

Modern Arranging and Composing

Volume II

The Advanced Materials of Harmony

**MODERN
HARMONIC TECHNIQUE**

*"A full examination of the contemporary techniques
of tonal harmony for the arranger and composer."*

by Gordon Delamont

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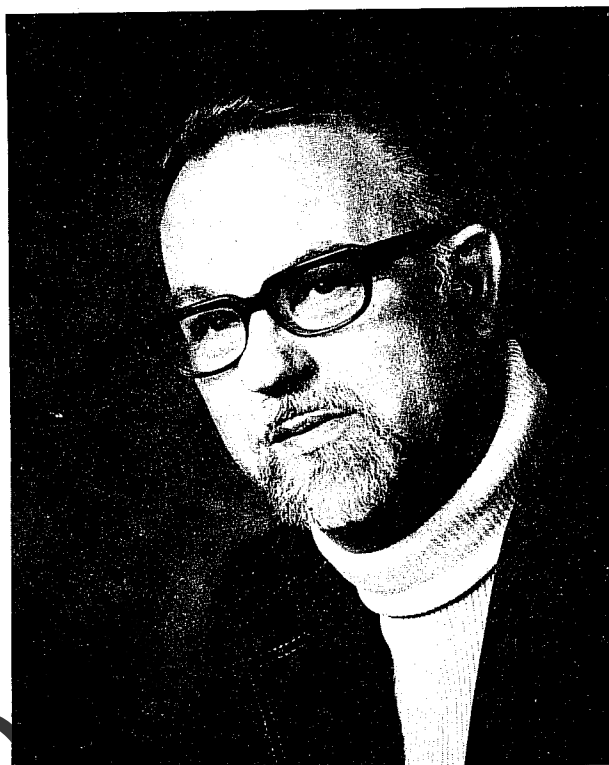
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BIOGRAPHICAL SKETCH

GORDON DELAMONT was born in Moose Jaw, Saskatchewan, Canada, and received his first musical training in Vancouver, British Columbia. While in his early teens he was trumpet soloist with the world famous Vancouver Kitsilano Boys Band. This band, conducted by Mr. Delamont's father, has won major contests the world over, starting with the 1933 Chicago World's Fair and culminating in two consecutive first place ratings at the World Music Festival in Kerkrade, Holland, in 1958 and 1962, respectively.



Mr. Delamont's career as a professional trumpet player began in 1939 in Toronto, and in the following twenty years he played with virtually all of Canada's leading dance and studio orchestras. During this time he also formed and directed his own band which enjoyed great success in Canada until he started his present career as a teacher of harmony, arranging and related subjects. He opened his own studio in 1950, and since then has spent full time in teaching and writing, his two primary interests. His students have come from the United States and Europe, as well as Canada, and may now be found in successful musical positions the world over.

Along with teaching, Mr. Delamont has pursued his own writing in the field of jazz composition and arranging. He has had works commissioned and performed on CBC, CTV, and on many concerts and concert series. He has also written a number of articles for such magazines as Canadian Music Journal, Music Across Canada, Crescendo, and Jazz Monthly. He is president of a recently formed organization named "Jazz Arts", a society to promote the interests of jazz in all its forms.

His rich musical heritage and experience, combined with his scholarly approach in teaching and writing, make Mr. Delamont an eminently qualified author of this text on modern harmony, composing, and arranging. It is our opinion that his works will stand for many years as the most comprehensive and definitive approach to serious study of these subjects.

The Publisher

FOREWORD

This book is designed to follow Volume I (Modern Harmonic Technique) and is a direct extension of it. It assumes that the reader has a knowledge of:

- Scales (Modes)
- Intervals (and their qualities with respect to the harmonic overtone series)
- Chords (in major and minor keys)
- The nature of dissonance and resolution
- The nature of harmonic rhythm
- Cadences
- Chord progression (Primary and Secondary root movements) in major and minor with the use of root positions, 1st, 2nd, and 3rd inversions
- All of the basic principles of voice leading and part writing grammar.

Further, this book assumes that the reader's ear is familiar with the chords and chord movements in major and minor, and that he has the ability to construct horizontal lines which are sensitive to scale tendencies, action and reaction, and the avoidance of monotony.

These are large assumptions, and point up the fact that this volume is not intended to be self-sufficient. Unless the reader has gained, in some way, the knowledge which is herein assumed, he is advised to refer to Volume I. This series includes three books: "Modern Harmonic Technique", Volumes I and II, and "Modern Arranging Technique". The books are interdependent, but have been published separately to minimize the unit purchase price and because a text as comprehensive as this would be uncomfortably bulky in one volume.

Even for the reader who is familiar with Volume I, or familiar with the material it covers, certain points which are made in it bear repeating.

The volumes dealing with "Harmonic Technique" are not books on arranging or composition. They deal only with the harmonic vocabulary which is applied to arranging and composition.

The terminology used in these books is fairly standard and traditional, but inconsistencies in musical nomenclature do exist from text to text and from teacher to teacher. Effort has been made herein to define those terms which are not self-explanatory, but a dictionary of terms is a valuable accessory for any musician.

The development of the ear must be stressed at every step of the way. Every note, every chord, and every chord movement must be comprehended aurally. Unless this is done, the study of harmony is meaningless.

The attitudes taken in this text are "non-stylistic", in the sense that the text does not attempt to present or duplicate the style of any specific arranger or composer. It attempts, rather, to present the principles which underlie present day uses of tonal harmony and melody. The only "style" which must be considered is the style which the student himself establishes in the first few bars, or sometimes the first few notes, of each exercise. He should then concern himself with retaining that style.

The devices of syncopation and the "rhythmic anticipation", i.e.:



are not generally used in the first two volumes. This type of rhythm is characteristic

of jazz and jazz oriented music, and is fully examined in "Modern Arranging Technique", but it is usually inappropriate to the "part writing" idiom which is employed in the study of harmony. The syncopated rhythms do not, in any case, significantly affect the basic principles of chord movement and melody.

"Rests", which are common and often necessary in practical writing are not liberally used herein, mainly because students tend to use them to get out of difficulties or to avoid grammatical errors. In the later, more advanced exercises, a judicious use of them could be acceptable.

The student who is prepared for the examination of the materials in this volume, will find that many of the sounds which result from the more advanced harmonic techniques and devices, and particularly with the use of the non-chordal notes ("Melodic Inharmonics"), may be more familiar to him than the sounds available with only basic diatonic harmony. He will also find that some of the procedures contained in later parts of the text (e.g., "opposed scales", "equal division of the octave") can be carried further than the examples in the text indicate. Experimentation, an open mind, skepticism, and - above all - continued ear training and listening are encouraged. It is well to remember that technical books deal with what has been done and not necessarily with what can or will be done.

Examination of modulation has been left until the final chapter, not because it presents some different or difficult theories of harmony, but because modulation can employ any of the harmonic procedures which are part of tonal harmony. Consequently it tends to act as a review of these procedures.

The reader who is ready to embark into this book has already come a good distance. The perseverance required to get this far deserves congratulation, and the student can be assured that the road which remains, while not necessarily easier to traverse, is more scenic and becomes increasingly more rewarding.

Gordon Delamont

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Chapter 1

EXTENDED TONALITY

Part 1

The term "Extended Tonality" refers to any process whereby the normal boundaries of a key are "extended" to allow the inclusion of harmonic and melodic material which is not diatonically a part of the key.

THE "MIXED MODE" TECHNIQUE

I. INTRODUCTORY

Proposition: The boundaries of diatonic tonality may be "extended" to include harmonic and melodic material from other modes with the same tonic (i.e., the *Parallel* modes).

The modes involved in this procedure will be the five Tonal Modes:

The TONAL MODES	Mode 1	IONIAN
	Mode 2	DORIAN
	Mode 3	PHRYGIAN
	Mode 5	MIXO-LYDIAN
	Mode 6	AEOLIAN

The LYDIAN and the LOCRIAN modes are eliminated for the purposes of this technique. The five TONAL Modes each contain the essential Tonal notes: the tonic, dominant, and subdominant. The Tonal Modes differ only in their Modal notes; the 2nd, 3rd, 6th, and 7th degrees.

The proposition can be presented more directly as, for instance,

The key of "C" = $\begin{cases} \text{C MAJOR} \\ \text{and} \\ \text{C MINOR} \end{cases}$

The first requisite is a knowledge of the Modal scales. The student is requested to supplement the information here with a review of the Modal scales in Chapter I, Volume I, "Modern Harmonic Technique".

Using the key of C for example purposes, here are the five Tonal Modes with the chords therein contained:

C IONIAN (Mode 1):

C DORIAN (Mode 2):

The musical notation shows two staves. The first staff is for C IONIAN (Mode 1) and the second is for C DORIAN (Mode 2). Both staves show the chords I through VII. The C IONIAN staff has natural notes for all chords. The C DORIAN staff has flats for the 2nd, 3rd, 6th, and 7th degrees in the chords. The chords are labeled with Roman numerals I through VII.

C PHRYGIAN (Mode 3):

C MIXO-LYDIAN (Mode 5):

C AEOLIAN (Mode 6):

When all of the triads from these five Tonal Modes are thrown, as it were, into one container, the following *composite* result emerges:

From: I D I A P I M D I P

C: I ii iii IV

I D P I D P I D P

I D P I D P I D P

THE 19 TRIADS OF THE KEY OF C!

(In a sense, every one of these chords is *diatonic* in the key of C.)

The use of a *Mixed Mode* technique is not entirely new in this study. "IVmi" and "vii⁰⁷" have been used in major; both of which are actually "borrowed" from minor. These have been used primarily for voice leading reasons.

In point of fact, the Mixed Mode technique *most often does concern the introduction of MINOR material into MAJOR*; but its purpose is very often for "expression" rather than for "function". Material from the other Modes introduced into Major brings in *flatted* notes (and chords containing these flatted notes) and the result is a "softening" of the harder outlines of Major, with increased "warmth" and a more "Romantic" quality. Therefore, it can be fairly stated that the Mixed Mode technique applied to Major is more consistent with the quality of "popular" music, jazz, Latin music, or other "Romantic" styles than it is with, for instance, religious music.

The use of the Mixed Mode technique applied to Minor has also been encountered, in the use of:

1. "Musica Ficta" - which is actually Major material introduced into Minor. But Musica Ficta is primarily a *functional* process, concerned with voice leading rather than *expressiveness*.
2. The "Tierce de Picardie" - which, it can be argued, IS an *expressive* or *emotional* use of Major material in Minor.

Generally, however, the Mixed Mode technique concerns the use of Minor resources in Major. (And, because the ear is more likely to accept the stability of Major rather than the instability of Minor, the use of "major" material in Minor will probably sound like MAJOR with added *minor* material anyway!)

Before engaging in a detailed examination of the individual chords of the Mixed Mode technique, it is well to note the terminology applied to the chords, and to note the general hazards which will be encountered in this area.

Terminology for the Mixed Mode chords in MAJOR:



The General Hazards: (Being a forewarning against the three points which most frequently cause trouble in Mixed Mode writing.)

1. AWKWARD VOICE LEADING

The hazard of awkward leaps is greatly increased with the introduction of the modal variants. For instance, in a move from "I" to "bii" the only comfortable destination for the 3rd of I is the 3rd of bii - to any other note of bii would be an awkward leap! Therefore, very often a note which is normally "free" will be limited in its movement by the notes of the next chord, and the obligation to retain smooth voice leading. As always, it is the **Augmented** leaps which are most dangerous. Avoid them unless they are serving a clear "melodic" purpose, and then make sure they receive proper resolution.

2. CHROMATICISM

"Chromatic" use of the Modal variants should be kept at a minimum. Chromaticism occurs when a note is immediately followed by a half tone alteration of the same note, as:

This is "chromatic":

C: G Gb

This isn't:

C: G F

This is "chromatic":

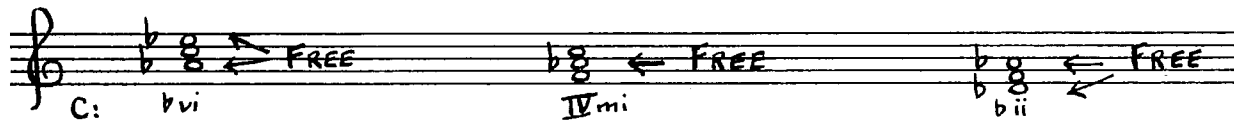
C: F F#

This isn't:

C: F G

Certain formulas of a "chromatic" nature have become part of the general use of modal chords (e.g: "ii - bii - I", "ii - ii^{b5} - V", etc.) and these will be noted. But, while there is nothing *wrong* about chromatic movements, chromaticism is a different technique and its quality is not consistent with the **Modal Scales**.

Certainly the Modal alterations, if used *modally* (i.e., in a manner consistent with the diatonic mode from which they are derived) are under no obligation to "resolve", unless they are *harmonically dissonant*, as:



BUT:

These are NOT *free*, and are obligated to "resolve", NOT because they are Modal variants but because they are harmonically dissonant!

However, if a Modal variant is used in a "chromatic" manner, it will take on a **chromatic tendency**, as:

The "chromatic" use leads to a linear motivation in the Ab! (and it requires *resolution*). The harmony has become "chromatic" rather than "modal".

Undoubtedly, the Modal variants in Major do exhibit a *downward tendency* because they are "flat-
ted" notes. But they are under no obligation to resolve downward unless they are "harmonically"
dissonant, or unless they are used chromatically.

COMPARE:

No objection!

Chromatic use.
Less effective, Less Modal,
less logical.

3. CROSS RELATION

"Cross relation" is the use of an altered note immediately preceding or immediately following the unaltered form of the **SAME NOTE** in a **DIFFERENT PART**, as:



(Cross relation)

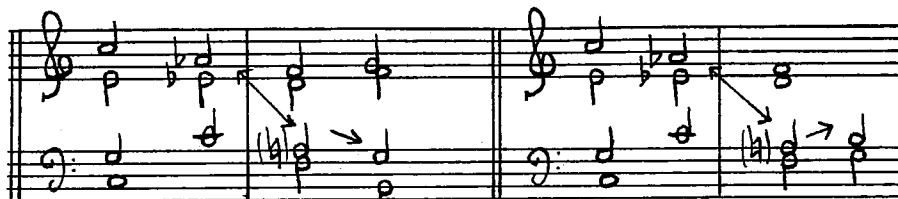
Hard and fast rules governing cross relation are impossible to formulate. But its danger lies in its "emphasis", which can work against the best interests of smoothness and logical flow. (Although there are times when such emphasis can be attractive!)

In any case, cross relation resulting from the appearance of the modally altered note AFTER the diatonic version in another part is usually inoffensive. If the Modal variant is *followed* by the original diatonic note in a different part, however, the result may be uncomfortable. To illustrate:



C: I - bvi - ii^b
Cross Relation

Even this could turn out all right if the subsequent voice leading carried a logical justification for it, as:



C: I - bvi - ii^b - V^b(7) C: I - bvi - ii^b - V⁷

Awkward,
illogical!
(Better as "Ab - ii^{b5}")

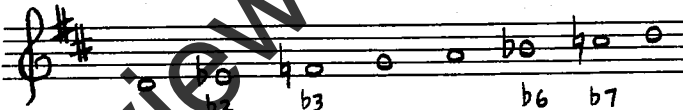
ALL RIGHT!*

*The natural "A" which is causing the cross relation is also serving a subsequently logical voice leading purpose (in the manner of the Dorian 6th in Minor).

ASSIGNMENT 41 (Preparatory Exercises to "Mixed Modes")

- Write the five "Tonal Modes", with correct key signatures, in a few keys.
- Using the Ionian signature, write the five Tonal Modes in a few keys, employing "accidentals" as necessary.

Example: (D Phrygian with D Ionian signature)



- Write the triads on each degree of the scales in Exercises 1 and 2.
- Using the Ionian signature, write the 19 triads available through the Mixed Mode system in a number of keys. Indicate the Mode or Modes from which each triad is derived, and "figure" each chord (i.e.: "ii^{b5}", "bii", etc).
- With the "Mixed Mode technique", what are the available:

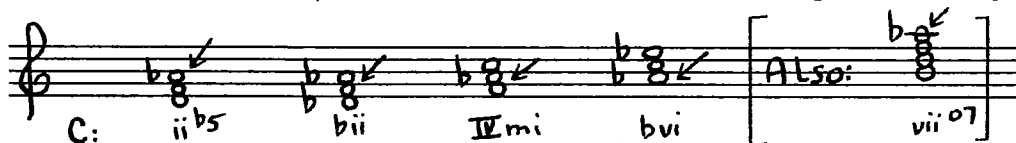
ii chords in G?
iii chords in A^b?
IV chords in D?
V chords in E?
vi chords in B^b?
vii chords in A?
I chords in F?

(Create more of these as necessary)

6. Examine as much music as possible with the aim of locating Mixed Mode chords in Major. The songs of Cole Porter and lead sheets of jazz "heads" should be particularly rewarding.
7. **The ear:** Become familiar with the **Modal Variants**. At the piano, play a "I" chord (major) and follow it with each of the Mixed Mode chords. Example:

I - \flat ii	(C: C - D \flat)	
I - \flat vi	(C: C - A \flat)	
I - \flat vii \flat ³	(C: C - B \flat mi)	
I - \flat iii	(C: C - E \flat)	etc., etc.

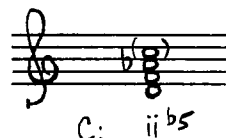
The most frequently used Mixed Mode chords in major are those which contain the **Minor Submediant** - a note which, as has been observed earlier, seems to hold a fascination for composers in many idioms. These chords are:



and the following text will begin with a comprehensive examination of these chords.

II. THE MODAL ii CHORDS

A. "ii \flat ⁵":



Quality: Diminished, dissonant, romantic.

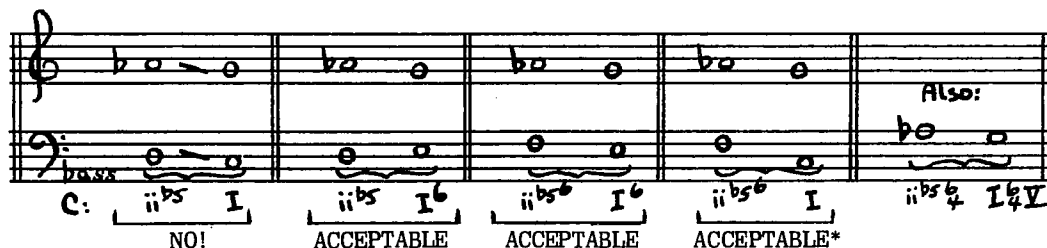
Doubled note: 3rd preferable, root acceptable. Never Double Diminished 5th.

Available 7th: Minor 7th, creating a "Mi \flat ⁷⁵" chord (ϕ 7).

Preferred position: 1st inversion (tonal note in the bass), and the 2nd inversion (Dim. 5th in the bass) are fine. The root position is available but is sometimes less satisfactory.

Function: Mainly "subdominant", that is, the same function as the unaltered ii chord. It moves well to "V" or to "I \flat ⁶ - V". The movement of ii \flat ⁵ to V in major operates with exactly the same considerations as "ii - V" in minor. Refer to the text dealing with this movement in Chapter VIII, Volume I.

Further, ii \flat ⁵ moves well to I with the quality of an "altered Plagal cadence". It can be used in a fully cadential manner and also receives use as an elaboration of the tonic chord, as: |I - ii \flat ⁵ - |I ||. Care must be taken to resolve the chord without grammatical errors; both chords cannot be in root position. To illustrate:



*Here the result is almost identical to "IVmi - I".

Also, particularly in "popular" harmony, it can receive a "chromatic" use, *between* the the diatonic ii and V, or between the diatonic ii and I, as:

Finally, ii^{b5} will move well to bi^{iii} , in the sense of "vii of bi^{iii} ", or to anywhere else consistent with logical voice leading and resolution.

Addendum: A "passing 7th" on I, between the tonic and the MINOR SUBMEDIANT, will be a "MINOR 7TH", to avoid awkward voice leading. This Minor 7th on I is the "MIXO-LYDIAN 7TH". To illustrate:

ASSIGNMENT 42 (ii^{b5})

(DRILL)

1. Work out the following short patterns for four parts, within the present limits. Try for a fragment of music, rather than just a succession of chords. Choice of inversion is yours, except where otherwise indicated.

2. Soprano and bass are given. Add the inner parts.

3. Soprano is given. Complete for four parts, noting the use of "ii^{b5}":

(A)

F: I - ii^{b5} - I vi ii^{b5} V I - ii^{b5} V+ I

(B) (See Sample Solutions page 293.)

G: ii^{b5} - ii^{b5} - V - vi ii^{b5} I^b V I

4. Bass is given. Add the upper parts, using a few eighth notes.

C: I ii^{b5}? ii^{b5}^b I^b V IV^b? OR I^b V

B. "bii" (called the "Neapolitan Chord"):

C: bii C minor: bii

Derivation: The PHRYGIAN MODE ONLY. (This is true of all Modal chords which contain the flatted supertonic.)

Doubled note: Any - but the 3rd (tonal note) is the preferred double

Available 7th: MAJOR 7th.

Quality: Consonant but rich. A strong suggestion of the warm Phrygian character.

One particular form of bii enjoyed wide use in Classical and Romantic harmony: the "Neapolitan 6th" (abbreviated "N⁶"). This is the bii chord in 1st inversion:

C: N⁶ C minor: N⁶

"N⁶" is usually used in the Subdominant Function, proceeding to V or to I₄⁶ - V. The movement of N⁶ to V is often characterized by the unusual interval "leap" of a Diminished 3rd, from the flat supertonic down to the leading tone:

C: N⁶ V

Examples: (N⁶ - V⁷)

C: N⁶ V⁷ C minor: N⁶ V⁷ C: N⁶ V⁷

*Note Diminished 3rd leap "covered" with passing 7th.

In the preceding examples the 5th of V is omitted, thus avoiding the cross relation between the flat supertonic in N^6 and the normal supertonic in V. However, writers *have* used this particular cross relation, apparently not being disturbed by it:

C: N^6 V^2 C: N^6 $V^{b(7)}$

Here is an example of N^6 proceeding to I_4^6 - V. No cross relation will occur, and the diminished 3rd leap is no longer present:

C: N^6 I_4^6 V

Furthermore, since N^6 is a consonant chord it may move to any other destination consistent with logical voice leading. For instance, it can move to I or to I_4^6 , with a Plagal feeling:

C: N^6 I Cmi: N^6 I_4^6

The bii chord may be used in root position; in which case it isn't " N^6 ", of course, but simply the Neapolitan chord. From root position it may move (in the Subdominant Function) to V, as:

C: bii V^* bii V^{b6} bii V^2

(satisfactory resolution of the Augmented 4th)

It may also slide directly into I, with a *Dominant Function* feeling. The " bii - I" movement may be used cadentially. The parallel 5ths inherent in this movement are "stylistic" parallel 5ths (i.e., consistent with the "style" of the progression). They may be used, but are best confined to the *two bottom parts ONLY*:

C or Cmi: bii I

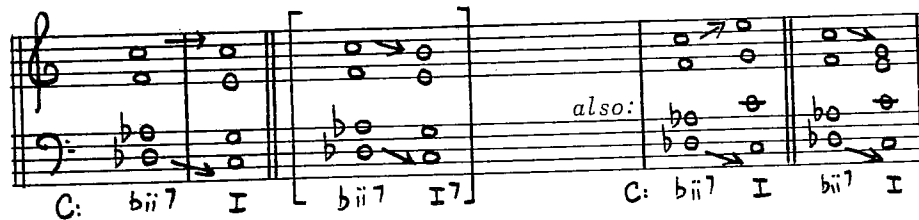
Further, the MAJOR 7TH of bii may resolve passively, in a " bii - I" progression, provided it stands above the root. We have encountered this "passive" resolution of a Major 7th in the " vi^7 - V" movement in Minor. This one is allowable for the same reason: The ROOT can be heard as, and regarded as, Dissonant; the Major 7th as Consonant. To illustrate:

Stable Tonic: CONSONANT! or, of course: DISSONANT

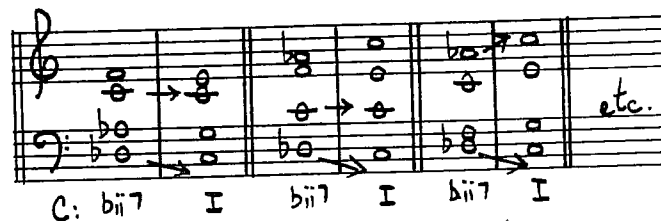
Unstable "flatted" Supertonic: DISSONANT! CONSONANT

C: bii^7 C: bii^7

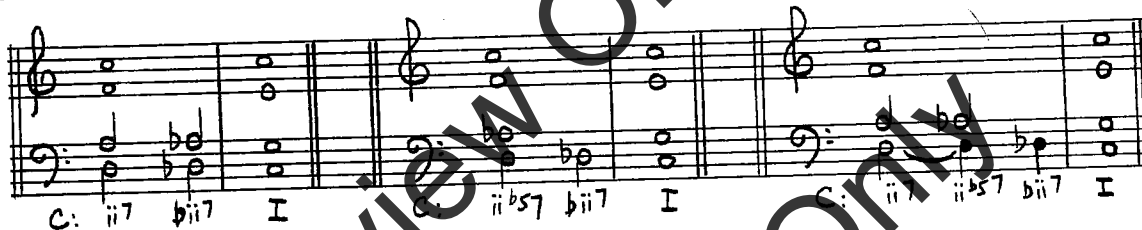
The Major 7th will likely occur in the soprano, in a formula the essence of which is:



But other disposition of the parts is available, provided the Major 7th stands above the root:



The bii chord may itself be preceded by ii , by ii^{b5} , or by $ii - ii^{b5}$. This is one of the "chromatic" formulas earlier referred to, and brings into play certain movements which are new to this text, and warrants examination:

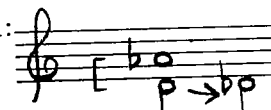


In the above, note: 1. "Stylistic" chromatic parallel 5ths: (Bass and Tenor only)

2. "Chromatic" resolution of Minor 7th interval:



3. "Chromatic" resolution of Diminished 5th interval:



These chromatic resolutions are acceptable since they do not involve an ACTUAL CHANGE of scale degree; the scale degree just CHANGES FORM!

The type of progression represented by these examples of " $bii - I$ " and " $ii - bii - I$ " are, as the alert listener will have noted, rather "sectional" in sound. They lack the strength and balance of part writing and are more idiomatic to sectional contexts than they are to part writing.

The text to this point has discussed the movement of bii to V or to I . However, bii is a Major Consonant Chord and, in theory at least, may move anywhere. When the 7th is used, its destinations will be limited by the necessity for resolution.

ASSIGNMENT 43 (bii)

1. (Drill) Write: $|N^6 - V - ||$ and $|N^6 - I_4^6 V ||$ in a few major and minor keys.
2. Soprano is given. Complete for four parts using only the presently available resources, taking note of the use of " N^6 ":

(A)

3. Work the following for four parts, perhaps using a few eighth notes.

(A)

Gmi: I - vi - N⁶ - ^{PR}V - I - I

(B)

A: I IV₆ I - N⁶ I₆ V - I - I

4. (Drill) Work out the cadential formula: $\text{||i} - \text{bii} - \text{|| I} \text{——— ||}$ varying it with:
 $\text{||i}^{\text{b5}} - \text{bii} - \text{|| I} \text{——— ||}$ and $\text{||i} - \text{ii}^{\text{b5}} - \text{bii} \text{|| I} \text{——— ||}$ in a few major keys. Use root positions and use the 7th on the ii, ii^{b5} , and bii chords - likely in the soprano. This is a *formula* and does not allow much deviation from standard voicing.

5. Soprano is given. Complete for four parts:

(See Sample Solutions page 293.)

C: bii V I₄ V I - ii bii I vi ? ? I

6. Progression suggested. Work out for four parts. Stay within the present limits, but endeavor to exploit ALL of the present resources.

TWO EXAMPLES: a. No eighth notes
b. Some eighth notes

Example 1: Eb ii - ? - I - vi - ? - V I₄ V I - ? -

Example 2: I - ii OR ii^{b5} OR bii I - iii - IV - ii OR ii^{b5} OR bii I

III. THE MODAL IV CHORDS

A. "IVmi"

Structure:

C: IVmi IVmi⁷

Derivation: Aeolian and Phrygian modes

This chord has been introduced earlier, and there is very little more to say about it. It occurs frequently in the "Altered Plagal Cadence" formula and, of course, can perform its Subdominant Function, leading to V, I₄⁶ - V, or vii. When the Minor 7th is used, it is subject to those principles governing the resolution of Minor 7ths.

B. Also:

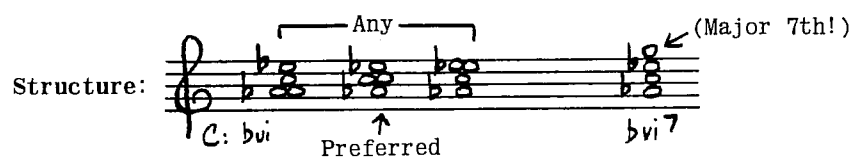
C: IVmi^{ma7}

This chord is generally attributed to the "Harmonic Major" scale and was mentioned in Chapter I, Volume I under "Scales Concluded". It is a structure which is not uncommon in "popular" harmony, and the Major 7th is usually in the melody. (Many of the popular songs that begin with the "IV - IVmi - I" formula use the major 7th melodically on the IVmi chord.)



This is the IV⁷ chord from the Dorian mode (two flats in the key of C). It is entirely available, subject only to the proper resolution of the Minor 7th. (Bars five and six of the "Blues" progression employ this chord, where it resolves back to "I". This is a matter of re-interpreting the Minor 7th (Eb) as an Augmented 6th (D#). The Augmented 6th chords are examined in the next chapter.)

IV. THE "bvi" CHORD

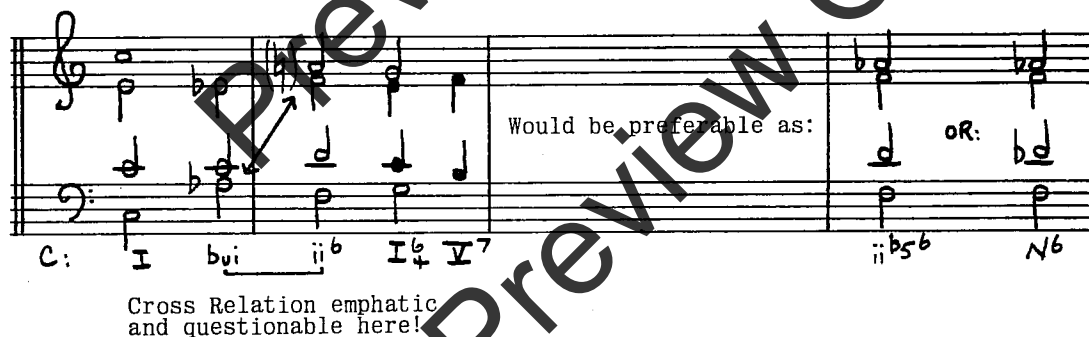


Derivation: Aeolian and Phrygian modes.

Quality: A "richness" that belies its major construction. (Note the difference between the sound and expressiveness of a "I" chord in Ab and a "bvi" chord in C major!) This chord represents a more drastic change from the major tonality, because it contains, along with the minor submediant, the minor mediant, which is the chief difference between major and minor keys.

Functions: Pretty much the same as vi in minor, i.e.:

1. To precede ii. In this case it is likely that "ii^{b5}" or "bii" will be more satisfactory than the diatonic, unaltered, ii chord. The diatonic ii chord will produce a cross relation between the minor submediant in bvi and the major submediant of ii. As always, of course, such cross relation *could* be justified with the subsequent voice leading. Examine:



Cross Relation justified here. The major submediant is subsequently used in the manner of the "Dorian 6th".

Care should be taken with the bass in a " $\flat vi - ii$ " (or $ii^{\flat 5}$) movement. Root position of both chords will produce awkwardness, as:

The diagram shows a bass line with two groups of chords. The first group, labeled "AWKWARD", contains the chords $\flat vi$ and ii in root position. Above the first chord is a handwritten "DIM 5" and above the second is "AUG 4". The second group, labeled "BETTER", shows the same chords with altered bass notes to avoid awkwardness: $\flat vi$ with a $\flat 5$ in the bass, and ii with a $\flat 5$ in the bass. The notation includes notes on a staff and chord symbols below.

- " $\flat vi$ " will proceed well, by Primary progression, to the Subdominant harmony. The " $IVmi$ " will likely be preferable, since the straight IV chord will produce the "minor submediant - major submediant" cross relation discussed in point 1.
- " $\flat vi$ " can proceed directly, in the Subdominant Function, to V or to $I^{\flat 6}_4 - V$. In the " $\flat vi - V$ " progression, the half tone parallel 5ths can be regarded as "Stylistic", but should be used between the two bottom parts only. Further, the use of a passive resolution, or even a free treatment of the Major 7th of $\flat vi$ is available (provided it stands above the root). Note the example:

The example shows a musical progression in C major: I (C major) to $\flat vi^7$ (E-flat major 7) to V (G major) to V' (G major) to I^7 (C major 7). The notation includes a treble and bass staff with notes and chord symbols below.

(It should be noted that the passive resolution of a Major 7th is traditionally restricted to only the progressions " $\flat ii - I$ " and " $\flat vi - V$ ".)

The student is requested to supplement these notes with a review of the text on the "vi chord in Minor" in Chapter VIII, Volume I, Modern Harmonic Technique.

- " $\flat vi - I$ " is a possibility. Although *Secondary*, there is a marked contrast between the chords since two notes change. But the movement is usually used as an elaboration of the tonic harmony, with a use of " $\flat vi^6$ " rather than root position. It can be used as an effective Interrupted Cadence:

The example shows a musical progression in C major: V^7 (G major 7) to $\flat vi^6$ (E-flat major 6) to I (C major). A handwritten "D# Implication" points to the D# note in the $\flat vi^6$ chord. The notation includes a treble and bass staff with notes and chord symbols below.

(Similar to the Appoggiatura $IVmi^{\flat 6}_4$.)

or as a means of "developing" what is essentially a sustained tonic chord:

The example shows a musical progression in C major: I (C major) to $\flat vi^6$ (E-flat major 6) to I (C major). A handwritten "D#?" points to the D# note in the $\flat vi^6$ chord. The notation includes a treble and bass staff with notes and chord symbols below.

(Similar to the Pedal $IVmi^{\flat 6}_4$.)

- Finally, " $\flat vi$ " may be used in any other manner consistent with logical voice leading.

ASSIGNMENT 44 (Modal IV and bvi Chords)

(DRILL)

1. Work out the following short progressions for four parts, aiming for a musical result. Choose varying major keys, and use a few eighth notes in some:

(A) (B)

I - bvi - ii^bs - I⁶₄ V I I bvi - V - I - bvi⁶ - I

Elaboration of tonic harmony.
Use sustained tonic in soprano
and bass.

(C) (D)

I - IV_{mi} V bvi^6 - I -
OR
Dor. IV "Interrupted cadence"
Use sustained tonic
in soprano and bass.

I - bvi - bii ($N_6?$) $\text{I}_4^{\flat}\text{V}$ bvi - $\text{IV}_m \text{vii}^\circ 7$ I

(E)

I - bvi - ii - V - I

Handle cross relation logically.

2. Soprano is given. Complete for four parts, within the present limits.

[illegible]

② (See Sample Solutions page 294.)

G: I Subdom. Dom. I - bvi V I ? bvi ? I
Funct. Funct. f f

3. Progression is suggested. Work for four parts, using a few eighth notes.

Handwritten musical notation on a staff with a key signature of two flats (Bb, Eb) and a 4/4 time signature. The notation includes various Roman numeral chords and accidentals, with some parts underlined and labeled as "UNUSUAL" and "(or Elaborate)".

Handwritten musical notation on a staff with a key signature of two flats (Bb, Eb) and a 4/4 time signature. The notation includes various Roman numeral chords and accidentals, with some parts underlined and labeled as "UNUSUAL" and "(or Elaborate)".

V. THE MODAL V CHORDS

A. "Vmi"

Structure:

C:Vmi

Derivation: Mixo-Lydian, Dorian, Aeolian

Quality: Somber. Retains the "root tendency" of the Dominant, but has less energy than the *Tonal V*.

Uses:

1. For the specific quality of a "Modal Cadence". Compare:

C: ii ii^{b5} V I

Normal cadential energy

C: ii ii^{b5} Vmi I

Passive dignified, primitive

OR:

C: I IV^{b6} Vmi V I

"Modal-Tonal" Cadence

2. For voice leading purposes. The 3rd of Vmi (the *Subtonic*) enjoys more freedom than does the leading tone:

C: I V bvi I Vmi bvi

NO — but — GOOD

bii V I bii Vmi I bii Vmi V I

GENERALLY NO — but — GOOD

3. Any other use consistent with logical voice leading.

B. The Phrygian V (V^0)

Structure:

C: Phr.V Likely Possible NO! 7th (Gmi $7b5$ or $G\sharp7$)
 (The root here is considered consonant.)

Derivation: Phrygian mode only

Quality: Rich, romantic, dissonant

Uses:

1. Cadentially. (This, surprisingly, is very infrequently encountered.) Examine the examples, and note that the Diminished 5th (the flatted supertonic) resolves down to the tonic. The root is free to leap.

C: Phr.V I Phr.V $\frac{6}{4}$ I Phr.V I

C: I PHR.V 2 I ii PHR.V $\frac{6}{4}$ I

(Note the "Spanish" flavor common to chords which contain the Phrygian supertonic.)

2. To lead to bvi , in the sense of "vii of bvi ".

C: PHR.V bvi PHR.V bvi PHR.V $\frac{6}{4}$ $IVmi \frac{6}{4}$ I
 [vii of bvi] ("Interrupted Cadence")

3. In any other use consistent with logical voice leading.

ASSIGNMENT 45 (Modal V Chords)

(Drill)

1. Work out each of the following short patterns for four parts, in various major keys. Do a couple of examples for each, always aiming for a musical result:

(A) Subdominant Function - Vmi - | I (B) Subdominant Function - Vmi Vma | I (C) I - Phrygian V - | I ||

(D) Subdominant Function - Phrygian V - | bvi - Subdom. Function Phrygian V - | I ||

2. Soprano is given. Complete for four parts, noting the use of Modal V chords.

(A)

(The above melody is entirely PHRYGIAN, and the passage can be done with only Phrygian harmonies (5 flats) by using Phrygian V and Imi.)

(B)

(The above is a Mixed Mode melody)

(C) (See Sample Solutions page 294)

(The above is entirely Phrygian melody, except for the final "Tierce de Picardie".)

3. The Progression is suggested. Work out for four parts, without any eighth notes.

VI. THE MODAL *vii* CHORDS

A. "*bvii*"

Structure:

C: *bvii* Less regular

Mixo-Lydian
Dorian
Aeolian

Mixo-Lydian
Aeolian
Dorian

MINOR and MAJOR 7THS available!

The Minor 7th, the familiar minor submediant, is the more common because of its marked downward tendency and its warm character. But the Major 7th on this chord has a charm which should not be overlooked. Its "sharp dissonance" contrasts effectively with the color of the triad.

Quality: Somber, primitive

Uses:

1. To "I", by Primary movement. It can be used cadentially. Similar to all *step* progressions, parallels are a hazard. Examine the examples:

C: I *bvii*⁶ I I *bvii*⁶ I⁶

(intentional doubled 3rd)

C: I IV^{mi} *bvii* I I *bvii* I

Heavy, primitive quality.
COULD be "Stylistically" acceptable.

2. To V (Primary root movement)

"Short score" examples:

C: *bvii*⁷ V⁶ *bvii* V

(Chromatic)

C: *bvii* [or 4^o] *bvii* [or 4^o] V

(Chromatic)

3. To *biii*. In this case the Minor 7th is more likely, in the sense of "V⁷ of *biii*".

Example:

C: I *bvii* *biii*⁶

(V of *biii*?)

4. In any other use consistent with logical voice leading.

B. "bvii^{b3}" (The Phrygian vii)

Structure:

C: bvii^{b3} Less regular

Derivation: Phrygian mode only.

Quality: Deep, rich, distinctly Phrygian.

Uses:

1. To I, even cadentially. Examine:

C: I bvii^{b3} I I I N⁶ bvii^{b3} I etc.

2. To V (Primary movement).

"Short score" examples:

C: bvii^{b3} PHR. V⁶⁽⁷⁾ bvii^{b3} V⁶⁽⁷⁾ bvii^{b3} vii^{o7} etc.

(Chromatic) (Chromatic)

3. To biii (Primary movement).

C: I bvii^{b3} biii etc.

4. Any other logical use.

ASSIGNMENT 46 (The Modal vii Chords)

(DRILL)

1. Work each of the following short patterns for four parts in various major keys. (Musical!)

(A) (B)

I - bvii - I I - bvii^{b3} - I

NOT NECESSARILY CADENTIAL

(C) (D)

I - ? bvii - I I - ? bvii^{b3} - I

ASSUME TO BE CADENTIAL

(E)

I - ? - bvii - V (of some sort) I I

OR I^b V

(F)

I - ? - bvii^{b3} - V (of some sort) I I

OR I^b V

2. Soprano is given. Complete for four parts noting use of the Modal vii chords:

(A)

(B) (See Sample Solutions page 294.)

3. Progression is suggested. Work for four parts, using few, if any eighth notes.

VII. THE biii CHORD

Structure:

ANY

PREFERRED

MAJOR and MINOR 7THS available

"biii" is a Major, Consonant chord, so that there are no specific restrictions on it. As with most chords, it is likely to move by Primary root movement, as:

biii - IV or IVmi (up 2)
 biii - bvi (up 4)
 biii - I (down 3) See notes below.

The Minor 7th added to it, from Phrygian, creates a structure that will most logically resolve on to bvi, in the sense of "V⁷ of bvi", as:

KEY of C: E^{b7} - Ab
 biii - bvi
 or "V⁷ of bvi" - bvi

Uses:

1. The use of "biii - I", even cadentially, is available. However (just as with "iii - I" in Major and "iii - I" in Minor), the 1st inversion of biii is most likely in this usage, because of the resulting "dominant - tonic" bass. Note the examples:

C: ii^{b5}(7) biii⁶ I C: I biii² [P.H.R.] I Imi⁶ biii⁶ I

2. Further, biii may be used in any other manner consistent with logical voice leading.

VIII. THE MODAL I CHORDS

A. The Mixo-Lydian I⁷ Chord

Structure: ← "Mixo-Lydian 7th"

C: I⁷ (Mixo-Lydian)

Uses:

1. Throughout the exercise material in this chapter, a "passing" Mixo-Lydian 7th has been used on the I chord to pass from the tonic down to the Minor Submediant, as:

instead of.

* → Aug. 2

2. Further, the Mixo-Lydian I⁷ is widely used as "V of IV":

C: I Imi⁷ → IV

[V of IV]

3. It can be used as a I chord in the body of a passage or even, exceptionally, as the opening "I" chord. (See: "What Is This Thing Called Love?", "Sweet and Lovely")

C: I² ii^{b5} V⁷ I² bvi I⁶ V⁷ I

(Mixo-Lydian) (Mixo-Lydian)

4. Its use as a FINAL tonic harmony is not entirely unknown to classical literature. Jazz, particularly in the "blues" idiom, makes frequent use of it, often with 9th, 11th, and 13th extensions.

B. "Imi" (I^{b3})

Structure:

C: Imi

Irregular

From Harmonic and Melodic ascending Minor.

Derivation: All of the Minor modes.

Uses:

1. For voice leading, particularly where it is desirable or necessary to lead the 3rd of I down to the Phrygian 2nd, as:

C: ii6(7) V \rightarrow *Imib buiib3b PHRV I

C: Imi PHRV

*(E natural would be poor in these situations.)

2. Simply for "effect" - in the manner, perhaps, of a reverse "Tierce de Picardie".

C: I V Imi Imi V I

*(No functional reason, merely a change of mood.)

3. Chromatically. At the opening of this chapter, it was stated that *chromatic* use of Modal material is NOT true "Modal" use. This is so, but the text has shown a number of chromatic uses which have become standard with the Modal chords. The following movement is clearly another of these: (See "The Lady is a Tramp")

C: I Imi ii? V?

C: I Imi ii6(7)

"Practical" parallel 5ths.

ASSIGNMENT 47 (biii, Imi, etc.)

1. (Drill)

a. Work out a few cadences, using "biii" in a *dominant* sense, such as:

|| Subdominant - biii* - | I ||
Function
*(likely biii⁶; perhaps Imi⁶₄ biii⁶)

b. Write a few examples of the following formula, which uses "Imi" chromatically:

|| I - Imi - | ii
OR
V (V⁶₄ if the 3rd of Imi is in the bass)

2. Soprano is given. Complete for four parts.

(A)

(If "Imi" used in above, the whole passage can be Phrygian, since the soprano is a Phrygian melody.)

(B)

3. Soprano and bass are given. Add the inner parts. (See Sample Solutions page 295.)

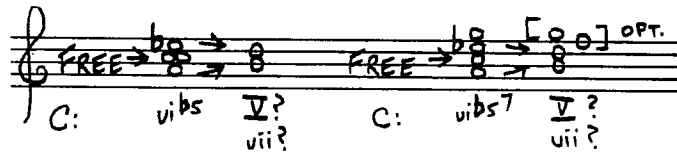
IX. THE DORIAN vi CHORD (vi^{b5})

Structure:

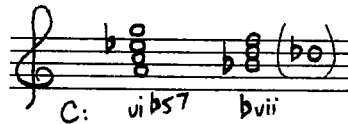
Derivation: Dorian mode only.

Uses:

1. The reader is requested to refer back to the notes on the Dorian vi chord in Chapter VIII, Volume I. He will note that it is a dissonant diminished chord, and is most often used in a *Subdominant Function*, resolving to V or to vii as:



2. It will move well to bvii, in the sense of "vii of bvii":



3. It also makes an interesting variant for the regular vi, in the familiar "vi - ii" progression. The Diminished 5ths will resolve; the root can be regarded as free:



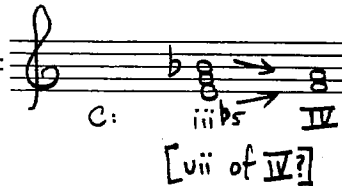
X. THE MIXO-LYDIAN iii CHORD (iii b5)



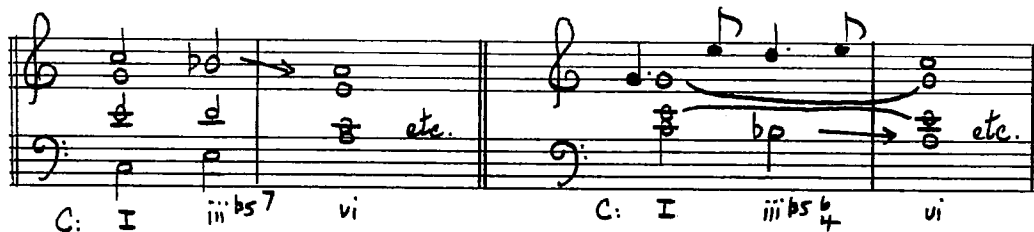
Derivation: Mixo-Lydian mode only.

Uses:

1. This chord appears to find its chief use as "vii of IV":



2. It can also resolve on to vi, as:



3. It can resolve to anywhere else (in a phrase that should by now be familiar) consistent with logical voice leading.

CONCLUDING REMARKS

Remember that the *voicing of a chord can affect its possibilities for progression*. It is quite possible for a particular chord movement to be theoretically correct, but not practical because of the position of the voices.

Remember that the *resolution of dissonance is the important thing* (even though, through "transference", such resolution may be in a different part). A consonant chord, or the consonant notes in a dissonant chord, may move with freedom as long as no grammatical errors or awkward leaps occur, and as long as there is sufficient contrast over the bar line. So, for instance, while an "Fmi triad" in the key of C is likely to move to V or to I, it *can move anywhere*; but the possible destinations of an "Fmi⁷" are limited by the obligation to resolve the 7th.

It is worth noting that passages which employ a rich Mixed Mode technique, using chords such as $\flat vi$, $\flat ii$, $\flat iii$, $\flat vii$, etc., have an innate richness of texture, a "density" that often lends itself well to triadic harmony. The 7ths are perhaps not as important as they are in more diatonic passages.

Finally, it can do no harm to reiterate the three points noted at the beginning, under **GENERAL HAZARDS**:

1. Avoid awkwardness in the voice leading.
2. Avoid cross relation, where it is awkward or illogical.
3. Avoid an over use of chromaticism.

ASSIGNMENT 48 (Dorian $\flat vi$, Mixo-Lydian $\flat iii$, and "Summing up")

(DRILL)

1. In a number of Major keys, write sufficient examples of:

(A) (B) (C) [sense of "vii of $\flat vii$ "]

DOR. $\flat vi$ - V - DOR. $\flat vi$ - $\flat vi^{\circ}$ - DOR. $\flat vi$ - $\flat vii$ [or $\flat vii^{\circ}$ b3]

Experiment with different "positions"

(D) (E)

I - DOR. $\flat vi$ - ii - DOM. - I I MIXO-LYDIAN - IV - DOM. - I

FUNCT. FUNCT.

2. Soprano is given. Complete for four parts.

(A)

G: I DOR. $\flat vi$ - ? - I MIXO-LYDIAN IV V (of some sort) I

[iii b5]

(B)

F: I - ? - ? - ? - I - $\flat vii$ - ? - I $\flat V$

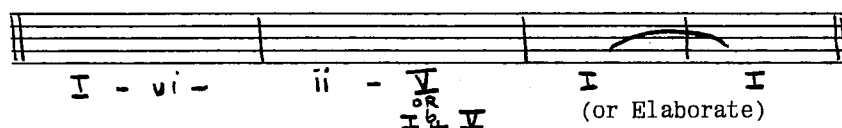
[1 or 2 chords]

I - DOR. $\flat vi$ - ? I - ? ? I (or Elaborate)

OR ?

26

3. (Summing up) Take the familiar progression: (See Sample Solutions page 295.)

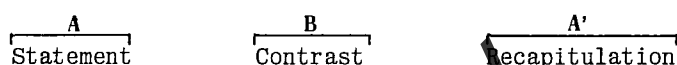


and give six or seven versions of it, employing the diatonic forms of the chords, and the Modal Variants, as:

I Mixo-Lydian I - I mi	vi - b vi - Dorian vi	ii - ii ^{b5} - b ii	V - V mi - Phrygian V
Tonic possibilities	Submediant possibilities	Supertonic possibilities	Dominant possibilities

Work out an entirely *diatonic* version first and aim to use ESSENTIALLY the same soprano in each case, varying it *modally* as required by the Modally varied chords.

4. (Summing up) Compose a short (approximately 24 bars) "Prelude" in Ternary Form. "Ternary" is a three part form reading:



Follow this general plan:

A	B	A'
Calm, serene, no eighth notes. Slow moving harmony, certainly no more than two chords per bar, and perhaps only one chord per bar, or one chord per two bars.	"Busier", using some eighth notes. Somewhat more harmony.	Similar to first A, but not identical. Use more or less the same soprano line however, adjusted so that it will reach a perfect cadence in either the last or second last bar. Not as busy as B, but can be a little busier than the first A.

The suggested 24 bar length (8 bars per sentence) is variable. For instance, the B. section could be either shorter or longer; the first A. could have a short introductory passage; the final A. could be extended with a short *codetta*. (Forms are always general rather than specific; even the popular song form shows diversity.) In any case, provide for a climax (high point) either towards the end of B. or near the beginning of the second A.

The technical purpose of this assignment is the review and exploitation of the **Mixed Mode** technique. It may not be practical to USE all of the chords available with this process, but at least CONSIDER all of them.

Chapter 2

THE AUGMENTED 6TH GROUP

INTRODUCTORY

The Augmented 6th chords are *chromatic* in nature. They involve the chromatic lowering or raising of diatonic notes for the purpose of procuring half tone "leading" intervals into the notes of the destination chord. Therefore, this chapter could be regarded as an "Introduction to Chromatic Harmony", but a full survey of chromaticism will not be undertaken until a later point in the text. To a degree than, this area of the study is out of logical order. The reasons for introducing the Augmented 6th chords here are:

1. Although chromatic in origin, these chords have become almost "scale" chords through common usage. They do not suggest any real diversion from the diatonic and modal relationships but, rather, fit quite comfortably into the scale chord family.
2. They have an obvious relationship, in structure and sound, to the Mixed Mode harmonies.
3. They offer further resources to which can be applied the "Melodic Inharmonics" (the next area of this text).

In MAJOR, the Augmented 6th chords are found in three places - on $\flat ii$, IV, and $\flat vi$. There is significance in the fact that the Augmented 6th itself resolves, in each of these cases, to the relatively conclusive notes of the scale: the tonic, mediant, and dominant (i.e., the notes of the tonic triad). Observe:

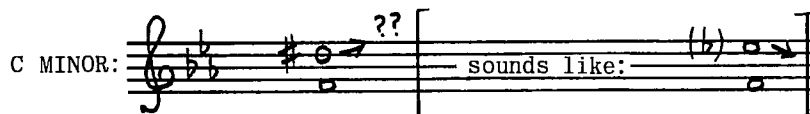


*Note the appearance of chromatic tones. These notes are derived from the chromatic scale of C.

In MINOR, Augmented 6th chords are found in only *two* places - on $\flat ii$ and on vi :



There is no "IV $^+6$ " in minor, because there is no Major Mediant. An Augmented 6th chord on IV in minor will simply sound like "IV 7 ". Observe:



An Augmented 6th chord has three basic forms, each of which has a root, a 3rd and an Augmented 6th. The differences occur in the "5th" or the note used as the 5th. Each of the three forms is designated with a "Geographical" name: (The examples are given on the note "C" - not in the key of C.)

ITALIAN	GERMAN	FRENCH
NO 5TH	PERFECT 5TH	AUGMENTED 4TH
	(or, in one specific instance which will be examined - DOUBLY AUGMENTED 4TH)	(instead of a 5th)

The Italian form is rarely, if ever, used when more than three parts are available.

Perfect 5th Enharmonic Doubly Aug. 4th Aug. 4th

Here are the Augmented 6th chords as they are found in their basic forms in Major and Minor:

C MAJOR: bii^{+6} IV^{+6}

[Italian] German French [It.] Ger. Fr.

bvi^{+6} [It.] *Ger. Fr.

*The two notations for the German form are found only in bvi^{+6} in Major. The choice depends only on the destination of the note.

C MINOR: bii^{+6} (No IV^{+6} in minor)

[It.] Ger. Fr.

vi^{+6} [It.] Ger. Fr.

The Augmented 6th chords are *enharmonically* similar to "Dominant 7th" chords, as:

C^{+6} = C^7

ENHARMONIC EQUIVALENTS

In the symbol system, they are invariably called "7" chords, as:

Symbols: C^7 C^7b5

Further, on piano sheet music and similar areas, it is not uncommon to find them actually erroneously written as "7" chords.

The use of the "7" symbol is unfortunate; but directing a guitar or piano player to play, for instance, a "D⁺⁶," would likely lead to no good end. The 7th symbol is simpler, and from a purely vertical point of view, in equal temperament produces the same arrangement of vibration frequencies. BUT: an *Augmented 6th* chord does not:

LOOK LIKE,
SOUND LIKE,
or ACT LIKE

a 7th chord. In later practical work, when the *symbol system* is used, the 7th symbol will be employed. For the present, they must be written as, and called, **Augmented 6th chords**.

ASSIGNMENT 49 (Preparatory Exercises to "Augmented 6th Group")

1. In ten Major keys write: bii^{+6} German and French
IV⁺⁶ German and French
 bvi^{+6} German (two forms) and French

Example (Key of C):

Ger. Fr. Ger. Fr. Ger. Fr.

bii^{+6} IV⁺⁶ bvi^{+6}

2. In ten Minor keys write: bii^{+6} German and French
vi⁺⁶ German and French

Example (Key Cmi):

Ger. Fr. Ger. Fr.

bii^{+6} vi⁺⁶

3. Examine music for examples of the use of Augmented 6th chords. Particularly look for "7th" or "9th" symbols which are really "Augmented 6th" chords.

I. THE " bii^{+6} " CHORD

A. Basic Forms

IN C MAJOR: IN C MINOR:

It. Ger. Fr. It. Ger. Fr.

*(Italian form is not required with four parts.)

" bii^{+6} " is entirely a **Dominant Function** chord. It resolves, cadentially or otherwise, to the tonic chord. In fact, it is often termed the **Substitute Dominant**. All forms of it contain the tonal tritone:

MAJOR: MINOR: Ger. Fr. Ger. Fr.

It joins, then, the other two cadential *tritone* chords, "V" and "vii", with a comparison as follows:

V - I	--	Clear, strong, classic
vii - I	--	Lighter
bii ⁺⁶ - I	--	Heavier, more chromatic

If the instructions read "V - I", feel entirely free to substitute "vii - I" or "bii⁺⁶ - I" and vice versa. The results will be "functionally" the same provided the substitution fits the style of the passage, and provided the voice leading works out!

(There are, of course, other Dominant Function substitutes in the form of the Modal V chords, iii⁶, biii⁶, ordinary bii, etc., which can replace V. The V, vii, and bii⁺⁶ are distinguished, however, by the presence of the tonal tritone.)

B. The German Form:

Doubled note: Preferably none.

Resolution: Nearly always to "I".

Details of resolution:

1. All notes are dissonant and will resolve with respect to their dissonance:

2. The parallel 5ths are of the chromatic type and can be regarded as acceptable and stylistic. But they should be confined to the two bottom parts only:

3. All inversions are available, but the second inversion is not particularly adaptable since it leads to "I₄⁶". This produces:

- a. An unusual succession of $\frac{6}{4}$ chords.
- b. A necessity to resolve the resulting I₄⁶.

Examples of German " bii^{+6} to I":

C: bii^{+6} I bii^{+6} I⁶ bii^{+6} I

Root Pos. 1st Inv. 3rd Inv.

C. The French Form:

C: bii^{+6} [Fr.] Cmi: bii^{+6} [Fr.]

Doubled note: Preferably none.

Quality: It is not as ponderous and heavy as the German form. It has a *whole tone* quality, being in fact, an incomplete *whole tone* chord.

NOTE: The French form of " bii^{+6} ," can just as well be regarded as a chromatic alteration of "V". In fact, the symbol for it would undoubtedly be such:

C: V^{b5}

It makes NO DIFFERENCE whether the chord is regarded as a French " bii^{+6} ," or as a " V^{b5} ." It will be handled exactly the same in either case! Some of the freedoms allowed it (and the examples will show that it does enjoy more liberty than does the German form) favor a " V^{b5} " analysis.

Details:

1. The Augmented 4th in French bii^{+6} is the Dominant. It is free to LEAP:

C: bii^{+6} [Fr.]

This means, among other freedoms, that the second inversion of the French form is quite adaptable:

C: bii^{+6} [Fr.] I bii^{+6} [Fr.] I bii^{+6} [Fr.] I

V^{b5} ? V^{b5} ? V^{b5} ?

2. The Augmented 6th of the French bii^{+6} can fall to the 5th of I in an inner part (just as can the leading-tone in V) to fill out the tonic harmony:

C: bii^{+6} I
[∇b^5 ?]

(Further evidence in favor of a " ∇b^5 ," interpretation!)

3. The 3rd of the French bii^{+6} can rise under the same conditions that allow the 7th of V to rise:

C: $bii^{+6}[\text{Fr.}]$ I $bii^{+6}[\text{Fr.}]$ I⁶ etc.

Peruse the following examples of French bii^{+6} to I. They deserve careful study. It is clear that the French form is more flexible than the German.

C: $bii^{+6}[\text{Fr.}]$ I $bii^{+6}[\text{Fr.}]$ I $bii^{+6}[\text{Fr.}]$ I $bii^{+6}[\text{Fr.}]$ I⁶ $bii^{+6}[\text{Fr.}]$ I $bii^{+6}[\text{Fr.}]$ I⁶ etc.

Heavy parallel 5ths of German form avoided!

D. The APPROACH to " bii^{+6} ," (All forms)

Being a Substitute Dominant, bii^{+6} can be approached (with due respect for voice leading) from any Subdominant Function chord. Examples:

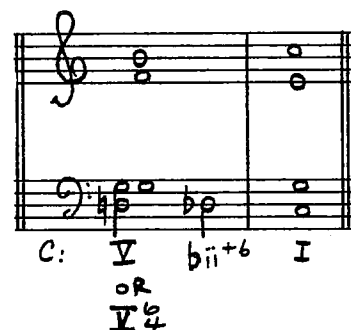
Standard Subdominant Functions	$\left[\begin{array}{l} \text{IV} \\ \text{IVmi} \\ \text{ii}^* \\ \text{ii}^{b5} \\ \text{bii} \\ \text{bvi} \end{array} \right\}$	bii^{+6}	$\left[\begin{array}{l} \text{IV} \\ \text{IVmi} \\ \text{ii}^* \\ \text{ii}^{b5} \\ \text{bii} \\ \text{bvi} \end{array} \right\}$	bii^{+6}	$\left[\begin{array}{l} \text{Dorian vi} \\ \text{bvii} \\ \text{bvii}^{b3} \end{array} \right\}$	bii^{+6}

*Note:

From I (I - $\flat ii^{+6}$)
From Imi_4^6 :



From V itself, or V_4^6 :



From vii^{o7}



Clearly, $\flat ii^{+6}$ can be approached from almost anywhere, provided the voice leading is smooth and logical. Care must be taken to approach the chromatically altered notes gracefully; they will be smoothest when taken by step. When leaps are involved, try to avoid leaping UP to a chromatic up note or DOWN to a chromatic down note.

Despite the freedom in approaching $\flat ii^{+6}$, it is most likely, and most commonly, to be used in situations where V could be used.

II. MODIFICATIONS AND DERIVATIVES OF THE " $\flat ii^{+6}$," CHORD

Proposition: Certain groupings of a less conforming nature can be derived from the $\flat ii^{+6}$ chord, through the application of further Chromatic Leading-Tones aimed at the notes of the tonic chord.

