

Longy School of Music of Bard College

# Music Theory for young students

designed for use in Creative Music Theory classes  
in the Preparatory Division

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Levels 4, 5, 6

first revision  
fall 2011

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# Introduction

Dear student!

As we continue to study music theory, we focus more on some aspects of vertical and horizontal organization of music; more precisely, we continue to study homophonic and polyphonic techniques and styles. Music that you play mostly belongs to the “common practice period”, a term that describes music written between 1600 and 1900. At this time tonal music (with tonic as a strong center of a mode) was developed.

Early polyphonic music is modal, i.e. written in modes other than traditional major and minor; therefore modes (Greek or church) will be our focus. Studying modes calls for broadening our perspective on chords, and in addition to primary chords ( I, IV, V) other chords will be introduced – II, III, VI, and VII.

We are going to expand our chordal harmony to seventh chords, and learn all types of seventh chords and their inversions, as well as their practical use.

Polyphony will be studied in more or less chronological order: we will listen, analyze, and create polyphonic pieces using first, second, and third species counterpoint. All of the above components of music theory will be studied using authentic music examples.

In theory 1 – 3 we studied elementary music forms, which are building blocks for larger forms such as variations, rondo, sonata-allegro. In Levels 4 – 6 we will continue the study of form. We will learn the distinction between music form and music genre, and apply our knowledge to analysis and composing of musical pieces.

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Dear parents,

At this level many of your children are more advanced music theory learners, and most likely, able to study independently. There are many theory components that will still benefit from your participation. Your children are learning two - part singing, and you may assist them in either playing or singing one of the parts. They will be composing counterpoints in different clefs, and you may help them to perform it. They may be harmonizing a melody in different styles, which, again, calls for ensemble playing. And if you feel that your music proficiency is not up to theory 4 – 6 standards, you at least can be an appreciative listener.

As your child grows older, don't miss a chance to listen to music together and discuss it. Music theory applied to their repertoire may be a productive discussion topic. Theory 4 – 6 goes beyond techniques into the field of understanding music in cultural context; your input as a competent or novice listener is very valuable. Enjoy this journey, make music a participatory experience for you and your child!

P.S. It is even more essential for theory 4 – 6 students to have a keyboard at home for practicing four voice leading; please, make sure your child has one.

# Texture, Style, and Counterpoint

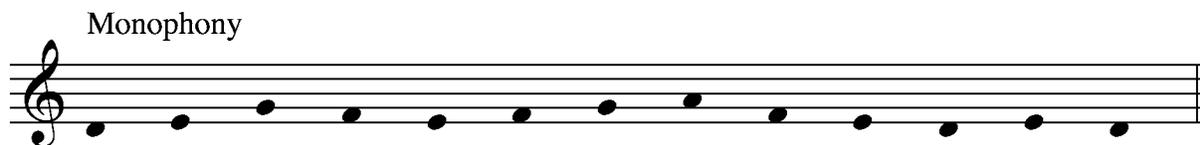
## Style in music.

You've heard the word "style" many times in your encounters with music. It could be a style of a certain epoch, or a style of a specific composer, or a style of a performance.

Sometimes the word style is referred to a specific texture of music: polyphonic style or homophonic style. We have discussed these terms in book 1, but back then we referred to them as texture. It is indeed a texture of music that was preferred in a certain time period; therefore the same words apply to texture and style.

## Monophony

Early Western music (music written down using music notation) was monophonic – a single melody sung solo or in unison. It was used for chanting holy texts, and was called a plainchant, plainsong, or Gregorian chant. Plainchant was not metered, and it was constructed using small intervals, convenient for singing.



## Polyphony

Many centuries later musicians started to experiment with adding other melodic lines to it, which eventually brought the development of polyphony. Polyphony is a texture where independent melodic lines are combined. The earliest polyphony in Western music was strictly regulated. Rules and regulations of polyphony were compiled in the book *Gradus ad Parnassum* by Austrian composer and theoretician Josef Fux in 1725. In this book he presented the rules for species counterpoint – a teaching tool still used by musicians to study counterpoint.

## Counterpoint

Counterpoint literally means note against note. The base melody used for writing a counterpoint is called *cantus firmus*, a fixed melody. *Cantus firmus* is a plainchant, usually written in alto clef for tenor part. *Cantus firmus* has to be sung, therefore the contour and register of a melody has to be convenient for singing. **Appendix 1** contains guidelines for writing a *cantus firmus*.

Counterpoints vary in their complexity. First species counterpoint is note against note, second species is two against one, third is four against one, and fourth is written in syncopated notes. Fifth species counterpoint is a combination of all four.

See **Appendix 1** for a full description of the rules for species counterpoint.

Early music used a variety of modes, not only major and minor that we mostly use in music of the "common practice period" (1600 – 1900).

## Modes

Modes are sometimes called Greek, because they were described in Greek treatises on music; they are also called church or medieval modes, because they were used in religious and secular music in medieval times; sometimes diatonic, because they can be constructed by starting on different degrees of the major scale.

There are seven modes. You will find both descriptions and examples of each in **Appendix 2**.

A very important aspect of counterpoint is the smooth movement of voices. Composers of common practice period were all trained in counterpoint. Eventually it brought the formation of chords and the development of homophonic style, or homophony.

