



NOTES FOR OTTMAN 1: ELEMENTARY HARMONY



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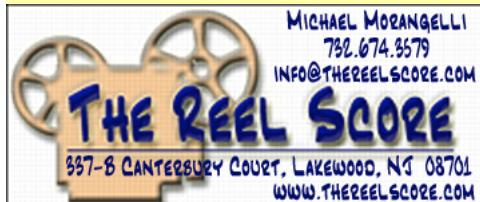
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Quick Reference Section

SCALES

MAJOR

A series of 8 tones with the following relationships

1		2		3	4		5		6		7	8
C		D		E	F		G		A		B	C
	W		W		H		W		W		W	H

*W=Whole Step i.e. C→D on the piano which has a black key between
i.e. E→F on the piano which have no black key between

MINOR: THREE FORMS

Built on the 6th scale step of a major scale and shares that key signature i.e. Eb major the corresponding C minor scale (relative minor) is built on C. Both have Bb Eb Ab in the key signature

NATURAL (OR PURE) MINOR – NO ALTERATIONS FROM THE KEY SIGNATURE

1		2	3		4		5	6		7		8
C		D	Eb		F		G	Ab		Bb		C
	W		H		W		W	H		W		W

HARMONIC MINOR – RAISED 7TH SCALE STEP (AN ACCIDENTAL)

1		2	3		4		5	6		#7	8
C		D	Eb		F		G	Ab		B	C
	W		H		W		W	H		W+H	H

MELODIC MINOR – RAISED 6TH & 7TH ASCENDING, SAME AS PURE MINOR SCALE DESCENDING

1		2	3		4		5	#6		#7	8
C		D	Eb		F		G	A		B	C
	W		H		W		W		W		H

SCALE DEGREE NAMES

Major Keys		Minor Keys	
Scale Degree	Name	Scale Degree	Name
1	Tonic	1	Tonic
2	Supertonic	2	Supertonic
3	Mediant	3	Mediant
4	Subdominant	4	Subdominant
5	Dominant	5	Dominant
6	Submediant	6	Submediant
7	Leading Tone	#6	Raised Submediant
		7	Subtonic
		#7	Leading Tone

INTERVALS

DEFINITION

- An interval is the distance between two pitches
- Measured by number of whole and half steps it contains
- Identified by an interval name

P8												C
M7												B
m7												Bb
M6												A
A5												G#
m6												Ab
P5												G
A4												F#
d5												Gb
P4												F
M3												E
m3												Eb
M2												D
m2												Db
	H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H
	C	C	C	C	C	C	C	C	C	C	C	C

Number Of Half Steps

Spelling is important – i.e. C→G#=A5; C→Ab=m6

m=minor; M=Major; P=Perfect; d=diminished

TWO ADDITIONAL INTERVALS

- Perfect Prime (PP) = no distance between intervals: C1 → C1
- Augmented Prime (AP) = half step between notes of same letter name: C1 → C#1

INVERSION OF INTERVALS

- Major intervals invert to minor intervals
- Minor intervals invert to major intervals
- Perfect intervals remain Perfect (hence their name)
- Diminished intervals invert to Augmented intervals
- Augmented intervals invert to Diminished intervals

	C	C	C	C	C	C	C	C	C	C	C	
	11H	10H	9H	8H	7H	6H	5H	4H	3H	2H	H	
m2											B	M7
M2										Bb	▲	m7
m3									A			M6
d4								G#				A5
M3								Ab				m6
P4							G					P5
A4						F#						A4
d5						Gb						d5
P5					F							P4
m6				E								M3
M6			Eb									m3
m7		D										M2
M7	Db											m2
	H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	
	C	C	C	C	C	C	C	C	C	C	C	

Key Signatures

Grouping of accidentals placed at start of composition

Identifies the Tonic note of the scale basis of the composition

These accidentals maintain the Whole & Half Step relationship of Scales constructed on different Tonic notes

1: INTRODUCTION: HARMONIC MATERIALS

DEFINITION: HARMONY IS THE STUDY OF CHORDS:

- Construction
- Relation to the Key Center
- Relation to other chords
- Use in melodic, rhythmic, and contexts of form

HARMONY, SCALES, AND KEYS IN WESTERN MUSIC

A MUSICAL COMPOSITION CONTAINS SEVERAL ELEMENTS BESIDES HARMONY:

- Melody – a succession of pitches forming the “tune”
- Rhythm – the duration of each of the pitches
- Form – the patterns of musical construction
- Intensity – loudness or softness of the sounds
- Timbre – the quality of the sound i.e. trumpet or piano

STUDY IS CONCERNED WITH THE COMMON PRACTICE PERIOD:

- From 1600 to 1900
- Encompasses the Baroque, Classical, and Romantic Periods
- A system of harmony that principally differentiates this music from earlier and later periods

PRE 1600

- Developed from earliest organum counterpoint of two line, note against note
- Progressed with more melodic lines and independence of rhythm
- Harmony in pre-17th Century music was determined by calculating the distance of any note in any voice part above the lowest sounding note
- These distances were to be consonant intervals – M3, m3, M6, m6, P5, P8
- Other intervals could only be used in certain well defined situations

MOVEMENT TOWARDS CHORD AS A SEPARATE ENTITY

- Emerged throughout the latter half of the 16th Century
- Received principal impetus near end of the century – first with Figured Bass (developed by an anonymous Italian organist) and with the use by Lodovico Viadana (1564-1627) who capitalized upon the idea
- The procedure became immediately popular and in effect to realize the Figured Bass, one was constructing chords above the bass line
- Culminated about 1750 with the works of Bach and Handel

A THEORY OF HARMONY

- Jean Phillipe Rameau (1683-1764) presented his theories of harmonic music in his “Treatise on Harmony Reduced to its Natural Principles”
- Two of his discoveries are of particular interest
 - : Theory of Inversion – stated that all chords using the same letter names no matter in what arrangement (CEG; EGC; etc) were the same chord
 - With Fundamental note of triad based on the acoustical phenomenon of dividing a string (the Fundamental note)
 - The Overtone series displays similar characteristics
 - : That chord progressions are based upon the roots of chords whether or not these roots are in the bass
- Music after Rameau and up to 1900 can be studied and analyzed by the principles he first outlined

SCALES AND KEYS

- Scale systems can be observed in music of most cultures and can be traced back to the earliest times in music history
 - : Scale formations were known and described by the ancient Greeks as early as 300 BC
- By 900 AD the use of four basic scales was firmly established – the Church Modes
 - : These were rarely used in pure form with “musica ficta” (False music) which added a sharp or flat to certain tones
 - Lowering the B to Bb in any mode containing the patten ABA
 - Raising the 7th scale step the precedes the eighth scale step at the end of a musical phrase
- In 1547 Heinrich Glareanus in “Dodecachordon” recognized that two additional modes and plagal forms existed
 - : The Ionian Mode on C (like present day C Major Scale)
 - : The Aeolian Mode on A (like present day A pure minor scale)
- Between this date and 1750, music became more and more characteristically Ionian or Aeolian and the other mode usage gradually disappeared
- Beginning in the early 17th Century composers began to write transposed major and minor scales necessitating accidentals and by 1750 the use of accidentals at the beginning of a piece became standardized

SUMMARY OF COMPOSITIONAL CHARACTERISTICS BY PERIOD		
Up to c. 800	Monody	Modal Scales
c. 800 – c. 1600	Counterpoint	Modal Scales, Musica Ficta
c. 1600 – c. 1900	Harmony	Major Minor Scales and Keys

THE MELODIC LINE

MELODY (AND HARMONY)

- Melody has been one of the principal characteristics of Western Music from the earliest known music
- In this period of Common Practice (1600-1900), melody is as important as harmony
- In this period, the melodic line implies both specific harmonies and successions of harmonies
- During this period, there is a close relationship between melody and the harmonic system of the period

RHYTHM

- Ever changing note values in a music composition
- Chords in succession are also based upon principles of rhythm

FORM

- A shape or structure of an object or concept being described
- The pattern used in the construction of a piece of music
- Phrase is the smallest unit of form
 - : A group of notes leading to a cadence (point of pause – a resting place, or ending – a full stop)
 - : Can theoretically be any length usually not more than 8 with 4 measures the norm
 - : May contain two or more distinct units called “Motive”
 - Motives combine to form a phrase
 - Separated by a pause within the phrase



- Period is a combination of 2 phrases
- 1st phrase is called the “Antecedent”
 - : usually ends in a half cadence (pause)
 - : A note of the V triad (Dominant Chord)
 - : If pause is on 3rd or 5th degree of the I Triad (Tonic) it is an imperfect cadence
- 2nd phrase is called the “Consequent”
 - : Usually ends on the Tonic note
 - : If not, and imperfect cadence

CHARACTERISTICS OF PHRASE & PERIOD

- Parallel Period
 - : Two phrases constituting the period are similar in some respect
 - : Usually the beginnings of each phrase are identical
 - : But ANY similar characteristic – i.e. contour – will justify analysis as “parallel”
- Contrasting Period
 - : Lack any specific or general similarity

Note:

If successive phrases end each with the tonic note, these phrases CANNOT be combined into a larger form – they remain simply two successive phrases, NOT a period

MELODIC COMPOSITION

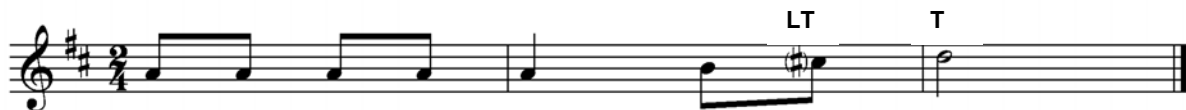
- With Limited Technical Materials
 - : The Scale
 - Always good
 - Avoid more than 5 or 6 notes in the same direction
 - : Intervals
 - Skips (3rd or larger) are usually limited to not more than two in the same direction and then proceed in the opposite direction
 - Large skips (5th or larger) are usually approached from a direction opposite to the skip and left in a direction opposite to the skip



- Techniques
 - : Repetition
 - Repeating melodic figure
 - Also effective in smaller units
 - : Sequence
 - Similar to repetition with repeats at different pitch level
 - Need not be exact

CAUTIONS

- Climax (highest note in Melody)
 - : Is usually not repeated in course of phrase or period
 - : Repetition will diminish its effectiveness
 - : Same rule applies to lowest note (anti-climax) though not as strictly
- Leading Tone
 - : Must be treated with care – it “leads” to tonic
 - : When approached by step from below, it must proceed to the tonic



Step from Below -> Tonic



When preceded by Tonic may progress down by step



Or return to the Tonic

2: THE CONNECTION OF CHORDS

PART WRITING DEFINITION

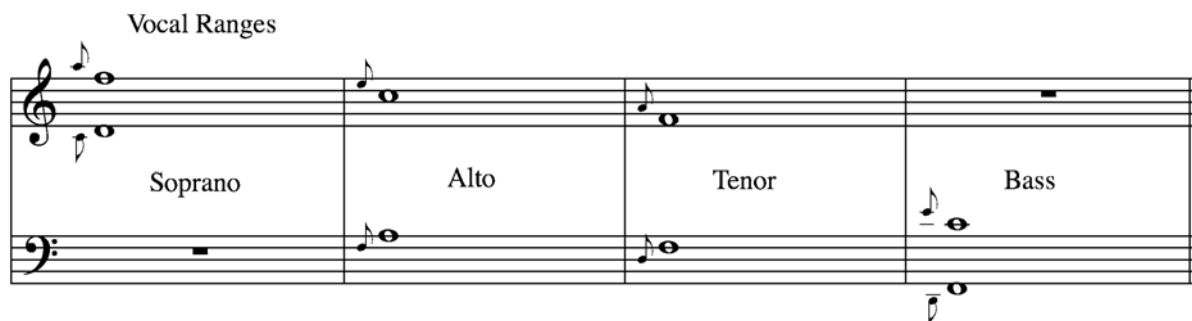
- Part writing is the procedure used to connect a series of chords in a musical composition
- In writing/analyzing music, it is important to give equal attention to BOTH vertical (harmonic) and horizontal (melodic) aspects
- Aim of part writing is to produce good INDIVIDUAL voice lines when a series of chords is written in succession
- Part writing rules are the result of investigations of part writing practices of successful composers of this period
 - : Organized and codified as a set of rules
 - : Exist for a pedagogical convenience in teaching
 - : No need to feel limited by procedures, but rather to be aware of them

Note:

In music 1650-1900, most of the basic principles/procedures of music composition are so similar, the period is referred to as the "Common Practice" period

WRITING THE SINGLE TRIAD

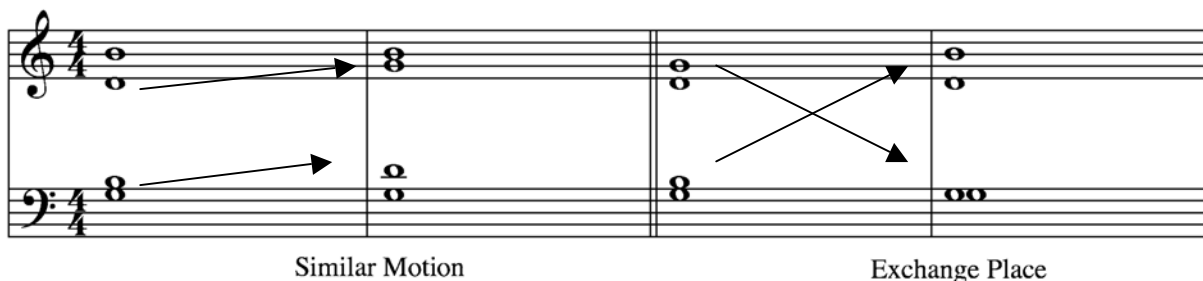
- Range is the normal singing range for that voice (soprano, alto, & bass)
- Doubling is usually the root of the triad
- Position is Open or Closed
 - : In open position, the distance between soprano & tenor is octave or more
 - : In close position, the distance between soprano & tenor is less than an octave
- Distance between voices
 - : Distance between any two adjacent voices does not exceed an octave
 - : Between bass and tenor, it may exceed an octave
- Voices should not be crossed i.e bass voice higher than tenor voice



