to the rest of the musical texture.

The rules of counterpoint constitute a representation of consonance and dissonance in a variety of rhythmic frameworks in which consonance and dissonance occurs. The study of counterpoint consists of different ways of adding a melody or melodies to a given melody. The given melody is called the “cantus firmus,” which means “song fixed.” The plural of cantus firmus is cantus firmi. The cantus firmus is a preexistent melody expressed in equal note values which is used as the basis of a polyphonic composition.

The different ways of setting a melody are called species and there are five types of species. All of the species are designed to prepare the student for the free composition and combining of melodies without the use of a cantus firmus.

In this series, we shall study counterpoint in species one (first species) and species two (second species). Species one has one note of the counterpoint moving against one note of the cantus firmus. First species is always consonant; no dissonant notes are allowed. Species two involves two notes of the counterpoint moving against one note of the cantus firmus.

First Species: “One Against One”

For first species, we use the rhythmic notation and note values of the Renaissance, namely, the whole note and the double whole note. The whole note is also known as the semibreve. The double whole note, sometimes referred to as the breve, is twice as long as the whole note. Modern music notation usually represents the double whole note as either a whole note with one or two vertical lines on each side of the note head (example S1–1a) or as a hollowed-out rectangular box with a vertical line on each side of the note box (S1–1b). It is also possible to represent the double whole note as two whole notes tied together.

While the double whole note may appear on any line or space of the five-line staff, the double whole rest is confined to the third space on the staff, between the center line and the fourth line from the bottom (S1–1c).

Example S1–1: the double whole note and its rest



Counterpoint exercises are written in either $\frac{2}{2}$ time or in what has been called the “doubled measure,” which has two whole notes per measure, in other words, $\frac{4}{2}$ time. Although bar lines were not generally used in the Renaissance, modern counterpoint exercises have them. We also have a dotted bar line dividing the measure in half when using $\frac{4}{2}$ time.

The Church Modes

The history of the church modes is one in which the usage differs from one era to another, from the Middle Ages through the second half of the nineteenth century. For instance, the way Medieval composers use the Dorian mode is different from the treatment it receives during the Renaissance in the works of Palestrina, which in turn is different from the way Fauré, Debussy, and Ravel use the Dorian mode in the late nineteenth century. A brief history and introduction to the church modes (as we understand them today) is provided as a free download called “Church Modes.” For the study of species counterpoint, we begin with the music of the Renaissance, with the practice of Palestrina (d. 1594) and that of his generation.

Chromaticism in Renaissance Music

During the Renaissance, certain chromatic additions to the church modes brought them much closer to the major-minor tonal system of the “common practice period” (about 1600 to 1900 C. E.). Even before the Renaissance, a B \flat instead of B \natural was used when composing in F Lydian in order to avoid the tritone between B \natural and F. The addition of B \flat transformed F Lydian into F Ionian. In the music of the Renaissance, only the Dorian, Phrygian, Mixolydian, Aeolian, and Ionian modes are used. All five modes employ the leading tone at cadences, except for the Phrygian mode, which *never* uses the leading tone.

- I. Chromatic alterations of scale degrees 3 and 7 in the Ionian and Mixolydian modes: C Ionian may have a B \flat and/or an E \flat ; however, at cadences, the Ionian mode always takes a B \natural . G Mixolydian can use a B \flat and/or an F \sharp (as a cadential leading tone).
- II. Chromatic alterations of scale degrees 6 and 7 in the Dorian and Aeolian modes: D Dorian often includes a B \flat and/or a C \sharp (as a cadential leading tone, but not in succession with B \flat). A Aeolian often uses an F \sharp and a G \sharp (as a cadential leading tone).
- III. D Dorian, A Aeolian, and E Phrygian may have a raised scale degree 3 at cadences.

The Rules of First Species in Two Parts (or Voices)

- I. The Vocal Dimensions of the Species One Counterpoint
 - A. Melodies (both the counterpoint and the *cantus firmus*) should not exceed the range of a single octave. A single high or low tone one step beyond the range is occasionally possible.
 - B. The distance between the cantus firmus and the counterpoint should generally be within an octave. However, a 10th, especially at the cadential approach, is often good but do not exceed a 12th internally (before the cadential approach) for any reason.
 - C. Do not cross voices in species one (example S1–2). After first species, however, the counterpoint may occasionally cross the cantus firmus—as long as forbidden vertical intervals such as the 4th are not formed between the two voices and the parts do not become confused.