## Homophony

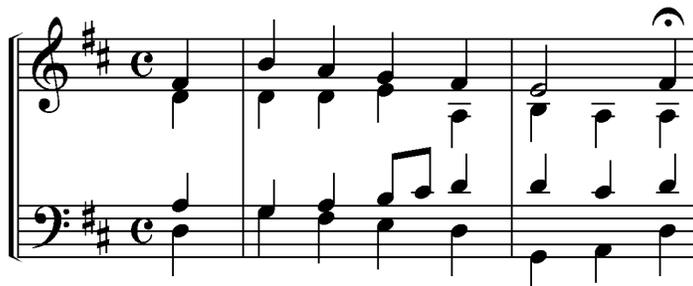
Homophony is a texture (and a style) where a leading voice (homo- one, phon- voice) is supported by accompaniment (harmony).

Homophony:



Chorale texture, where all voices move basically together as a block chord, emphasizing the top voice as melody, is also homophonic texture.

Chorale (homophonic) texture:



# Harmony

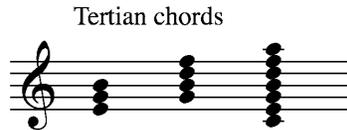
Harmony in music has several meanings.

1. Musical pitches sounding together.
2. A branch of music theory formalizing relations between pitches in melody, chords and keys.

The building blocks of polyphony are intervals; the building blocks of harmony are chords.

## Chords

A chord is made of a minimum of three pitches, chords separated by thirds are called *tertian*.



In classical harmony, the most commonly used chords are triads and seventh chords. In Levels 1 - 3 we discussed triads, their inversions and a seventh chord – the dominant seventh.

## Seventh chords

Seventh chords may be constructed on any note in a scale by adding another third on top of a triad. The official name of each seventh chord comes from this concept of building: we name the seventh chord by the quality of its triad and the quality of its seventh. Read each name below from the bottom up so that you name the triad first.

Types of seventh chords

	seventh: minor	minor	major	diminished	minor
	triad: major	minor	major	diminished	diminished

Depending on their location in a key they have different structure and function.

## Dominant seventh chords

The most common seventh chord is the dominant seventh – an extension of the dominant triad. This chord is constructed with a major triad plus a minor seventh above the root.

Its official name is major-minor seventh chord, but the name most generally used is dominant seventh. This is because only one major-minor seventh chord normally occurs in either major or minor, and it is on the dominant scale degree.

Dominant sevenths

C: V <sup>7</sup>	a: V <sup>7</sup>	d: V <sup>7</sup>
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## Inversions of seventh chords

Seventh chords are inverted the same way intervals are inverted, by bringing a bottom sound of a chord one octave up and putting it on top of a chord. The example below includes the numerals which show all the intervals above the bottom note.

Inversion of seventh chords

root position	first inversion	second inversion	third inversion
7	6	6	6
5	5	4	4
3	3	3	2

## Naming inversions

Inversion names include the official name of the root or triad (dominant or V, supertonic or ii, etc.) with arabic numerals giving the location of chord members above the note that is in the bass. The example below provides the commonly-used symbols for dominant seventh inversions.

Inversion of dominant sevenths

V <sup>7</sup>	V <sub>5</sub> <sup>6</sup>	V <sub>3</sub> <sup>4</sup>	V <sub>2</sub> <sup>4</sup>

## Resolution of seventh chords

Seventh chords combine stable and non-stable tones. The number of non-stable tones included in chord influences its character and intensity. When seventh chords are resolved, non-stable tones are brought to stable tones. Resolution of the dominant seventh and its inversions demonstrates how this happens. (Every tone in the dominant seventh has a strong tendency to go to a specific place. A root-position one will resolve to a tonic with three roots and one third. Note how the inversions are able to resolve to complete tonic triads by keeping scale degree 5 as a common tone.)

Dominant sevenths and inversions resolved

C:	V <sup>7</sup>	I	V <sub>5</sub> <sup>6</sup>	I	V <sub>3</sub> <sup>4</sup>	I	V <sub>2</sub> <sup>4</sup>	I <sup>6</sup>

### Diminished seventh chord

Another non-stable chord is  $\text{vii}^{\circ 7}$ , which occurs in harmonic minor. This chord has a diminished triad and a diminished 7th above its root. Officially, it is called a diminished-diminished seventh chord, but diminished seventh is a widely-used name for it.

Diminished seventh chord in g minor



### Resolution of diminished seventh chord

A diminished seventh chord consists of two diminished fifths. Resolving each of the diminished fifths correctly brings us to a modification of a tonic triad, which has a doubled third.

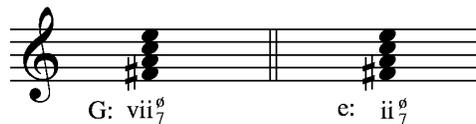
Diminished seventh resolved



### Other seventh chords

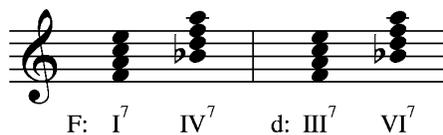
A seventh chord on the second scale degree in minor or on the leading tone in major has a diminished triad and a minor seventh above its root. It is generally known as a half-diminished seventh chord, though the official name is diminished-minor seventh.

Half-diminished seventh chords



A seventh chord on scale degree 1 or 4 in major or on scale degree 3 or 6 in minor has a major triad and a major seventh above its root. Its official name is major-major seventh, but major seventh chord is its common name.

Major seventh chords



A seventh chord on scale degree 1 in minor has a minor triad and a minor seventh above its root. Officially, it is a minor-minor seventh, but minor seventh chord is its common name. There are minor sevenths to be found elsewhere in major and minor keys. Try to figure all possible combination of triads and intervals of the seventh to make all the seventh chords in a key.

Minor seventh chord



The most commonly used seventh chords are dominant seventh, diminished seventh, and half-diminished seventh chords.

Resolving or connecting seventh chords requires knowledge of four-part harmony. In four-part harmony all chords, even triads, have to have four notes.

