

Dave Smey

Counterpoint – Introduction & First Species

Counterpoint is the art of combining musical lines so that they sound good together and yet retain a certain independence. It is an extremely valuable skill for a musician to study – historical evidence shows that Haydn, Mozart, and Beethoven all worked on counterpoint from the same theoretical text, Fux’s *Gradus ad parnassum*, (even, in Beethoven’s case, when he was already a very successful composer.)

Cantus Firmi

In the formal study of counterpoint one typically begins with a fixed line which is called a “*cantus firmus*” (or CF). New parts are composed against the CF. Below are a handful of fixed melodies that you can use in your work. If a CF is in treble clef, you usually want to compose beneath it in bass clef, and vice-versa for those in bass clef. Note that I generally don’t use a meter for counterpoint exercises, though you may use one if you want. These are all in C major, though one can (and occasionally should) work in other keys and even other modes (like phrygian, lydian, etc.)

Bass Lines

1.

2.

3.

4.


5.



6.

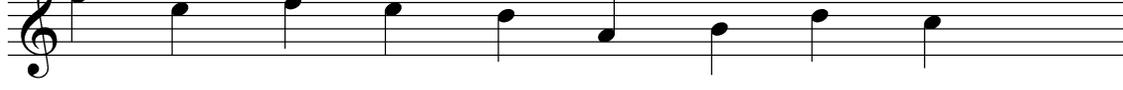


Upper Lines

1.



2.



3.



4.



5.



6.



First Species

Counterpoint is typically approached in very strictly controlled exercises called “species.” In each species there is a particular rhythmic relationship between parts. So, even though a great contrapuntal composer like Bach writes lines that are rhythmically independent, like so –

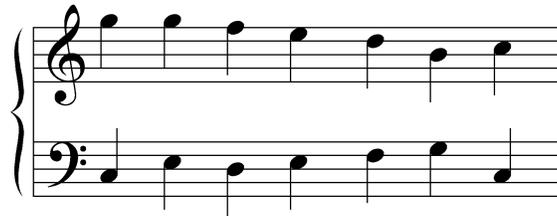
Book One
Andante ♩ = 72

Fugue 8, D-sharp Minor



– our *first species* counterpoint will simply match a quarter-note for every quarter in the CF. (In other words, it’s a “one-to-one” rhythmic ratio.)

example of first species

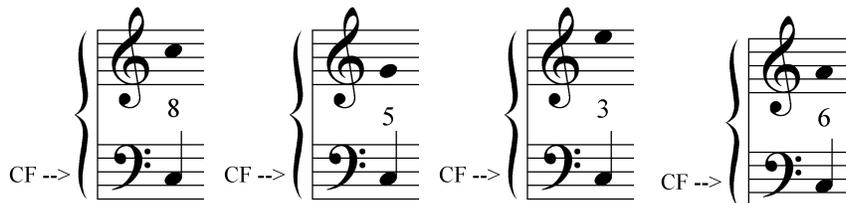


First species thus may seem very crude and abstract. It is, however, the most important species of them all, since the vertical intervals you make in your two-voice species exercise are the building blocks for fuller harmonies, and the harmonic progressions we write later will need to feature good counterpoint.

Harmonic Rules

1. Legal vertical intervals

In traditional counterpoint one uses only the most basic consonances – octaves, fifths, thirds, and sixths. Thus, given a note in the CF, you really only have a few options as to what you can put against it.



Notice that we don't really care whether thirds and sixths are major or minor. In the context of counterpoint, thirds are just thirds, and sixths are just sixths. We usually keep track of the intervals by simply writing "3", "5", "6", et cetera in the space between the two parts. (Also, we don't care if the intervals are larger than an octave. Though some texts will count a third plus an octave as "10" etc., I don't think we need to do that, at least not with first species.)

However, the fifth must stay perfect! A diminished fifth is not a legal consonance, so watch out for the tritone.

The image shows a pair of musical staves (treble and bass clef) with a brace on the left. Below the staves, intervals are indicated by numbers: 3, 3, 3, °5, 3. The interval °5 (diminished fifth) is circled in red and has the word "(error)" written above it in red.

Melody Rules

We will write in a very conservative melodic style. (It's supposed to be modeled on the 16th-century composer Palestrina). Imagine that a chorus of monks will be singing your counterpoint in some European cathedral. Aside from tradition, though, there are good perceptual reasons for sticking to a very simple style.