THE CONNECTION OF REPEATED TRIADS

PART WRITING RULE 1

- When Two Triads with same spelling & with same root in bass & used in succession with differing soprano notes
 - : May be written in the same position by moving the upper three voices in similar motion
 - : Two voices – the bass & one other remain stationary while the other two voices exchange places



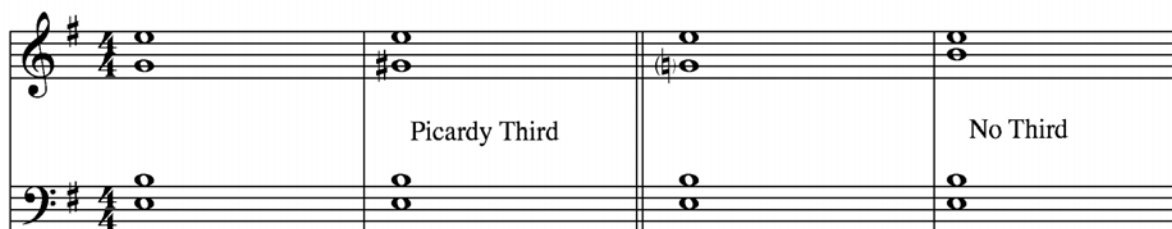
WHICH TO USE

- Determined by
 - : Keeping Voices in good register
 - : Avoidance of Large Leaps in inner voices of 5th or larger
 - : Correct Voice distribution
 - Doubled Root
 - Third
 - Fifth

THE MINOR TRIAD & MELODIC LINE IN MINOR

MINOR TRIAD

- The minor Tonic (i) and the Major tonic (I) have the same function in their respective modes → the minor final and Major final
- There are two possible alternatives in minor
 - : Especially in the 16th, 17th, 18th Century
 - : During the 16th → 18th Century the minor triad was considered too dissonant for a final
 - Picardy 3rd which is #3rd of the minor tonic
 - Omit the 3rd in final



MELODIC LINE IN MINOR

- Melodic form of minor scale is generally used in melodic writing
- Rules
 - : Of line ascends 5th to Tonic, the 6th & 7th steps of scale are raised
 - : If line descends Tonic to Dominant, 6th & 7th are lowered



- When either the 6th or 7th is used without the other
 - : The 7th step is raised and moves up
 - : The 6th step is lowered and moves down



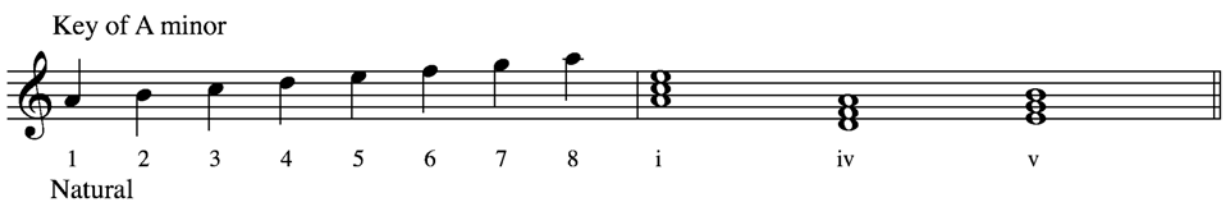
- If last note of grouping 6th – 7th is the 7th step
 - : ALL notes of the group are raised
 - : 7th proceeds upward
- If last note of grouping 6th – 7th is the 6th step
 - : ALL notes of the group are lowered
 - : 6th proceeds down



AUTHENTIC AND PLAGAL CADENCES

CHORDS FOR CADENCE

- Three principal triads of a key (Major/minor)
 - : Tonic (I/i)
 - : Subdominant (IV/iv)
 - : Dominant (V/v)
- In minor the three forms of the minor scale influence spelling and quality



HARMONIC CADENCE

- Definition
 - : Consists of two chords
 - : Marks the end of a phrase or larger musical structure
- Identification
 - : By chords selected for cadence
 - Tonic and Dominant = AUTHENTIC
 - Tonic and Subdominant = PLAGAL
 - By degree of finality
 - : Ending with Tonic = PERFECT or IMPERFECT
 - : Ending on other than the Tonic = HALF

Note:

Description of Cadence is Authentic or Plagal; in combination with – Perfect, Imperfect, or Half

AUTHENTIC CADENCES

- Perfect Authentic
 - : Progression is V I or V i
 - : V chord has root in Bass
 - : I (final) chord has root in Bass & Soprano
 - : Soprano line usually has
 - Leading tone proceeding to Tonic note on I (7→8 scale step)
 - Supertonic to Tonic (2→1 scale step)

Key of C Major

7 8 2 1

V I V I

All with Root in Bass

- Imperfect Authentic
 - : Progression is V I or V i
 - : Final Tonic has 3rd or 5th in the Soprano or Bass
 - : Or V Triad has 3rd or 5th in the bass
 - : Common Soprano lines
 - 2 → 3
 - 5 → 5
 - 5 → 3

Common Soprano Lines

2 3 5 3 5 5

V I V I V I

- Authentic Half (Semi)
 - : The progression I V or i V

PLAGAL CADENCE

- Perfect Plagal
 - : Progression IV I or iv i
 - : Subdominant has root in Bass
 - : Tonic Chord has Root in Bass and Soprano

Perfect Plagal

Root Root Root Root Root Root

Root IV Root I Root IV Root I Root IV Root I

- Imperfect Plagal
 - : Progression IV I or iv i
 - : Tonic final has 3rd or 5th in Soprano and/or Bass
 - : Or Bass note of Subdominant is 3rd or 5th
 - : Common Soprano lines
 - 6→5
 - 4→3
 - 1 up to 3

Common Soprano Lines

- Plagal Half
 - : Progression IV I or iv i
 - : Little used

FIGURED BASS (BRIEFLY)

- A compact shorthand device for indicating a given harmonic progression
 - : Arabic numeral indicates interval above BASS NOTE
 - : Two or more numbers will (with Bass note) spell entire chord
 - : Combination will indicate whether Bass note is Root/3rd/5th
 - : Observe normal doubling for inversion and chord quality
- In Practice
 - : When Bass note is root, the figured bass for triad is not given
 - : If accidentals above Bass note are required the figured Bass is given for those notes
 - : An accidental without a number i.e. # or b only – it is always the 3rd above Bass
 - : Slash (/) through a number is the same as a #
 - : Does not indicate Open or Closed position
 - : Does not indicate soprano note
 - : With Key signature
 - Follows the key signature
 - Must indicate any alteration to a note against the key signature
 - : Any type of chord can be indicated by figured bass

KEY of C					
Root			1 st Inversion		2 nd Inversion
G	5	with No figured bass in root position	C	6	E 6
E	3		G	(3)	C 4
C			E		G

Figured Bass Examples

Root Position (♭3) (♭5♭3) (#5) (♭3) (#5♭3)

NB: must accommodate Key Signature and indicate any alteration in the Figured Bass & to cancel an accidental

PART WRITING RULE 2A

- Triads with Roots in Bass a 5th apart
 - : Retain the common tone in the same voice
 - : Move the other voices step-wise

Part Writing Rule 2A

5 3 V 5 3 I 5 3 V 5 3 i

PART WRITING RULE 2B

- Alternate method when 2A is not possible
 - : Move the 3 upper voices in similar motion to nearest tones of the next triad

Part Writing Rule 2B

Upper 3 voices in similar motion

WRITING THE IV → V PROGRESSION

PART WRITING RULE 3

- Triads with Roots in the Bass a 2nd apart
 - : Move upper three voices to nearest triad tones
 - : In Contrary motion to the Bass
- Violation of Rule 3 most frequent appearance of
 - : Parallel 5th
 - : Parallel Octave
 - : Melodic Augmented 2nd
- Stationary Octave or 5th
 - : Repeated on same pitch
 - : Are not considered parallel

Must be
Avoided

Part Writing Rule 3



IV V I

NOTE:

Melody Writing Using the V & V⁷ Chords

V Chord:

Skips in the dominant triad are used freely in melodic writing

Leading tone may skip up to another note of the V triad

Interval 3→1 is often filled with a passing tone

The V⁷ Chord

7th of the chord almost always proceeds downwards either by scale step or to another member of the V⁷ Chord

If not, and the melody ascends, the melodic line usually descends immediately after to effect a normal resolution of the 7th step

Parallel 5th

Parallel Octave

Parallel Octave by Contrary Motion

IV V IV V IV V

Augmented 2nd

Parallel 5th

Parallel 5th by Contrary Motion

vi V V I V I

SUMMARY

- Parallel 5th and Octave, and the melodic Augmented 2nd are not bad/wrong in themselves
 - : Parallel 5th's appear in 9th & 10th Century Organum
 - : Augmented 2nd in 20th Century
- But Between these dates (1000 yrs), composers considered these sounds undesirable and avoided them
 - : This is a study of 17th → 19th Century Harmonic process
 - : So avoid
- Part Rules – General Principles
 - : Keep voices in Good Register for Part
 - : Soprano, Alto, Tenor, and Bass Vocal Range
 - : Avoidance of large leaps
 - 5th or larger in inner voices
 - : Correct voice distribution
 - 2 Roots
 - 1 Third
 - 1 Fifth

Part Writing Rule 1

When two triads, each w/same spelling and each with root in the bass are used in succession with different soprano notes
Each may be written in the same position by moving the upper 3 voices in similar motion
Each may be in a different position two voices → the bass and one other remain stationary, the other two voices exchange positions

Part Writing Rule 2A

Triads with Root in Bass a 5th apart
Retain the common tone in the same voice and move other voices stepwise
At an Authentic Cadence
The root of the tonic triad may be tripled → omitting the 5th of the triad
At cadence, the aural effect of the leading tone proceeding to the tonic and the resulting incomplete triad is often preferable to the more conventional procedure of rule 2B

Part Writing Rule 2B

When 2A is not possible
Move the other 3 upper voices in similar motion to the nearest tone of next triad
Move the 3rd of the 1st triad up or down the interval of a 4th to the 3rd of the next triad hold the common tone & move other voice by step
Effect is a change of position from open to close or close to open

Part Writing Rule 3

Triads with Roots in the Bass a 2nd apart
Move the upper 3 voices to nearest triad tones in contrary motion to the Bass

3: THE TRIAD IN INVERSION

- A triad is in inversion when any other note other than the root is in the Bass
 - : Root in Bass = Root position
 - : 3rd in Bass = 1st inversion
 - : 5th in Bass = 2nd inversion
- Inversion
 - : Gives variety to the Vertical Sound
 - : Allows Bass line to be more melodic

Note:

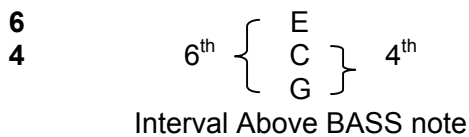
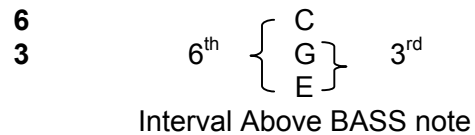
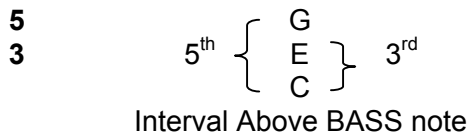
Most important concept in the composition of music:

The two part structure existing between the Bass Line and the Melodic Line

The effect is a good sounding two part structure between the Soprano and Bass

Figured Bass Symbols

Root Position	5 3	Usually not indicated unless the 5 th or 3 rd is altered
1 st Inversion	6 3	Usually the "3" is omitted with only # or b used in place if required
2 nd Inversion	6 4	Both numbers appear



Key Signature must be accommodated – when Key is known, the Roman numeral in conjunction with the Figured Bass will correctly spell the chord

Key of C minor

Natural Minor

Harmonic Minor

#7th

Melodic Minor

#6th #7th

b7th b6th

Ascending: Raised 6th & 7th Descending: Lowered 6th & 7th

USE OF THE 2ND INVERSION

- Restricted to limited number of specific musical situations in this MUSICAL PERIOD
- Dual nature of the 6/4 sonority
- Presence of the 4th interval above the bass is considered a dissonant interval
 - : The 4th requires a downward resolution to nearest consonance (a major or minor 3rd above the same lowest sounding note)
 - : The need to resolve the 4th dissonance should always be kept in mind
- Cadential 6/4
 - : Found at point of cadence
 - : Followed by V or V7
 - : Usually on a strong beat

