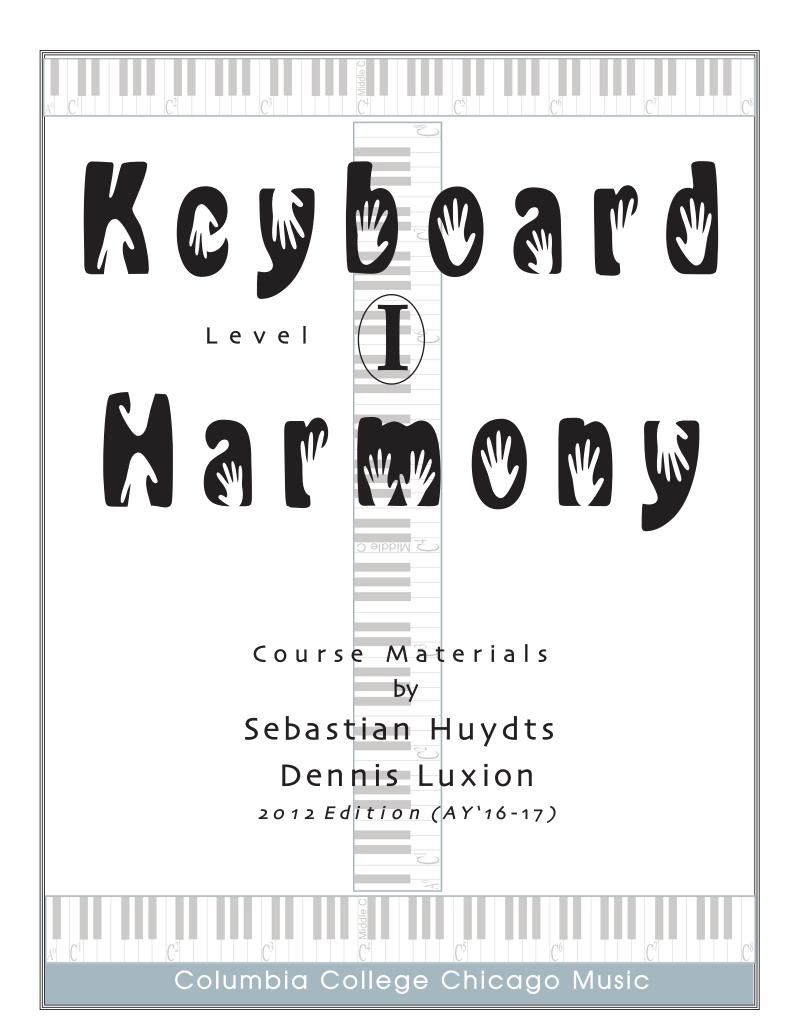


The European naming system for the registers of the keyboard. We discourage its use.



To the students and instructors of Keyboard Harmony I;

It pleases the authors to present you with this newly revised syllabus containing essential course materials for the Keyboard Harmony I class. Additionally, these materials enforce concepts taught in other classes in the Columbia College Music Core Curriculum, but needless repetition has been avoided.

In this compilation, adaptations from the standard repertoire and newly composed exercises present and illustrate harmonic concepts in a playful way while always emphasizing a sensible approach to creating and performing harmony at the keyboard. Great care has been given to ensure that all exercises and illustrations are at a technical level that may be expected after successful completion of the prerequisite keyboard classes.

Course materials are rarely definitive. Therefore, the authors welcome all comments and suggestions for future editions.

Wishing you an inspiring semester exploring the wonderful world of harmony,

Sebastian Huydts — Dennis Luxion, Summer 2012.

Sebastian Huydts, M.A., holds degrees in Piano and Composition from the Sweelinck Conservatory in Amsterdam and the University of Chicago. His principal teachers have included John Eaton, Edith Lateiner, Shulamit Ran and Howard Sandroff. At present Mr. Huydts holds the position of Director of Piano and Keyboard Studies at Columbia College Chicago. In addition, he performs as a pianist in various settings throughout the USA and Europe.

Dennis Luxion has toured and recorded with Chet Baker (appearing on two CDs and documented in the recent James Gavin book), played with Toots Thielemans, Lee Konitz, Woody Shaw and Tony Scott, and taught at the Royal Conservatory of Music in Liege, Belgium. Upon returning to Chicago, Dennis has also recorded and/or played with many artists in and coming through Chicago including Von Freeman, Slide Hampton, Sheila Jordan, Gunther Schuller, among others.