1. Stepwise connections are most important.

In fact, I'll say that the more stepwise connections in a melody, the better it is. Think of any kind of leap as a break in your melodic line. Also, straight lines are stronger than bendy lines -- the longer your line goes in a single direction, the more contrapuntal skill it shows. (This idea is actually a departure from the way other people typically teach counterpoint. I am particularly interested in straight lines.)

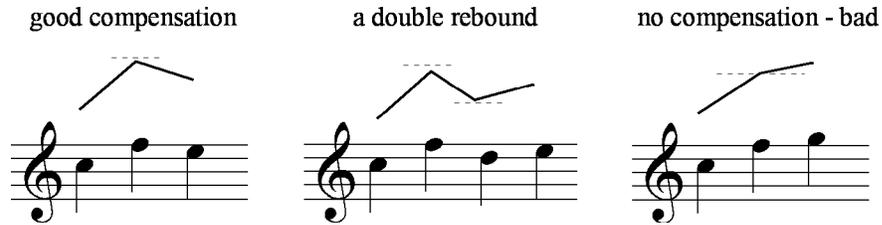
The image shows two musical staves. The left staff is labeled "a meandering, bendy line" and has a wavy line drawn above the notes. The right staff is labeled "a strong, directed line" and has a straight line drawn above the notes.

2. No big leaps.

No leaps bigger than a sixth. No tritone leaps.

3. Leaps demand “compensation” in the opposite direction.

Any leap is considered a big deal, so the line is supposed to rebound from the leap by going in the opposite direction (preferably by step).

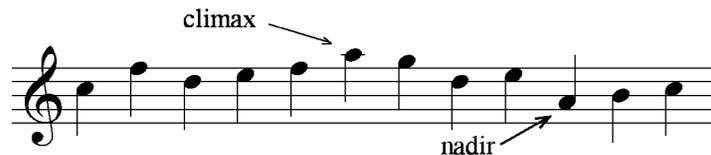


4. Arpeggiating triads.

You are allowed to make two leaps in the same direction only if they spell out a triad shape.

5. Climax (and nadir).

Traditionally, it is considered good composition if your melody has a single highpoint (or climax). It is supposed to be located somewhere in the middle of your melody, not at the beginning or end. If you really want to have an interesting contour, you can also feature a single lowpoint (or nadir). Since I am so interested in making straight lines, I tend to ignore this rule.



6. Repetition

In first species you may occasionally repeat a note, though it is considered somewhat weak to do so. Don't do it more than twice in the same exercise.

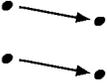
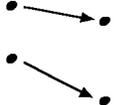
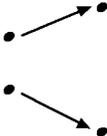
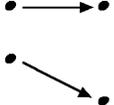
7. Voice-crossing

Don't let your counterpoint cross below or above your CF.

These melodic rules generally apply whether you are composing a counterpoint or your own original cantus firmus.

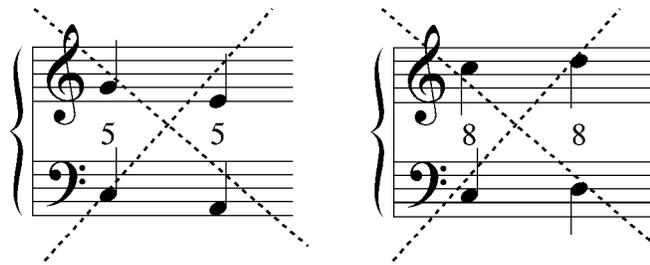
Motion Rules

The motion rules are really the heart of counterpoint. Generally speaking, two lines can move in four possible ways.

Parallel Motion	Similar Motion	Contrary Motion	Oblique Motion
same direction, same interval	same direction, different intervals (different "angles")	opposite directions	one voice moves, one is stationary
			

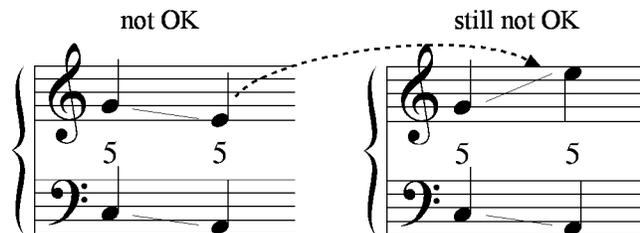
1. No parallel octaves, or fifths.

If you've already got a fifth or an octave, you've got to move on to some other interval.