F Minor

F Major

6 4 i

V

8 i

6 6 ii I

4 4 V I

Cadential 6/4

DOUBLING

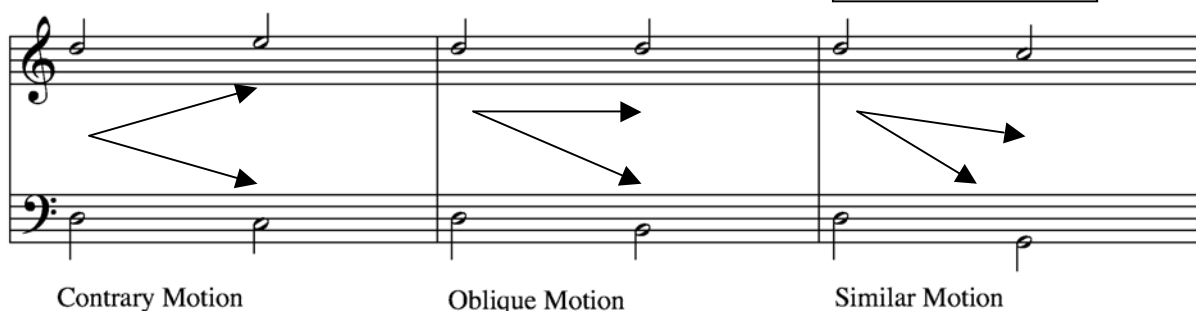
5	Root in Bass	Double Root
3		
6	3 rd in Bass	Double soprano and retain one each of the remaining triad members
3		
6	5 th in Bass	The 5 th (Bass note) is usually doubled
4		

WRITING TO OR FROM A TRIAD IN INVERSION

- Primary Consideration for a Triad in 1st inversion connecting with any triad with root in Bass
 - : Approach to the doubled note
 - : Correct resolution of the doubled note
- May be from root triad or to root triad
- Doubled notes move in three different ways
 - : Contrary motion
 - : Oblique motion
 - : Similar motion
- Best to use Contrary (1st) and Oblique (2nd)

Note:

Similar is ordinarily used in bringing one voice into better range or effect a change of position



PART WRITING RULE 6A

- When writing to or from a triad in any inversion
 - : Write the two voices moving to or from the doubled note first
 - : Use contrary motion or oblique motion between the two voices if possible
 - : When using similar motion, care should be taken to avoid parallel 5^{ths} and Octaves

WRITING SUCCESSIVE TRIADS IN 1ST INVERSION

- When triads in 1st inversion are used in succession
 - : Impossible to use normal doubling
 - Normal = double soprano note and retain one each of the remaining triad members
 - : To avoid the resulting parallel 5^{ths} and Octaves with normal doubling
 - Each triad in inversion may have a different doubling if necessary
 - Avoid doubling the leading tone of the key OR any altered note
 - : With only two 1st inversion triads in succession, often possible to double the soprano note BUT in different pairs of voices

PART WRITING RULE 6B

- When a triads in inversion are found in succession
 - : Each succeeding triad must have a different doubling
 - : OR normal soprano doubling may appear in different voices
 - : Avoid doubling the leading tone or any altered tone

TRIAD IN 2ND INVERSION

- When a triad is found in second inversion
 - : The 5th of the triad (Bass note) is usually doubled
 - : Cadential 6/4
 - The bass note of the I6/4 is usually approached by step-wise motion
 - Following the I6/4 the interval of the 6th above the bass note moves to the 5th above the bass
 - The 4th above the bass moves to the 3rd above the bass

6th -> 5th
4th -> 3rd
Step wise
IV I V I

OTHER PART WRITING CONSIDERATIONS

- The Melodic Augmented 4th is usually avoided in melodic writing and should not appear in any voice line in 4 part writing
- Overlapping voices when two adjacent voices ascend simultaneously
 - : Lower voice should not ascend to a pitch above the higher of the two original tones
 - : Also applies to upper voice when two tones are descending
 - : Overlapping may often be eliminated simply by changing the direction of one part

PART WRITING RULE 7

- Triad position may be changed
 - : At repeated triads
 - : Using Rule 2C
 - : At a triad in inversion
 - : At a triad with unusual doubling

Note:

Many part writing difficulties can be solved by going back to a point where Rule 7 may be applied and rewriting the subsequent material

SUMMARY

- Part writing considerations
 - : Keep voices in good register for part
 - : Avoidance of large leaps (5th or larger in inner voices)
 - : Correct voice distribution (2roots, 3rd, 5th in root position)
 - : Avoid the melodic augmented 4th
 - : Overlapping voices
- Part writing rules
 - : Rule 1: When two triads, each with same spelling and each with root in the bass are used in succession with differing soprano notes
 - Each may be written in the same position
 - By moving the three upper voices in similar motion
 - Each may be written in a different position
 - Two voices the bass and one other remain stationary
 - Other two voices exchange tones
 - : Rule 2A: Triads with roots in the bass a 5th apart
 - Retain the common tone in the same voice
 - Move other voices step wise
 - : Rule 2B: Triads with roots in the bass a 5th apart
 - Move the three upper voices in similar motion to the nearest tones of the next triad
 - : Rule 2C: Triads with roots in the bass a 5th apart
 - Move the 3rd of the first triad up or down to the interval of a 4th to the 3rd of the second triad
 - Hold the common tone
 - Move other voices by step
 - : Rule 2D: In an authentic cadence (leading tone proceeding to the tonic often preferable)
 - Root of tonic triad may be tripled
 - Omit the 5th of the tonic triad
 - : Rule 3: Two triads roots in bass are a second apart
 - Move upper voices to the nearest triad tones in contrary motion
 - : Rule 6A: When writing to or from a triad in any inversion
 - Write the two voices moving to or from the doubled note first
 - Use contrary/oblique motion if possible
 - Use care for Parallel Octaves & Parallel 5^{ths} if similar motion
 - : Rule 6B: When first inversion triads are found in succession each triad must
 - Have a different doubling
 - Or normal soprano doubling may appear in different voices
 - Avoid doubling the leading tone (of Key) or any altered note
 - : Rule 7: Triad position may be changed
 - At repeated triad
 - Using Rule 2C
 - Triad with unusual doubling

Note:

Effect of 2C is a change of position
Open->Close
Close->Open

Note:

Violation of Rule 3 is most often the cause of Parallel Octave & 5th and melodic augmented 2nd

- Doubling
 - : Root of triad is usually doubled in Root position
 - : Leading tone skipping down a 3rd to dominant tone is satisfactory in an inner voice (produced by Rule 2B) at a cadence and is preferable to have leading tone proceed to a tonic with resulting incomplete triad
 - : Triad in 1st inversion double the soprano note
 - : Triad in 2nd inversion the bass (5th) is usually doubled

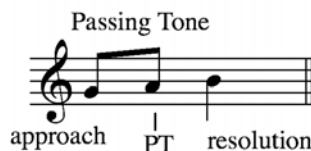
4: NON – HARMONIC TONES

- The addition of the dissonant effect of non-harmonic tones furnish the necessary contrast to the purity of harmony
- Usually found melodically between two harmonic tones
- Identified and classified by the relationship of the dissonance (non-harmonic tone) to the harmonic tones that precede and follow

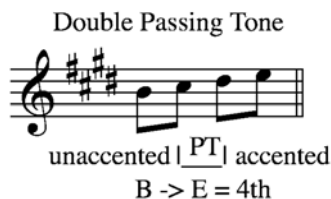
PASSING TONE (PT)

UPT: Unaccented / APT: Accented

- Found step wise between harmonic tones of different pitch



- Occasionally PT's fills in the interval of a 4th between 2 harmonic tones – necessitating two adjacent Passing Tones



- Any non-harmonic tone occurring in a weak rhythmic position (up-beat) in relation to note before and after is unaccented → in a strong position is accented

NEIGHBORING TONE (NT)

UN: Upper / LN: Lower

- Found between two harmonic tones of the same pitch
- Above the harmonic tone called upper neighbor
- Below the harmonic tone called lower neighbor
- Usually unaccented but can be accented

The diagram illustrates the Neighboring Tone (NT) concept. On the left, a single staff shows a harmonic tone (a half note) with an upper neighbor (a quarter note) above it, labeled 'NT' and 'Upper Neighbor'. On the right, a two-staff example shows a harmonic tone (a half note) with an upper neighbor (a quarter note) above it, labeled 'NT'. The first measure is labeled 'unaccented' and the second measure is labeled 'accented'.

SUSPENSION (S)

- Approached by a note of the same pitch
- Resolves down by step/half step
- Note of the approach may be tied into dissonance

The diagram illustrates the Suspension (S) concept. On the left, a single staff shows a harmonic tone (a half note) with a suspension (a half note) above it, labeled 'Suspension' and 'Resolution'. The first measure is labeled 'Approach' and the second measure is labeled 'Suspension'. On the right, a two-staff example shows a harmonic tone (a half note) with a suspension (a half note) above it, labeled 'Note of Resolution'. The first measure is labeled '4' and the second measure is labeled '3', indicating a 4-to-3 suspension.

- Less often the dissonance will resolve upward
- Called a retardation ®

The diagram illustrates the Retardation concept. On the left, a single staff shows a harmonic tone (a half note) with a retardation (a half note) above it, labeled 'Retardation' and 'Resolution'. On the right, a two-staff example shows a harmonic tone (a half note) with a retardation (a half note) above it, labeled 'Note of Resolution'.

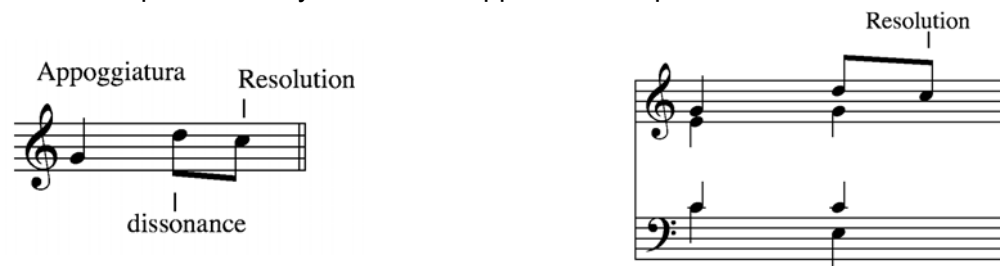
ANTICIPATION (A)

- Sounds the same pitch as the harmonic tone following
- Found on a weak rhythmic position



APPOGGIATURA (APP)

- Dissonance is approached by leap (3rd or larger)
- Resolves stepwise usually in direction opposite to leap



ECHAPPÉE (ESCAPE TONE: ET)

- Dissonance approached by step
- Resolves by leap usually in opposite direction to that of the approach note



CHANGING TONE (CT)

- 4 Notes
- Note of approach and note of resolution are the same pitch
- The note of approach proceeds up or down by step → to a dissonance
- This resolves by step to the note of resolution



PEDAL POINT (P)

- A note sustained in one voice while in the other voices the harmonies are changing
- In Bass voice most often
 - : If in the highest voice → called inverted pedal
 - : If in an inner voice → called inner or internal pedal



SUMMARY: NON HARMONIC TONES

- Classified in one of two ways
 - : Named and defined according to the relationship of the dissonance to the harmonic tones that precede and follow it
 - : Defined according to rhythmic placement
- Here any non harmonic tone sounded on an accented beat or part of the beat is called an appoggiatura
- Includes the suspension of system 1 when there is no tie to the dissonance
- When tie is present, the dissonant note is called a suspension
- Unaccented non harmonic tones can carry similar names in both systems

- To identify non harmonic tones spell the chord first then relate the dissonant notes to preceding and following notes
 - : Can be chromatically altered (accidental not belonging to key)
 - : Two non harmonic tones can be followed in succession
 - : In Contrapuntal passages
 - Look for implied harmony to identify non harmonic tones
 - Consider rhythmic placement
 - Mostly a note appearing on the beat will imply a chord
 - Between beats will be another chord tone of the same chord or a non harmonic tone
 - Chord succession → musical and appropriate chord progression
 - Tempo → slower can use more chord changes, faster fewer changes
 - Harmonic rhythm → the rhythmic pattern established by frequency of chord changes
- Harmonic Rhythm considerations
 - : Chords may be changed on any beat of the measure
 - When a change of chord appears on strong beat of the measure it may extend to following beats
 - When change of chord appears on weak beat of the measure
 - It should not be repeated on a following stronger beat → rather a new chord
 - Also hold true for a bass note → if newly appearing on a weak beat, it should not be repeated on a strong beat even if there is a change in harmony
 - : Exceptions
 - The chord appearing on the opening weak beat of a piece of music or of a new phrase may be repeated on the following strong beat (often no harmony at all is supplied at such points)
 - A new phrase beginning on a strong beat may repeat the harmony of the previous weak beat

5: SECONDARY TRIADS – PRINCIPLES OF CHORD PROGRESSION

THE DIMINISHED TRIAD / THE LEADING TONE TRIAD

- Built on steps 2, 3, 6, & 7 of the scale
- Different forms of the minor scale create alternate forms

Major

1	2	3	4	5	6	7	8
I	ii	iii	IV	V	vi	vii	VII
CΔ	d-	e-	FΔ	GΔ	a-	b°	CΔ

Minor Scales share Key signature w/Relative Major (c min → Eb)