Example S1–2: do not cross voices in species one

	a. avoid voice crossing in first species	b. voice crossing creating vertical 4th!
(cantus firmus)		

II. The Four Basic Types of Motion Between Two Voices

- A. Parallel motion: movement in the same direction, upwards or downwards, between like numerical intervals.
- B. Similar motion: movement in the same direction, upwards or downwards, between unlike numerical intervals.
- C. Contrary motion: movement in which the voices proceed in opposite directions.
- D. Oblique motion: involves one stationary voice and an opposing voice that moves.

III. General Features of the Species One Line

- A. Do not repeat notes in the same register.
 1. A counterpoint may, however, like the cantus firmus, occasionally employ two tied whole notes, that is,  (or, in the doubled measure, a ). If the cantus firmus has fewer than ten notes, then do not have more than one tied whole note before the cadence.
 2. A leap of a perfect octave is considered a change of register rather than a repeated tone.
- B. The counterpoint must never circle around a single tone or wander aimlessly; rather, it should seek to express a definite goal, that is, a single note stated as the goal one time only.
 1. If the counterpoint is above the cantus firmus, then there should be a single internal high point with a gradual descent.
 2. If the counterpoint is below the cantus firmus, then there should be a single internal high point with a gradual descent or a single internal low point with a gradual ascent.
 3. Therefore, the initial and final note(s) will not be the highest or lowest note(s) of the counterpoint.
 4. In either case, high or low points should preferably not occur simultaneously with those of the cantus firmus.
 5. Avoid “shadowing” the cantus firmus in the counterpoint. In other words, do not employ too much parallel motion between the two parts. If both parts ascend together or descend together for more than a few notes at a time, then the independence of the two lines is compromised and counterpoint becomes dull and unproductive (See the parallel-6th motion in example S1–7a on page 5 below: G/E, A/F, B^b/G).
- C. Do not use repeated figures or melodic sequences of any kind (that is, repeating a melodic pattern at different pitch levels). (See the ascending patterns in both the cantus firmus and counterpoint of S1–7 below.)
- D. Avoid outlining triads or seventh chords in any single voice. In other words, do not unfold the melody with consecutive 3rds (for example, C E G upwards, or C A F D downwards).
- E. Seek at all times a preponderant blend of upward and downward stepwise movement between pitches contrasted by occasional single leaps, preferably in contrary motion to the stepwise line. The best result is achieved with a least three scale steps preceding the leap.
 1. “conjunct” (stepwise) movement between pitches involves intervals smaller than a minor 3rd.
 2. “disjunct” (leaping) movement between pitches involves intervals greater than a major 3rd.
- F. Acceptable Single Leaps
 1. Upward Leaps: minor and major 3rd, perfect 4th or 5th, minor 6th (sparingly), and perfect octave (occasionally).
 2. Downward Leaps: minor and major 3rd, perfect 4th or 5th, and perfect octave.
- G. Unacceptable Single Leaps
 1. Upward Leaps: any diminished or augmented interval, including the tritone 4th or 5th, a major 6th, a major or minor 7th, or compound intervals.
 2. Downwards: any diminished or augmented interval, including the tritone 4th or 5th, a minor or major 6th, a minor or major 7th, or compound intervals.

4 Counterpoint: First Species (S1)

H. Upward and Downward Leaps of the 3rd

1. There is a rule in counterpoint, encountered in species three but also applicable to species one and two, which says that if the line proceeds either upwards or downwards, a leap of a 3rd is permissible under certain conditions:
 - a. the leap of the 3rd is the initial note of the cantus firmus; or,
 - b. if the motion is upwards, then the 3rd should not be preceded by stepwise motion in the same direction of the leap (example S1–3a); however, the leap of the 3rd may be followed by stepwise motion in the same direction of the leap (example S1–4a); or,
 - c. if the motion is downwards, then the 3rd should not be followed by stepwise motion in the same direction of the leap (S1–3b); however, the leap of the 3rd may be preceded by stepwise motion in the same direction of the leap (S1–4b).
 - d. Additionally, if the motion is upwards, then the 3rd should precede the smaller interval(s);
 - e. or, if the motion is downwards, then the smaller interval(s) should precede the 3rd.

Example S1–3: problems with ascending and descending leaps of the 3rd

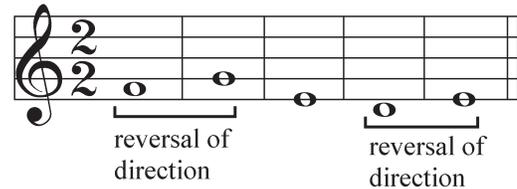
Example S1–4: acceptable use of ascending and descending leaps of the 3rd

2. Exceptional Uses of the Leap of the 3rd
 - a. *Occasionally*, it is possible to have one exception to the rule put forward above which states that “if the motion is upwards, then the leap of the 3rd should not be preceded by stepwise motion in the same direction of the leap (S1–3a).” You can precede the ascending leap of the 3rd by stepwise motion in the same direction of the leap *if immediately after the leap, the line reverses direction by step* (example S1–5).