2. No octaves or fifths by contrary motion.

Really the same rule as #1. You can't avoid parallel 8ves or 5ths by simply going to the same note in the opposite direction. You can follow rules #1 and #2 by writing in your intervals in the space between the parts. If you've got two 5's or two 8's in a row, you've made a mistake.

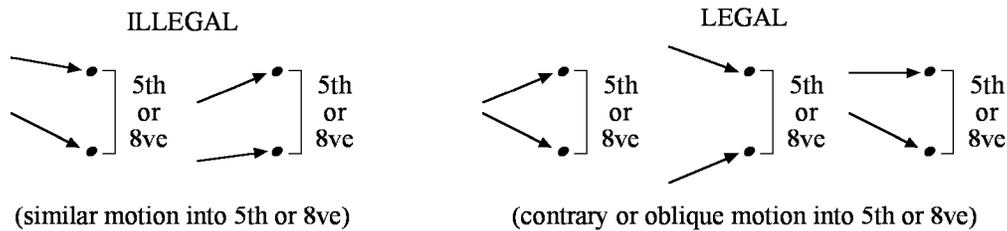


The reason behind the fifths and octaves rule is that the parallels destroy the independence of the lines. Imagine you are playing an electric guitar and you've got an octave doubling pedal. (Or a fifth-doubling pedal – I'm sure such a feature exists somewhere...) When you step on the pedal, it doesn't really sound like you are playing

two parts, it just sounds like the line you are playing gets thicker, or brighter. The idea behind these rules is that your counterpoint will collapse into a single line if you move in parallel octaves or fifths, even for a second.

3. Direct fifths or octaves.

This rule is tricky. If you make a vertical fifth or octave, you may not approach it in similar motion. Only contrary or oblique motion are acceptable ways to enter into a fifth or octave. The idea is that similar motion into a 5th or 8ve causes it to “pop out” of the texture, interrupting the overall smoothness.



These next four examples would all be bad.

direct 5th

direct 5th

direct 8ve

direct 8ve

4. Not too many 3rds or 6ths in a row.

You already know that you cannot have 5ths or 8ves in a row. 3rd and 6ths, however, can move along in parallel motion. As many as three thirds or three sixths in a row is considered good technique, but four in a row is considered too much. (Again, it destroys the independence of the lines. Here the effect is not so much that your counterpoint has collapsed, but just that it has become simplistic and lame. This is especially true if the parallel line “bends” or skips along with your CF.)

good

too much!

5. Simultaneous leaps

It is very weak counterpoint if both lines break at the same time (especially if they leap in the same direction). Try to smooth over leaps in the CF with a step in your counterpoint.

The image shows two musical examples side-by-side, each with a treble and bass clef staff. The first example, labeled 'simultaneous leaps', shows a treble staff with notes G4, A4, B4 and a bass staff with notes G3, A3, B3. The interval between the treble and bass notes is 8 in the first measure, 6 in the second, and 6 in the third. The second example, labeled 'smoothing over the break', shows a treble staff with notes G4, A4, B4 and a bass staff with notes G3, A3, B3. The interval between the treble and bass notes is 8 in the first measure, 3 in the second, and 3 in the third. The label 'CF' is placed to the left of each staff.

Beginning and Ending

Bass lines should always start on the first scale-degree of the key. Start your upper lines on a note from the tonic triad ($\hat{1}$, $\hat{3}$, or $\hat{5}$).

You need to end your counterpoint with a proper *cadence*. The last note must land on $\hat{1}$. The preceding note may be $\hat{2}$ or $\hat{7}$, or, if your counterpoint is on the bottom of the texture, it may go $\hat{5}$ - $\hat{1}$. There are therefore just a few cadential combinations that you can create:

The image shows four musical examples of cadential combinations, each with a treble and bass clef staff. The first example shows a treble staff with notes G4, A4 and a bass staff with notes G3, A3. The interval between the treble and bass notes is 2 in the first measure and 1 in the second. The second example shows a treble staff with notes G4, A4 and a bass staff with notes G3, A3. The interval between the treble and bass notes is 7 in the first measure and 1 in the second. The third example shows a treble staff with notes G4, A4 and a bass staff with notes G3, A3. The interval between the treble and bass notes is 7 in the first measure and 1 in the second. The fourth example shows a treble staff with notes G4, A4 and a bass staff with notes G3, A3. The interval between the treble and bass notes is 2 in the first measure and 1 in the second. The labels '2' and '1' are placed above the treble notes, and '7' and '1' are placed below the bass notes. The text '(direct 8ve. but it's legal)' is written below the third and fourth examples.