Minor: Natural

no alteration to scale – same as Eb Major starting on 6th step of scale

1	2	3	4	5	6	7	8
i	ii°	III	iv	v	VI	VII	i
c-	d°	EbΔ	f-	g-	AbΔ	BbΔ	c-

Minor: Harmonic

Starting on the 6th scale step of Eb Major with raised 7th step of scale

1	2	3	4	5	6	#7	8
i	ii ^o	III+	iv	V	VI	vii ^o	i
c-	d ^o	Eb+	f-	GΔ	AbΔ	b ^o	c-

Minor: Melodic Ascending

(same as Natural Minor descending)

Starting on the 6th scale step of Eb Major with raised 6th & 7th step of scale

1	2	3	4	5	#6	#7	8
i	ii	III+	IV	V	vi ^o	vii ^o	i
c-	d-	Eb+	FΔ	GΔ	a ^o	b ^o	c-

iv/IV Triad in a minor key: When the iv- triad in a minor key is found in an ascending melodic line, the 3rd of the chord is raised 1/2 step to produce a IVΔ Triad

Note:

For chords built on the 6th & 7th degrees of the minor scale steps, the triad number always indicates whether the lowered/raised tone is the Root

VI = Lowered 6th step – VII = Lowered 7th step

vi^o = raised 6th step – vii^o = raised 7th step

PRINCIPLES OF HARMONIC PROGRESSION

- Tonic is the goal in a Harmonic Progression
- With 3 principle triads (I, IV,V)
 - : IV or V can proceed directly to the Tonic (I chord)
 - : IV can proceed to the V (reverse V → IV is rare)
 - : I (Tonic) may proceed to either
- With the introduction of secondary triads (ii, iii, vi, vii^o) theoretically possible for any one triad to progress to anyone of six other triads
- In Common Practice technique utilizes some progressions relatively frequently
- Progressions of Chords is always described in terms of root movement regardless of the actual bass note (inversion)

COMMONLY USED CHORD PROGRESSIONS

- Possible 'common' root movements
 - : Up/Down by 5th
 - : Up/Down by 2nd
 - : Up/Down by 3rd

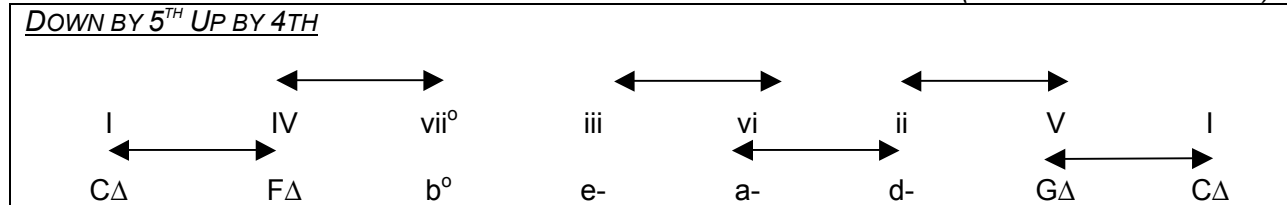
Note:

4th, 6th, 7th, movement is just inversion of 5th, 2nd, 3rd movement

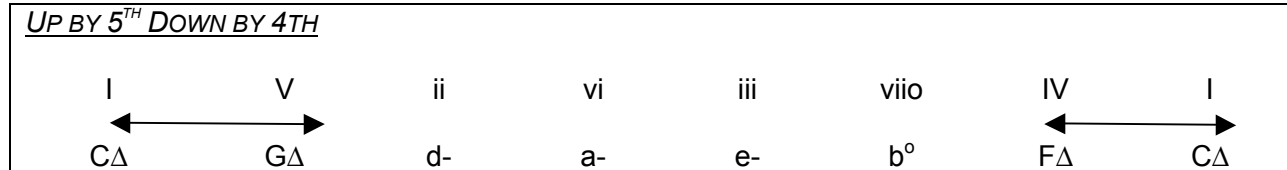
COMMON CHORD PROGRESSIONS BY ROOT MOVEMENT

(Arrows = Common use)

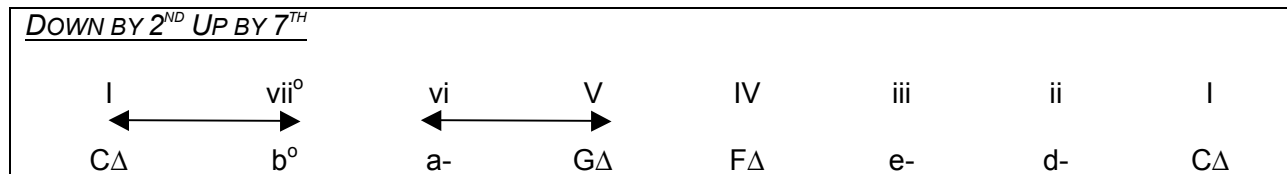
DOWN BY 5TH UP BY 4TH



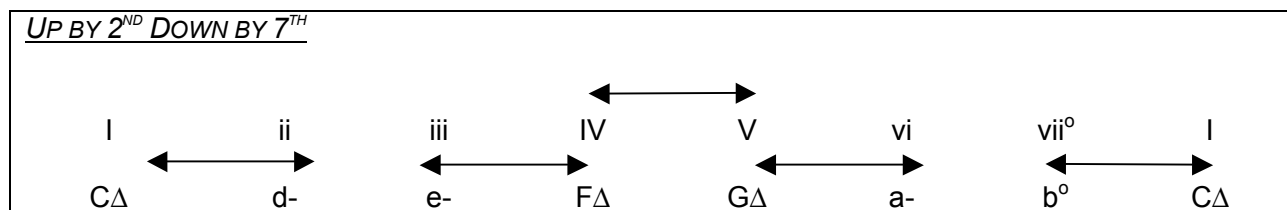
UP BY 5TH DOWN BY 4TH



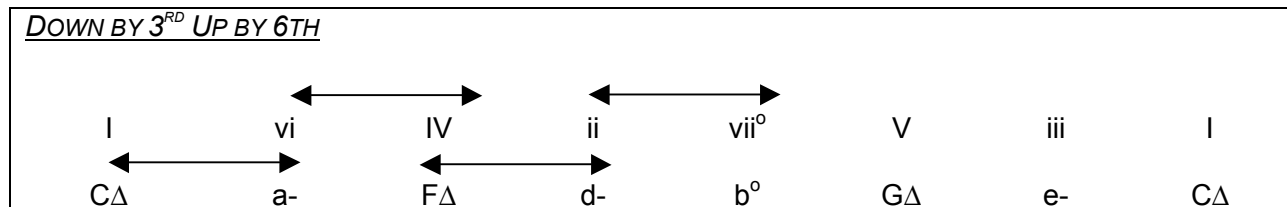
DOWN BY 2ND UP BY 7TH



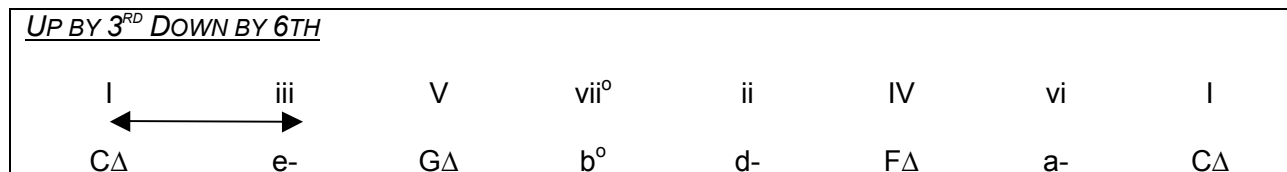
UP BY 2ND DOWN BY 7TH



DOWN BY 3RD UP BY 6TH



UP BY 3RD DOWN BY 6TH



vii° may be substituted for V in any progression except vi – V & V – vi (Leading Tone Triad) and used when series continues to Tonic by downward 5th

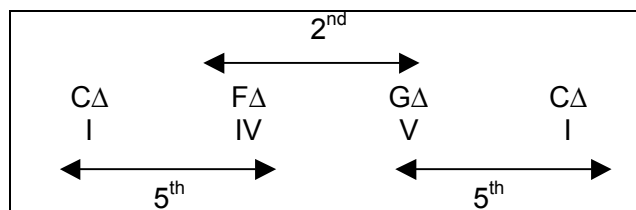
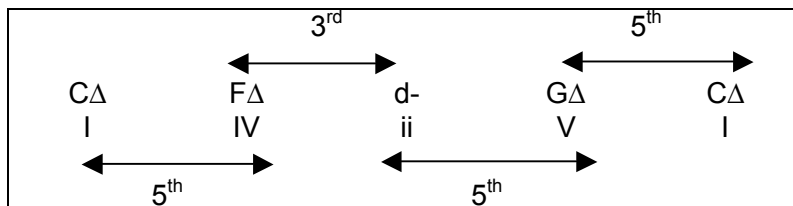
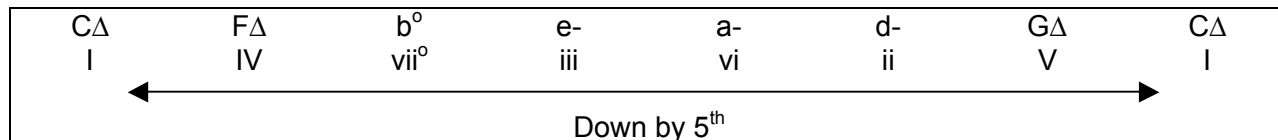
CHORD MOVEMENT SUMMARY

→					
I	–	May proceed to any other Chord			
ii	–	ii->V	ii->vii ^o		
iii	–	iii->IV	iii->vi		
IV	–	IV->ii	IV->V	IV->vii ^o	IV->I
V	–	V->I	V->vi		
vi	–	vi->ii	vi->iii->IV	vi->IV	vi->V
vii ^o	–	vii ^o ->I	VII->I (in minor)		

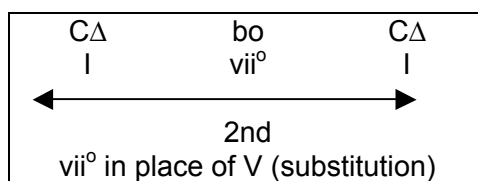
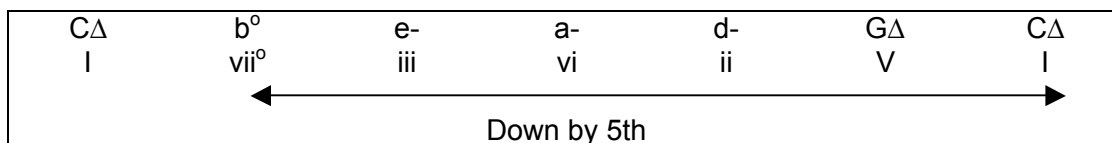
- Movement valid for 7th and altered chords (with exceptions) as well as triads
- Considerations for Progression Movement
 - : Tonic triad at cadence is the goal of any harmonic progression
 - Finality can be modified by a half or deceptive cadence
 - : Tonic triad is often the beginning point of a harmonic progression
 - Other chord may initiate movement at beginning of phrase or section
 - Most often the V chord
 - : Root movement downward by 5th most common
 - : Can delay or hasten this movement toward 'goal' by use of root movement of 2nd, 3rd, & upwards 5th
- Special Considerations in special situations
 - : First inversions in succession
 - When a bass line moves by step & each note is a 3rd of a chord, ANY succession of chords is acceptable
 - : Harmonic Sequence
 - A succession of chords with a regularly recurring pattern of root movements
 - : Chromatic Bass Line
 - Bass line ascends/descends by a series of 1/2 steps any resulting chord succession is usually satisfactory

ROOT MOVEMENT TO TONIC W/START ON TONIC & DOWN BY 5TH – W/INTERRUPTIONS

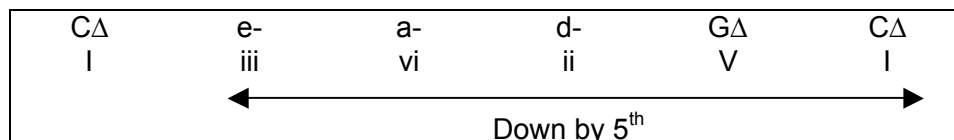
I → IV

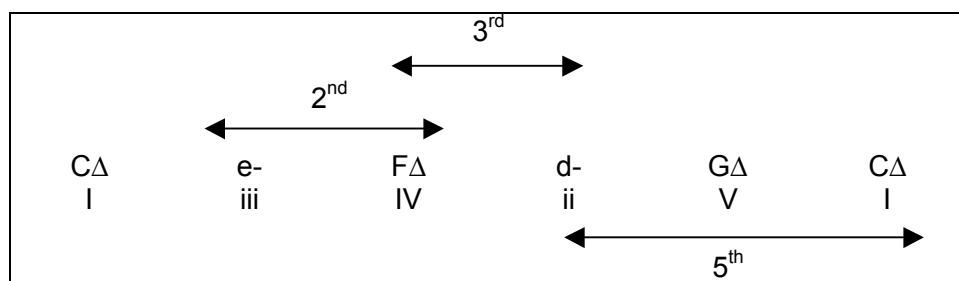
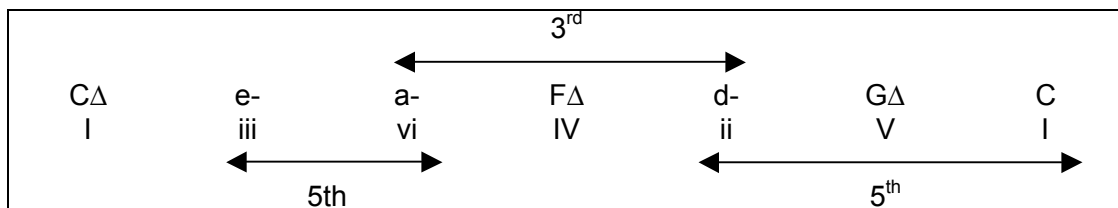
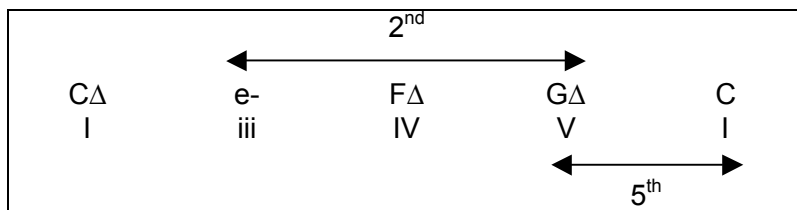