A. The Doubly Augmented Octave (In major only)



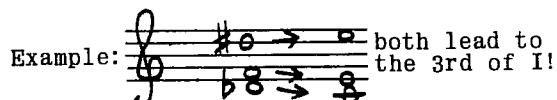
Function: To lead UP to the 3rd of I in Major.

A complete $\flat ii^{+6}$ chord with doubly augmented octave will read:

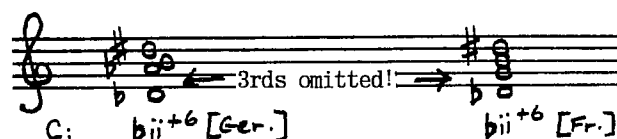
These are enharmonic "9" chords and would be symbolized as such (D^{b9}).



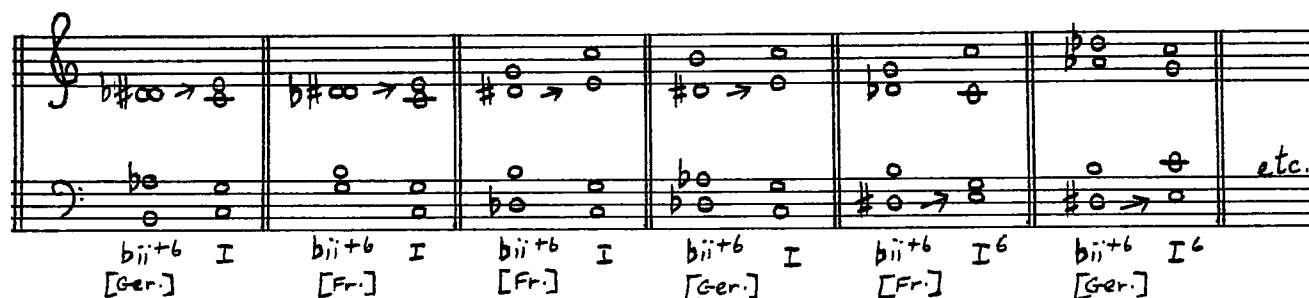
With only four parts available, however, one note of the basic chord will have to be omitted in order to accommodate the doubly augmented octave. A little bit of clear "horizontal" thinking will show that the best omission is the 3rd, since the doubly augmented octave **DUPLICATES THE FUNCTION OF THE 3RD!**



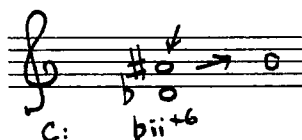
So, with the use of the doubly augmented octave, the forms available are:



Here are some examples of " $b_{ii}+6$ to I", employing the doubly augmented octave. Note that it is available in any part, even the bass, where it creates a technical "4th" inversion!



B. The Doubly Augmented 5th



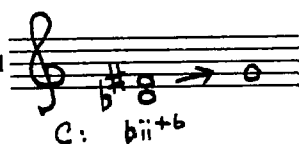
Function: To lead up to the Major 7th in I.

The doubly augmented 5th will be used only in a part which can successfully employ the Major 7th of I. The soprano is the most likely position.

Again, a note of the basic chord will have to be omitted in order to accommodate the doubly augmented 5th. IT DOESN'T MUCH MATTER WHICH. The choice of omission will be entirely *dependent on the voicing of the desired destination*. Peruse the following examples carefully. They illustrate uses and various voicings of $b_{ii}+6$ with the doubly augmented 5th and also, in some cases, the doubly augmented octave.

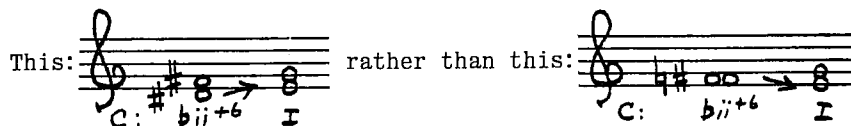


C. The Augmented 3rd

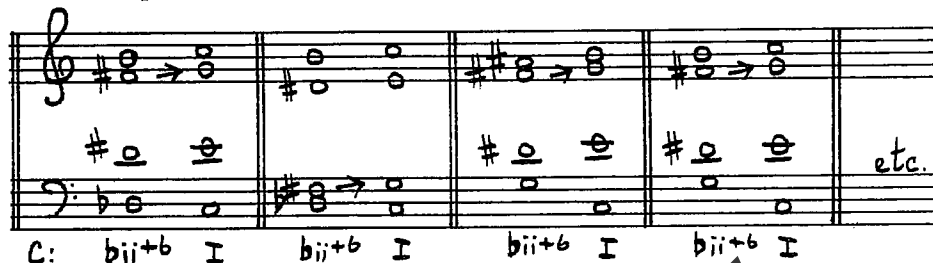


Function: To lead up to the 5th of I.

This appears to be infrequently used in practice, but it can provide some interesting sounds. The best piece of advice here is: WHEN THE AUGMENTED 3RD IS USED, USE THE DOUBLY AUGMENTED OCTAVE INSTEAD OF THE MAJOR 3RD TO LEAD INTO THE 3RD OF I. The combination of the regular 3rd and the augmented 3rd is, in four parts, not particularly pleasing. There seems to be nothing harsher than an augmented unison or octave.

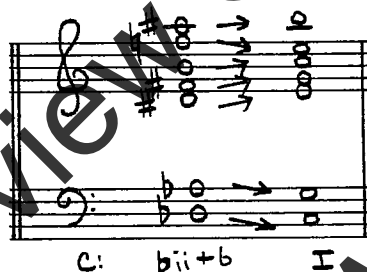


Here are a few examples of " $bii+6$ to I", employing the Augmented 3rd:



Obviously, many of these "derivatives" have strayed a long way from the basic forms of " $bii+6$ ". Some of the structures which can be created with the use of the doubly augmented octave and 5th, and the Augmented 3rd, bear only a remote relationship to the original German and French structures.

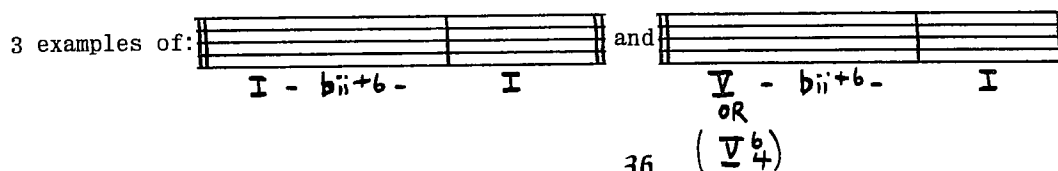
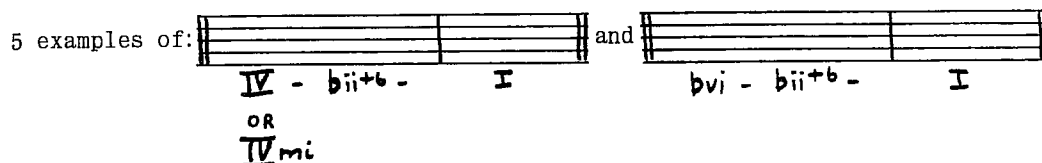
In fact, $bii+6$ is not a *chord* in the accepted sense as much as it is a group of leading-tones aimed at the tonic harmony. In a full orchestral voicing, a grouping such as the following is possible:



It must not be assumed that ANY four of these possible notes will work in a four part context. Aural judgement must be exercised with respect to the control of tension, and with respect to the approach and release of the chord (i.e., voice leading). However, it IS a remarkably flexible structure and one deserving full investigation.

ASSIGNMENT 50 (" $bii+6$ ")

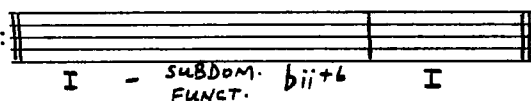
1. In the key of F Major, write:



Aim:

Show the various voicings, inversions, and forms of " $bii+6$ " (the straight German and French forms, and all of the "modifications"). Approach and leave the chord smoothly in every case.

2. In several Minor keys, write:



3. The Soprano is given. Complete for four parts. The choice of inversions, etc., is yours.

(A) Doubly Aug. Octave

(See Sample Solutions page 296.)

(B)

(C)

(D) Doubly Aug. 5th

(E)

(F)

(See Sample Solutions page 296.) (or Elaborate)

(G)

(H)

(1 or 2 chords)

4. Add the inner parts:

C:

5. Work out an example of the following progression in four parts. Use a few eighth notes. All of the material which has been discussed thus far is available.

slowly

B \flat : I - I $\frac{4}{4}$ V bvi - bii $^{+6}$ - I ? - DOM FUNCT. -

I - vi - iii ? - bii $^{+6}$ - I

6. Examine music for illustrations of the use of "bii $^{+6}$ ", and particularly for use of the modifications.

III. THE "IV $^{+6}$ " CHORD (Major keys only)

A. Basic Forms:

C: (German) (French)

The extensive modifications which are available on "bii $^{+6}$ " are NOT available on "IV $^{+6}$ ". There is one modification, however, which is the Minor 3rd (producing the familiar "IVmi" chord with an added Augmented 6th):

C: IVmi $^{+6}$ [Ger.] IVmi $^{+6}$ [Fr.]
(or bii $^{+6}$, doubly augmented octave, root omitted)

All forms of IV $^{+6}$ regularly resolve to I; in all forms the root itself is not heard as a dissonance. It may leap to the root of I. The chord is a chromatic version of the IV chord and the root of IV retains its consonance. So:

C: IV $^{+6}$ [Ger.] I IVmi $^{+6}$ [Ger.] I IV $^{+6}$ [Fr.] I IVmi $^{+6}$ [Fr.] I

—Basic resolutions of all forms of IV $^{+6}$. Note the leaping root.—

"IV $^{+6}$ - I" is obviously just the *Plagal* formula, intensified and colored with the chromatic Augmented 6th. It is interesting to note that the use of the French form, which contains the tonal tritone, produces a clear suggestion of the "dominant" quality:

C: IV $^{+6}$ [Fr.] I

Interesting cadence! It is a subtle blend of a "IV - I" and a "V - I" quality.

Some Uses:

1. "IV⁺⁶" can be used between two I chords, as:

C: I IV⁺⁶ I C: I IV⁺⁶ IV^{mi+6} I
[Pedal 6]

I IV⁺⁶ IV^{mi+6} I etc.
*E^b fits soprano line better than D[#]!

2. It also fits well between ii⁶ and I or between root position ii⁷ and I⁶, as

C: ii^{b(7)} IV⁺⁶ IV^{mi+6} I - ii^b IV^{mi+6} [rr] I C: I ii⁷ IV^{mi+6} I⁶

C: I ii^{b5} IV^{mi+6} I⁶
[intentional doubled 3rd]

3. This chord can be used cadentially, as:

C: bvi^7 IV^{mi+b} I
* [Fr.] *Actually D^\sharp , but kept as E^b for reading convenience.

C: IV^7 IV^{+b} I

C: ii IV^{+b} I [Fr.]

4. " IV^{+6} " may serve in any other suitable manner.

ASSIGNMENT 51 (" IV^{+6} ")

1. Work out a smooth four part example for each of the following patterns:

(A) A Major:

I - IV^{+b} - I [Ger.] I - IV^{+b} - I [Fr.]

I - IV^{mi+b} - I [Ger.] I - IV^{mi+b} - I [Fr.]

(B) Bb Major:

ii - IV^{+b} - I [ii6?] [Ger.] ii - IV^{+b} - I [ii6?] [Fr.]

ii - IV^{mi+b} - I [ii6?] [Ger.] ii - IV^{mi+b} - I [ii6?] [Fr.]

2. The lead is given. Complete for four parts, noting the use of IV^{+6} . The choice of inversions, etc., is yours.

(A)

F: ? - ? - I I I OR ? ? ? I

(See Sample Solutions page 296.)

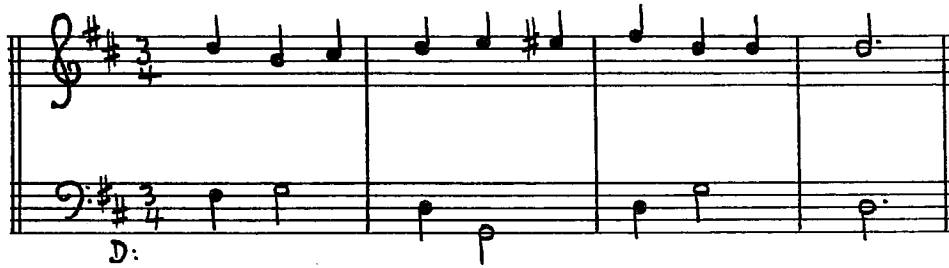
(B)

C: I - ? - I - IV^{+b} - I - ? ? I
(1 or 2 chords)

(C)

G: I ? ? ? ? ? I (or Elaborate)

3. Add the inner parts to this example: (See Sample Solutions page 297.)

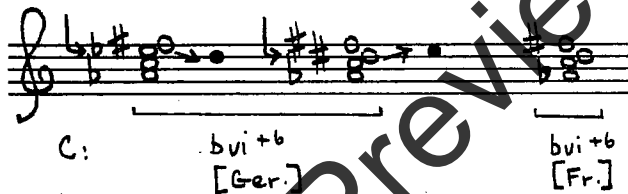


4. Work out an eight bar passage in any desired time signature. Use any material available up to this point, but particularly make at least two uses of the IV^{+6} chord. Use either one chord per bar, two chords per bar, or a balanced combination thereof. Use a *Half-Cadence* at the end of bar four.
5. Examine music for illustrations of the use of IV^{+6} (e.g., "This Can't Be Love"). Take note of the fact that the Minor 7th added to the IV chord in the Blues progression (bars 5 and 6) probably evolved as a *harmonic* use of the blues "flat mediant", but the movement of this chord back to I suggests a " IV^{+6} " analysis.

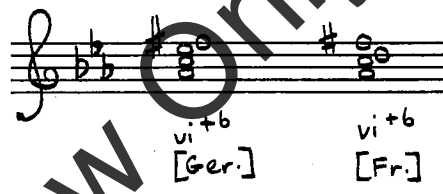
IV. THE " bvi^{+6} " CHORD (In Minor - just " vi^{+6} ", since the 6th degree is already "flat")

A. Basic Forms:

IN C MAJOR:



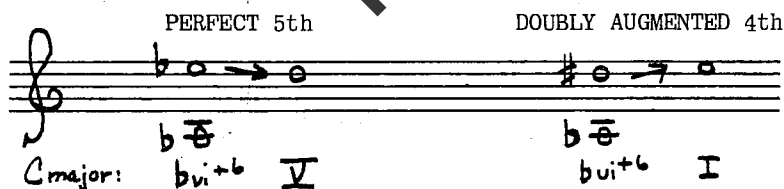
IN C MINOR:



B. The German Form

Introductory:

In MAJOR, there are two notations for the "5th" of bvi^{+6} . The chord normally moves to V or to I and the choice of the Perfect 5th notation (minor mediant) or the doubly augmented 4th notation (raised supertonic) is just a matter of where the note is going. To illustrate:

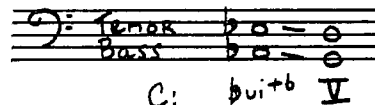


In MINOR, where there is no major mediant to lead to, the German form employs only the Perfect 5th notation.

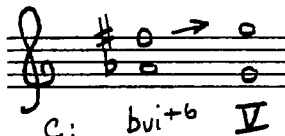
1. GERMAN FORM TO "V"

This is a *Subdominant Function* use of bvi^{+6} and the following details are pertinent:

- This movement may be regarded as " bii^{+6} of V" to V. Most things which are available with " bii^{+6} to I" in the KEY OF G will be available with " bvi^{+6} to V" in the KEY OF C!
- The parallel 5ths are stylistic and are available between the two bottom parts:



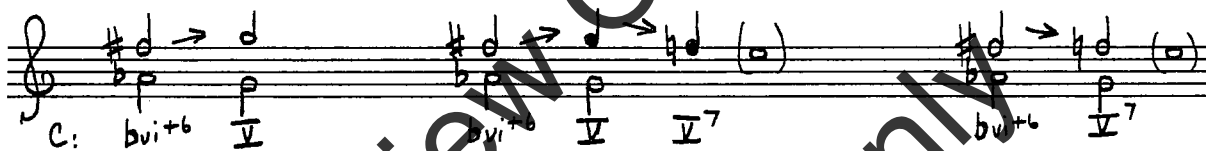
- The Augmented 6th (the raised subdominant) will, if it follows its logical linear tendency, rise to the dominant, as:



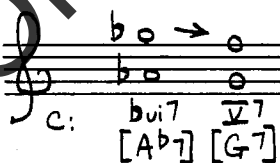
It may FALL TO THE 7TH OF V, if desired, as:



on the basis of an evolution which probably went something like this:

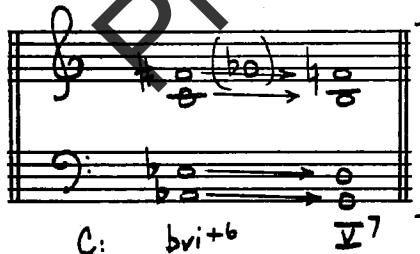


This has led to the use, in some areas, of a notation reading:



However, it is preferable to avoid this notation since (whether the Augmented 6th is taken up to the dominant or down to the subdominant) it still is, and sounds like, an Augmented 6th and not a Minor 7th.

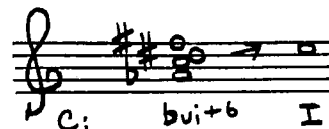
When the Augmented 6th falls to the 7th of V, the result is a "parallel" succession of dominant 7th structures:



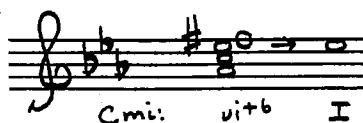
This is available, but is more of a *sectional* technique than it is a *part writing* one.

2. GERMAN FORM TO I

Here the "doubly augmented 4th" notation is used instead of the Perfect 5th, in MAJOR:



In MINOR, the normal Perfect 5th is used:



- a. The chord moves well to I_4^6 . Since the I_4^6 is likely to be followed by V, this movement is functionally the same as moving to V:



- b. The use of "bvi+6" to a consonant form of I is somewhat more of a problem. It is doubtful, for instance, if the bvi+6 chord can be regarded as a possible *Dominant Function* because:

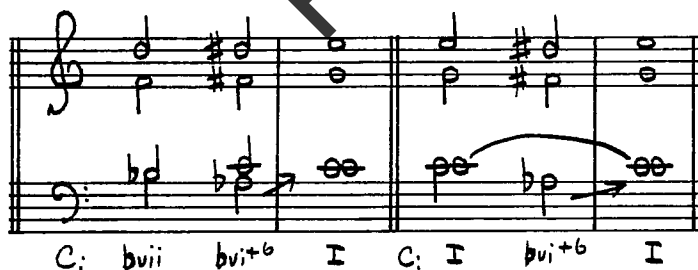
1. It does not contain the leading-tone of the scale.
2. It lacks a decisive root movement, particularly to approach root position I.

Therefore, a cadential use of bvi+6 is not common, but the movement of bvi+6 to I can be used in a transitional manner in the main body of a passage, or as an *elaboration* of a basic tonic harmony. Observe the examples, and note that bvi+6 is usually preceded by ii or by I itself. Further, note the smooth chromatic voice leading and the fact that the bvi+6 to I requires a *doubled 5th* on I:



These are all really *elaborated* I chords!

- c. The use of a ROOT POSITION bvi+6 to a ROOT POSITION I, as:



regards the root of bvi+6 as consonant, and free to leap. It is occasionally used in this manner, but may not be entirely effective.

C. The French Form

IN C MAJOR: IN C MINOR:

This is not as frequently used as the German form, which is perhaps unfortunate since it has an attractive quality. The "whole tone chord" flavor is found in the French form of all of the Augmented 6th chords.

1. FRENCH FORM TO V

Here it is quite in order to view the movement in the sense of French " bii^{+6} to I" in the KEY OF THE DOMINANT! (or as " v^{b5} to I" in the key of the dominant!)

The Augmented 4th of the French form enjoys a freedom compatible with this interpretation, as:

Free!

Below are some examples of French " bvi^{+6} to V":

2. FRENCH FORM TO I

This is not frequently encountered in Major, probably because the doubly augmented 4th of the German form will normally provide a stronger leading urge toward the 3rd of I than will the Augmented 4th of the French form, such as:

Stronger "leading" with D#

But it is certainly available and can sometimes produce smoother voice leading than the German form. To illustrate:

In MINOR, the French form is probably superior to the German when moving to I, because it will provide a movement into the 3rd of I, as:



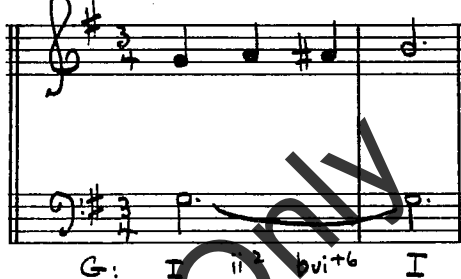
ASSIGNMENT 52 ("bvi+6")

- The outside parts are given for the following formulas. Complete for four parts. Observe the use of the $bvi+6$ chord and be continuously aware that the justification for chromatic movements of this nature must be *smooth voice leading*. Note that the " $bvi+6 - I$ " movement normally requires a *doubled 5th* on I .

(A) (See Sample Solutions page 297.)



(B)



*Try Mixo-Lydian "I" chords.

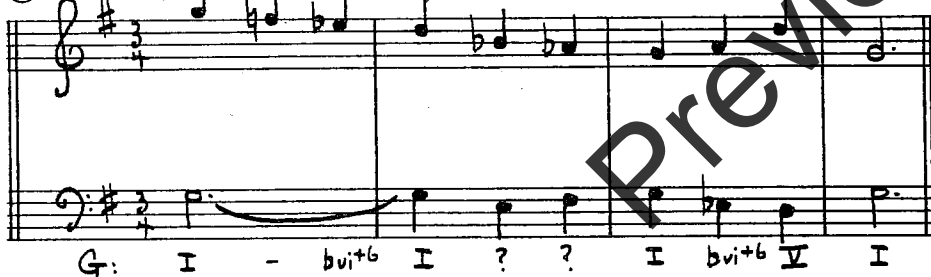
(C) (See Sample Solutions page 297.)



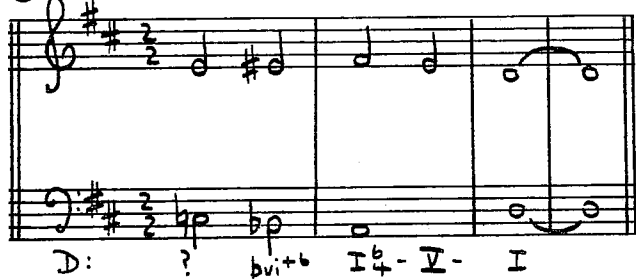
(D)



(E)

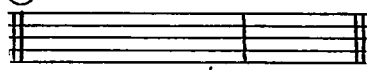


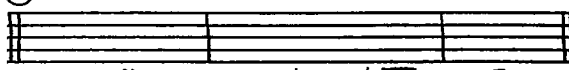
(F)

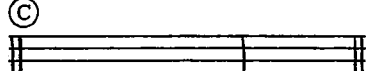


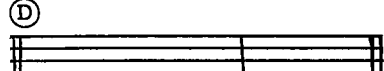
2. Work a four part example for each of the following formulas. The choice of inversions, etc., is yours, but strive for a smooth approach to and resolution of bvi^{+6} . Use various keys.

IN MAJOR:

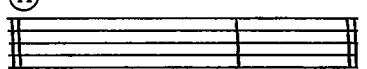
(A)  I - ii bvi^{+6} I

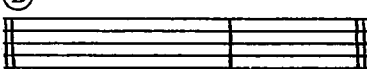
(B)  I - ii - bvi^{+6} - I $\frac{4}{4}$ V I
or ii^{b5}

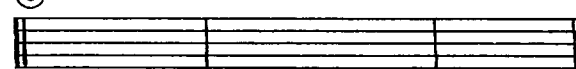
(C)  I - bvi^{+6} V I

(D)  I - bvi^{+6} - I

IN MINOR:


(A)  I - ii vi^{+6} I


(B)  I - vi^{+6} V I

(C)  I - ? - vi^{+6} - I $\frac{4}{4}$ V I

3. Lead is given. Complete for four parts, noting the use of bvi^{+6} and other chords of the "Augmented 6th Group". The choice of inversions, etc., is yours. Try to achieve smooth part lines.

(A) (See Sample Solutions page 297.)

 F: I - bvi^{+6} - I ? ? I bvi^{+6} - I $\frac{4}{4}$ V I

(B)  D: I - I - ? bvi^{+6} I ? V I
[or ii^{b5}]

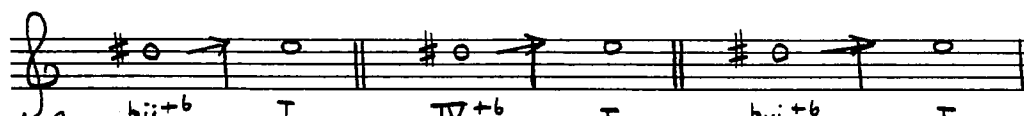
(C)  Gm: I - vi^{+6} - I - ? I vi^{+6} I $\frac{4}{4}$ V I
(or 2 chords)

4. Examine music for illustrations of the use of bvi^{+6} . (e.g., "Bye Bye Blues", "September Song")

SOME FURTHER OBSERVATIONS ON THE AUGMENTED 6TH GROUP, and other matters.

Notes which lead into notes of the tonic chord can often be handled with more than one chord of the Augmented 6th group. Examples:

Raised supertonic into mediant:

 C: bii^{+6} I IV⁺ I bvi^{+6} I
(Doubly Aug. Octave)

Leading-tone into tonic:

$bii+b$ I $IV+b$ I
[Fr.]

Minor submediant into dominant:

$C:$ $bii+b$ I $IVmi+b$ I $bvi+b$ I

The familiar situation found above can also be handled with a variety of Modal variants, as:

bvi I $vii^{\circ 7}$ I $IVmi$ I $ii bs$ I bvi I

The range of possibilities will necessarily be cut down by considerations such as chord voicing, voice leading, whether or not the movement is cadential, etc. You should be aware, however, that most situations offer more than one solution, and a careful examination of all possibilities will do much to increase understanding, to develop flexibility, and to increase resources.

The **CHORD FUNCTION** principle is worth stressing. If the chord chosen to handle a situation:

1. forms an acceptable movement with respect to where it is going and from where it is coming, and
2. meets the demands of the "Strong - Weak" aspect of the pulse, and
3. supports the soprano acceptably, and
4. creates no grammatical errors

it cannot be wrong. Admittedly, there is usually more than one chord which meets these requirements. The decision (as all musical decisions ultimately must) rests with the ear.

Experimentation with intelligent deviation from the prescribed harmony in the exercises is encouraged. It is possible that the prescribed harmony will be the most pleasing, but an examination of other solutions is excellent practice. At this point (and also in actual scoring) the deviations should be logical *functional* substitutions rather than an aimless experimentation with vertical sounds. To illustrate: Assume the following situation, with prescribed harmony:

$C:$ I ii $bii+b$ I

Analyzed *functionally*, it's simply a matter of using harmonies that will join the two I chords and will support the given soprano. Consider the following alternative solutions:

$C:$ I ii $IV+b$ I

V	$bii+b$
V	$V+5$
ii	$bvi+b$
$bvii$	$bvi+b$
$bvii$	$bii+b$
$bvii$	$IV+b$
$ii bs$	$bii+b$
$ii bs$	$V+5$
vii	$bii+b$
etc. etc.	

Each of these (plus other possibilities) will work provided due attention is paid to voice leading, proper bass, and avoidance of grammatical errors.

A casual changing of the original harmonies of a melody, just for the sake of change, is not necessarily a praiseworthy practice, but the writer should be equipped to analyze and to understand the *function* of the chord or chords with which he is faced. He should also be equipped to provide *functional* substitutes when the orchestration and/or psychological demands make it desirable to do so. Too often the novice arranger and orchestrator appears to be entirely dependent on the *chord symbols* of the sheet music. Such a lack of flexibility should be counteracted throughout the study of harmony.

To this point, it is true, the student has only a limited amount of harmonies to manipulate. The extension of the tonality through **Tonicization** and **Chromaticism** will greatly increase the resources; but even in the material presently at hand, there are a large number of possibilities. The diatonic harmonies, modal harmonies, and the Augmented 6th group add up to a sizable total. Examine the following, which takes a simple and familiar chord pattern and modifies it. These are only a few of the possible modifications. (An established melody would, of course, limit the possibilities.)

The image displays eight staves of musical notation, each representing a different harmonic modification of a simple chord pattern. The chords are written in Roman numerals with various accidentals and stems. A large diagonal watermark "Preview Only" is overlaid across the center of the page. A label "Harmony Thinned out" points to the bottom-most staff.

Harmony "Thinned out"

ASSIGNMENT 53 (on "Some Further Observations")

1. Give three or four solutions for the following. In each case end on root position "I".

B \flat : I ?
vi ?
I vi ?
iii ?

C: I ? ? ? I

2. Give at least seven solutions for the following. End on "I" or "I⁶".

F: I ? (1 or 2 chords) D: I or I⁶

3. Give ten solutions for the following. End on "I" or "I⁶".

C: (I ?) F: I or I⁶

4. Give six solutions for the following. End on root position "I". (See Sample Solutions page 297.)

G: I - ? ? I - ? ? I ? ? I

5. Work out four different examples for the following: two examples without eighth notes, two with a few eighth notes. In this passage, and in Exercise 4, the I chord continues to recur somewhat monotonously. Try to alleviate this a little by not using root position I every time, although it is likely to occur at the end.

E \flat : I - ii Aug 6th chord I - bvi + b V [I b V] I - ii or ii \flat 5 or bii bvi + b I - ? - I I (or Elaborate)

Chapter 3

MELODIC INHARMONICS

INTRODUCTORY

The term **Melodic Inharmonics** has the same meaning as the terms "Non-chordal Tones", "Ornamental Tones", "Accessory Notes", "Unessential Notes", etc., and is applied to notes which are, in some manner, foreign to the chords with which they are sounded.

They are, however, far from "unessential". In fact, they are indispensable to musical expressiveness. No matter how craftily the work to this point has been done, it can have been little more than a smooth joining of harmonies, with some interest provided by arpeggiation or by the use of contrapuntal 7ths (which are themselves really "melodic inharmonics"). The material introduced in this chapter will provide:

Melodic decoration,
More expressive "texture",
Smooth means of providing movement for
rhythmic balance at points where the
actual harmonic progression is providing
none.

We will see that many of the more "dissonant" techniques, and many of the more "modern" chords, result from a more liberal use of melodic inharmonics, as for instance:

Dominant 7th chord With appoggiaturas 11th chord

becomes: becomes:

The types of melodic inharmonics examined here are fundamental. To attempt a minute cataloguing of *all* possibilities would be an impractical, if not impossible, task. (A non-chordal tone that does not appear to fit into any one of the standard categories will likely be derived from or related to one of them.)

The names which are herein applied to the inharmonic types are, for the most part, those usually used, although an investigation of different texts and different dictionaries of terms will show that there is some conflict of terminology. In any case, the terminology is not itself the important thing; an understanding of the nature and functions of the melodic inharmonics is! They must **at all times** be used with a *clear expressive, or voice leading, or rhythmic purpose*; that is, a *clear musical purpose*. *Excessive or uncontrolled use of non-chordal tones may (in fact, probably will) lead to an undesirable overloading of the texture.* The retaining of *harmonic clarity* should be the aim, particularly in the early stages of the work. Similar to architecture, interior decoration, dress, and other areas where artistic decoration is required, **taste** is an indispensable ingredient. No attempt will be made here to define **taste**, but a questionable situation is more likely to be improved by eliminating some decoration rather than adding to it. Learn to edit your music. There is no point in having an interesting decoration in one part if it is blurred by irrelevant movement in another.

The melodic inharmonics fall into two general categories: **ACCENTED** and **UNACCENTED**. These terms refer to the position of the inharmonics with relation to the **STRONG AND WEAK** beats, and not to the literal use of an "accent" in the dynamic sense.

The Accented inharmonics resolve from "strong to weak". They are: **SUSPENSIONS**
RETARDATIONS
APPOGGIATURAS

The Unaccented inharmonics resolve from "weak to strong". They are: **PASSING TONES**
AUXILIARY TONES (and
auxiliary derivatives)
ANTICIPATIONS

There are some instances, however, where a normally Unaccented type occurs at a Strong beat, and vice versa. As always, it is a matter of clear *musical* sense and purpose.

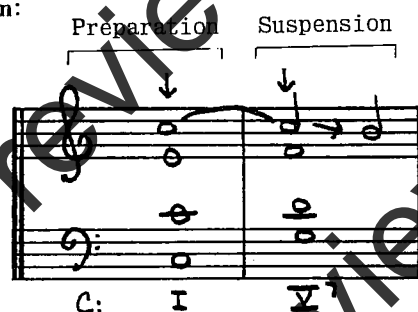
(Following the survey of basic types, will be an area dealing with "delayed" and "decorative" resolutions, in which the Cambiata, Échappée, and Elision will be examined.)

I. THE ACCENTED INHARMONICS:

- A. Suspensions
- B. Retardations (including a section on Chord Symbols)
- C. Appoggiaturas

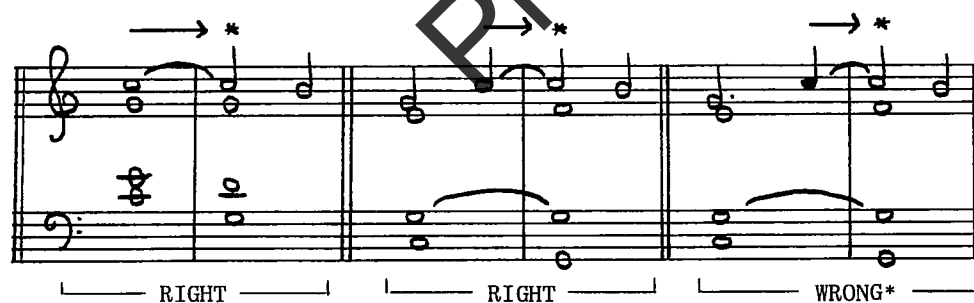
A. The Suspension

A suspension is a note **HELD OVER**, by means of a "tie", from one chord into the next, with which it forms a Dissonance. The suspension **RESOLVES ONE STEP DOWNWARD**. The note to which the suspension is tied is called the **Preparation**:



Details:

1. The suspension must be **NO LONGER** than its preparation note, as:



*(When the preparation is shorter than the suspension, the effect is as an "anticipated appoggiatura".)

2. The resolution should occur at a metrically "weaker" position than that of the suspension:

C: I V I vi⁷ ii^{b(7)} V⁷ I V --

RIGHT RIGHT WRONG

3. Suspensions are referred to "numerically", as:

A suspended 9th over the root is a "9-8" suspension:

C: I

A suspended 4th or 11th over the 3rd is a "4-3" suspension:

C: I

A suspended 6th or 13th over the 5th is a "6-5" suspension:

C: I

NOTE: Some traditional texts use figures which relate the inharmonic to the actual *bass* note rather than the *root*. However, the figures used in this text will refer to the relation which the inharmonic has to the *root* of the chord. To illustrate:

C: vi^b

will be called "9-8" suspension because the suspension is the 9th of the chord.

4. The suspension must be a **TIED** note. If the note is struck again, so that the melodic rhythm agrees with the harmonic rhythm, it is an "appoggiatura" (see later notes), as:


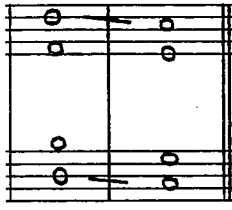
SUSPENSION APPOGGIATURA

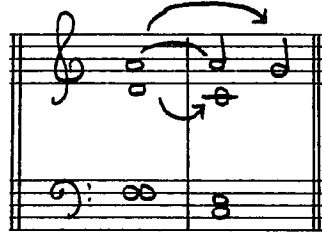
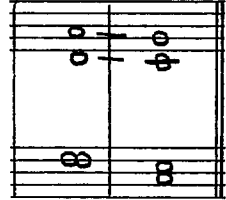
C: V⁷ I V⁷ I

But the use of a "dotted" note instead of a tie is acceptable, e.g:

is equivalent to:

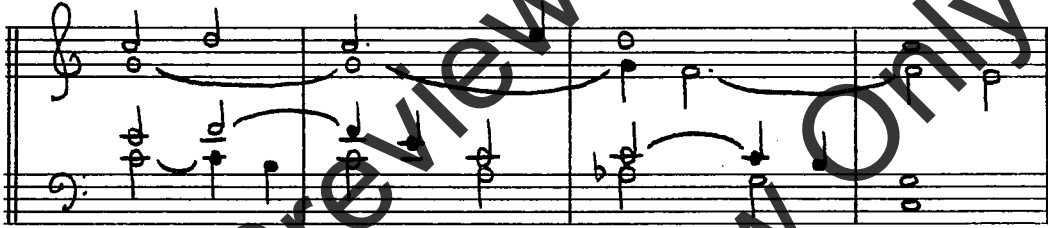
5. The suspension will not, in general, conceal forbidden parallels, as:

This:  is equivalent to: 
 (parallel octaves)

This:  is equivalent to: 
 (parallel 5ths)

WRONG!

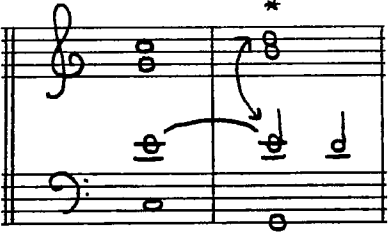
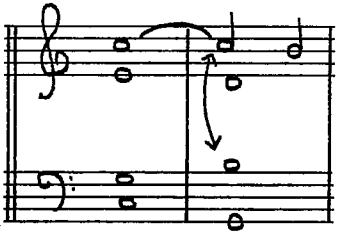
6. All melodic decoration is more frequently used in the upper voices and particularly in the lead (soprano). But the inharmonics may appear in any part, and when they do, the part using them takes on "melodic" value. Here is an example of suspensions appearing in the supporting parts:



C: I I I vi⁷ ii b⁵ I

"4-3" in bass "4-3" in tenor "4-3" in alto "4-3" in tenor "4-3" in alto

7. The resolution note should not be used simultaneously in a voice ABOVE the suspension, as:

 and the use of the resolution note simultaneously in a voice BELOW the suspension is often unacceptable, as: 
 C: I V
 WRONG!

*Reason: Wrong resolution of the 7th interval:



There are situations where the note of resolution may appear simultaneously with the suspension ABOVE it, as follows:

- a. The note of resolution should be in a lower octave, as:

C: I I

YES NO!

- b. The note of resolution should be a note which may be doubled, as:

C: I

*Not ideal - because of stress on irregularly doubled 3rd of IV.

- c. The chord created by the simultaneous use of the suspension and its resolution note should be acceptable with relation to the principles of 5, 6, and 7 part chords. (When the suspension is used INSTEAD OF the note to which it resolves, it is purely "non-chordal", but when it is used simultaneously with its resolution note, it becomes a "chordal extension" and the resulting "extended chord" must be acceptable as a chord.)

A brief review of the principles of seven part chords is relevant here:

"9ths"

A MAJOR 9th is harmonically good on any chord. A MINOR 9th is best confined to *dominant structures only*. Therefore:

A MAJOR "9-8" suspension *can* exist simultaneously with the resolution note (root of the chord) provided the resolution note is in a lower octave, as:

C: I I V7

ALL GOOD!

A MINOR "9-8" suspension with root simultaneously in lower octave is fine on Dominant structure chords, as:

Cmi: I7

GOOD!

but *inadvisable*, due to high tension, on non-dominant structures, as:

C: I

INADVISABLE!

"11ths"

An AUGMENTED 11th is harmonically good on a MAJOR or a MINOR chord. A PERFECT 11th is acceptable on a MINOR chord only. Therefore:

An AUGMENTED "4(11)-3" suspension with the MAJOR 3rd simultaneously in a lower octave is permissible, provided the 3rd is an acceptable double, as:



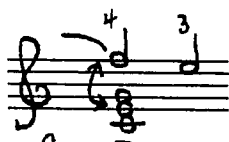
ALL RIGHT!

and a PERFECT 4 (11) - 3 suspension with the MINOR 3rd simultaneously in a lower octave is acceptable, provided the 3rd is an acceptable double, as:

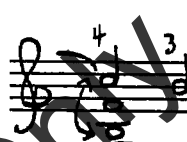


ALL RIGHT! ALL RIGHT!

BUT: A PERFECT "4(11)-3" suspension with the MAJOR 3rd simultaneously is NOT acceptable:



NO!



NO!

"13ths"

A MAJOR 13th is harmonically possible on either a Major or a Minor chord. A MINOR 13th is NOT an acceptable harmonic extension. Therefore:

A MAJOR "6(13) - 5" suspension, with the Perfect 5th simultaneously in a lower octave, is possible, but not particularly advisable!

This is possible, because the suspended Major 6th is a legitimate "13th":



C:

This is not particularly advisable, because a certain ambiguity results, as:



OR
Ami7?

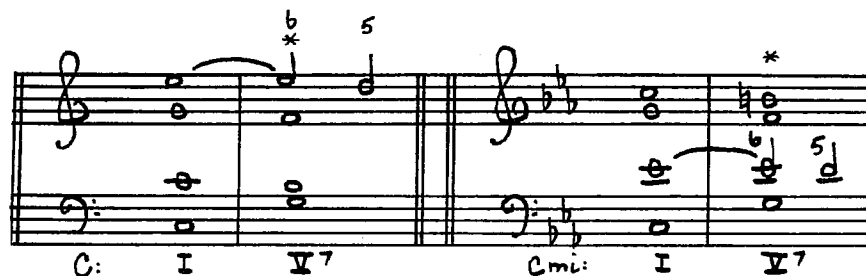
8. In point of fact, a "6-5" suspension is, at best, problematical. The point above indicates the danger of ambiguity when the "6-5" suspension is used simultaneously with the 5th; but there is also a danger when the "6-5" is used without the 5th! It then becomes a consonant suspension, as:



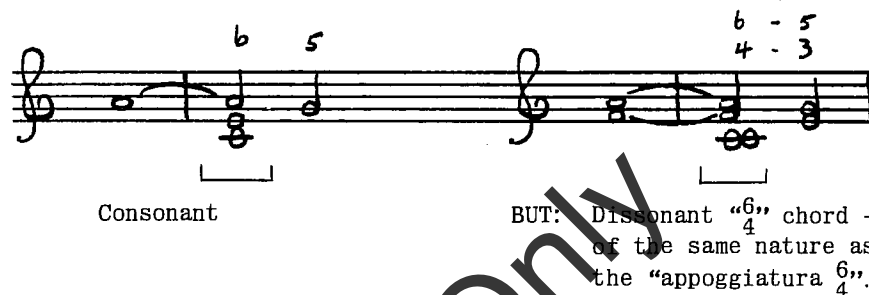
Consonant Chord!

The result becomes a DIFFERENT, consonant chord. There is no law against this, but it leads to ambiguous harmony and a "pale" sort of sound. It lacks the *dissonance which is the real attraction of the accented inharmonics.*

The single "6-5" suspension on the V chord (and particularly on V⁷) is more energetic, however. In fact, the V chord is perhaps the only place that a single "6-5" suspension is successful:



In other cases, the use of an accompanying "4-3" suspension, when available, is an improvement since it produces a more clearly dissonant effect, as:

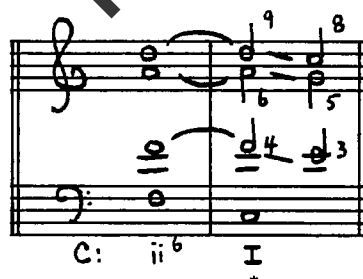


9. As the point above indicates, combined suspensions are available.

When two suspensions are used simultaneously, they are termed **Double Suspensions**. They will move in **Parallel Imperfect Consonances** (3rds or 6ths). To illustrate:



Triple Suspensions are possible, provided no parallel 5ths result:



*(actually the 3rd inversion of ii⁷!)

Combined suspensions should be handled very carefully. An undesirable overloading may result, and the intention of the harmony may be lost. The clarity of the harmony should be a primary concern, and a piling on of suspensions, or any other inharmonic type, can lead to a loss of this clarity. The musical effect may be different and perhaps inferior to the intention. To illustrate:

The image shows three musical examples of combined suspensions in C major, each spanning two measures.
 1. **Single suspension:** The first measure has a C4 and E4 in the treble and a C3 and G2 in the bass. The second measure has a C4 and E4 in the treble and a C3 and G2 in the bass.
 2. **Double:** The first measure has a C4 and E4 in the treble and a C3 and G2 in the bass. The second measure has a C4 and E4 in the treble and a C3 and G2 in the bass.
 3. **Triple:** The first measure has a C4 and E4 in the treble and a C3 and G2 in the bass. The second measure has a C4 and E4 in the treble and a C3 and G2 in the bass.
 Below each example are the chord symbols: C: ii⁶ I, C: ii⁶ I, and C: ii⁶ I.

It is doubtful if the three solutions above get progressively better!

10. Suspensions may resolve to a change of position of the same chord, as:

The image shows a musical example of a suspension resolving to a change of position of the same chord. The first measure has a C4 and E4 in the treble and a C3 and G2 in the bass. The second measure has a C4 and E4 in the treble and a C3 and G2 in the bass.
 Below the notation are the chord symbols: C: V⁷ I⁶ I⁶.

(For resolution of a suspension on to a different chord, see the later section on the "Harmonic" use of suspensions and appoggiaturas.)

B. The Retardation

The Retardation is a suspension which resolves UPWARD. (Some texts simply call it an "upward suspension".)

Details

1. Retardations are most often situated a half-tone below their resolution notes. Upward resolutions, which oppose gravity, are always more obvious and adaptable by half-step than by full step.

The most common is probably the leading tone retarded under the tonic, as:

The image shows a musical example of a retardation resolving upward. The first measure has a C4 and E4 in the treble and a C3 and G2 in the bass. The second measure has a C4 and E4 in the treble and a C3 and G2 in the bass.
 Below the notation are the chord symbols: C: V⁷ I, C: V⁷ vi.

Other *diatonic* half-step retardations available are:

The mediant
under the sub-
dominant in
major:

C: I ii°6

The supertonic
under the mediant
in minor:

Cmi: vii°7 I

The dominant under
the submediant in minor:

Cmi: I vi

Chromatic half-step retardations are occasionally available, when the previous chord contains altered notes, as:

C: IVmi+b I

C: bVII V

2. Retardations of a full-step are unusual, but may be effective in *SOME* situations, as:

C: I IV

C: V I

BUT NOT:

C: ii°(7) I

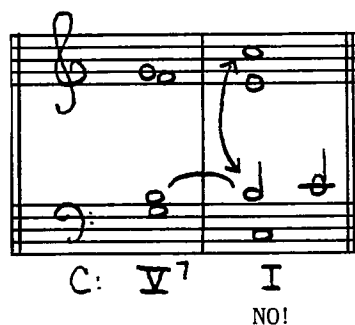
* Incorrect resolution of
the Minor 2nd interval

However, the *full-step* retardation under the leading-tone in a dominant or dominant function chord is *USUAL*, since the use of a half-step inharmonic in this situation weakens the upward urge of the leading-tone itself:

USUAL!

C: ii V7

3. As with a suspension, the note of resolution of a retardation should *not* appear simultaneously in a voice ABOVE the retardation:



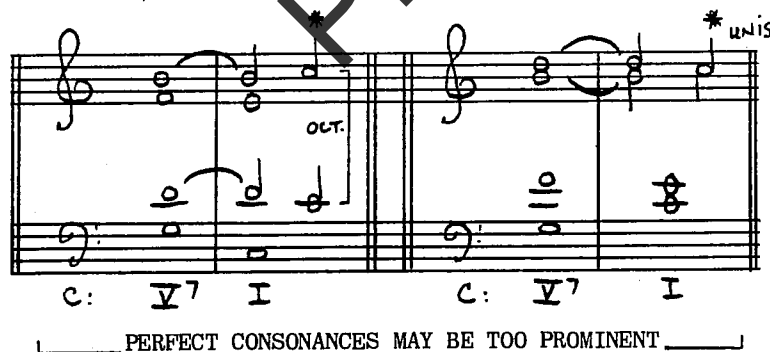
4. Combined retardations are available, in parallel 3rds or 6ths (imperfect consonances), as:



5. Combinations of retardations and suspensions are available. They will, of course, resolve in contrary motion, as:



Such a combination of a retardation and suspension is best when it resolves (as it does in the above example) to a 3rd or a 6th. Resolution on to a perfect consonance (octave, unison, 4th, 5th) is not forbidden, but can sound somewhat bleak and overemphasized, as:



C: vii°7 I C: IVmi+b I [Fr.]

PERFECT CONSONANCES MAY BE TOO PROMINENT

Two suspensions (moving in parallel 3rds or 6ths) may be used with a retardation:

C: V7 I C: IVmi+b I [Fr.]

or two retardations (moving in parallel 3rds or 6ths) may be used with a suspension:

C: V7 I C: IVmi+b I [Fr.]

However, take care to avoid overloading. Suspensions and retardations in the bass are not frequently used, but the upper parts can certainly employ them. Nevertheless, decoration in one part only, has more chance of success than does a vertical "piling up" of inharmonics. A part involved in a suspension or a retardation immediately has "individuality"; consequently, they are not too often found in unified sectional orchestration. Their value in part writing and counterpoint cannot be overestimated. They produce a flow in the music which stitches the chord progression together. Here is an example of a simple chord progression followed by an example where suspensions and retardations are applied to it. Note the increased forward motion in the second passage:

F: I vii°7 I bii+b I IVmi.4 I [Mixo-Lydian]

CHORD PROGRESSION ONLY

F: I vii°7 I bii+b I IVmi.4 I rall.....

WITH APPLICATION OF SUSPENSIONS AND RETARDATIONS

ASSIGNMENT 54 (Suspensions and Retardations)

Group 1. Sopranos are given, with basic harmonies. Work out 2 four part solutions for each. The first is to be simple, with nothing more in the supporting parts than is necessary for clear harmony and rhythmic balance. The second is to use a "richer" texture with combined suspensions, more dense harmonies, etc., but without loss of clarity.

SUGGESTION: It very often helps to reduce a line which contains inharmonics to its essential notes. This provides a clearer view and it is quite possible that a good harmonization of the essential framework will also support the decorated line.

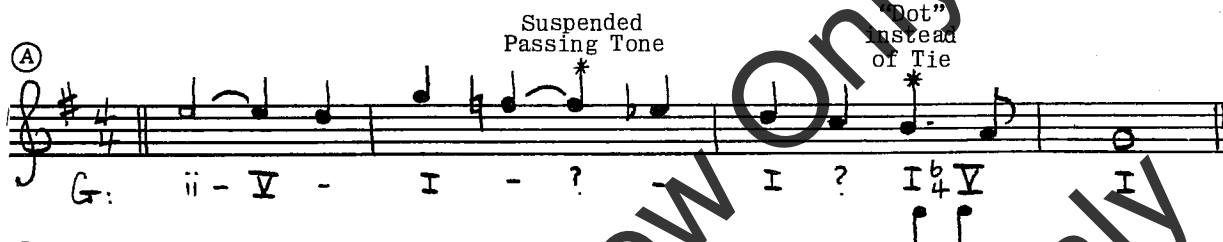
This: 

C: I - V - I - vi - ii - V - I

can be reduced to:



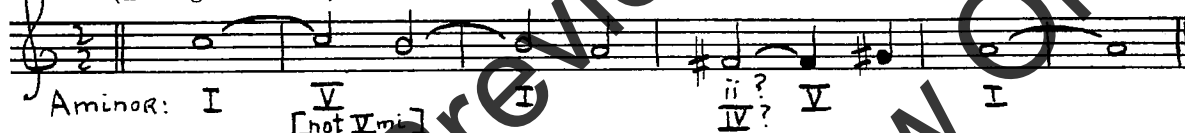
C: I - V - I - vi - ii - V - I

Ⓐ 

G: ii - V - I - ? - I - ? - I $\frac{4}{4}$ V I

Suspended Passing Tone
"Not" instead of Tie

Ⓑ (See Sample Solutions page 298.)
(no eighth notes)



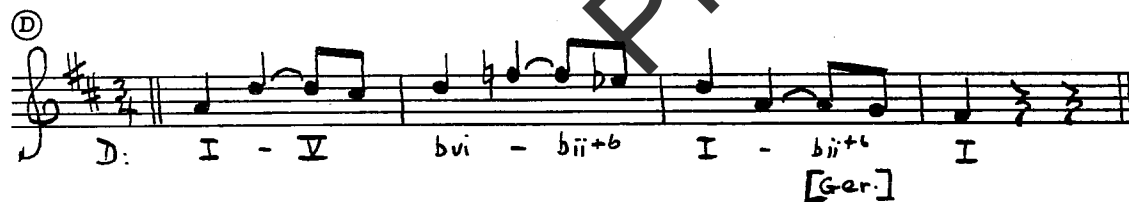
A minor: I V I ii? V I

[not Vmi]

Ⓒ 


C: I - IV - V - vi - ii $\frac{5}{4}$ - V - I

Less Usual
"Full Step"
Retardation

Ⓓ 

D: I - V bvi - bii+b I - bii+6 I

[Ger.]

Ⓔ 

C: ii - IV+b - I - vi - ii - I $\frac{4}{4}$ V I

Not a "Suspension"
just a "Tied Note"!

Ⓕ

(No chords given. Use starred (*) notes as suspensions or retardations)



Group 2. The Basic four part passage is given. Give three elaborations of it, as follows:

- Apply suspensions and retardations to **soprano only**.
- Leave the soprano as given and increase interest in the supporting parts through application of suspensions and retardations.
- Apply suspensions and retardations to any and all of the parts, for a balanced texture. (See Sample Solutions page 298.)

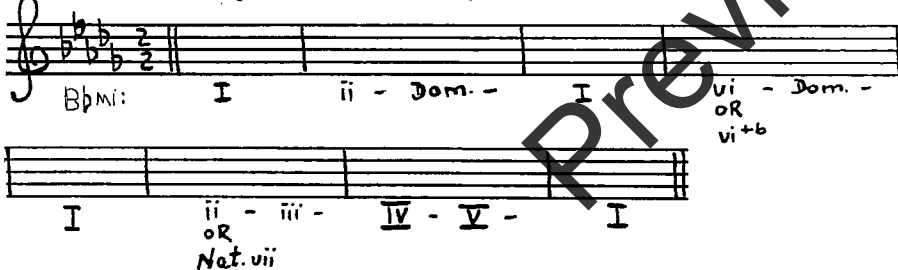
CAUTION: Do not try to force these! Some of the later inharmonic types can be applied almost anywhere, but since suspensions and retardations require *preparation*, they can only be used where a preparation exists.



Group 3. The progressions are suggested. Work each for four parts, aiming to make a musical use of suspensions and retardations. Create a balanced texture of true "four part" writing, with all parts making a contribution - although the bass, due to its *foundation* function, may be less active. No given progression need be taken literally. Remember the availability of "functional substitutes", the developmental 6⁴s, etc., or simply ignore the given progressions and devise your own.

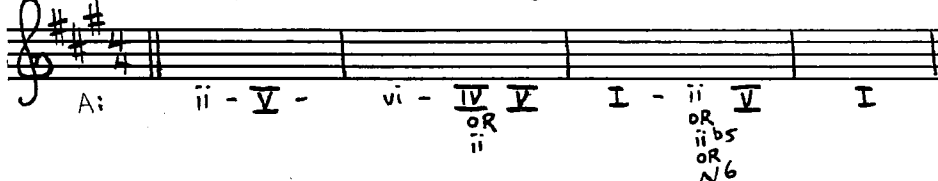
Ⓐ

Slowly. Do not use eighth notes.




Ⓑ

Fairly bright. Use some eighth notes.



SOME REMARKS REGARDING "CHORD SYMBOLS"

Certain areas of orchestration, lead sheets, etc., make extensive use of the "chord symbol" system. The use of suspensions, retardations, appoggiaturas, etc., can sometimes change the structure of a chord to the degree that a "modified" symbol becomes necessary. To illustrate:

While this passage:  is still "I - V⁷ - I", it is clear that the symbols:

C: I V⁷ I

"C - G⁷ - C" do NOT tell the whole story! In general, *this matter can be summed up as follows:*

If the inharmonic 1. is NOT a legitimate "harmonic" extension of the chord (that is, if it hasn't harmonic, but only "inharmonic", validity

AND 2. lasts for the duration of a full beat or more

the symbol should be "modified" to accommodate the inharmonic.

Therefore, this will be symbolized as indicated:



Symbols: C^{sus4} C G^{7sus4} G⁷ C^{sus4} C-

[I V⁷ I]

*The abbreviation "sus. 4" stands for "suspended 4th" and is used whether the dissonant 4th is a suspension, appoggiatura, or any other form of inharmonic!

BUT:
This will be:



Symbols: C G⁷ C

*In the above case, it is sufficient to use only the basic symbols "C - G⁷ - C". The "sus. 4th" can be ignored because of their brevity and because they resolve on the same beat.

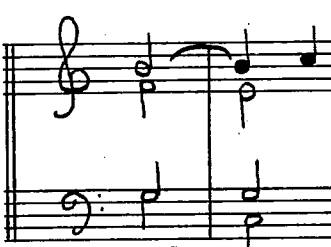
A careful perusal of the following examples should make the general procedure clear:



Symbols: C Dmi⁷ G⁷ C^{sus4} C

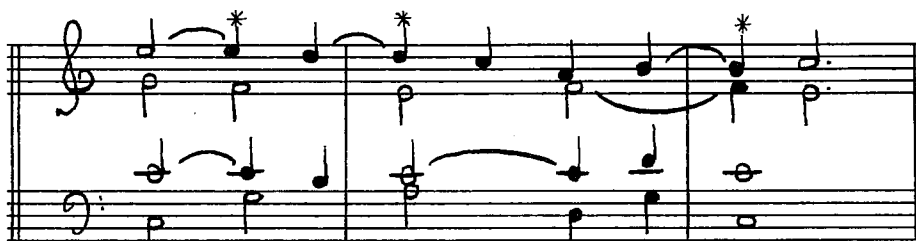
Inharmonics not indicated because they are legitimate "9ths", which can be used harmonically.

Since the Perfect 4th over the Major 3rd does not allow the simultaneous sounding of the 3rd, the symbol needs modification.



Symbols: G⁷ C

The Major 7th retardation is a legitimate harmonic extension and does NOT need a modified symbol.



Symbols: C G^{sus4} G7 A mi D mi 7 G7 C^{sus4} C - -

It is necessary to indicate "sus. 4" because "C" and "B" are not compatible in a G chord; but no need to indicate the suspended Major 6th.

Perfect 4th and MINOR 3rd can be used simultaneously, so no modification is necessary.

"sus. 4" is a necessary modification here.



Symbols: C mi G7^{sus4} G7 C mi

Minor 6th called
"Augmented 5th"!

Some of the following are more complicated and employ *appoggiaturas* (examined in the next area of the text). However, they serve as examples for the problem of chord symbols:



C: I - -
Symbols: C^o C



Symbols: B C
[C bass]
OR B C
OR Even C^o C



C: I - - IV⁺⁶ I
Symbols: C mi C F7 - C -

There is nothing here which will conflict with guitar (or whatever) playing an "F7". It has been noted earlier that the "7" symbol is used for Augmented 6th chords.



C: vi ii V
Symbols: A mi D mi 7^{b5} D mi 7 C G G7 -

"b5" here is really
a "raised 4th"!

Appoggiatura $\frac{6}{4}$ chord
is formed here. For
piano, guitar, etc.,
write:

$\left| \begin{array}{c} C^{(G \text{ BASS})} \\ C_4^6 \end{array} \right| \begin{array}{c} G \\ \text{or} \\ G \end{array} \begin{array}{c} G^7 \\ G^7 \end{array} \right|$

More complex situations may be encountered, but these examples should serve to illustrate the general procedure. (They also show - by indirection - the folly of accepting symbols at their face value!) Further chord symbol problems will occur as the work progresses.

C. The Appoggiatura

An appoggiatura is an "unprepared" suspension; it is a dissonant note STRUCK, and resolved to a weaker metrical position. The rhythm of an appoggiatura and its resolution is always "STRONG TO WEAK". (As remarked earlier, the term *appoggiatura* is derived from the Italian "to lean", which is a clue to its character.) Because of its emphasized dissonance, the appoggiatura is the most expressive of the non-chordal tones.

Very often, *but not necessarily*, the appoggiatura is of longer duration than its resolution note.

Details:

1. The appoggiatura may be approached by leap, by step, or passively. (When a leap is involved, it is usually better to leap in the opposite direction to the resolution.)

Examples:

2. The appoggiatura may be in any voice:

3. Any beat, or fraction of a beat, may be subdivided into STRONG and WEAK to provide appoggiaturas. In the following illustration, all of the "starred" notes are appoggiaturas, resolving from Strong to Weak:

In triple time, the pattern:



is generally preferable to the syncopated

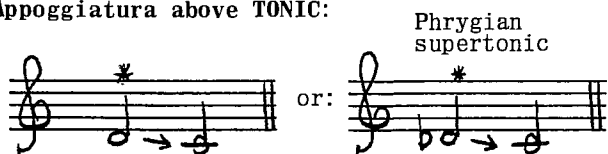
feeling of:



but both are available.

