

COUNTERPOINT: INTRODUCTION AND FIRST SPECIES

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Introduction

Why study counterpoint?

- Counterpoint (meaning “note against note”) forms the fabric of musical texture and is therefore found in every piece of music
- Counterpoint creates musical motions (which were once thought as representing the motion of the planets), often called “voice leading”
- The laws that govern the motion of voices form a fundamental property of music
- Studying these laws shows us what makes music pleasing and why it is so

1. *Andante.*

Steps to Parnassus

- These laws were codified in “Gradus ad Parnassum” (Steps to Parnassus) by Johann Fux in 1725
- This book was based on the “perfect” polyphonic music of Palestrina, a 16th century composer
- Many of the great composers (including Bach, Haydn, Mozart and Beethoven) studied this book in detail
- These laws of counterpoint have followed through up until music of today, though the 20th century saw some huge revolutions in the language of music

Species Counterpoint

- Fux divided counterpoint into five different “species”, or exercises:

- 1) First Species - One note against one note (1:1)
- 2) Second Species - Two (or three) notes against one note (2:1 or 3:1)
- 3) Third Species - Four (or six) notes against one note (4:1)
- 4) Fourth Species - Syncopations
- 5) Fifth Species - Florid

6 1) 1st Species, 1:1

c. f.

30 4) 4th Species, Syncopation

c. f.

11 2) 2nd Species, 2:1

c. f.

40 5) 5th Species, Florid

c. f.

20 3) 3rd Species, 4:1

c. f.

Intervals

Consonance and Dissonance

Consonant intervals are harmonious and pure intervals that have a restful quality.

Consonant sounds vibrate at ratios of low numbers, therefore their sound-waves contain few beats or few clashes (2:1 = an Octave, 2:3 = a 5th for example).

Dissonant intervals contain tension and restlessness.

Their sound-waves literally contain more beats than consonances, as a result of sounds physically clashing at high ratios (approx. 15:8 = a Major 7th for example). Their tendency is to resolve to consonant intervals.

The Overtone Series

Each pitch contains a fundamental note and a sequence of sounds. That sequence of sounds vibrates at set frequencies that remain the same for any given note. These frequencies are also called 'partials' and those in closer proximity to the fundamental are 'lower partials' and those further from the fundamental are 'higher partials'. The closer to the bridge you pluck, the more higher partials are brought out from the fundamental and vice versa.

The overtone series can be physically manifested by playing harmonics on the guitar. The first partial above the fundamental forms a 2:1 ratio, or an octave. This can be manifested on a string by playing a harmonic on the halfway point (12th fret). The third partial forms an octave and fifth above, which can be manifested by playing a harmonic on the halfway of the halfway point (7th fret).

The image contains two musical diagrams. The top diagram shows a treble clef staff with a series of notes representing the overtone series. The notes are labeled with Roman numerals and circled numbers below them: VIII (6), 3 (4), 2 (2), 1 (1), 1 (1), and 4 (4). A bracket above the last three notes (1, 1, 4) is labeled 'Major Triad'. The bottom diagram shows a treble clef staff with a 'Stacked' series of notes (represented by a cluster of notes) and a 'Down an octave' series of notes (represented by a cluster of notes). The notes in the 'Down an octave' series are labeled with circled numbers 1, 3, and 4.

The two partials directly above the fundamental from the octave and fifth and thus in nature are the most stable tones. These tones form the most stable of all.

Notice too how partials 4-5-6 create a major triad, which is a core building block of western music. The fifth partial forms a third above the fundamental and is therefore regarded as a consonance (stable). Its inversion (a sixth) is also considered consonant (stable).

So here are the intervals considered consonant in western tonal music:

Perfect Octave

Perfect 5th

Major and Minor 3rds

Major and Minor 6ths

Every other interval is considered a dissonance.

Intervals: Distance and Quality

Two factors are to be considered when identifying intervals

- a) Distance - the interval of space from one note to another, represented by a number
- b) Quality - the type of interval it is so labeled due to its precise size, represented by qualifying terms

The five qualifying terms are:

- 1) **Perfect**
- 2) **Major**
- 3) **Minor**
- 4) **Diminished**
- 5) **Augmented**

Below are the most common and fundamental intervals (above C) found in western tonal music.

Yellow Intervals = consonant

Purple Intervals = dissonant

Dissonant intervals are not used in all species of counterpoint and when they are they're treated very carefully.

