

**Introduction to Counterpoint**  
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This little book on counterpoint is designed to provide young composers with a simple introduction to the main techniques of both strict and functional counterpoint. Much of the material is based on the German book from which I learned the subject: *Der Lineare Satz*, by Hermann Grabner, a 20<sup>th</sup> century German composer and teacher of composition. His book on harmony theory was for a long time a standard textbook in German universities.

It is assumed that the reader can already read music and has some understanding of harmony theory. Specifically, the reader should understand the following concepts:

1. intervals
2. scales
3. triads
4. chords and general harmonic voice leading principles (although many of the latter will be dealt with from a contrapuntal perspective in this book).

## **Overview**

Counterpoint is an attempt to combine unity and diversity into a single musical fabric. The individual threads are melodic lines or voices. However, quite often there is a underlying harmonic structure that gives the whole a sense of harmonic unity. The balance between melodic individuality and harmonic unity is the primary challenge of contrapuntal writing.

A mathematician would view this as an optimization problem. The goal is to give each voice its own unique personality / individuality and yet at the same time observe the constraints of the underlying harmonic structure. Contrapuntal characteristics are optimized where we maximize this individuality while adhering to the constraints.

As Walter Piston points out in his textbook on counterpoint, all music is to some extent contrapuntal. However, where some of the voices show less individuality and serve more to establish the underlying harmonic background, we tend to use the term homophonic to describe this music as opposed to the term contrapuntal.

The undisputed master of this optimal form of functional or harmonic counterpoint was the great 18<sup>th</sup> century composer Johann Sebastian Bach. He lived in a unique era in which the contrapuntal individuality of each melodic voice and the implicit harmony had reached a great state of maturity. You can take any voice from any passage in any of Bach's music, play it and never find it to be a boring melody; every however humble, seemingly subordinated voice could stand on its own as a distinct, dignified theme. There are few composers of whom this can be safely asserted besides Bach.

## **Construction of Uniform Melodic Lines.**

This section deals with the principles of constructing a uniform melodic line. A uniform melodic line is a single melody whose notes all have the same metric or rhythmic value. We will begin with lines

that consist entirely of whole notes, although the same principles would apply to lines consisting of half notes alone, or quarter notes alone, etc. The main point is that all the notes have the same value.

A melodic line can also be called a *melodic phrase*, or simply a melody. It is a line because there is only one voice. The study of counterpoint is concerned with combining more than one melodic line, but for now we will only be concerned with the construction of a single line.

For the types of melodic lines we will be dealing with first in strict counterpoint, the uniform melodic lines will have the following characteristics:

1. The tones to be used will consist solely of the one of the following scales:
  - a) major
  - b) natural minor (aeolian)
  - c) melodic minor (raised 6<sup>th</sup> and 7<sup>th</sup> steps when ascending, but natural 6<sup>th</sup> and 7<sup>th</sup> when descending). For now we will not consider the harmonic minor because its augmented second step from the natural 6<sup>th</sup> to the raised 7<sup>th</sup>.
2. The first and last note of the phrase shall be the tonic note of the scale. These two notes must be identical; they may not be, e.g., an octave apart. The final note must be reached by a step either from above or from below. Leading tones such as the 7<sup>th</sup> in major should be reached by a step as well. The one exception is that the 7<sup>th</sup> may be approached from the 5<sup>th</sup> scale degree.
3. The phrase should have only one high point, i.e., only one note of highest pitch.
4. The range of the notes should not exceed one octave from lowest to highest note.
5. Preference should be given stepwise movement from one note to another. Any jumps larger than a fourth should generally be offset immediately by a step in the opposite direction, sometimes a larger interval, especially when hitting the “pillar tones”, i.e., the tones of a triad, although broken chords should generally be avoided in strict counterpoint. Grabner states that the intervals of a second are the carriers of linear movement.
6. The following intervals are allowed in progressing from one tone to another:
  - a) major and minor seconds
  - b) perfect fourths and fifths
  - c) octaves
  - d) the minor sixth **upwards**
7. The following intervals are not allowed:
  - a) all diminished and augmented intervals
  - b) minor sixth **downwards**
  - c) major sixths **upwards** and **downwards**
  - d) all sevenths
8. Avoid:
  - a) tone repetition
  - b) broken chords
  - c) repetition of note patterns or groups
  - c) chromaticism

### **Varying a Melodic Line through Rhythmic Subdivision**

Uniform melodic lines can be varied by subdividing the notes in half, in quarters, in using syncopation or ties, and in using all of the above. This technique helps ensure that the characteristic profile of the original uniform melodic line will be preserved.