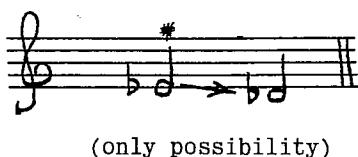
4. Just as suspensions are more common than retardations, so is the appoggiatura more often above the note of resolution. It will be the **Scale Tone** above in all cases. The following table deserves close scrutiny. The key of "C" is used for example purposes. In each case, the first note is the **APPOGGIATURA**; the second note is to be understood as a **CHORDAL** tone:

Appoggiatura above TONIC:

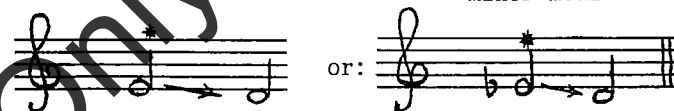


This is possible only if "C" is in a chord which is found in the *Phrygian mode*. It would be possible in $\flat vi$, $IVmi$, $I mi$, but not advisable on vi , IV , or I because these chords are not *Phrygian*.

Appoggiatura above PHRYGIAN SUPERTONIC:



Appoggiatura above SUPERTONIC:



This is possible only if "D" is in a chord which is found in **MINOR** (as V , $\flat vii$, vii , etc.) It has a *blues* quality.

Appoggiatura above MINOR MEDIANT:



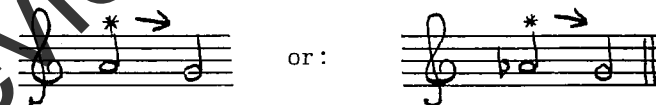
Appoggiatura above MEDIAN:



Appoggiatura above SUBDOMINANT:

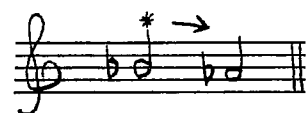


Appoggiatura above DOMINANT:



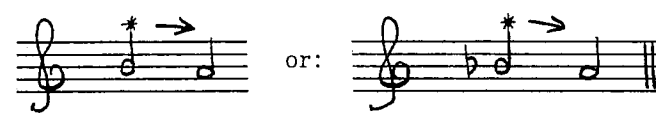
This is possible only if "G" is in a chord which is found in **MINOR** (as V , $\flat iii$, $I mi$).

Appoggiatura above MINOR SUBMEDIANT:



(only possibility)

Appoggiatura above SUBMEDIANT:

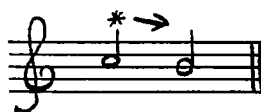


This is possible if the "A" is in a chord which can take a Mixo-Lydian or Dorian interpretation (See bar 3 of "Oh What a Beautiful Morning").

Appoggiatura above Flatted 7th degree:



Appoggiatura above LEADING TONE:

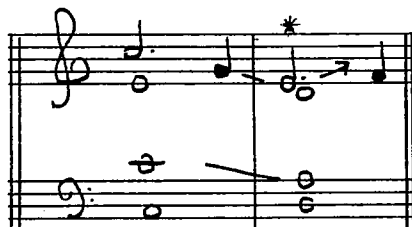


5. The appoggiatura may be below its destination note. It is usually a half-step below, and the use of the leading tone below the tonic is common, as:



Other diatonic half-step lower appoggiaturas may be:

- a. The mediant under the subdominant in Major:



C: I ii

- b. The supertonic under the mediant in Minor:



Cmi: i° ii vi

Note: There is no objection to the parallel 5th when one note of the second 5th is an appoggiatura!

- c. The dominant under the submediant in Minor:



Cmi: I ii°

6. When the scale tone below the chordal tone is a FULL STEP underneath, it is customary to raise it chromatically to give it a clear tendency up (i.e., to create a leading tone):



Examples continued:

C: I ii7 V7 I

C: I vi6 ii6 V7 I

However, the appoggiatura below the actual leading tone in a "V" or "V function" chord is regularly a FULL STEP below (i.e., the 6th degree of the scale under the 7th degree of the scale) in order to avoid weakening the upward tendency of the leading tone, as:

FULL STEP HALF-STEP FULL STEP HALF-STEP

is more likely than: is more likely than:

C: V7 C: V7 C: bii+6 [Fr.] C: bii+6 [Fr.]

and even:

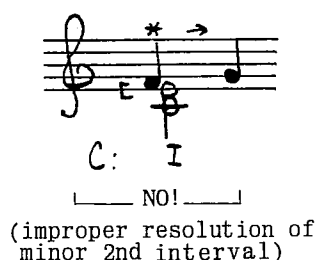
C: bii+6 [Ger.]

AND: Full step appoggiaturas will occasionally sound well under other notes, provided the dissonant interval involved receives proper resolution. To illustrate:

C: I C: IV C: vi6

(See first note of
"Falling in Love
With Love")

These are exceptional, and certain situations simply will not allow full step lower appoggiaturas, as:



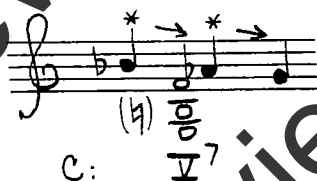
The direction for lower appoggiaturas can, therefore, read:

The lower appoggiatura will usually be a half-step under the chordal tone, even if this requires a chromatically altered scale degree; except in the case of the appoggiatura under the leading tone in a "V" or "V function" chord, when it will usually be a full step below.

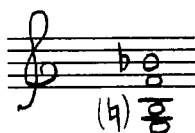
7. Worth special mention is the "blues" quality gained from the use of the flat 7th degree used as an appoggiatura over the flat 6th degree, sounding against the leading tone in dominant function harmony. To illustrate:



When used with a true "V" chord, the result is the unusual situation of an appoggiatura over an appoggiatura (i.e., the Minor 10th (♭10) over the Minor 9th (♭9), which is over the root!):

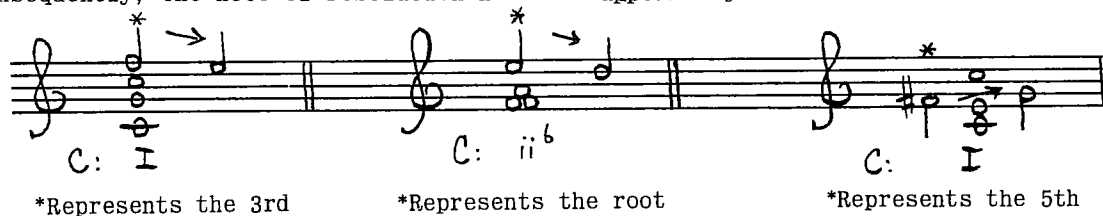


The chord so formed:



is variously called the "Gershwin 9th", the "♭10" chord or the "blues" chord.

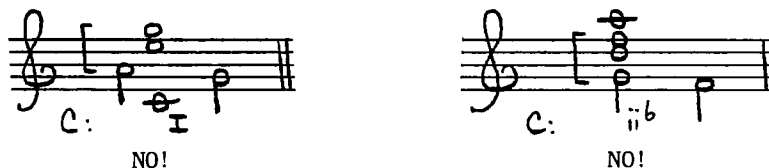
8. An appoggiatura can be regarded as representing the note over (or under) which it is situated. Consequently, the note of resolution need not appear anywhere else in the chord. Examples:



The following points are offered as a guide to the *simultaneous use of an appoggiatura and its resolution note*. Although it is not necessary for the resolution note to appear *simultaneously with the appoggiatura* (because, as mentioned above, the appoggiatura represents the chordal tone to which it will resolve), it IS possible to use them both under certain conditions:

A. NOTE OF RESOLUTION APPEARING SIMULTANEOUSLY ABOVE THE APPOGGIATURA

The simultaneous striking of an appoggiatura with its resolution note ABOVE it is rare, and generally unsatisfactory, because it results in an improper resolution of the dissonant interval. Observe:



Exceptionally, it is possible to use a Major 9th appoggiatura in the BASS, on a "I" chord, with the tonic sounding above it. To illustrate:



There *may* be instances where a Major 9th appoggiatura, in the bass with the root above it, could be acceptable on chords other than "I", as:



There are divergent opinions on this however, and each instance should be decided on its own merits in the context.

B. NOTE OF RESOLUTION APPEARING SIMULTANEOUSLY BELOW THE APPOGGIATURA

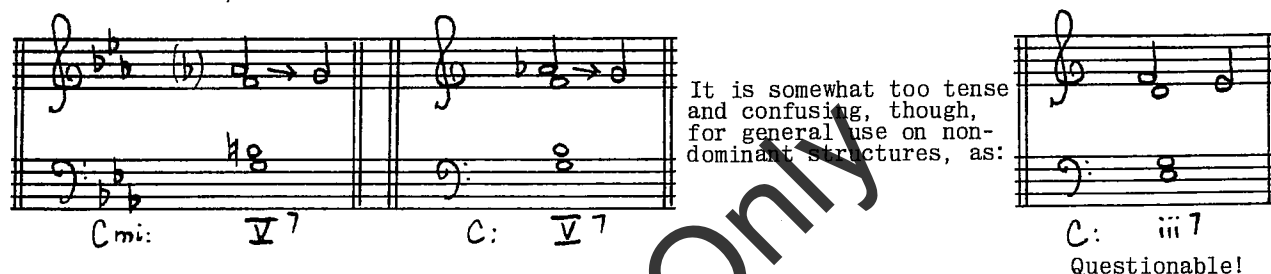
1. The note of resolution should be in a lower octave, as:



2. The most adaptable situation using an appoggiatura simultaneously with its resolution tone below is the appoggiatura 9th, with the root in a lower octave, as:



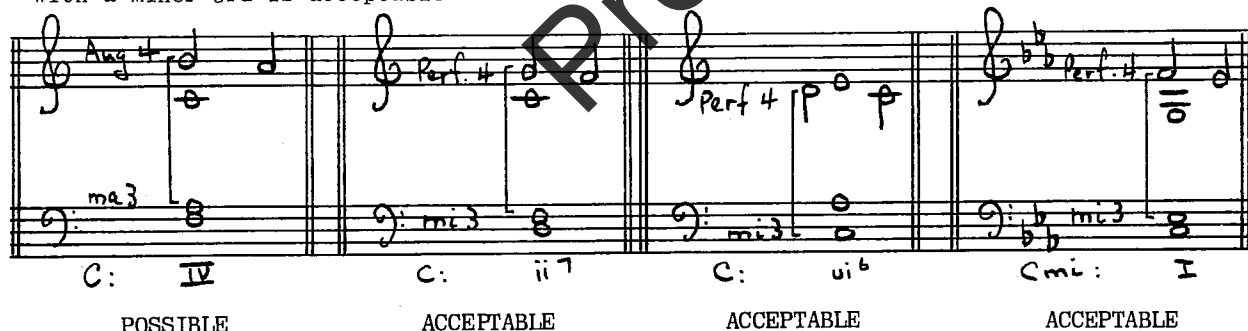
All of the above examples are MAJOR 9THS, and all are quite acceptable. They form legitimate 9th chords. A MINOR 9TH struck simultaneously with the root below it is fine on a Dominant Structure chord, as:



3. The "4 - 3" appoggiatura needs caution. Avoid the striking of an appoggiatura Perfect 4th (11th) with a Major 3rd below it, as:



But the simultaneous use of an Augmented 4th (11th) with a Major 3rd, or a Perfect 4th (11th) with a Minor 3rd is acceptable:



(although the subsequent irregular doubling of the 3rd of IV is not ideal)

(although the subsequent irregular doubling of the 3rd of I is not ideal)

4. The "6 - 5" appoggiatura is usually better without a simultaneous striking of the 5th. Certainly, if the appoggiatura is a MINOR 6th (13th) over the 5th, there could be no justification for the simultaneous sounding of the 5th, since the "harmonic" 13th added to a major or minor chord is always the Major 13th. Example:

mi^b Perfs C: V NO

corrected: YES (5th omitted)

If the appoggiatura is a MAJOR 6th (13th) over the 5th, there *could* be some justification for the simultaneous striking of the 5th in a lower octave, as:

ma 6

but because of the harmonic ambiguity, it is undoubtedly best (in four part writing) to OMIT the 5th when the 6th is used as an appoggiatura over it:

C: I or OK vi?

C: V or OK iii?

The "6 - 5" appoggiatura, similar to the "6 - 5" suspension, is problematical at best. The objection to the use of the 6th and 5th simultaneously has been stated. There is also an objection to its use as a single appoggiatura even without the 5th, since the 6th is then not *dissonant*. This leads to a pallid sound and possibly to an entirely different chordal implication than the intended one, as:

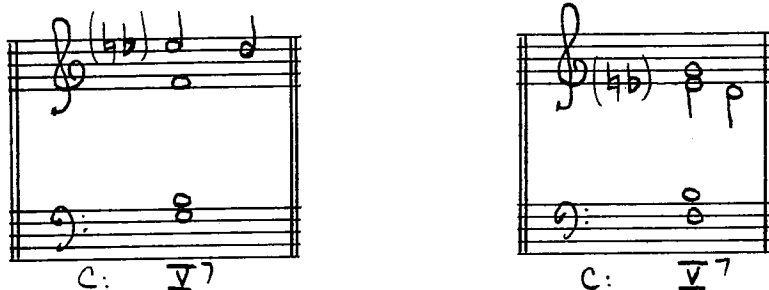
C: I? or C: vi?

The use of a 7th in the chord will give the appoggiatura 6th a clearer dissonance, as:

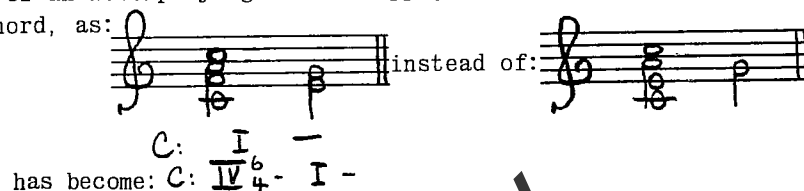
This: C: I⁷ is more effective than: C: I

This: C: ii⁷ is more effective than: C: ii

The single "6 - 5" on the V chord (and particularly on V⁷) is by far its most common, and perhaps most effective, use. To illustrate:



In other cases, the use of an accompanying "4 - 3" appoggiatura will create a clearly dissonant "APPOGGIATURA ⁶/₄" chord, as:



The use of certain other combinations with the "6 - 5" such as:

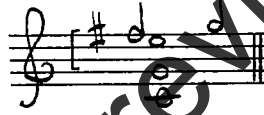


will produce desirably dissonant effects (Item "9." examines "combined appoggiaturas".)

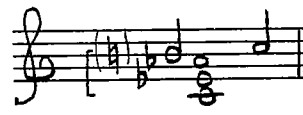
5. The preceding points discussed the use of an appoggiatura OVER a chordal tone struck simultaneously with the chordal tone in a lower octave. In the matter of an appoggiatura UNDER a chordal tone, the same general principle applies: if the appoggiatura struck at the same time as its resolution tone in a lower octave produces a legitimate chordal extension, it will probably be acceptable. Examples:



ALL RIGHT
(Major 7th chord)



ALL RIGHT
(Augmented 11th chord)



UNUSUAL, but acceptable
as an "Augmented 9th"
implication on a major
chord.

However, such situations must involve the use of a MAJOR 7th interval, and not a MINOR 7th interval, as:



NO! (Improper resolution of Minor 7th interval)

To recapitulate:

An appoggiatura can be regarded as a "representation" of the chordal tone over (or under) which it is situated; and the chordal tone *need not appear simultaneously*.

The resolution tone *should not be struck simultaneously ABOVE the appoggiatura*, except in the occasional case involving a Major "9 - 8" over the root in the bass, with the root above it. (This exception is confined mainly to the Tonic Chord.)

The appoggiatura may be struck simultaneously with its resolution tone in a lower octave, provided the resulting structure is an acceptable harmonic chord.

Finally, **duration** is a factor. A situation which might be offensive at a slow tempo, or with longer note values, may be acceptable if it is brief (that is, if it is not there long enough to register *vertically* on the ear). A combination which might be unacceptable when struck simultaneously is more likely to be acceptable if not actually *struck*. To illustrate:

Trouble! But: All Right Trouble! But: All Right

As always, the ear is the final arbiter! The directions relating to appoggiaturas, similar to all of the directions in this text, are based on common practice; but brilliant and effective exceptions to all of the directions can be found in every style of music. Adherence to the principles of common practice is likely to yield the best results, and deviations from these principles should be conscious and calculated. Deviations which result from sloppy technique and/or a faulty ear are not likely to be successful.

9. COMBINED APPOGGIATURAS

Appoggiaturas in two voices simultaneously are available. They will move either in parallel imperfect consonances (3rds or 6ths), as:

in 6ths in 6ths in 3rds in 6ths
(10ths)

C; I ii V I

has become "IV₄⁶ - I" has become "I₄⁶ - V"

(Appoggiatura ₄⁶) (Appoggiatura ₄⁶)

Examples continued:

in 6ths in 6ths in 3rds in 3rds

C: I bii +6 I F: I vii°7 I⁶

or in **Contrary Motion**. It is generally preferable to have the contrary motion appoggiaturas resolve on to the interval of a 3rd or a 6th, rather than on to a perfect consonance. The resulting *duet* emphasis on the perfect consonance can sound somewhat "hollow", as:

to a 4th to an Octave to a 5th

(These are not specifically forbidden, but in normal contexts are questionable.)

The following examples show more common contrary motion to imperfect consonances

C: I IV C: *1 I *2 V I

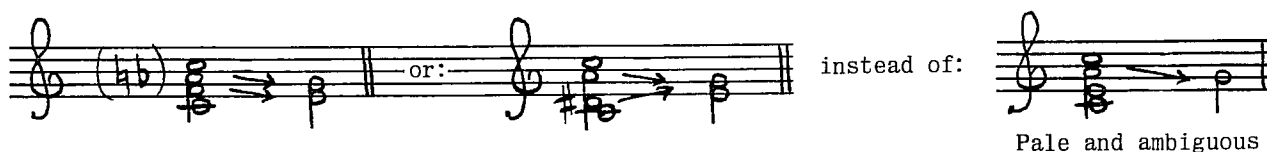
To a "3rd"(10th) To a "6th" To a "3rd" To a "6th"

*¹ Note the "diminished octave". This is quite acceptable, but its inversion, the "augmented unison", may be somewhat too harsh for general use. Consider:

Possible, but may not fit a normal context, particularly if held too long.

*² Note the "full step" appoggiatura under the leading tone in the dominant chord.

The use of two appoggiaturas is usually not too much of a threat to the always important harmonic clarity. In the case of the combination of another appoggiatura with the "6 - 5", it is actually an improvement, as:

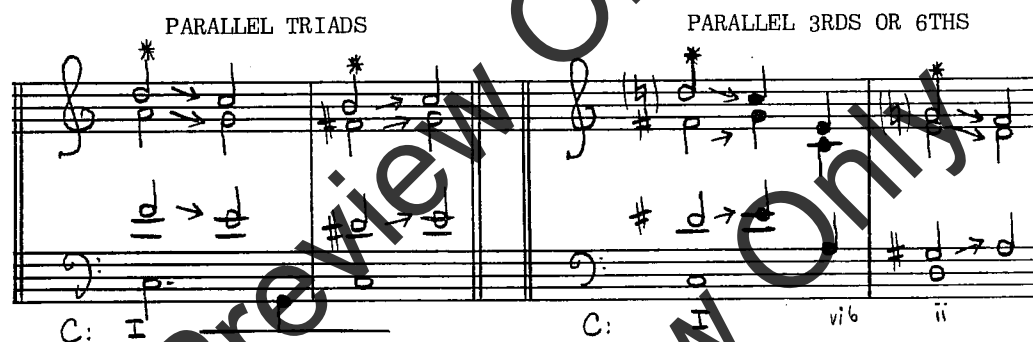


It does not necessarily follow that two appoggiaturas are *always* better than one! Further, it is inadvisable to "double" an appoggiatura, *even* if they move in contrary motion, as:

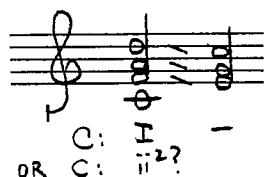


POOR!

Appoggiaturas in three parts simultaneously are possible. They either move in parallel triads, (provided no parallel 5ths result), or two voices will move in parallel 3rds or 6ths, while the other moves in contrary motion. Examples:

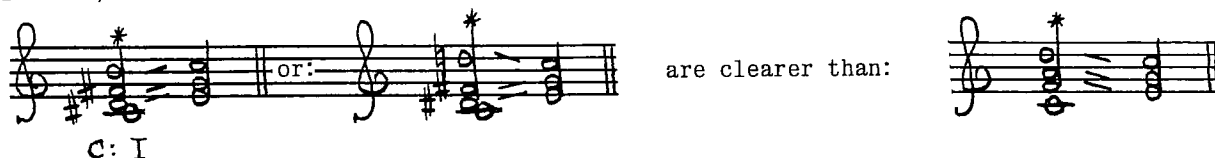


Appoggiaturas in three voices simultaneously can be dangerous; the "appoggiatura chord" which results may cloud the harmonic intent, and lead to a situation where the intended dissonance becomes *consonant* and the intended consonance becomes *dissonant*! Observe:



The "F" here is the intended dissonance, the "C" the intended consonance; but it could be argued that the true result is the exact opposite!

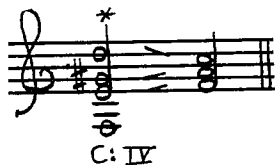
It seems that the presence of clear *leading tones*, particularly of a *chromatic* nature, and the presence of contrary motion will give a more obvious "leading" quality to triple appoggiaturas, as:



Examples continued:



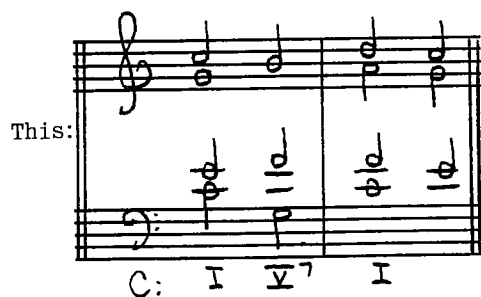
is clearer than:



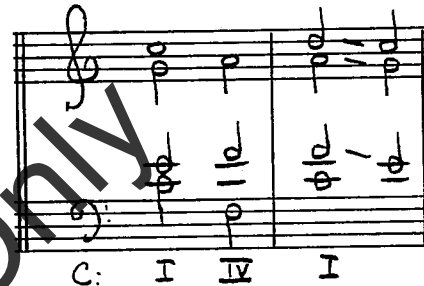
is clearer than:



Furthermore, the expectancy of the intended basic chord is a factor:

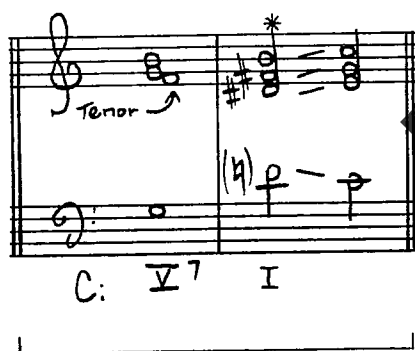


is clearer than:

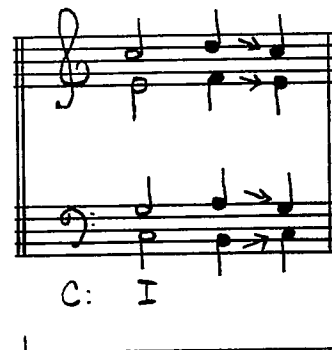


simply because the expectancy of a "C" chord is greater. (V⁷ predicts "I" more than IV does.)

The use of appoggiaturas in four parts simultaneously is unusual, but not impossible. Obviously, even more care is needed to retain harmonic clarity. If the appoggiatura chord formed by the four appoggiaturas is clearly of an "inharmonic" structure, if the notes in it show sufficient linear tendency toward their intended destinations, and the intended basic chord is strong enough, it may work. Observe the illustrations:



ACCEPTABLE Although "biting" because of the augmented unison, the expectancy and clear linear dissonance are present.



Has become "I - vii - I". It is all right, but it is "I - vii - I" and not just "I"!

Again, the ear must make the final decision. The value of combined appoggiaturas is the resulting dense and rich texture, and there are areas in which such richness is desirable. More often, however, economy of means and a sparser texture are preferable. The rich texture runs the risk of loss of clarity and the risk of an over-ripe romanticism. The following examples show a number of ways of handling an appoggiatura 9th on a "C" chord. Whether any of the solutions improve on the first one is, of course, debatable:



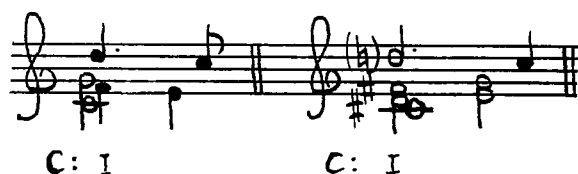
Below is an example of a line using an economical texture, followed by an example of the same line supported with a richer texture resulting from combined appoggiaturas. The second solution is not meant to be an *improvement*, but simply a different style. The exercise material will require examples of both types of texture:



Nothing more in the supporting parts than is necessary for harmonic clarity and balanced rhythm.



NOTE: The resolution of "combined appoggiaturas" may be done in a "staggered" manner, as:



10. An appoggiatura over a 7th is, of course, impossible; such a note will simply be the root, as:



But the question of an appoggiatura under a 7th occasionally arises. Since a 7th is itself a dissonance, the use of an appoggiatura resolving into it is NOT a normal procedure. To illustrate:



*These notes have no particular urge to rise.

There could be exceptional instances, however, (involving combined appoggiaturas) where an appoggiatura under a 7th might be usable, assuming the intention is clear:



ASSIGNMENT 55 (Appoggiaturas)

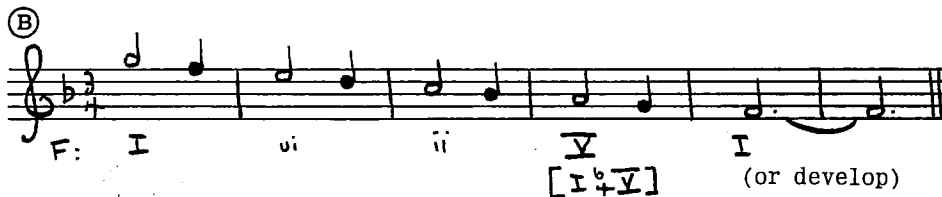
- GROUP 1. Sopranos are given with basic harmonies. Work out one simple and one "richer" four part solution for each. As always, it is often helpful to reduce a line to its essential notes for a clearer view. Example:



reduces to:



- Ⓐ (See Sample Solutions page 298.)



Group 1 continued:

© (See Sample Solutions page 298.)

© (See Sample Solutions page 299.)

© (No chords given. Use "starred" (*) notes as appoggiaturas.) (See Sample Solutions page 299.)

GROUP 2. a. Most melodies are, from a technical point of view, simply consonant chordal tones embellished and decorated with various inharmonic types. To illustrate, using only appoggiaturas:

This:

could become:

or with a subdivision of the beats:

Elaborate each of the following "chordal note" lines with application of appoggiaturas.
(Suspensions and retardations are also available.) *Melody exercise only.*

(A)

G: I ii V ii b5 V I

(B)

Fmi: ii - V I - - ii - V I

(See Sample Solutions page 299.)

b. A basic four part passage is given. Give three elaborations of it, as follows:

1. Apply appoggiaturas to the soprano only.
2. Leave the soprano as given and increase interest in the supporting parts through application of appoggiaturas.
3. Apply appoggiaturas to any and all parts, for a balanced texture.
(Suspensions and retardations are also available in all of the above.)

Andante

G: I ii b V⁷ I bvi b5 b7 V IV^b bii⁺6 bvi b I

(See Sample Solutions page 299.)

[DoR.] [Fr.] ("interrupted cadence")

GROUP 3. The progressions are suggested. Work each for four parts, aiming to make a musical use of appoggiaturas. (Suspensions and retardations are also available.) Do not concentrate all of the activity in one part; rather try for a true "four part" result. But when the bass is decorated it is usually wise to avoid cluttering the parts above it. Again, feel free to modify these progressions, or use your own.

(A) Slowly, with no eighth notes.

Emi: I - - IV^{or} ii - Dom. vi ii - Dom. I NAT vii iii IV V I I

(or Develop)

(B) A moderate tempo, with some eighth notes.

Dm: vi ii Dom. or I^{b4}-V- I ii Dom. or I^{b4}-V- I I

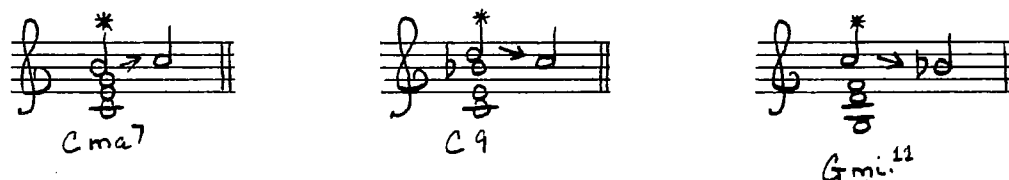
(or Develop)

GROUP 4. Examine as many melodies as possible, in all styles, for the use of appoggiaturas, and become familiar with the sound of the various single and combined appoggiaturas.

II. THE "HARMONIC" USE OF APPOGGIATURAS AND SUSPENSIONS

Introductory:

The "accented" inharmonics have harmonic significance. That is, they create extended and modified chords. The following appoggiaturas create, at their point of impact, the chords indicated below each:

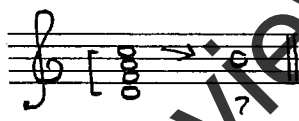


In general, the evolution of harmony to the use of the so-called "modern" chord structures has progressed along contrapuntal paths. The more involved "vertical" chords have developed from the use of inharmonics in the "horizontal" lines. The fact that most of these more involved vertical chords are explainable, vertically, with reference to the overtone series, or the fact that many of these harmonies are now used as chords rather than as coincidental combinations of melodic lines, in no way changes the fact that they evolved *contrapuntally*.

The extended chords result from a "freezing" of the appoggiatura. Instead of being resolved, it is retained to form a more involved chord, as:



The dissonant "upper functions" of a chord are the 7th, 9th, 11th, and 13th. Unquestionably, the most demanding of these is the MINOR 7TH because it needs a new chord for its resolution:



We are familiar with the part this note plays in chord progression. (The resolution of the Minor 7th down to a consonance is the basis of the principle of Primary root movements, see Volume I.)

On the other hand, the 9th, 11th, and 13th are quite different from the Minor 7th in effect, because they can resolve *on the same chord*, as:



Hence their adaptability as appoggiaturas and suspensions.

Therefore, the 9th, 11th, and 13th *do NOT* have an influence on the actual chord progression! They do not have as much linear urge to resolve as does the Minor 7th. This fact is pointed up by noting that, while a Minor 7th must in general be retained in the chord until resolution takes place, a 9th, 11th, or 13th may be dropped without serious loss of density or energy. To illustrate:

mi.7th No.7th

BUT:

9th No.9th

Dmi.7 Dmi.

Dmi.9 Dmi.7

NOT GOOD!

ACCEPTABLE!

The following text examines 9th, 11th and 13th chords.

A. 9th Chords

1. CONSTRUCTION

The 9th chord is derived from the freezing of the appoggiatura 9th. Through common usage, it has become recognized as a **basic chord type**. With only four parts available, it is customary to omit the 5th, as:

C: V⁹ C: ii⁹ C: I⁹

It is felt that the 5th is expendable, whereas the 7th provides the support for the 9th. This is *NOT* an essential requirement, however. Other omissions are possible depending on the voice leading in the context. Observe the following examples, which show 9th chords with omissions other than the 5th:

C: V⁹ C: V⁹ C: V⁹(vii⁷?) C: ii⁹ C: ii⁹ C: ii⁹(IV⁷?)

Unusual omission of important 7th in V.

Unusual omission of important 3rd.

Omission of root. This produces a "vii⁷", which is really an incomplete V⁹.

7th omitted

Unusual omission of 3rd.

Omission of root.*

*This produces IV⁷ instead of ii⁹, but considering the subdominant function of both chords, no harm will likely be done.

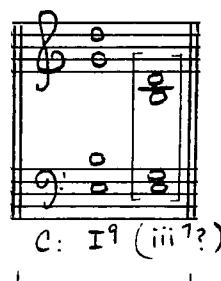
Examples
continued:



7th omitted



Unusual
omission
of 3rd.



Omission
of root.*

*This produces iii^7 instead of I, which is not unusual. An examination of chord symbols will show that an "Emi7" chord in C major is often really a "Cma9" chord without the root!

Chords of the 9th (and certainly those of the 11th and 13th) are, more often than not, used in **root position**. This assures maximum support for the upper functions and assures greatest harmonic clarity. Furthermore, the disposition of the notes with respect to the overtone series is of **UTMOST IMPORTANCE**. The success of extended chords depends more on the voicing than on any other factor! The greatest clarity is obtained when the notes of the chord outline the overtone series, and when the partial numbers are low. To illustrate:



Overtone series of G



Clear 9th voicings in four parts.

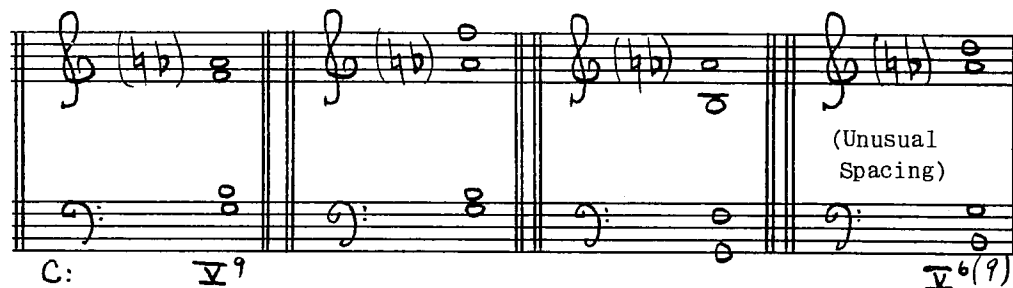
A voicing that might be effective with a *resolved "9 - 8" appoggiatura* may not be effective as a true "9th chord", as



Good

Doubtful

The *Dominant 9th chord* is the most frequently used, and because of its acoustical purity it enjoys more flexibility of voicing than the non-dominant 9th chords. Here are a few examples: (Note the availability of "b9" on V. This would be diatonic in minor, and a Modal Variant in major.)



Examples continued:

or even:

Actually vii⁷!

Despite some of the possibilities indicated above, the 9th *will normally be situated in an upper voice*, and non-dominant 9ths need more care in voicing. Further, it is inadvisable to use a MINOR 9TH on non-dominant chords. Examples:

minor 9

C: iii⁹ minor chord

Not generally useful.

But:

A mi: V⁹ A: V⁹ b9

Acceptable

2. RESOLUTION

The 9th usually resolves one step down into the next chord, as:

C: V⁹ I C: V I C: V⁹ I C: V⁹(2) I⁶

C: I⁹ IV C: ii⁹ V⁷ C: vi⁹ ii⁷ C: bii +b(9) I

Parallel 9th Chords

OPT.

Other resolutions are possible, however, as:

"Passive" resolutions:

C: V⁹ vi C: V⁹ ii⁷ C: I⁹ V⁷

Upward step resolutions:

In this case, the 9th is being used as an appoggiatura under the 3rd of V, with the 3rd omitted.

Full 9th chord

9th used as appoggiatura under the 3rd of ii, with the 3rd omitted.

And, in the last step of the process, it is possible - occasionally - to treat the 9th more casually, and to leap from it. To illustrate:

C: V^9 I^9 C: ii^9 V^9 I [or I^9]

Such casual treatment of the 9th creates a new environment, a different "style"; a style which is based on the "sound of 9th chords" rather than an environment in which the 9th chords are used in the framework of a regular context.

Leaping 9ths are most likely to be successful in the melody (soprano) and in obvious progressions such as "ii - V" "IV - I", etc. In obvious Primary progressions, the root movement is clear and the important dissonance of the Minor 7th resolves the expected resolution.

It is important to retain a consistency of style. One casual treatment of a 9th, or any other upper function, in an otherwise conforming environment may well sound wrong!

The 9th chords are derived from appoggiaturas and will occur at strong rhythmic positions. However, a 9th which arrives in an appoggiatura position may leap to another note of the same chord and it may or may not be replaced in another part, as:

C: V^9 V^7 I C: V^9 V^7 I C: V^9 $V^9(6)$ I
[vii^o7?]

Examples continued:

C: $\text{V}^9 \text{V}^7 - \text{I}$ C: $\text{V}^7 \text{V}^9 \text{V}^7 \text{I}$

The majority of these instances occur (as in the above examples) on Dominant chords. But the same process can occasionally be effective with non-dominant structures, provided the "style" which results is consistent with the established environment:

C: $\text{ii}^9 \text{ii}^{\flat 5}(7) \text{bii}^{\flat 6}$ C: $\text{I} \text{I}^9 \text{I}^7 \text{ii}^7$

[Fr.]

C: $\text{ii}^9 \text{ii}^7 - \text{V}^7$ C: $\text{vi}^9 \text{vi}^7 \text{ii}^9 \text{ii}^7 \text{V}^7$

ASSIGNMENT 56 (9th Chords)

1. Examine any available scores and sheet music for the use of 9th chords, particularly the Dominant 9th. Find melodies (e.g., "Laura") where 9ths are used melodically.
2. The soprano is given, with basic harmonies. Complete for four parts, noting the use of 9ths, and an opportunity may arise to use 9ths other than those in the given lines. Strive for clear, well supported, voicings and do not forget the overtone series.

(A)

C: $\text{ii} \text{V} \text{I} \text{vi} \text{ii} \text{V} \text{I}$

(B) (See Sample Solutions page 300.)

F: $\text{I} \text{vi} \text{ii} \text{V} \text{I}$

(C) (See Sample Solutions page 300.)

G: $\text{I} \text{vi or vi}^{\flat 5} \text{ii} \text{V} \text{I}$

(D)

B^{\flat} : $\text{ii} \text{bii}^{\flat 6} \text{I}$

2. (continued)

⑤

G. ii V I

⑥ (See Sample Solutions page 300.)

Eb. I - V - I - V - I

⑦

D: I - vi - ii - V I

⑧

G: ii - V - I vi ii V I

3. The progressions are suggested. Work out for four parts, aiming to exploit, and make musical use of the sound of 9th chords. Stress the Dominant 9th. As always, produce smooth voice leading and a shapely soprano, but avoid too much activity. The more extended chords being used in this section of the text will create an environment and style of their own. It is generally better to use them for their sonority rather than as a basis for mobile lines.

⑨

Bb. ii - V - I - IV V I

⑩ (See Sample Solutions page 300.)

Emi: I - V - I - SUBDOM. DOM. FUNCT. FUNCT. I

⑪

Eb. I IV - V - vi ii - V - I - - bvi - - bvi - ? - I

4. The ear: Become familiar with the sound of the 9th chords, and the possible voicings.

B. 11th Chords

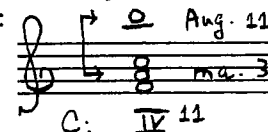
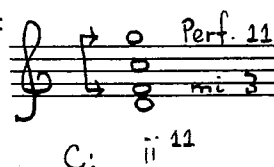
1. CONSTRUCTION

The 11th is most often derived from the "4 - 3" appoggiatura over the 3rd, as:

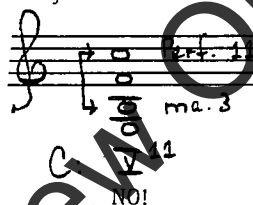


In these cases then, it is usually the 3rd which is omitted when the 11th is present in four part writing.

Occasionally, the 3rd and the 11th may be present at the same time, when the 11th is an acceptable "harmonic extension" of the chord. The appearance of a *Minor* 3rd below a *Perfect* 11th is possible, as:



but the striking of a *Major* 3rd and a *Perfect* 11th simultaneously is unacceptable, as:



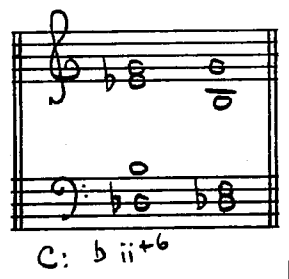
However, when the 11th is derived from an appoggiatura over the 3rd, as it is in these cases, it is customary to omit the 3rd, in which case the problems arising from the simultaneous use of the 11th and the 3rd will not arise.

Root position is regularly used, and the 9th may or may not be present. Observe the examples:

Diagram showing six examples of 11th chords in root position, illustrating the omission of the 3rd and 9th, 3rd and 5th, 3rd and 9th, 3rd and 5th, and the use of the 11th and 3rd together (less usual).

C: V ¹¹	C: V ¹¹	C: ii ¹¹	C: ii ¹¹	C: ii ¹¹	C: bii ^{+6 11}
3rd and 9th omitted	3rd and 5th omitted	3rd and 9th omitted	3rd and 5th omitted	LESS USUAL USE OF 11TH AND 3RD.	(GERMAN) 3rd and 9th omitted

The omission of the root is unlikely in 11th chords.



Actually turn out to be French forms!

Chords which employ an Augmented 11th are most often derived from an appoggiatura *under* the 5th. To illustrate:

C: V^7 becomes: V^{+11} C: I becomes: I^{+11}

C: IV becomes: IV^{+11}

Since this form of the 11th is derived from the 5th and *not* from the 3rd, the 3rd will usually be present and either the 5th or 7th omitted, as:

C: V^{+11} C: IV^{+11} C: I^{+11} C: V^{+11} C: I^{+11}

But, depending on the voice leading, instances can arise where other omissions and voicings are desirable, as:

2. RESOLUTION

An 11th which is derived from the appoggiatura over the 3rd normally resolves down one step into the next chord, as:

C: ii^{+11} C: V^7 C: ii^{11} C: V^{b11} C: I^7

A "passive" resolution is also available (See cadence of "Blue Moon"):

C: V^{+11} C: I C: ii^{11} C: V^{11} C: I^{+11}

Even a more casual treatment, with a leap from the 11th, is possible. Again, such a casual treatment is likely to occur in the melody, in an obvious progression, and must be suitable to the style of the passage:



The Augmented 11th which is derived as an appoggiatura under the 5th will regularly resolve a half step upward. When it is a chromatically altered note (which, more often than not, it will be), it will necessarily do so:



In normal popular harmonic practice, the Dominant 11th and the Supertonic 11th chords are the only 11th chords frequently used. The Tonic Augmented 11th is occasionally used at endings and impact points. Arpeggiations of 11th chords appear to be infrequent and would most likely occur on V, as:



interesting "subdominant"
arpeggio against dominant
harmony

ASSIGNMENT 57 (11th Chords)

1. Examine any available music for the use of 11th chords. Find melodies where 11ths are used melodically, particularly the 11ths on ii and on V.

2. The soprano is given, with basic harmonies. Complete for four parts, noting the use of 11ths. Strive for clear, well supported voicings, and use mostly root position, particularly with the 11th chords.

Ⓐ (See Sample Solutions page 301.)

F: ii - V[?] I vi ii V I ii V I
bii+b *bii+b*

Ⓑ (See Sample Solutions page 301.)

Bb: I - V - I - vi - ii - V - I

Ⓒ

D: ii V I - ii V I - Sub. dom. V I
bii+b

Ⓓ (See Sample Solutions page 301.)

Eb: I - vi - ii - V - I

NOTE: The line above is actually in F major with the harmony in Eb major. The result is an effect of "Poly-tonality".

3. The progressions are suggested. Work for four parts, aiming to make a musical use of occasional 11th chords. Perhaps use an 11th or two in the soprano with smooth voice leading and good chordal sonorities!

Ⓐ (See Sample Solutions page 301.)

G: ii - V - I - IV^{or ii} V vi - ii V

Ⓑ

Db: I - vi - ii - V - ? - ? - I

Ⓒ

C: ii - *bii+b* - I - iii - *ii or IV* - *V or bii+b* - I

4. The ear: Become familiar with the sound of 11th chords, and note how the voicing has a great deal to do with the effectiveness of these chords.

C. 13th Chords

1. CONSTRUCTION

The 13th chord is derived from the "6 - 5" appoggiatura over the 5th, as:

becomes: becomes:

C: V^7 V^{13} C: V V^{13}

It is, therefore, the 5th which is omitted in four part writing when the 13th is present. The 13th chords are mainly used on the dominant, and particularly the *dominant 7th*, chord. In minor, and with a "mixed mode" intention in Major, the 13th on V can be MINOR. Here are a few examples of Dominant 13th chords:

C: V^{13} C: V^{13} C: V^{13} C: V^{13}

NO ROOT!

Note that the 5th is omitted and the 7th is present in all of the above examples! Further, the 13th itself is in an upper part, and not voiced too low. However, it is well to remember that any listing of isolated vertical voicings is only part of the picture! The effectiveness of any vertical structure depends on what precedes it and what follows it. In part writing, the voice leading must be a major concern; the *vertical* cannot be divorced from the *horizontal*.

The Augmented 6th chords (which are enharmonic "dominant structures") offer possibilities for the use of the 13th, as:

C: $bii + b^{13}$ C: $IV + b^{13}$ C: $bvi + b^{13}$

The use of 13ths on other chords appears to be relatively infrequent. They are *best when a 7th is also present*, to avoid ambiguity. The 5th will, of course, be omitted in four part writing. Observe the examples:

This: I^{13} is better than: $[vi^6?]$

This: ii^{13} is better than: $[vii^6?]$

2. RESOLUTION

The 13th normally resolves one step down into the next chord, as:

$C: V^{13} I^9$ $C: V^{13} ii^7$ $C: V^{13} I^9?$ $iii?$

$C: V^{13} I^{+11}$ $C: ii^{13} V^9$ $C: I^{13} IV^9$

although, especially in the melody of a Dominant structure chord, it can sometimes be treated with about the same freedom as the 5th, (the note it stands for) as:

$C: V^{13} I$ $C: V^{13} I^6$

These uses of the Dominant 13th have become familiar through common usage. They are, in fact, examples of "Elision", a procedure which is examined at the end of this chapter.

Arpeggiations of 13th chords are rare, but the 13th struck at a strong rhythmic position can leap to another note of the same chord without necessarily being replaced, as:

C: $V^{13} V^9 I^7$ C: $ii^{b5(6)} V^{13} V^7 I^6$ C: $V^{13} V^7 I$

[iii b7?]

ASSIGNMENT 58 (13th Chords)

1. Examine any available music for the use of 13th chords. Note the relative frequency of the Dominant 13th.
2. The soprano is given, with basic harmonies. Complete for four parts, noting the use of 13ths. As always, join the harmonies with smooth voice leading, but do not forget that the effectiveness of the extended chords depends greatly on the voicing.

(A)

C: $ii^{b5} V I V I$

(B)

G: $ii? - V - I - bii^{+b} - I - ii? V I$

$IV?$
 $IV^{mi?}$
 $bii?$

$IV?$
[etc.]

(C)

(See Sample Solutions page 301.)

$Eb: I - IV^{+b} - I - ii? V I$

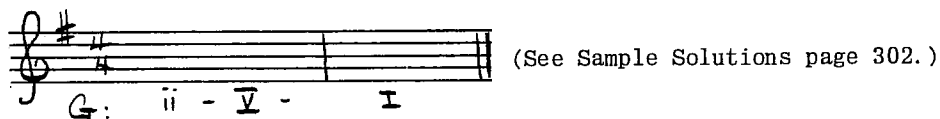
$IV?$
 $V? -$

(D) (See Sample Solutions page 302.)

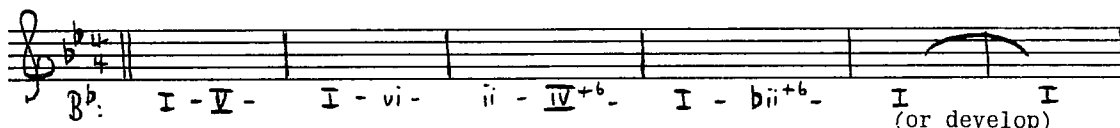
Amix: $I - V - I - V - I$

TONAL! TONAL!

3. Work out a few four part examples for the following familiar cadence pattern. Use various voicings which employ 9ths and/or 11ths and/or 13ths, particularly the Dominant 13th. Use occasional examples of the Minor 13th on V.



4. The progression is suggested. Work out for four parts aiming to employ 13th chords, especially on V and on the Augmented 6th chords. (The 13ths will be most adaptable in the soprano.) Use few, if any, eighth notes.



5. **The ear:** Become familiar with the sound of the 13th chords. Note how the 13th benefits from a 7th used below it.

D. The "Added 6th" on I

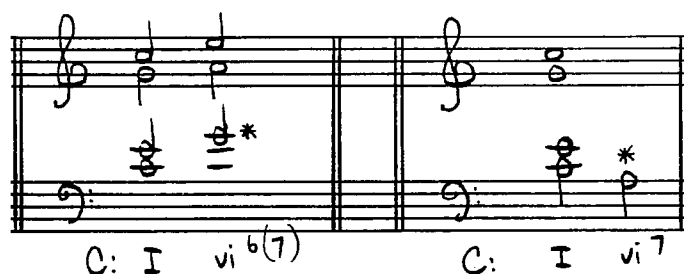
The "added 6th" is related to the 13th chord, with an important difference. The "added 6th" is used as, and understood as, a substitute for the 7th, and not for the 5th.



The "added 6th" is always a MAJOR 6th. When applied to I in minor, it therefore requires an accidental:



The use of the "added 6th" on I creates a "vi⁷" chord, and the structure will be heard as "vi⁷" unless "I" is expected. The following examples are clearly "vi" and not "I" chords:



The "added 6th" on I IS NOT often used in the part writing idiom, because it does impart an ambiguity to the important tonic chord. (In Chapter III, Volume I, under "Four Note Chords on the Scale Degrees", it was pointed out that the "added 6th" receives its main use in the *sectional* harmony style.) Nevertheless, it may be useful as a means of adding density to the I chord, provided the chord is constructed so that it is clearly a I chord and is used at a point where I is expected.

1. CONSTRUCTIONS

—Note Neutral quality from 4ths—

I add 6 I add 6 I 9 [add b] I 9 (b) [add b]

I 4 add 6 I b add 6

2. SOME EXAMPLES IN CONTEXT

C: V mi 13 I 9 add 6 ii 7 b ii + b I add 6

C: I b ii + b I add 6 V vii o 7 I b [add b]

Examples continued:

chords in 4ths

C: ii b5 4 I b[add 6] V7 I C: V² b4 b13 I b[add 6]

The "added 6th" can be used in arpeggio or semi-arpeggio fashion, leaping to another note of the chord. It need not be replaced, as:

etc.

C: I vi C: I V⁷ sus4 V⁷ I

Finally, the "added 6th" chord on IV, as shown, is really the 1st inversion of "ii⁷" and can be so considered.

C: IV add 6

ADDENDUM

It is evident, then, that it is occasionally possible to use a chord which is not, in a vertical sense, the intended chord at all but which has, in the context, the harmonic effect of the intended chord!

The interchangeability of ii and IV is likely the most common of such cases, but it has been further shown that in some circumstances:

- vi⁷ (particularly in 1st inversion) can equal I.
- iii (particularly in 1st inversion) can equal V.
- iii (particularly iii⁷) can equal I.
- vii can equal V.

In a sense, all of these substitutions result from the freezing of appoggiaturas. Other chord structures that illustrate this possibility can and do occur.

ASSIGNMENT 59 (Added 6th on I and Summing Up Exercises on extended Chords)

A. The "Added 6th" on I

1. Examine sheet music, and listen for, the use of the "added 6th" on I. Note that its quality is generally more suited to popular sectional writing than it is to the part writing idiom. Note also, that it is not infrequently used as a melody note in popular songs.
2. The soprano is given, with basic harmonies. Complete for four parts, noting the use of the "added 6th" on I.

(A) (See Sample Solutions page 302.)

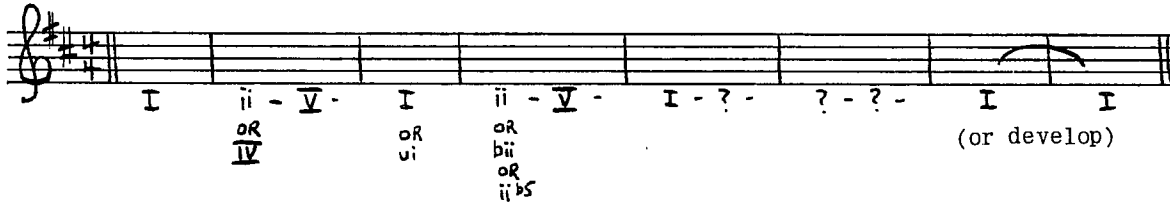
3. The progressions are suggested. Work for four parts, aiming to make some judicious use of the "added 6th" on I. Remember that the "added 6th" on I in MINOR will be the Dorian 6th, requiring an accidental.

B. Summing Up the Exercises on the Extended Chords

1. The soprano and basic harmonies are given. Complete for four parts, aiming for clear voicings of the extended chords - along with smooth voice leading.

(See Sample Solutions page 302.)

2. The progression is suggested. Work out for four parts, without eighth notes. Exploit the extended chords and aim for a misty and pretty quality. Do not overdecorate, but let the harmonies themselves create the emotional environment. Suggestion: Make use of the "upper functions" in the soprano line.



3. The ear: Continue to experiment at the keyboard with voicings and uses of the upper functions.

III. THE UNACCENTED INHARMONICS:

- A. Passing Tones
- B. Auxiliary Tones (and "auxiliary derivatives")
- C. Anticipations

Introductory:



The dissonance in the **Unaccented Inharmonics** is not nearly as evident as it is in the **Accented** type. (Compare, for instance, the difference between the fourth note of "I'm Looking Over a Four Leaf Clover", which is an *appoggiatura* 9th on the I chord, with the 6th note, which is a *passing* 9th on the same chord.) They are not as "expressive" and their dissonance does not need quite so much care. Writers have always been more casual with "clash" at weak beats or fractions of beats. For instance, most writers would view this with alarm:

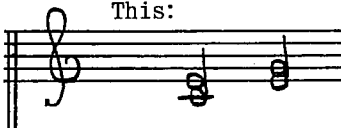



A. The Diatonic Passing Tone

NOTE: "Chromatic" passing tones will NOT be examined or used at this time. They provide a good entry into "Chromatic Harmony" and will be investigated under that heading.

A **Passing Tone** is a non-chordal note used to "bridge" a leap between two different notes in the same voice. The passing tone replaces a leap with "steps" and consequently produces a smoother line. Because of this, the passing tone is probably the most frequently used inharmonic, particularly in vocal, or vocal style, melody. Observe the examples:

Examples continued:

This:  can become: 

This:  can become:  or:  or: 

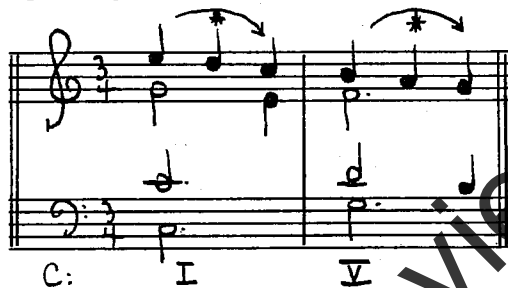
C I

Details:

1. The passing tone most often bridges the interval of a 3rd, as:



2. The passing tone may join notes of the same chord, as



C: I V

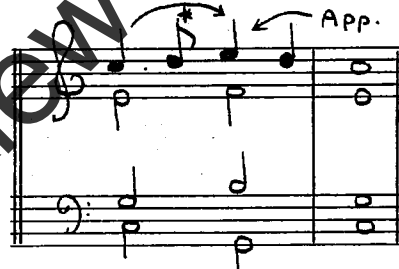
or join notes of different chords, as:



(Familiar "Passing 7th")



It may also lead to an appoggiatura, as:

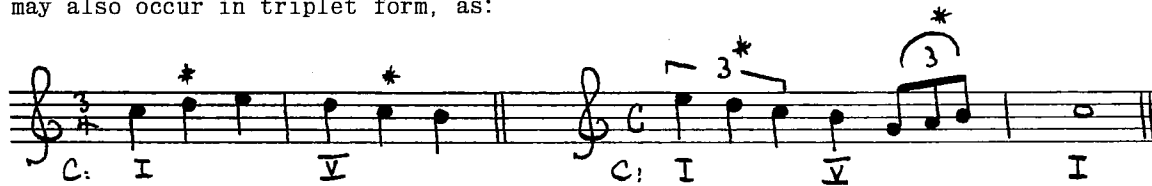


App.

3. The passing tone is usually found (since it is an *unaccented* inharmonic) at a weak beat or fraction of a beat, leading to a stronger one, as:



It may also occur in triplet form, as:



However, an *Accented Passing Tone* can occasionally occur, (see bar 1 of "Yours") as:



Accented passing tones are similar to appoggiaturas, but are used *in the sense of passing tones*. Sometimes it is advisable to treat the supporting harmony parts as if the accented passing tone were an appoggiatura. To illustrate:

NORMAL PASSING TONE

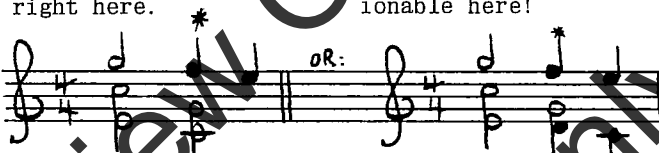
ACCENTED PASSING TONE



Unaccented clash
between F and E
all right here.

Clash between *accented*
F and E could be object-
ionable here!

SOLUTION:



F treated in the manner of an appoggiatura.

4. Passing tones can ~~CREATE~~ forbidden parallels, as:

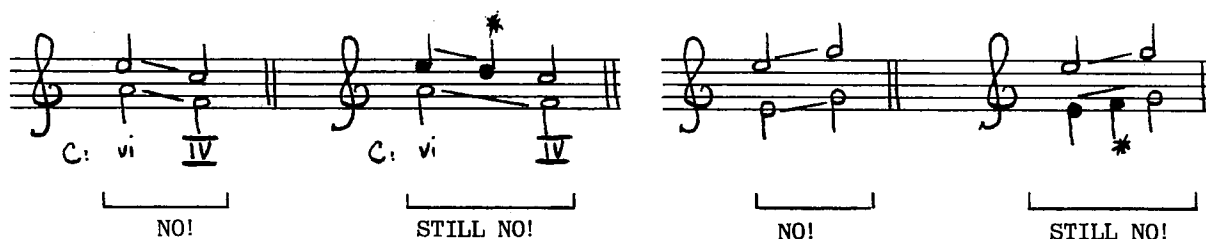


Acceptable.

BUT:

Questionable at best!
(Passing "E" has created
a parallel 5th.)

Unfortunately, passing tones will *not* hide forbidden parallels:



5. The interval of a 4th may be bridged with two passing tones (in which case one of them may be an *accented* passing tone):

Most situations involving two passing tones covering a 4th are between the root and 5th, or 5th and root, of the same chord (as they are in the above examples). Other situations are, possible, however, as:

could become:

not counted here as a rising 7th!

In Minor, the 6th and 7th degrees used as passing tones will usually be derived from the **Melodic Minor**, ascending and descending:

6. Occasionally, a **SINGLE** passing tone, instead of the more natural two, may be used to bridge the interval of a 4th, as:

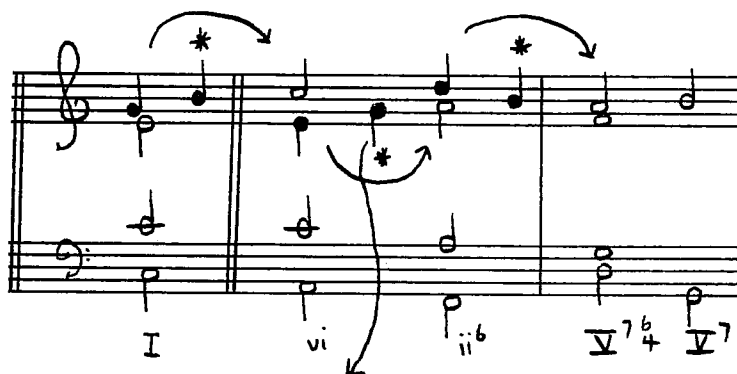
or: instead of:

or: instead of:

"Pentatonic" suggestion!*

*(This is a commonly used passing tone on I in popular and jazz lines.)

Also:



This is unusual!*

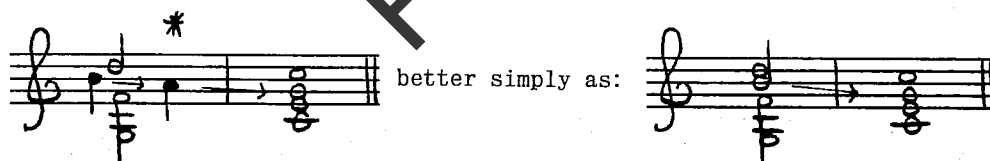
* The "G" taken by leap is the Minor 7th of the chord, which tends to fall. The normal tendency of the note would be better overcome with a clearer "passing tone" usage, as:



7. All inharmonics occur most often in the soprano, but they may appear in any voice, as:



It is sometimes inadvisable to use a passing tone between the leading tone in V and the dominant in I to fill out the tonic chord when that movement is used as an irregular voice-leading situation. To illustrate



Not entirely satisfactory because it draws attention to the irregularity!

8. Passing tones may appear in two parts simultaneously. These "double" passing tones will move in parallel imperfect consonances (3rds or 6ths) or in contrary motion:

C: I (parallel 6ths) C: I IV (parallel 3rds)

C: ii Ami: V⁶ V⁶₄

Note doubled passing tones in contrary motion. OK!

9. They may appear in three (and sometimes four) parts simultaneously. "Triple" passing tones will move with two voices in parallel 3rds or 6ths and the 3rd voice in contrary motion or, sometimes, in parallel triads if no parallel 5ths result:

C: I⁶ I Ami I C: V V⁷ C: I

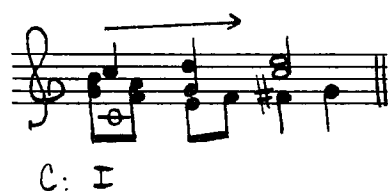
Two voices parallel, 3rd voice in contrary motion. Parallel triads

The use of combined passing tones, or passing tones combined with other inharmonic types, leads to increased complexity. New chords are implied and the basic harmonic framework becomes more obscure. As always, consider balance and harmonic clarity. Certainly avoid overloading, but a "richer" and "busier" texture is available if handled skillfully. Make sure that the direction and destination of every part is clear, and that the meaning of every inharmonic is obvious. As a general "rule of thumb", it is wise to avoid more than two separate ideas simultaneously. To illustrate:

C: I C: I C: I⁶ I

One idea Still one idea Two ideas emerging because of contrary motion

Illustrations continued:



Two ideas. The opposed idea in the inner parts is a separate element



Clearly two ideas

10. It may be necessary or desirable to resort to unusual doublings, in order to obtain passing tones and at the same time retain smooth voice leading. If such irregular doubles occur logically and are not heard in too much of a vertical sense, no harm will be done.