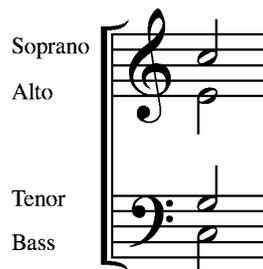
### Four part harmony

In polyphony voices have independent contours and rhythm, in homophonic style they move together in the same rhythm. Because homophony is a product of polyphony, the smooth connection between chords or voice leading is very important, and the aim of every line created is to be musically interesting.

### Voice leading

The movement of each voice from one chord to the next is called voice leading. There are four parts in traditional harmony. They get their names from voices in chorus: soprano, alto, tenor, bass. Notice how the stems of voices which share a staff go in opposite directions.

Four-part voice names



In levels 1 - 3 we used three part chords, now one member of the chord (frequently the bass) is present twice in a chord, or doubled, to make a fourth part. Knowing which triad member to double is important. In general, doubling the tonal scale degrees (1, 4, 5, and sometimes 2: those scale degrees which do not change according to mode) will almost always work well. Achieving good melodic lines in voice leading is sometimes more important than doubling the “correct” triad member. Find and identify the chord member that is doubled in the example above.

Chords may be in close or open position, which alters the sound to some degree but doesn't change the chord quality.

### Close chord position

When notes in a chord are spaced as closely as possible it is called close chord position. The chord could have a root, third, or fifth in the soprano part, it doesn't matter.

Closely-voiced triads



### Open chord position

When the notes of a chord are more spread out (again, having any chord member on top) it is an open chord position.

Triads in open voicing



### Rules of voice leading

For a complete description of movement types and voice-leading, see **Appendix 3**.

Real music rarely exists in the form of four part harmony. Usually a melodic line has notes that do not belong to a harmony, and they are called non-harmonic tones, or non-chord tones.

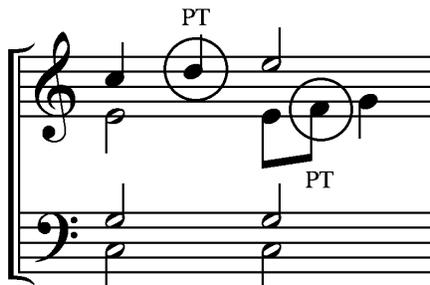
## Non-harmonic tones (non-chord tones)

We will classify non-harmonic tones by their location in a measure. Non-harmonic tones are notes that do not belong to the triad or seventh chord active at the time. Non-harmonic tones are strictly governed according to how they are introduced (prepared) and how they move to chord tones (i.e., how they are resolved).

### Weak beat non-harmonic tones

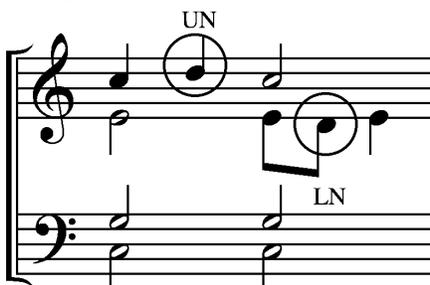
Passing tone (PT): a non-chord tone between two different harmonic tones. Passing tones must resolve by step in the same direction they are introduced.

Passing tones (circled and labelled)



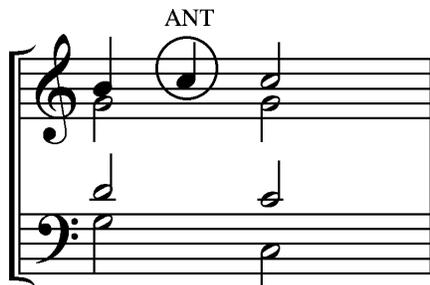
Neighbor tone – upper neighbor (UN) or lower neighbor (LN): a note step higher or lower between the same repeating harmonic tone.

Neighbor tones (circled and labelled)



Anticipation (ANT): when a tone of the next chord sounds before the chord which contains it. Note that anticipations generally require a change of harmony.

Anticipation (circled and labelled)



### Strong beat non-harmonic tones

Accented passing tone (PT): passing tone on a strong beat, or the strong part (first part) of a beat.

Accented passing tones

The image shows a musical example of accented passing tones. It consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains a melody of quarter notes. The first note is a half note, followed by a quarter note circled in red and labeled 'PT' above it. This is followed by another quarter note circled in red and labeled 'PT' below it, and finally a quarter note. The bass staff shows a chord progression with two chords, each represented by a pair of notes. The first chord is a triad, and the second is a dyad. The circled notes in the treble staff correspond to the notes in the bass staff.

Suspension (SUS): a tied or repeated note from previous chord. The non-chord tone is *prepared* by belonging to the previous chord, and is held while the chord changes. When the tone does not belong to the new chord, it is a dissonance, and must *resolve* down by step. Note that the arabic numeral below the bass shows the interval movement of the dissonance and its resolution.

Suspension

The image shows a musical example of a suspension. It consists of two staves: a treble clef staff and a bass clef staff. The treble staff shows a melody where a note is tied from the previous measure to the current measure, circled in red and labeled 'SUS' above it. The bass staff shows a chord progression with two chords. Below the bass staff, the arabic numeral '4 - 3' is written, indicating the interval movement of the dissonance and its resolution.

Appoggiatura (APP): non-harmonic tone appears as a leap in the melody. Typically, the leap is up, and the non-chord tone will resolve down by step.

Appoggiatura

The image shows a musical example of an appoggiatura. It consists of two staves: a treble clef staff and a bass clef staff. The treble staff shows a melody where a note is circled in red and labeled 'APP' above it. The bass staff shows a chord progression with two chords. The circled note in the treble staff is a non-harmonic tone that appears as a leap in the melody.