I → vii^o

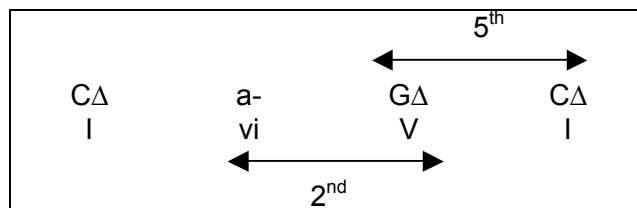
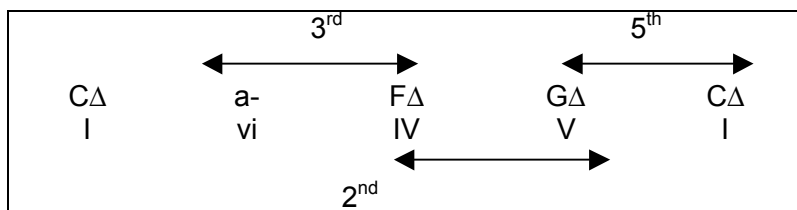
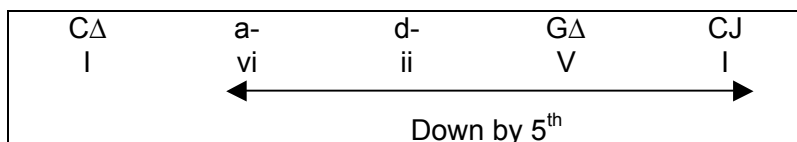


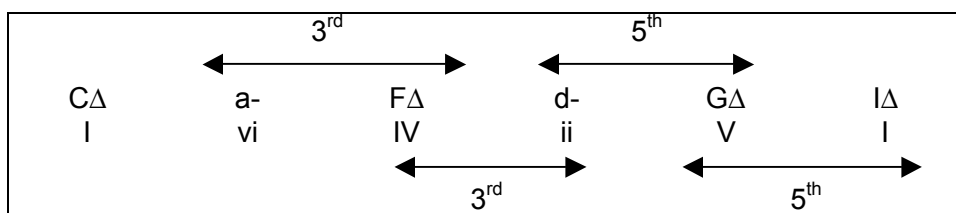
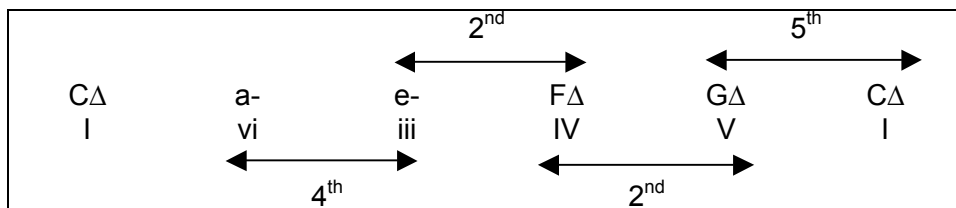
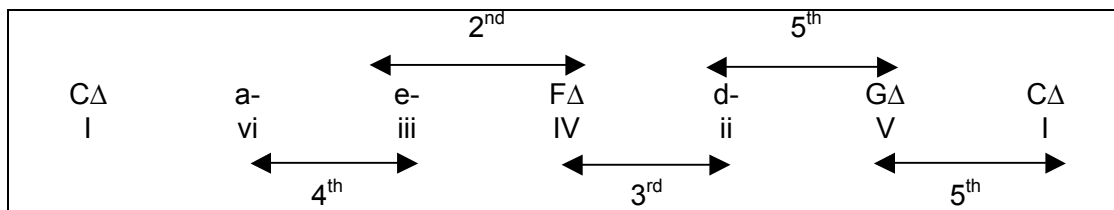
I → iii



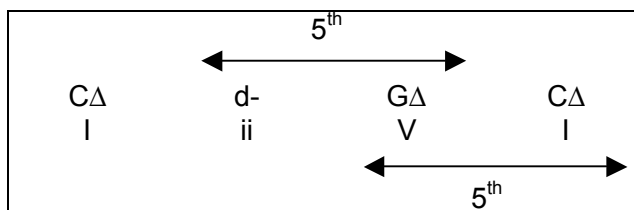


I → vi

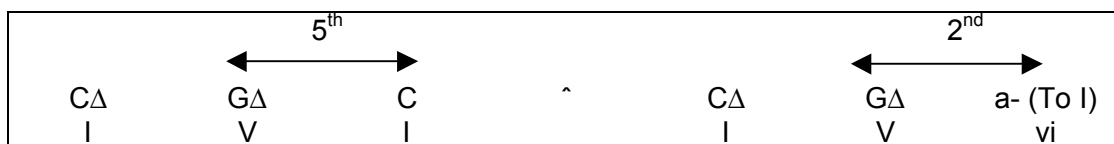




I → ii

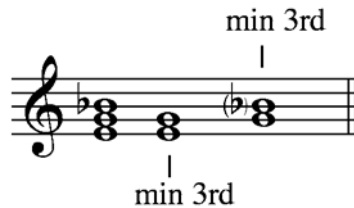


I → V



6: THE DIMINISHED TRIAD

- Composed of 2 minor thirds
- Because of dim 5th classified as a dissonant triad
- vii^o in minor and major key; ii^o in minor key



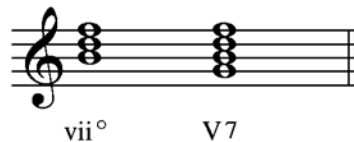
Note:

In Common Era practice, chords are consonant triads if containing consonant intervals – Octave, P5, P4, M3, m3, M6, m6 – triads containing other intervals are dissonant

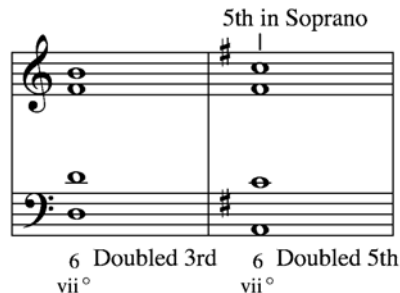
- Used most frequently in First Inversion
- But can appear w/root in bass as part of a harmonic sequence

THE LEADING TONE TRIAD

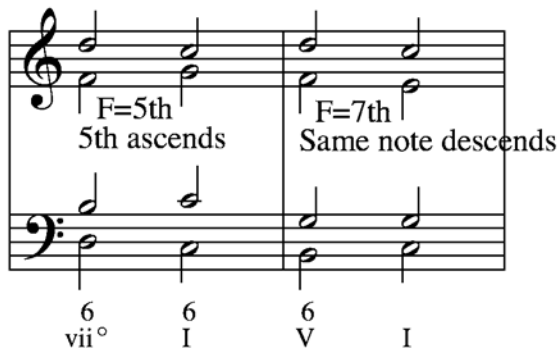
- Appears on Leading Tone in both major and minor keys
- Found in 1st inversion (vii^{o6})
- Because the triad has 3 common tones to the V7 it can be substituted for V7 – has the aural effect of a dominant chord



- For any diminished triads two uses are most common
 - : Between the Tonic triad and its 1st inversion
 - : After the IV triad when soprano note ascends
- Normal voice distribution for any diminished triad in 1st inversion
 - : Two 3rd's
 - : One root
 - : One 5th
 } vii^{o6} – Bass note is doubled
 - : If 5th is found in the soprano, the 5th is usually doubled



- Although the vii° Leading Tone Triad sounds like an incomplete V7 – the voice leading is different
 - : The 5th of the triad ascends while the same note in the V7 descends
 - : When 5th is in the soprano voice of the vii° triad the upper 5th resolves down and the lower 5th resolves up



SUMMARY DIMINISHED AND LEADING TONE TRIADS

ANY DIMINISHED TRIAD

- Used most frequently in 1st inversion
 - : But can be root position as part of a harmonic sequence
 - : Classified as a dissonant triad
- Normal voice distribution
 - : Two 3rd's, One root, One 5th (bass note doubled in 1st inversion)
 - : If 5th is in the soprano, the 5th is usually doubled

LEADING TONE DIMINISHED TRIAD

- Appears on Leading Tone in both major and minor keys
 - : Found in 1st inversion
 - : Because this triad has 3 common tones with the V7, can be substituted for the V7
- The 5th of the vii° and the 7th of the V7 is treated differently
 - : 5th of vii° resolve up
 - : 7th of the V7 resolves down
- When 5th of vii° is in the soprano voice
 - : The upper 5th resolves down
 - : The lower 5th resolve up
- Two uses are most common
 - : Between Tonic triad and its 1st inversion
 - : After IV triad when soprano note ascends

- Use Part Writing Rule 6 as almost always appears in 1st inversion
 - : Rule 6A
 - : Write the 2 voices moving to or from doubled note 1st
 - : Use contrary motion if possible
 - : Care to avoid parallel 5th & Octave if not
 - : Rule 6B
 - : When 1st inversion triads are found succession
 - : Each succeeding triad must have a different doubling or normal soprano doubling may appear in different voices
 - : Avoid doubling leading tone or altered note
- IV → vii^o6 when melody ascends (cannot follow Part Writing Rule 3)
 - : Necessary to prevent parallel 5th & Octave the use of the vii^o6 rather than the V is required
 - : When the root of the IV triad is in soprano, this note is held over a soprano of the following vii^o6
- Unequal 5th 's (dim 5th followed/preceded by P5)
 - : This use is perfectly acceptable though visually look like parallel 5th
 - : viio6 w/5th in soprano
 - : As a melody tone, the 5th of a diminished triad normally descends
 - : May progress upwards when found in a melody line moving in similar motion w/bass at interval of a tenth

7: MELODY HARMONIZATION

- Triad in Inversion
 - : Creates a more melodic Bass Line
 - : Reduces the number/size of leaps
 - : Procedure
 - : Triad for each melody note should be chosen FIRST when harmonizing a melody
 - : Write Bass Line First – the soprano and Bass line together should make good composition
 - : Soprano/Bass lines related movement can be in any one of four directions
 - Contrary motion
 - Similar motion
 - Oblique motion
 - Stationary motion
 - : Contrary and oblique most frequent, similar w/3rd & 6th interval in soprano and bass

Motion

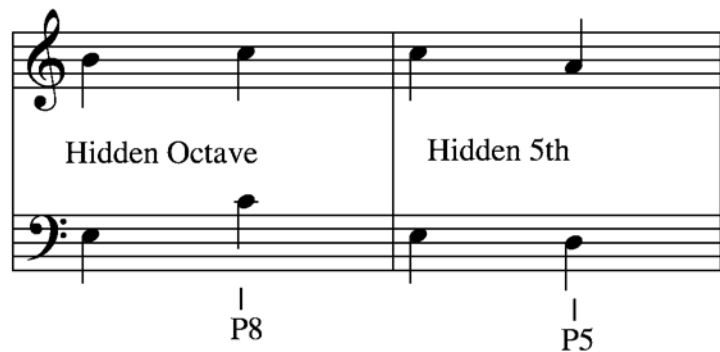
The diagram illustrates five types of motion between the soprano and bass lines in a triad in inversion:

- Contrary:** The soprano line moves up while the bass line moves down.
- Oblique:** The soprano line moves up while the bass line remains stationary.
- Oblique:** The soprano line remains stationary while the bass line moves down.
- Similar:** Both the soprano and bass lines move in the same direction (both up or both down).
- Stationary:** Both the soprano and bass lines remain stationary.