Examples:



Finally, for example purpose, here is:

- A simple melody composed of consonant chordal notes.
- A "development" of it, through application of passing tones and other inharmonics.
- A simple four part harmonization of the developed line.
- A more ornate harmonization. (Even with only the presently available material, scores of such examples would be possible. This one exploits a contrary idea in the bass.

a.



b.



C.

d.

C: I [I^b] [I] ii [ii^b] V V I IV mi₄ I

GROUP 1. The sopranos are given, with basic harmonies. Work out one simple and one “richer” four part solution for each. Again, it is often helpful to reduce a line to its *essential* notes for a clearer view. Example:

mus. This.

The first staff of music is in treble clef, common time (C), and 3/4 time signature. It begins with a C4 quarter note, followed by a D4 quarter note, and an E4 quarter note. A slur connects the next three notes: F4 (quarter), G4 (quarter), and A4 (quarter). This is followed by a B4 quarter note, an A4 quarter note, and a G4 quarter note. A slur connects the next three notes: F4 (quarter), E4 (quarter), and D4 (quarter). The staff ends with a C4 quarter note. Dynamics markings 'p' (piano) are placed above the first, second, fourth, fifth, and sixth measures. An 'app.' (appoggiatura) marking is placed above the eighth measure. The key signature has one flat (Bb). The bass line below the staff shows the following chords: C: I, II, V, I.

C: I ii V I

(A)

Group 1. (continued)

Ⓑ

Accented
Passing Tone

P APP.

A: I vi ii V I

Ⓒ (See Sample Solutions page 303.)

P P P P APP. P [ma. 7th]

F: I vi ii V I V I

(Try "imitation" in the above)

I 4 V
vii 0 7

Ⓓ (See Sample Solutions page 303.)

3 3

Dmi: I V I V I

Ⓔ

C: I vi ii V I

Ⓕ

Bb: I V

I

Ⓖ Bright, in style of "folk-dance". (See Sample Solutions page 303.)

Bmi: I ii? IV? vii 0 7? V? I

I 4 6 V I

PHR. vii [Ami]

Ⓕ No chords given. Use "starred" (*) notes as inharmonics.

GROUP 2. a. Devise a few short *chordal tone* melodies against any simple progression, then experiment with embellishments of them through the addition of passing tones. (Plus the accented inharmonics which have been discussed.)

b. The basic four part passage is given. Give three elaborations of it, as follows:

1. Apply passing tones to the soprano only.
2. Leave the soprano as given and increase interest in the supporting parts through application of passing tones.
3. Apply passing tones to any and all parts, for a balanced texture.
(Appoggiaturas, suspensions, and retardations are also available in all of the above.) (See Sample Solutions page 304.)

G: I ii $b5$ 6 V⁷ V⁶ 7 bvi 6 bii +⁶ [Fr.] I

GROUP 3. The progressions are suggested. Work out each for four parts, aiming to make musical use of passing tones, plus the other inharmonics which have been discussed. Short note values are available. (As always, feel free to modify these progressions, or use your own.)

(A) *Slowly*

E m: I IV - NAT - vii iii IV - V I vi - DOM. - FUNCT. I I (or develop)

(B) *Bright*

A p: SubDOM. FUNCT. DOM. FUNCT. I bvi ii $b5$ or bii DOM. FUNCT. I I

GROUP 4. Examine as many melodies and as much harmony as possible, in all styles, for the use of diatonic passing tones. Note that they occur more frequently than any other inharmonic type. Become familiar with the sound of the various single and combined passing tones.

B. The Auxiliary Tone (and the "auxiliary derivatives")

The **Auxiliary Tone** is a decoration of a stationary note. It is used at a weak beat, or fraction of a beat, one step above or one step below the principal note. It returns to the principal note.

Examples:

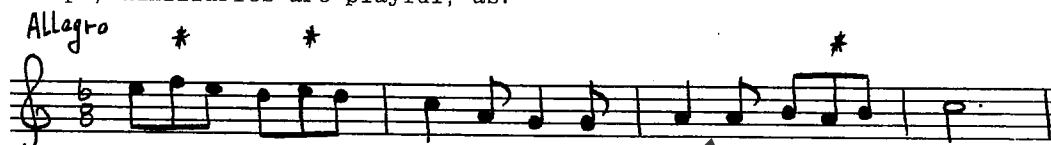
It does not have the obvious *expressive* value of an *appoggiatura* nor the *bridging* purpose of a passing tone. It is purely *decorative* and, because of this, can lead to an undesirably "florid" texture if overdone. It can appear in a variety of "weak" metrical positions, as:



It is particularly adaptable to triple groupings, as:



At a bright tempo, auxiliaries are playful, as:



(See "Mexican Hat Dance", "Sicilian Tarantella" etc.)

Details:

1. The UPPER auxiliary is nearly always found *one scale step above* the principal note, as:



In situations where the harmony allows a "mixed mode" interpretation, the auxiliary may be a *Modal half-step above*, as:



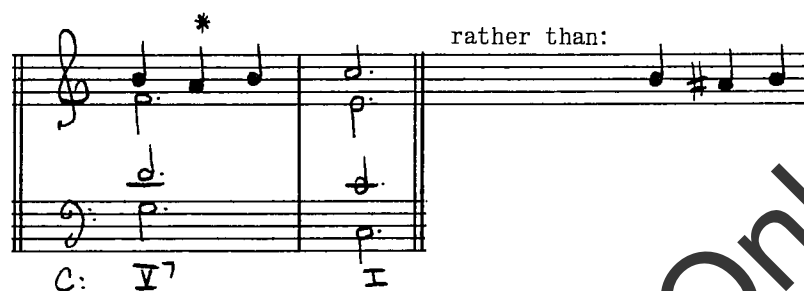
Unlikely!—because the C major chord is not capable of "minor" interpretation. That is, the modes of "C" that have C major chords do not contain A \flat 's!

2. The LOWER auxiliary is most often a *half-tone below* the principal tone, even if this requires a *chromatically raised note*, as:



This produces a "leading-tone" effect, and the upward resolution of the auxiliary is thereby aided.

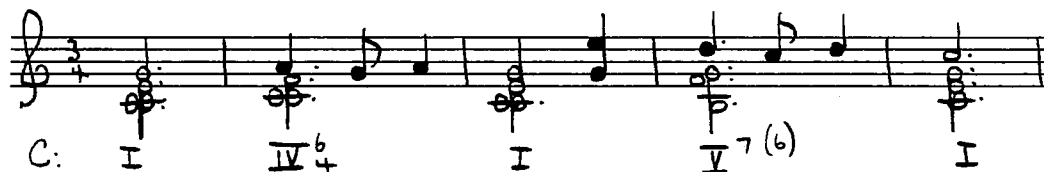
The auxiliary *below the actual leading tone* in a V or "V function" chord is an exception. Similar to an appoggiatura in the same situation, the auxiliary will be a *full scale step below* (i.e., the 6th degree of the scale) in order to avoid weakening and detracting from the upward urge of the leading tone itself. To illustrate:



In situations where the leading tone is not subsequently rising to the tonic, a chromatic half-step auxiliary may be all right, as:



In all other situations, the *half-step lower auxiliary* is the **RULE** rather than the exception. However, full step lower auxiliaries are possible anywhere, and may sometimes be suitable, as:



(See bar two of "Auld Lang Syne"; bar ten of "How High the Moon", etc.)

3. An auxiliary tone may return to the principal tone of the same chord, a change of position of the same chord, or on a new chord:

C: I C: I I⁶ C: I V⁷ C: I vi

(Same chord) (Change of position of the same chord) (Change of harmony)

4. Since an auxiliary may decorate any note, it may decorate a note which is itself a non-chordal tone, as:

C: I V⁷ C: V⁷ I

Auxiliary on Passing Tone Auxiliary on Appoggiatura Auxiliary on Appoggiatura Auxiliary on Retardation

Auxiliary on Auxiliary

5. Auxiliaries may appear in any part, as:

C: I IV V vi ii V I

They often provide a handy way to gain activity for purposes of motion or rhythmic balance, without upsetting the basic chord structure or voicing.

6. An auxiliary can appear simultaneously with a doubling of the principal tone, as:

C: I C: I⁶

But this should not occur when the doubling is a unison, as:

7. Auxiliaries may appear in two voices simultaneously. They will move in parallel 3rds or 6ths, or in contrary motion, as:

Parallel Imperfect Consonances

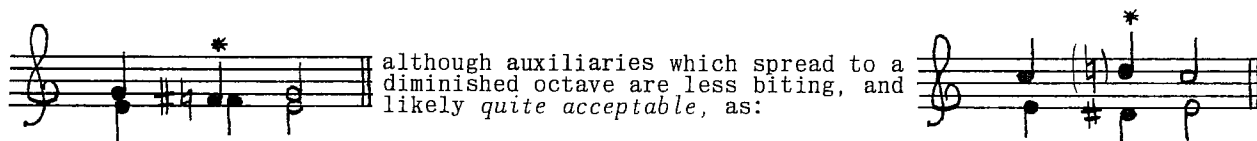
Contrary motion

Two contrary motion auxiliaries which resolve on to a perfect consonance will likely be unsatisfactory, as:

to an octave to a unison to a 5th to a 4th

Doubtful value! *Too much stress on the bleak perfect consonances.

Combined auxiliaries which produce an *augmented unison* may be too harsh, as:



8. Auxiliaries in three parts simultaneously are also available. Two parts will move in parallel 3rds or 6ths, while the other moves in contrary motion, or all three parts may move parallel, provided no parallel 5ths are involved. Very often an incidental "auxiliary chord" is formed:

C: I V_4^b I IV^b I_4^b V I

Four auxiliaries!

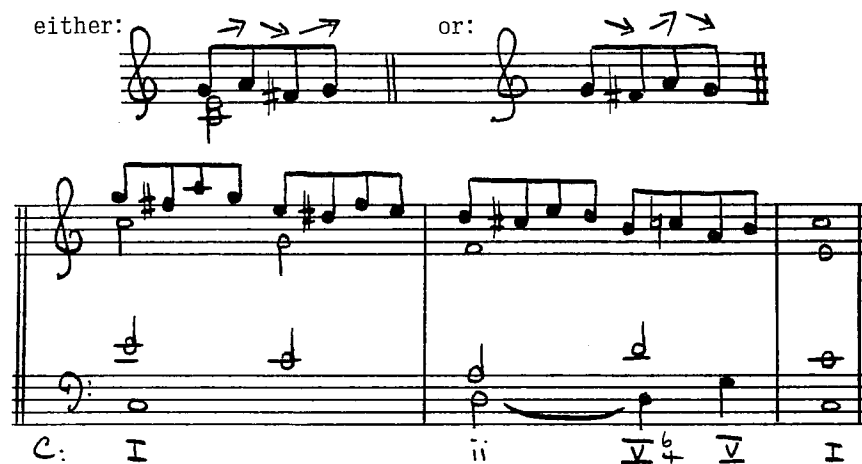
Auxiliary Tone Derivatives

1. The Turn is a traditional five note device, using both the upper and lower auxiliaries, as:

C: I ii^7 V^7

(See the bridge of "I'm Always Chasing Rainbows")

2. **The Double Auxiliary** is a four note device which uses both the upper and lower auxiliaries of the principal note, without returning to the principal note between them, as:



(See "Mona Lisa")

They may appear in any part, or in combination with due regard for parallels:



For more florid decoration, TRIPLE, QUADRUPLE, etc., AUXILIARIES are available.



3. **The Unprepared Auxiliary** is an auxiliary tone taken by leap. It is found at a weak metrical position (usually an "up-beat" or fraction thereof) and it resolves to a stronger metrical position.

Most often it is a half-step below the destination tone, where it is usually approached from above, as:



It can be the scale tone above the destination tone, however, where it is usually approached from below, as:

Example:

C: I vi ii bii+6 I

ASSIGNMENT 61 (Auxiliary Tones and Auxiliary Derivatives)

GROUP 1. The sopranos are given, with basic harmonies. Work out one simple and one "richer" four part solution for each.

(A)

F: I I V I vi V I

(B) (See Sample Solutions page 304.)

G: I ii? V I

(C)

Dmi: I - ? - I vi ii? V I

(D) (See Sample Solutions page 304.)

Eb: I - IV+6 - I [vi?] ii V I

Group 1. (continued)

(E)

C: I - ? - I - ? - I - V - I

(F)

I - V - I - V - I

(G)

Amci, I V I V I

(H) (No chords given) (See Sample Solutions page 304.)

GROUP 2. a. The basic "chord tone" melodies are given. Embellish each through the application of the inharmonics available to this point, with particular stress on "auxiliaries" and "auxiliary derivatives". This is a melody exercise only. (Exercises of this type should not be approached with the idea of making a wholesale use of inharmonics. They should be applied with musical judgement, and for musical reasons.)

(A) (See Sample Solutions page 305.)

D: [I] [IVmi] [V] [I]

(B)

Cmi: [I] [V] [I] [V] [vi] [V] [I]

b. Basic four part passages are given. Give a few elaborations of each, through a tasteful application of inharmonics, with particular stress on the auxiliary notes and auxiliary derivatives:

(A)

Dmi: I bii iii NAT.vii vi6 bii+6 I [DOR] [Fr.]

Group 2. (continued)

(B)

B \flat : IV mi ? V b^9 I \flat V b^6 V b^7 bvi \flat V I
 ii b^5 b b^7

GROUP 3. The progressions are suggested. Work out each for four parts, aiming to make musical use of auxiliaries and auxiliary derivatives (as well as other presently available inharmonics).

(A) *Slowly*

E \flat : I - ? ? I - IV b^6 - I - ii - iii - V b^7 I I
 SUB. DOM. DOM.

(B) *Bright*

C: I - - biii [b b^7] - - bvi - - bvi b^7 - I - - SUBDOM. - DOM. FUNCT. FUNCT. I I

GROUP 4. Become familiar with the sound and effect of these decorations. Examine any available music for illustrations of their use. Fast moving jazz lines often make liberal use of auxiliaries, and ornamentation of this type is found extensively in Baroque counterpoint.

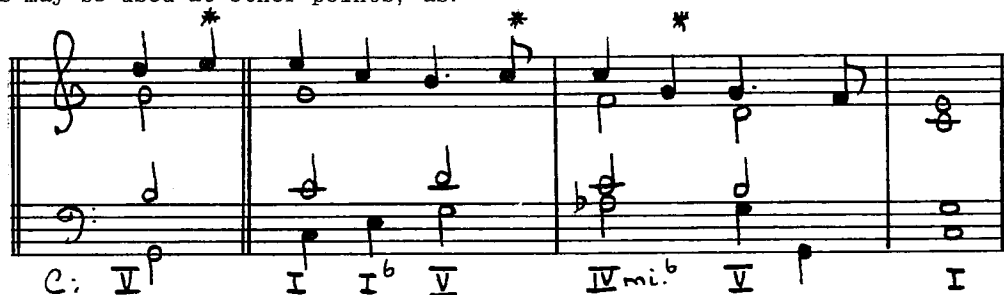
C. The Anticipation

An **Anticipation** is so called because it "anticipates" the note a part is moving to in the next chord - before the next chord arrives. It occurs at a weak metrical position, and is usually a short note. The most familiar use of the anticipation occurs at the final cadence, with the "home" tonic being introduced slightly ahead of time, as:

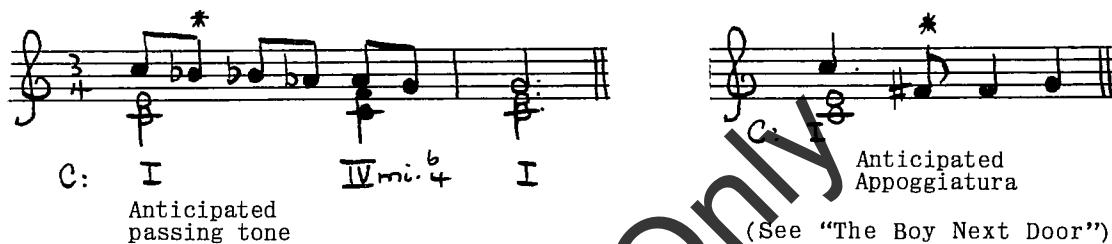
C: I \flat I V b^7 I C: ii V I

The final tonic takes on more definition with the use of the anticipation. Among the familiar melodies that use the anticipated tonic at the final cadence are "Annie Laurie", "Onward Christian Soldiers", and the song "Something's Gotta Give" shows a three note anticipation at the end.

Anticipations may be used at other points, as:



Other non-chordal tones may also be anticipated, as:



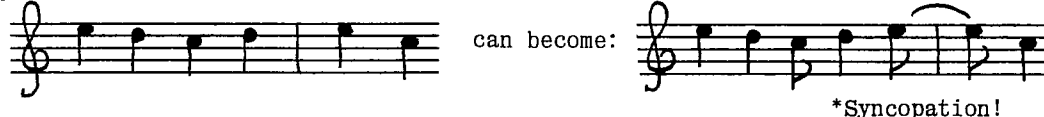
Because it introduces a note from a chord which has not yet arrived, the anticipation can be confusing if it is not presented in a clear and obvious manner. It usually occurs in the melody, and usually in INDEPENDENT movement. Sometimes "combined" anticipations or even a full "chordal" anticipation can be useful, but these are relatively uncommon. Examples:

COMBINED ANTICIPATION

CHORDAL ANTICIPATION



Caution: Do not confuse the anticipations discussed here, which are melodic anticipations, with the **Rhythmic Anticipation**. The rhythmic anticipation is a form of syncopation through which a line such as:



This is a familiar and widely used rhythmic device in jazz and related areas, but is not very adaptable to the part writing technique which this section of the text is using.

This concludes the investigation of the six fundamental inharmonic types. The remainder of this chapter concerns "Delayed" and "Ornamental" resolutions.

ASSIGNMENT 62 (The Anticipation and "Summing Up" Exercises on the Basic Inharmonics)

A. The Anticipation

1. Examine any available music for illustrations of the use of the Anticipation.
2. The sopranos are given, with basic harmonies. Complete for four parts, noting the use of anticipations.

(A) *anticipated passing tone*

C: I - Dom. - I $\frac{V}{I}$ $\frac{ii}{I}$ $\frac{V}{V}$ I $\frac{V}{ii}$ $\frac{IV}{IV}$ $\frac{V}{V}$ I

(B) *anticipated appoggiatura*

D \flat : I $\frac{ii}{ii}$ $\frac{V}{V}$ I $\frac{V}{V}$ I

(C)

E \flat : $\frac{ii}{ii}$ $\frac{V}{V}$ I $\frac{V}{V}$ I

(D) (See Sample Solutions page 305.)

E mi.: I $\frac{IV}{IV}$ I $\frac{V}{V}$ I $\frac{IV}{IV}$ $\frac{V}{V}$ I

3. Take a few melodic lines and basic four part passages from previous assignments and apply anticipations to them.

B. "Summing Up" Exercises on the Basic Inharmonics

1. Mark and name every inharmonic in each of the following lines.

Example:

TURN *APP.* *ANT.* *Aux.* *APP.* *PASS.* *Sus.* *APP.*

C: I $\frac{V}{V}$ I $\frac{IV}{mi.}$ I $\frac{V}{V}$

APP. *11th* *13th* *9th*

vi $\frac{ii}{ii}$ $\frac{V}{V}$ I

B. (continued)

(A)
 E^b: I V I V I V I

(B)
 A^m: I IV V I

(C)
 B^b: ii V I bii+b I IV I

(D)
 D: I V bvi V I

(E)
 C: I vi ii I

(F)
 G: I ii V I ii V I

2. The basic "chordal note" melody is given. Give five or six embellishments of it, making a musical application of all the inharmonics. (This is a melody exercise only.)

F: [I] [ii] [V] [bvi] [I] [ii] [V] [I]

(See Sample Solution page 305.)

3. The soprano only is given. Complete for four parts.

(See Sample Solutions page 305.)

4. Take one or two of the basic four part passages from earlier assignments and give elaborations of them, employing all inharmonic types.
5. Continue to become familiar with the sound and the uses of all the inharmonic types.

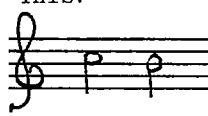

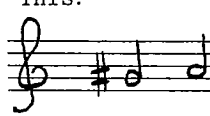

IV. DELAYED AND ORNAMENTAL RESOLUTIONS

Proposition:

Notes of an "ornamental" nature and purpose may be interpolated between an inharmonic and its resolution, in a sort of "melodic detour" between the dissonance and its destination. These detours employ the Cambiata, the Échappée, and various combinations of chordal and non-chordal tones. They are examined in detail herewith.

A. The Cambiata (or "Nota Cambiata")

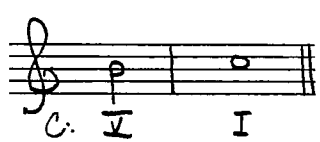

The **Cambiata** is a note taken by *leap* of a 3rd in the direction of the melodic movement, returning to the destination note by step, as:

This:  becomes:  This:  becomes: 

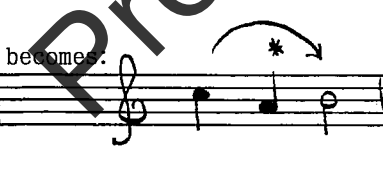
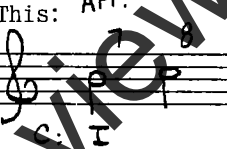

Cambiata Cambiata

Details:

1. The cambiata may decorate any movement of a "2nd", up or down. For instance, this cadence:

 is often decorated to become: 

A cambiata is most often used between an *INHARMONIC* and its resolution, as an "ornamental resolution". To illustrate:

This: APP.  becomes:  This: APP.  becomes: 

2. The cambiata may appear at a weak beat, or fraction of a beat, as:

It may also appear on a strong beat, in which case it is also, usually, an *APPOGGIATURA*:

3. The cambiata, similar to all of the decorative resolutions, is a *melodic* device. It usually occurs in the soprano, but can appear in any part, *provided it is heard in independent melodic movement*. Observe the examples below:

C: I vi ii⁶ ii ii V I

C: ii V I ii V I

4. Any type of inharmonic that resolves with the movement of a 2nd can have its resolution ornamented with a cambiata. Examples:

Passing tone:

can become:

Auxiliary:

can become:

(double auxiliary)

Unprepared Auxiliary:

can become:

Suspension:



can become:



Retardation:



can become:



Appoggiatura:



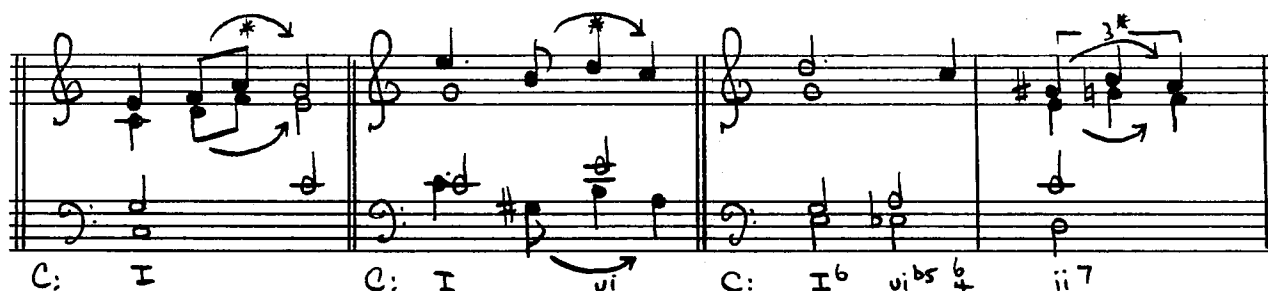
can become:



NOTE: The lower cambiata is usually a leap of a Minor 3rd, as:

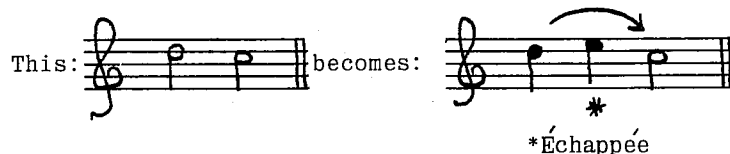


5. Combined cambiatas can be useful occasionally - with due regard for parallels, as:



B. The Échappée

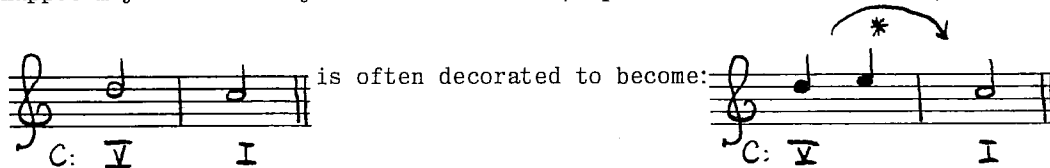
The Échappée is also a note which decorates the melodic movement of a 2nd, up or down. But the échappée moves one step in the **OPPOSITE** direction, and then returns to the destination note by **LEAP**, as:



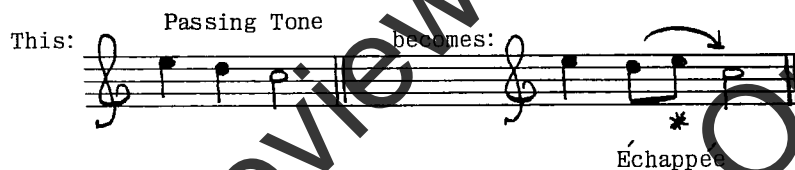
In other words, it tries to *escape* the ultimate fate and is, in fact, an "escape tone".

Details:

1. The échappée may decorate any movement of a 2nd, up or down. For instance, this cadence:



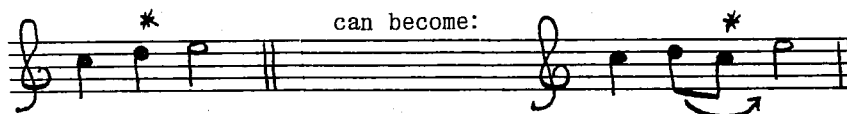
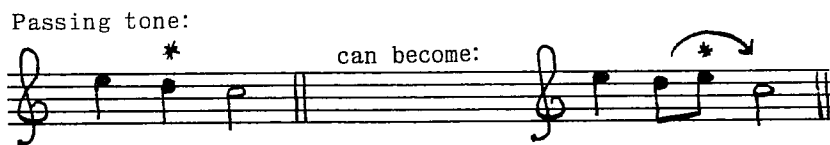
Most often an échappée is used *between an INHARMONIC and its resolution*, as an "ornamental resolution". To illustrate:



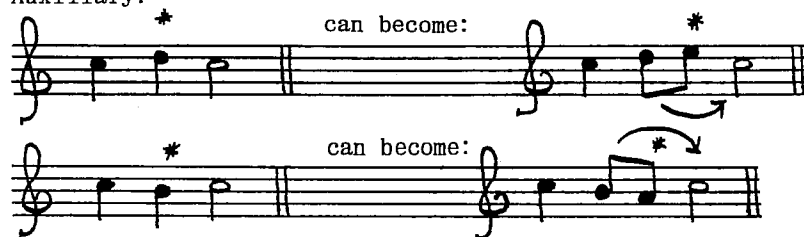
2. It was noted that the cambiata may be used at a weak OR strong beat (item 2. under "The Cambiata"), but the Échappée is used at a **WEAK** beat or **FRACTION** of a beat **ONLY!** To illustrate:



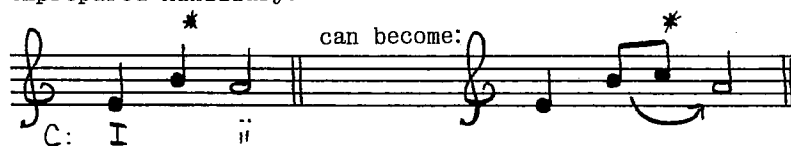
3. The échappée can decorate the resolution of any inharmonic type that resolves by a 2nd, as:



Auxiliary:



Unprepared Auxiliary:



Suspension:



Retardation:



Appoggiatura:



4. The échappée is a melodic device which is most likely to occur in the soprano, but it can appear in any part provided it is heard in independent melodic movement. Examples:



5. In some circumstances, *combined échappées* could be useful, as:

C: I IVmi.4 I C: ii¹¹ V⁷ I

NOTE: To help avoid confusion between the *cambiata* and the *échappée*: The first bar of "Tea For Two" offers an example of each. The second note is a *cambiata*, the fourth note an *échappée*. For further examples of *cambiatas* and *échappées* see: "There's a Small Hotel", "I Didn't Know What Time It Was", "The Way You Look Tonight", "I Got It Bad and That Ain't Good", etc., etc.

ASSIGNMENT 63 (The Cambiatas and Échappée)

1. Examine as many melodies as possible for illustrations of the *cambiata* and *échappée*.
2. The lines are given, which include inharmonics. Decorate each further through the addition of tasteful and appropriate *cambiatas* and *échappées*. (This is a melody exercise only.)

(A)

F: I V I V I IVmi.

(B) (See Sample Solutions page 306.)

G: I IVmi I V I V

(C)

Dmi: I V I ii V I

3. Short four part passages are given, which include inharmonics. Give two elaborations of each, through the application of tasteful *cambiatas* and *échappées*.

(A)

C: IV⁷ V I

(B)

B^b: I V I^b

3. (continued)

© (See Sample Solutions page 306.)



Ami: I - \underline{V}^7 - vi - $\underline{IV}^7 \underline{V}^7$ I

4. The sopranos are given, with basic harmonies. Complete for four parts, noting the use of cambi-
atas and échappées. Do two examples for each, with differing textures.



E \flat : I - DOM. - I - $\underline{ii} \underline{V}$ I - $\underline{V} \underline{ii} \underline{V}$ I
FUNCT.
[passing \underline{V}^b ?]

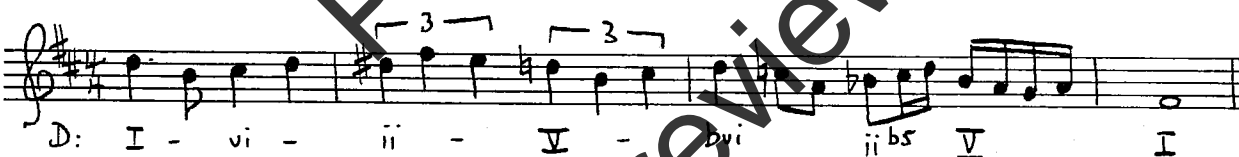
© (See Sample Solutions page 306.)



E \natural : I - - - - \underline{V} - - - - I

5. a. Analyze the following line explaining every note.

b. Reduce it to its essential notes. (See Sample Solutions page 306.)



D: I - vi - \underline{ii} - \underline{V} - \underline{Dvi} $\underline{ii}^b \underline{V}$ I

6. The progression is suggested. Work for four parts, aiming to use any and all inharmonics plus
cambiata and échappées. Do two examples with:

- No eighth notes
- Some eighth notes, or even shorter note values.



B \flat : \underline{ii} - \underline{V} - I - \underline{bii} - $\underline{IV}^{\underline{mi}}$ - DOM. - I
 $\underline{ii}^b \underline{V}$
 \underline{bii}

C. Other Ornamental Resolutions

While the Cambiata and the Échappée are the only ornamental resolutions with specific names, a resolution may be decorated in other ways:

1. A consonant chordal tone may be introduced between an inharmonic and its resolution, as:



This "subsidiary chordal tone" is an extension of the cambiata or échappée principle. It will occur at a weak beat or fraction of a beat. It can decorate the resolution of any inharmonic type but, similar to all of these ornaments, must be heard melodically - no matter what part uses it. Observe the following examples:

APPOGGIATURA:

A musical staff in C major showing a resolution from the supertonic (C: ii) to the tonic (I). A subsidiary chordal tone (F#) is introduced between the ii and the final I, marked with an asterisk and an arrow indicating its resolution.

SUSPENSION:

A musical staff in C major showing a resolution from the tonic (C: I) to the dominant seventh (V7) and back to the tonic (I). A subsidiary chordal tone (F#) is introduced between the V7 and the final I, marked with an asterisk and an arrow indicating its resolution.

RETARDATION:

A musical staff in C major showing a resolution from the tonic (C: I) to the supertonic seventh (ii7) and back to the tonic (I). A subsidiary chordal tone (F#) is introduced between the ii7 and the final I, marked with an asterisk and an arrow indicating its resolution.

PASSING TONE:

A musical staff in C major showing a resolution from the tonic (C: I) to the tonic (I). A subsidiary chordal tone (F#) is introduced between the two I chords, marked with an asterisk and an arrow indicating its resolution.

AUXILIARY:

C: I^b ii¹¹

UNPREPARED
AUXILIARY:

C: I bii^{+b}
[Mixo-
Lydian]

Even an
ANTICIPATION
can be so
decorated:

C: I V⁷ I

2. An auxiliary tone may be used as a decoration of a resolution. (See item 4. under "The Auxiliary Tone"):

C: I V C: I

3. A resolution note may be anticipated, as:

C: I V⁷ C: I V^{b(7)} C: I bii^{+b}

4. A dissonant inharmonic may itself be preceded with another "neighboring tone", as:

C: I vi ii V² I⁶

5. All of the ornamental resolutions up to this point have involved ONE decorative note interpolated between a dissonance and its resolution. But two, three, four, or even more notes can be used in the "melodic detour", for a more florid result. These more elaborate delayed resolutions will employ either more than one subsidiary chordal tone, as:

C: I C: V^{b4} C: I ii b5(7) V⁷ b9

or combinations of chordal and non-chordal tones, as:

C: I C: I C: I C: ii V I bii+b

C: I I⁶ V⁴ V I I⁶

The example above can be reduced to:

C: I I⁶ V⁴ V I I⁶

which in turn can be reduced to:

C: I I⁶ V⁴ V I I⁶

Examples of this more elaborate, more florid, decoration could fill a book. The given examples (plus analytical listening) should make the general process clear, however. Some cautions are in order:

There is no point in an intricate maze of arrows pointing to a resolution if the resolution cannot be heard in performance! Judgement and taste are of paramount importance! It is essential that the actual musical intention be clear to the listener; every decorative resolution must be calculated on the basis of its sound!

It is important that the note of resolution, or a note which clearly represents the note of resolution, occurs when it is expected to occur. To illustrate:

This: APP.

could, among other things, become:

or:

or:

*Represents expected "C"

or:

*Represents expected "C"

It should NOT, however, become:

*The STRONG BEAT "E" neither is, nor does it represent, the expected note of resolution!

With more florid and elaborate decoration, the everpresent risk of overloading is even greater. The danger is at its height when combinations of different inharmonic types are used simultaneously. For instance, the following simple pattern:



could have any part individually decorated to become:

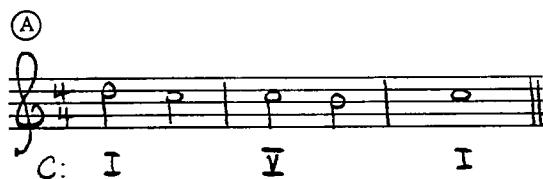
Sopr. (3) or: Alto (3) or: Tenor or: Bass

C: I V^b V C: I V^b V C: I V^b V C: I V^b V

However, an attempt to combine all of these at the same time is not likely to yield clarity of musical thought. Combinations of dissimilar decorations are certainly available and can produce some of the best musical results if constructed with sufficient care for detail, balance, and meaning. Otherwise they may produce the worst.

ASSIGNMENT 64 (Other Ornamental Resolutions)

1. Examine any available music for illustrations of the ornamental resolutions.
2. The lines are given, which include inharmonics. Decorate each further, with a tasteful application of the ornamental resolutions under examination. Short note values are available. (This is a melody exercise only.)



2. (continued)

© (See Sample Solutions page 306.)

E \flat : I V bvi V I

A \flat : I IV V I V I

3. Short four part passages are given, which include inharmenics. Give two elaborations of each, through a tasteful addition of the ornamental resolutions. Short note values are available.

C: I bvi + b I

B \flat : I P V I

(See Sample Solutions page 306.)

E \flat : I - I \flat IV vi + b I IV \flat I

4. The sopranos are given, with basic harmonies. Complete for four parts, noting the use of ornamental resolutions. (Suggestion: Reduce to the essential notes for a clearer view.)

F: I II V I II V I II V VII \circ 7 I

C: I vi II V I

© (See Sample Solutions page 307.)

G: II b5? IV mi? bii? V? bii + b? vii \circ 7? I II V I

4. (continued)

① (See Sample Solutions page 307.)



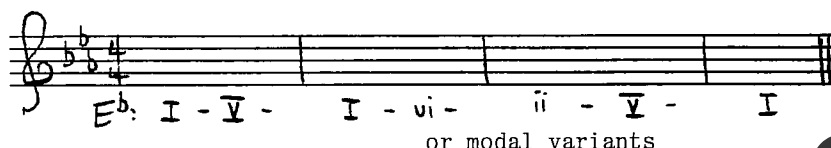
5. a. Analyze the following line, explaining every note.

b. Reduce it to its essential notes. (See Sample Solutions page 307.)



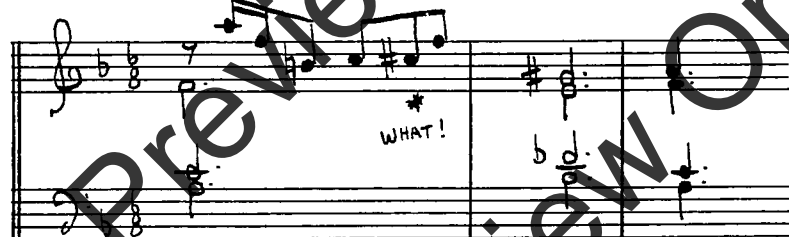
6. The progression is suggested. Work out for four parts, aiming to illustrate use of the ornamental devices under discussion. Do two examples with:

- eighth notes,
- sixteenth notes, etc.



D. Free Uses

The basic inharmonic types and the decorative resolutions examined to this point account for the overwhelming majority of non-chordal ornamentations. The door must be left open, however, to admit the possibility of irregularities. Consider, for instance:



(Derived from R. Strauss: "Till Eulenspiegel")

The "*" can probably best be explained as a passing tone between the C and F and, in fact, any irregularity is likely to be simply a more liberal use of some basic inharmonic type. Since an irregularity (as is implicit in the term itself) is an exception to or contradiction of common practice, it is clearly impossible to formulate laws or principles to account for them. Here, however, are some situations which could occur:

1. Anticipation of a note in a different part:



2. Resolution of a passing tone in a different part:



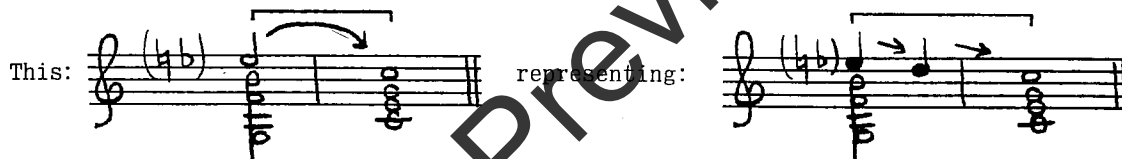
3. A succession of arpeggiated "neighboring tones" with only the LAST one resolved:



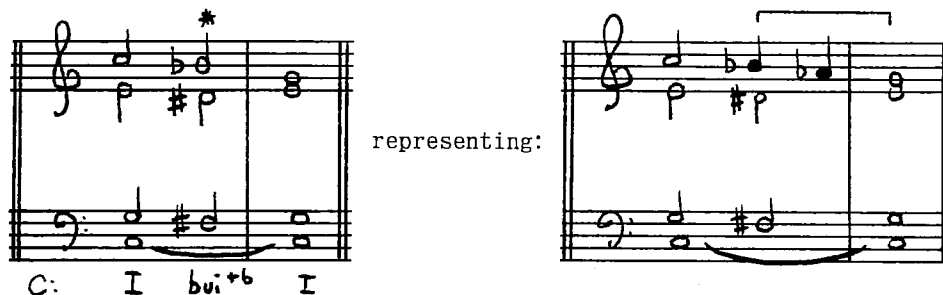
These are not all of the possibilities, but they indicate the general direction the idea can take. Even these are not at all usual. It may be said that the extent to which freedom can be taken with non-chordal tones depends on the melodic logic involved and the **strength and obviousness of the harmonic support**. If the harmonic support is clear enough, almost any combination of **melodically logical** notes may be introduced in a decorative sense. Consider, in this respect, the type of line which can, and does, occur in fluid jazz improvisation, against a clear harmonic and rhythmic support. (Although such a line would not likely be suitable as one part of a "part writing" context.)

E. Elision

Elision is the term used to describe a situation where a note is omitted, but is present by *implication*. If it is to be successful, the implication must be clear to the listener. Item 2. under "13th Chords" mentioned it in connection with the dominant 13th chord, and this is probably the most common use of elision. To illustrate:



Other uses are available, most of which concern an *appoggiatura* leaping down a 3rd, omitting (i.e., "eliding") the note to which it would normally resolve. An examination of the following examples should convey the sense of the process. Note that they are all *clear in intention*, which is as it should be:



C: I $\text{vii}^{\circ 7}$ I bii^{+6} I

representing:

F: I vi^6 $\text{ii}^{\flat 5 4}$ V^7 I

representing:

Instances of "Chordal Elision" are also possible, as in the use of " $\text{I}_4^6 - \text{I}$ " instead of " $\text{I}_4^6 - \text{V} - \text{I}$ ".
Example:

C: bvi^{+6} I_4^6 I

representing:

C: bvi^{+6} I_4^6 V I

At this point, the text returns to the presentation of further resources and techniques of harmony and harmonic progression. However, it is vitally important that the student continues to USE all of the melodic inharmonics - and that he continues to cultivate taste and judgement in their application.

ASSIGNMENT 65 (Free Uses and Elision)

1. Examine any available music for illustrations of Elision and Free Uses.
2. The sopranos are given, with basic harmonies. Complete for four parts, noting the use of Elision and Free Uses:

(A)

Elision

Anticipation of note in different part

F: I ii V I ii V I

(See Sample Solutions page 307.)

2. (continued)

② Elision Anticipation of note in different part Elision

C: I - vii[°]7 I - bvi bvi+6 V bii+6 jii:°7 I

Imi. 6 V
OR: Imi. 6 -
[Chordal ELISION]

③ Elision Anticipation of note in different part-or just "added 6th" on I. Anticipation of note in different part

D: I - ? - I vi ii V I

Use chord in which the C# represents Bb!

④ Succession of neighboring tones - only last one resolves Anticipation of note in different part

D: I - I - I

(See Sample Solutions page 307.)

⑤ Elision Elision Passing note? Elision

Gmi: ii - V - I - - V I

(See Sample Solutions page 308.)

3. Take a few simple progressions and experiment with a controlled use of appoggiaturas resolving with elision, and with free uses.

Chapter 4

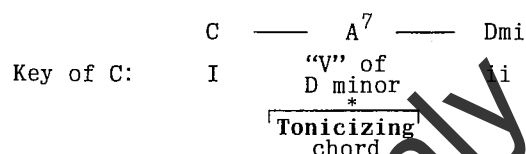
EXTENDED TONALITY

Part 2

I. TONICIZATION

Proposition:

The boundaries of a key may be extended to allow the introduction of harmonic and melodic material from its related and Modally related keys, and even from unrelated keys. In its simplest form, this extension of the tonality is done by preceding a chord of the key with a **cadential movement** in the **KEY OF THE CHORD**, as:



The process is called **tonicization**, since it endows the destination chord with a touch of the "tonic quality". Tonicization is the most frequently used form of extended tonality.

Any major or minor chord is capable of being a tonic chord; so that any major or minor chord can be "tonicized". In practice, however, tonicization is most often directed at **Related Keys**. Therefore, it is advisable to establish exactly what a "related key" is.

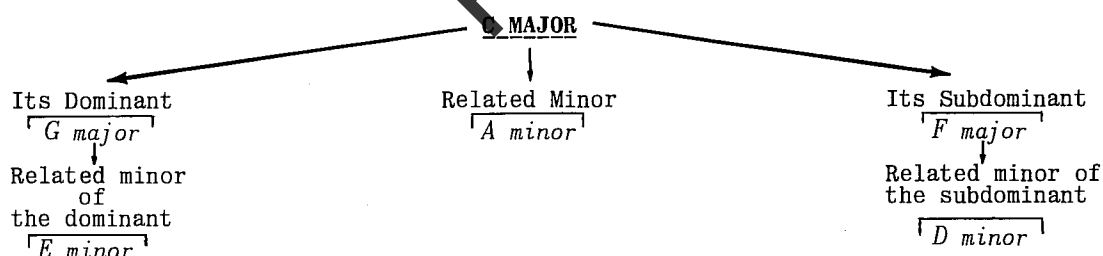
A. Related Keys

In point of fact, *all* keys are related to one another; the difference is only in the degree of relationship. But the term "Related" normally refers to those keys which have their tonic chords in the diatonic scale of the key in question (plus, in major, the key of the minor subdominant).

For example, the related keys of C major are:

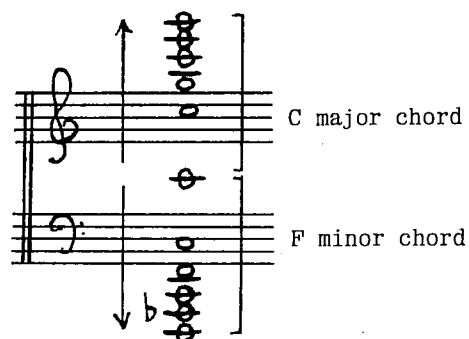
D minor (ii), E minor (iii), F major (IV), G major (V), A minor (vi), plus F minor (IVmi)

Another explanation of this relationship is as follows:



Note that these related keys have *no more than one accidental difference in the key signature*. In fact, the more "common tones" there are between the scales, the closer the relationship is. (The keys of C[#] and C^b, neither of which has any common tones with C major, are the most *distant* from C major.)

The close relationship which is generally accepted between a major key and the key of its minor subdominant (as C major and F minor) is less easy to explain. It has been suggested that it is the result of a theoretical "Undertone Series". By placing notes *below* any note in the SAME INTERVAL ORDER as the overtone series above it, note what happens:

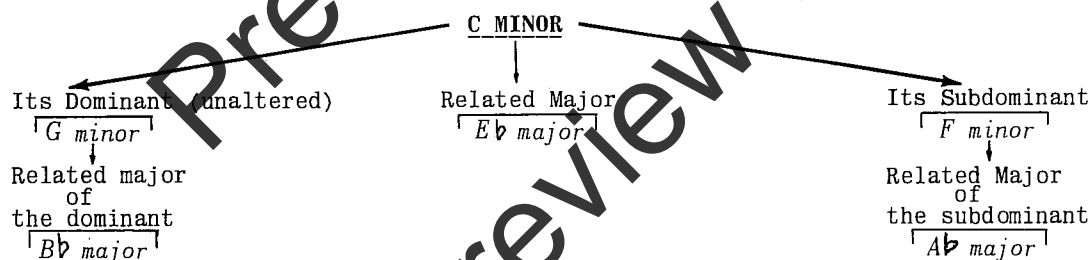


This may be nothing more than an interesting coincidence. More likely, the relationship between a major key and its minor subdominant key is a result of the same "Dominant - Tonic" relationship found between the tonic and its major subdominant, aided and abetted by the familiarity which the chord of the minor subdominant enjoys.

In MINOR, the related keys are those which have their tonic chords in the diatonic, unaltered, Aeolian Mode ("Natural Minor" scale) of the minor key in question. Thus, for example, the related keys of C minor are:

E♭ major (iii), F minor (IV), G minor (V), A♭ major (vi), B♭ major (vii).

Another explanation of which is:

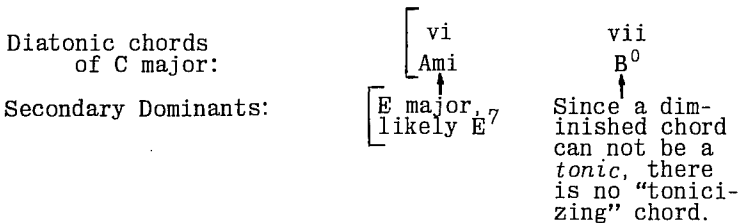
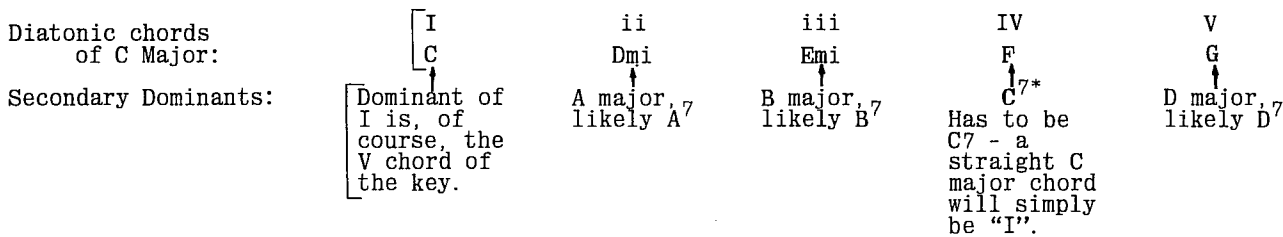


(Tonicization, similar to all forms of extended tonality, occurs less frequently in minor than in major.)

The main tonicizing chord (that is, the chord most often used to precede and to tonicize the destination chord) is the "V", and most often the "V⁷" of the key in which the destination chord is the tonic. These tonicizing V chords are called **Secondary Dominants** (i.e., dominants of secondary tonal regions in the keys). They will be MAJOR chords, whether the destination chord is major or minor. That is, the TONAL dominant, the major 3rd of which is the *leading tone*, is used to lead to and to tonicize the destination chord. (For instance, if the destination chord in the context were a D major or a D minor chord, the secondary dominant preceding it would be an A Major chord, and likely an "A⁷".)

To illustrate:

Here are the diatonic chords of the key of C major, with their *secondary dominants*:

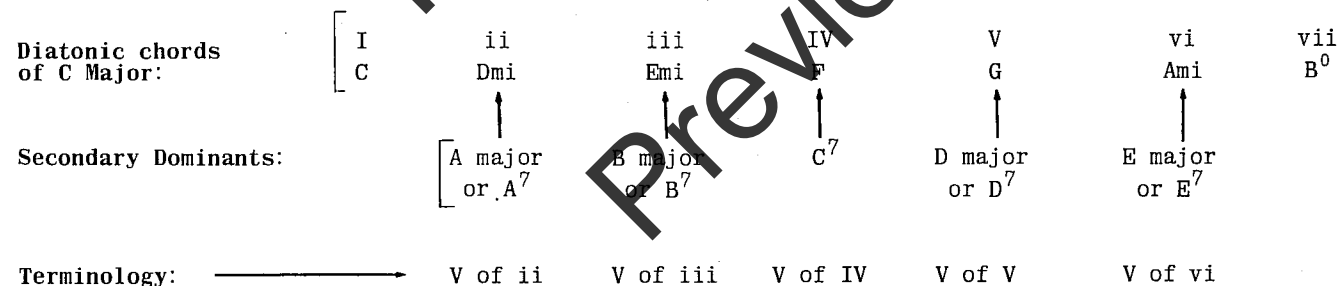


*Will also tonicize the minor subdominant (IVmi).

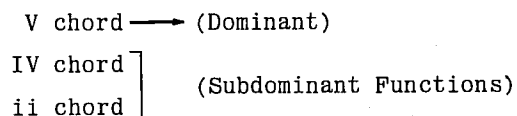
A glance at the above will show that the secondary dominants of the related keys are all built on roots which are DIATONIC in the basic key. Consequently, they are sometimes referred to as *altered* chords as, for instance, an "A⁷" in the key of G could be called "altered vi".

However, while it is true that an "A⁷" in the key of C is an "altered vi", it is equally true that an "Ami^{7b5}" (Dorian vi) or an "Ab⁷" (bvi) are also "altered vi" chords. Clearly, then, the term "altered vi" does not indicate *HOW* or *WHY* the vi chord has been altered!

Therefore, this text will use a bulkier, but more explicit, terminology. The A major or A⁷ chord in the key of C will be termed "V of ii", which clearly indicates both the form and the purpose of the alteration. To illustrate:



The simplest form of tonicization is, then, the use of a **Secondary Dominant** to precede, and to lead to, and to emphasize a chord of the key. The most frequent recipients of the tonicizing process are the related keys and, of these, the most frequent recipients are the:



The emphasis which results from the tonicizing of the important dominant and subdominant function chords actually tends to STRENGTHEN the basic tonality, because of the stress it places on these important "key" chords. Hear and compare:

C	-	F	-	G	-	C
I		IV		V		I
Strong, clear						
C	-	[*] C ⁷	-	F	-	[*] D ⁷
I		V of IV		IV		V of V
Even stronger key feeling!						

C	-	Dmi	-	G	-	C
I		ii		V		I
Strong, clear						
C	-	[*] A ⁷	-	Dmi	-	G
I		V of ii		ii		V
Even stronger key feeling!						

The tonicizing of vi and iii likewise poses no threat to the main key, but just enriches it. Listen:

C	-	[*] E ⁷	-	A ⁷	-	Dmi	-	[*] G ⁷	-	C
I		V of vi		vi		ii		V		I

C	-	[*] B ⁷	-	E ⁷	-	A ⁷	-	[*] D ⁷	-	[*] G ⁷	-	C
I		V of iii		iii		vi		V of V		V ⁷		I

On the other hand, excessive tonicization of MODAL chords needs more caution. While it is true that the "chords" of D^b major (bii), E^b major (biii), A^b major (bvi), B^b major (bvii), etc., are found in the "mixed mode" resources of the key of C, it is also true that the keys of these chords are NOT closely related to C major. Therefore, although tonicization of Modal Variants offers opportunity for increased richness and colorful harmony, an injudicious use of it may lead into a sort of "tonal wilderness". The main key may become obscured and the return to the tonic may be unconvincing. Consider (listen!):

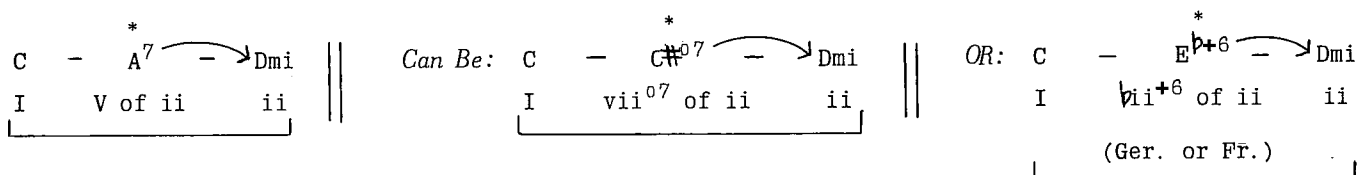
C		A ^b		B ^b mi		G ⁷		C
I		bvi		bvii ^{b3}		V ⁷		I
MODALLY RICH, BUT CLEARLY IN "C"								

BUT:

C	[*] E ^{b7}	A ^b	[*] F ⁷	B ^b mi		G ⁷		C
I	V of bvi	bvi	V of bvii ^{b3}	bvii ^{b3}		V ⁷		I
BEGINNING TO STRAY RATHER FAR AFIELD!								

This in no way means that tonicization of Modally related keys is not available. On the contrary, it is one of the most valuable harmonic resources. What it does mean, is that such tonicization is *more* of an extension of the tonality than is the tonicization of related keys. Therefore, it requires more care in constructing an effective and convincing relationship to, and return to, the home key.

The "secondary dominants" (that is, the "V" structures) are the basic means of tonicization, but other **Dominant Function** chords are available. Chief among these are the " vii^{07} ," and the " $\flat ii^{+6}$," chords. To illustrate:

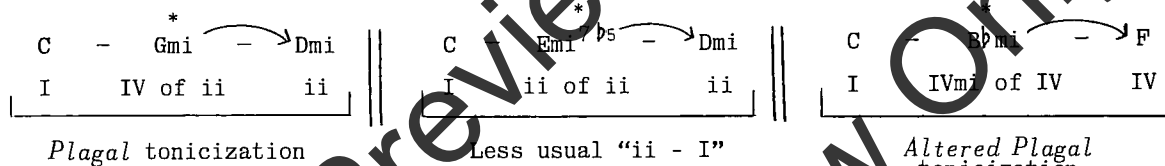


A rough comparison can be drawn, as:

Use of "V" ---- clear, classic
 Use of " vii^{07} " ---- lighter, more romantic
 Use of " $\flat ii^{+6}$ " ---- heavier, more chromatic

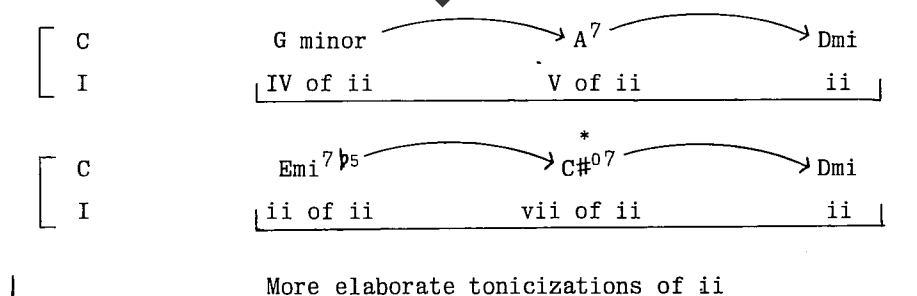
All are *functionally* adequate, of course, since all are Dominant Function chords and all contain the tonal tritone of the destination key.

Further: Less obvious, more subtle, tonicizing chords are available, as:



Such subtle tonicization is considerably less emphatic. In jazz and "popular" harmony, which is not as a rule very subtle, this type of tonicization has not enjoyed extensive use. But it does offer some interesting pastel coloring.

More common, by far, than these "subtle" tonicizations is the use of a more elaborate, more emphatic tonicization through the use of a cadential approach involving MORE THAN ONE CHORD from the key of the destination chord. This consists mainly of the use of a *Subdominant Function* chord to precede the dominant function, as:



The combinations of "SUBDOMINANT FUNCTION - DOMINANT FUNCTION" are quite extensive, and merit reviewing:

1. THE DOMINANT FUNCTIONS:

"V" or, for more emphasis, "I₄⁶ - V"
 "vii^{o7},"
 "bii⁺⁶," (German and French) and, occasionally, "I₄⁶ - bii⁺⁶,"

(The reader will recall that there are other cadential *Dominant Substitutes* such as iii⁶, biii⁶, IV⁺⁶ Fr., Vmi, V Phr., etc. These dominant substitutes are fine in an established key, but they are considerably less decisive than the tritone dominants and may quite likely be unsatisfactory for tonicization purposes.)

2. THE SUBDOMINANT FUNCTIONS:

a. in MAJOR (i.e., in the process of tonicizing a MAJOR chord)

IV
 IVmi
 ii
 ii^{b5}
 bii (N⁶)
 bvi
 bvi⁺⁶
 Dorian vi

(ALL LEAD TO "V")

b. in MINOR (i.e., in the process of tonicizing a MINOR chord)

IV
 IV^{#3} (b³) -- for raised 6th degree moving up to leading tone.
 ii
 ii^{#5} (b⁵) -- for raised 6th degree moving up to leading tone.
 bii (N⁶)
 vi
 vi⁺⁶
 Dorian vi -- for raised 6th degree moving up to leading tone.

(ALL LEAD TO "V")

Here, then, is a *partial* list of the theoretical possibilities for a "two chord" tonicization:

Example to tonicize "ii" in C major. (a D MINOR chord)

Gmi (IV of ii)

Gma (IV^{b3} of ii)

Emi^{7b5} (ii of ii)

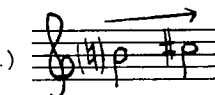
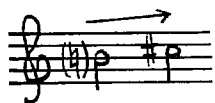
Emi (ii^{b5} of ii)

E^b (bii of ii)

B^b (vi of ii)

B^{b+6} (vi⁺⁶ of ii)

Bmi^{7b5} (Dorian vi of ii)



TO:

A⁷ (V of ii)

Dmi⁶₄ - A⁷ ("I⁶₄ - V" of ii)

F^{#07} (vii of ii)

E^{b+6} (bii⁺⁶ of ii)

TO: → Dmi (ii)

Example to tonicize "V" in C major (a G MAJOR chord)

Cma (IV of V)

Cmi (IVmi of V)

Ami (ii of V)

Ami^{7b5} (ii^{b5} of V)

A^b (bii of V)

E^b (bvi of V)

E^{b+6} (bvi⁺⁶ of V)

Emi^{7b5} (Dorian vi of V)

D⁷ (V of V)

G⁶₄ - D⁷ ("I⁶₄ - V" of V)

F^{#07} (vii of V)

A^{b+6} (bii⁺⁶ of V)

TO: → Gma (V)

In practice, the nature of the melody line, the position of the voices, the style of the music, and other factors will modify and limit these theoretical possibilities. *The majority of the two chord tonicizations follow the most obvious cadential "ii - V" and "IV - V" paths.* Most tonicization employs SIMPLE HARMONIC FORMULAS. It gains its color and richness from the fact that the formulas are from keys other than the established one. (Consider, in this respect, the difference in sound and emotional quality between, for instance: Emi: "ii - V - I" and Cma: "ii of iii - V of iii - iii".)