### Other non-harmonic tones

There is also an escape tone (ET), a weak-beat non-harmonic tone between two consonances that are a step apart, that skip by a third into resolution. One may describe this action as approaching the dissonance (non-chord tone) by step, left by leap in the opposite direction.

Escape tone  
ET

Cambiata, CAMB, a weak beat non-harmonic tone connecting two consonances that are a step apart. The dissonance is approached by leap and left by step in the opposite direction.

Cambiata  
CAMB

A neighbor group (NG), or double neighbor tone (DN), which is sometimes referred to as a changing tone, is a combination of upper and lower neighbor tones. Note that in the example below, the chord tone is not sounded between the two non-chord tones. Some people would call this an incomplete neighbor group.

Neighbor group

## Diatonic chords and functional progressions

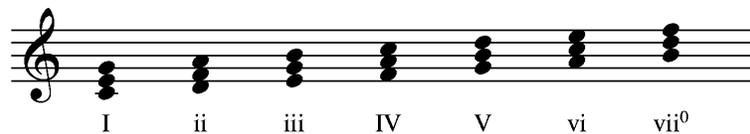
In medieval and renaissance music, the interaction of lines and intervals is most important, and any chord could follow any other. In common-practice period, some chords acquired special significance, especially in providing a sense of forward movement. Tonic (T) is beginning and end, dominant (D) leads to tonic, and subdominant (S) leads to dominant. The three chords stand for their functions in harmonic progression, which are tonic, dominant, and pre-dominant. When chords function in this way, we say it has *functional harmony*.

Tonic function chords include I (or i) and on occasion the chords which share two notes with tonic, iii (III) or vi (VI). Returning to tonic is the eventual goal of all common-practice period music. (Chords in parentheses come from the minor mode.)

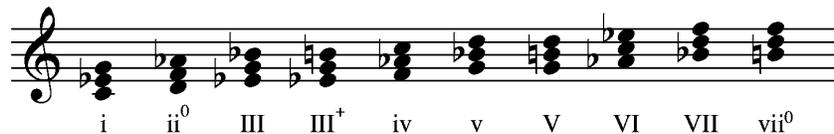
Dominant function chords include V, V<sup>7</sup>, and vii<sup>0</sup>. (Notice that these chords are the same in major and minor. The *functional* dominant in minor is spelled using harmonic minor.)

Pre-dominant chords include IV (iv), ii (ii<sup>0</sup>), and seventh chords built upon them.

Diatonic triads in major



Diatonic triads in minor



### Supertonic triad

A triad constructed on scale degree 2, the supertonic leads most frequently to the dominant triad, and therefore has pre-dominant function. The chord is minor (ii) in a major key, and diminished (ii<sup>0</sup>) in a minor key.

### Mediant triad

A triad constructed on the third scale degree combines sounds belonging to the tonic triad and the dominant triad, and can occasionally stand in their place. It is called mediant, because it is equally removed from T and D. The mediant is minor (iii) in the major keys, and can be either major (III) or augmented (III<sup>+</sup>) in a minor key. The augmented quality comes from a raised leading tone, which explains its occasional use as a dominant-function triad.

### Submediant triad

A triad constructed on the sixth scale degree combines sounds of S and T triad, and can therefore sometimes take on either function, tonic or subdominant. It is called submediant, because it is equally removed from S and T.

### Leading tone triad

In major and in harmonic minor a triad on the seventh scale degree is diminished ( $vii^0$ ); as mentioned above, it is a chord of dominant function.

### Subtonic triad

The triad constructed on the seventh scale degree in natural minor is major (VII, often referred to as  $bVII$ ). In minor keys, it is the relative major of dominant minor, and the dominant of the relative major.

### Primary and secondary chords

Triads constructed on first, fourth, and fifth degrees or, T, S, and D are called primary triads. All other triads are secondary. Notice that in major mode primary triads are major, and secondary triads are minor. In minor mode primary triads are minor (when spelled using the natural minor), and secondary triads are major.

Using primary and secondary triads creates unexpected harmonic combinations, enriches music with more colors.

### Relationships between primary and secondary chords

Primary and secondary chords are closely related. In major mode, the submediant is the relative minor of tonic, while the mediant is the relative minor of dominant, and supertonic is the relative minor of subdominant.

Relative minors of primary triads in major

(tonic) (relative minor) (relative minor) (tonic) (relative minor) (tonic)

C:                  vi                  C: iii = vi of G (V)      C: ii = vi of F (IV)

In minor mode, the mediant is the relative major of tonic, submediant is the relative major of subdominant, and subtonic is the relative major of dominant minor.

Relative majors of primary triads in minor

(tonic) (relative major) (relative major) (tonic) (relative major) (tonic)

a:                  III                  VI = III of d (iv)      VII = III of e (v)

## Secondary and primary triads in harmonization

The ambivalent character of secondary chords allows for their wide use in harmonization. Primary triads are used in structurally significant places: in the beginning of a piece for establishing a key, and in cadences.

### Types of cadences

In levels 1 – 3 we discussed melodic cadences, now we are going to focus on cadences expressed in harmony. Cadences function like punctuation, they shape musical phrasing.

There are four basic cadence types:

**Authentic (full) cadence (AC):** usually at the end of a phrase.

An authentic cadence is called perfect if the soprano carries scale degree 1 in the tonic chord, and both dominant and tonic are in root position. We abbreviate the label as **PAC**. An authentic cadence is imperfect when it has 3 or 5 in the tonic chord, one of the chords is inverted, or the leading-tone chord is used instead of dominant. We abbreviate the label as **IAC**.