Acknowledgements:

Typesetting, layout, original texts, original music, arrangements and adaptations: Sebastian Huydts, Dennis Luxion. Additional research, planning and artistic and general advice: Bette Coulson, Byron Dueck and Dennis Luxion. Proof reading and corrections: Bette Coulson, Dennis Luxion and Byron Dueck. Resources provided by the Music Department of Columbia College Chicago, J. Richard Dunscomb—Chair Person Printed and bound by Columbia College Printing Services.

For the production of the course materials the following were used:

QuarkXPress 8 (layout and typesetting), Finale 2011, Sibelius 7.1.2 (music processing), Adobe Acrobat 9.0 (PDF compilation), Microsoft Office 2011 (tables and charts), MacBook Air.

The author wishes to thank H.E. Baccus, executive director of the Columbia College Music, Bette Coulson, Byron Dueck and Philip Seward for their generous support and advice.

Submit questions or general remarks to shuydts@colum.edu.

©2011 Sebastian Huydts, Dennis Luxion

Columbia College Chicago Music Department students and faculty may duplicate and/or quote these materials as needed, provided written permission from the authors has been obtained and all applicable acknowledgements have been made and any or all applicable licenses have been settled. Any other reproduction, regardless of means, without the written consent of the authors is not allowed and is considered a breach of applicable copyright laws.

What is keyboard harmony?

1. General definition of keyboard harmony

Keyboard harmony is the application of harmonic studies to keyboard instruments. Unlike piano studies, which emphasize performance, keyboard harmony classes focus on skills that will allow you to apply and expand your knowledge of (tonal) harmony. The study of keyboard harmony will enable you to effectively harmonize melodies, understand and hear harmonic progressions, modulate and transpose music, interpret figured bass and lead sheets and play more easily from scores.

2. General practice of keyboard harmony

Example 1.1 shows **traditional SATB** (=**four part**) **style harmony** where the soprano and alto voices are notated on the treble cleff staff and the tenor and bass voices are on the bass cleff staff.



Example 1.2 shows **Keyboard harmony style** voicing. The *upper* three voices are played in close position in the right hand, and a single bass line is played in the left hand. Therefore the tenor voice has to be played by the right hand, as notated—as in mm.1-2 of example 1.2, When that is physically impossible, the tenor is transposed up an octave and played as the middle voice of the right hand chords—as in m.3 of example 1.2. This style adapts the four part SATB texture to the human hand in order to facilitate playing the progressions in tempo while maintaining good voice leading

However, Not all melodies lend themselves to keyboard harmony style. There are times where a simple **block chord accompaniment**, as learned in Keyboard 1 and 2, is more effective, or simply easier to play. For block chord accompaniment, we reverse the keyboard harmony style idea; the left hand plays the chords, while the right hand performs the melody. Watch out when using this style:

- —Chords in close position tend to sound muddy in the lower register, which impedes harmonic clarity.
- —Maintaining good voice leading and avoiding parallels may be more difficult, as example 1.3 shows.



In this class we use mainly **keyboard harmony style** (=chord in the RH with single bass notes in the LH.) Examples and many exercises use and focus on mastering this technique.

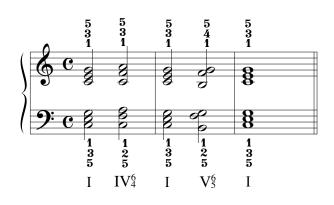
However, depending on the situation, a combination of both keyboar d harmonization styles can often successfully be applied and lead to very pleasing results.