Three chord tonicizations, or even four and five chord tonicizations, are theoretical possibilities which are not very often found in practice. If used, they are likely to employ short duration chords and likely to follow an obvious harmonic path, as:

C	B \flat	Emi ^{7\flat5}	A ⁷	Dmi
I	vi of ii	ii of ii	V of ii	ii

A natural question arises: "Is tonicization the same as modulation?"

The answer is a qualified "no". Full modulation is consideration in the larger design of composition and arranging having to do with form and contrast, but tonicization is a detail of the harmonic progression. Modulation requires *rhythmic* considerations not necessary in tonicization. (For instance, modulation always coincides with the beginning or ending of a sentence, phrase, or other rhythmic grouping.) Modulation requires *melodic* considerations not necessary in tonicization. (For instance, the melody of a modulation must be conceived with the scale of the new key in mind, whereas tonicization uses, in the main, melody related to the scale of the main key - a factor to be examined under "Some Technical Details", page 153.)

The terms "Transient Modulation" or "Temporary Modulation" are acceptable for areas of prolonged or elaborate tonicization but, in general, tonicization can be compared to modulation as a weekend in a neighboring city can be compared to actually moving to that city. The *means of transportation* may be the same in both cases, but the weekend is just a diversion from and an enriching of the normal path of living, whereas an actual change of address requires much more preparation and encompasses many more attendant considerations.

ASSIGNMENT 66 (The Terminology and Harmonic Process of Tonicization)

1. The three main Dominant Function chords of ii in C major are: A⁷ (V of ii), C \sharp ⁰⁷ (vii of ii) and E \flat ⁺⁶ (bii⁺⁶ of ii). What are the three main Dominant Function chords of:

ii in D major?	bii in C major?	iii in G minor?
iii in F major?	biii in D major?	IV in E minor?
IV in G major?	bvi in G major?	V in C minor?
vi in A major?	bvii in E major?	vi in D minor?

(Create more of these questions as necessary.) (See Sample Solutions page 308.)

2. The Subdominant Function chords used in a tonicizing approach to a MAJOR chord are mainly "ii" and "IV", but can also be IVmi, ii^{7 \flat 5}, bii, bvi, bvi⁺⁶, Dorian vi. What are the possible Subdominant Function chords of:

IV in F major?	V in E major?	iii in D minor?	vi in D minor?
----------------	---------------	-----------------	----------------

(Create more of these as necessary.) (See Sample Solutions page 308.)

3. The Subdominant Function chords used in a tonicizing approach to a MINOR chord are mainly "ii" and "IV", but can also be IV^{(b3) (#3)}, ii^{(b5) (#5)}, bii, vi, vi⁺⁶, Dorian vi. What are the possible Subdominant Function chords of:

ii in F major?

iii in D major?

vi in C major?

IV in A minor?

V in B^b minor?

(Create more of these as necessary.)

(See Sample Solutions page 308.)

4. What chord is:

V of ii in E major?

ii of ii in B^b major?

bvi of IV in C major?

vi of IV in C major?

iii of iii in C minor?

bvi of bvii in E major?

vii of vi in F major?

IV of IV in D major?

bii⁺⁶ of vi in G major?

bii of IV in G major?

ii of vi in B minor?

V of IV in A minor?

(Create more of these as necessary.)

5. Some "two chord tonicizations" (Subdominant Function - Dominant Function) of ii in C major could be:

C: || Gmi - Dmi⁶₄ (I⁶₄ of ii) (V of ii) | Dmi (ii)

C: || Emi^{7b5} - Dmi⁷₄ (ii of ii) | Dmi (ii)

C: || B^b - Dmi⁶₄ (I⁶₄ of ii) (bii⁺⁶ of ii) | Dmi (ii)

etc., etc., etc.

Give a few possible "two chord tonicizations" of:

iii in G major, V in D major, ii in F major, vi in E^b major, bvi in D major, IV in B minor, iii in D minor.

(Create more of these as necessary.)

6. Here is a symbol progression, with the chord figure analysis underneath:

The musical notation shows a single staff with a key signature of one sharp (F#) and a common time signature (C). The notes are: F4, A4, C5, B4, A4, G4, F4, E4, D4, C4. Below the staff, the chord figures are: F: I, ii^{of}, V^{of}, ii, [IV of vi], V^{of}, vi, V^{of}, V, I.

6. (continued)

Give the correct chord figures for each of the following symbol progressions:

(A) (See Sample Solutions page 308.)

E^b : $E^b - E^b7 - A^b - B^b7 B^b7 Cmi. - D7 - Gmi - A^b B^b7 E^b$

(B) (See Sample Solutions page 308.)

G : $G - - - Fmi7 - B^b7 - E^b - E^b7 - A^b - A^b+b - G$
 $[A^b7]$

(C)

Dmi : $Dmi - D7 - Gmi - A7 - Dmi - E7 A7 Dmi$

(D)

D : $D - - - Gmi7 - C7 - F - Gmi A7 D - A7 - D D$

The following text will examine the various aspects and uses of tonicization. First, however, it is prudent to expose some of the technical details that must be considered in all of its applications.

B. Some Technical Details

1. RHYTHM

The tonicization, which uses a cadential pattern, will usually be of a masculine character. The destination chord will be at a STRONG beat and the tonicizing chords will lead into the strong beat, as:

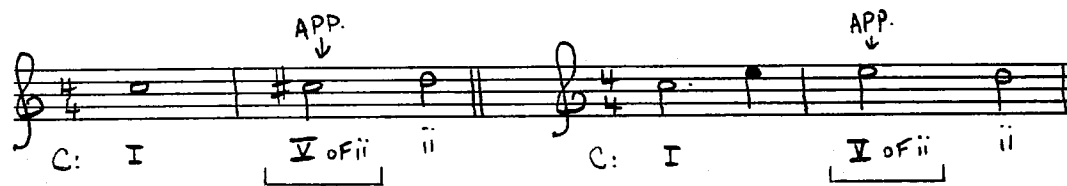
C : $I \quad V \text{ of } ii \quad ii$
 C : $I \quad ii \text{ of } IV \quad V \text{ of } IV \quad IV$

But the feminine pattern:

C : $I \quad V \text{ of } ii \quad ii$

is also available.

It is most often found in an "appoggiatura" sense, with the melody (soprano) in appoggiatura style, as:



* Both of which are really elaborations of the Dmi chord.

There is one place where it is quite common to find the feminine rhythm of "Strong to Weak": The movement of "V of V - V⁷", as:



REASON: The two successive "Dominant" structures do not produce a feeling of "energy to rest", but rather a "continuance of energy". Consequently, the weak beat remains activated.

2. THE ALTERED NOTES

The altered notes which occur in the tonicization will, of course, be **tendency tones**. When they are approached by leap, it is always preferable to leap to them in the *opposite direction* to the tendency (i.e., try, as always, to avoid leaping UP to "up" notes or DOWN to "down" notes).

The altered notes will be left in a manner suited to their normal treatment in *their home keys*. The leading tone in a tonicizing Dominant Function chord, for instance, will move up to its "temporary tonic" if it is in an exposed part. In an inner part, it may leap down to the 5th of the tonicized chord to "fill out" the tonicized chord. To illustrate:



Examples continued:

FINE!

C: I ii^b V^b V ii

ALSO FINE!

C: I ii^b V^b V ii

The preceding examples illustrate that whatever would be acceptable in D minor proper is also acceptable in the tonicizing of D minor. This holds true for all similar situations.

3. TONICIZED 7TH CHORDS

The tonicization may lead to a 7th chord, as:

V of ii - ii⁷
 V of iii - iii⁷
 V of vi - vi⁷
 etc., etc.

If the 7th is MINOR, as it is in the above examples, the temporary "tonic" feeling which can be engendered by the tonicization is IMMEDIATELY DISPELLED and the tonicized 7th chord keeps only the quality associated with the position it occupies in the main scale.

Some care should be taken in approaching the 7th. Note the following.

C: I V^o of ii ii⁷ V

GOOD

C: I V^{b(7)} of ii ii⁷

NOT SO GOOD

The cross relation between the leading tone in V of ii and the 7th in ii⁷ is logical, and the "down" minor 7th is leaped to from below.

The cross relation is not as logical, because the "down" minor 7th of ii is leaped to from above.

C: I⁶ V^o of ii ii⁷

NOT IDEAL, but the dropping of the leading tone in the Secondary Dominant to the 7th of the destination chord is consistent with modern practice. In fact, this can be done even if a "hidden 5th" results, since one of the notes of the 5th is a "7th", as:

C: V⁷ of ii ii⁷

ALL RIGHT!

In the movement "V of V - V⁷" (two dominant 7th structures in succession), *parallel tritones are entirely acceptable*, as:

C: V⁷ of V V⁷
ALL RIGHT!

4. THE "IDIOMATIC V⁶₄"

The idiomatic V⁶₄ (see Volume I, Chapter 9) is also available on Secondary Dominants, as:

C: I V of vi vi V of V V

5. CHROMATICISM

The tonicizing chords *may* be introduced in a "chromatic" manner, as alterations of the diatonic chords, as:

C: C Ami⁷ A⁷ Dmi D⁷ G^{#7} G^{#7} Ami
I vi V of ii ii V of V V⁷ vii of vi vi
CHROMATIC CHROMATIC CHROMATIC

However, it is inadvisable to overdo this. It was noted earlier that *Mixed Mode* harmony receives some chromatic use, but it was also noted that the true quality of Modal harmony is lost when the chromatic usage is overdone. The same is true here! There is certainly no law forbidding progressions such as:

Dmi - D⁷
Ami - A⁷
Dmi - D^{#7}
etc., etc.

There is no suggestion that they sound poorly. The point is that the feeling of chromaticism is one thing and the feeling of tonicization is another! Tonicization is essentially *diatonic*; it extends the main key through the introduction of diatonic and Modal material from other keys. It IS NOT derived from the chromatic scale.

6. INHARMONICS

Inharmonics, all of the decorative devices, 9th chords, etc., etc., are entirely available and advisable. A passage of harmony involving tonicization will be more colorful than straight diatonic chords but it still needs the "stitching" and decoration of inharmonics. The inharmonics are normally drawn from the scale to which the tonicizing chords belong. A brief example:

C: I V of vi vi V of iii iii vi V of V V I

7. CHORDAL AMBIGUITY

Any single chord is ambiguous; that is, it appears in more than one key. This quality of ambiguity can be, and is, widely exploited in tonicization. To take an example:

An A MINOR CHORD is "vi" in C major.

It is also: ii in the key of the dominant (G)

iii in the key of the subdominant (F)

IV in the key of the mediant (E minor)

I in the key of the submediant (A minor)

Consider, then, the following analyses of this A minor chord in context:

C - A mi - D7 - E7 etc. C: I vi V of V V

C - E7 - A mi - B7 etc. C: I V of vi vi V of iii iii

C - E7 - A mi - Bb - C7 - F etc. C: I V of vi vi IV of IV V of IV IV

C - E7 - A mi - Bb - C7 - F etc. C: I V of vi vi IV of IV V of IV IV

More importantly, this ambiguity increases the resources for an interesting progression, because of the fact that a chord arrived at in one key may be left in another. That is, it can function as a Pivot Chord. To illustrate:

Assume a progression which has led to a Dmi chord in the key of C major, as:

C - A7 - Dmi etc. C: I V of ii ii

Among other things, this Dmi chord can:

- a. Move in the usual manner of ii, as:

C - A7 - Dmi - G7 - etc.
C: I V of ii ii

- b. Be reinterpreted as "IV of vi", as:

C - A7 - Dmi - E7 - Ami. etc.
C: I V of ii ii V of vi vi
[IV of vi]

- c. Be reinterpreted as "vi of IV", as:

C - A7 - Dmi - Gmi - C7 - F etc.
C: I V of ii ii V of IV V of IV IV
[vi of IV]

(At present, this Pivot Chord process should be restricted to related and Modally related keys only.)

8. THE SOPRANO

The soprano (the main melody line) achieves continuity, coherence and logic by reason of its **relationship to a SCALE**, and not simply its relationship to the chords. (It can be observed that much inferior jazz improvisation results from inattention to this fact.) Students, particularly in this area of the study, too often neglect the *horizontal* aspect of the soprano. A melody must do more than just "fit the chord" at any point; it must also be coherent with respect to the scale. The student must *hear* the soprano in its entirety, *without the harmony*, and feel that it makes sense and hangs together. It is, of course, the "altered notes" which occur in the tonicization that present the threat to the coherence of the line. The following points and observations may help:

- a. Very often, the soprano can remain *entirely diatonic*, or *Modal*, so that the integrity of the basic scale is not threatened. The altered notes and the key shifts will be a **factor of the harmony only**, and NOT of the main melody line. In popular music and in the "song" field this is most often the case. Observe the examples:

This is an entirely diatonic melody, with tonicization in the harmony:

C - A7 - Dmi. - E7 - Ami. - D7 - G7 - C
C: I V of ii ii V of vi vi V of V V I
[IV of vi]

The melody here uses some accidentals in an *inharmonic* sense, but only as decorations of the diatonic tones and posing no threat to the scale of C:

Modal variant

Modal variant

C A7 Dmi. E7 Ami. D7 G7 C

In cases such as these, the tonicization is *harmonic color*, and the soprano retains its clear relationship to the scale of C.

- b. However, the soprano **can** make use of some of the altered notes of the tonicization, provided care is taken to preserve the feeling of the main scale. This can best be done by resolving the altered notes correctly and/or by cancelling them out subsequently with a reappearance of the unaltered form of the note in question.

For instance, this (while it uses notes of the *chords* involved) is chaotic and meaningless in a *horizontal* sense:

C: I V of ii ii [IV of vi] V of vi vi V of V V I

Whereas this (which uses the *same* altered notes with the *same* harmonies) retains its horizontal integrity, because the altered notes serve a clear melodic purpose:

C: I V of ii ii IV of vi V of vi vi V of V V I

- c. Sometimes the melody may "arpeggiate" the tonicizing chord progression, so that the harmonic intent is outlined by the melody. If the progression is OBVIOUS enough, and FAMILIAR enough, the melody may be satisfactory. Examples:

C: I vii of ii ii bii + b I

C: I V of V V I

"Please", "Shine On Harvest Moon" and "Up a Lazy River" are examples of popular songs which employ arpeggiation of tonicizing chords. (Very often this type of melody will follow the "Cycle" progression, examined at a later point in this chapter.)

9. CROSS RELATION

It is important to be aware of the cross relation that tends to occur when altered notes are used. IF it results from a logical voice leading of the parts involved, it will likely cause no trouble.

ASSIGNMENT 67 (Basic Leading Tonicization)

1. Examine any available sheet music, etc., for illustrations of the use of tonicization. Take particular note of the melody lines used against the tonicization harmonies.
2. Work out a four part example for each of the following short patterns. (Tonicization of most of the related and modally related keys is covered with these nine exercises.) The chords and the voice leading between them are important, but also use some judicious decoration. Make each pattern a musical fragment and not just a succession of vertical structures. Take special care with the soprano: in some instances keep it diatonic, and in those cases where it employs an altered note or notes make sure they are handled logically.

(A) (See Sample Solutions page 309.)

G: I - V of V V⁷ I

(B)

F: I - V of V - V - I

(C) (See Sample Solutions page 309.)

B^b: I - SUBDOM. FUNCT. OF II - DOM. FUNCT. OF II - I

(D)

A^{mi}: I - V of IV - IV - V - I

(E)

C^{mi}: I - - - ii of iii - V of iii - iii - IV V I

(F)

C: I - V of iii - iii - vi - V of V - V - I

2. (continued)

(G)

D: I - - - ii of bvi - V of bvi - bvi - V - I

(H) (See Sample Solutions page 309.)

G: I - - - SUBDOM. - DOM. - vi - V of V V I
FUNCT. OF vi FUNCT. OF vi [ii of V?]

(I)

C: I - - - ii of biii - V of biii - biii - V of IV mi. - IV mi. - V - I
OR I 4 V

3. The soprano is given, with suggested basic harmonies. Complete for four parts.

(A) (See Sample Solutions page 309.)

F: V of V V - I - ? ii - V I
OR ii of V V of V OR I 4 V
1 or 2 chords tonicizing ii

(B)

Eb: ii OR V vii of vi vi - ? IV of iii
OR V of V 1 or 2 chords tonicizing iii

(C)

E mi: I V of IV IV V I V of V V I

(D) (See Sample Solutions page 309.)

C: I - - - ii of bvi - V of bvi bvi - V - I

3. (continued)

⑤

F: I - V of V - V - I - - - V of ii - ii - V of V - V - I

⑥ (See Sample Solutions page 309.)

Fmi: I - V of iii - iii - - - V - - - I - V of V - V - I

[NAT. vii]

OR
I 4
OR
vii

⑦

G: I - V of IV - IV - - - V of V - V - - - V of ii - - -

[IV - IV mi. -]

ii - - - V of vi - vi - - - ii - - - I

OR
IV of vi

OR
V of V

4. The basic progressions are given. Work out for four parts, adding tonicization in a "leading" sense, where adaptable (mainly "masculine"). Use some "two chord" tonicizations.

⑧

D^b: I - IV - V - vi - iii - IV - V - I

⑨

Gmi: I - - - IV - V - - - I - I

5. Work out two passages for four parts on the following harmonic scheme:

① Without eighth notes (or with very few). ② With eighth notes, or even shorter values.

(See Sample Solutions page 310.)

I - - - ? - ? - ii - - - V - - - I - - -

Two chords
tonicizing ii

I 4 - V -
or other
Dominant
Function

? - ? - bvi - DOM. - I

Two chords
tonicizing bvi

6. **The ear:** Become familiar with, and develop the ability to recognize, the basic tonicization harmonies, particularly the Secondary Dominants which lead to the related keys.

C. Three Propositions (adding to the basic tonicization principles)

Proposition 1.

A secondary dominant (or secondary vii^{o7} or secondary bii^{+6}) may resolve to a *Modally altered chord* on the same root as its normal destination chord. To illustrate:

$C - A^7 - Dm7^{b5}$ etc.
 or $C\#^{o7}$
 or E_b^{+6} *
 $C: I$ Dominant of ii ii^{b5}

Instead of the expected "D minor"

*Interesting! - since apparently this is a tonicization of a diminished chord and a diminished chord, which cannot function as a tonic chord, cannot be tonicized! Really, of course, the " A^7 " (or substitute) is NOT heard as " V of ii^{b5} " but as " V of ii ". The ii^{b5} is an unexpected alteration of the expected ii chord and the modally altered ii^{b5} is on the same root as the expected chord.

This situation most often occurs with " V of $ii - ii^{b5}$ ", as in the above example, and has a pronounced *chromatic* quality. Examine and hear the following examples:

$C: V$ of ii ii^{b5}
 $C: V$ of ii ii^{b5}
 $C: V$ of ii ii^{b5}
 $C: V$ of ii ii^{b5}
 $C: bii^{+6}$ of ii ii^{b5}
 $C: vii^{o7}$ of ii ii^{b5}

But there are other places where a modally altered chord can replace the expected destination, as:

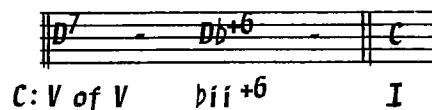
V of $vi \rightarrow to \rightarrow vi^{b5}$ (Dorian vi)	(In C : E^7 to A_{mi}^{7b5})
V of $iii \rightarrow to \rightarrow iii^{b5}$ (Mixo-Lydian iii)	(In C : B^7 to E_{mi}^{7b5})
V of $V \rightarrow to \rightarrow V^{b5}$ (Phrygian V)	(In C : D^7 to G_{mi}^{7b5})

The reason "V of ii - ii^{b5}" is more common is only because ii^{b5} is more common than vi^{b5}, iii^{b5}, or V^{b5}. Certainly, the principle is the same in each case.

(It should be clear that although, for instance, an "Ab" chord in C is a Modally altered vi chord, the progression "E⁷ - Ab" (V of vi to bvi) would not be proper. The Modal variant must be *on the same root* as the expected chord.)

Proposition 2. (Note: Propositions 2. and 3. concern the "V of V")

Instead of moving to V, the "V of V" may resolve onto "bii⁺⁶" (German or French). To illustrate:

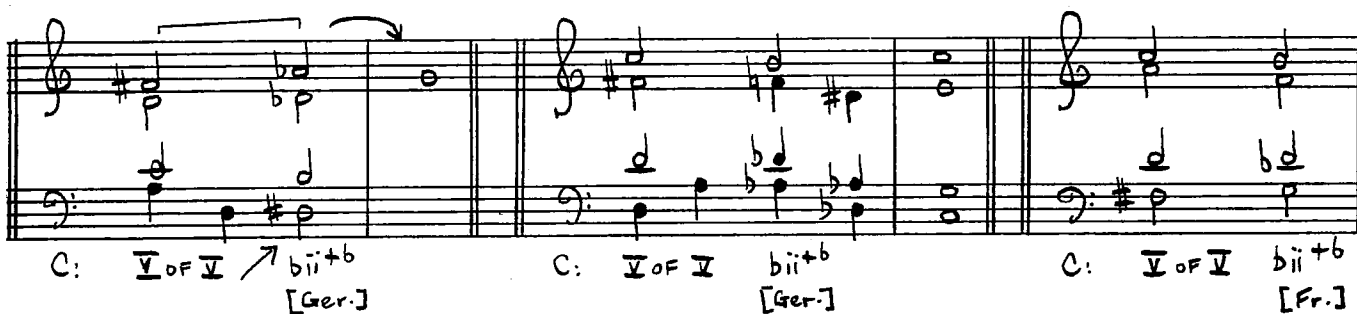


The tritone in bii⁺⁶ is, of course, the same as the tritone in V⁷, so the essence of the progression is the same.

The joining can be done in a *parallel* manner, as:



Parallel movements of this sort are used (and "Parallel Harmony" is discussed in detail in a later chapter), but they are not ideal from a part writing point of view. Other joinings, *with or without parallel tritones*, are available. Observe:



As an addendum to this proposition, note that the bvi^{+6} chord can function as " bii^{+6} of V", and it can move to bii^{+6} , as:

C: bvi^{+6} or bii^{+6} of V? OR: Ab^{+6} Db^{+6} bii^{+6} bii^{+6} of V?
 V of bii^{+6} ?

Therefore, the possible combinations are:

C: V of V V V of V bii^{+6} bii^{+6} of V V bii^{+6} of V bii^{+6}

(i.e., "Dominant Function chords of V" - to - "Dominant Function chords")

Reminder: In practical areas where the symbol system is used, the Augmented 6th chords are symbolized as "7th" chords. So the progression " Ab^{+6} - Db^{+6} ," would be called " Ab^7 - Db^7 ."

Proposition 3.

"V of V" may move to "ii - V" (instead of just to V). To illustrate:

C: V of V (ii) V
 $Dmi^7/b5$

Which means, in effect, that the "V of V" is moving to another version of a chord on the same root, and is therefore a *chromatic resolution*.

The ii chord will take its value from the V chord, as:

rather than: D^7 Dmi^7 G^7

The bass part offers a problem, since the roots of the chords are the same. The retaining of the same bass note across the bar line may be unsatisfactory from Weak to Strong, as:

C: V V of V ii V
 POOR!

It can be acceptable as:

C: V of V ii V I

or:

C: V of V ii V I

The retaining of the same note over the bar line can be avoided by:

a. Using an "arpeggiated $\frac{6}{4}$ " on V of V, as:

C: V of V ii V

(This is a favored solution)

b. Using an octave leap, as:

C: V of V ii V

c. Any other means that suggest themselves in the context.

Since "V of V - ii" is a movement from a chord to another version of the same chord, there need be no concern for a leaping 7th, provided it is not discarded:

C: V of V ii V of V ii bs V

In other words, all of the freedoms which exist in a change of position of the same chord are available!

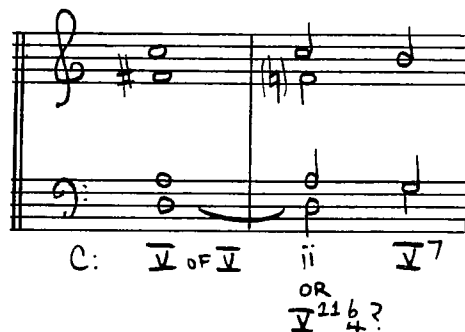
The question arises: When the "V of V" has moved to ii, is it then necessary to proceed to V, or can the ii (or ii^{bs}) then move in some other compatible manner?

The answer is provisional. In the majority of cases, the "ii" chord taken after a "V of V" is just a development or elaboration of the Dominant harmony, and will proceed to V, or to ii^{bs}. Other avenues are possible, however, as:

C: I V of V ii iii IV V I

C: V of V ii bs I

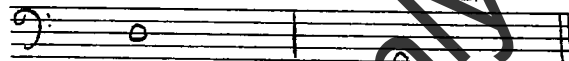
In a sense, the ii chord used in the progression "V of V to ii - V" is a "v¹¹" chord (or v^{sus.4}). The 7th of the ii chord is heard as a "4 - 3" suspension, or appoggiatura, over the V chord, as:



It is not at all uncommon to encounter on sheet music symbols which read:



with a BASS PART reading:



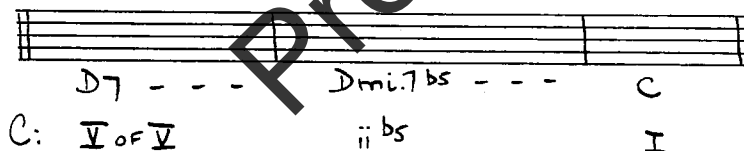
The symbols, in such cases, are simplified versions for the rhythm instrument players, and since the chords the guitar or piano player will be in the middle register and will not affect the bass, they are usually satisfactory.

To sum up, here are the things that can follow "V of V":

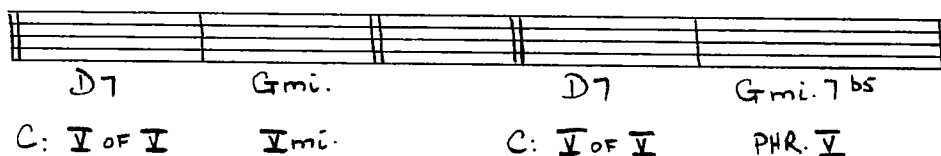
- a. "V of V" → V⁶₄ - V
→ bii⁺⁶
→ ii - V
→ iib⁵ - V

However, a chord symbol situation which reads as "V of V" to "ii - V" may really be "V of V" to "v^{sus.4} - V"! (The ii chord used in this manner is sometimes called the "Suspension Chord".)

- b. "V of V" may move to ii or to ii^{b5} and the ii chord may then move to a chord other than V, such as:



- c. And, of course, "V of V" may move to a Modal Variant of V, as:



ASSIGNMENT 68 (Three Propositions)

1. The following progressions employ the movements discussed under "Three Propositions". Work out a musical four part example for each, using various major keys.

(A)

I - V of ii - ii b5 - Dom. - I

(B) (See Sample Solutions page 310.)

I - V of vi - vi b5 - V of V - ii - Dom. - I

or
ii b5

(C)

I - V of V bii + b I

(D)

I - bii + b of V bii + b I

[bii + b?]

(E)

I - V of iii - iii b5 - IV I

[vii of IV?]

(F)

I - ii of ii Dom. of ii ii b5 - I b V I - V of V I

IV of ii

(G)

V of V - - - ii b5 - - - I - - - V of V - ii V I

or
ii b5 (or develop)

(H) (See Sample Solutions page 310.)

vi - V of V - ii - V - I

[ii of V?] (or develop)

2. The lead is given, with suggested basic harmonies. Complete for four parts.

(A) (note unusual five bar phrases)

(B) (See Sample Solutions page 310.)

3. The soprano and bass are given. Add the inner parts. (See Sample Solutions page 311.)



4. The soprano only is given. Complete for four parts. (See Sample Solutions page 311.)

5. Work out a slow moving, sedately romantic passage of four part writing (approximately eight bars), illustrating one or more of the "Three Propositions".
6. **The ear:** Become familiar with the sound of the progressions herein examined, particularly "V of V - ii", "V of V - \flat ii⁺⁶", and "V of ii - ii^{b5}".

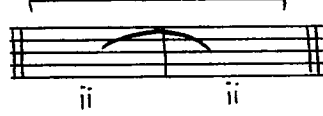
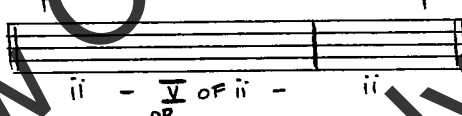
II. "INTERNAL" AND "ELABORATION" TONICIZATION

Introductory:

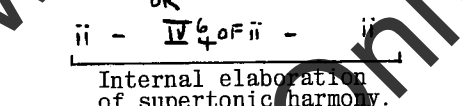
To this point in the text, tonicization has consisted of the use of a *leading* chord or chords directed at a destination. Further, the principles of tonicization may be used to elaborate, "internally", any major or minor chord. To illustrate:

Just as:  could become: 

OR

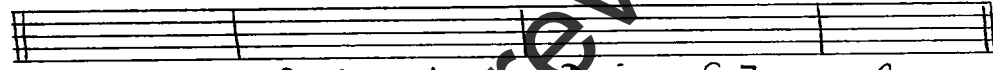
SO CAN:  become: 

OR



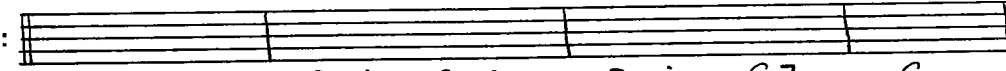
Internal elaboration of supertonic harmony.

"Internal elaboration" may take place whether or not the elaborated harmony has been *prepared* with tonicization. To illustrate:



C: I ii V of ii ii V I

Elaboration without preparatory tonicization

OR: 

C: I V of ii ii IV of ii ii V I

Elaboration with preparatory tonicization

Details:

- a. This process can become somewhat more than just simple tonicization. If the elaboration is of significant duration, it becomes, in effect, a **Transient** or **Temporary** modulation - a sort of **Harmonic Detour**. Consider:

C: ii V I IV V_oF_{ui} vi
[V_{io}F_{ui}]

V_oF_{ui} V_oF_{ui} vi ii V I

This could, since the *length of time spent in the key of the related minor is significant*, be analysed as:

C: ii V I IV V I IV V I
Area in key of related minor

Similarly, the following offers a dual analysis:

C: I ii V_oF ii V_oF ii ii V I
OR C: I { Dmi: I ii V I } C: ii V I
Area in key of supertonic

- b. Transient modulations, or "harmonic detours", are among the most effective techniques of organized harmony. They require good craftsmanship and a sensitivity to tonal relationships, or chaos can result. In the overwhelming majority of cases, these transient modulations involve the closely related keys, as:

In MAJOR:	[The key of the related minor] commonly used, perhaps because they bring "minor" material into Major.
		The key of the supertonic	
		The key of the subdominant	
		The key of the dominant	
		The key of the mediant	
In MINOR:	[The key of the related major]
		The key of the subdominant	
		The key of the submediant	

These "close" relationships offer a large number of **common tones** and **common chords** between the keys involved. Therefore, the entry into and departure from the "harmonic detour" can be accomplished smoothly and without too much threat to the basic key.

- c. If the areas of transient modulation are in closely related keys, an eight bar passage could use a couple of them if they were handled carefully. One such area is more usual, and more than two could become confusing.

An example of *one* transient modulation in eight bars:

C: ii V I ii of ii V of ii ii V of ii ii I⁶₄ V I

D MINOR: ii V I V I

Area in key of supertonic

An example of an eight bar passage using *two* transient modulations to related keys, with a return to the basic key between them:

Area in key of iii Return to "C"

C: I vi V of iii iii V of iii iii ii V

E MINOR: IV V I V I

Area in key of ii Return to C

C: I vii of ii ii V of ii ii V I

D MINOR: vii I V I

NOTE: Obviously more chord changes are necessary to accomplish *two* transient modulations than are necessary for one. In general, the more chord changes, the slower the tempo!

An example of an eight bar passage using *two* transient modulations to related keys, *without* a return to the basic key between them:

Area in key of IV TO: Area

C: I ii $\flat vi^{+6}$ I V of IV IV ii of IV V of IV IV V of vi

F MAJOR: V I ii V I

A MINOR: vi V

Area in key of vi Return to C

Ami: I IV V I V of IV IV

- d. Transient modulations to Modally related keys are available. These pose more of a threat to the main key, because they involve keys which have few common tones and few, if any, common diatonic chords. The main difficulty with a transient modulation to a modally related key occurs in the **return** to the main key.

For instance, to get INTO the key areas of:

- B \flat or B \flat mi (b vii)
- E \flat (b iii)
- A \flat (b vi)
- D \flat (b ii)

from "C" is no real problem, because these chords can be introduced with or without tonicization, as Modal Variants in the key of C. However, if any of these keys is established (even in a transitional manner), getting back to C can be difficult because the C chord is NOT a Modal Variant in any of these keys. Therefore:

1. Make sure that *enough harmony* and *enough time* is allotted to the process of *returning* to the home key, after an area in a modally related key.
2. Make sure that the main key is firmly established *before* the area in a modally related key, so that the listener will be prepared for a return to it.
3. In an eight bar passage, *one* transient modulation to a modally related key is possible. More than one may be difficult to do convincingly.

Examples of eight bar passages incorporating one transient modulation to a modally related key:

Area in key of b vi Return to "C"

C: ii V I b vi V of b vi b vi IVmi I $\frac{6}{4}$ V I

A \flat : I V I vi

Area in key of b iii

C: I IVmi b vii (x of b iii) b iii b vi of b iii b iii $\frac{6}{4}$ V of b iii

E \flat : ii V I b vi I $\frac{6}{4}$ V

Return to "C"

C: b iii IVmi V I ii b ii^+6 I

E \flat : I ii *This "I" Needed to reaffirm "C"

unconvincing!

Area in key of b vii

C: ii V I Imi IV? vii Imi IV?

V of b vii ? V of b vii ?

B \flat : ii V vii of ii ii V

Return to "C"

b vii b iii IVmi V b vi I $\frac{6}{4}$ V I

B \flat : I IV Vmi

An example of an eight bar passage with transient modulations to two modally related keys, with a return to the basic key between them:

—Area in key of $\flat vi$ — —Return to C—

C: I IV V $\flat vi$ V of $\flat vi$ $\flat vi$ V

A \flat : I V I

—Area in key of $\flat ii$ — —Return to C—

C: I $\flat ii$ ii of $\flat ii$ V of $\flat ii$ * I_4^6 V I

D \flat : I ii V

*(reinterpreted as " $\flat vi+6$ ")

An example of an eight bar passage with transient modulations to two modally related keys, without a return to the basic key between them:

—Area in key of $\flat iii$ — —Area in —

C: I ii of $\flat iii$ V of $\flat iii$ $\flat iii$ IVmi of $\flat iii$ $\flat iii$ V of $\flat vii$

E \flat : ii V I IVmi I

B \flat : IV V

—key of $\flat vii$ — —Return to C—

C: $\flat vii$ vi of $\flat vii$ ii of $\flat vii$ IVmi I_4^6 V I

B \flat : I vi ii Vmi

An example showing two transient modulations: one to a modally related key, one to a related key:

—Area in key of $\flat iii$ — —Area in —

C: ii V I $\flat iii$ ii of $\flat iii$ V of $\flat iii$ $\flat iii$ V of ii ($\flat ii$ of ii)

E \flat : I ii V I

D MINOR: $\flat ii$ V (N^6)

—key of ii — —Return to C—

C: ii $\flat ii+6$ of ii ii ii^{b5} I_4^6 V I

Dmi: I $\flat ii+6$ I

It must be noted that these "chord symbol" progressions are only the skeleton of the music. The success or failure of passages based on progressions such as these is ultimately a matter of voice leading, control of the soprano, smooth chord joinings, and all other musical considerations.

- e. It is possible to start a passage in a different key than the intended basic tonality. (This is really simply an extension of the idea that a passage can start on a chord other than the tonic.)

Such a procedure usually involves a related key rather than a modally related one. For instance:

1. Starting in the key of *ii* is more adaptable and more likely than starting in the key of *bii*.
2. Starting in the key of *vi* is more adaptable and more likely than starting in the key of *bvi*.

In practice, it is important to differentiate between a passage that starts in a *key* other than the tonic, and one which simply starts on a *chord* other than the tonic. For instance:

"I SURRENDER DEAR" (opening harmonies)

clearly starts in the "key of *ii*", whereas:

"BODY AND SOUL" (opening harmonies)

simply starts on the *ii* chord.

"LAURA", which starts in the key of the dominant, and Mendelssohn's "WEDDING MARCH", which starts in the key of the mediant, were mentioned in Chapter VII, Volume I, page 130. Passages which start in the related minor (e.g., "Love Me or Leave Me", "It's All Right With Me") are not unusual.

As a corollary to the idea of starting in a different key, it is also possible to END a passage in a key other than the established one. This is not common practice now, but was quite frequent in early modal music, where a passage could apparently be in, for instance, C Ionian but end in D Dorian, E Phrygian, A Aeolian, etc. This "pre-tonal" period of music employed the Related Modes (i.e., Modes with the same key signature) in a manner similar to the way related keys are used now.

The principle can still be exploited, however, and occasionally a passage ending in the related minor is encountered, as:

C: I ii V I V I

A minor: NAT. vii I

C: I ii V I V I

A minor: $\overline{\text{IV}}$ $\overline{\text{V}}$ I

In either of the above, the use of a "Tierce de Picardie" in the related minor will produce the interesting use of an A MAJOR chord as a final in the key of C!

f. The soprano line needs particular care in a passage which employs transient modulation. Point 8. under "Some Technical Details", (page 153) still, in general holds. That is, the soprano -

1. may remain diatonic, or Modal, in the basic key
- or 2. may use the altered notes of the areas in a different key, but resolve them in accordance with the principles of the BASIC scale.
- or 3. itself show a transient modulation. (This is less usual.) In this case, utmost care must be exercised in leading the soprano into and out of the new key area. Make sure the melodic transient modulation is smooth and logical. Always test the soprano line *without the harmonies*. If it does not make its own horizontal sense, it is wrong!

ASSIGNMENT 69 (Internal and Elaboration Tonicization)

1. Examine available music for illustrations of "Internal" and "Elaboration" tonicization and for passages that begin in keys other than the ultimate basic key.
2. The soprano is given, with suggested harmonies. Complete for four parts, noting the "transient modulations".

Area in related minor _____

bad!

I_4^b $\overline{\text{V}}$ (I I I I)

2. (continued)

② Area in related major

Emi: I - - - IV - V of iii iii V of iii iii ii of iii V - I

[ii of iii] [IV]

③ Development in key of supertonic

Eb: I V of ii ii V of ii ii V I

[vii of ii]

④ Area in C to:

G: I - ? ? I - V of IV IV - ii of IV V of IV IV - V of vi

Area in Emi

vi - IV of vi V of vi vi V of I ii b5 I 4 V I

⑤ (See Sample Solutions page 311.) Area in key of bvi

D: I - V - I V of IV - IV mi - ii of bvi V bvi V of bvi

[vii of bvi] [I 4 V] "Effect" ending in key of related minor.

bvi V of IV mi IV mi. V I V vi

[V of Vii of bvi]? [I 4 V]

⑥ In D minor In A minor In G In C

C: ii V of ii ii V of vi vi IV 4 of vi vi V of V

V ii of V V of V V - - (V 7) I V I

[ii V]

Note that the melody in the above example is entirely diatonic in C, while the harmony threads its way through four related keys.

3. The progressions are suggested, involving transient modulations, etc. Work out for four parts, taking particular care with the soprano.

D minor: **Area in key of vi**
 Musical staff showing a progression in D minor. The notes are: I, V, vi, of, of, vi, IV, I⁶₄, V, I, I. Roman numerals below: Bb: I ii V I vi. A bracket above the last four notes is labeled "Area in key of vi". A bracket below the last two notes is labeled "or develop".

F: **(Starts in key of ii)**
 Musical staff showing a progression in F major. The notes are: ii, of, of, ii, of, ii^{b5}, I⁶₄, V, I. A bracket below the first three notes is labeled "(Starts in key of ii)".

Eb: **Cmi: ii V I V I**
 Musical staff showing a progression in Eb major. The notes are: ii, V, I, ii, of, of, vi, of, vi, ii, V. Roman numerals below: Cmi: ii V I V I. A bracket below the last four notes is labeled "(Key of related minor)".

Fmi: V I IV⁶₄ I
 Musical staff showing a progression in F minor. The notes are: I, of, ii, of, ii, V, I. Roman numerals below: Fmi: V I IV⁶₄ I. A bracket below the last three notes is labeled "(Key of supertonic)".

G: **Area in key of biii**
 Musical staff showing a progression in G major. The notes are: I, ii, of, of, biii, of, biii, of, biii, biii, ii, V, I, ii, V, I. Roman numerals below: Bb: ii V I bvi bii V I. A bracket above the last six notes is labeled "Area in key of biii".

4. Work out passages of varying texture and activity, in the following general plans. The completed passages are to be for four parts, but preparatory sketches of the harmony and/or melody and/or bass are advisable.

a. Key C: **Establish tonic key - To area in related minor - Return to tonic key.**

(See Sample Solutions page 312.)

b. Key D: **Start in key of the supertonic - to area in related minor - to conclusion in D**

c. Key Fmi:

Establish key of tonic - to "half-cadence" in key of related major - Area in related major - Return to Fmi

d. Key A:

Establish tonic key - To area in key of bvi - Return to A

e. Key C:

Establish tonic key - to area in key of subdominant - to area in key of bii - Return to C

"INTERNAL" AND "ELABORATION" TONICIZATION (continued)

Proposition 1.

Harmonies derived from the tonicization principles may be used to support INHARMONICS in the lead line - as "Passing Chords", "Auxiliary Chords" etc. To illustrate:

Just as:

could become:

So could:

become:

As a further illustration, the following line, with basic harmonies:

could, with application of tonicization chords to support the inharmonics, become:

C: *vi* *ii* *of* *ii* *ii* *V* *sus.4* *V* *bvi* *vii of bvi* *bvi* *ii b5* *bii +6* *I* *IV mi. 4* *I*

"lead-in" chord Auxiliary chord Passing chord Pedal $\frac{6}{4}$

The use of **Inharmonic Chords** in this manner is *not in any way intended to replace any previous method of handling inharmonics*. Rather, it is a further resource; a resource which provides a heavier texture and a more sectional, vertical style of writing. It is a technique widely used in those areas of "sectional writing" that occur in practical orchestration.

Here, for comparison, is a fragment which employs an auxiliary note and a passing note in the melody, treated in different fashions:

1. C: *ii* *V* 2. C: *ii* *V* $\frac{4}{4}$ *V* 3. C: *ii* *vii of ii* *ii* *bii +6 of V* *V +5* *V*

Sparse, simple Little more active Richer, more sectional. More of a vertical "note against note" style.

There is no question of "better" or "worse" in the above solutions. It is sufficient to remark that the third example, which shows an application of the technique under discussion, is more of a "harmonic" sound and less of a "part writing" one. It is a valuable instrumental technique particularly when it is desirable, for some reason, to have movement in all parts. On the other hand, a "part writing" context will become heavy and unwieldy if such a technique is retained for too long.

Proposition 2.

A passive and sustained lead line can be given richer and more active harmonic support through the application of "Elaboration Harmonies" derived from the tonicization principles: To illustrate:

Just as: C: *I* could become: C: *I* *IV* $\frac{4}{4}$ *I* - *I* *V* $\frac{11}{11}$ *I* - *I* *ii* *I* *b* - etc.

so could:


C: ii

become:

C: ii $\frac{V}{V_4} \text{ of } ii$ ii -
 ii $\frac{V}{V_4} \text{ of } ii$ ii^b - etc.

The above examples illustrate the essence of the idea - which is, simply, that any major or minor chord can be regarded as a **"Temporary I Chord"**, and chords from its own tonal sphere may be introduced to elaborate it. In practice, the process may be applied:

- a. To elaborate, harmonically, a sustained note occurring in a passage which is generally more active. as:

This:  ii of ii - V of ii - ii V I

(basic harmony) C: I ii of ii - V of ii - ii V I

Could I ii of ii - V of ii - ii - V of V* V - - - I

become: I ii of ii - V of ii - ii - V of V* V - - - I

*Elaboration *Leading *Elaboration


The above example worked out for four parts:

A musical score for the song 'The Rose Tree'. The score is written on two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one sharp (F#) and the time signature is 4/4. The melody is written on the top staff, starting with a quarter note G4, followed by a quarter note A4, a quarter note B4, and a quarter note C5. The bass line is written on the bottom staff, starting with a quarter note G2, followed by a quarter note A2, a quarter note B2, and a quarter note C3. The score includes a large 'Preview' watermark across the center.

Basic: C: I - - - II OF II - ~~III OF II~~ - II - - - - - -
Revised: C: I - - - II OF II - V OF II - II - V OF II - II - - V OF V

[illegible]

- b. To provide a richer harmonic support under a line which is passive and sustained throughout,
as:

This: 

(basic harmony) C: I - - - vi - - - ii - - - V - - - I - - -

Could become: I IV^b₄ I - - vi ^{OF}_{vi} V ^{OF}_{ii} ii - ^{OF}_{ii} - ii^b ^{OF}_V V - I ^{OF}_V IV^b₄ ^{OF}_{vi}^b₄ I - -

* * * * *

The above example worked out for four parts:

Basic: C: I vi ii

Revised: I IV^b I - vi V^{of} vi V^{of} ii ii^{of} ii

Basic: C: I vi ii

Revised: I IV^b I - vi V^{of} vi V^{of} ii ii^{of} ii

It is worth remarking again that “Harmonic Elaboration” like this is not meant to cancel out, nor is it necessarily an improvement on, the type of texture elaboration that can be gained with just *inharmonic* uses. This is simply another tool in the kit.

ASSIGNMENT 70 (Internal and Elaboration Tonicization—continued)

1. A. Lines are given, with basic harmonies. Harmonize for four parts, aiming to use examples of passing and auxiliary chords, etc., derived from the tonicization process. (These lines do not necessarily offer continuous opportunity to apply the process under discussion. No technique should be "forced", and while it is important to know HOW to use a technique, it is also important to know WHEN and WHEN NOT to!)

1. A. (continued)

(A)

F: I vi ii V I

(B) (See Sample Solutions page 312.)

G: I bvi SUBDOM. V I

(C)

Ami: I [ii of iii] IV V of iii iii V of vi vi V [ii V]

I V of IV IV V I V I

B. In the following, aim to get continuous MOVING eighth notes in ALL PARTS:

(See Sample Solutions page 312.)

Bb: ? I ii V I vi ii V I

2. Leads are given, with basic harmonies. Complete for four parts, aiming to show some enriching of the supporting harmony through the application of tonicizing elaboration.

(A) *Slowly* (See Sample Solutions page 313.)

C: ii V I vi ii V I

(B) *Slowly*

G: I vi ii V

bvi ii bs IV mi. V I

(C) *Medium*

Eb: I vi ii V I

DOM. of ii ii V I

III. "DECEPTIVE" TONICIZATION

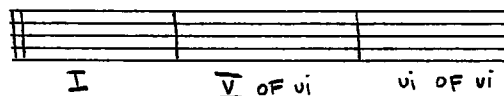
Proposition:

Just as the "V" chord of the key can resolve by "Deceptive Cadence", so can a "Secondary Dominant" resolve in a deceptive manner. For instance, just as "V - vi" is successful, so will be "V of ii - vi of ii"; or, just as "V - bvi" is successful, so will be "V of V - bvi of V", etc., etc.

The most common of the deceptive movements is "V - vi(or bvi)", but other movements are available. Observation would seem to indicate that the deceptive movements most frequently used from Secondary Dominants are the following three:

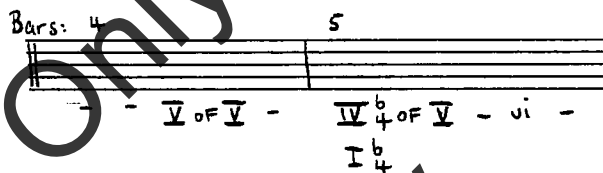
"V of vi - vi of vi"

Example: "Sunny Side of the Street":



"V of V - IV of V"
usually
"IV⁶₄ of V"

Example: "I Surrender Dear"



"V of iii - vi of iii"

Example: "Whispering"

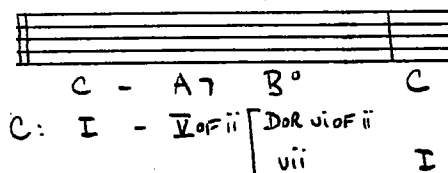
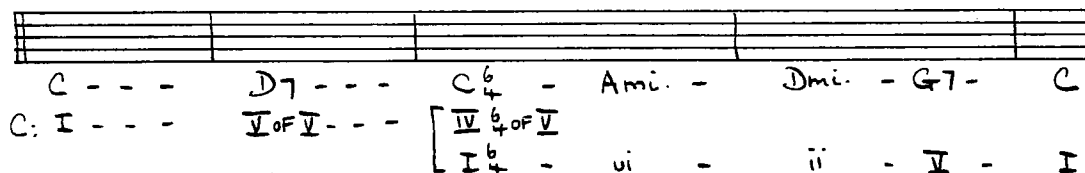


The same principle can work in many other situations, however.

Details:

The chord arrived at by the *deceptive* movement may do one of three things:

- It may be treated as a chord of the basic key, if it is one, as:



When treated in the manner indicated above, the key which is prepared with the Secondary Dominant is "by-passed" entirely. The tonicization begun by the Secondary Dominant is aborted.

b. It may continue in the key of the deceptive cadence, as:

Area in key of ii

C - - - Emi.7bs - A7 - Bb - Gmi. A7 Dmi. - G7 - C

C: I - - - ii of ii - V of ii - vi of ii - IV of ii V of ii ii - V - I

Area in key of vi

C - - - E7 - - - F - E7 - Ami.

C: I - - - V of vi - - - vi of vi - V of vi - vi

etc.

Area in key of bvi

C - - - Eb7 - - - Dbb - - - Ab

C: I - - - V of bvi - - - IV of bvi - - - bvi

etc.

*(Appoggiatura $\frac{6}{4}$ in the manner of an "Interrupted Cadence")

When treated in the manner indicated above, the deceptive movement delays or prolongs the the entry into the new key area, but the destination implied by the Secondary Dominant is ultimately reached.

c. It may be treated as a chord of another new key area, as:

*

C - A7 - Bb C - F - G7 - C

C: I - V of ii - [vi of ii] IV of IV - V of IV - IV - V - I

*

C - - - D7 - - - Emi. - A7 - Dmi. - G7 - C

C: I V of V [vi of V] ii of ii V of ii - ii - V - I

* * *

C - A7 - Bb C7 - Db - Eb7 - Fmi. - G7 - C

C: I - V of ii - [vi of ii] IV of IV - V of IV - [bui of IV] IV of bui - V of bui - [vi of bui] IV mi. - V - I

When treated in the manner indicated above, the key which is prepared with the Secondary Dominant is "by-passed", and then the progression flies off in a new direction. Care must be exercised to control it, and to control the voice lines, so that the main key is returned to convincingly.

ASSIGNMENT 71 (Deceptive Tonicization)

1. The soprano and bass are given. Add the inner parts. Note the deceptive movements from Secondary Dominants.

(A) (See Sample Solutions page 313.)

Sop. Bass

F: ii^b_4 - V^b - vi^b - ii - ii - V^b - I - V^b - vi^b - V - I

[IV]

(B) Sop. Bass

G: I vi - V^b - V^b - V^b - vi -

[ii^b_4 of V^b] [I^b_4]

V^b - ii - V - I

OR V^b_4 [OR DEVELOP]

2. Symbol progressions are given. Give the correct chord "figures" for the following:

(A) (See Sample Solutions page 313.)

Eb - - - Fmi.7 - G7 - Ab - Bb7 - Eb

(B) (See Sample Solutions page 313.)

D - - - Fmi.7 - Bb7 - Cmi. - F7 - Gmi. - Db A7 D

(C) (See Sample Solutions page 314.)

C - E7 - F - G7 - Ami.7 - D7 - C - $\text{G}\sharp^b$ - Ami. - Dmi.7 G7 C

[b^2_4]

3. The soprano is given, with suggested harmonies. Complete for four parts.

Handwritten musical notation for exercise 3. The soprano line is in B-flat major (Bb). The suggested harmonies below are: I, V of ii, ii OR V of ii, D or V of ii, V of vi, vi, ii, V, I. There are also some additional markings like 'ii of ii' and 'V of ii'.

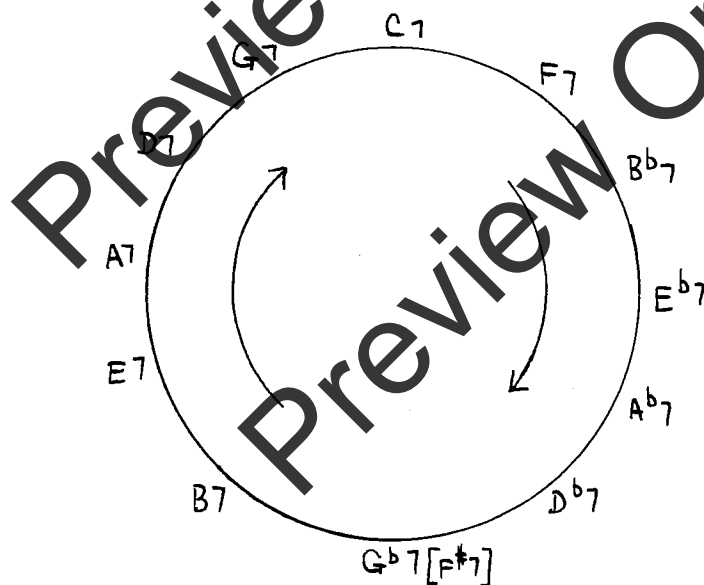
4. The progression is suggested. Work out a four part passage based on it. Use a passive, unhurried soprano, and move smoothly through the deceptive tonicizations.

Handwritten musical notation for exercise 4. The first part shows a suggested progression: ii of ii - V of ii - ii - V of ii - vi of ii - V of IV - IV - V - [IV of IV]. The second part shows a four-part passage: I - V of iii - vi of iii - V of vi - vi of vi - V - I. There are also some additional markings like '[I]' and '[IV]'.

5. Examine any available music, and listen for uses of Deceptive movements from Secondary Dominants.

IV. THE "CYCLE" (of Dominant 7th chords, or derivatives)

The term refers to a movement of Dominant 7th chords by root movement of "Up 4" (Down 5), as:

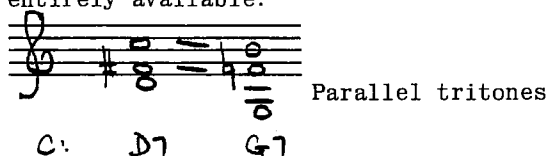


Part 1.

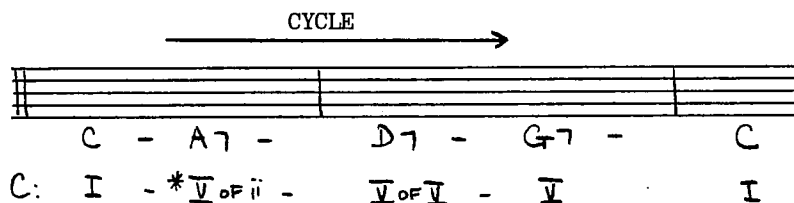
The proposition is a simple one. A dominant or secondary dominant may resolve on to another dominant structure a perfect 4th higher (perfect 5th lower), as:

"D⁷ to G⁷"
a fragment of the "cycle"

This movement has been encountered with "V of V - V⁷", where it was noted that *Parallel Tritones*, while not obligatory, are entirely available:

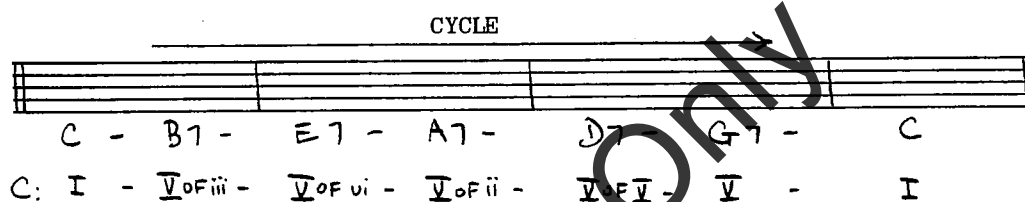


The other frequently encountered use of the cycle is the movement "V of ii - V of V", as:



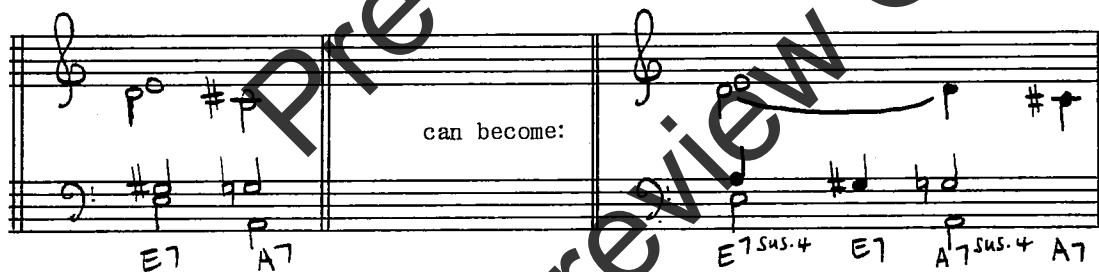
*This is "V of ii" rather than "V of V of V"! The fact that it goes to an alteration of the ii chord, rather than the actual ii chord, is a *subsequent* happening. At the point the A7 arrives, it's a "V of ii".

However, a more extended use of the cycle is available, as:

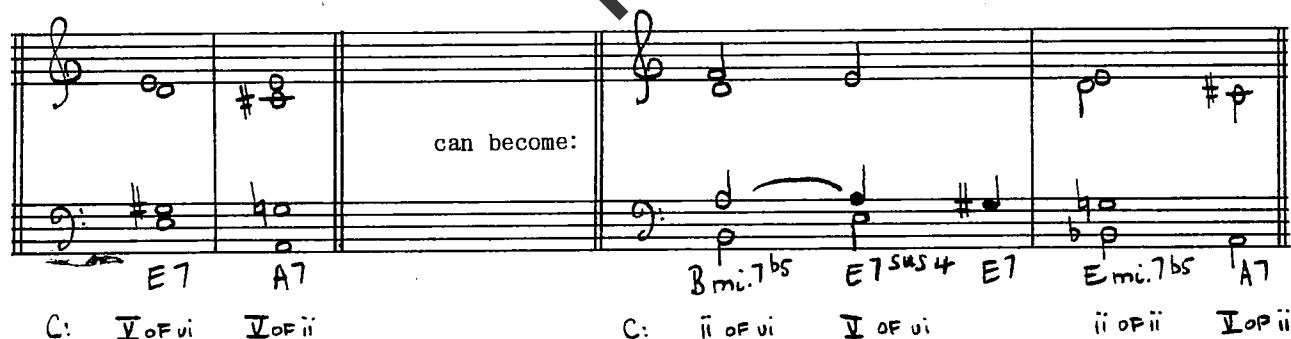


Such a progression is comfortable, logical, and has good "forward motion", but it is somewhat dull and undistinguished. There are, however, a number of modifications and embellishments that can be applied to it for more interest:

a. The use of suspended or appoggiatura 4ths (i.e., "sus. 4"), as:



b. A "ii - V" may be used instead of just "V", as:



c. "9th" chords, etc., and other inharmonic decorations are available, as:

can become:

E7 A7 E7^{b9} E7 A7⁺⁵ A7

d. Or the cycle may move with a descending half-step root movement; that is, it may employ alternate "bii⁺⁶" chords, as:

E7 A7 D7
C: V of vi V of ii V of V

may become:

E7 Eb⁺⁶[E7] D7
C: V of vi bii⁺⁶ of V V of V

or may become:

Bb⁺⁶[Bb7] A7 Ab⁺⁶[Ab7]
C: bii⁺⁶ of vi V of ii bii⁺⁶ of V

Since a "bii⁺⁶" chord has the same tritone as the "V" for which it substitutes, the tritone progression will be the same for all three of the above examples. Note:

E7 A7 D7 E7 Eb⁺⁶[E7] D7 Bb⁺⁶[Bb7] A7 Ab⁺⁶[Ab7]

Of course, the inharmonic uses and the more extended chords are equally available on the cycle of descending half-tones.

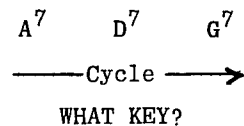
Addendum:

If the cycle progression is incorporated into a passage in which the key has been established, it will relate itself to that key, as:

C - E7 - A7 - D7 -
C: I V of vi V of ii V of V

Heard in relation to C major

However, if (as is occasionally the case) a passage STARTS with a cycle progression, *no specific key* is indicated by the harmony until one of the tritone structures resolves on to a non-dominant structure, as:



The melody (soprano) could indicate the key, however, as:



It is also possible for the soprano line to shift keys in a cycle progression, as:

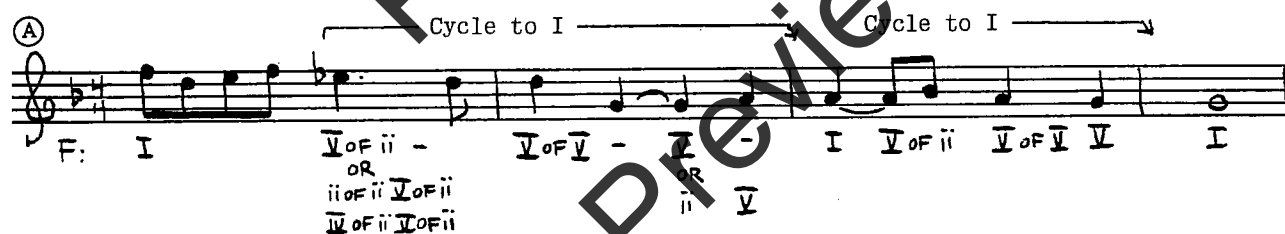


(There are a number of similar melodies that begin with a cycle progression where the melody keeps shifting to the key of each secondary dominant. "Sweet Georgia Brown" is one example.)