Authentic cadences

The image shows four examples of authentic cadences on a grand staff (treble and bass clefs). Above each pair of staves is a label: PAC, IAC, IAC, and IAC. Below each pair of staves are Roman numerals: V I, V I, V<sup>6</sup> I, and vii<sup>0</sup><sub>6</sub> I. The first example (PAC) shows a V chord in root position with the soprano line on G4, moving to an I chord in root position with the soprano line on G4. The second example (IAC) shows a V chord in root position with the soprano line on G4, moving to an I chord in root position with the soprano line on B4. The third example (IAC) shows a V<sup>6</sup> chord in first inversion with the soprano line on G4, moving to an I chord in root position with the soprano line on G4. The fourth example (IAC) shows a vii<sup>0</sup><sub>6</sub> chord in first inversion with the soprano line on G4, moving to an I chord in root position with the soprano line on G4.

**Half cadence (HC):** cadence on dominant, creates a need for answering in full cadence.

**Plagal cadence (PC):** S-T, usually at the end of a phrase, most frequently after a full cadence.

**Deceptive cadence (DC):** D – vi (VI in minor), prolongs music, calls for a full cadence.

More cadences

The image shows three examples of other cadence types on a grand staff. Above each pair of staves is a label: HC, PC, and DC. Below each pair of staves are Roman numerals: IV V, IV I, and V vi. The first example (HC) shows an IV chord in root position with the soprano line on C4, moving to a V chord in root position with the soprano line on G4. The second example (PC) shows an IV chord in root position with the soprano line on C4, moving to an I chord in root position with the soprano line on C4. The third example (DC) shows a V chord in root position with the soprano line on G4, moving to a vi chord in root position with the soprano line on G4.

In addition to bringing pieces or sections to close in the home key, cadences are places that make a change of key more firm, a process known as modulation.

## Modulation and chromaticism

Modulation is a change of key confirmed by cadence. Key change occurs very often in music, especially in longer pieces. Sometimes a change of key is just hinted before returning to an initial key. This is called tonicization.

### Tonicization

Sometimes a tone in a key assumes the potential of a new tonic. It happens with help of a new leading tone which points to that tonic. A leading tone lies a half-step below its tonic, which often leads to the presence of a note that does not belong to the original key of the piece. It is the aural strength of the accidental that creates the feeling of a new potential tonic.

### Secondary dominant

Any chord in a scale may be preceded by its own dominant. We know that a dominant chord is major, and that its third is the leading tone of a key. The dominant may be a dominant seventh chord as well, which occurs only one place in a scale, and which might bring additional accidentals. This new dominant has different names – secondary, applied, or transient dominant.

Notice in the example below that we label secondary dominants as “of” the chord whose root has the new leading tone. We will soon see that a composer might change the key for a while to the new tonic, and it will be either major or minor based upon whether the chord built on it is major or minor.

Secondary dominants

The image shows a musical score for piano with two staves, treble and bass clef. It illustrates secondary dominants in three keys: a minor, a major, and C major. The notation shows chords and their resolutions. Below the staff, the chords are labeled as follows:

a:  $V^7/iv$     $iv$    a:  $V^7/III$     $III$    C:  $V^7/vi$     $vi$

### Chromaticism

There are 12 notes in a chromatic scale, it is constructed by using all semitones in an octave. One way to think of the chromatic scale is as a succession of diatonic notes in a scale with leading tones to each diatonic note. Any time a note appears that is not contained in the key of a piece, we call that chromaticism. Some chromaticism simply ornaments a note. When chromaticism functions as part of new key being established through tonicization or modulation, it will be supported harmonically. (See the example on the next page.)

Chromaticism

a: i V<sup>7</sup>/iv iv V

The circled notes are NCTs, as labelled.

The first G# is a melodic ornament.

The C# on the second beat is *functional*, providing a leading tone for the secondary dominant of the subdominant.

### Tonicization and modulation

When after tonicization a new key is confirmed (by a cadence in the new key), modulation occurs. In the example below, the previous example has been extended, but rather than come to rest on a half-cadence in the original key of *a minor*, the succeeding chords belong to the new key, *d minor*.

Modulation

a: i V<sup>7</sup>/iv iv = i iv V i  
d: \_\_\_\_\_

### Role of modulation

Changing keys makes music more dynamic; it creates boundaries between different parts in larger musical pieces. It allows a composer to use melodies and motives in many ways without our growing weary of them.

### Making modulation

Modulation is usually made through using a common note in a melody or a common chord (or series of chords) in a harmony that assumes a new identity in a new key. In the example above, notice how the d minor chord on beat three of the first measure can belong to both *a minor* and *d minor*. It is therefore a common chord, or pivot.

A common chord is called pivot chord. After a pivot chord, cadence confirming a new key completes a modulation.

## Types of modulations

Modulations could be smooth, using one or a few pivot chords. This type is known as **common-chord modulation**.

It could be an **abrupt modulation**, introducing different keys without any preparation (starting a different part in a different key). When abrupt modulation occurs between two phrases, some call it a **phrase modulation**.

A composer might reduce the texture to a single note, such as scale degree 2, and move ahead in a key that treated that note as tonic. This would be an example of **common-tone modulation**.

A modulation could lead to a key that shares all notes with the original key (as in modulation to the relative major or minor), or to a key that has no common notes with the original key.

## Closely related keys

Keys are related according to the number of notes they have in common. The more notes a pair of keys have in common, the more chords they will have in common. Consider G major and C major. Only one note is different, but it shifts the tonic and all harmonic relations. The example below shows the chords the two keys have in common.