- Motion
 - : Contrary/oblique motion most frequent
 - : Similar is good when 3rd or 6th interval between soprano & bass
 - : Bass line should progress more by intervals of 2nd, & 3rd rather than larger leaps
- Hidden octave & 5th's
 - : Occur when two voices progress in similar motion to P8 & P5
 - : Only concern is between OUTER voices
 - : Also acceptable when
 - Chord is repeated
 - Triad ROOTS are a 5th apart
 - : Hidden octave and 5th's in any other circumstances do not sound good and need careful consideration

Note:

Cadence is usually more effective when triads are in root position though I⁶₄ may be used



8: THE SUPERTONIC TRIAD

- A minor triad in Major key
- A diminished triad in minor key
 - : Or minor with use of the melodic minor scale
- Most frequently found in 1st inversion
- Root in bass much less common
- Root position ii chord leaps up a 4th in cadential 64 context

Note:

Useful at cadence points



ALTERNATE DOUBLING IN MINOR TRIADS

- Can use normal doubling as previously
 - : Root of Triad in Root position
 - : Double the soprano in 1st inversion
 - : For vii^o6/ii^o6 double Bass note (3rd)
 - : For vii^o6/ii^o6 with 5th in soprano double 5th (soprano note)
 - Upper 5th resolve down
 - Lower 5th resolve up
 - : Double Bass in ⁶/₄ inversion (5th)
- Alternate Doubling
 - : Double 3rd regardless of soprano note
 - : Especially true when the 3rd is the Tonic, Subdominant, Dominant
 - : With the supertonic triad (ii) the 3rd is the subdominant of key so 3rd is usually doubled

WRITING THE SUPERTONIC TRIAD

- Rule 2A & Rule 2B for ii → V (roots a 5th apart)
- Rule 3 for I → ii (roots a 2nd apart)
- Rule 6A & 6B for any progression to OR from ii6 & ii^o6 (1st inversion → 1st inversion)

9: WRITING PASSING TONE (PT) AND NEIGHBORING TONE (NT)

- Part Writing Rule 8
 - : When a non-harmonic tone is used it temporarily replaced a harmonic tone
 - : Write the triad with normal doubling if possible and substitute the non-harmonic tone for one of the triad tones
 - : Introduce and leave the non-harmonic tone according to the definition of the particular non-harmonic tone used
- Simple application for unaccented passing/neighbor tones
 - : By step to dissonance on unaccented beat
 - : Then continues to next harmonic tone

D	→	C
G	F	E
B	→	C
G	→	C
<hr/>		
V		I

- Accented passing/neighbor tones Rule 8 is more obvious
 - : Dissonance on accented beat causes dissonant note and chord to sound simultaneously
 - : Dissonance then resolves to chord tone
 - : Dissonance is considered temporary substitute for the following chord tone

C	B	C
D	→	E
G	→	C
G	→	C
V		I

DOUBLING WITH ACCENTED PT/NT

- Don't double the chord tone substituted by dissonance if the substituted chord tone is not normally doubled
- If note of resolution (substituted chord tone) is normally doubled, the substituted chord tone may sound simultaneously with the dissonance

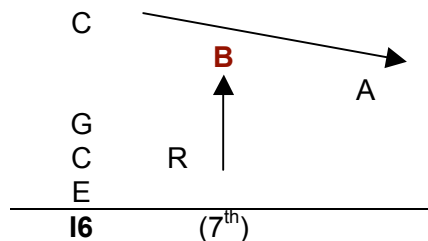
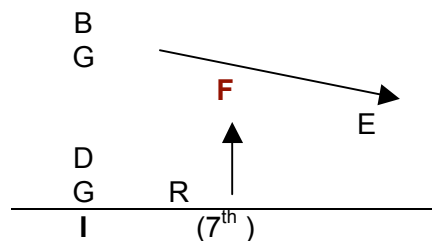
Normal Doubling not substituted by dissonance

		NT → 3 rd	
B	3	C → B	normal doubling is
D	5	D	root, w/NT, omit
G	R	G	3 rd on chord
G	R	G	maintaining
			normal doubling

Normal Doubling is substituted by dissonance

		NT → R	normal doubling is
G	R	A → G	root, NT is
D	5	D	substitute for
B	3	B	Soprano Root –
G	R	G	both bass root and
			NT dissonance
			sound together
			w/NT resolving to
			soprano Root

- When dissonance is a 7th above root (even if Bass is not the root of chord)
 - : Will have the aural effect of a 7th chord
 - : This dissonance MUST resolve downward



- PT & NT plus other non-harmonic tones are commonly found as double or triple dissonances (2 or 3 dissonances sounding simultaneously) or in combination with each other

Double Passing Tone

Lower Neighbor

Upper NT

I V 6 I Double PT V

FIGURED BASS SYMBOL FOR NON-HARMONIC TONES

- No standard figured bass for NH tones – symbols are used that will best express musical situation

D		C	B	A	G
G		E		E	
C	B	C		C	B
G		A		C	
4	3	3	—	8	7
		3	2	6	5
V		ii		ii	

Read figured bass from bass voice to soprano

When bass note changes, the number/numbers under the new bass note have NO connection with numbers of previous bass note (Vertical indication only)

MELODY HARMONIZATION USING THE SUPERTONIC TRIAD

- Useful in harmonizing the 2nd and 4th scale steps of Key
- 6th scale step (with 5th of triad in soprano) is less common in major and rare in minor keys
 - : ii is a minor triad in major keys and minor OR diminished triad in minor keys
 - : ii^o with lowered 6th scale step (5th of the triad) doubled makes resolution awkward
- When melody ascends after the IV triad, the vii^o6 is ordinarily used
- When melody outlines a supertonic triad, the same triad is ordinarily found in the harmonization
- the vii^o, ii, ii^o triads can give variety to harmonizations

10: THE MELODIC LINE

FORM – PHRASE

- 4 & 8 measure period appear frequently
- Phrases of shorter or greater length appear as a common occurrence
 - : Often extensions/contractions of 4 & 8 measure groupings
 - : Avoids monotony of repetitive regular 4 & 8 measure phrases

TYPES

- Extensions
 - : Repeating part of a phrase – exact repetition of entire phrase is NOT an extension
 - : Evading the cadence –allowing melody to continue further to ultimate cadence
 - : Using a Sequential pattern – just presence of sequence does NOT mean extension
 - : Lengthening a motive
 - : Adding an additional motive to a phrase
 - : Complete phrase more/less than 4 measures

TEMPO CONSIDERATION

- When tempo is very fast
 - : With each measure containing few notes, 8 measure phrase is regular
- When tempo is very slow
 - : When each measure may contain many notes, 2 measure phrase is regular

FORM – LONGER THAN A PERIOD

PHRASE GROUP

- Contains 3 or more phrases each of which differs melodically from the others
 - : Usually first and subsequent phrases end in half cadence
 - : With last phrase a full cadence
- Any or all phrases in a phrase group can be lengthened by extension

DOUBLE PERIOD

- Consists of 4 phrases
- First 3 end with half cadence
- Last phrase ends with full cadence
- Phrases 1 & 3 are similar or identical

CONSIDERATIONS IN MELODY WRITING

PHRASE

- Is smallest of all forms
- Group of notes leading to a cadence
- Can consist of 2 or more distinct units called motive
- Motives combine to form a phrase

PERIOD

- Is the grouping of 2 or more phrases
 - : Last phrase is perfect cadence
 - : Preceding are imperfect

MELODIC INTERVALS

- May outline any chord
- If each note of intervals outline a different chord, chord changes occurs as interval is sounded

11: THE SUBMEDIANT (VI/vi) AND MEDIANT (III/iii) TRIADS

THEORY & ANALYSIS

QUALITY

- Minor when in Major Scale
- Major when in minor scale
 - : Because of altered 6th & 7th step can also be vi^o or III+

Natural Minor – Key Signature of Eb Bb Ab

1	2	3	4	5	6	7	8
C	D	Eb	F	G	Ab	Bb	C
Eb G Bb = major III				Ab C Eb = major VI			

Harmonic Minor – Key Signature of Eb Bb Ab

1	2	3	4	5	6	7 (raised 7th)	8
C	D	Eb	F	G	Ab	B	C
Eb G B = aug III+				Ab C Eb = major VI			

Melodic Minor – Key Signature of Eb Bb Ab

1	2	3	4	5	6 (raised 6th)	7 (raised 7th)	8
C	D	Eb	F	G	A	B	C
Eb G B = aug III+				A C Eb = dim vi ^o			

- The VI/vi and III/iii appear exclusively with roots in bass (III+ and vi^o considered later)

ROOT MOVEMENT

- Can now construct root movement by 3rd
 - : I vi IV ii most common
- With downward 5th the submediant (vi) is common in both Major and Minor
 - : The mediant is comparatively uncommon in minor
- Commonly found in upward progression by 2nd in Major and Minor
- Downward progression by 2nd is
 - : I → vii^o
 - : vi → V
- With V → vi or V → VI occurring at a cadence point a deceptive cadence results
 - : V would normally progress to I at cadence
- Resolution of the mediant to subdominant is much more widely used than the resolution by downward 5th to the subdominant
 - : I iii IV or vi iii IV
 - : Progression vi iii IV is unique as vi iii ordinarily found ONLY when followed by IV
- Passing tone can produce ambiguous NH tone

D	(D)	A
D	(D)	D
F#	G (PT)	A
B	(B)	F#
vi	IV ⁶ implied	I ⁶
Key of D Major		

SPECIAL USE OF TONIC TRIAD IN PROGRESSION

- Tonic Triad (I) often found between two triads of a commonly used progression
 - : vi → IV To vi → I → IV
 - : ii → V To ii → I → V

SUBMEDIANT & MEDIANT TRIADS IN INVERSION

- Rare except for 3 specific situations
 - : Harmonic Sequence
 - : Series of 1st inversion
 - : When Bass note of previous chord is held over to become the 3rd of the mediant/submediant

Triads in Major Scale

1. Tonic	I	5. Dominant	V
2. SuperTonic	ii	6. SubMediant	vi
3. Mediant	iii	7. Leading Tone	vii^o
4. Subdominant	IV		

Triads in Minor Scale

1. Tonic	i	6. SubMediant	VI
2. SuperTonic	ii/ii°	#6. SubMediant	vi°
3. Mediant	III/III+	7. Subtonic	VII
4. Subdominant	iv/IV	#7. Leading Tone	vii°
5. Dominant	v/V		

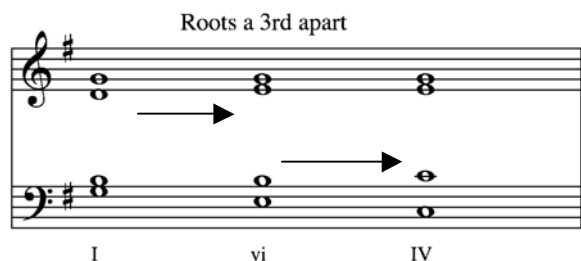
Depending on Minor Scale Format

Natural	Harmonic (#7)	Melodic (#6 & #7 Ascending) (Natural 6 & 7 descending)
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PART WRITING RULES FOR TRIADS WITH ROOTS A 3RD APART

• Part Writing Rule 4A

- : When Bass notes of two successive triads are ROOTS of the triads and these triads are a 3rd apart
- : Hold the two common tones and move the other voice stepwise



• Part Writing Rule 4B

- : When Bass notes of two successive triads are Roots of the triads and these triads are a 3rd apart AND when the soprano note moves by leap
- : 2nd triad may be in open or close position
- : Use only when both triads are desired to have normal doubling
- : Choice of open or close position is determined by
 - Avoidance of poor voice range
 - Parallel Octaves or 5th
 - Often more desirable to use Rule 5

• Part Writing Rule 5

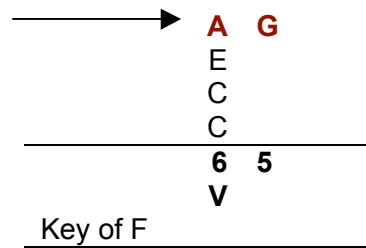
- : When impossible or undesirable to follow normal doubling for triads with roots in the Bass
- : Double the 3rd in the SECOND of the two triads
- : But if the 3rd is the leading tone or any altered tone, double the 3rd in the FIRST of the two triads

Note:

When a minor triad – this results in normal alternate doubling

When a VI chord, the 3rd is the tonic of the key and preferred doubling

NB: Mediant Triad created by the presence of a non-harmonic tone is indicated by figured bass 6 5



12: WRITING SUSPENSIONS

- Rule 8
 - : The dissonance (the suspension) temporarily replaces a chord tone
 - : Resolves down by step to that chord tone

TYPES OF SUSPENSIONS

PART I

- 4 – 3 Suspension
 - : At resolution triad has normal doubling
- 7 – 6 Suspension
 - : Occurs in a 1st inversion
 - : Triad has normal doubling at resolution
- 9 – 8 Suspension
 - : 2 – 1 if in tenor voice but not common
 - : Dissonance usually sounded simultaneously with resolution since resolution is doubled note
- ⁵₃ Suspension (2 – 3 suspension)
 - : Also known as the 2 – 3 suspension
 - : Always found in the Bass voice
 - : Since replaces the 3rd of the triad – found in 1st inversion
 - : Upper voices show normal doubling for 1st inversion

PART II

- Suspensions in the Tonic ⁶₄ chord
 - : When figured with actual root of the chord
 - : 5 – 4 suspension same as 9 – 8
 - : 7 – 6 suspension same as 4 – 3

-
- 9, 7, & 4 Suspensions
 - : Identical with 9 – 8, 7 – 6, & 4 – 3 suspensions
 - : But at moment of resolution, there is a change of structure in the harmony
 - : Change in inversion
 - : Change to a different Chord

PART III

- Suspensions with ornamental resolutions
 - : Two variables
 - Those with notes of ornamentation found below the suspension dissonance
 - Those with notes of ornamentation found higher than the suspension dissonance
- Chain Suspensions
 - : When two or more suspensions follow each other in succession
 - : Note of resolution of one suspension becoming the note of approach for the next suspension
- Double Suspension
 - : Sounding of two suspensions simultaneously