ASSIGNMENT 72 (The Cycle - Part 1)

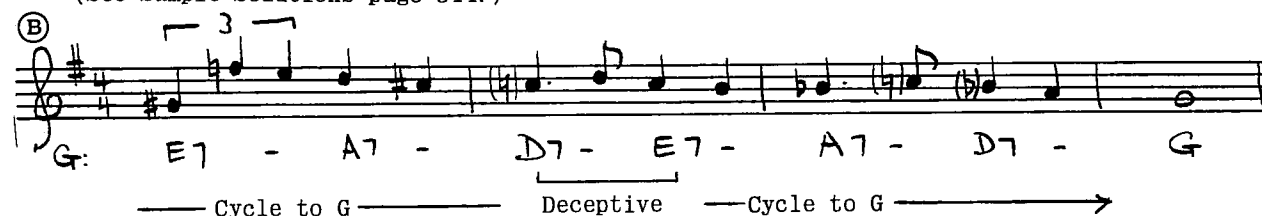
1. Examine available music for illustrations of the use of the cycle. In particular, note how song melodies are manipulated through cycle progressions and, further, note how a good jazz improviser threads a line through a cycle progression.
2. The leads are given. Complete for four parts, noting the use of the cycle.

(A)



(See Sample Solutions page 314.)

(B)



The symbols above are basic only. Modifications through use of "ii - V" instead of just V, or the use of the *half-tone cycle* (e.g: "Eb⁺⁶" instead of "A⁷", etc.) are available.

(C)

E \flat : I - V of vi - V of ii - - - V of I - V - I

Again, the progression above can be modified. In fact, bar two needs some modification for rhythm - perhaps a "sus. 4" for the first half of the bar.

3. The lead is given. Complete for four parts, applying some form of the cycle at the indicated points. (See Sample Solutions page 314.)

B \flat : ? - ? - ? - V - I - ? - ? - ? - I

— Cycle — Cycle —

4. The progressions are suggested. Work out for four parts, using a different "texture" for each. While it is not necessary to employ examples of the various modifications of the cycle, it is necessary to consider them.

(A)

D: I - - ? ? ? I ? ? ? ? ? I

Cycle — Cycle —

(B)

F: I - ? - ? - ? - bvi - DOM. I - V of iii - iii - ? - ? - ? - I I

Cycle to bvi — Cycle —

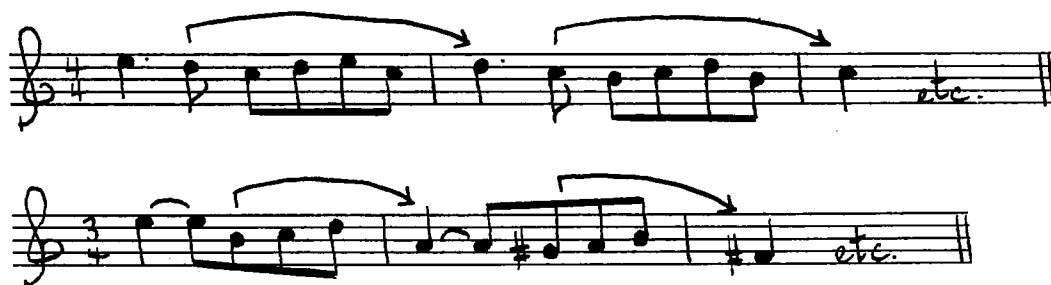
[V]

5. The ear: Become familiar with the sound of the cycle and its modifications.

Part 2.

Very often a melody line will start with an Anacrusis (i.e., "lead-in" or "pick-up") consisting of more than one note, as:

Furthermore, the main body of a line may contain anacrusis, or anacrusis type, movements leading into a strong beat, as:

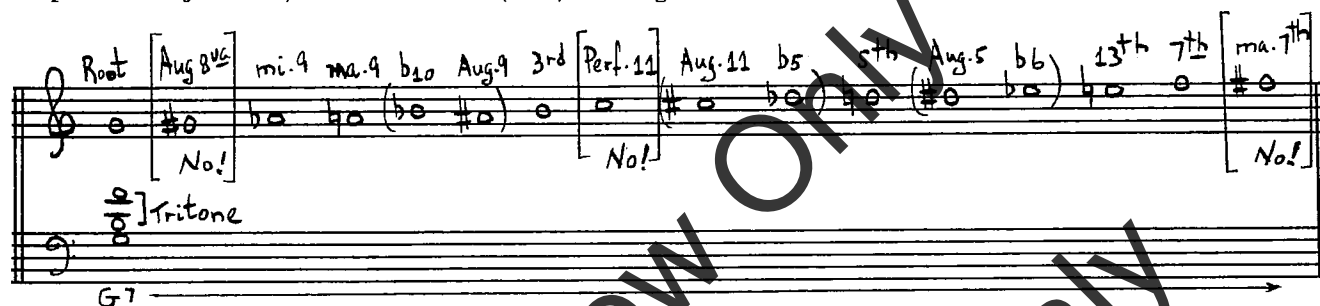


(Standard melodies will provide further examples, and "fill-in" phrases in reed and string background writing use such anacrusis movements frequently.)

There will be times (particularly in sectional contexts) where it is desirable to support such anacrusis groupings with a *note for note* harmonization, to achieve an anacrusis **STREAM OF HARMONY**. The cycle will often provide a way of doing this.

Details:

A dominant structure chord, with tritone (Major 3rd and Minor 7th) can support any melody note except the Major 7th, Perfect 11th (4th) or Augmented octave of the chord. To illustrate:



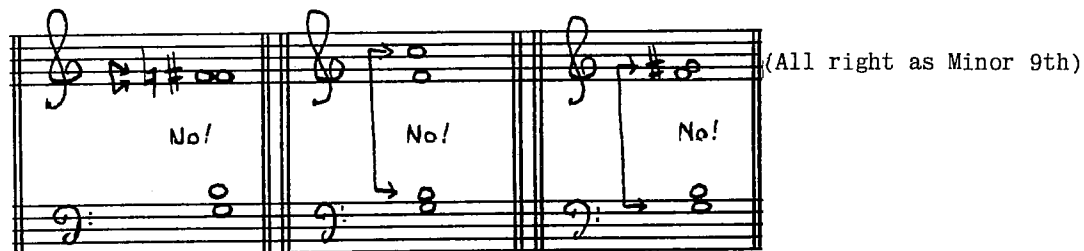
Any one of the notes in the above chart, except those marked "NO", can be used as a **MELODIC** note on the G^7 chord. Some of them are basic chordal tones (root, 3rd, 5th, 7th) of the dominant harmony, and the Major 9th and Major 13th are more or less chordal. The remainder of the notes are derived as appoggiaturas or as chromatic alterations.

Furthermore, even the Major 7th, Perfect 11th and Augmented octave can be used in a purely inharmonic manner, as:



Major 7th appoggiatura resolving to root | Perfect 11th appoggiatura resolving to 3rd (4 - 3). | Augmented octave appoggiatura under the Major 9th
3rd is omitted.

But these are not successful as melodic chordal tones, with the root, Major 3rd, and Minor 7th present at the same time. To illustrate:



However, all of the other notes CAN be used as melody notes, in a quick or fairly quick cycle progression, *without having to resolve in the usual sense*. Examine the following, which shows *dissonant* melodic tones leaping freely on top of a cycle progression:

ma.13 ma.13 Aug.11 Aug.11 Aug.5 Aug.11

G7 C7 F7 B^b7 E^b7 A^b7

The musical notation shows a cycle progression of dominant seventh chords: G7, C7, F7, B^b7, E^b7, and A^b7. Above the staff, the tritone intervals are labeled: ma.13 (major 13th), ma.13 (major 13th), Aug.11 (augmented 11th), Aug.11 (augmented 11th), Aug.5 (augmented 5th), and Aug.11 (augmented 11th). The melody consists of notes that are dissonant with the underlying chords, leaping freely between them.

There is no illogical feeling here! The logic and obviousness of the cycle progression, and the logical movement of the tritone dissonances in it, is quite enough to satisfy the ear. The fact that the chords resolve properly, and progress in the strongest of all movements, allows almost complete freedom of melodic line - provided, of course, that the melody has its own horizontal logic.

Also, brief irregular doublings of the 3rd and 7th may occasionally be acceptable, if no erroneous parallels, etc., are caused, as:

G7 C7 F7 B^b7 E^b7 A^b7

* Doubled 3rd * Doubled 3rd

The musical notation shows the same cycle progression as before, but with irregular doublings of the 3rd and 7th notes in some chords, indicated by asterisks and the text "Doubled 3rd".

The cycle may also use the alternate roots of the tritones, as:

As V of G As $\text{bii}^{\text{+b}} \text{ of G}$

The musical notation shows two measures. The first measure is labeled "As V of G" and the second measure is labeled "As bii^{+b} of G". The notes are written in a way that illustrates the alternate roots of the tritones.

Thus, a cycle progression has optional *root* movements, as the following example illustrates.

Examine:

D7 G7 C7 F7 A^b7* D^b7* G^b7* C^b7*

The musical notation shows a cycle progression with optional root movements. The chords are D7, G7, C7, F7, A^b7*, D^b7*, G^b7*, and C^b7*. The notes are written in a way that illustrates the optional root movements.

OR

A7* G7 Gb7* F7

OR

D7 Db7* C7 Cb7*

*In keeping with more casual common practice with chord symbols, the "7th" symbol is used in all of the above, even though many of the chords are really "augmented 6th" chords.

In context, the choice of roots would be dependent on contrasting shape with the soprano. To illustrate:

This:

D7 G7 C7 F7

is better than:

A7 G7 Gb7 F7

(ineffective relationship between bass and soprano)

Here, then, is the working procedure:

1. Locate the anacrusis phrase which could be adaptable to this technique.
2. Count back, from the proposed destination point, the number of chords required in the cycle progression.
3. Determine if the melody notes will work with the proposed chords. (Remembering to take into account the fact that two roots are available for each.)
4. If they will not work, forget it!
5. If they will, then it is just a matter of completing the harmony. Generally, use the *parallel tritones in the alto and tenor*, with the roots in the bass. To illustrate:

Given line:

Basic harmony: C: I vi ii V I

Possible anacrusis:

Proposed cycle harmonization of anacrusis:

B7 E7 A7 D7 G7 I

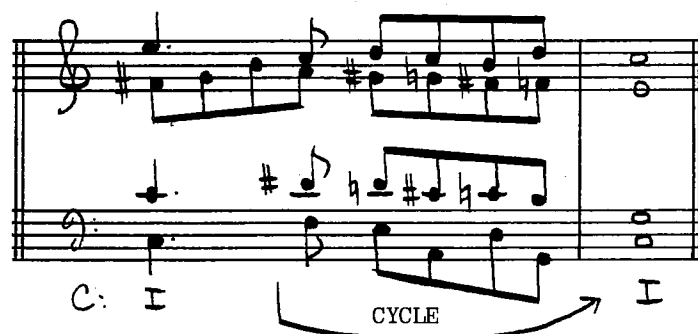
OR OR OR OR OR

F7 Bb7 Eb7 Ab7 Db7

Either will work on these four notes

Which WILL NOT work because it places melody note as Augmented octave

Clearly, the cycle WILL work as harmonization of this phrase. The original harmonies of the line are, of course, discarded, and a working of the passage could be something like this:



(Other bass lines are possible here, but this one is "strong" and contrasts well with the "steps" in the upper parts.)

ASSIGNMENT 73 (The Cycle - Part 2)

1. Give the alternative root progressions, with symbols, for each of the following tritone movements:

Example:

D7 G7 D7 Db7* Ab7* G7 Ab7* Db7*

*"7th" symbol used for Augmented 6th chords.

2. Five chords of the cycle, leading into a "C" chord, with alternatives, would be:

B⁷ → E⁷ → A⁷ → D⁷ → G⁷ → C
 Alternatives: F⁷ → Bb⁷ → Eb⁷ → Ab⁷ → Db⁷ → C

- Give:
- a. Five chords of the cycle, with alternatives, leading into a "Bb" chord.
 - b. Five chords of the cycle, with alternatives, leading into a "B" chord.

3. The sopranos are given. Complete for four parts, aiming to harmonize some anacrusis groupings with a cycle progression.

(A)

C: $\text{V} \text{ of } \text{ii}$ ii V I

(B) (See Sample Solutions page 314.)

G: $\text{V} \text{ of } \text{ii}$ ii V I

(C) (See Sample Solutions page 314)

F: I $\text{V} \text{ of } \text{ii}$ ii V I

(D)

Eb: I vii ii V

I vii V I

V. TONICIZATION OF REMOTE KEYS

While, in practice, tonicization seems mainly to be directed at closely related keys, and occasionally at Modally related keys, there is no reason why the tonality cannot be extended further. The same principles may be employed to tonicize more distant chords and keys.

Without attempting to draw a conclusion, it can be observed that it is not uncommon (even in popular harmony) to encounter, in major, tonicizations of:

- iii Major (e.g., key of E major in C)
- and vi Major (e.g., key of A major in C)

Both of these can be approached in the same manner as their diatonic counterparts. That is, a tonicization of the E minor chord in C is able to resolve onto a E major chord, and the same process that will tonicize an A minor chord in C will also tonicize an A major chord.

To illustrate:

First staff: C - - - Ami. 7 - B7 - E mi. etc. or E ma.
C: I vi
E mi. 7 (IV) → V (V)

Second staff: C - - - Dmi. 7 - E7 - Ami. etc. or Ama.
C: I ii
Ami. 7 (IV) → V (V)

Conclusion: Tonicization directed at a "minor" chord can resolve onto a "major" chord, and vice versa.

Clearly, then, some very remote key areas come easily into the sphere of a basic key, as:

In C: E \flat MINOR (6 flats) can be approached as a tonicization of E \flat major (\flat iii)
A \flat MINOR (7 flats) can be approached as a tonicization of A \flat major (\flat vi)
etc., etc.

Enharmonic Equivalents can be utilized, as:

In C: C \sharp MINOR can be approached as D \flat major (\flat ii)
D \sharp MINOR can be approached as E \flat major (\flat iii)
etc., etc.

In point of fact, the Mixed Mode concept gives a major or minor chord on every degree of the 12 tone scale in every key, EXCEPT on the raised subdominant (or flattened dominant) and on the leading tone.
Example:

I bii ii biii iii IV V bvi vi bvi vii

Even the major and minor keys with their tonics on the raised subdominant or on the leading tone will have some points of contact (i.e., "Pivot Chords") from which they can be entered. (For example: "V" in any key will be " \flat ii" in the major or minor key of the raised subdominant, and "I" in any major key will be " \flat ii" in the major or minor key of the leading tone.) Suggestion: Take a couple of remotely related keys and calculate all of the points of contact between them.

To illustrate:

<i>C major and B major:</i>	C chord	C: I
		B: $\flat ii$
	E minor chord	C: iii
		B: $IVmi$
	G chord	C: V
		B: $\flat vi$
	A minor chord	C: vi
		B: Phrygian vii
	B major chord	C: V of iii
		B: I
$C^{\sharp 7}$		C: Enharmonic $\flat ii^{+6}$
		B: V of V
	E major chord	C: V of vi
		B: IV

etc., etc.

Getting out of a remote area and returning to the main key convincingly is usually more of a problem than getting into it. The following points are pertinent:

- The harmonies used to move back into the basic key can be chosen with the same method. That is, find a chord or chords that will act as a point of contact between the keys.
- The more remote the key, the more it is a threat to the stability of the main key, which is the reason why remote tonicization is exceptional. Consequently, it is important to allot enough time and enough harmony to make the return convincing. (For instance, if the key of B is set up in, say, the sixth bar of the sentence in the tonality of C, it is doubtful if an effective return to the key of C could be accomplished by bar eight!)
- The use of more than one remote tonicization in an eight bar sentence would be unusual. It is not impossible, however. A pattern such as the following could be worked effectively, if the tempo were not too fast:

Slowly



As always, keep the soprano under control. Even passages involving remote tonicizations can be accomplished with a diatonic melody, or with Modal variants. But the melody may change key, if it does so smoothly. Remember that the melody relies on its *scale* relationship for continuity and coherence! Always test it *without* the harmonies.

(Finally, changes to remote keys are often accomplished with "sequences", which are examined in the next chapter.)

ASSIGNMENT 74 (Tonicization of Remote Keys)

1. Analyze the harmony in the following passage, and provide the correct chord figures underneath. Note that there are two "transient modulations" into remote keys.

(See Sample Solutions page 315.)

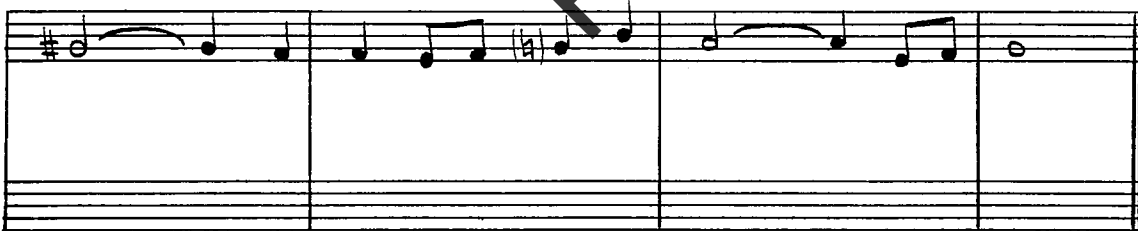


2. Complete the following passage for four parts in the same general style. Observe the "transient modulations" to remote keys.

(See Sample Solutions page 315.)



G: ii - V - I - viio ii
 Ama: viio I - ? - I - ?
 into Ema:

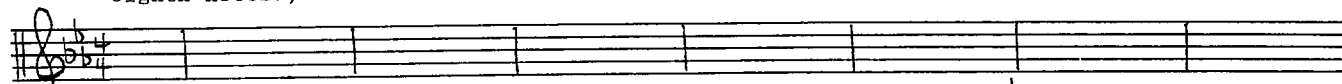


G: I

Ema: I - ? - I -
 Lead logically to G

3. Work out four part passages in the following general plans. Aim for an interesting texture, but do not overload. (Suggestion: Set up a provisional *harmonic sketch* first.)

Ⓐ (Few, if any, eighth notes.)



Establish E \flat Move towards C major "Half-cadence" in C (i.e., Dominant chord in C.) Return to E \flat

Ⓑ (Some eighth notes.)



Establish D Into F \sharp major Into B \flat minor Return to D

4. Examine any available music, particularly music which is familiar, for examples of tonicization of remote keys.
5. Continue to pursue an investigation of all of the possibilities suggested in this chapter. Look also for exceptions to the principles outlined herein. Popular harmony has made an extensive use of tonicization, and it is important to have a close acquaintance with it.

Preview Only

Preview Only

Chapter 5

SEQUENCES

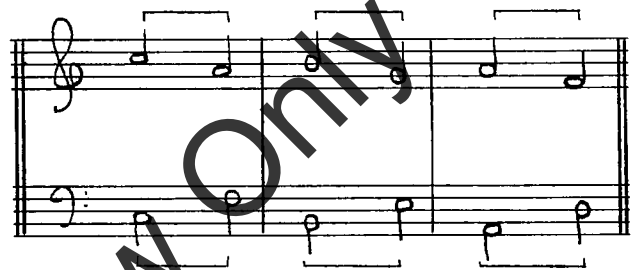
INTRODUCTORY

A **Sequence** is the organized repetition of a musical pattern, at a higher or lower pitch level. The full sequence, as herein discussed, implies a repetition of **both the melodic and harmonic elements of the pattern**. All of the parts are repeated. (A simple "melodic" sequence, so widely used as a structural factor in popular melodies (e.g., "Talk of the Town") is not necessarily a full sequence of all elements.)

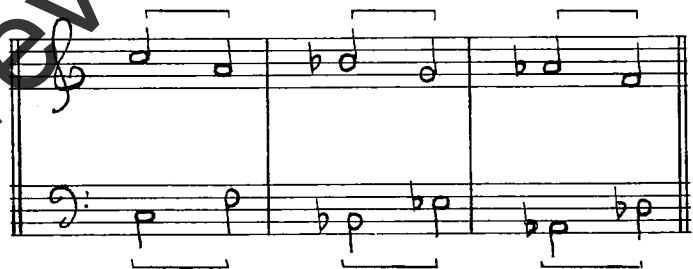
In a real sequence, the pattern usually appears **three times**. Only seldom do sequences show more than three appearances of the pattern, probably to avoid monotony. If the pattern appears only **twice** in succession, it is properly termed a "Sequential Repetition" rather than a Sequence. (But the use of the term *sequence* to describe a single repetition would not be a severe error!)

There are two types:

- A. **The Non-Modulating Sequence** - in which the pattern is repeated at a new level in the *same scale*:



- B. **The Modulating Sequence** - in which the pattern is repeated in a *new key*:



The sequence is a device of *unity*, and it employs the simplest of all ways of gaining coherence: **Repetition**. The changes of pitch add the element of **Variety** to the repetition. The sequence is adaptable to many uses and is found as a structural device in all styles of music. References to it will occur in subsequent areas of this text. At this point, the concern is primarily for the harmonic and technical considerations of the sequence.

A. The Non-Modulating Sequence

1. THE INITIAL PATTERN

The pattern chosen for sequential treatment may be of any desired character. Its length may vary from a single short "motif" on a single chord to a phrase of significant duration. Here is an example of a sequence which uses a short, one bar pattern based on a single harmony. Since such a pattern has limited harmonic interest, some interest in the part lines is desirable:

C: I vi IV (ii)

The example which follows employs a fairly elaborate four bar pattern. This is not a common practice, since it is generally felt that the pattern should be more concise, not too elaborate, and not too long, so that it can be more readily heard as a unit.

Note that the third appearance of this pattern is varied slightly to avoid the monotony which could result from the literal repetition of a pattern as long as this one. Such variation of the initial pattern is available at any time. As long as it is only "variation" and does not substantially change the pattern, it will not destroy the sequence idea:

C: iii vi iii ii V

ii V I IV (variation) I IV

While short patterns of one bar, or even a half bar, and longer patterns of four bars are quite available, the *two bar pattern* is probably the most common. This is particularly true in jazz and dance music, where the melodic "motifs" are so often two bars in length. Here is an example showing a two bar pattern based on two chords in the strong "up 4" relationship:

C: I IV ii V

iii vi

2. THE HARMONIC FRAMEWORK

The harmonic framework of the initial pattern is mainly a matter of choice but it will, in most cases, be simple. The use of two chords (as in the example above) is perhaps the most common procedure. Any of the following diatonic two bar schemes would be quite acceptable, for instance:

I V V I ii V

I iii I vi I ii

The use of simple tonicization is also available in the non-modulating sequence. This adds color and emphasis to the basic diatonic chords which form the sequence, as:

V I V of ii (instead of vi) ii V of iii (instead of vii) iii

V of vi (instead of iii) vi V of IV (instead of I) IV V of ii (instead of vi) ii

The use of tonicization in this manner does not create a "modulating" sequence. It can still be regarded as "non-modulating" because it does not leave the central tonality.

3. The sequence is particularly effective when the initial pattern (and the subsequent patterns) is based on a "Weak to Strong" rhythm, by the use of an anacrusis, as:

Example 1: B \flat : I V I vi V of vi vi IV [V of IV] IV

Example 2: Cycle to \rightarrow I Cycle to \rightarrow vi Cycle to \rightarrow IV

Example 3: F: V I IV \flat I V \flat of ii V \flat of ii V of iii iii vi \flat of iii

4. DEGREE OF TRANSPOSITION

The pattern may be transposed by any interval, up or down. The choice depends on two considerations:

- The intended ultimate destination of the sequential passage.
- How well the pattern connects to its transposition.

The most common transpositions are up or down in 2nds or 3rds. And, of course, the non-modulating sequence will not proceed by exact transpositions; the 2nds or 3rds may be Major in one case, Minor in another, depending on the position in the scale.

To illustrate:



5. IRREGULARITIES (of doubling, voice leading, etc.)

Certain irregularities which are undesirable under normal circumstances, may be acceptable when they occur as part of a sequential repetition. Examine the following:



In the above, note:

- Awkward Augmented 4th leap, unresolved
- Tripled root on vii (The voicing of the first chord in the initial pattern will, of course, determine the voicing of the first chord of each repetition.)
- Unusual chord progressions ("vii - ii", "ii - I")

All of these irregularities and others, are acceptable in a sequential situation, but some liberties may be more problematical. Consider the following:



- Unresolved passing 7ths
- Parallel 5ths

The sequential repetitions no doubt reduce the severity of these irregularities. The unresolved passing 7ths could be acceptable provided the FINAL one is resolved accurately, but the parallel 5ths are not necessary, and could be avoided!

Very often a decoration or extension of the harmony may be fine on one scale chord, but not on another, as:

C: ii⁷ C: I⁷ C: I⁹ C: vii⁹

└ All Right ┐ └ Not so good! ┐ └ All Right ┐ └ Not so good! ┐

It follows then, that it is not always possible to repeat a pattern sequentially in the non-modulating technique. The pattern may be fine at one level in the scale and unmusical at another level! Therefore, the initial pattern must be constructed with an eye for the relationships which will occur in its sequential repetitions. (This concern is not necessary in the "Modulating" sequence.)

6. THE START OF THE SEQUENCE

A sentence may start with a sequence, or the sequence may occur in the body of the sentence.

7. THE ENDING OF THE SEQUENCE

If the last chord of the final pattern is "I", the sentence could end with the sequence. More likely, however, the sequence will be followed by material of a "non-sequential" nature. It is quite possible, and may be necessary, for the end of the final pattern in the sequence to be modified IN ORDER TO LEAD OUT OF THE SEQUENCE.

ASSIGNMENT 75 (Non-Modulating Sequences)

1. The harmonic progressions are suggested. They include provision for non-modulating sequences, without anacrusis. Work out for four parts, in any desired keys.

Ⓐ (2 bar sequence pattern. Slowly, with no eighth notes, or very few.)

I IV ii V ii vi ii - V - I

or any harmony leading back to "I".

Ⓑ (1 bar sequence pattern. Bright, using some eighth notes.) (See Sample Solutions page 315.)

ii V I ii iii IV V I

OR ii

2. The harmonic progressions are suggested. They include provision for non-modulating sequences, with anacrusis. Work out for four parts, in any desired keys.

(A) Medium, using some eighth notes.

Harmonic progression for exercise (A):

$\text{V} - \text{I} - \text{IV}^{\flat} - \text{I} - \text{vi} - \text{ii} - \text{IV}^{\flat} - \text{ii} - \text{ii} - \text{vii}$

OR

$\text{vii}^{\flat} - \text{V} - \text{V}^{\flat} - \text{ii} - \text{ii} - \text{V}^{\flat} - \text{ii} - \text{ii} - \text{vii}$

OR

$\text{vii}^{\flat} - \text{V} - \text{V}^{\flat} - \text{ii} - \text{ii} - \text{V}^{\flat} - \text{ii} - \text{ii} - \text{vii}$

non-sequential material leading to cadence

(B) Medium, with eighth notes optional.

Harmonic progression for exercise (B):

$\text{ii} - \text{V} - \text{I} - (\text{I}) - \text{V} - \text{vi} - \text{iii} - \text{IV} - \text{I} - \text{V} - \text{I}$

(or alternatives) (or develop)

3. The bass is given. Add the upper parts, using the sequences as indicated.

Bass line: $\text{G}^{\flat} \text{mi}: \text{V}^{\flat} - \text{IV} - \text{IV} - \text{V}^{\flat} - \text{ii} - \text{ii} - \text{V} - \text{I}$

See Sample Solutions page 316.)

*The secondary Dominant is not used here, because in Minor is a diminished chord, and does not act as a temporary tonic.

4. The soprano is given. Complete for four parts, using the sequences as indicated.

Soprano line: Bright F:

(See Sample Solutions page 316.)

5. Examine any available music, and listen for uses of sequences (non-modulating and modulating) and sequential repetitions.

B. The Modulating Sequence

In this text, the term **Modulating Sequence** refers to a sequence in which the initial pattern is repeated with *identical intervals* at a *new level*. Therefore, for example, if a pattern in C major is followed by a repetition of the pattern in **any other MAJOR** key, it will be understood as a **Modulating Sequence**.

A return to the basic key will be required. This text will use the term "**Sequential Modulation**" to refer to a situation where a sequence is used for the express purpose of actual modulation. This does not substantially differ in technique from a Modulating Sequence, but its aim is different. It will be examined in the chapter: "**MODULATION**"

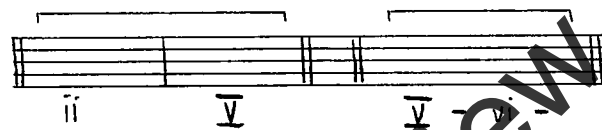
Most of the details of technique in a modulating sequence are the same as, or similar to those discussed under "**Non-modulating Sequence**", but a few points need clarification:

1. The **INITIAL PATTERN** may be in the home key. It may or may not include the tonic chord, as:

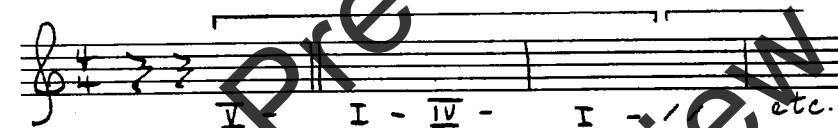
Patterns with tonic chord:



Patterns without tonic chord:



It may be based on a "Strong - Weak" rhythm, as those above, or it may be "Weak - Strong" with the use of an anacrusis, as:



2. A situation where the initial pattern is NOT in the home key is entirely available, as:

(Outside voice sketch)

C: I IV of ii - V of ii - ii - (Initial pattern in Key of ii) (continue as from $b\text{vii}^{b3}$)

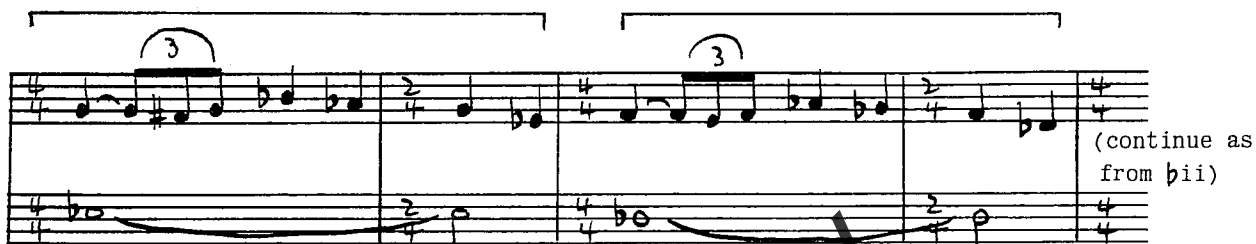
Dmi: V - I Cmi: V - I $b\text{mi}$: V - I

[C: $b\text{vii}^{b3}$]

(Outside voice sketch)



C: ii V I V of IV IV
F: I IV^b₄ I



E^b: I IV^b₄ I D^b: I IV^b₄ I
[C: bii]

3. The modulating sequence allows more possibilities in its degree of transposition. For instance, the following shows a *chromatic* transposition:

(Outside voice sketch)



C: I^b B^b: N^b - V - I
B: N^b - V - I A: N^b - V

Of course, the transpositions will be up or down in "exact" intervals rather than "scale" intervals.

4. Irregularities due to varying scale intervals, which create problems in the "non-modulating" sequence, will not cause trouble in the "modulating" type. If the pattern is acceptable in its initial appearance, subsequent appearances will also be acceptable since the relationships will be identical in the new key.
5. Finally, do not neglect the "joining" between the patterns. Make sure the gears are shifted smoothly, and take care to avoid harmonic or voice leading bumps between the levels.

ASSIGNMENT 76 (Modulating Sequences)

- The harmonic progressions are suggested. They include provision for modulating sequences, without anacrusis. Work out for four parts. (Given symbols are basic only, and subject to modification as desired.)

Ⓐ (2 bar sequence pattern) Slowly, with eighth notes optional.

C --- Fmi.7 - Bb7 - Eb --- Abmi.7 - Db7 - Gb --- Bmi7 - E7 -

C: I Eb: ii V I Gb: ii V I A: ii V

[F#] [F#]

(non-sequential material)

Ami. --- Dmi.7 - G7 - C C

C: vi ii V I

Ⓑ (1 bar sequence pattern) Medium, with eighth notes optional.

Gmi.7 - C7 - F - Fb - E - Eb - Eb - Eb+6 -

F: ii V I E: bii+6 I Eb: bii+6 I D: bii+6

[Fb+b]

(non-sequential material)

Dmi. --- Gmi.7 - C7 - F F

F: vi ii V I

2. The harmonic progression is suggested. It includes provision for a modulating sequence, with **anacrusis**. Work out for four parts.

Medium. Use some eighth notes. (See Sample Solutions page 317.)

? - D - ? - C - ? - B \flat - ? - ? - ? - D D

leading material to D similar leading material to C similar leading material to B \flat [bvi] non-sequential material leading to cadence

3. The soprano and bass are given. Add the inner parts which conform to the modulating sequence in the first three bars. Note that the passage starts in the key of the mediant.

Bmi: I [G]

4. The soprano is given. Harmonize for four parts, using sequences as indicated. (See Sample Solutions page 317.)

C:

5. Construct a sentence for four parts, in the key of E \flat major, which employs a modulating sequence. The initial pattern is to be in E \flat , the third appearance to be in A. Return convincingly to E \flat .

Chapter 6

EXTENDED TONALITY

Part 3

I. CHROMATIC HARMONY

A great many of the commonly used chromatic chords are derived from chromatic passing tones. In fact, the difference between a chromatic chord and a chromatic passing tone is often nothing more than duration. For this reason (and also because that section of the text dealing with "Melodic Inharmonics" introduced only the diatonic passing tone), the first part of this chapter will examine the chromatic passing tone.

A. Chromatic Passing Tones

Introductory:

Chromatic passing tones are derived from the "chromatic scale". There have been, and are, a number of ways to notate the chromatic scale. The way which appears to be most common at present is given here:

Major Ascending: All degrees of the diatonic scale are raised chromatically, or the lowered 7th (Mixolydian) may be used instead of the raised 6th:



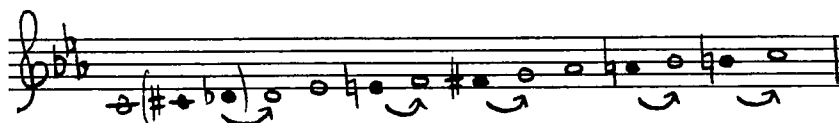
Major Descending: All degrees of the diatonic scale are lowered chromatically, with the exception of the Dominant. In place of the flatted dominant, it is customary to use the raised subdominant, because the lowered dominant is generally felt and heard as a "leading tone" below the dominant:



*Raised subdominant instead of lowered dominant.

Minor Ascending: The Minor Ascending is usually written with the notation of the ascending chromatic scale of the Related Major:

Example: (Ascending chromatic scale of C minor, using notation of E \flat major)



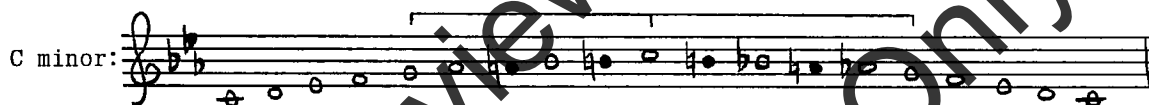
Example: (Descending chromatic scale
of C minor, using notation
of C major)





E♭ major chromatic scale:

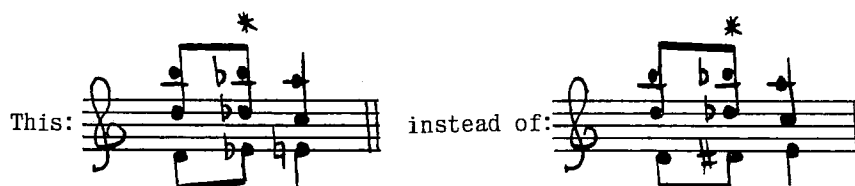


Minor, however, presents a different problem. The presence of familiar “Musica Ficta” pretty well established the notation of the ascending and descending “chromatic Upper Tetrachords”, as:

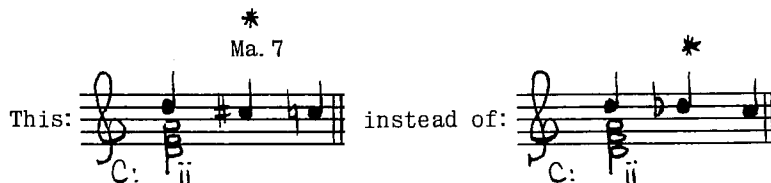


C minor:

This:  instead of: 



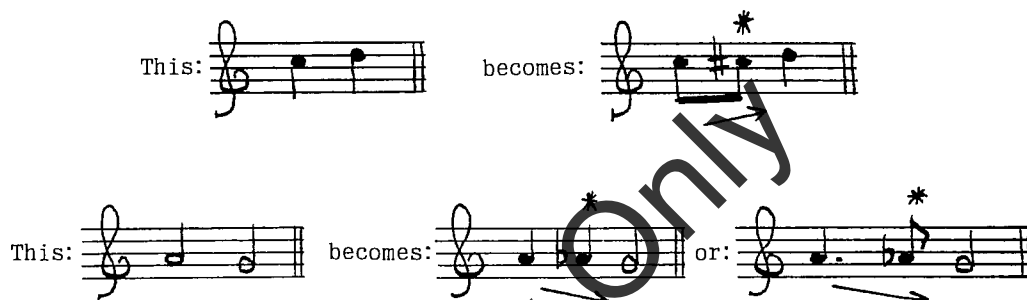
Or, it may be used to favor the position a chromatic note occupies in relation to the chords, as:



Therefore, while it is important to be aware of regular practice in these matters, the main thing is to be sure that your intention is clear, and that your notation is consistent with clarity.

Details:

1. The chromatic passing tone is used between two notes lying a major 2nd apart. It is usually of short duration, and usually unaccented. For example:



The chromatically altered note should generally not appear simultaneously with the diatonic form of the same note, as:



Duration is a factor in this, however. If the offending situation is brief and unaccented, it *may* be acceptable:



2. Chromatic passing tones are available in a number of situations, including:

a. Between chordal notes of different chords, as:

This:

could become:

C: I IV

This:

could become:

C: ii V⁷

or Bb?

b. Between an appoggiatura and its resolution, as:

This:

could become:

C: V⁷

This:

could become:

C: I vi⁷ ii⁷ V¹³ I

c. Between a chordal tone and an auxiliary, or vice versa, as:

This:

could become:

or:

or:

d. Between a *diatonic* passing tone and its resolution, as:

This:

could become:

This:

could become:

C: I V⁷ C: I

e. Between a chordal tone and a diatonic passing tone, as:

This:

could become:

C: I

This:

could become:

C: V⁷

f. Between a chordal tone and an échappée, as:

“accented” chromatic
passing tone

This:

This:

could become:


or:

C: $\text{F}\sharp$ 7


g. A *long* chromatic line may be an elaboration of a melodic leap, as:

This:

This:



could become:



Actually a combination of diatonic and chromatic passing tones

h. A chromatic passing tone may employ a decorative or delayed resolution, as:

The first system of musical notation for 'The Rose Tree' is written on a single staff. It begins with a treble clef and a key signature of one sharp (F#). The melody consists of several measures, including a triplet of eighth notes. The lyrics 'The Rose Tree' are written below the staff, aligned with the notes.

i. It may also be used in any other manner consistent with musical sensibility.

3. Combined chromatic passing tones are available, in contrary motion or in parallel imperfect consonances (3rds or 6ths). Examine:

ords of other, examine:

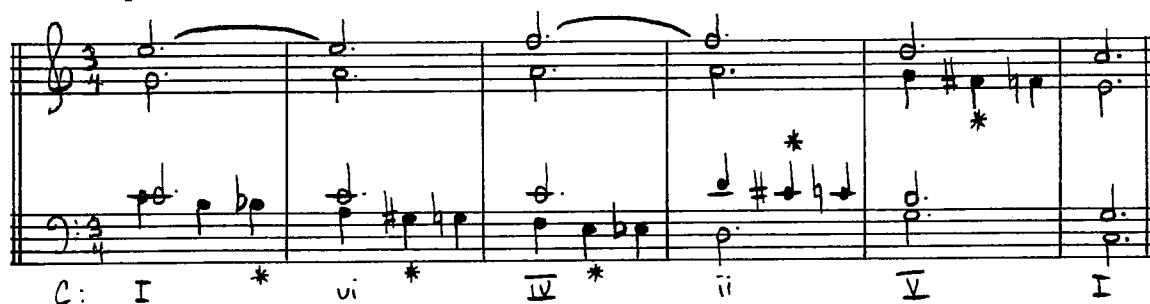
The musical score is for the song 'The Rose Tree'. It is written for voice and piano. The key signature is one sharp (F#), and the time signature is 3/4. The score is divided into two systems. The first system starts with a treble clef and a key signature of one sharp. The melody is written in the treble clef, and the piano accompaniment is in the bass clef. The second system continues the melody and accompaniment. The score ends with a double bar line. Below the first system, the chord progression is indicated as C: I. Below the second system, the chord progression is indicated as C: V and V 7.

C: I

C: V

V 7

4. The use of a *Passing Major 7th* immediately preceding a *Passing Minor 7th* is a common idiom, and worth special note:



*Note notation which favors the *harmonic* status of the note (major 7th).

The Minor 7th can be interchanged with the same chromatic passing tone in both voices, in contrary motion. To illustrate:



5. A word of warning! Chromatic passing tones make use of the "weakest" of the melodic intervals - the Minor 2nd. Consequently, they tend to weaken the fabric of the music. *Excess* use of them will lead to a spurious sentimentality, an overly lush, overly romantic quality. Very often a diatonic decoration is preferable.

ASSIGNMENT 77 (Chromatic Passing Tones)

1. Examine any available music, particularly romantic songs and melodies, for illustrations of the use of chromatic passing tones.

2. Write the chromatic scales, up and down, of: D major, F major, D \flat major, A major.

UP: indicate optional "raised 6th" or "flatted 7th"

DOWN: use "raised 4th", but indicate the possibility of "flatted 5th"

3. Write the chromatic scales, up and down, of: D minor, A minor, B \flat minor, E minor.

4. The lines are given. To each one add further decoration in the form of *tasteful* chromatic passing tones. (This is a melody exercise only - do not harmonize.)



5. A short four part passage is given. Give a couple of elaborations of it, through the application of tasteful chromatic passing tones. (Other decoration is also available.)

C: ii V I^b vi^b ii V I

6. The sopranos are given, which include chromatic passing tones. Complete for four parts. Give two examples for each: a. Simple, uncluttered, clear
b. More elaborate, richer texture

(Suggestion: Reduce the lines to their essential notes for a clearer view.)

(See Sample Solutions page 317-318.)

(A)

D: I V I [vi opt.] ii V I V I

(B) (See Sample Solutions page 318.)

(B)

E♭: I V I V I V I

(C)

E mi: I V I V I V I

(D)

C: I ii V I vi ii V I

*Written as C# in favor of its harmonic status (passing Major 7th).

B. Chromatic Chords

It was suggested earlier that the "Augmented 6th" chords could be considered as an introduction to chromatic harmony. The linear *leading* nature of these chords, and particularly of the modifications (doubly augmented octave, augmented 3rd, etc.) which can be applied to them, illustrate the process of chromaticism. It is the **process** which is the important thing. The Augmented 6th chords, and certain other chords which are examined in this chapter, have become "standard" chords through common usage. However, this in no way changes the fact that they evolved from the linear chromatic process and not from a consideration of *root relationships*.

The process of chromaticism is far-reaching in its possibilities and implications. Some modern compositional harmonic techniques, both tonal and atonal, are direct or indirect outgrowths of it.

The basis of chromaticism is the use of chromatic chords formed through the use of chromatic passing tones. Note how the addition of obvious chromatic passing tones to the following diatonic progression creates chromatic *passing chords*.

This:

becomes:

C: ii ii⁺5 V⁷ V^b5 I I⁺5 vi vi[#]3 ii[#]3 V V⁷ I

The idea can often be extended to allow the altered chord more independence. That is, the chromatic chord can often be used **INSTEAD OF** the chord from which it is derived. For example:

This:

C: V^b4 I

becomes:

C: V^b4 V^b5^b6 I

becomes:

C: V^b5^b6 I

This:

A mi: vi V⁷

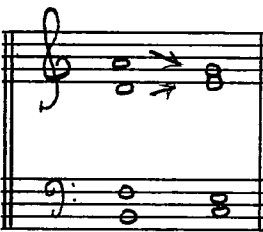

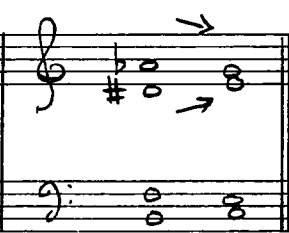
becomes:

A mi: vi vi⁺ V⁷




becomes:

A mi: vi⁺ V⁷

If there is more than one "full-step" in the basic chord joining, chromaticism can be applied to more than one voice simultaneously, as:

This:  becomes:  becomes: 

C: vii7 I C: vii7 vii°7#3 I C: vii°7#3 I

This:  becomes:  becomes: 

C: ii7 V C: ii7 ii°7#3 V C: ii°7#3 V bvi+b [Fr]

Furthermore, the first of two repeated notes may be chromatically lowered (occasionally raised) to provide movement. In such a case, the chromatic chord is derived from chromatic auxiliaries, as:

This:  becomes:  becomes: 

Am: ii b Am: ii b Am: ii b

This:  becomes:  becomes: 

C: ii b V7 C: ii b V7 C: ii b V7

Examples of this sort illustrate the nature of the chromatic process. From these, and from similar examples, it can be seen that some sharp contrasts are available. The value of chromatic chords derived in this manner depends on the context, and on the exercise of the ear.

ASSIGNMENT 78 (Chromatic Chords, Preparatory)

- Simple diatonic chord joinings are given. Modify each in a manner similar to the illustrations in the text (i.e., application of obvious chromatic passing tones and auxiliaries to form *chromatic* versions of the first chord in each case).

(A) (B) (C)

C: I ii C: ii7 I⁶ C: ii⁶⁽⁷⁾ I

(D) (E) (F)

C: ii⁶⁽⁷⁾ V C: ii V7 C: IV⁶ V7

(G) (H) (I)

C: ii7 V⁶⁽⁷⁾ C: vii⁰⁷⁽⁷⁾ I⁶ C: I⁴⁽⁷⁾ IV

- Create and experiment with many more similar problems in various Major and Minor keys.
- Examine any available music for illustrations of the chromatic process.

Chromatic chords of this type produce, in effect, "chromatic tonicization". The chord following the chromatic structure becomes the destination of the *leading tones* in the chromatic structure. In some cases, the chromatic chords derived in this manner turn out to be some form of " pii^{+6} ", " vii^{07} ", or "V" of the destination chord.

In other cases, the chromatic alteration may simply point up and emphasize the relationship which existed without the chromatic alteration. For instance, the chromatic D# in the following simply increases the linear motivation of the V⁷ chord, but does not disturb the normal relationship between the two chords:

C: V⁷⁺⁵ I

Chromatic chords fall, in general, into three classes:

Class 1: "Conforming"

Class 2: "Enharmonically conforming"

Class 3: "Non-conforming"

Each is hereunder examined.

Class 1: "Conforming"

These are chromatic chords which are recognizable counterparts of chords in the Major and Minor scales, and which can be easily "symbolized". Here are some illustrations of "conforming" chromatic chords, derived from alterations to diatonic triads:

From MAJOR triad:

Major Minor Major Augmented Major Diminished Major Diminished

From MINOR triad:

Minor Major Minor Diminished Minor Augmented Minor Augmented

From DIMINISHED triad:

Diminished Minor Diminished Major Diminished Augmented

Class 2: "Enharmonically Conforming"

These are chromatic chords with "non-conforming" notation, but which are conforming if the notation were simplified. Here are some illustrations of "enharmonically conforming" chromatic chords, derived from alterations to diatonic triads:

From MAJOR triad:

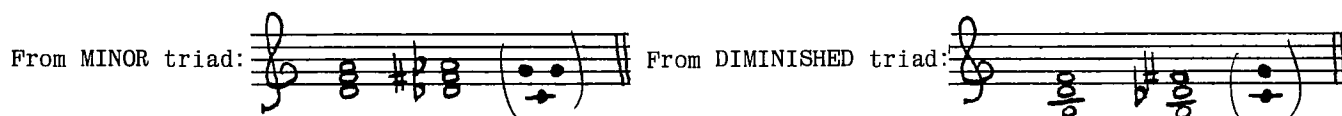
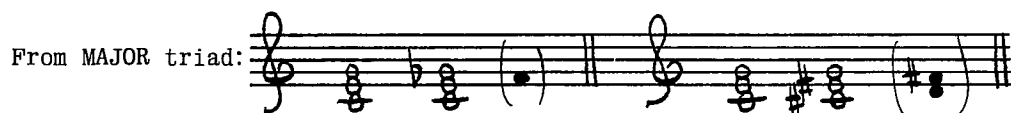
C Fmi. C Abmi. C Ebmi.7

From MINOR triad:

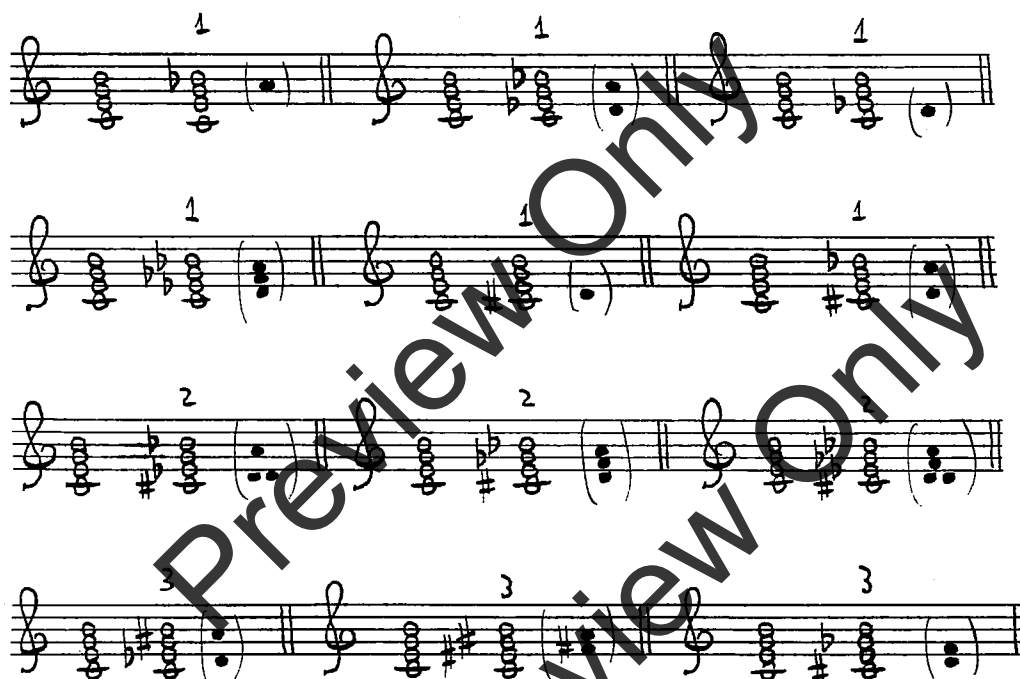
From DIMINISHED triad:

Class 3: "Non-conforming"

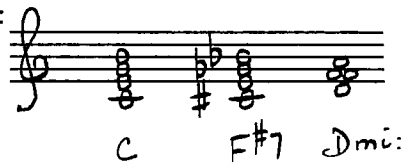
These are chromatic chords with no counterparts in the standard Major and Minor scales, and which resist any obvious "symbol". Examples:



Here are a few examples of chromatic chords derived from "7th" chords. They are marked "1" (conforming), "2" (enharmonically conforming), or "3" (non-conforming):



In popular harmony, the commonly used chromatic chords belong to Class 1. Class 2. (enharmonically conforming) are occasionally encountered. For instance, a "symbol" progression reading "Cma⁷ - F#⁷ - Dmi" would undoubtedly refer to a situation which is basically:



Other similar instances will be encountered. In areas such as piano sheet music, etc., the Class 2 chords are usually written in their more simple enharmonic versions for ease of *vertical* reading. Class 3. chromatic chords (non-conforming) are rarely, if ever, used in the original harmonies of popular songs, but orchestration (even popular orchestration) makes some use of them. (They are generally confined to "up" beats or fractions of beats so that the harmonic rhythm instruments (guitar, piano, etc.) are not affected.)

The following pages do not attempt to catalogue all available chromatic chords, nor even to catalogue all of the commonly used chromatic groupings. Even if such a catalogue were possible, it would miss the real point of chromaticism. While it is true that many chromatic chords have, through repeated use, achieved status as recognized and recognizable "harmonies" (and therefore warrant examination), it is also true that, ultimately, it is the *process* which is more important than its individual instances. The student is advised to be aware of the process at all times. Even in the exercises designed to acquaint him with the standard chromatic chords, he is entirely free to produce deviations from, and substitutes for, the standard chords - always, of course, providing that such deviation is done with aural concern for the musical effect that is produced.

Finally, the following observations regarding the chromatic alteration of scale tones may be of some value:

TONIC - May be chromatically raised, but if lowered will sound as the leading tone.

SUPERTONIC IN MAJOR - May be chromatically raised or lowered. When raised, it is sometimes heard as the Minor mediant.

MINOR MEDIANT - When chromatically raised it becomes the major mediant. If lowered, it will become the supertonic.

MAJOR MEDIANT - May be chromatically lowered to become the minor mediant, but if raised, it will be heard as the subdominant.

SUBDOMINANT - May be chromatically raised, but if lowered it will sound as the major mediant.

DOMINANT - May be chromatically raised but, in some cases, might be heard as a minor submediant. When it is lowered it is generally heard as the leading tone of the dominant (and, as earlier noted, usually is written as such).

MINOR SUBMEDIANT - May be chromatically raised to become the major submediant. If lowered, it becomes the dominant.

MAJOR SUBMEDIANT - May be chromatically lowered to become the minor submediant. It may be raised but is sometimes heard as the lowered 7th degree.

MINOR 7TH DEGREE - May be chromatically raised to become the leading tone. If lowered, it becomes the major submediant.

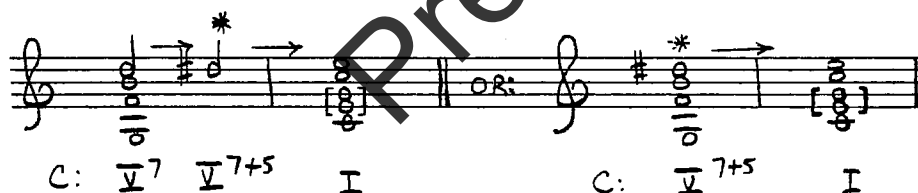
LEADING TONE - May be chromatically lowered. If raised, it becomes the tonic.

II. A CATALOGUE OF SOME STANDARD CHROMATIC CHORDS DERIVED FROM ALTERATIONS TO THE SCALE CHORDS

A. Chromatically Altered "V" Chords

1. ALTERED 5THS ("Variable 5ths")

a. The Augmented 5th (In MAJOR only)



Certain chromatic chords (e.g., the "Augmented 6th" chords) owe their linear impulse and motivation to the dissonance and urge of the altered note or notes in the chord. In other cases, the chromatic alterations will support and emphasize the actual root progression. Such is the case here. The chromatic "Augmented 5th" does not in any way conflict with the normal "V - I" relationship. Consequently, the chord can be used with or without preparation.

To illustrate:

PREPARED UNPREPARED

C: I V V⁺ I C: I V⁺ I

as a chromatic passing tone instead of the diatonic V.

This is pretty well true of all of the chromatic forms of "V", particularly those which lead to "I".

b. The "Flatted 5th"

C: V⁷ V⁷^{bs} I C: *V⁷^{bs} I

*This chord has been encountered as French bii^{+6} , and may be equally regarded as such. In point of fact, many of the chromatically altered V chords can be equally interpreted as bii^{+6} or modified bii^{+6} chords!

Combined alteration of the same scale degree is available. Here is a V chord with both the Augmented and Flatted 5th:

C: V V⁺⁵_{bs} I C: V⁺⁵_{bs} I

2. ALTERED 9THS ("Variable 9ths")

a. The "Flatted 9th"

C: V⁹ V⁷^{b9} I⁷ C: V⁷^{b9} I⁷

The regular Dominant 9th in Minor

b. The Augmented 9th

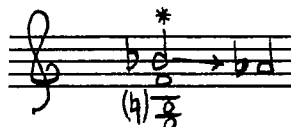


*not to be confused with the $\flat 10$ "Blues" chord:

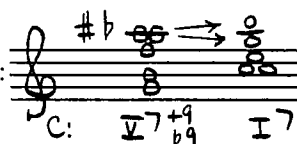


C: V

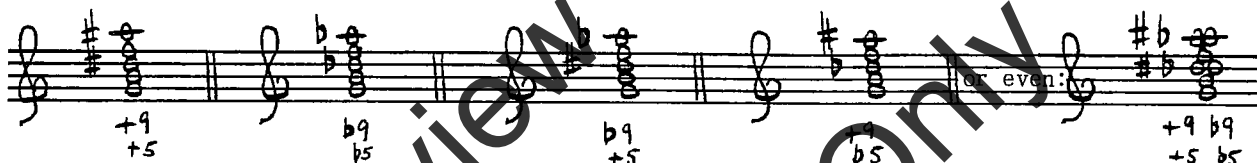
same, but is derived differently and resolves differently. The " $\flat 10$ " results from an appoggiatura over the flatted 9th:



A combination of the flatted and Augmented 9th is available, as:



A variety of combinations of the altered 5th and altered 9ths are also possible, as:

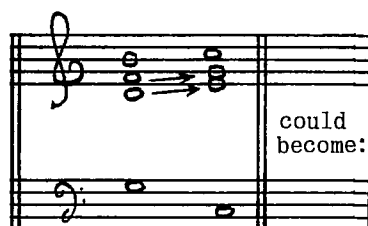


Clearly, these chords need more than four parts for their full effect, but *abbreviations* of them may occasionally be practical in four part writing. The omissions which are necessary to accommodate these combinations will be chosen with respect to the disposition of the chord and the voice-leading in the context.

3. THE RAISED 7TH

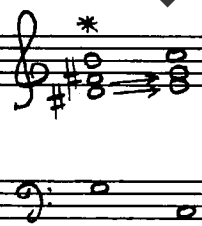
The 7th of V is, of course, one of the notes of the tonal tritone. Alteration of it appears to be infrequent. However, there could be instances which involve a rising 7th where a chromatic raising of it may be useful. To illustrate:

This:

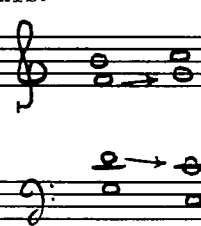


C: V⁷ I

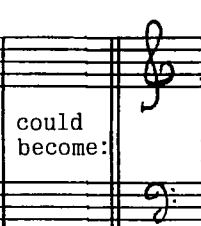
This:



C: V^{ma.7} I



C: V⁷ I⁶



C: V^{ma.7} I⁶

4. The chromatic versions of V are normally directed at the I chord, simply because V is normally directed at I. But in situations where V is moving to a chord other than I, other chromatic alterations may suggest themselves. For example:

This: could become: or:

[vii^{o7} of vi]

[vii^{o7} of vi]

Also: (Class 2!)

This: could become: or:

This: could become: or:

*Note the example of a stationary tone between two chords being inflected and given movement through an auxiliary technique

Certain chromatic movements of a *passing* and/or *auxiliary* nature may appear as an internal elaboration of V itself, as:

C: V⁷ dim. V⁷ C: V V^{Sust.} dim. V⁷

C: V⁹ V⁺⁴ V⁷ C: V⁹ dim. V⁷

5. TWO POINTS OF IMPORTANCE:

- a. In the chromatic alterations to V, or to any other chord, the voicing of the chord and its intended destination play a vital part in determining the available logical chromatic alterations which can be applied. The chromatic process cannot be divorced from voice-leading.
- b. In any chromatic chords, it is the chromatically altered notes which are dissonant, and which require resolution. A note in the chord which was consonant and "free" BEFORE the chromatic alterations remains "free" even if the chromatic alterations create a harmonically dissonant interval with it. To illustrate:

Free Still free! Free Still free!

The reason: The chromatic process is essentially inharmonic and it is the inharmonic alterations that carry the dissonance and the obligation to resolve.