Subdividing the notes in half gives rise to two different rhythmic strengths: stressed and unstressed. The first half note is naturally stressed while the second is not. Thus we differentiate between downbeats and upbeats.

With quarter subdivision there are two stressed beats, the first and third, and two unstressed beats, the second and fourth. The first beat is stressed the most, while the third is typically stressed the second most. The second and fourth beats are the least stressed notes.

The following general rules tend to apply to quarter note subdivision:

1. From the first note to the second you proceed only by way of a step; not jump or skips!
2. Otherwise, all kinds of steps and skips are allowed from the second quarter note to the third, from the third to the fourth and from the fourth to the next stressed first beat of the next measure.
3. Within the measure skips do not have to obey the rule 5 from the previous section which mandated a step or skip in the opposite direction to offset a previous skip larger than a third.
4. Passing tones tend to be the most common.
5. Avoid broken chords, especially the 6/4 chord.
6. Nota cambiata are highly recommended.

With ties a new element of syncopation is introduced. This achieves to some extent a shifting of the rhythmic stress. The importance of syncopation in contrapuntal composition cannot be stressed enough (no pun intended!). As we'll see later when we begin to combine melodies together, syncopation achieved through ties adds individuality to a melodic line and helps make it distinct from other lines within the whole contrapuntal texture. Study the melodic lines of the great masters, especially those of J. S. Bach, and you will see they were all masters of syncopation. Without syncopation melodic phrases sometimes tend to be too regular and mechanical. Syncopation gives them vitality.

Finally, all of the above techniques for varying an otherwise uniform melodic line can be combined to vary one and the same line. A few rules should be observed, however:

1. When mixing a half note with two quarter notes within the same measure, let the half note occupy the stressed first beat, with the two quarters following on the third and fourth beats. Avoid the opposite, namely, the situation in which the two quarter appear first followed by a half note.
2. In tying notes across the measure bar, have the second of the two tied notes be equal to or less in value than the first of the two tied notes. Thus, you can tie an initial half note to a subsequent quarter note or half note, but try to avoid tying an initial quarter note to a subsequent half note.
3. You may sprinkle the phrase with occasional use of two eighth notes, generally on unstressed beats; e.g., a quarter note followed by two eighths would be permissible, but avoid preceding a quarter note with two eighths.

### **Strict, Two-Part Counterpoint**

Now the fun begins! We will start combining melodic lines and will proceed first with the simplest case of two uniform lines. This is called "note against note" because the notes in both voices have the same rhythmic value, thus whole notes against whole notes, half notes against half notes, etc. We'll

just deal with whole notes against whole notes for now, although the principles apply two phrases of mixed values as long as the values at each beat are the same in both voices.

In this form of strict counterpoint, it is assumed that one line is given and conforms to the rules of the uniform melodic line as outlined above. This voice will be referred to as the “cantus firmus”.

For two part counterpoint we shall often refer to intervals. These intervals now stand primarily for vertical harmonic relationships between the simultaneously sounding tones. We distinguish, of course, between consonant and dissonant intervals. The reader should already be familiar with this distinction.

Rules for Note-Against-Note:

1. The first (vertical) interval shall be either a unison, fifth or octave.
2. The final notes should be in unison or an octave apart (the latter requires that both notes should be reached in a stepwise manner).
3. Only consonant intervals are allowed throughout.
4. The distance between the two voices should be no more than a tenth.
5. Preference should be given to thirds and sixths, but every once a while octaves and fifths may show up.
6. No more than three parallel thirds, sixths or tenths.
7. No parallel fifths, octaves or unisons! By parallel we mean moving in the same direction and preserving the same interval distance between them.
8. No fourths! (Since these behave too strongly like suspensions before the third, thus restricting the freedom of each voice.)
9. No hidden fifths, octaves or unisons. These are similar to parallel fifths, octaves and unisons except that they are reached from a different interval, e.g., from a sixth to an octave would be bad.
10. No cross relationship (where the first lower note is a half step away from the second upper note).
11. No simultaneous jumping in both directions (regardless of direction).
12. Avoid having the high points of each line occur on the same beat.
13. The repetition of a note is now allowed in the counterpoint (but not in the cantus firmus).
14. The voices may actually cross momentarily (not permanently).