RHYTHMIC FACTOR

- Four Part Vocal Style
 - : Note of approach is same length – or longer – than suspended note
- Instrumental Style
 - : Allows note of approach to be shorter than note of dissonance
- Suspension always occurs at a strong rhythmic position in relation to the note of resolution
- Approach note
 - : A note of the same pitch preceding the dissonance (dissonance resolves down by step or 1/2 step)

Approach Note	Dissonance	Resolution
G	G	F
C	C	C
E	F	F
C	A	A
<hr/>		
	7	6
I	IV	IV
<hr/>		

9 Suspension: Change in Harmony

9

resolution

D Maj: IV ii

4 – 3 Suspension: Ornamental Resolution
with Lower Neighbor

GMaj: I V

Chain Suspensions

vi	V	iii	IV	ii	iii	vi	ii	V	I	IV	ii
A	(A)	G	(G)	F	(F)	E	(E)	D	(D)	C	F
C	D	G	A	A	B	(B)	A	(A)	G	(G)	F

Double Suspension

9 → 8

7 → 6

LN UN

B Minor:

9	8
7	6
3	—
i	

13: MISCELLANEOUS TRIAD USAGE

THE v- (MINOR) TRIAD IN A MINOR KEY

- The v- triad is used instead of the V Δ (Major)
 - : In a descending line when moving through the 7th scale step
 - : At time when dominant triad is used

v- replacing V Δ Triad moving through 7th Scale Step

Gminor: i i v vi III

THE VII Δ TRIAD IN A MINOR KEY

- Normally preceded by the tonic
- Progresses to III Δ
- VII & III major triads are the only diatonic major triads in either major or minor that can function as a dominant to another chord not actually the tonic of the key
 - : Called a secondary dominant chord
 - : Aural effect is often that of a temporary change of key
 - : Secondary Dominants are common but usually an altered tone is required

VII & III Major Triads in a minor key

i VII VII III i

d- C Δ C Δ F Δ - - - (d-)

Secondary Dominant

HALF CADENCES

- The V Triad of authentic half cadence may be preceded by triads other than I

Major	Minor
ii → V	ii°6 → V
IV → V	iv → V
vi → V	

- The iv6 → V in minor key = Phrygian cadence
 - : iv6 → V, the bass descends 1/2 step with upper voice ascending a whole step
 - : A characteristic of the Medieval Phrygian mode in which 1 → 2 is a whole step and 7 → 8 a 1/2 step
 - A reverse of the characteristic half & whole step relationship

Phrygian Cadence

Whole Step

1/2 Step

6 iv 1/2 Step V

iv Whole Step V

14: THE $\text{}^6_4$ CHORD (2ND INVERSION TRIADS)

CADENTIAL $\text{}^6_4$

- Cadential $\text{}^6_4$ is most frequently used – I $\text{}^6_4$ – V – I
- Most common form the moving voices above the bass proceed down
- Occasionally upper voices ascend
- Normal resolution of the cadential $\text{}^6_4$ is occasionally interrupted by another sonority
 - : Bass note is a step above
 - : Bass note is a step below

Cadential 64 with interruption

6 4

6 Interrupted w/bass below V I

Cadential 64

THE PASSING $\frac{6}{4}$

- Occurs ordinarily between a triad w/root in bass and its 1st inversion – or vice versa
- The 3 note bass line is countered by SAME 3 note line
 - : In upper voice
 - : in opposite direction
 - : 3 note patter in upper voice may be missing
- Most common is passing $V\frac{6}{4}$ between two positions of tonic triad

Passing $\frac{6}{4}$ Chord

Between 2 Postions of Tonic Chord

- Passing $\frac{6}{4}$ chords on other than V and I are uncommon
 - : Theoretically any triad can be found as a passing $\frac{6}{4}$
- Sometimes are found between two different chords BOTH of which normally progress to the same chord
 - : i.e. $vi\frac{6}{4}$ between vii^o and V^4_2 (a 7th chord) both of which normally progress to I

THE PEDAL $\frac{6}{4}$

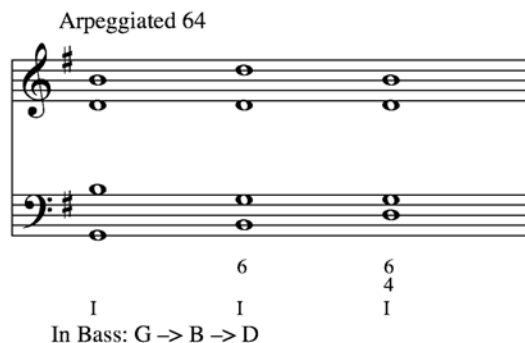
- Chord preceding the $\frac{6}{4}$ chord has the same bass note as the $\frac{6}{4}$
- Usually resolves to the same triad which preceded it
- Name derives from pedal effect in the bass
- Most commonly found in the pattern I → IV → I

Pedal $\frac{6}{4}$

Bb Pedal

THE ARPEGGIATED 6_4

- Preceding this chord is the same chord with root or 3rd in the bass



WRITING 6_4 CHORDS

- Approach and departure
 - : The bass note of the 6_4 chord is preceded and followed ONLY by
 - Same bass note
 - Note step above or below
 - Skip in the same chord
 - Skip from Supertonic note in progression ii (ii^7) → I 6_4
- The Bass note (5th of triad) is always doubled

15: CHROMATIC NON-HARMONIC TONES

- Done for one of five reasons
 - : Notate the various forms of the minor scale
 - : Alter a non-harmonic tone
 - : Alter a chord (i.e. minor to major)
 - : To indicate diatonic tones of a scale when music is written in a key other than that of the key signature
 - : As a courtesy accidental
- Spelling
 - : Spelled according to the direction of resolution
 - : resolves upward it will take the letter name below the note of resolution
 - Up to 'F' use 'E' natural note 'Fb'
 - : Resolves downward take letter name above the note of resolution
 - Down to 'G' use 'Ab' – not 'G#'

- Other Usages
 - : Pedal Point
 - Relatively infrequent in 4 part vocal style
 - : Appoggiatura Chord
 - Tone forming a chord but sounding over a Bass note from a different chord

WRITING THE V- AND VII TRIADS IN A MINOR KEY

- With Lowered 7th Step
 - 3rd of the v- triad MUST descend
 - Always found as part of a descending Melodic minor scale line
 - If minor ascends, it indicates the music is written in a mode other than major or minor
 - The 3rd is lowered 7th scale step
- Secondary Dominant function of the VII negates the necessity of resolving the lowered 7th scale step

Note:

Melodic Minor – raised
6th & 7th scale step
ascending Natural
descending (lowered 6th
& 7th)

MINOR & MAJOR SCALE DIATONIC CHORDS

Major Diatonic Chords

I ii iii IV V vi vii° I

EbMaj Fmin Gmin AbMaj BbMaj Cmin Bdim EbMaj

Natural Minor Diatonic Chords

i ii° III iv v VI VII i

Cmin Ddim EbMaj Fmin Gmin AbMaj BbMaj Cmin

Harmonic (#7th) Minor Diatonic Chords

i ii[°] III⁺ iv V VI vii[°] i

Cmin Ddim EbAug Fmin GMaj AbMaj Bbdim Cmin

Melodic (#6th & #7th Ascending) Minor Diatonic Chords (Natural Minor descending)

i ii III⁺ IV V vi[°] vii[°] i

Cmin Dmin EbAug FMaj GMaj Adim Bbdim Cmin

MINOR DIATONIC CHORDS COMPARISON

	I	ii	iii	IV	V	vi	vii [°]
Major	Maj	Min	Min	Maj	Maj	Min	Dim
Natural	i	ii [°]	III	iv	v	VI	VII
	Min	Dim	Maj	Min	Min	Maj	Maj
Harmonic	i	ii [°]	III ⁺	iv	V	VI	vii [°]
	Min	Dim	Aug	Min	Maj	Maj	Dim
Melodic	i	ii	III ⁺	IV	V	vi [°]	vii [°]
	Min	Min	Aug	Maj	Maj	Dim	Dim

MELODY HARMONIZATION

TWO EXTREMES OF NON-HARMONIC TONE USAGE

- 4 Part Vocal Style
 - : Used very sparingly as in simple church hymn where perhaps only a single passing tone is used at final cadence
 - : Used to make each of 4 vocal parts a truly melodic line as in chorales of J.S. Bach

- Use & Devices
 - : Non-Harmonic tones allow almost continual melodic movement from one chord to next
 - Opposed to the 'Block Chord' effect of usual church hymn
 - : Changing the inversion of the chord on the WEAK half of the beat
 - : Change the chords within the beat durations
 - Held notes with changed notes creating new chord

Note:

Take care to not create parallel 5th & Octaves through use of non-harmonic tones

SUSPENSIONS

4 – 3	1st inversion dissonance is usually sounded simultaneously with the resolution – resolution is the doubled note	Normal resolution
7 – 6		
9 – 8		
5 – 2 → Found in Bass		

5 – 4 = 9 – 8	$\frac{6}{4}$ Chord	5 th (Bass Note) is doubled
7 – 6 = 4 – 3		

9	Change in Structure At moment of resolution move to different inversion or chord	
7		
4		

- With Ornamental Resolutions
 - : Above or below pitch of dissonance
- Chain Suspensions
 - : Two or more suspensions follow in succession
 - : Note of resolution of one suspension becomes note of dissonance in next
- Double Suspension
 - : Two suspensions sounding simultaneously

16: THE DOMINANT 7TH CHORD; THE SUPERTONIC 7TH CHORD; & RHYTHMIC SYNCOPATION

HISTORY

- The Interplay between consonance and dissonance has been one of the principle features of Western Music
- Since free organum in the 11th Century
- By 14th Century it was well established that consonant intervals were:
 - : Major & Minor third
 - : Major & Minor sixth
 - : Perfect 5th & Octave
- A Vertical sonority was constant when each of the upper voices formed a consonant interval with lowest sounding voice
- Dissonance could only be used in well defined situations
- Any dissonance called today a complete 7th chord was limited to the weak part of the beat
 - : Would create an aural impression of an incomplete 7th chord is on strong part of beat (5th missing)
- Not until the 17th Century did the dissonant 7th appear simultaneously with a complete triad forming a complete 7th chord
 - : This 7th still obeys the traditional laws of dissonance
 - : Properly approached and resolved
 - : remained standard through the late 19th Century

TERMINOLOGY FOR 7TH CHORDS

- Consists of a triad + interval of a 7th above root and may be built on any scale degree
- Indicated by Roman numeral + superscript '7'

7 th Triad	
TRIAD { <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> Bb G E C </div> } 7 th	In Key of F a C7 or V ⁷

CHORD TYPES

major – minor 7 th Chord	Major Triad + minor 7 th Used as is no alternative term
minor – minor 7 th Chord	minor Triad + minor 7 th May use minor 7 th term
diminished – minor 7 th chord	diminished Triad + minor 7 th May use half-diminished term

FIGURED BASS

Triad			
5	6	6	
3	3	4	
G	C	E	
E	G	C	
C	E	G	
I	I ⁶	I ⁶ ₄	
(written as)			
Root	3 rd	5 th	

7 th Chord			
7	6	6	6
5	5	4	4
3	3	3	2
Bb	C	E	G
G	Bb	C	E
E	G	Bb	C
C	E	G	Bb
V ⁷	V ⁶ ₅	V ⁴ ₃	V ⁴ ₂
(written as)			
Root	3 rd	5 th	7 th

THE DOMINANT 7TH CHORD

- Built on the dominant (5th) scale degree
- Most common of all 7th chords
 - : More frequently used at least in instrumental styles than the dominant triad
- Treatment in common with non-harmonic tones as 7th resolves Down by Step
 - : This applies to ALL 7th chords
- In Chord progression the chords preceding and following the 7th chord are limited by strictures of "approach to & departure from" the 7th
- V⁷ is followed ordinarily by the tonic or submediant triads only (I/vi)

Note:

The V⁷ is used for both major and minor key

The v₇ (v minor 7th) is rarely used

THE SUPER TONIC 7TH CHORD

- Built upon the 2nd scale step
 - : In a major key = minor 7th chord (ii⁷)
 - : In a minor key = diminished 7th chord (ii^{o7})
- Used most frequently in 1st inversion (⁶₅) particularly at a cadence point
- Another common use is in conjunction with passing ⁶₄ chord (IV⁶ → I⁶₄ → ii⁶₅)
- Can be found in other inversions though less frequent than 1st

Note;

In melodic minor (ascending) it will appear as a minor chord

Rarely used due to the resolution of the raised 6th

APPLICATION OF 7TH CHORDS

- The 7th is a dissonance and must be treated carefully

PART WRITING RULE 9

- The 7th of a 7th chord
 - Its note of approach, its note of resolution comprise a 3 note figure similar to certain non-harmonic tone figures
 - The Passing Tone
 - The Suspension figure
 - The Appoggiatura figure
 - The Upper Neighboring Tone figure
 - Resolution of the 7th is usually Down by Step

Note:

7th replaces the 5th in 4 Part writing – if necessary

7th chord may be found complete or w/5th missing and root doubled

Complete 7th chord often followed by incomplete Tonic

Incomplete 7th often followed by complete Tonic

Passing Tone 7th

6 I 7 V I

Suspension Tone 7th

6 IV 7 V I

Appoggiatura Tone 7th

6 I 7 V I

Upper Neighbor Tone 7th

UN

I 7 V I

Detailed description: This musical example is in G major (one sharp). The first measure shows an upper neighbor tone (F#) in the treble clef moving to the tonic (G), with the bass clef containing a whole rest. The second measure shows a 7th chord (F#-G-A-B) in the treble and a 7th chord (F#-G-A-B) in the bass. The third measure shows the tonic triad (G-A-B) in both staves. Roman numerals I, 7, V, and I are placed below the bass staff for the respective measures.