Example S1–5: reversing the direction of the upward 3rd by step

- b. *Occasionally*, it is possible to have one exception to the rule put forward above which states that “if the motion is downwards, then the leap of the 3rd should not be followed by stepwise motion in the same direction of the leap (S1–3b).” You can follow the descending leap of the 3rd in the same direction by one single step below the leap *if the leap is approached by contrary motion* (changes the direction of the line); *and, after continuing one step below the leap, the line reverses direction* (example S1–6).

Example S1–6: reversing the direction of the downward 3rd by step after a one-step continuation



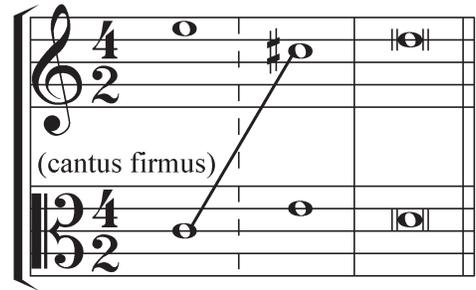
- I. Two successive leaps in *opposite* directions to each other may be used *sparingly*.
- J. Avoid two successive leaps in the *same* direction, *especially two consecutive 3rds*.
- K. Do not produce a melody that outlines the interval of the tritone, that is, the “linear tritone” (S1–7a), nor create what is known as the “cross-relation tritone” (S1–7b).

Example S1–7: sequences, tritones, shadowing the line, lack of melodic variety in both parts

- L. In general, a large leap (of a 4th or more) in one direction should be filled in with stepwise motion in the opposite direction (reversing the line), especially in the case of a large upward leap.
 - 1. See the cantus firmus of S1–7 above; here, the line in the alto clef drops *down* from G to E and then continues *upwards* with stepwise motion. Subsequently, the cantus firmus drops down from A to D followed by a reversal of direction.
 - 2. It would be well to understand, however, that despite filling in a large leap with stepwise motion, S1–7 is ultimately flawed with too much stepwise motion. There is a lack of melodic variety in this exercise. Remember, as stated in III. E. above: “there should be a preponderant *blend* of upward and downward conjunct motion contrasted by occasional single leaps, preferably in contrary motion to the stepwise line.”
- I. Chromaticism Revisited
 - 1. Raise scale degree 7 to produce the leading tone at cadences, except for the Phrygian mode.
 - 2. Never use two successive versions of any one scale degree; for example, the subtonic scale degree 7 must never be immediately followed by the leading tone.
 - 3. Different versions of a pitch between any two voices: always avoid the cross relation (example S1–8) unless there are two successive half-beats (two whole notes in species one) between the involved altered tones.

6 Counterpoint: First Species (S1)

Example S1–8: cross relation between C and C#



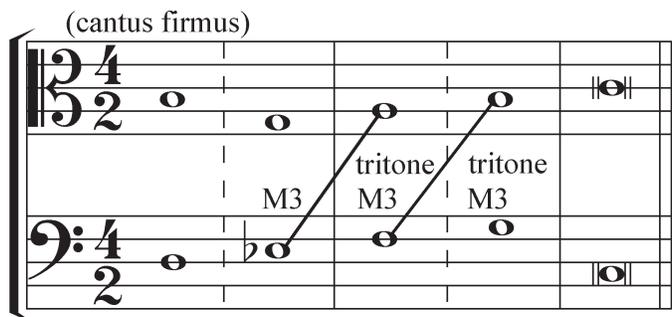
IV. Features of Vertical Intervals Between the Cantus Firmus and the Species One Line

- A. Usable intervals: perfect consonances (perfect unisons, perfect 5ths, and perfect octaves) and imperfect consonances (minor and major 3rds, minor and major 6ths) only. Although initial and final unisons are good, *no internal unisons must be formed against the cantus firmus*.
- B. Forbidden intervals: all other intervals constitute vertical dissonances and must *never* be used.
 - 1. In two-voice counterpoint, not only the tritone but also the perfect 4th is always a dissonant interval.
 - 2. In addition to the vertical (as well as linear) tritone, avoid also the "cross-relation" tritone, i.e., the tritone sounding between the two parts in immediate succession (S1–7b) unless there are at least two half-beats between the notes of the tritone.