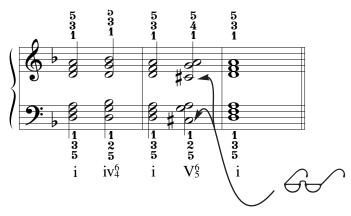
Cadence Chords

1. In the previous keyboard classes the following cadence chords were taught:

The cadence chords in major

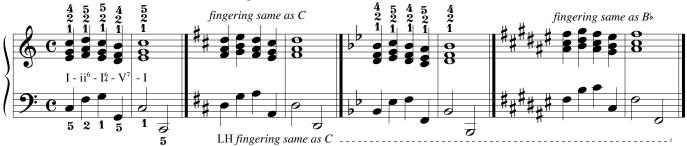
The cadence chords in minor



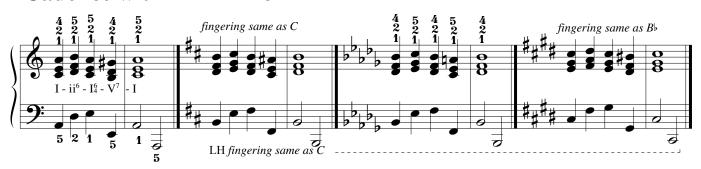


2. In week 9 of Keyboard 2 we introduced a keyboard harmony style cadence:

Cadence with ii⁶ in Major



Cadence with ii⁶ in minor



3. In the first half of the keyboard harmony course we will continue practicing pentachords, scales and basic I-IV-V exercises as shown on page 3 and 4 in order to become comfortable with all keys.

In class assignment: Play the circle of 4th and the scale/triad exercises in major, starting in C and, ending in _____. Then repeat the exercises in the minor version, starting in A minor (harmonic.) If you are unsure about the fingering of the scales, refer to appendix five.

Every week we will focus on just one major key and it's harmonic minor relative. However, the exercises on page 3 and 4 are to be studied every day this semester in or der to get you fluent in all keys.

#1: Pentachord / Circle of 4th exercise with I–IV–V

Study Tempo: $J = ca. 52 \rightarrow 120$

a) Major





b) minor





#2: Scale / Circle of 4th exercise #1 with I-IV-V

Study Tempo: $J = ca. 60 \rightarrow 120$

a) Major



b) minor



#3: Scale / Circle of 4th exercise #2 with I–IV–V

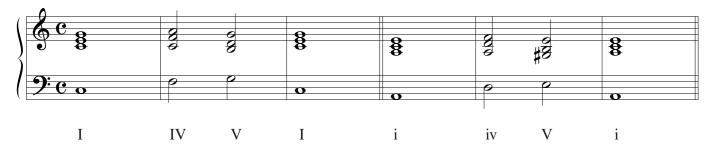
Study Tempo: $J = ca. 60 \rightarrow 120$



Week 1 progression: I–IV–V–I, i–iv–V(v)–i

The study of keyboard harmony includes learning commonly used progressions with which to harmonize melodies, play standard songs, and anticipate score reading. In order to facilitate learning these progressions, each week during the semester a specific progression will be introduced to be used as cadence chords. The progression will be expanded in a study piece. Your instructor may ask you to transpose progressions and the studies to some other keys as well (per haps even all twelve keys.)

One could easily say that the triads built on the Tonic, Subdominant and Dominant form an essential trinity, in which each chordal function is needed to confirm the tonality of the composition in question. Therefore we shall focus this week on the most pure I-IV-V progressions, leaving out sevenths or any substitutions (such as ii^6) that surfaced in Keyboard 1 and 2 and in the pp.5-6 exercises of this course.

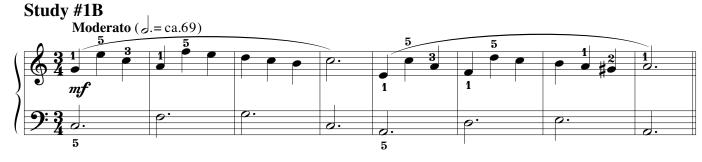


In class assignment: Transpose this progression to ____ major and ____ minor.

Performance

- 1. Perform pp.5/6 exercises from C major to ___ major and from A minor to ___ minor.
- 2. Studies 1A and 1B are based on this week's progression. After you have studied and memorized the progression, play these studies in the original and the keys of ____ and ___ and ___.



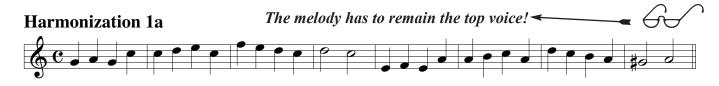


Harmonization

Like Keyboard 1 and 2, this class too will have a harmonization component. The weekly harmonizations will ask you to apply parts of the harmonic progressions that have been discussed, in combination with the techniques you already learned in Keyboard 1 and 2. However, the practice of writing on a three staff grand staff will no longer be used in this class.

