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

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
**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).

![Major Triad](image)

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.
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.
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 scalic motion. Too many leaps results in a bumpy and awkward line.

Smooth line - scalic 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

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).
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

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