Common chords, G major and C major

The diagram shows two staves of music. The top staff is for C major and the bottom staff is for G major. Chords are represented by triads on a five-line staff. The common chords between the two keys are highlighted with boxes: C major IV (F4, A4, C5), G major I (G4, B4, D5), C major V (G4, B4, C5), G major ii (B3, D4, E4), C major vi (E4, G4, A4), G major iii (B3, D4, F4), and C major vii<sup>0</sup> (B3, D4, F4).

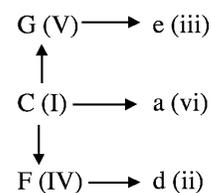
Relative major and minor are the closest, they share all notes.

Keys are considered closely related if they are one accidental away in the circle of fifths. The example above is of two chords a fifth apart in the circle of fifths.

Therefore, closely related keys will be keys of primary chords and their relative keys. This produces a set of closely-related keys which includes all the major or minor chords in a key (i.e. not including diminished triads.)

Notice that in the chart to the right, all the scale steps of C major (except the leading tone, which would carry a diminished triad) are either one step away in the circle of fifths, or are relative minors of a key that is one step away. All of the chords (= keys) diatonic to a major key are quite closely related.

Chart of closely-related keys



### **Tonal plan**

Different sections of music are often in different keys, and the different keys all are related in some way back to the original tonic. A tonal plan shows the changing keys within a piece.

### **Tonal counterpoint**

Tonal counterpoint is eighteenth-century or Baroque style counterpoint. It is driven by harmony, and therefore combines understanding of harmonic relationship on a larger scale, and some rules of species counterpoint. Tonal counterpoint is a technique of composing specific genres of polyphonic music: invention, round, fugue. It is also technique of polyphonic development used by later composers for creating parts of classical forms.

## **Form, genre, and style in music**

The previous sections of the book explained ways of presenting and developing musical ideas and images; this section explains how music is structured and classified. Music is the most ephemeral of arts; it only exists at the time of performing. Why does it have to be structured, and what does structure in music mean?

### **Structure in music**

Music, like literature, or film, is a form of art that develops in time. Music listeners and performers have to be able to comprehend music while it sounds. Structuring musical ideas in time is the function of music form. Form in music is a way of organizing multiple musical components to make it easier for our brain to recognize, retain, and process musical ideas.

### **Graphic expression of music form**

Musical form is not a visible structure, but it could be expressed through graphics. Let's try to present "Twinkle, twinkle, little star" using graphical symbols.

There are three phrases in a song, the first and the last have the same words, and appear with the same music. In a graphic scheme it can be presented with the same symbol, in this case, with the letter A.

The middle part, "Up above the world so high, like a diamond in the sky", has a different melody, and is presented with a different letter B.

The graphic scheme for this song is ABA. The song has three sections, and is written in ternary (three-part) form.

### **Some characteristics of musical form**

Most musical forms are sectional, with the exception of forms that cannot be divided.

Sectional forms are often named by the number of sections they present: binary, ternary, rounded binary.



Variations – a sectional form in which the main theme is embellished and changed.

A A1 A2 A3, etc.

Rondo is composed of alternation of refrain and different episodes ABACADA.

One of the most complex forms of classical music is the form of sonata allegro.

It is a sectional form ABA', where B is a development of the musical ideas from part A.

There are usually two contrasting musical themes in part A, as well as a theme connecting them, and a theme concluding the exposition (that's how part A is called, as an analogy to a novel, which sonata allegro is often compared with). The themes in sonata allegro are called primary and secondary, and in the exposition the contrast between them is amplified by presenting them in different keys. In the recapitulation section both themes appear in the tonic key.

Sonata allegro is a musical form; it is also a name of a first movement of a multi-movement sonata form – one of the most important forms of classical music.

### **Multi-movement, or cyclical forms**

Multi-movement forms combine several movements that serve as sections of a larger musical creation. Sometimes there is one underlying idea expressed through a theme or a key, which makes the multiple movements create a cycle. Sonata, quartet, concerto, and symphony are examples of multi-movement form.

Sonata, quartet, symphony are also genres of classical music.

### **Genres in music**

Genre is a kind of music. Genre could define the whole area of music – vocal or instrumental; an intended audience – folk, classical; music of specific time – Renaissance, Baroque, modern; social function – religious, court music.

March is a genre of music. Marches have similar musical characteristics: instrumental music, 4/4 meter, dotted rhythm. There are different kinds of march: funeral, wedding, military, etc.

Genres of classical music are types of music established during classical era (1750-1850) in Europe : sonata, quartet, symphony, concerto.

Genres of Romantic music are symphonic poem, song cycle, prelude, nocturne, impromptu, etude, etc.

Terms genre and style are sometimes used interchangeably.

### **Style in music**

Style is a sum of musical means particular to a composer (Beethoven's style), or a specific time period (Baroque style), or to a specific ethnic or regional music (Hungarian folk music, flamenco, salsa). Sometimes, as it has been mentioned before, a style is linked to texture (homophono-harmonic style, polyphonic style).

Knowledge of musical form, genre, and style help musicians and listeners to understand and appreciate music in a cultural context, and provide guidance for interpretation.

## Appendix 1

# Species Counterpoint

Counterpoint - “point against point” The interaction of multiple melodic lines is at the heart of the study of counterpoint. It is not concerned with chords, but it is concerned with the interplay of consonance and dissonance created when two melodies are played at the same time. The study of species counterpoint has a long history. It was developed out of the compositional style of sixteenth-century composers like Palestrina. Species counterpoint has been a traditional part of the study of music theory for the last 300 years. Composers such as Bach, Mozart, and Beethoven studied counterpoint to learn how music is constructed. Many of the techniques demonstrated in species counterpoint can be seen in tonal music from the Baroque period all the way to today.