A musical staff in treble clef showing four intervals starting from middle C (C4):
1. Perfect Unison: C4 to C4 (yellow label)
2. Perfect 8ve: C4 to C5 (yellow label)
3. Perfect 5th: C4 to G4 (yellow label)
4. Perfect 4th: C4 to F4 (purple label)

A musical staff in treble clef showing four intervals starting from middle C (C4):
1. Major 2nd: C4 to D4 (purple label)
2. Major 3rd: C4 to E4 (yellow label)
3. Major 6th: C4 to A4 (yellow label)
4. Major 7th: C4 to B4 (purple label)

A musical staff in treble clef showing four intervals starting from middle C (C4):
1. Minor 2nd: C4 to B3 (purple label)
2. Minor 3rd: C4 to Bb3 (yellow label)
3. Minor 6th: C4 to Ab4 (yellow label)
4. Minor 7th: C4 to Bb4 (purple label)

A musical staff in treble clef showing two tritone intervals starting from middle C (C4):
1. Diminished 5th (Tritone): C4 to Fb4 (purple label)
2. Augmented 4th (Tritone): C4 to F#4 (purple label)

Compound Intervals

When the intervals above are the same plus an octave (i.e. putting the top note up an octave), they are called compound. These intervals very often occur in music on the harmonic (i.e. vertical) plane, whereas the intervals above often occur on both the vertical and linear (i.e. melodic) plane.

The image displays musical notation for various compound intervals on a treble clef staff. Each interval is represented by a pair of notes: a lower note on a lower line and a higher note on a higher line, with a vertical bar between them. The intervals are labeled in colored boxes above the staff, with their corresponding scale degrees in parentheses below the labels.

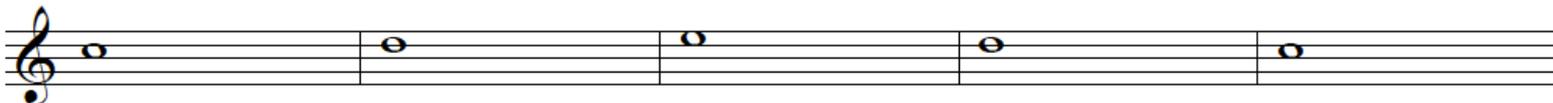
- Compound Perfect 4th (Per 11th)**: Purple box, (Per 11th)
- Compound Perfect 5th (Per 12th)**: Yellow box, (Per 12th)
- Compound Perfect 8ve (Per 15th)**: Yellow box, (Per 15th)
- Compound Major 2nd (Maj 9th)**: Purple box, (Maj 9th)
- Compound Major 3rd (Maj 10th)**: Yellow box, (Maj 10th)
- Compound Major 6th (Maj 12th)**: Yellow box, (Maj 12th)
- Compound Major 7th (Maj 13th)**: Purple box, (Maj 13th)
- Compound Minor 2nd (Min 9th)**: Purple box, (Min 9th)
- Compound Minor 3rd (Min 10th)**: Yellow box, (Min 10th)
- Compound Minor 6th (Min 12th)**: Yellow box, (Min 12th)
- Compound Minor 7th (Min 13th)**: Purple box, (Min 13th)
- Compound Diminished 5th (Dim 12th)**: Purple box, (Dim 12th)
- Compound Augmented 4th (Aug 11th)**: Purple box, (Aug 11th)

Voice leading

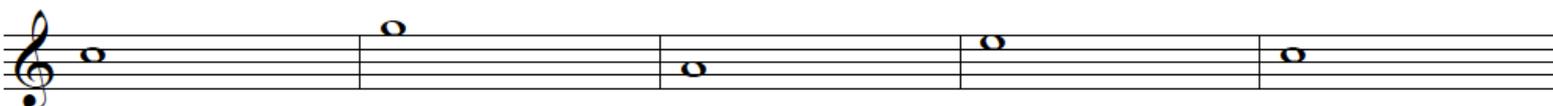
Voice leading is the linear motion that occurs when passing from one note to the next. Here are some basic guidelines behind this property that result in pleasing music.

a) Smooth lines

- In general, notes will move in scalar motion. Too many leaps results in a bumpy and awkward line.