(The harmonically astute might notice that all of these could be part of some kind of V-I progression.)

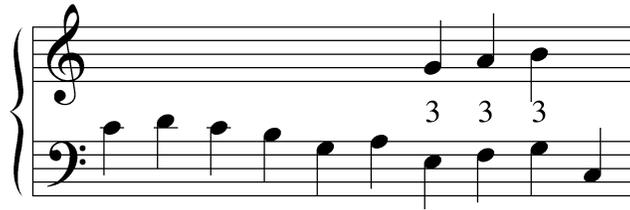
Note also that the direct 8ves rule is suspended when you are landing on the final note.

Strategies for better lines

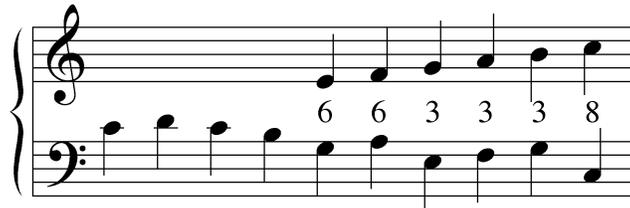
In general, you don't want to write your counterpoint strictly from beginning to end. You want to look at the cantus firmus and plot out a strategy for a strong line with lots of straight, stepwise passages. Here are a few basic strategies.

Parallel Motion

As we've already established, it is good to have as many as three 3rds or 6ths in a row. Thus, one easy strategy is to look for a straight line in the CF that you can match with some parallel motion.



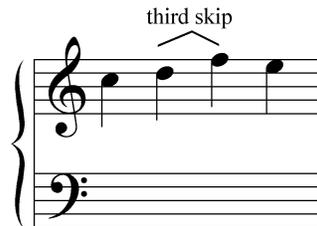
Then, look to see if you can extend the line in either direction. In the case of this example, you can make a nice seven-note run, including a proper cadence at the end.



(Remember that you can test both parallel 3rds and 6ths against the same part of the line. In this case, the parallel 6ths wouldn't work out quite as nicely.)

Contrary Motion & the "Voice Exchange"

Another strong contrapuntal technique is the use of contrary motion. Perhaps the most basic technique is the "voice exchange," in which the two parts seem to simply swap notes. Say you've got a CF that features a skip of a third:



You can simply reverse the order of the third in the new part, creating a swap.

voice exchange

It turns out you can also create a filled-in voice exchange any time you see three steps in a row. Again, just reverse the order of the three steps in the new part.

filled-in voice exchange

So the voice exchange is an easy way to create instant contrary motion. It turns out that in the entire contrapuntal universe it is only possible to create as many as four contrary steps in a row. The four steps will make this basic intervallic pattern, either forward or backwards:

(voice-exchange) (voice-exchange)

Notice that the voice exchange is a three-note segment of my 4-note progression. Also contained in the progression is a three-note pattern that turns octaves into fifths, and vice-versa.

8ve to 5th 5th to 8ve

So remember that you can use these techniques to match several different stepwise lines against the same segment of the CF. Then try to extend the line so that it continues even when the CF breaks away – that's really strong counterpoint!

Acknowledgments and Bibliography

Parts of this packet are closely derived from George Fisher's counterpoint packet, which I used at NYU. (In particular, the cantus firmi are a direct lift, something that I'll have to revise in the future.) And, as I've mentioned, I've taken some liberties with traditional rules that I personally want to emphasize or de-emphasize (as one should expect with any original text).

There are many other works that the interested student could use to expand his or her knowledge of counterpoint, getting into three-voice counterpoint and additional species. These include:

Fux, Johann Joseph. *The Study of Counterpoint from Gradus ad parnassum*. trans. and ed. by Alfred Mann (New York: Norton, 1965).

Here you can see how theory worked in the 18th century. The most amusing aspect of the book is that it is set as a dialogue between a teacher ("Aloysius") and student ("Josephus"). The student asks questions and makes lot of errors which the teacher corrects, and he says lots of flattering things like "I understand and am full of admiration."

Gauldin, Robert. *Harmonic Practice in Tonal Music*. (New York: Norton, 1997).

Gauldin's Appendix 3 is a crash-course in the rules of counterpoint, much like what was presented here.

Salzer, Felix and Carl Schachter. *Counterpoint in Composition*. (New York: Columbia University Press, 1989).

The first half of this text is a hard-core introduction to the discipline of counterpoint, and the second half shows how you can use the basic framework of species counterpoint to analyze real music.