The most important rule of all is hard to specify exactly but can be stated thus: The counterpoint should exhibit the characteristics of a well-formed, coherent melody in its own right, one that could be heard alone. Its inner logic should be somewhat intelligible and be aesthetically pleasing and balanced. The counterpoint melody should seem like it is a sequence of random notes when heard alone! Certainly a computer can be programmed (and has been many times over) to produce counterpoint according to these rules, but quite often the resulting melody appears devoid of a 'soul', that is, devoid of the vitality that excites us so much in music.

Rules 6-14 strive to ensure that the counterpoint is maximally independent of the cantus firmus, i.e., a melody that has its own individuality and is not subordinate to the other voice. Rule 5 serves to imbue the conjoined lines with some harmonic unity. Note the contrast between rule 5 and rule 6. Here is where the unity and diversity are mostly achieved.

## Rules for 2:1 Counterpoint

This type of counterpoint involves the juxtaposition of two notes of counterpoint against one note of cantus firmus. Again we will assume that the cantus firmus is given in whole notes and that the counterpoint to be written shall therefore be in half notes.

The subdivision into half notes yields once again the distinction between stressed and unstressed beats.

1. On the stressed beat only a consonant interval is allowed.
2. On the unstressed beat can be either a consonant or dissonant interval.
3. If the unstressed beat exhibits a consonant interval, then it must be introduced and followed by stepwise movement.
4. Unison is allowed on the unstressed beat.
5. Avoid simultaneous jumps in both voices when passing from the unstressed to the stressed beat.
6. Avoid parallel and hidden octaves, unisons, and fifths between the stressed beats of two sequential measures.
7. It is allowed to have the counterpoint in half notes begin with the unstressed beat.
8. The last measure may consist of whole note against whole note.

## Rules for 4:1 Counterpoint

Here we have a counterpoint line in fourth notes with the cantus firmus in whole notes.

For this species we distinguish between one stressed beat and three unstressed beats (although the third is stressed slightly more than the other two unstressed beats).

1. Always a consonant interval on the stressed beat.
2. Wherever possible, make the third beat a consonance as well, unless the second and fourth beats are consonant intervals in which case the third may be a dissonance.
3. On the third and fourth beats a consonance or dissonance may be heard; however, always ensure that a dissonant interval is introduced with a step and followed up with a step movement. (Unless a *nota cambiata* is being employed.)
4. Avoid successive jumps in the same direction, since these will give the appearance of broken chords.
5. Parallel and hidden octaves, fifths and unisons are allowed in the case of quarter notes between the accented notes.
6. Avoid once again the simultaneous jumps in both voices when going from the fourth beat to the first.

## Rules for Syncopated Counterpoint

These rules are very simple and fairly easy to implement and yet because the effectiveness of ties / syncopation, they should be practiced a lot to achieve mastery. We assume the cantus firmus is in whole notes and the counterpoint exhibits (tied) half notes. If a half note in the counterpoint is tied to a previous half note from the last measure, it will now form either a consonance or dissonance with the cantus firmus.

1. Always introduce a tie on the unstressed beat with a consonance.

2. If the tied half note on the stressed beat makes a dissonance with the cantus firmus, then the dissonance is to be resolved by stepwise motion in such a way that a fourth becomes a third, a seventh becomes a sixth, a second becomes a third and fourth a fifth.
3. Avoid ties before an octave or unison.
4. Avoid monotonous sequences of tied notes by breaking them up with a few untied notes.
5. The suspension pattern of 7-6 or 3-2 works well as a final cadence formula.

### Rules for Counterpoint in Mixed Values

Again we are still assuming that the cantus firmus is uniform (and written in whole notes). This species of strict two-part counterpoint allows the counterpoint voice be completely free in its choice of rhythmic value. Basically this type of counterpoint involves all of the rules for various kinds explained above. No new rules are needed here. However, it is emphasized that one should make liberal use of syncopation through ties to add a distinctive rhythmic character to the counterpoint.

Since this type of counterpoint involves all of the above types, this is the type of counterpoint that should be practiced the most, since it will implicitly exercise all of the other types.

### Free Counterpoint

Now we loosen the reins further by allowing the cantus firmus itself to be a varied melody and allow the counterpoint to be completely free. Thus, this sort of counterpoint exhibits two completely free melodies interwoven together.

The only rules to observe are the following:

1. Note-against-note now applies to whole-against-whole, half-against-half, quarter-against-quarter, etc.
2. 2:1 counterpoint now applies to half against whole, quarter against half, etc.
3. Syncopated ties can now apply to tied quarter notes against half notes, and tied eighth notes against quarter notes.

We also relax the rule regarding the introduction of ties; we will now allow them to be introduced by dissonant intervals.