The exercises in species counterpoint are designed to help understand how melody and harmony interact to create shape and form in music. Species counterpoint gives the basic framework for understanding the structure of all tonal music.

There are two principle components in the study of counterpoint. The first component is a set of rules that govern what is considered a good melody.

### Intervallic content

Use primarily stepwise motion.

Leaps can only be consonant intervals.

Leaps cannot be larger than an octave.

After a leap of a P4 or larger, the melody should move by step in the opposite direction.

### Melodic structure

A melodic phrase has a beginning, middle, and an end.

1. The beginning introduces the key and always starts on the first, third, or fifth scale degree.
2. The middle of the melody should have an interesting shape and work its way up to a high point. Melodies have only one high point.
3. The end of a melody is the cadence. The cadence signals the end of the phrase.

The second component in the study of counterpoint is the interaction between two (or more) melodies. Every melody will be written against a *cantus firmus*. Composers in the sixteenth century based their compositions on chants (melodies) from the Medieval period. A borrowed chant is called a *cantus firmus*. They wrote new melodies that complemented these older melodies to create their new compositions. The rules that govern the interaction of melodies (counterpoint) are broken into species. Each species becomes progressively more complicated.

## Species 1

Rhythm: 1 against 1. Whole note against whole note.

Intervals: Beginning (first interval) – only a third, fifth, or octave.

End – Cadence formula (see page 24)

Only consonant intervals. No dissonant intervals allowed. Parallel fifths and octaves are also forbidden. A parallel fifth or octave is the use of two consecutive perfect fifths or octaves. Composers believed this sound destroyed the sense of two individual melodies.

## Species 2

Rhythm: 2 against 1. Half notes against whole note.

Intervals: Beginning – same as first species.

Middle – the first note of measure (strong beat) must be consonant. The second note can be consonant or dissonant. If it is dissonant, it must be a passing tone. A passing tone is a dissonant interval that resolves by step in the same direction. The melodic motion must be by step.

End – same as first species.

Parallel fifths and octaves are still forbidden. In second species, parallel fifths and octaves are not allowed between two consecutive notes. They are also not allowed between consecutive strong beats (beginning of a measure).

## Species 3

Rhythm: 4 against 1. Quarter notes against whole note.

Intervals: Beginning – same as first species.

Middle – The first note in the measure must be consonant. The other three notes can be consonant or dissonant. If they are dissonant, they must be a passing tone or a neighbor tone. The rules for passing tones are the same as second species. A neighbor tone is a dissonant interval that moves by step away from a consonant interval and then returns to the previous note. The intervals on both sides of a neighbor tone must be consonant.

End – same as first species.

## Species 4

Rhythm: Syncopated half-notes. 2 against 1. The second half-note in the measure is tied to the first half note of the next measure. A half-rest may begin the counterpoint line.

Intervals: Beginning – same as first species.

Middle – Fourth species deals with suspensions. It is a three part procedure. The preparation note (the note on the second half note, the one that is tied) must be consonant. The tied note may be dissonant or consonant. If consonant, you can skip to the next tone (it must be a consonant leap.) When dissonant, a suspension is created, and it must resolve **down by step** to become consonant. The three acceptable intervallic patterns for suspension resolution are 7-6, 4-3, and 9-8. This suspension pattern should be the primary melodic pattern. Occasionally, the suspension pattern can break by including consonant notes for the entire measure. The tied rhythm should remain consistent, but may be broken once per exercise. Breaking the series of ties will produce a second-species measure, so follow those rules in those measures. In counterpoint written below the *cantus firmus*, the only allowable interval pattern is 2-3. (see example)

End – same as first species.

In fourth species, parallel fifths and octaves are not allowed on consecutive weak beats.

## Species 5

Rhythm: A combination of species 1-4.

Intervals: Beginning – same as first species.

Middle – Fifth species allows creative combinations of species 1-4. Interval rules for each species must be followed when writing in that species. Do not break any species rules when changing from one to another.

End – same as first species.

## Cadences

Each species counterpoint exercise must end in a cadence. Each of the following note patterns is a common melodic cadence based in C. Use one of these cadences to end every species counterpoint exercise. Transpose the pattern as necessary. (Note: leading-tone should be raised in minor modes.)



## Appendix 2

### The Church Modes

Some of the earliest work in music theory had to do with figuring out the scales used in Gregorian chant. The result is known today as the church modes. Sharps and flats were unknown in such ancient times, which is nice for the ease of using them today. We can use the pitches of C major (the C-major pitch set) and simply begin and end on a particular note, and the pattern of whole- and half-steps changes. This way of remembering the modes also allows you to sing a mode that belongs to a set of pitches from any major scale.

In the table on the right, you'll notice that each mode starts on a different scale degree of C major. The same will be true of any set of notes coming from a particular major key. For example, scale degree 2 to 2 using the pitches of a major key will produce a dorian mode *on* that second scale degree.