6. This examination of chromatic alterations to V has, up to now, concerned the V chord of the key, but **Secondary Dominants** may also employ chromaticism in the same way and with the same processes. To illustrate:

This: could become: or:

C: $V^9 \text{ of } V$ V^7 C: $V^9 \text{ of } V$ $V^{b9} \text{ of } V$ V^7 C: $V^{b9} \text{ of } V$ V^7

This: could become: or:

C: $V^7 \text{ of } IV$ IV C: $V^7 \text{ of } IV$ $V^{b5} \text{ of } IV$ IV C: $V^{b5} \text{ of } IV$ IV

Here is an example of a "cycle" progression, with chromatic modifications:

C: I $V^{b9} \text{ of } ii$ $V^{b9} \text{ of } V$ V^{b9} I
[bii + b]

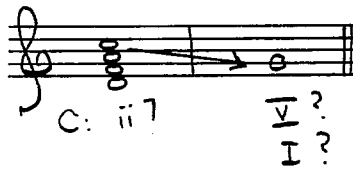
Note: the above, the combination of chromatic and Modal lines: $Bb \rightarrow Ab$
 $Eb \rightarrow Db$

B. Chromatically Altered "ii" Chords

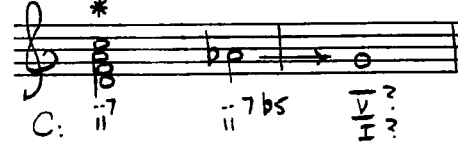
1. ALTERED 5THS

a. The "Flatted 5th"

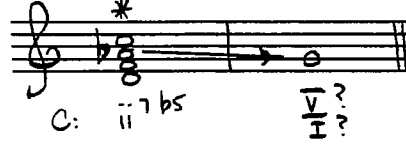
This:



can become:



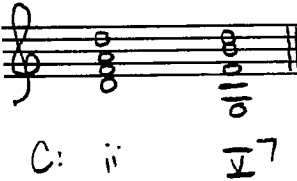
or:



(The ii^{b5} chord has been encountered as a Modal Variant of ii - receiving here a chromatic usage.)

b. The Augmented 5th

This:



can become:



*"Class 2" chromatic chords (enharmonically conforming) which would be symbolized as "Bb" and possibly notated as Bb:



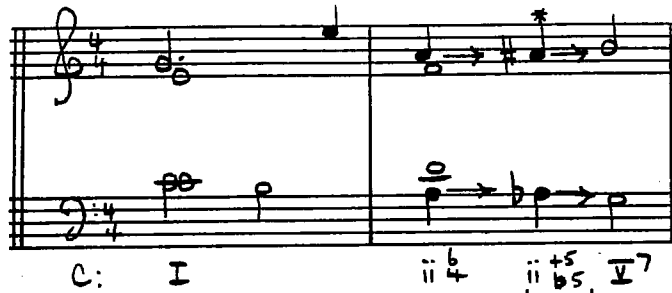
Since this alteration enharmonically produces a different chord (with a different root impulse), it is less likely to be used *instead of* the diatonic ii, as:



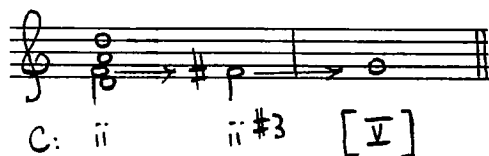
Heard as a chromatic alteration of ii.

Heard as bvii!

A combination of the Flatted 5th and the Augmented 5th is available, also producing a "Class 2" (enharmonically conforming) chord:



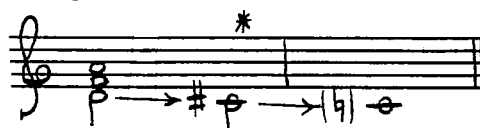
2. THE RAISED 3RD



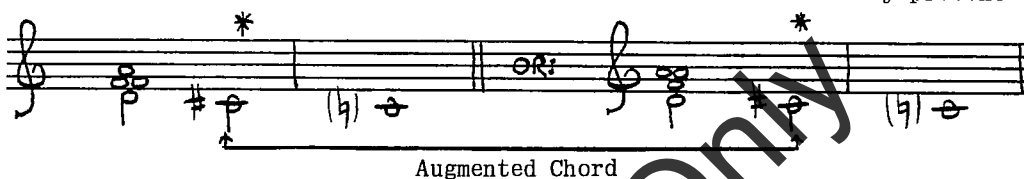
This produces a "V of V" when taken by chromatic approach, and may be so regarded.

3. THE LOWERED ROOT

The Lowered Root is almost invariably written as a "Major 7th":



It produces an augmented chord if the root is not simultaneously present:



It will produce a "passing Major 7th" if the root is simultaneously present, as:



It resolves onto a Minor 7th of the same chord:



More often, however, it will resolve onto a "Suspended 4th" on the V chord:



4. THE "#ii⁰⁷" CHORD

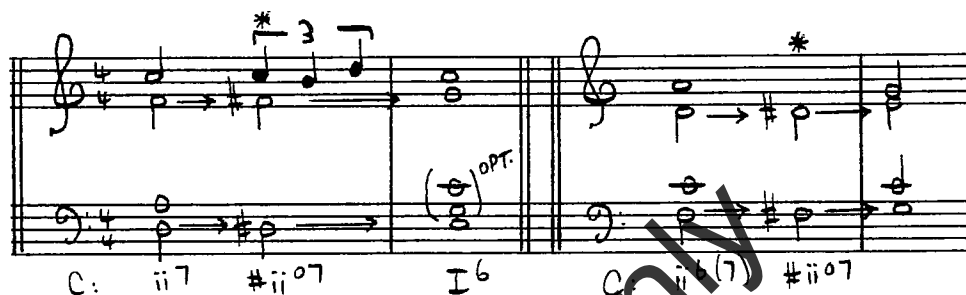
This is a commonly used chromatic chord in popular harmony which results from a chromatic raising of the root and 3rd of ii:



It normally resolves onto the I chord, as follows:



It receives transitional use, either in a "passing" or connecting manner, as:



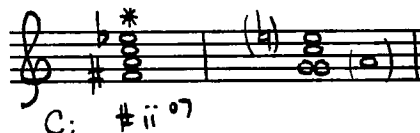
It is also used in an *auxiliary* manner between two I chords ("internal elaboration" of I):



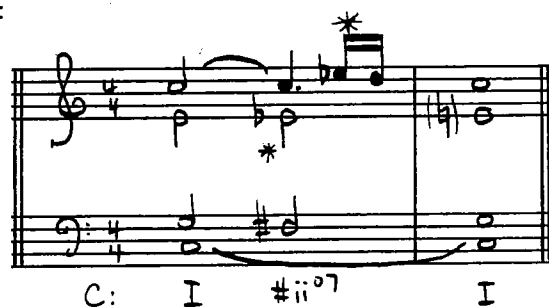
It may be suggested with an appoggiatura delaying of I as:



Writers often show an indifference to the correct grammatical notation of this and similar chords. The raised supertonic is sometimes written as a flat mediant:

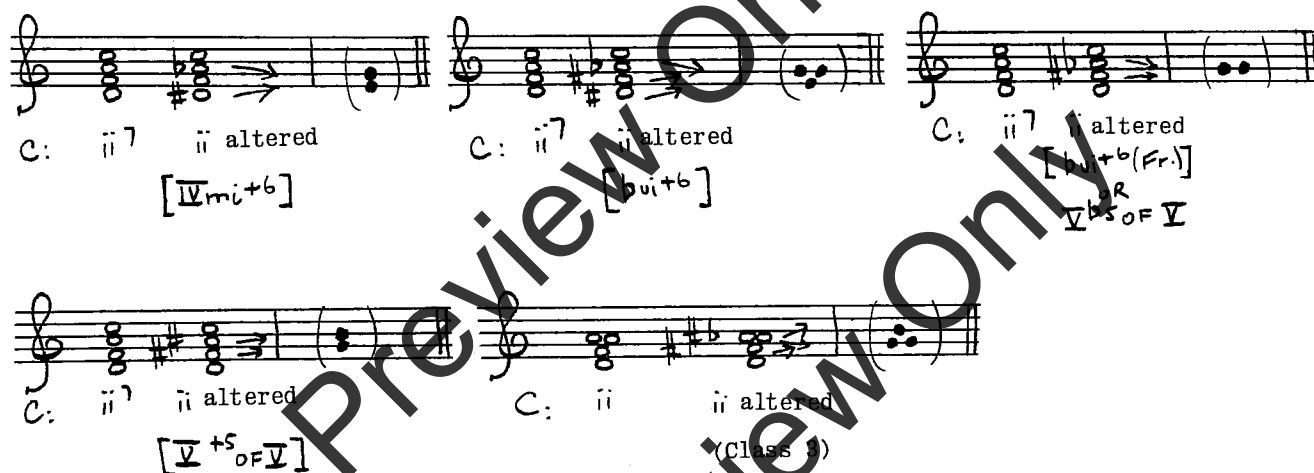


In a situation such as:



it seems much wiser to notate the "blues" soprano as "Eb". On the other hand, the alto "Eb" should be "D#", but perhaps the Eb is justified in order to coincide with the soprano. Compromises of this sort are not unusual, particularly in more casual areas. They should be kept at a minimum, however, and used only if they serve a valuable end (e.g., ease of reading).

5. Combinations of alterations to the ii chord are available, some of which produce chords which have been encountered under the names of "IV⁺⁶" and "bvi⁺⁶". (Some theorists hold, in fact, that the "IV⁺⁶" and "bvi⁺⁶" chords are supertonic harmonies.) In the following examples, the chromatic forms of ii are used *following* the unaltered ii chord. This is the likely, but not essential, way they are used:



Interlude

At this point, the student has chromatic versions of "V" and chromatic versions of "ii" at hand. The chromatic variations of the familiar "ii - V - I" formula are obviously extensive, and the exercise material will provide opportunity to examine them. It should be remarked that a chromatic chord can resolve onto *another* chromatic chord, as:



C. Chromatically Altered "I" Chords

Introductory:

An examination of the possible chromatic alterations to the "V" and the "ii" chords shows that, in a number of cases, the chromatic form of the chord can be used instead of the diatonic form. That is to say, the chromatic version does not necessarily change the usual "function" of the chord, but simply emphasizes it. To cite an example:

"ii^{b5} - V⁺ - I"

is still a "subdominant function" to "dominant function" to "tonic". The chromatic alterations have not disturbed the normal motivation of ii and V, but have in fact stressed it.

However, the "function" of the tonic chord is NOT motivation; rather, it is repose. So it follows that a chromatic alteration of notes in the tonic chord may well disturb its usual function.

Consequently, the chromatic versions of I will *not*, in the majority of cases, be used *instead* of I, but rather *between* I and the following harmony.

1. ALTERED 3rd

C: I Imi.

Cmi: I Ima.

Minor I in Major, or Major I in Minor (Tierce de Picardie) can be used *instead* of their diatonic counterparts, but would be regarded as "Modal" rather than chromatic alterations.

2. ALTERED 5THS

a. The Augmented 5th

In MAJOR:

C: I I⁺

This is one of the more frequently used chromatic chords, and usually leads to IV:

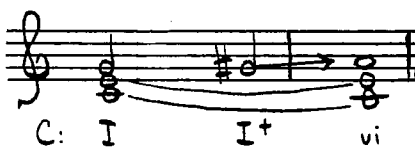
C: I I⁺ IV

In this use, it can be equally regarded as "V⁺ of IV", as:

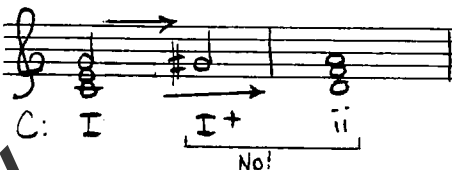
C: I I⁺ IV

[V⁺5 of IV?] etc.

However, I^+ may also lead to vi , as:

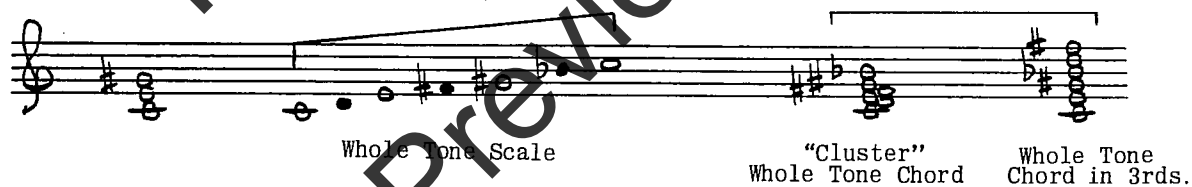


I^+ may move to ii , provided no parallel 5ths result:

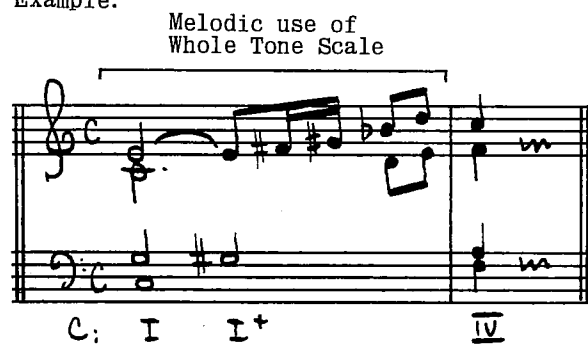


Certain idiomatic modifications are available, and sometimes encountered, with the I^+ chord:

1. The use of melodic and harmonic notes derived from the whole tone scale and whole tone chord: (See also "Augmented Triad" in Chapter III, Volume I.)



Example:

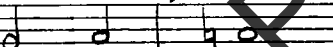


[illegible]

Handwritten musical score for "The Rose Tree" in C major. The score is written on two staves, treble and bass clef, with a common time signature. The melody is in the treble staff, and the bass line is in the bass staff. The key signature has one sharp (F#). The score is divided into measures by bar lines. The first measure is a whole note chord (C4, E4, G4). The second measure is a half note chord (C4, E4, G4). The third measure is a half note chord (C4, E4, G4). The fourth measure is a half note chord (C4, E4, G4). The fifth measure is a half note chord (C4, E4, G4). The sixth measure is a half note chord (C4, E4, G4). The seventh measure is a half note chord (C4, E4, G4). The eighth measure is a half note chord (C4, E4, G4). The ninth measure is a half note chord (C4, E4, G4). The tenth measure is a half note chord (C4, E4, G4). The eleventh measure is a half note chord (C4, E4, G4). The twelfth measure is a half note chord (C4, E4, G4). The thirteenth measure is a half note chord (C4, E4, G4). The fourteenth measure is a half note chord (C4, E4, G4). The fifteenth measure is a half note chord (C4, E4, G4). The sixteenth measure is a half note chord (C4, E4, G4). The seventeenth measure is a half note chord (C4, E4, G4). The eighteenth measure is a half note chord (C4, E4, G4). The nineteenth measure is a half note chord (C4, E4, G4). The twentieth measure is a half note chord (C4, E4, G4). The score ends with "etc." in the treble staff.

C: I I+ *I add b I+ I C: I I+ *I add b I+ I etc.

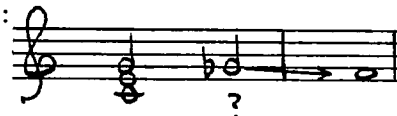
Example: This:  equals, and is written as: 


 Cmii: I I⁺ [vi^b] I add b
 Dor. vi
 IV
 ii
 etc.

Handwritten musical notation for the first system of 'The Rose Tree'. The system consists of two staves. The top staff is in treble clef with a key signature of two flats (B-flat and E-flat). It contains a melody of eighth and quarter notes. The bottom staff is in bass clef with the same key signature, featuring a single bass note (C) with a long, curved line above it indicating a sustained or glissando effect. Below the staves, the chord progression is written as: Cmi: I I+5 Iadd b I+5 I. At the bottom, three boxes contain the notes: [vi^b] [Dor.vi^b] [vi^b].

b. The Flatted 5th

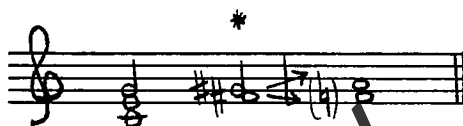
In Major, the use of a chromatically lowered 5th on I, without any other alteration, is not common because it results in a "non-conforming" harmony:



It is usually accompanied with a flatting of the 3rd, producing a diminished chord. (See notes below on "I^o".) Furthermore, as noted earlier, the flatted dominant is usually written as a raised subdominant:



A combination of the flatted and augmented 5th produces a *whole tone derivative* chord:



In MINOR, the flatted 5th on I produces a diminished chord:



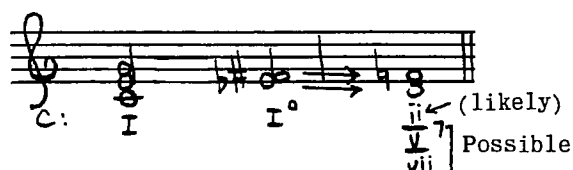
D. The "I^o" Chord

Although it is not likely that a count has been made, it may well be that the I^o chord is the most common of the standard chromatic chords in popular song harmony. Its tearful quality has endeared it to two or three generations of song writers. Because of its stylistic importance and because it has some idiomatic considerations, a reasonably comprehensive examination of it is indicated.

It is mainly used in Major and its basic form results from the chromatic lowering of the 3rd and 5th, as:



The I^o most often leads to "ii", but may lead to V⁷ or vii, as:



It may be used as a triad, with the tonic doubled. (*Diatonic* diminished chords usually have their 3rds doubled, but this would clearly be inapplicable here.):

C: I - I° - ii

The MINOR 7TH may be added to the chord, creating a "Imi^{7b5}":

(Practical parallel 5ths)

C: I I b7 b5 b3
Cmi.7b5

However, the most common addition is the submediant (i.e., the "added 6th"):

C: I°

The notation indicates that this is a "vi⁰⁷" chord which is a chromatic alteration of the vi⁷ chord:

C: vi°7

Many theorists will hold this view. In this text, however, it will be regarded as a "I⁰" with an "added 6th" because its *usage* is derived from a chromatic alteration to the I chord. Observe the following examples illustrating the basic use of the "I⁰ add6." Note that the chromatic tones resolve, but the diatonic tones (root and "added 6th") are free to leap:

C: I I° ii°7 C: I° I° ii°7b5

C: I I° I°7 C: I I° vii I°7
[vi°7?][I°7?]

The diatonic tones (root and "added 6th") may be decorated. The chromatic notes are already "chromatic passing tones" and cannot be further decorated with appoggiaturas, although passing tones of any kind can have auxiliaries applied to them:

Two measures of a C major scale in treble and bass clefs. The first measure shows the root (C) and added 6th (B) decorated with appoggiaturas (marked with asterisks). The second measure shows the root (C) and added 6th (B) decorated with appoggiaturas (marked with asterisks). The notes are: C, D, E, F, G, A, B, C.

C: I I^o ii⁷ C: I I^o ii⁷(7)

Two measures of a C major scale in treble and bass clefs. The first measure shows the root (C) and added 6th (B) decorated with an appoggiatura (marked with a downward arrow). The second measure shows the root (C) and added 6th (B) decorated with a chromatic passing tone (marked with a downward arrow). The notes are: C, D, E, F, G, A, B, C.

C: I I^o ii⁷

The I^o chord, similar to most chromatic chords, can change position, as:

Two measures of a C major scale in treble and bass clefs. The first measure shows the root (C) and added 6th (B) decorated with an appoggiatura (marked with a downward arrow). The second measure shows the root (C) and added 6th (B) decorated with a chromatic passing tone (marked with a downward arrow). The notes are: C, D, E, F, G, A, B, C.

C: I I^o ii⁷ C: I I^o ii⁷ etc.

E. The "#I^o" Chord

This is another chromatic chord which is common in popular harmony. It is a diminished chord resulting from the chromatic raising of the root of I in Major:

Two measures of a C major scale in treble and bass clefs. The first measure shows the root (C) and added 6th (B) decorated with an appoggiatura (marked with a downward arrow). The second measure shows the root (C) and added 6th (B) decorated with a chromatic passing tone (marked with a downward arrow). The notes are: C, D, E, F, G, A, B, C.

C: I #I^o

If the tonic is a "flat" note, the accurate term for this alteration would be "bI^o", as:

Two measures of a C major scale in treble and bass clefs. The first measure shows the root (C) and added 6th (B) decorated with an appoggiatura (marked with a downward arrow). The second measure shows the root (C) and added 6th (B) decorated with a chromatic passing tone (marked with a downward arrow). The notes are: C, D, E, F, G, A, B, C.

E^b: I bI^o but the term "#I^o" is generally used.

This chord has been encountered as "vii of ii":

C: I vii^{°7} of ii ii
[[#]I^{°7}?]

and may still be regarded as such, when it is joining I to ii.

Further, the [#]I^{°7} may resolve to V⁷, in which case the flatted 7th degree (the diminished 7th of [#]ii^{°7}) is written, and used, as a "raised 6th degree":

Thus: C: [#]I^{°7} ii becomes: C: [#]I^{°7} V

From a notation point of view, then, this chord is really "[#]vi^{°7}":

C: [#]vi^{°7}

It is most often used as a chromatic alteration of I, or of I^{add6}. Examine its resolutions in different positions:

C: [#]I^{°7} V⁷₄ C: [#]I^{°7} V⁷ C: [#]I^{°7} V⁷ C: [#]I^{°7} V⁷(⁶)

Here are some uses in short contexts.

C: I [#]I^{°7} V⁷₄ V⁷ C: I [#]I^{°7} V⁷ I C: I V⁷ of ii [#]I^{°7} V⁷(⁶)
[V^{dim}?]

It has been noted earlier that writers are sometimes indifferent to correct notation in chromatic harmony (particularly, it seems, with the "neutral" diminished 7th chords). So be not dismayed if the [#]I^{°7} chord resolving to V is encountered with the use of the lowered 7th degree instead of the raised 6th, such as:

This: instead of:

In principle, of course, a chromatically altered note receives a tendency to continue movement in the direction of the alteration and, in principle, receives an "inflection" from the performer which favors the direction of the alteration. Consequently, accurate notation is encouraged.

Here are a few references for the use of some of the standard chromatic chords in the harmony of standard melodies:

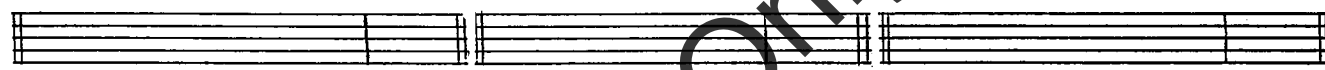
"V⁺" - "She's Funny That Way". "V^{b9}" - "Laura". "ii^{b5}" - "I Can't Believe That You're In Love With Me". "ii⁺⁵" - "How Am I To Know". "Lowered Root of ii" - "It's Been a Long, Long Time". "#ii⁰⁷" - "O Lady Be Good" (bridge). "Imi" - "The Lady Is A Tramp". "I⁺" - "When Irish Eyes Are Smiling", "Say It Isn't So". "I⁰" - "Pennies From Heaven", "I'm Through With Love", "Fine and Dandy", "Embraceable You". "#I⁰" (as vii of ii) - "Stormy Weather", "My Buddy". "#I⁰" (to V) - "I Never Had A Chance". Etc., etc., etc.

ASSIGNMENT 79 (Drill Exercises on "Standard" Chromatic Chords)

Chromatic Chord "Drill" Exercises

Group 1.

- a. In various major keys, plus one or two minor key examples, write sufficient versions of:



V - Chromatic V - I Chromatic V I ii - Chromatic V - I

Aim to show examples of all of the chromatic forms of V which lead to I.

- b. Do a couple of examples for each of the following, in various major keys:



V - Chromatic V - I V - Chromatic V - ii

- c. Write a few elaborations of:



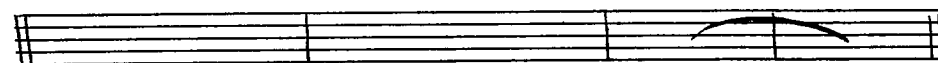
V to become: V - Chromatic V - V

- d. Write a couple of examples for each of the following, employing chromatic forms of the Secondary Dominants as well as of the main V chord:



I - V of ii - ii - V - I I - V of V V I

(or Develop)

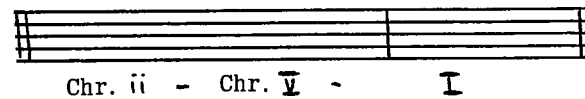
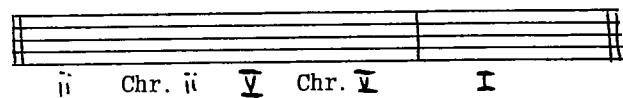
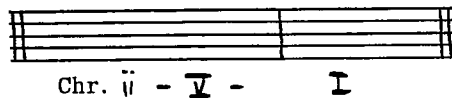
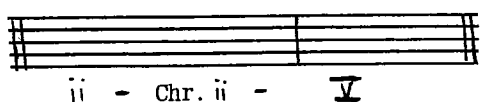


I - V of ii - V of V - V - I I

(or Develop)

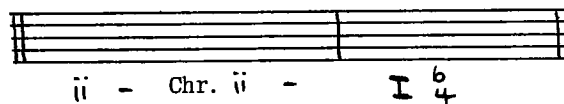
Group 2.

a. Write, in various major keys, sufficient examples of:

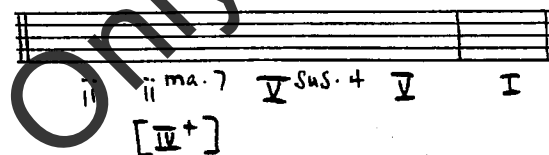


Aim to show examples of all of the discussed chromatic forms of ii, which lead to V.

b. Write, in various major keys, sufficient examples of:

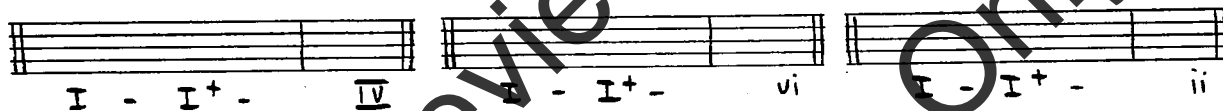


_____ Show examples of "#ii^{o7},"



Group 3.

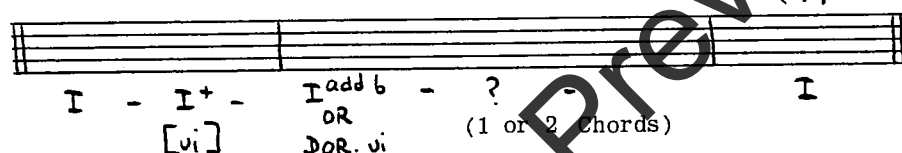
a. Write, in various major keys, sufficient examples of:



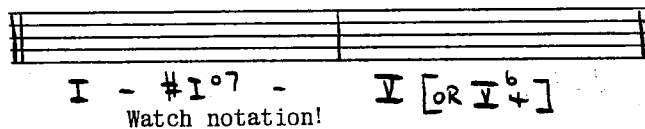
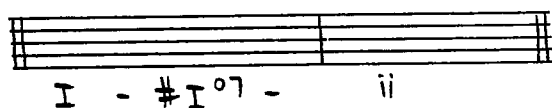
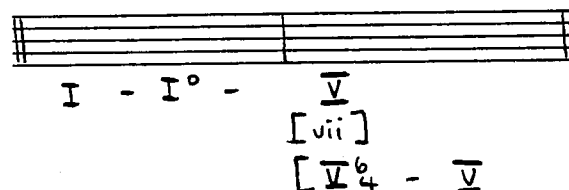
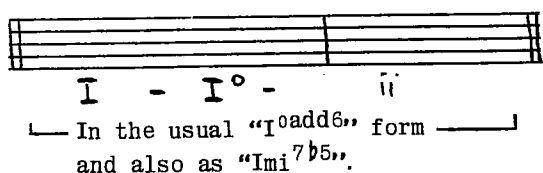
Development of: _____ with use of "I⁺".



b. In minor, do a couple of examples of:



c. Write, in various major keys, sufficient examples of:



Group 4.

Search out examples, in familiar music, for all of the "standard" chromatic chords, as well as for other chromatic uses.

Some of the more common chromatic alterations to the V, ii, and I chords have been herein examined. Most of these are "Class 1." (conforming) chromatic chords. This investigation could be carried on to include a cataloguing of "Class 2." (enharmonically conforming) and "Class 3." (non-conforming) possibilities and, no doubt, further examples of "Class 1." chromatic chords. Certainly the chords on iii, IV, vi, and vii can be subjected to similar linear chromatic alterations.

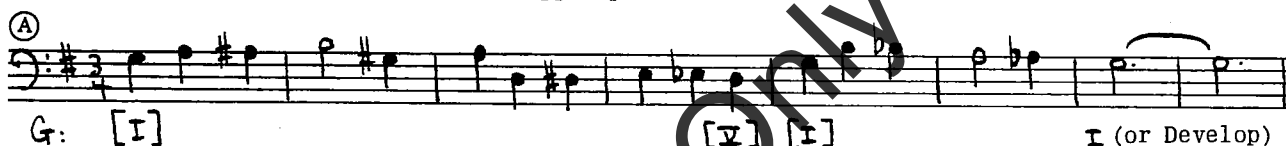
However, it must be stressed that, while a memorization of a catalogue of chromatic chords can be valuable, it is an understanding and feel for the *chromatic process* which is ultimately important. Further experimentation and observation may, at this point, be left to the student. The exercise material which follows will provide opportunity for such experimentation and observation.

ASSIGNMENT 80 (Completion of Chromatic Harmony)

(In all of the following exercises, aim to make use of the "standard" chromatic chords, as well as less obvious formations. Occasionally, do more than one solution for the same problem.)

1. The bass lines are given. Add the upper parts.

(A)



G: [I] [V] [I] I (or Develop)

(See Sample Solutions page 318.)

(B)



F: [I] [V] I^b? I (or Develop)
Funct. iii?

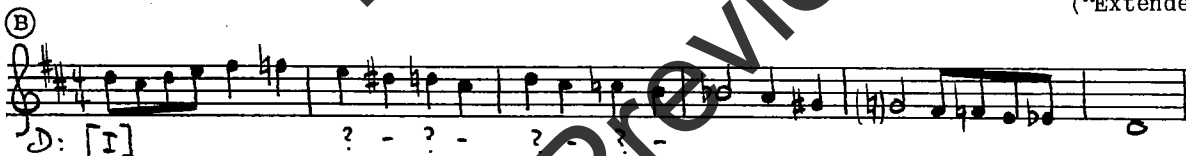
2. The soprano lines are given. Complete for four parts.

(A)



E^b: [I] [V] [I] I - ? - I
("Extended Cadence")

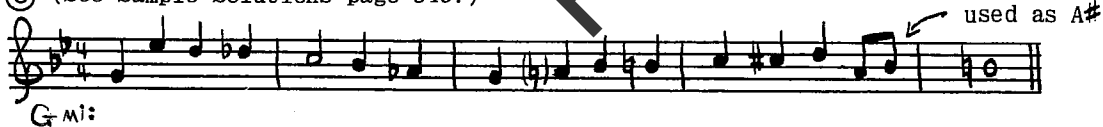
(B)



D: [I] ? - ? - ? - ?

(See Sample Solutions page 319.)

(C)



G m: used as A#

(See Sample Solutions page 319.)

(D)



G:



3. The "Ground Bass" is given. Add the upper parts as follows:

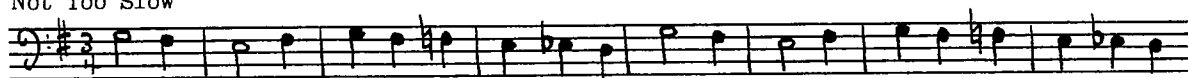
1st four bars: Use three parts only (i.e., add two upper parts, probably alto and tenor). Make it restrained, not busy.

2nd four bars: Add the additional part for full total of four. Use a somewhat more active and more chromatic style.

Final bars: Use more activity, more tension, more chromaticism. Have the high point occur in this section.

Although there may be some similarities, the progression need not, in fact should not, be identical in each of the three sections. (The "Ground Bass" idea is the basis of the classical "Passacaglia" form, and it enjoys quite frequent use in jazz composition.)

Not Too Slow



4. Work out a composition for four parts, at least 16 bars in length. It may consist of two similar sentences as:



or two contrasting sentences, as:



The soprano may be diatonic or it may employ some chromaticism but, in any case, make use of chromatic harmony. Use some examples of the standard chromatic versions of V, ii, and I - as well as other chromatic formations that are suitable. Use a slow tempo, with a harmonic rhythm that has a *general* feeling of two chords per bar.

Chapter 7

PARALLEL HARMONY

PART I. CHROMATIC PARALLEL HARMONY

PART II. DIATONIC PARALLEL HARMONY

PART III. EXACT PARALLEL HARMONY

PART I. CHROMATIC PARALLEL HARMONY

Proposition:

A chord may be approached from another chord of identical structure, a half-tone above or below it. (It will more often occur from above, because of the more natural resolution of 7ths, 9ths, etc., and because of gravity.)

Technical Details:

All parallels are acceptable, with the exception of parallel octaves and unisons. As always, parallel 5ths which are formed by the root and Perfect 5th of the chords are preferable in the two bottom parts.

Since parallel octaves and unisons are to be avoided, the destination chord must have four *different* notes in it.

Uses:

- A. Perhaps the single most common use of chromatic parallelism in popular harmony is the chromatic joining of iii^7 and ii^7 in major. Since iii^7 and ii^7 are identical structures lying a major 2nd apart, the use of a parallel chromatic chord between them (i.e., " $\text{iii}^7 - \text{biii}^7 - \text{ii}^7$ ") produces a succession of minor 7th chords. Observe the examples:

The musical notation shows three examples of chromatic parallelism between iii^7 and ii^7 chords in C major. Each example consists of two staves (treble and bass clef) and a chord label below. Example 1 shows a direct chromatic approach from iii^7 to ii^7 . Example 2 shows a chromatic approach from iii^7 to biii^7 and then to ii^7 . Example 3 shows a chromatic approach from iii^{11} to biii^{11} and then to ii^{11} . The chords are labeled as follows: C: iii^7 biii^7 ii^7 , C: iii^7 biii^7 ii^7 , C: iii^{11} biii^{11} ii^{11} .

B. A chromatic anacrusis or lead-in, involving two, three, four, or more notes, can be harmonized with a "stream" of chromatic parallel harmony, as:

BASIC: V I vi V of V V I

In situations such as the above, the chromatic parallel harmony is calculated *TO the destination chord*.

All parallel harmony is most effective *when the chords involved have some interest!* (For instance, a succession of "v^{b9} sus. 4" chords would be more effective than a string of straight "v⁷" chords.)

C. The chromatic parallel harmony may be used as the **Harmonic Progression** of a passage, or part of a passage, and be "melodized".

Any chord type is available, but successions of "Dominant 9th" chords (or modifications) seem to have been favored. Observe the examples:

Chromatic parallel to "V of ii"

C: I=Fii

Dmi. G7 C
ii I I

Because of their repetitive nature, progressions of this sort are suited to "sequential" or partially sequential melodies. In fact, they are suited to overall sequential treatment. The above example uses a sequential repetition based on two chords of the progression, and it could be worked out with a repeated pattern on each chord.

Sequential treatment is not necessary, of course. In the following example, no sequence is used, and interestingly, the soprano remains entirely diatonic in C major:

Chromatic parallel to "V" → \bar{V} I

The musical notation shows a four-measure progression in C major. The soprano line is diatonic, moving from C4 to G4. The bass line moves chromatically from C3 to F#3. The chords are C7, B7, Bb7, A7, Ab7, G7, and C. An arrow points from the A7 chord to the Ab7 chord, labeled "Chromatic parallel to 'V'".

Here are further illustrations of chromatic parallel harmony used as the basis of the progression, with chords other than "dominant structures" used:

1. PARALLEL MAJOR 7TH CHORDS:

Chromatic parallel to "bvi" → \bar{V} I

The musical notation shows a four-measure progression in C major. The soprano line moves chromatically from C4 to G4. The bass line moves chromatically from C3 to F#3. The chords are Cma7, Bma7, Bbma7, Am7, Abma7 (bvi), G7, and C. An arrow points from the Abma7 chord to the G7 chord, labeled "Chromatic parallel to 'bvi'".

2. PARALLEL MINOR 7TH CHORDS:

Chromatic parallel from ii7 to vi7

The musical notation shows a four-measure progression in C major. The soprano line moves chromatically from C4 to G4. The bass line moves chromatically from C3 to F#3. The chords are C: I, Iof ii, ii7, Dmi7, Dbmi7, Cmi7, Bmi7, Bbmi7, vi7, A7, and I. An arrow points from the ii7 chord to the vi7 chord, labeled "Chromatic parallel from ii7 to vi7".

3. PARALLEL DIMINISHED 7TH CHORDS (with appoggiaturas):

C°7 B°7 Bb°7 A°7 Ab°7 Gmi.7b5 I

— Chromatic parallel diminished chords to “Phrygian V” → $\overline{\text{V}}$ PHR.

(In the previous three examples, no attempt was made to avoid the “sequential” plan - which is the most obvious treatment for this kind of harmonic progression. However, in every case there was a Pre-determined Destination in mind.)

D. Finally, it is possible to handle single, brief, unaccented inharmonics (passing-tones, auxiliaries, unprepared auxiliaries), which resolve by chromatic or diatonic half-step, with chromatic parallel harmony. To illustrate:

Unprepared Auxiliary Unprepared Auxiliary Chromatic Passing Tone Diatonic Auxiliary

C: ii V

But the result is somewhat crude, and is not recommended in part writing. (It is more suited to sectional writing.)

PART II. DIATONIC PARALLEL HARMONY

Definition:

Diatonic parallel harmony is diatonic chords moving in parallel fashion through the scale.

Technical Details:

The principle is the same as it is with chromatic parallel harmony, except that chromatic parallel harmony produces a sustained impression of the basic chord type whereas diatonic parallel harmony produces a sustained impression of the basic scale type.

In diatonic parallel harmony, the chord type will change from one scale degree to another. A structure that may be good at one point in the scale may be harsh in another. To illustrate:

C: ii^4 I^4 vii^4 vi^4 C: V^4 IV^4 iii^4 ii^4

Fine Harsh Fine Fine Harsh Fine

Nevertheless, if such "harsh" structures are used transitionally, and are of short duration, they will probably be acceptable, as:

V^4 IV^4 iii^4 ii^4 I^4

ALL RIGHT
(short)

Uses:

A. The diatonic parallel progression can be used to harmonize *diatonic scale passages*, as:

This:

C: I V I

could become:

BASIC: I V I

HAS BECOME: ii^{11} I^{11} vii^{11} vi^{11} V^{11} V^{7b5} I^7 ii^7 iii^7 ii^7 I^7

Diatonic parallel to V^{11} Diatonic parallel from I^7 back to I^7

A short or prolonged scale passage which uses a modal scale other than the basic mode of the passage may use diatonic parallel harmony in the appropriate diatonic mode.

To illustrate:

This:

C: I bvi bii I

could become:

BASIC: I bvi bii I

HAS BECOME: I bvi⁷ PHR. I⁷ PHR. IV⁷ PHR. iii⁷ PHR. ii⁷ I⁷

Phrygian parallel harmony
from bvi to bii

B. A diatonic parallel progression may be used as the harmonic basis for a passage, or part of a passage, and be "melodized". To illustrate:

C: I ii iii ii I

C: I IV^{OF}_{bvi} V^{b9}_{OF bvi} bvi PHR. V PHR. IV PHR. iii PHR. ii I

Phrygian parallel harmony from bvi to bii
(or Diatonic parallel harmony in the key of bvi?)

Illustrations continued:

The musical notation shows a four-measure phrase in C major. The treble clef part has a 'free' lead melody, while the bass clef part provides parallel harmony. The notes in the bass are: C4, D4, E4, F4, G4, A4, B4, C5. The notes in the treble are: C4, D4, E4, F4, G4, A4, B4, C5. The notes are beamed together in groups of four.

C: I $\underline{V^7}$ vi⁷ vii⁷ I⁷ ii⁷ iii⁷ IV⁷ $\underline{V^7b9}$ I⁷

Diatonic parallel harmony (ascending) with "free" lead

In all of the previous examples, the parallel harmony has moved in diatonic scale "steps". This is usual.

Parallelism with "leaps" is also possible. To illustrate:

The musical notation shows two examples of parallelism with leaps. The first example is a four-measure phrase in C major. The treble clef part has a 'free' lead melody, while the bass clef part provides parallel harmony. The notes in the bass are: C4, D4, E4, F4, G4, A4, B4, C5. The notes in the treble are: C4, D4, E4, F4, G4, A4, B4, C5. The notes are beamed together in groups of four. The second example is a four-measure phrase in C major. The treble clef part has a 'free' lead melody, while the bass clef part provides parallel harmony. The notes in the bass are: C4, D4, E4, F4, G4, A4, B4, C5. The notes in the treble are: C4, D4, E4, F4, G4, A4, B4, C5. The notes are beamed together in groups of four.

C: ii⁹ $\underline{V^9}$ IV⁷ V⁷ I⁷ C: ii⁷ iii⁷ I⁷ ii⁷ iii⁷ vii⁷ ii⁷ I⁷

C: I vi ii V I

"free" soprano

In situations such as the above, the parallelism must be carried on long enough to make the intention clear. *Even then*, it may sound clumsy and unschooled.

C. Finally, diatonic parallel harmony *may* sometimes be used to harmonize diatonic passing tones, diatonic auxiliaries, diatonic unprepared auxiliaries, etc., as:

BASIC: C: I ii V⁷ I⁹

HAS BECOME: I I⁷ ii⁷ I⁷ ii vi⁷ V⁷ ii⁹ I⁹

This use of diatonic parallel harmony is not entirely satisfactory in part writing, however. The *intention* is not indicated clearly enough, and the result tends to be crude.

PART III. EXACT PARALLEL HARMONY

Introductory:

Again, the principle is the same, but each part moves in the same intervals as the lead. (Consequently, each part in effect performs the same melody at a different pitch level.)

The result is a sustained impression of the basic chord type, as:

In C: I

In E: I

In G: I

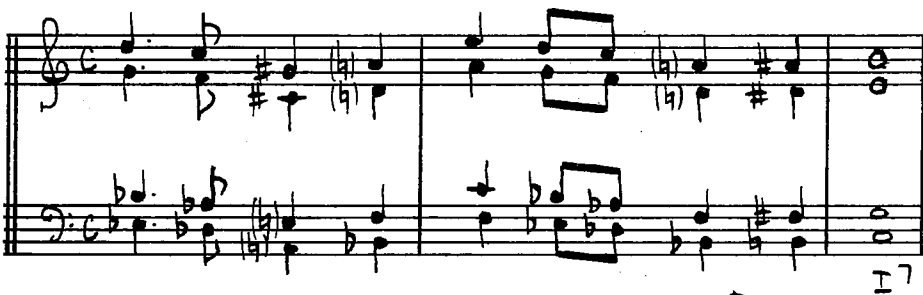
C₄ A₄ B₄ C₄

Chromatic parallel harmony (see Part I.) is also *exact* parallel. *Chromatic* parallel harmony follows the *chromatic* scale, though, and has a relatively "neutral" quality. *Exact* parallel harmony can move through any interval relationship. It does not have the neutrality of *chromatic* parallel harmony or the clear "key" feeling of diatonic parallel harmony. As a result, it is considerably *more emphatic* and distinctive than either of these, and is *less* able to fit comfortably into a normal context. The quality of the passage as a whole must be taken into consideration before making use of it, and it must be carried on for *at least* the length of a phrase or rhythmic grouping. Any chord type, or modified chord type, may be used.

Uses:

A. A complete passage can be done in exact parallel harmony. For instance:

This: 

could become: 

Parallel major 7th chords, aimed at final "I⁷"

or: 

Exact parallel harmony to final "modified" I

or: 

Exact parallel chords in "4ths"


In the above example, the "key" is ambiguous, and is dependent mainly on the top line. (Also try chords in "5ths".)

- B. The exact parallel technique may be applied to just a segment of a passage, provided it is long enough to make the intention clear and provided it does not sound irrelevant in the context. To illustrate:

This: 

C: I vi ii V I

could become:



C: V of V V of V V of V V of V V of V V of V V of V V of V

Parallel 3rd inversion 13th chords to "V of V"

or:



C: I ii b5 6 ii I


[DOR. vi] Exact parallel to I (with appoggiaturas)

This:



C: I V of ii ii V I

could become:



C: I ii V I

Parallel 11th chords to ii Parallel 11th chords to V

ASSIGNMENT 81 (Parallel Harmony)

1. Parallel harmony is more often used as an orchestral, arranging and compositional technique than it is as the original harmonization of popular melodies. Listen for examples of its use.
2. Work out a short passage for four parts incorporating the movement:

"iii⁷ - biii mi⁷ - ii⁷"

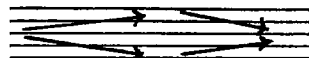
3. Along the general lines of the examples in the text, work out:
 - a. A group of examples illustrating chromatic parallel harmony.
 - b. A group of examples illustrating diatonic parallel harmony.
 - c. A group of examples illustrating exact parallel harmony.
4. Compose a short work (minimum: 16 bars) illustrating and exploiting the sounds of parallel harmony. The work can be based primarily on parallel techniques and parallel progressions, or a more conforming technique can be the main vocabulary with parallelism used occasionally.

Chapter 8

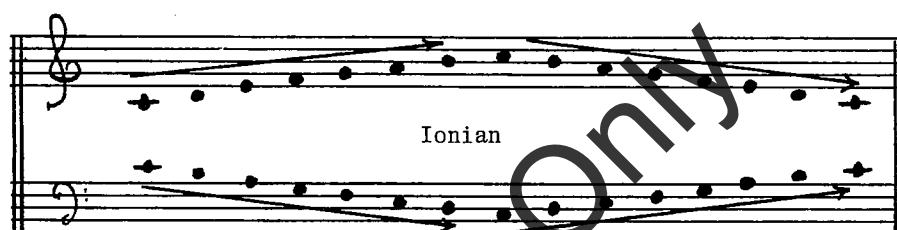
OPPOSED SCALES

Proposition:

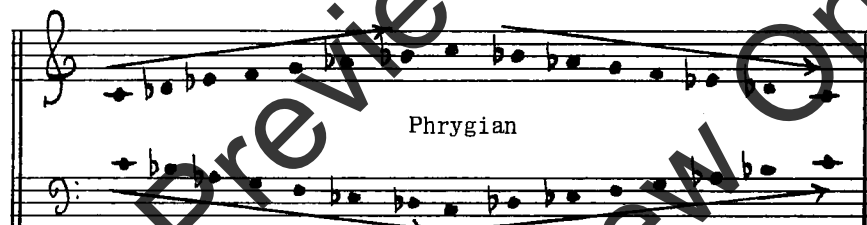
Scale patterns may be played simultaneously in contrary motion:



A. Similar *diatonic* scales may be used in contrary motion to a destination.

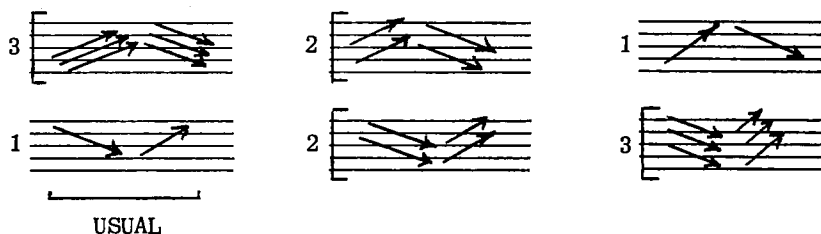


Essence:



The *horizontal* logic of the opposed elements minimizes *vertical* clash, particularly in short note values.

The outside parts will normally be the contrary elements. The inner parts will likely be coupled, in parallel harmony, to one of the outside parts, as:

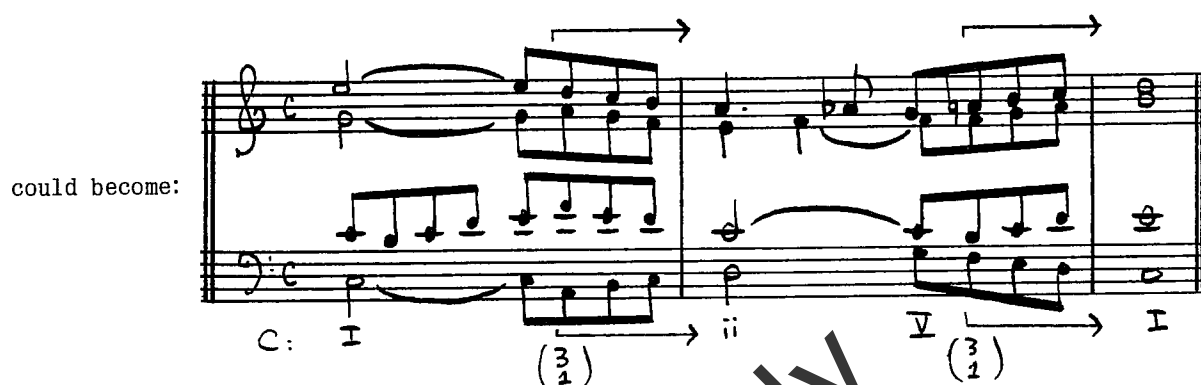


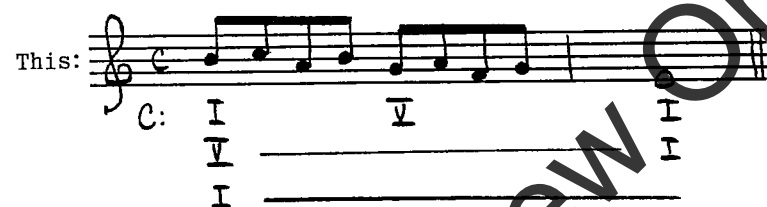
Application:

Opposed diatonic scales may be used to harmonize brief or extended diatonic scale passages.

To illustrate:

This: 

could become: 

This: 

could become: 

*Irregular spacing is justified in interest of the overall idea.

B. The chromatic scale may be used in contrary motion to a destination.

Essence:



Application:

Opposed chromatic scales may be used to harmonize brief or extended chromatic scale lines, as:

This:

could become:

This:

could become:

C. Differing scale types may be combined in contrary motion to a destination. To illustrate:

Essence:

Melodic Minor down	Phrygian	Chromatic
Melodic Minor up	Ionian	Ionian

Application:

These opposed scales may be used to harmonize brief or extended scale lines, or as a compositional device. To illustrate:

This:

C: I I of bui bui V I

could become:

Phrygian Ionian

This:

C: V vi ii V I

could become:

Chromatic Ionian

D. The opposed scale patterns may be used in differing time values.

Essence:

Ionian

Chromatic

Chromatic

Whole Tone

Chromatic

Application:

This method may be used to harmonize scale lines, or as a compositional device. To illustrate:

F: [I]

[V] I

E. Repetitive interval patterns may be combined, either together or along with scale patterns.

Essence:

Ionian "3rds"

Ionian repeated pattern

Phrygian "5ths"

Ionian 3rds

Pattern

Chromatic

Application:

These may be used to harmonize repeated interval patterns, or as a compositional device. To illustrate:

Ionian 4ths: A scale of four intervals of a fourth, shown on a treble clef staff with notes G, C, F, B, E, A, D, G.

Phrygian scale: A scale starting on B-flat, shown on a treble clef staff with notes B-flat, C, D, E-flat, F, G, A, B-flat.

Chromatic four note pattern: A pattern of four notes, shown on a treble clef staff with notes G, A-flat, B-flat, C.

Chromatic scale: A scale of twelve notes, shown on a treble clef staff with notes C, C-sharp, D, D-sharp, E, F, F-sharp, G, G-sharp, A, A-sharp, B.

Below the scales, the Roman numerals V and I are indicated.

(Observe combinations)

A musical example in C major, showing a combination of scales and patterns. The notation includes a treble clef staff with a C major scale, a bass clef staff with a C major scale, and a treble clef staff with a C major scale. The example includes a triplet of eighth notes in the treble staff and a quarter note in the bass staff. The Roman numerals C: I, bvi, V, and I are indicated below the staff.

The techniques and devices suggested in this chapter can be carried much further than these illustrations. More exploration in the direction these examples indicate is recommended.

Sharp contrasts between tension and fusion can be dangerous, and remember that the ear is the final arbiter in techniques such as this. It is quite possible to devise a combination that looks very crafty on paper but sounds completely chaotic!

ASSIGNMENT 82 (Opposed Scales)

1. Even more so than Parallel Harmony, the use of opposed scales and patterns is to be found as an orchestral, arranging, or compositional device rather than in the original harmonies of popular songs. Listen for its use.
2. Create a number of short examples illustrating opposed scale technique, etc., along the lines of the examples in the text.
3. Compose a short work for four parts (minimum: 16 bars) that makes extensive or occasional use of the techniques discussed in this chapter.

Chapter 9

ORGAN POINT

(“Pedal Point”—“Pedal Notes”)

Definition:

A note, interval, or chord held through various changes of harmony.

The Organ Point may be (in fact, to some degree, nearly always is) foreign to the harmonies with which it sounds. However, it *customarily begins and ends as a member of the harmony*.

Introductory:

The terms **Organ Point**, **Pedal Point** and **Pedal Note** originated from the use of the sustaining pedal on the organ, but the uses of organ point have evolved considerably beyond this. There are, in fact, very few technical restrictions on its use. Similar to Parallel Harmony, Opposed Scales, Equal Division of the Octave, etc., its effectiveness is a matter of musical judgement rather than technical rules.

By far the most used pedals are the dominant or tonic in the bass - where they act, in effect, as “Prolongations” of the dominant or tonic harmony. Pedals may also be used in the upper voice or in an inner part, and they may employ scale degrees other than the dominant or tonic. The pedal may be broken into rhythmic patterns, and it may be melodically decorated. It may even achieve major thematic significance as an “ostinato” (continuously repeated pattern). It can be argued that the “opposed scales” idea developed from the organ point, and modern theory considers organ point to be the origin of poly-tonality.

The standard uses of the organ point are:

- Single Dominant
- Single Tonic
- Pastoral (tonic and dominant in combination)
- Chordal
- Others

The following text examines these.

I. THE SINGLE DOMINANT ORGAN POINT

A. In the Bass

The dominant organ point in the bass is by far the most common pedal usage. It can be regarded as a prolongation of the dominant harmony, and can be retained against harmonic elaboration in the upper parts, as:

Chromatic Parallel

Dominant organ point

Dominant organ point

C: ii⁷ - - - V V^oF V⁷ - I F I - V - I

"Cycle"

Dominant organ point

C: I - V^oF - [V^oF II V^oF V V I [V]

The above examples represent brief elaborations of V, but the organ point may be of any duration, as:

C: V¹¹ V^{b5} I

This is rather more a sustained root of V than it is a dominant organ point, but the arpeggiation of the 9th, 11th, and 13th of V create the impression of a "D minor" or "F" chord against a G organ point.

The dominant organ point in the bass will invariably end on some form of the V chord, but it may begin on the I chord. Necessarily, this creates a " I_4^6 " chord, and the passage that uses the organ point can be regarded as an extension and elaboration of the " $I_4^6 - V$ " formula, as:

This: " $I_4^6 - V$ " becomes: " I_4^6 - - - - - V"

Elaboration material above
sustained dominant

To illustrate:

DOMINANT ORGAN POINT

C: I_4^6 - - - bvi - IV of bvi bvi b^3 - V^{b5} - I - - -
(" I_4^6 - - - - - V ")

The organ point may become a more significant element of the passage through rhythmic and/or melodic decoration and variation. To illustrate:

1. A sustained organ point may be broken into rhythmic patterns, as:

This: could become: etc.

or: etc. or: etc.

2. Octave leaps may be used, as:

This: could become: etc.

or: etc. or: etc.

3. The organ point may be decorated melodically, as:

This:  could become: 

or: 


Caution: The more elaborate and decorated the organ point is, the less active the accompanying parts should be!

Here is an example illustrating the use of a decorated dominant organ point in the bass. The ornate nature of the organ point, plus the fact that it is established before the other parts enter, gives it a significance that suggests it being properly termed an "ostinato".

Chromatic parallel harmony

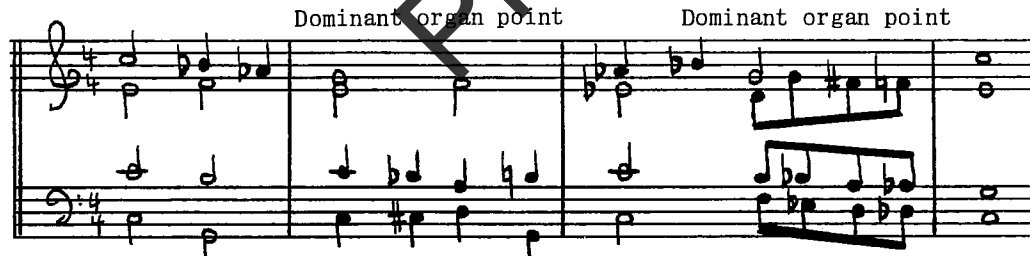
B^b A A^b G

I buii I



B. The dominant organ point may occur in the Soprano either briefly, as:

Dominant organ point Dominant organ point



C: I V⁷ I vii^{oF} ii V⁷ bui⁶ V----- I

Chromatic parallel

or the dominant organ point in the soprano may be of longer duration and achieve more significance through rhythmic and/or melodic embellishment, as:

*(embellished dominant organ point in soprano)

F: I viioF ii bii^{+b} of ii ii - bii^{+b} - I - biii bii [I]

Exact parallel

C. The dominant organ point may be used in an inner part, either briefly, as:

*(Dominant organ point in tenor)

C: I IV bii^{+b} I

or it may be of longer duration, and achieve more significance through rhythmic and/or melodic embellishment, as:

*(embellished dominant organ point in alto)

C: I b vii^{b3b} b vi^b b vi^{b3b} I b ii P.H.R.V I

II. THE SINGLE TONIC ORGAN POINT

Introductory:

The overall principles relevant to the use of the tonic organ point are not substantially different than those concerning the dominant organ point. However, it is worth noting that the tonic organ point is somewhat less flexible, and tends to "clash" more often. The dominant is reasonably compatible with all of the scale chords and their modal variants, but the tonic (because of its innate "rigidity") can sometimes be harsh when combined with those chords which normally lead into it, such as V⁷, vii, and bii^{+b}. (This is an observation only, and is not to be interpreted as a "direction".)

A. In the Bass

The tonic organ point in the bass can be regarded as a prolongation of the tonic harmony. Its most common use is the familiar "Pedal IV_4^6 " formula ("I - IV_4^6 - I"), as:

C: I IV_4^6 I

Its use can be extended well beyond this, however.

It may be brief, as:

C: I - - I b_7 b_5 b_3 V b_9 - I

or it may be of longer duration and achieve significance through rhythmic and/or melodic embellishment, as:

C: I b_{vi} b_3 I V b_{ii} b_{vi} V I

Cmi: I b_{ii}^{+6} I $[IV=F\#vi]$ b_{ii} b_{ii}^{+6} ui $Vmi.$ b_{ii}^{+6} I

B. The tonic organ point may be used in the soprano, either briefly, as:

Tonic organ point Tonic organ point

C: I buii b3 I V OF ii ii b5 V I⁶ I

"Opposed Scales"
 [Diatonic in alto
 Chromatic in tenor
 Chromatic in bass]

Note: The use of a sustained tonic at the end of a vocal solo is a familiar arranging use of the tonic organ point, as:

Vocal:

 (V) (I)

The band plays a short "codetta" against a sustained tonic in the voice.

or the tonic organ point in the soprano may achieve more significance through duration and embellishment, as:

Embellished tonic organ point _____ joins V here

F: I buii bui Vmi. V I

C. The tonic organ point may occur in an inner part, either briefly, as:

*(Tonic organ point in alto)

G: I bui V I

opposed chromatic scales
 in soprano, tenor, and
 bass

or the inner part tonic organ point may be of longer duration, with thematic significance, as:

*(embellished tonic organ point in alto)

F: I [biii] Chromatic Parallel I

opposed chromatic and Phrygian scales

III. THE "PASTORAL" ORGAN POINT (Tonic and Dominant in Combination)

A. At the Bottom

The Pastoral organ point is a more emphatic form of the tonic organ point. It acts as a *prolongation of the tonic chord*, with a very strong "key" feeling. The following example shows an elaboration of a final "I" chord, using a Pastoral organ point. (Note also, the dominant organ point in the tenor in bars 1 and 2.)

*Dominant organ point pattern in 4ths with chromatic scale

C: I - #I° - ii - V^{b5} I Pastoral organ point

Here is a longer example:

C: I - V^{op} IV IV V^{op} V - V - - - I

Sustained Pastoral organ point

The Pastoral organ point can be given, through duration and embellishment, more significance, as: (Five parts are used in the following example.)

Elaborated Pastoral organ point

C: I I buii I Vmi. I buii I

Further, the Pastoral organ point may be performed in only one voice line, as a "melodic" device. When used this way, it is called an "Alternating Pastoral Organ Point" and is still basically a tonic organ point. Here is an example where the bass is performing an "Alternating" Pastoral organ point:

Chromatic parallel harmony →

Alternating Pastoral organ point —————

C: I ii #ii° I ii V biii — — — — — I

^{of} ^{of}
 biii biii

- B. The Alternating Pastoral organ point (decorated or undecorated) may occur at the top, or in the middle. Observe the examples:

Embellished alternating Pastoral organ point in Soprano

Eb: I Chromatic parallel I vii° ii ii bii°+6 I

Embellished Alternating Pastoral Organ Point in alto

G: I vii° ii° bii I

IV. CHORDAL ORGAN POINT

The principles here are no different than in the other, more frequent, uses of organ point. **Chordal organ point** normally involves the tonic chord. An example from commercial practice is the sustained final tonic chord in a vocal group, while the orchestra performs a short codetta against it.

The chordal organ point may be a simple sustained chord, or the chord may be broken into an "arpeggio", perhaps with some decoration. The following examples should indicate possible avenues: (four parts are generally insufficient for this technique)

C: I bii^{+b} I $\overset{of}{\underset{vi}{ii}}$ $\overset{of}{\underset{vi}{V}}$ vi^{bs} $\overset{of}{\underset{vi}{V}}$ ii^{bs} $\overset{of}{\underset{vi}{V^{bs}}}$ I

$[ii^{bs} \overset{of}{\underset{vi}{V}}]$ $\overset{of}{\underset{vi}{V}}$

Sustained tonic chord organ point

C: I $\overset{of}{\underset{vi}{V}}$ $\overset{of}{\underset{vi}{IV}}$ $\overset{of}{\underset{vi}{IV}}$ $biii$ I

Embellished tonic chord organ point

F: I $\overset{of}{\underset{vi}{V}}$ $\overset{of}{\underset{vi}{V}}$ $\overset{of}{\underset{vi}{IV}}$ $\overset{of}{\underset{vi}{I}}$

[$\overset{of}{\underset{vi}{IV}}$ $\overset{of}{\underset{vi}{I}}$]

Arpeggiated tonic chord organ point

C: ii $\overset{of}{\underset{vi}{V^{b9}}}$ I

Sustained tonic chord organ point

V. OTHERS

The foregoing text presents the usual uses of the organ point, but it does not exhaust the possibilities. For instance:

Mediant organ points can be used, as:

Mediant organ point

C: ii V^{b9} I V^{ofii} ii^{b5} V I

Submediant Organ points can also be used, as:

*Submediant organ point

C: I #I° V^b V I (bvi) I

Chromatic parallel

These will likely be factors of the melody or upper parts rather than the bass.