Smooth line - scalar motion



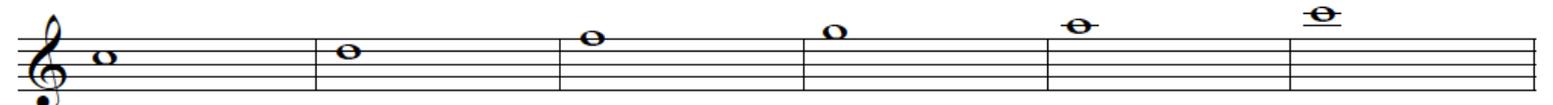
Awkward - too many leaps!

b) Balance

- When leaps to occur, they are typically followed by movement in the opposite direction



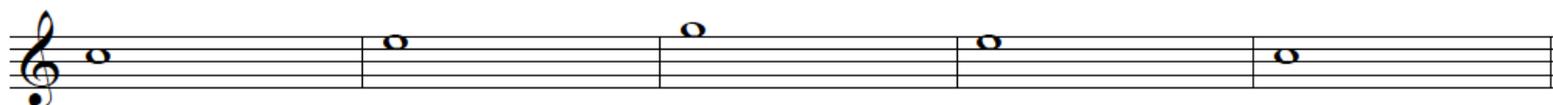
Balanced - gap "filled in"



Unbalanced - gap not filled in

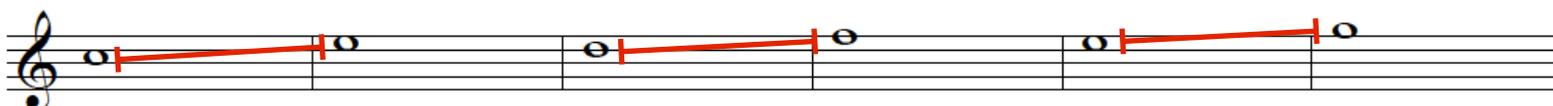
c) Independence

- Avoid melodically arpeggiating a triad as this interrupts independent voice leading and results in something akin to an accompaniment



d) Monotony

- Sequences are to be avoided as they result in a monotonous and superfluous exercise



Types of Motion

Three possible types of motion exist:

- a) Direct motion - voices move in the same direction
- b) Contrary motion - voices move in opposite directions
- c) Oblique motion - one voice is stationary while the other voice moves

A balanced mix of the three types of motion is desirable

The image shows three measures of music on a single staff, each illustrating a different type of motion between two voices. Measure (a) shows direct motion: both voices move up by the same interval. Measure (b) shows contrary motion: one voice moves up while the other moves down. Measure (c) shows oblique motion: one voice is stationary while the other moves.

Parallel 5ths and 8ves

There are certain intervals you want to avoid moving in parallel motion - Perfect 5ths and Perfect Octaves.

Perfect 5ths and Perfect Octaves represent stability and hearing them in parallel succession can negate the independence of melodic lines.

Direct 5ths and octaves are when you move to a perfect 5th or perfect 8ve via direct motion (i.e. both voices move into the interval in the same direction).

The image shows two examples of parallel motion. Example (i) shows parallel 5ths and 8ves: two voices move in the same direction, maintaining a perfect 5th or perfect 8th interval. Example (ii) shows direct 5ths and 8ves: two voices move in the same direction, but the interval between them changes, moving from one perfect 5th or perfect 8th to another.

First Species

1 note against 1 note

or 1:1

- a) Beginning and end must start with a unison, fifth or octave
- b) The unison can only occur at the start and end
- c) Only consonant intervals may be used (excepting the unison, which can be used at the start and end)
- d) All of the rules of voice leading apply here (balance, monotony, independence, motion etc.)
- e) If coming from below, the penultimate note must be a raised to form a leading tone (#7)
- f) The final note must come to a unison or octave

c. f. 8 6 6 10 8 6 5 6 6 8

Observations

- 1) Notice the balance of intervals - no interval is repeated too often
- 2) Each separate line has a different climax point, heightening each line's independence
- 3) There is a good mixture of different kinds of motion (direct, contrary and oblique)
- 4) After a leap, motion generally moves the other direction (except for measures 7-9)

Method for practicing first species counterpoint

- 1) Play each line separately
 - Ensure dynamic shaping to and from the climax point
- 2) Sing each line separately
 - Check intonation especially at leaps
- 3) Play one line and sing the other
 - Shape the voices independently
- 4) Repeat step three but reverse the voices

Supplemental Materials

- Label the intervals
- Observe the type of motion from one bar to the next
- Practice as outlined above
- Compose your own first species counterpoint