Each mode is also described here in terms of how it differs from either a major scale starting on the same note, or a natural minor scale starting on the same note.

ionian (major)



dorian (natural minor, raised sixth)



phrygian (natural minor, lowered second)



lydian (major, raised fourth)



mixolydian (major, lowered seventh)



aeolian (natural minor)



locrian (natural minor, lowered second and fifth)



### Appendix 3

## Root Position Voice-Leading Guidelines

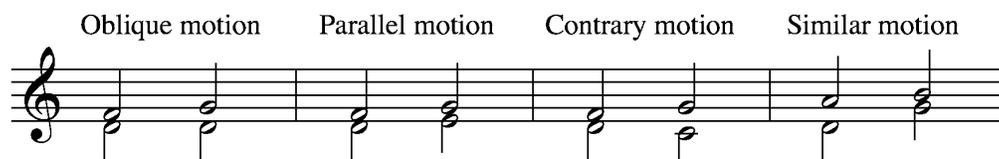
### Types of Motion

**Oblique motion** – One voice moves while the other stays the same.

**Parallel motion** – Both voices move in the same direction keeping the same interval.

**Contrary motion** – Voices move in the opposite direction.

**Similar motion** – Both voices move in the same direction arriving on a different interval.



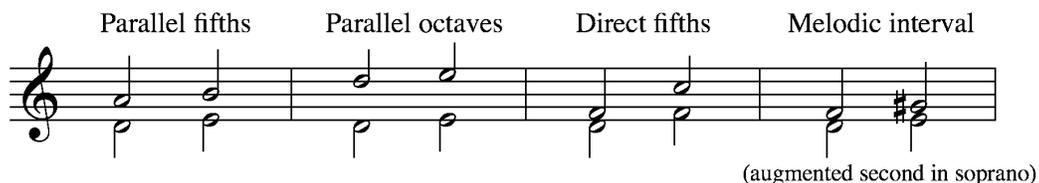
All motion types are important. You should not try to avoid a certain type of motion, in fact mixing the types is desirable. You only need to avoid moving by problematic intervals.

### Problematic intervals in voice-leading.

**Parallel fifths and octaves** – parallel motion by fifth or octave between any voice is prohibited. Parallel fifths or octaves destroy the sense of independence between the voices.

**Hidden fifths or octaves (direct fifths or octaves)** – Hidden fifths occur when the two outer voices move in the same direction (similar motion) and arrive on a perfect fifth or octave. A hidden fifth or octave is acceptable if the upper voice moves by step. In fact, it would be impossible to complete an exercise if you could not move to a fifth or octave by step.

**Melodic motion** – Voices should not move by augmented or diminished melodic intervals.



**Voice crossing** – Voice crossing occurs when one voice is above or below an adjacent voice. The acceptable place for this to occur is between the alto and tenor. Do not cross soprano or bass lines.

### Steps for writing ROOT POSITION VOICE-LEADING exercises.

(These steps apply to root position part writing exercises only. Examples using inversions or harmonizing a melody are based on these rules, but they need more flexibility in their execution.)

1. Write the bass notes for each chord.
2. Keep the common tones in the same voice between each chord.
  - If the roots of the chords are a third or sixth apart, there will be two common tones.
  - If the roots of the chords are a fourth or fifth apart, there will be one common tone.
  - If the roots of the chords are a second or seventh apart, there will no common tones.
3. Move the remaining voices to closest note in the next chord.
  - If there are no common tones (root motion by second or seventh), the upper voices (SAT) should move in contrary motion to the bass. This will avoid any problematic intervals.
  - You should almost always double the root (with some exceptions; some people prefer to simply double the tonal scale degrees, which are 1, 4, and 5), and each chord should be a complete. (No chord tones missing. There are also a few exceptions to this rule. If anything is to be omitted, it is the fifth, not the third.)

The diagram shows three examples of voice-leading exercises in a grand staff (treble and bass clefs). Each example consists of two chords connected by a bar line.

- Example 1: Root motion by third.** The bass line shows a root moving up a third. The upper voices (SAT) move in contrary motion to the bass. There are two common tones between the chords. Label below: "two common tones".
- Example 2: Root motion by fourth.** The bass line shows a root moving up a fourth. The upper voices (SAT) move in contrary motion to the bass. There is one common tone between the chords. Label below: "one common tone".
- Example 3: Root motion by step.** The bass line shows a root moving up a step. The upper voices (SAT) move in contrary motion to the bass. There are no common tones between the chords. Label below: "no common tones".

### Special Considerations:

V chord – The leading tone of the key (3<sup>rd</sup> of the V chord) should always resolve to tonic if it is in an outer voice (S or B). If the leading tone is in an inner voice, it may resolve to the fifth of the tonic triad to complete the chord.

### Exceptions:

V-vi (deceptive cadence) – This progression has root position by step. The upper voices should move contrary to the bass except the leading tone of the key (3<sup>rd</sup> of the V chord). This should resolve **UP** to the tonic. The result will be a vi chord with a **DOUBLED THIRD** (note that this is scale degree 1).

VI-V in minor keys – Normal voice-leading rules will create a melodic augmented second. You can avoid this by doubling the third in the VI chord.

ii-V – It is common to treat this progression as if it has no common tones. In this case the upper voices move in contrary motion to the bass. In a major key, you can use either normal rules or move the upper voices in contrary motion. If the progression occurs in root position in a minor key, you must move the upper voices in contrary motion to the bass. (This is a rare occurrence, since the diminished triad almost always uses first inversion.)

**Appendix 4**

Table of Non-Chord Tones

name (abbreviation)	approached by	left by	comments
passing tone (p)	step	step in same direction	may be on or off beat
neighbor (n)	step	step in opposite direction	
suspension (s)	same tone	down by step	harmony changes to create dissonance, note prepared by belonging to previous harmony
retardation (r)	same tone	up by step	harmony changes to create dissonance, note prepared by belonging to previous harmony
appoggiatura (app)	leap or step	step, typically down	on the beat
escape tone (e)	step	leap in opposite direction	
neighbor group (n. gr)	step	step	an upper and lower neighbor paired
anticipation (ant)	step (typically) or leap	same tone	anticipates coming harmony
pedal point (ped)	same tone	same tone	note sustains while harmony changes