- Infrequent supertonic 7th w/root in bass is usually found complete
- When followed by the V⁷, the V⁷ is usually incomplete
- 7th chord in inversion usually all four notes are present
- Complete V⁷ chord often followed by an incomplete tonic triad (no 5th)
- Incomplete V⁷ chord (no 5th & root doubled) followed by complete tonic

No 5th Doubled Root

7 Incomplete V7 V

Complete I I

7 Complete V7 V

Incomplete I No 5th I

Detailed description: This musical example is in G major. The first measure shows an incomplete V7 chord (F#-G-A) in the bass and a complete I chord (G-A-B) in the treble. The second measure shows a complete V7 chord (F#-G-A-B) in the bass and an incomplete I chord (G-A-B) in the treble. The third measure shows a complete V7 chord (F#-G-A-B) in the bass and an incomplete I chord (G-A-B) in the treble. The fourth measure shows an incomplete I chord (G-A-B) in the bass and a complete I chord (G-A-B) in the treble. Roman numerals and chord names are placed below the bass staff.

EXCEPTIONAL PRACTICES

- Passing V⁴₃
 - Found between two positions of Tonic (similar to passing v64)
 - When used with ascending bass line, 7th of V7 ascends
- Transfer of 7th
 - 7th chord may be repeated with 7th occurring in different voice
 - The 7th of the last 7th chord RESOLVES normally
- Irregular/ornamental resolutions
 - The 7th may be found ornamented as in ornamental resolution of a suspension
 - Resolution of the 7th may be delayed when held over into next chord
- Double Dissonance
 - 7th chord already includes one dissonance (the 7th)
 - A second may be sounded when its use CONFORMS to general rule for writing non-harmonic tones

Transfer of 7th

Resolution

4 3 V 7 V I

Ornamental Resolution

Resolution

7th LN V I

Delayed

Resolution

7 7 7 ii 6 4 I V

Delayed & Transferred 7th transfer from ii Resolution

Resolution

I 6 5 ii 6 4 I V

Passing 43

Resolution

I 4 3 V 7 I

Ascending Bass
7th Resolves up

17: MELODY HARMONIZATION FOR KEYBOARD

- Follow all basic harmonic and melodic principles of the common practice era
 - Varies only in accommodating physical construction and capabilities of a particular instrument
 - i.e. Keyboard
 - Range of 88 notes
 - Can perform many notes simultaneously
- In Medieval & Renaissance Periods
 - Instruments at rudimentary stage of development
 - Originally played individual lines of vocal composition
 - Voices alone; Voices accompanied by instruments; Instruments alone
 - Earliest indistinguishable from vocal compositions (except for words & sonority)
 - Developed over time with less dependence upon vocal style
 - According to characteristics of individual instruments

- Through 19th Century music for instruments still displays an influence from vocal style of writing
- Differences are made possible by the unique characteristics & capabilities of an instrument or of a combination of instruments

KEYBOARD PROCEDURES

- Part writing procedures, principles of doubling, resolution, non-harmonic tone resolution, and harmonic progression all still apply
 - : Exceptions
 - One or more voice lines may be doubled in octaves
 - Called sonority doubling
 - Found most frequently in the Bass
 - : Tones that ordinarily demand specific resolutions (leading tone, altered tone, 7th of 7th chord) may be doubled one in each hand
 - BUT only when one of these tones continues on to a different tone BEFORE the other doubled note resolves
- Block Chords may be used in the right hand with soprano notes of the chord succession forming the melodic line
- Block Chords may be found in the Left Hand
 - : Less common treatment
 - : Avoid chords so low as to create a thick muddy sound
 - : Careful to avoid parallel 5th and Octave
 - In left hand
 - Between left AND right hand notes
- Chords may be found in open structure
 - : Care that adjacent voices in each clef are close enough so that the hand can play both notes at the same time
- Chords in accompaniment may be arpeggiated
 - : Single low note followed by one (or more) block chords
 - : One note at a time – ‘Alberti Bass’ when found in the left hand
- Number of notes sounding simultaneously is not limited to 4 (1-8 possible)
- 3 voice texture is common – with arpeggiated left hand representing TWO voices
- 3rd of chord (or representative – i.e. non-harmonic replacement) should always be present
- Piece does not have to stay within one accompaniment style but can change as desired

Note:

Sonority doubling is not considered parallel octaves because it is a simple reinforcement of a single voice line (i.e. a doubled Bass line)

Two different voices in octaves do constitute actual parallel octaves (i.e. Tenor voice doubling the Bass voice)

18: ELEMENTARY MODULATION – SECONDARY DOMINANT

MODULATION

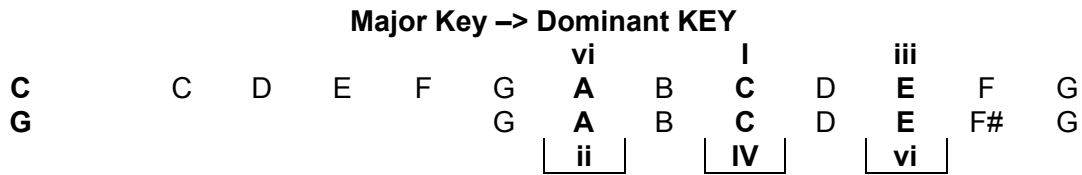
- A process of moving from one key to another
 - : From a given key, modulation to ANY other major or minor key is possible
 - : Two most common modulating techniques
 - : From a major key to its dominant key
 - i.e. C major → G major
 - : From a minor key to its relative major
 - i.e. C minor → Eb major
- Accomplished through a device known as a “common” or “pivot” chord
 - : This chord is spelled common to both keys but with different function

Common or Pivot Chords G minor & Bb Major				
G minor				Bb Major
i	G	Bb	D	vi
III	Bb	D	F	I
iv	C	Eb	G	ii
VI	Eb	G	Bb	IV
Function in G minor	← Spelling →			Function in Bb major

- Characteristics
 - : Pivot Chord usually located before the 1st appearance of a Dominant → Tonic progression in the new key
 - : Very often the chord immediately preceding this cadential progression
 - : Only infrequently is any dominant or leading tone chord in either key found as a pivot
 - This dominant function is so strong in one key that it is improbable that it will be HEARD as a different function in another key
 - : Eliminating dominant harmonies in both keys there are 4 possible in minor to relative major

minor key → relative Major key									
minor Major	(i)	B	III	iv	E	VI	G	i	C
	A		C	D		F		A	
	(vi)		C	D		F		A	
			I	ii		IV		vi	

: 3 Possible pivots in major key to its dominant key



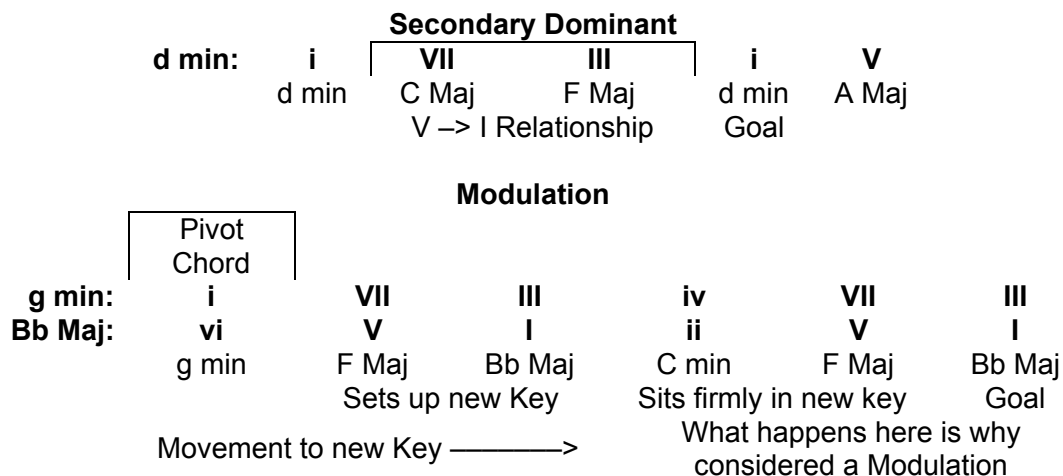
- Occasionally a chord appearing earlier than that immediately preceding the new V → I will act as a pivot
 - : Can be multiple possibilities that can function as a pivot
 - : Any choice of a pivot chord is usually correct when the resulting harmonic progression is correct

RETURN TO THE ORIGINAL KEY

- Direct Return
 - : Immediate return to original key
 - : Continue for a length of time in new key before return
- Other Keys before return
- Can be accomplished by simply beginning the next phrase with I, V → I, or some other basic progression in the original key

SECONDARY DOMINANT CHORDS (V OF V)

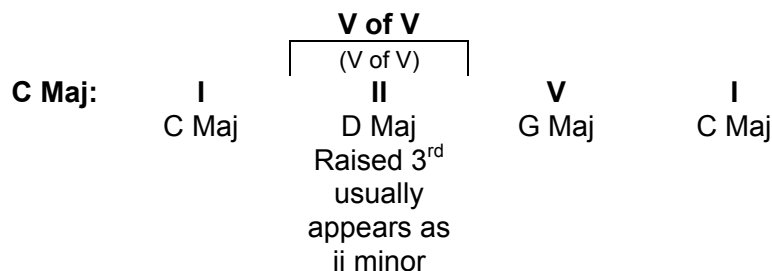
- Difference between a secondary Dominant progression and a modulation is the cadential goals



- Characteristics
 - : Any chord may be preceded by a major triad or major-minor 7th chord standing in dominant relationship to it
 - : Usually this secondary dominant chord includes a chromatically altered tone
 - : The most common secondary dominant is built upon the second scale step
 - : Functions as a dominant of the dominant
 - : Any secondary dominant chord can be found as a 7th chord
 - : V of V function very common at the cadence

Note:

VII → III in minor an exception



SECONDARY DOMINANT / MODULATION

- A single occurrence of a pivot chord + a V → I is not sufficient to establish CLEARLY a new key
 - : Modulation is more certain when a cadence in a new key is approached through a tonic ⁶/₄ chord
- Transient Modulation is an indefinite establishment of a change of key with the quick return to the original key
 - : Can have characteristics of both secondary dominant AND modulation
 - : Only as new tonic is given more emphasis is the impression of a definite modulation in place
 - : By repeating chords of dominant key or other devices
 - : This occurrence can be subjective for the listener
 - : Sound as a real modulation
 - : Sound as a transient modulation
 - : Sound as a half cadence
- Analysis choices less of a problem when modulating to keys other than the Dominant of a major key

Note:

It is the stability as a NEW key center for other keys – they do not have the urgency of dominant triad to return to original key

TERMINOLOGY VARIANTS FOR SECONDARY DOMINANTS

II	Indicates a chromatic alteration of the ii minor to II Major
V of V	D Major → G Major
$\frac{V}{V}$ $\frac{V}{V}$ $\frac{V}{L} \rightarrow V$	All indicate a V of V
II V x	'x' symbol placed below chord preceding diatonic V chord
II #	Indicates an altered ii chord in Major (with a raised 3 rd) (is a II Major)

SUMMARY PIVOT CHORDS

Modulation to Dominant Key (i.e Key of C to Key of G)

C Major	I C	ii d	iii e	IV F	V G	vi a	vii ^o b ^o	I C
G Major	C IV	D V	e vi	f# ^o vii ^o	G I	a ii	b iii	C IV
	Pivot I/V		Pivot iii/vi		Leading Tone chord	Pivot vi/ii		

Pivot chords are characterized by SAME SPELLING with DIFFERENT FUNCTION within each key

Leading Tone Chords (LT) are rarely found as a pivot chord as the dominant function in the original key is improbable to be heard with a different function in the new key

Modulation to Relative Major (i.e. Key of C minor to Key of Eb Major)

C minor (Harmonic)	i c	ii ^o d ^o	III Eb	iv f	V G (#3)	VI Ab	vii ^o b ^o	i c
Eb Major	c vi	d ^o vii ^o	Eb I	f ii	g iii	Ab IV	B V	c vi
	Pivot i/vi	Leading Tone Chord	Pivot III/I	Pivot iv/ii		Pivot VI/IV	Leading Tone Chord	

MODULATION IN THE MELODIC LINE

- In a melody a modulation becomes apparent when the implied harmony forms a cadence (or a cadential progression) in a new key
- Not always possible to depend on the appearance of an accidental in the melodic line to indicate a modulation to a new key
 - : Sometime only the implied harmony reveals the existence of the modulation
- Writing the V of V chord
 - : The V of V chord contains a chromatically altered note

PART WRITING RULE 10

- Use of altered chords does not change normal part writing procedures
 - : Do NOT double any altered note
 - : If unusual doubling occurs follow Rule 6A

Note:

All members in the V of V Chord function as if chord of resolution was tonic of a new key and ascends to tonic of new key

May descend ONLY when followed in same voice by a note of same letter name but different chromatic alteration

3rd of chord acts as leading tone to new key

In minor the 5th of II (V of V) functions as 2nd in new key and descends