V. Features of Vertical Motion Between the Cantus Firmus and Species One Line

- A. In order to create and maintain independence of the two parts, a preponderance of conjunct and disjunct contrary motion is always preferable to all other kinds of motion.
 - 1. conjunct movement between pitches involves intervals smaller than a minor 3rd.
 - 2. disjunct movement between pitches involves intervals greater than a minor 3rd.
- B. Upward and downward conjunct parallel motion involving imperfect consonances only is also occasionally effective (minor and major 3rds, minor and major 6ths).
 - 1. Avoid, however, more than three or, at the absolute maximum, four conjunct parallel imperfect consonances.
 - 2. Avoid disturbing the stability of the mode—along with creating the cross-relation tritone—by never using three conjunct major 3rds in parallel motion (example S1–9). In fact, even two such major thirds are questionable.
 - 3. A combination of parallel major and minor 3rds (up to four), however, is possible.

Example S1–9: consecutive use of three conjunct major 3rds



- C. *Occasional* oblique motion may also be effectively utilized in an opposing voice against two tied whole notes or a double whole note in the cantus firmus or the counterpoint; however, both voices must not use two tied whole notes or a double whole note at the same time.
- D. Forbidden motion
1. Do not have conjunct or disjunct parallel perfect unisons, perfect 5ths, or perfect octaves (example S1–10a and 10b).
 2. “Direct Motion” (wrong similar motion): do not have similar motion into a perfect 5th or perfect octave (S1–10c and 10d). Note, however, the one exception in the discussion of Special Cadential Licenses in VI. C. 2. b., S1–14, on page 9 below).
 3. “Consecutive” (or “anti-parallel”) perfect 5ths or perfect octaves: do not have two perfect 5ths in contrary motion or two perfect octaves in contrary motion (S1–10e).

Example S1–10: forbidden motion

a. parallel 5ths b. parallel 8ves c. direct 5th d. direct 8ve e. consecutive 5ths

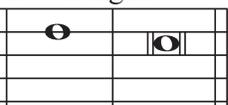
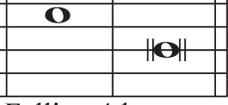
- E. Leaps
1. Most common usages:
 - a. If one voice leaps, the opposing voice moves against the leap in conjunct contrary motion (example S1–11a); or less often, the opposing voice may move conjunctly in similar motion against the leap (S1–11b).
 - b. Somewhat less often, a smaller or larger leap in one direction in one voice is matched by a simultaneous larger or smaller contrary leap in the opposing voice (S1–11c).
 2. Simultaneous leaps in both voices in the same direction are best avoided; however, if one voice leaps either a perfect octave (S1–11d) or no more than a perfect 4th while the opposing voice leaps no more than a minor or major 3rd (S1–11e), such simultaneous leaps in the same direction may be employed, albeit sparingly.
 3. Avoid in all cases, simultaneous leaps of large intervals in both voices, especially in the same direction, into strong beats; in other words, *avoid leaping over the bar line*.

Example S1–11: leaps

a. b. c. d. e.

- b. Given the special cadential licenses, otherwise forbidden direct motion into a perfect octave at the cadence becomes permissible *but only at the cadence* (example S1–14).
- c. Harmonic cadences have a falling 5th or rising 4th approach to the final note, whereas plagal cadences have a rising 5th or falling 4th approach to the final note.

Example S1–14: permissible direct motion using harmonic and plagal cadences

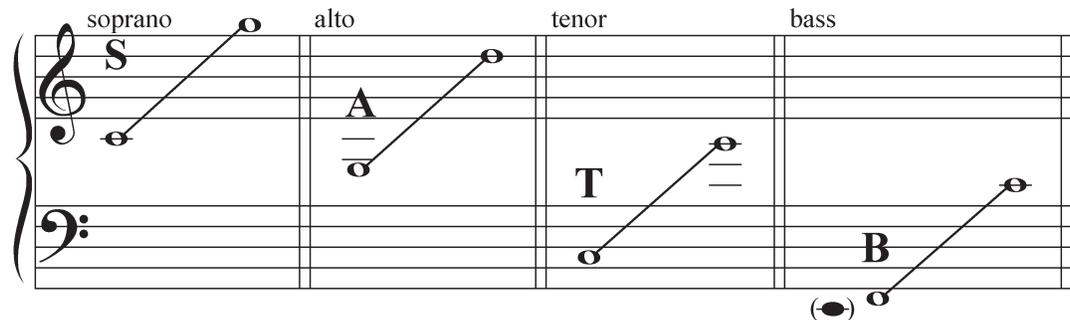
a. Harmonic		b. Plagal	
			
5	8	6	8
Falling 5th		Falling 4th	

Vocal Range

Example S1–15 shows the practical ranges for the soprano, alto, tenor, and bass voices. A single high or low tone one step beyond the range is occasionally possible. In this discussion of species counterpoint, the cantus firmus appears in the alto clef instead of the treble clef.