The organ point is, clearly, a remarkably unrestricted device. Unrestricted, that is, except by the demands of musical taste and judgement. Its effect is to bind together the passage in which it occurs into a single harmonic unit; hence the fact that it most often occurs on the dominant or tonic.

It is not unusual to find organ points in the original harmonies of popular songs and modern composition shows liberal developments of the organ point into ostinato. Jazz often makes use of an insistent repeated pattern, not necessarily wedded to the harmonic progression.

Further exploration and research into the uses of organ point is advised.

ASSIGNMENT 83 (Organ Point)

1. Examine any available music, and listen for uses of organ point, particularly dominant and tonic organ points.
2. Write a number of short examples along the general lines of those in the text, illustrating:
 - a. Single dominant organ point in the bass
 - b. Single dominant organ point in the soprano
 - c. Single dominant organ point in an inner part
 - d. Single tonic organ point in the bass
 - e. Single tonic organ point in the soprano
 - f. Single tonic organ point in an inner part

In each of the above, show brief, prolonged, undecorated, and decorated organ points.

3. Write a number of short examples along the general lines of those in the text, illustrating the Pastoral organ point. Include examples with the Pastoral organ point used in a sustained form and in the "alternating" form in the bass and in upper parts. If necessary, use more than four parts.
4. Write a number of short examples along the general lines of those in the text, illustrating chordal organ point. Use more than four parts when necessary.
5. Experiment with mediant, submediant, and other organ points.
6. Review completed exercise material from any earlier assignments, with the idea of applying organ point, perhaps as a fifth part.
7. Write a composition for four or more parts, from 16 to 24 bars in length. Either use "Binary" form ("A" sentence - "B" sentence), "Ternary" form ("A" sentence - "B" sentence - "A" or modified "A" sentence) or some variation of either of these. Illustrate and exploit the organ point possibilities.

Chapter 10

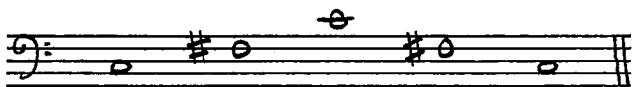
EQUAL DIVISION OF THE OCTAVE

("Symmetry of the Octave")

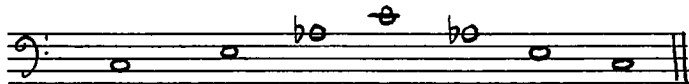
Introductory:

Any octave may be divided into 2, 3, 4, 6, or 12 equal parts, in ascending or descending direction. To illustrate:

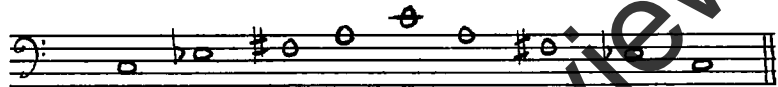
2 equal parts (tritones)



3 equal parts (major 3rds)



4 equal parts (minor 3rds)



6 equal parts (whole tones)

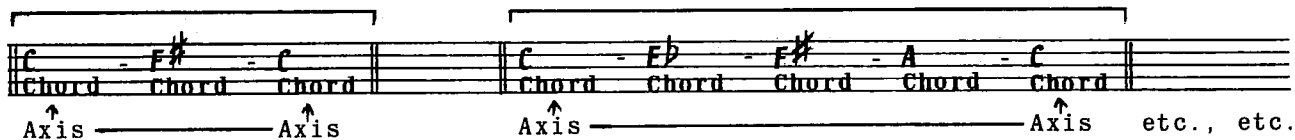


12 equal parts (12 tone scale)



Proposition:

A progression of harmonies may be based on a set of chords whose roots move through an equally divided octave. They will be held together, and achieve logic, because of the mathematical symmetry. The progression will have a sense of completion when the octave of the starting point is reached. The beginning and ending point is called the "axis", as:



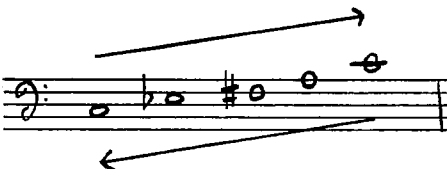
Details:

1. In practice, the most effective divisions are:

the two way, which outlines the tritone:



the four way, which moves in minor 3rds:

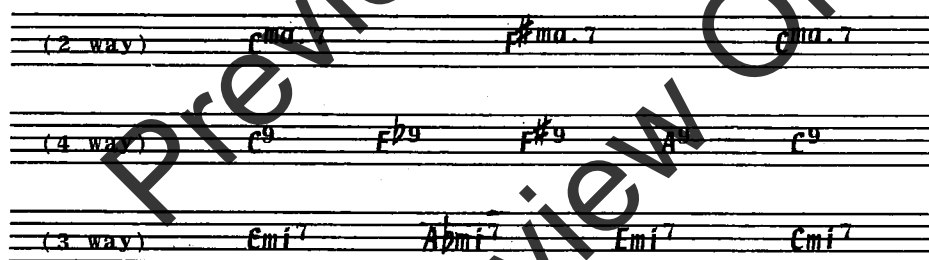


and the three way, which moves in major 3rds:

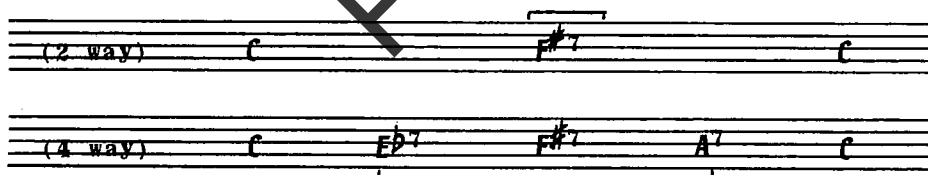


The six way division (whole tone scale) and the twelve way division (12 tone scale) are less forceful, and the duration of time required for their presentation (particularly in the case of the 12 way division) results in a loss of focus.

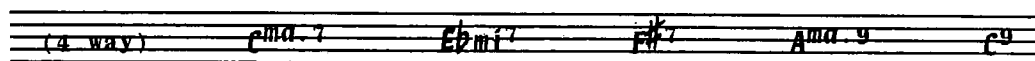
2. The type of chords used on the roots is a matter of choice. Similar structures will produce the greatest unity, as:



Similar "axis" chords, with some form of dominant structure for the intermediate chords, can also be effective, as:



It is quite possible to employ a mixture of chord types, as:



3. The unity and coherence in this harmonic device is the result of the mathematical relationship of the roots. It is NOT based on traditional scale and key relationships. Consequently, it is not possible to voice lead all parts in diatonic or chromatic scale intervals.

Although it IS possible for the soprano to conform to normal horizontal melodic practice, as:

Soprano diatonic in C major:

Chords: C, Eb, F#7b5, Ami.7, C

Soprano in C, with modal variants:

Chords: C, Eb7, F#9, A7b5, C

Soprano in C, with tonicization and chromaticism:

Chords: C, Eb7+5, F#7b5, A7, C

A little experimentation will show, however, that the supporting harmony parts for the above examples *cannot* move through C scale relationships.

Some Uses:

(As a few of the examples indicate, an organ point can be useful with an equal division progression.)

1. BRIEF "ELABORATIONS" OF A BASIC HARMONY, as:

C: V I Elaboration of I (Tonic organ point)

F: V I Elaboration of I (Tonic organ point)

As a variant of the above, note the possibility of contrary motion through an equally divided octave:

C: I V=ii ii Elaboration of ii with exact parallel harmony through an equal division. V^{b9} I

Elaborations of a basic harmony with an equal division progression are similar in intent and concept to "internal tonicization", and to developmental devices such as the Pedal $\frac{6}{4}$, etc. The basic harmony is enriched with material that leads back to the basic harmony.

2. BRIEF "SEQUENTIAL DIGRESSIONS"

Each chord of the equal division pattern can be regarded as occupying the same relative *scale position* as the “axis” chord. To illustrate:

The pattern will be repeated with the same scale relationship that the axis pattern has. To illustrate:

in C in A^b in E

C: I A^b: I E: I C: I

in C in G[#] in E in C

Dominant organ point

C: ii ^V [V¹¹] A^b bui E G[#]: bui C E: bui C: bui IV mi. Phr. V I

3. The equal division progression may be used as the plan for the key relationship in a more elaborate and extended modulating sequence passage. This type of sequential plan has the advantage of returning the music to the harmonic starting point. To illustrate:

in C in E \flat in G \flat in A in C

C: V I E \flat : V I G \flat : V I A: V I C: V I

in C in A \flat

C: ii V I V of \flat vii (V of ii in A \flat) A \flat : ii V I V of \flat vii (Enharmonic V of ii in E)

in E in C

E: ii V I V of \flat vii (V of ii in C) C: ii V I

4. ADDITIONAL MATERIAL

- a. "Incomplete" equal divisions can sometimes be useful and interesting, as:

Incomplete 4 way division of C (Reinterpreted as "V of ii")

Incomplete 3 way division of C (Reinterpreted as "V of vi")

- b. Other "symmetrical" harmonic progressions will work. Examples:

"Whole Tone - Half Tone" Patterns

mi. 2, mi. 3, mi. 2, mi. 3, mi. 2, mi. 3 Perf. 4 down, minor 2nd up, etc.

ma. 3, mi. 3, ma. 3, mi. 3, etc.

The student should explore and experiment further with this proposition.

ASSIGNMENT 84 (Equal Division of the Octave)

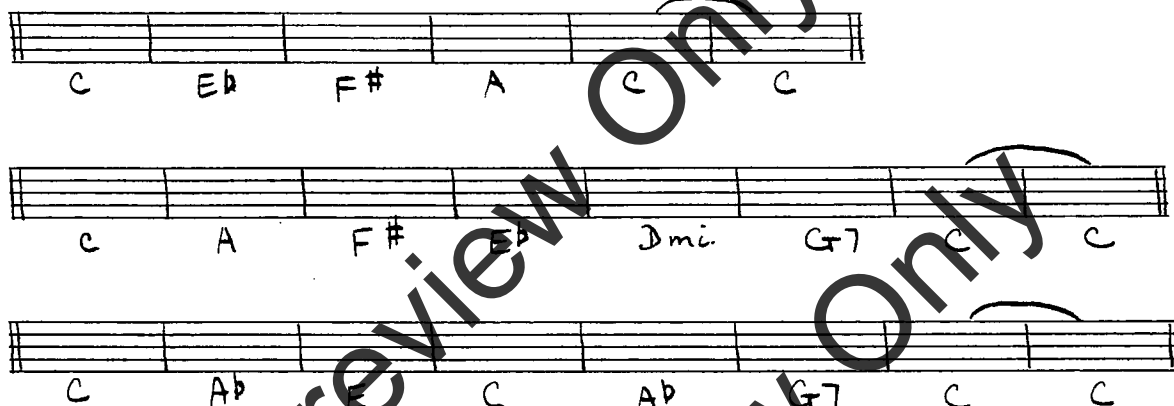
1. Examine various equal division and symmetrical progressions at the piano. Take a sentence or a phrase from any standard melody and experiment with harmonizations based on equal division techniques.

2. Take a few basic progressions such as:



and work them for four parts, using the equal division of the octave technique as a means of elaborating one or more of the basic chords.

3. Work out a passage using an equal division of the octave, or incomplete equal division of the octave, as the basic progression, as:



4. Work a short composition, minimum of 16 bars, which exploits the equal division idea as the harmonic plan for a modulating sequence, or in any other use. You could perhaps incorporate an organ point.

Chapter 11

MODULATION

Note: Modulation is not itself a particular or specific type of harmony. It has been left to this late point in the text because almost any form of harmony in tonality can be used for modulation purposes, and not because its problems are unique or difficult.

Definition:

Modulation is a change of key through a change of tone center. (For instance, a modulation from C to D \flat is a matter of directing the musical materials in such a way that the C ceases to sound like a *tonic* and begins to sound like a *leading tone*.)

Purposes:

1. VARIETY

Modulation is one of the chief devices of "contrast" in music. In a work of any length, composers and arrangers often find that a modulation is desirable to avoid monotony. This is particularly so if the basic harmony of the work is relatively simple and diatonic, and less so if it is more complex and extended.

2. RANGE CONSIDERATIONS

Arrangers often find it necessary to modulate in order to procure a more favorable key for a vocalist or instrumentalist.

Comment:

The writer never faces an isolated problem of modulation between two keys. It is always a problem involving a change of key *between one passage of music and another passage of music*. Therefore, the success of the modulation depends not only on the actual change of key but also on the organic relationship of the modulation to the whole work! Consequently, exercises in modulation, while technically necessary, are generally musically meaningless and unconvincing, since the true effectiveness of the modulation can only be assessed with reference to what preceded it and what follows it.

Considerations:

1. RHYTHM

A modulation will coincide with either the end or beginning of a phrase, sentence, or other rhythmic grouping. Harmonies of a modulatory nature which occur in the body of a passage are generally heard as "extended tonality" through tonicization rather than as actual modulation.

2. MELODY

More modulations are less than effective for lack of attention to the melodic line than for any other reason. In order to fulfill the aim of a modulation, the melody must do one of two things. It must either:

- Itself modulate, completely removed from any consideration of harmony. This would, of course, be necessary in situations (relatively infrequent) where the writer desires to perform the modulation with only a single unaccompanied line. Even in situations where a good modulatory harmonic progression is being used, the presence of a modulating melody will be, at the very least, an important advantage. OR,
- It must be ambiguous. That is, it must be constructed in such a way that it could logically exist in either key. Such a melody will not modulate by itself, of course, but if the modulatory harmonic progression is successful, the ambiguous melody will not be in conflict with the ultimate destination of the modulation.

(The student will note that one of the main differences between Tonicization and Modulation is the melody factor. In extended tonality through tonicization, the melody normally remains related to the scale of the main key - with the tonicization being harmonic color. In other words, the melody, as a rule, does not modulate. In full modulation, the melodic considerations are quite different.)

In constructing the melody of a modulation, the following suggestions may be helpful:

From the very outset of the modulation, conceive the melody in terms of the new scale. Do not spend time merely reiterating the relationships of the old scale; otherwise you may find yourself having to make an abrupt or clumsy switch near the end of the modulatory passage. This clumsiness can be avoided by using the notes of the old scale as they would regularly be used in the destination scale. To illustrate:

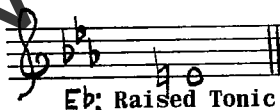
If the modulation were from "C" to "Eb" at the beginning of the modulatory melody use:



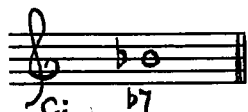
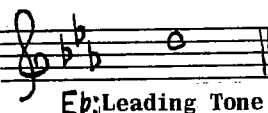
as if it were:



as if it were:



as if it were:

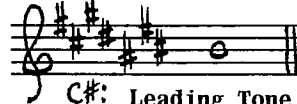


as if it were:



etc., etc.

This same advice will hold no matter what two keys are involved, even to the extent of enharmonic reinterpretation, as:

Modulation from "C" to "C#", treat:  as if it were: 

At some point, a note which is altered in the first key will appear. The familiar advice with respect to altered notes still holds, i.e:

If the first note in the new key is a raised note in the old key, it is better to avoid *leaping up* to it; and if it is a lowered note in the old key, it is better to avoid *leaping down* to it.

When the new scale has been entered smoothly, the next step is the definite establishment of the new key. Here are a few relationships which may help to do this: (The examples assume the Key of C to be the *destination key*.)

Dominant-Tonic movements:



Tonal tritone outlines:



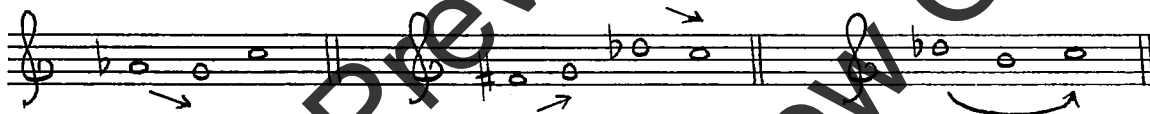
Ascending upper tetrachord:



Descending lower tetrachord:



"Leading" movements that stress the dominant and tonic relationship as:



(No one of these things need be as "bald" as presented above. Judicious decoration will add subtlety.)

If the new key is reached before the end of the proposed modulatory passage, all the better, since time will be left to establish it. Furthermore, the more distant the key, the more such time will be welcome.

Here are a few short modulatory melodies, to illustrate the process:

C major to E \flat major: 

C major to E major: 

C major to G major:



C major to B \flat major:

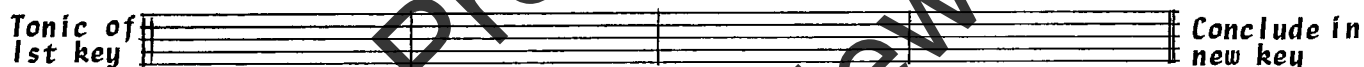
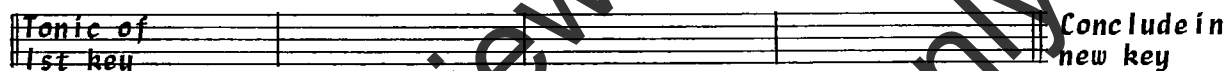


C major to F \sharp minor:



ASSIGNMENT 85 (Melodic Modulation)

Write melodic modulations (single line only, no harmony), of varying mood and character - some with eighth notes or shorter and some more sedate. For convenience sake, one of the following plans (while not obligatory) will suffice:



A frequently used plan in arranging (e.g., between one chorus and the next)

(In practice, of course, the tonic of the first key will have been preceded by material in that key and the conclusion in the new key will likely be followed by material in the new key.)

SUGGESTED KEY CHANGES:

Major to Major

Cma - Fma
Fma - Cma
B \flat ma - Cma
E \flat ma - Dma
A \flat ma - Fma
D \flat ma - Ama
Gma - D \flat ma
B \flat ma - Dma
Dma - Fma
Dma - E \flat ma

Minor to Minor

Dmi - Gmi
Gmi - Dmi
Ami - Gmi
Cmi - Bmi
Fmi - Dmi
Dmi - B \flat mi
Ami - E \flat mi
Fmi - Ami
Ami - Cmi
Emi - F \sharp mi
Bmi - Cmi

Major to Minor

Gma - Emi
Cma - E \flat mi
Fma - Cmi
Gma - Fmi
Dma - Gmi
B \flat ma - Cmi

Minor to Major

Gmi - Ema
Emi - Bma
Ami - Cma
Fmi - E \flat ma
Cmi - Ama
B \flat mi - Cma
E \flat mi - Ema
Cmi - Bma

3. HARMONY

General Directions:

Aim for a "subdominant function" chord, or a chord preceding a subdominant function chord, of the new key. This will guarantee at least three chords from the new key (subdominant function - dominant function - tonic), which can be regarded as a fair *minimum*.

Primary and basic progressions will usually serve the modulation best. Too much Modal or Chromatically altered harmonies may cloud the issue or defeat the purpose. This is not to say that a little harmonic subtlety should not be used, but a progression of colorful harmonies that could be effective in *established* C major may not be so effective in *establishing* C major!

The use of "I₄⁶ - V" instead of just "V" at the cadence is a traditional method of adding further emphasis to the new key.

Show concern for the melodic as well as the harmonic aspect of the BASS line. If the two outside voices consummate a convincing and smooth modulation in themselves, the problem is virtually solved.

Do not forget "accidentals". The new key area is usually reached before the actual change of key signature, and accidentals are necessary until the signature changes.

Specific Techniques:

(No attempt will be made here to list and examine every possible device which has been and can be applied to modulation. Most modulation harmony will fall, at least generally, into some one of the following methods.)

A. The "Pivot Chord" Modulation

A "Pivot Chord" is a chord which is arrived at in one key and left in another. The Pivot Chord technique is the fundamental modulation principle and nearly all modulations are directly or indirectly derived from it. To this point the text has introduced:

Diatonic Chords
Modal Variants
Tonicization
Chromatic Chords
Parallel Harmonies, etc.

A moment's reflection will show that, from one process or another, any chord can appear in any key! It follows, then, that any chord can function as a pivot chord between any two keys!

Rather than leave the student with only this broad concept (although there is a strong and attractive temptation to do so), it is wise to conduct a specific inquiry into at least some of the pivot chord types.

1. THE COMMON CHORD PIVOT

This will be a chord which is found *diatonically* in both keys. Common chord pivots are available only between keys with no more than two accidentals difference in the signature (e.g., there are no common chords between C major and E \flat major or beyond, and no common chords between C major and A major or beyond).

Examples:

Between C major and F major (1 accidental difference):

C	[C: I F: V	Dmi	[C: ii F: vi	F	[C: IV F: I	Ami	[C: vi F: iii
---	----------------	-----	------------------	---	-----------------	-----	-------------------

Between C major and B \flat major (2 accidentals difference):

Dmi	[C: ii B \flat : iii	F	[C: IV B \flat : V
-----	----------------------------	---	--------------------------

Between C major and G major (1 accidental difference):

C	[C: I G: IV	Emi	[C: iii G: vi	G	[C: V G: I	Ami	[C: vi G: ii
---	-----------------	-----	-------------------	---	----------------	-----	------------------

Between C major and D major (2 accidentals difference):

Emi	[C: iii D: ii	G	[C: V D: IV
-----	-------------------	---	-----------------

The pivot chord provides a point of entry into the new key. Get to it smoothly in the old key and proceed from it smoothly in the new key. Lead to a logical and firm "3 chord" cadence progression in the new key.

Here are a few examples of modulations using Common Chord Pivots. (Chord symbols only are used, which means that this is only part of the picture. All of these will work, but any one of them could be invalidated in its working out by inattention to, or poor handling of, melodic, rhythmic, and voice leading considerations.) The pivot chords are marked with asterisks. Note the possibility of a *pivot area* involving more than one pivot chord.

C major to G major:

Directly:

* C	D \flat	G		* C	* Ami	D \flat	G
C: I		I		C: I	vi		I
G: IV	V			G: IV	ii	V	

More elaborately:

* C	B \flat	* C	D \flat	G	* Ami	G \flat ₄	D \flat	G
C: I	vii	I		I	ii	I \flat ₄	V	I
		G: IV	V					

—Deceptive—

* C	* Ami	G \flat ₄	D \flat	Emi ^{7b5}	F \sharp ^{o7}	G
C: I	vi	I \flat ₄	V	Dor. vi	vii ^{o7}	I
G: IV	ii					

—Deceptive—

* C	* Emi	Emi	D \flat	E \flat	A \flat	D \flat	G
C: I	iii	IVmi	V	bvi	bii	V	I
G: IV	vi				(N \flat ?)		

C minor to A \flat major:

Cmi: I	iii	IV	IV	V	I
	A \flat : V	vi			

C major to E minor:

C: I	V	vi ⁷	Emi ⁶ ₄	V	I
Emi: vi	iii	IV ⁷	I ⁶ ₄		

ASSIGNMENT 86 (Common Chord Pivot Modulations)

1. List the possible Common Chord Pivots found in the following keys:

B \flat ma and E \flat ma
Dma and A \flat ma
Bmi and E \flat mi
E \flat ma and Gmi

2. Using one or more of the plans suggested in the exercises on Melodic Modulation (Assignment 85) work out modulations using Common Chord Pivots from:

F \sharp ma to Bma
B \flat ma to Fma
Cma to Dma
Fma to E \flat ma
Dma to Emi
Gmi to Fma
Dmi to Cmi

In each case, give *two* examples:

- a. With symbols only
- b. Worked out in four parts

Use one or two chords per bar, or a combination thereof.

Use a different progression for each example. If the four part example is elaborate, for instance, use a more direct approach for the symbol example, or vice versa.

Use a different type of texture, mood, and tempo in each of the four part illustrations.

3. Examine any available music, and listen for examples of modulations of all types.

2. MODAL PIVOT CHORDS

The Modal Variants of the Mixed Mode process may be used as pivots. This enormously increases resources and, in fact, makes any key change possible.

Details:

- a. When moving to a "flatter" key, a modally altered chord in the first key can be reinterpreted as a Diatonic chord in the second key. To illustrate:

Between C major and E \flat major:

E \flat [C: \flat iii E \flat : I	Fmi [C: IVmi E \flat : ii	Gmi [C: Vmi E \flat : iii	A \flat [C: \flat vi E \flat : IV
B \flat [C: \flat vii E \flat : V	Cmi [C: Imi E \flat : vi	D 0 [C: ii $^{\flat 5}$ E \flat : vii	

- b. When moving to a "sharper" key, a diatonic chord in the first key can be reinterpreted as a Modal Variant in the second key. To illustrate:

Between C major and A major:

C [C: I A: \flat iii	Dmi [C: ii A: IVmi	Emi [C: iii A: Vmi	F [C: IV A: \flat vi
G [C: V A: \flat vii	Ami [C: vi A: Imi	B 0 [C: vii A: ii $^{\flat 5}$	

- c. A Modal Variant in the first key can be reinterpreted as a different Modal Variant in the second key. To illustrate:

Between C major and F major:

D \flat [C: \flat ii F: \flat vi	B \flat mi [C: Phrygian vii F: IVmi	etc., etc., etc. (find others)
--	---	--------------------------------

Between C minor and A major:

Cma [Cmi: Ima A: \flat iii	Dmi [Cmi: Dorian ii A: IVmi	etc., etc., etc. (find others)
----------------------------------	---------------------------------	--------------------------------

- d. To simplify notation, or to unearth a pivot chord between distant keys, *enharmonic change* can be handy. To illustrate:

Between C major and G \flat major:

G [C: V G \flat : \flat ii (i.e., "A $\flat\flat$ ")
--

Between A \flat major and E major:

F \flat [A \flat : \flat vi E: I (i.e., "E")
--

Between C major and F $^\sharp$ major:

D \flat [C: \flat ii F $^\sharp$: V (i.e., "C $^\sharp$ ")

The procedure with Modal Pivots is the same as it is with the Common Chord pivot, i.e: move smoothly to the proposed pivot chord, which becomes the point of entry into the new key. Follow it with a logical harmonic progression in the new key, making sure that enough time, and sufficient chords, are allotted to establish the new key firmly. Examples of modulations using Modal Variants as pivot chords could fill a book. Here are a few symbol examples to illustrate the process:

C major to E^b major:

C: I V of IV IVmi Eb: ii I⁶/₄ V I

C major to A major:

C: I IV vii A: bvi ii^{b5} V bvi I⁶/₄ V I

C major to F major:

C: I V of bvii bvii³ F: IVmi bii⁺⁶ I — Exact Parallel — I

C major to C[#] minor:

C: I ii C[#]mi: Ima V V I — 4 way equal division — I

3. DOMINANT STRUCTURES AS PIVOT CHORDS

a. The Dominant chord in Key 1 may be left as a *Secondary Dominant* in Key 2. To illustrate:

C: I V B^b: V of ii ii V I

C: I V E^b: V of vi vi ii bii⁺⁶ I

- b. A Secondary Dominant of Key 1 can be reinterpreted as a Secondary Dominant in Key 2.
To illustrate:

*
C: I V of V F: V of ii ii V I C: I ii of bvi V of bvi Gb: V of ii ii V I
*
C: I ii of biii V of biii V of ii ii I₄⁶ V I
*
C: I V of bii B: V of ii ii V I

- c. An "Augmented 6th" chord in Key 1 may be enharmonically reinterpreted as a Dominant structure. To illustrate:

$D\flat^{+6}$ (bii^{+6} in C) = $D\flat^7$ (or $C\sharp^7$), which can be left as a Dominant or Secondary Dominant.
 F^{+6} (IV^{+6} in C) = F^7 which can be left as a Dominant or Secondary Dominant.
 $A\flat^{+6}$ (bvi^{+6} in C) = $A\flat^7$, which can be left as a Dominant or Secondary Dominant.

- d. A Dominant or Secondary Dominant in Key 1 can be enharmonically reinterpreted as an Augmented 6th chord on a different degree in Key 2. To illustrate:

G^7 (V in C) = G^{+6} $\left[\begin{array}{l} F\sharp \text{ or } F\sharp mi: bii^{+6} \\ D: IV^{+6} \\ B \text{ or } Bmi: bvi^{+6} \end{array} \right]$ D^7 (V of V in C) = D^{+6} $\left[\begin{array}{l} C\sharp \text{ or } C\sharp mi: bii^{+6} \\ A: IV^{+6} \\ F\sharp \text{ or } F\sharp mi: bvi^{+6} \end{array} \right]$
 C^7 (V of IV in C) = C^{+6} $\left[\begin{array}{l} B \text{ or } B\flat: bii^{+6} \\ E: IV^{+6} \\ E \text{ or } Emi: bvi^{+6} \end{array} \right]$

- e. And, further, an Augmented 6th chord on one degree in Key 1 can be reinterpreted as an Augmented 6th chord on a different degree in Key 2. To illustrate:

$D\flat^{+6}$ (bii^{+6} in C) = $A\flat: IV^{+6}$ F^{+6} (IV^{+6} in C) = $E \text{ or } Emi: bii^{+6}$
 $F \text{ or } Fmi: bvi^{+6}$ $A \text{ or } Ami: bvi^{+6}$
 $A\flat^{+6}$ (bvi^{+6} in C) = $G \text{ or } Gmi: bii^{+6}$
 $E\flat: IV^{+6}$

4. FURTHER PIVOT CHORD POSSIBILITIES

A Diminished 7th chord (either vii^{07} of the key, or one arrived at chromatically - such as $\sharp i^{07}$, $\sharp ii^{07}$, etc.) can be enharmonically reinterpreted, as:

$B^{07} = D^{07} = F^{07} = G\sharp^{07}$
 $[E\sharp^{07}]$

To illustrate:

*

*

An Augmented chord, or Whole Tone grouping, can be enharmonically reinterpreted, as:

C+ = Ab+ = E+

To illustrate:

*

ASSIGNMENT 87 (Modal, Dominant, and other Pivots)

- Find and list the possible Modal Pivot Chords between the following keys:

Fma and Abma
Gma and Ema
Cmi and Dmi
Gma and Cmi
Dma and Gma

- Find and list the possible Enharmonic Pivot Chords between the keys of:

D#ma and Ama
Fma and F#ma
Ebma and F#mi

- Using any version of the plan suggested in earlier exercises, work out modulations using Modal Pivot Chords from: and, with Enharmonic pivot chords, from:

Fma to Abma
Gma to Fma
Dma to Bbma
Ama to Bbma
Gma to Ema
Fma to Ama
Fma to Ema
Cma to Fma

Fmi to Ami
Gmi to Emi
Gmi to Ami
Dmi to Gma
Fmi to Gma
Gma to Cmi
Dma to Cma

Bbma to F#ma
D#ma to Dma
Ema to Ebma

Give two examples for each:

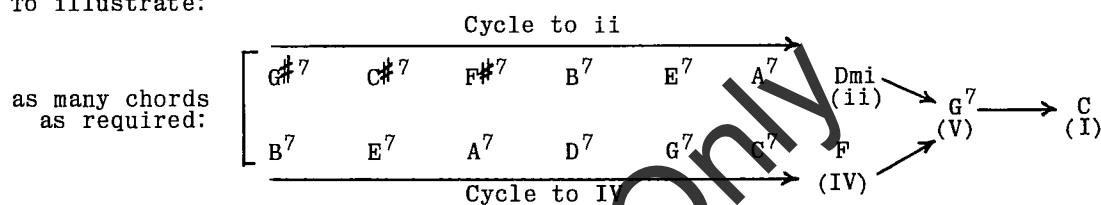
- With symbols only,
- Worked out in four parts

Use one or two chords per bar, or a combination thereof. Use a different progression for each example (i.e., make the four part example either more or less complex than the symbol example). Vary the texture and activity in the four part illustrations.

4. Write modulations, in symbols and in four parts, that use Dominant Structures as pivots, in any and all of the ways discussed in the text. Use any *predetermined* key changes and vary the harmonic avenues and textures. Use two bar, six bar, and eight bar plans, as well as the plans suggested for earlier exercises.
5. Write some modulations, if only in symbols, that use Diminished and Augmented chords as pivots.

B. The "Cycle" Modulation

The "cycle" of Dominant 7th structures, and derivatives, can be used for modulation purposes. Such modulations are not infrequent in popular arranging, although serious composition has not made extensive use of the cycle process, perhaps because it sounds somewhat obvious and trite. Nevertheless, a judicious use of inharmonics, etc., can infuse some interest into it. The procedure is simple: count back, from the proposed destination, the desired number of Dominant Structures, in the cycle - remembering that the destination should be a Subdominant Function chord of the new key rather than its tonic. (e.g., if the modulation is to C major, aim the cycle at a "Dmi" or "F" chord.) To illustrate:



The cycle is discussed under "Tonicization" (Chapter 4, page 139) and reference back to that area of the text is advised. The cycle can be modified in a number of ways, for instance:

1. Use of alternate Augmented 6th chords, creating a "half-tone cycle", as:

This: C⁷ - F⁷ - B^{b7}
 can become: C⁷ - C^{b7} - B^{b7}
 ↓ (Cb⁺⁶) ↓
 or: G^{b7} F⁷ F^{b7}
 (Gb⁺⁶) (F⁺⁶)

2. A "V" chord can be split into "ii - V" or "ii^{b5} - V", as:

This:: D⁷ G⁷ C⁷
 can become: Ami⁷ - D⁷ Dmi⁷ - G⁷ Gmi⁷ - C⁷
 or: Ami⁷^{b5} - D⁷ Dmi⁷^{b5} - G⁷ Gmi⁷^{b5} - C

3. Permutations involving both the "half-tone cycle" and the "ii - V" idea can be contrived, as:

This: D⁷ G⁷ C⁷
 can become: Ami⁷ - A^{b7} Dmi⁷ - D^{b7} Gmi⁷ - G^{b7}
 or: E^bmi⁷ - A^{b7} A^bmi⁷ - D^{b7} D^bmi⁷ - G^{b7}
 or: E^bmi⁷ - A^{b7} A^bmi⁷ - G⁷ D^bmi⁷ - C⁷

In any case, whatever form of it is used, the cycle creates an area of tonal ambiguity which is brought into focus with the appearance of a "subdominant function - dominant" of the intended destination key.

The repetitive nature of the cycle progression suits it to a sequential or semi-sequential treatment. The sequential repetition may be based on a "one chord" pattern moving up a 4th or down a 5th with each appearance, as:

(C major to A \flat major) — (Melodic sequence only)

[C] B \flat 7^{sus.4} B \flat 7 E \flat 7^{sus.4} E \flat 7 A \flat 7^{sus.4} A \flat 7 D \flat A \flat \flat E \flat 7 A \flat
 A \flat : V of IV IV I IV V I

More frequently, the sequence may be based on two chords of the pattern, as:

(C major to A \flat major)

[C] G7 C7 F7 B \flat 7 E \flat 7 A \flat 7 D \flat E \flat E \flat 7 \flat 9 A \flat
 A \flat : V of IV IV V I

C. The Sequential Modulation

The reader is requested to refer back to the text on "The Modulating Sequence" in Chapter 5, page 196. The procedure in a Sequential Modulation is exactly the same, except that a Modulating Sequence is an extension and enrichment of a basic key and returns to that key, but a Sequential Modulation is aimed at changing the key.

So the last appearance of the pattern (2 bar pattern, 4 bar pattern, 1 bar pattern, or whatever) will be *in the new key*. The final appearance of the sequential pattern may have to be modified so that it stops in its key, and it may be followed by a couple of bars of non-sequential material to establish the new key.

D. The Abrupt Modulation

This is, in truth, not a "modulation" at all, but simply an emphatic and immediate change of key. An abrupt shift of tonal center is in the "effect" category and will only be successful when the surprise value is in keeping with the context, and then only if not overdone.

Here are some ways an abrupt shift of key can be used:

1. Follow a phrase or sentence which is complete in itself with an immediate repetition at a new key level. Little or no concern need be shown for the voice leading or grammatical principles between the end of one section and the beginning of the next. To illustrate:

C: I I° ii^{bs} V^{bs} I D^b: I I° ii^{bs} V^{bs} I

D: I etc.

A two bar pattern is used in the above illustration, but the same process can be applied to four bar phrases or eight bar sentences. This example rises in half-tones, which is probably the most common shift, and is often used in arranging for a gradual psychological brightening. However, any interval relationship could be used. An abrupt lowering of the key (say in half-tones) could produce a gradual psychological depression.

2. The abrupt modulation can make use of the final tonic of the melody in Key 1 as the first note of the melody in Key 2, provided the first note is not the tonic of the key. In other words, a "deceptive cadence" is formed in which the final harmony of Key 1 is replaced with the initial harmony of Key 2. To illustrate:

G: V^oF V V A^b: I vi V^oF ii ii C: V A^b: ii V

Cadential approach in G Deceptive to tonic chord of A^b

Cadential approach in C Deceptive to ii chord in A^b

(The final tonic of the melody in G becomes the major 7th of the opening I chord in A^b.)

(The final tonic of the melody in C becomes the 9th of the opening ii chord in A^b.)

3. Any other situation where the psychological effect of a surprise key change could be musically valid, can make use of an abrupt modulation.

E. From time to time in arranging, a situation will arise where it is necessary to change key to a passage in which the opening chord is not "I" in the new key.

There is more than one way to cope with this problem but the safest and most reliable process is as follows:

1. Modulate to the key of the next area a bar or two before the end of the modulatory interlude, then
2. Use a leading chord or chords to the first chord of the new passage.

This assures that the new key is set up and that the first chord of the new passage is placed in its intended key relationship. To illustrate:

Problem: Modulation from E \flat major to C major, with the first chord of the new passage being "ii" (Dmi).

Two solutions:

The first staff illustrates a modulation from E \flat major to C major. It starts with E \flat : I (F \flat), then modulates to C major through F major (Fmi, C \sharp ₄, G \flat ⁷, C). The final chord is Dmi (ii) in C major. The second staff illustrates a modulation from E \flat major to C major using a chromatic parallel. It starts with E \flat : I (F \flat), then modulates to C major through F major (G \flat mi \flat ⁷, Fmi \flat ⁷, Fmi, E \flat mi \flat ⁷, Dmi \flat ⁷, E \flat , C). The final chord is Dmi (ii) in C major.

ASSIGNMENT 88 (Modulation Concluded)

1. With either a four, six, or eight bar plan write a few modulations between *predetermined* keys using the *cycle* in any of its forms or modifications. While sequential, semi-sequential, or at least melodically sequential treatments are particularly adaptable, they are not essential. Some examples in four parts, and some with symbols only should be done.
2. In any convenient length, write a few modulations between *predetermined* keys using the "sequential modulation" technique. Create a few symbol sketches and then work some out in four parts, with varying texture and activity.
3. Experiment with *abrupt* and *surprise* modulations at the piano and with written examples. Try the technique with standard melodies that end on a different scale degree than they begin, allowing the final note to be the first note of the next chorus.

4. Work out some symbol and some four part examples of modulations as follows:

From: Dma to Fma with the first chord of Fma to be "ii" (Gmi)
From: Fma to Cma with the first chord of Cma to be "V of ii" (A⁷)
From: B^bma to Gma with the first chord of Gma to be "bvi" (E^b)
From: Ami to Gmi with the first chord of Gmi to be "V" (D⁷)
From: Emi to Fma with the first chord of Fma to be "IV" (B^b)

5. Experiment with modulations that use less usual techniques, such as:

Equal Division of the Octave
Parallel Harmony
Opposed Scales
Etc., etc.

6. Write a number of four voice "Modulating Preludes" - i.e., short compositions in Ternary form ("A" sentence - "B" sentence - "Modified A" sentence).

Modulate, in the final bars of the "A" sentence, to a new key for the "B" sentence. The "B" sentence may remain in the new key or, possibly, incorporate a modulation to another new key depending on the tempo and the number of chords available in the established harmonic rhythm. In any case, the final bars of the "B" area will modulate back to the original key for the recapitulation of the "A" sentence.

Approach each Prelude with a different style and mood in mind. Regard this assignment as a "summing-up" of all of the material in the text, as well as an exercise in modulation. Write as many as is necessary to make use of:

Diatonic harmony in major and minor
Developmental 6's
Extended Tonality through use of Modal Variants, Tonicization, and Chromatic Harmony, and the Augmented 6th Chords
Sequences
Parallel Harmony, Opposed Scales, Organ Point, Equal Division of the Octave
All of the Melodic Inharmonics, with the decorative resolutions

EPILOGUE

The student who has gained technical and aural facility with the materials of this book and of Volume I will have a good knowledge of the theory and technique of tonal harmony. The twelve tone systems, serial techniques, and the whole field of traditional and modern counterpoint remain to be investigated, but the procedures examined in these two volumes provide ample resources for modern applications of tonal harmony.

The student who has come this far in his studies will be eager to make a practical use of the knowledge, and to hear some of his music coming back at him. He will find that practical application often requires modification of theory, but he will also find that modern orchestration is more remarkable for its similarity to traditional four part writing than for its differences. In many years of teaching experience, I have found that the problems which experienced arrangers often encounter - the problems which lead them back to further study - are invariably the result of an insufficient understanding of all or some of the basic principles of harmony and voice leading. Insensitive voice leading and poor correlation of parts are, in fact, the most frequent causes of inferior orchestration. The foundation which these two volumes aim to provide will place the student in the most favorable position for an examination of practical writing.

The text, "Modern Arranging Technique", is designed to follow directly from this point. It deals with the practical application of the procedures of the theoretical techniques and includes a full examination of the instruments, the procedures of "sectional" writing, the idiomatic rhythms and variations of jazz and popular music, along with a full investigation of background writing and orchestration. Comprehensive exercise material is included.

It is hoped that the student will continue into "Modern Arranging Technique" but no matter what method he uses for continuing his studies, he can be sure that the time and effort he has spent in becoming acquainted with basic harmonic materials will never be regretted.

SAMPLE SOLUTIONS TO THE ASSIGNMENT EXERCISES

In no case is the given solution the only correct possibility and, particularly in the later examples, the sample solution is not to be regarded as the *best*. Even in the early assignments there are many possible solutions, and in the more advanced areas of the study any one problem can be solved in an almost limitless number of ways.

Therefore, each of these sample solutions should be regarded as *representative only*. Nevertheless, the student may profit from a close examination of each. He should attempt to "hear" the music mentally, and he should bring an inquiring and critical eye and ear to the voice leading, the voicings, and the rhythmic balance.

He should observe the consistency of style in each solution (all of the examples are not in the same style and the student may very well disapprove of the style in some instances) and he should note the means through which the consistency is retained. Finally, he should attempt to find the *musical reason* behind the handling of the technical details.

ASSIGNMENT 42

3b.

ASSIGNMENT 43

2d.

An economical solution.
There are many others.

Dmi: I I⁷ IV⁶ I⁷ IV⁶ I⁷ N⁶ V⁷ I

5.

C: bii I⁶ V I ii⁷ bii⁷ I⁷ vi⁶ N⁶ V I^b ii⁷ bii⁷ I

2b.

ASSIGNMENT 44

G: I ii⁷ vii⁰⁷ I bvi V I^b IVmi bvi⁷ bii^b I

*An unusual use of both major and minor 7th. Each is performing a different function and each is accurately resolved, and the situation is very brief.

2c.

ASSIGNMENT 45

Vmi⁶

I^b bii^b bvi PHR I^b I

ASSIGNMENT 46

2b.

[Vmi⁷] [V^b₄] [bvii^b] [I^b] [V^b₄]

[V^b₄] [bvii^b] [bvi^b] [bvii^{b3}] [PHR V] IVmi⁶ I -

ASSIGNMENT 47

3.

[Mixo-Lyd]

I^2 $IVmi^b$ Imi^b bii^b $biii^b$ $Imi.$ bii $biii$ $IVmi\ bii^7$ I

ASSIGNMENT 48

3.

A Diatonic version:

C: I vi^b ii I^4 V^7 I

Variants:

C: I^b $DOR\ vi^4$ ii iib^b Imi^b Vmi^7 $I - IV^4 - I - IV^b I -$

C: $IVmi^4 I$ bui^b - iib^b $I^4 V^7$ Imi $iib^b\ bii$ I

C: Imi bui^b $N^b\ Imi^4\ PHRY^7$ Imi $IVmi^4\ bui^b$ $I\ [ma-]$

etc., etc., etc.

ASSIGNMENT 50

3a.

Chord symbols: $G: I \text{ } ii^7 \text{ } bii^{+6} \text{ } I^7$ $G: I \text{ } ii^7b^{(7)} \text{ } bii^{+6} \text{ } I$ $G: I \text{ } ii^2 \text{ } bii^{+6} \text{ } I$

Chord symbols: $G: I \text{ } bii^7 \text{ } bii^{+6} \text{ } I^7$ $G: I \text{ } ii^7b^{(7)} \text{ } bii^{+6} \text{ } I$

Labels: [Mixo-Lyd] [Ger.-tr.]

etc., etc.

3f.

Chord symbols: $D: I^6 \text{ } Imi^6 \text{ } bii^{+6} \text{ } ii^7b^{(7)} \text{ } bii^{+6} \text{ } Imi^6 \text{ } ii^7 \text{ } bii^{+6}$

Chord symbols: $I \text{ } vi^6(7) \text{ } IV^6(mi^7) \text{ } bii^{+6} \text{ } I \text{ } ii^7 \text{ } Imi^6 \text{ } bii^7 \text{ } I$

Label: [M.L.]

ASSIGNMENT 51

2b.

Chord symbols: $C: I - IV \text{ } IV^{+6} \text{ } I \text{ } IV \text{ } IV^{+6} \text{ } I - ii^6 \text{ } IV^{+6} \text{ } I$

(This assignment is continued next page)

Assignment 51 (cont'd)

3.

D: I^b ii^b IVmi^{+b} I ii^b IVmi^{+b} I ii^b IVmi^{+b} I
[FR.] [FR.]

ASSIGNMENT 52

1a.

1c.

3a.

I ii^b bui^{+b} I

ASSIGNMENT 53

4.

G: I ii⁷ bui^{+b} I^b ii⁷ bii^{+b} I I^b IVmi bii^{+b} I

or:

[FR.]

or:
etc., etc.

G: I buii IVmi^{+b} I ii^{bs6(b)} bii^{+b} I ii^{bs7} PHR. IVmi^b I
V₆

ASSIGNMENT 54

Group 1. b.

Ami: I V⁷ I ii V⁷ I IV₄ Ima.

Ami: I vii^{°7} I IVma. bii⁺6 [FR.] I IV₄₋₆ Ima.

Group 2. Problem 3.

ASSIGNMENT 55

Group 1. a. (simple)

ii² vii^{°7}

c. (richer)

E^b: I ii iib⁵(7) V I IVmi.₄ I

Assignment 55 (cont'd)

Group 1. (cont'd)

d. (fairly rich)

Exercise d. (fairly rich) is a short piece in 4/4 time, key of D minor. It consists of two staves. The melody is in the treble clef, and the bass line is in the bass clef. The notation includes various chords and intervals, with a final cadence. The chords are labeled below the staff: Dmi: I, V^{b(7)}, I, ii⁷, V⁷, Ima⁷.

f.

Exercise f. is a short piece in 4/4 time, key of D minor. It consists of two staves. The melody is in the treble clef, and the bass line is in the bass clef. The notation includes various chords and intervals, with a final cadence. The chords are labeled below the staff: ii^{b5b(7)}, V⁴, [V^b] I, vi⁷, vi^{b5b}, ii⁽⁷⁾, ii⁷, V⁷, I, V^b, I.

Group 2. a. (melody exercises)

Exercise a. (melody exercises) consists of two staves. The first staff is in 4/4 time, key of D major, and the second staff is in 3/4 time, key of D major. Both staves contain a single melody line with various intervals and rhythms, marked with asterisks to indicate specific exercises.

b. (problem 2)

Exercise b. (problem 2) is a short piece in 4/4 time, key of D major. It consists of two staves. The melody is in the treble clef, and the bass line is in the bass clef. The notation includes various chords and intervals, with a final cadence. The tempo is marked "Andante".

Exercise b. (problem 2) continues with a second system of two staves. The melody is in the treble clef, and the bass line is in the bass clef. The notation includes various chords and intervals, with a final cadence.

ASSIGNMENT 56

2b.

2c.

I⁹? DoR.vi⁴ ii⁹ V⁹ I⁹
iii⁷?

2f.

E^b: I⁹ V⁹ I⁹ V⁹ I⁹ V⁹ I⁹ V⁹ I⁹

*Acceptable and frequently used MINOR 9th on V in major. Here used for voice leading and warmth.

3b.

E^m: I⁹ V^{ma9} I⁹ IV⁹ V⁹ I⁹

*Less usual MAJOR 9th on V in minor. Here used for logical Musica Ficta.

*Usual MINOR 9th on V in minor.

ASSIGNMENT 57

2a.

F: ii¹¹ bii⁺⁶ I⁷ vi⁹ ii^{ma7} V⁷ I⁹ I^{mi7} ii¹¹ V^{b9}¹¹ I⁷

2b.

B^b: I¹¹ V¹¹ I¹¹ vi^{b5(11)} ii^{b5}⁶ V^{b9}¹¹ I¹¹

2d.

*Traditionally unusual use of Mixo-Lydian 7th on Final I.

3a.

G: ii¹¹ V^(b10) V⁷ I⁹ ii¹¹ V⁷ ii^{b5(b)} V¹¹ I^{ma.7}¹¹

ASSIGNMENT 58

2c.

ii⁹ V⁷^{b9}

Assignment 58 (cont'd)

2d.

*Acceptable use of appoggiatura with resolution tone struck simultaneously above it.

3.

A. 2a.

Irregular resolution of Minor 7th is justified by necessity and density of harmony.

B. 1.

ASSIGNMENT 60

Group 1.

1a. (fairly simple)



1c. (fairly rich)



1d. (rich)



1g. (fairly simple)



Assignment 60 (cont'd)

Group 2. b. (problem 3)

ASSIGNMENT 61

Group 1. 1b. (fairly simple)

1d. (rich)

1h. (fairly rich)

Assignment 61 (cont'd)

Group 2. a.

ASSIGNMENT 62

A. 2d.

Emi: I IV₄⁶ I V vii^{o7} I IV V⁶⁽⁷⁾ I V⁷ I⁹.

B. 2. (fairly ornate example)

P P P APP. RET. AUX. P P APP. APP. UNP. AUX.

TURN P APP. APP. P APP. ANT. AUX.

3.

ii² bvi⁷ I ii^{b5}₄ vii^{o7} I⁶ [I] ii⁷

I⁶ IV⁺⁶ IV^{mi}⁺⁶ I ii^{b5}₆⁽⁷⁾ I

(The basic progression used above is only one of a number of possibilities.)

ASSIGNMENT 63

2b.

G: I IV mi I V I

3c.

4b. (Simple)

4b. (more complex)

5. "Essential" notes:

ASSIGNMENT 64

2c. (slowly)

3b.

or:

etc.

Assignment 64 (cont'd)

4c. (fairly complex)

4c. (fairly complex) musical notation showing a complex melody in G major (one sharp) and a bass line with chords. The melody includes various intervals and a final cadence. The bass line features chords: G: bii⁷, bii⁺b [FR.], I, ii, ii^{b5}, V, I.

4d. (simple)

4d. (simple) musical notation showing a simple melody in G major (one sharp) and a bass line with chords. The melody includes triplets and a final cadence. The bass line features chords: G: bii⁷, bii⁺b [FR.], I, ii, ii^{b5}, V, I.

5.

5. musical notation showing a melody in G major (one sharp) and a bass line with chords. The melody includes triplets and a final cadence. The bass line features chords: G: bii⁷, bii⁺b [FR.], I, ii, ii^{b5}, V, I.

ASSIGNMENT 65

2a.

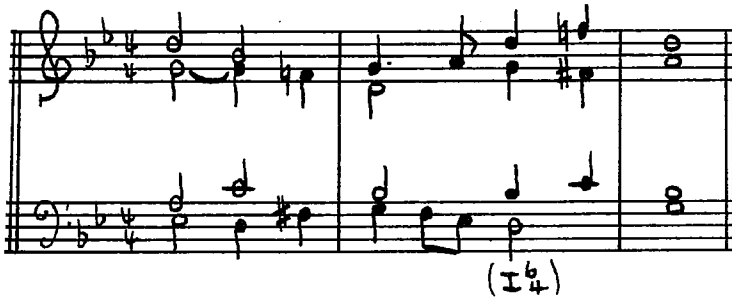
2a. musical notation showing a melody in G major (one sharp) and a bass line with chords. The melody includes a final cadence. The bass line features chords: G: bii⁷, bii⁺b [FR.], I, ii, ii^{b5}, V, I.

2d.

2d. musical notation showing a melody in G major (one sharp) and a bass line with chords. The melody includes a final cadence. The bass line features chords: G: bii⁷, bii⁺b [FR.], I, ii, ii^{b5}, V, I.

Assignment 65 (cont'd)

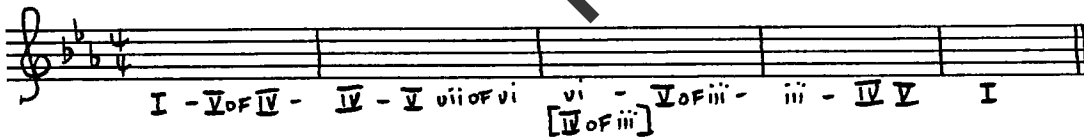
2e.



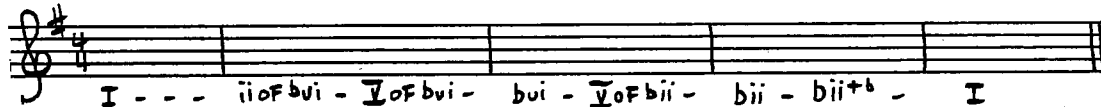
ASSIGNMENT 66

1. "ii in Dma" $\left[\begin{array}{l} B^7 (V) \\ D\sharp^{o7} (vii) \\ F^{+6} (bii^{+6}) \end{array} \right]$ "bii in Cma" $\left[\begin{array}{l} A\flat^7 (V) \\ C^{o7} (vii) \\ E\flat^{+6} (bii^{+6}) \end{array} \right]$
2. "IV in Fma" $\left[\begin{array}{l} Cmi^7 (ii) \\ E\flat (IV) \\ E\flat mi (IVmi) \\ Cmi^7 \flat^5 (ii \flat^5) \\ C\flat (bii) \\ G\flat (bvi) \\ G\flat^{+6} (bvi^{+6}) \\ Gmi^7 \flat^5 (Dor. vi) \end{array} \right]$
3. "ii in Fma" $\left[\begin{array}{l} A\flat mi^7 \flat^5 (ii) \\ Cmi^7 (IV) \\ Cma (Musica Ficta IV) \\ A\flat mi (Musica Ficta ii) \\ A\flat (bii) \\ E\flat (vi) \\ E\flat^{+6} (vi^{+6}) \\ E\flat mi^7 \flat^5 (Dorian vi) \end{array} \right]$

6a.



6b.



ASSIGNMENT 67

2a.

G: I - $\overset{\text{of V}}{V7^{b9}}$ V^7 I

2c.

B b : I - $\overset{\text{of ii}}{ii^6}$ $\overset{\text{of ii}}{V}$ ii^9 - $\overset{\text{of ii}}{V^{sus4}}$ I

2h.

G: I $bii - bii^{+6}$ - vi - $\overset{\text{of V}}{V}$ I I
 of vi [FR.]
 of vi

3a.

F: $\overset{\text{of I}}{V}$ - I^6 $\overset{\text{of I}}{V}$ - $\overset{\text{of ii}}{V}$ - ii - bii^6 $\overset{\text{of I}}{V}$ I

3d.

3f.

Assignment 67 (cont'd)

5a.

C: I vi - bii⁺6 - ii V

I ii - V bvi V

ASSIGNMENT 68

1b.

D^b: I - V₄ - vi b₅ - V ii b₅ - bii⁺6 - I

1h.

D: vi⁷ - V ii⁹ - V¹¹ I

2b.

Assignment 69 (cont'd)

4b.

ii(#s)
OF
ii

V
OF
ii

ii - DOR vi
OF
ii

V
OF
ii

[IV OF vi]
OF
ii

I 6 4
OF
vi

V
OF
vi

in E minor

in B minor

vi - V 6 4
OF
vi

vi 6 - V
OF
V

ii - V

I

in D major

ASSIGNMENT 70

1. A b.

G: I V I

bui vii 0 7
OF
bui

bui ii 0 6

V 3
OF
V 3

bui 6 - I -

1. B

bui 6

I vii 0 7

I V
OF
ii

ii 7 vii 0 7 ii 9 V 2

I 6 ii 6

I 6 2 bui 6

vi vii
OF
vi

vi vii
OF
ii

ii vii
OF
ii

ii 9 vii 0 7

I

*Note the use of elision.

Assignment 70 (cont'd)

2a.

ii ii of ii ii b vii of V V vii of V V bii + b I ii I b vii of vi vi b bii of vi vi bii + b of ii

ii V b of ii ii b ii V of V V V b of V V I I ma b ii I

ASSIGNMENT 71

1a.

2a.

I - - - ii - V of vi - vi of vi - V - I

[IV of vi] [IV]

2b.

I - - - ii of bii - V of bii - vi of bii - V of bvi - vi of bvi - I b V I

[ii of bvi] [V mi.]

2c.

2b.

26.

Handwritten musical score for exercise 26, featuring a treble and bass staff in G major and 4/4 time. The melody in the treble staff includes a triplet of eighth notes in the first measure and various intervals and rests in subsequent measures. The bass staff provides harmonic support with chords and single notes.

3.

WATERMARK

ASSIGNMENT 73

3b.

cycle

ii

I

3c.

F: I cycle VoFii ii cycle I

ASSIGNMENT 74

1.

F: $\text{bii}^{\text{+b}}$ I - vii V^{oFvi} F: V^{oFii} -
 $[\text{ii}^{\text{oFvi}}]$
 D: ii^{bs} V I - V^{b}_4 - I - V^{oFIV} -
 ii ii^{bs} V - I - V^{oFiii} - F: V^{oFvi} - vi^{bs} - ii V I
 A: V I - V^{oFIV} -

2.

ASSIGNMENT 75

1b.
Bright

Assignment 75 (Cont'd)

3.

4.

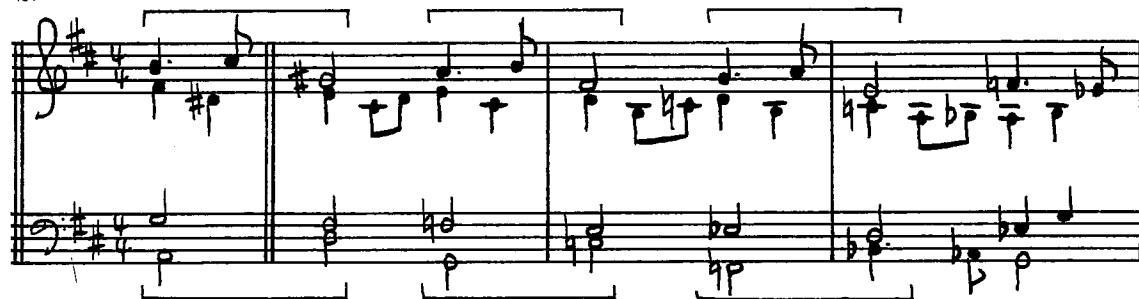
Bright

V I - - iii vi - - IV - - vii^bFii

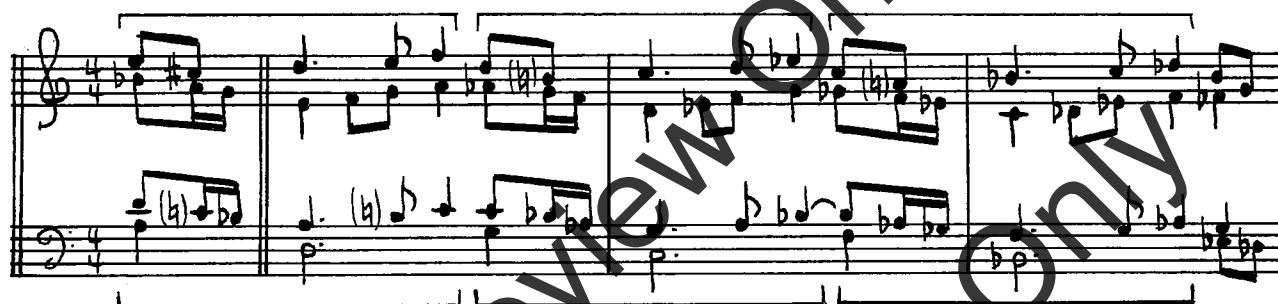
V^oFV - V V^oFui vi V I vii iii V^oFV V vi - ii^bs V I

ASSIGNMENT 76

2.



4.



ASSIGNMENT 77

6a. (fairly elaborate)



Assignment 77 (cont'd)

"Reduction" of preceding example:

Figured bass notation below the staff:

I^b V^b_4 I vi^7 ii $vii^{\circ 7}$ I I^b V^b_4 V I

6b. (simple)

ASSIGNMENT 80

1b.

Assignment 80 (cont'd)

2c.

Musical notation for exercise 2c, showing a melody and bass line in 4/4 time with a key signature of two flats. The melody consists of eighth and quarter notes, while the bass line features half and quarter notes.

2d. (Possible BASIC progression:)

Musical notation for exercise 2d, showing a melody line with Roman numeral chord symbols below it. The progression is: I, I^{OR} V^{OR} ii, ii, V^{OR} V^{OR} vi, I^{OR} vi, I^{mi} I^o, i, V.

Musical notation for exercise 2d, showing a second melody line with Roman numeral chord symbols below it. The progression is: I, IV⁺ b, I, Dom., I, Dom. of ii, ii b5, V, I, IV.

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