For the counterpoint below the cantus firmus, you may have to assume the range of the tenor voice instead of the bass range and voice. However, once you have selected a range for the counterpoint above or below the cantus firmus, each melody should stay within the range of a single octave. Moreover, it is occasionally possible to exceed the limits of a voice's range by one tone (as in the low E of the bass voice in S1–15).

Example S1–15: vocal ranges



Analyses of Species One Examples

I. D Dorian (example S1–16)

- A. The cantus firmus begins and ends on the tonic note, D.
 1. Most cantus firmi will have scale degree 2 as their second note from the end.
 2. When the cantus firmus is below, the top voice will end with an octave or unison. The preceding note will always be the leading tone unless the cantus firmus is in the Phrygian mode. Notice the C ♭ in the second measure; thus, the C ♯ near the end of the counterpoint is chromatic.

10 Counterpoint: First Species (S1)

- B. There is one high point in each line which is circled. It could also have been a low point if the counterpoint had been below the cantus firmus. When writing counterpoint exercises, circle the high and low points.
 - 1. Both lines should have a high or low point but not at the same time in the same measure.
 - 2. Simultaneous high or low points disturb the individuality or integrity of each part.
- C. Intervals: there is no dissonance in species one; remember that the 4th is a dissonance in two parts.
 - 1. In S1–16, we have 8, 6, 6, 6, 8, 3, 5, 6, 6, 8.
 - 2. Although not evident in S1–17, compound intervals can occur; but in two voices, stay within the range of a 12th. Use compound intervals sparingly, however.
- D. Tied notes: notice that the third and fourth notes from the end are tied to produce an internal double whole note, or breve. Do not use internal breves in both parts at the same time.

Example S1–16: cantus firmus (CF) in D Dorian with counterpoint above

The musical score for Example S1-16 consists of two staves. The top staff is in treble clef with a 4/2 time signature. The bottom staff is in bass clef with a 4/2 time signature. The cantus firmus (CF) is written in the bottom staff. The counterpoint is written in the top staff. The intervals between the two parts are indicated by numbers: 8, 6, 6, 6, 8, 3, 5, 6, 6, 8. The high point in the counterpoint is circled.

II. C Ionian (Example S1–17)

- A. Looking at example S1–17, notice the cross-relation tritone in the first four measures between the two parts. The tritone also appears three and four measures from the end. In the present circumstance, this problem seems to be unavoidable in species one, given this particular cantus firmus. Indeed, sometimes we even find the cross-relation tritone in the music of Palestrina. Therefore, ultimately, the practice of species counterpoint often becomes a question of which rendering is the least objectionable and causes the fewest difficulties. Frequently, solving one problem causes another problem somewhere else in the exercise. Can any of the tritones in S1–17 be avoided?

Example S1–17: cantus firmus (CF) in C Ionian with counterpoint above

The musical score for Example S1-17 consists of two staves. The top staff is in treble clef with a 2/2 time signature. The bottom staff is in bass clef with a 2/2 time signature. The cantus firmus (CF) is written in the bottom staff. The counterpoint is written in the top staff. The intervals between the two parts are indicated by numbers: 8, 5, 3, 3, 6, 3, 5, 6, 3, 5, 6, 8. The high point in the counterpoint is circled.

1. In S1–17 above, notice that the cantus firmus moves up by step from the initial leap upwards of the 3rd and then drops down a 3rd. The high point of the line is an A, which is reached by an upward leap of a 4th.
2. The cantus firmus has two leaps in succession but those leaps do not occur in the same direction.
3. The upward leap of the 4th is eventually filled in when the line reverse direction and moves down. As mentioned on p. 5, III. L., “a large leap...in one direction should be filled in with stepwise motion in the opposite direction...especially in the case of a large upward leap.” It takes about four measures for this to happen (A-G-E-F) in S1–17.
4. Looking at the counterpoint, we have already noticed the cross-relation tritones. There are other problems, as well.
 - a. The counterpoint has too many C pitches and just decorates the tone C; the melody is rather static, lacking in character or individuality.
 - b. The high point is not much of a high point; it is scale degree 2. This is weak in comparison to the cantus firmus, which has its high point on scale degree 6. At least both high points do not occur at the same time, which would be very unsatisfactory.