Written Assignment for week 2A.

On a grand staff, harmonize melodies 1a and 1b in **keyboard harmony style**. Use **only** roots in the bass, and observe the following voice leading rules: No parallel fifths or octaves allowed anywhere.



Harmonization 1b ("Berend Botje ging op reis... (Bernie Littlebone went on a trip...))



To help you get started, example 1.4 shows you three possibilities of the beginning of harmonization 1a. Notice how the melody stays on top and that the bass does not always repeats. Using a longer note value makes the arrangement less active.

Now take another careful look at the three possibilities given in example 1.4: Which one of these three is the best possibility? ____ Is there a problem with the other two?

Example 1.4: Keyboard harmony style voicing in root position





Assignments for wk 1b

- 1. Practice pp.3-4: Daily exercises □#1 □#2 □#3 in keys from to . .
- 2. Practice p.5: Wk.1 progression in assigned keys.
- 3. ... Practice p.5: Study 1A or B in the keys of
- 4.Review and learn pp.1-2 all terminology and concepts.
- 5. Written work (due Week 2A) See Harmonization above.

Progressions with roots a fourth or fifth apart

Diatonic progressions with root movements a 4th or 5th apart have one tone in common. The left hand bass note moves by leap, the common tone is retained in the right hand, and the two remaining tones in the right hand move by step.



note: The V or IV may be taken a fourth down as well; this does not alter the function.

In class assignments:

a) Look for the common tones in the week one progression/cadence chords. Whenever possible, orient yourself by common tones as you practice progressions in different keys.

Redistribution of chord tones

Notice that in the example above the progression is always the same, but that all possible inversions of the chords above the bass are used. Using the inversions allows us to harmonize melodies in keyboard style. The example below shows you all the possible combinations for the I–IV–V, and i–iv–V progressions. Study #2 on the next page also uses this principle.



Harmonic vs. natural minor

Natural minor (also known as "Aeolian") is used less frequently than harmonic minor. Nonetheless, you should study i-v progressions. Leave out the sharps in the example above, and you get i—iv—v.

Performance

- 1. Perform: Study #1A/B. Add the keys of and and .
- 2. Introduce Study #2A/B: Analyze the progression, then play in the keys of ___ and ___ and ___.

Study #2A ("Dominant Delight")

Sebastian Huydts



In class assignment: Study 2B shows that any of the V in Study #2A can be substituted for IV (iv). On staff paper, write a variation that mixes up IV (iv) and V in these studies.

Study #2B ("8 measure sub")

Sebastian Huydts



Analysis

Add a Roman Numeral analysis below the bass of the following piece. What type of voicing is used? Of one harmonic function all inversions are used in the right hand: Which function is that?

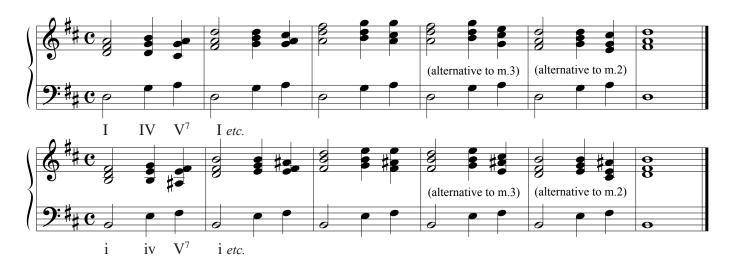


Assignments for wk 2a

- 1. Practice pp.3-4: Daily exercises □#1 □#2 □#3 in keys from to . .
- 2.... Practice the I-V, I-IV, i-V, i-v and i-iv progressions, as well as the lesson 1 progression.
- 3. Practice Practice Studies 1A/B in assigned keys, Study #2 in the keys of_____
- 4.Written work (due Tuesday Wk.2) see lesson 1A.
- 5.... Review the syllabus and all theory of lesson 1. If anything is unclear to you, prepare your questions.

Lesson 2 progressions: I - IV - V^7 and i - iv - V^7

Many musicians and composers find that the dominant has a stronger effect when the seventh is added to the chord. We shall focus in this lesson on the **I-IV-V**⁷ progressions, adding the seventh to the **V** chords. Notice that with we can safely leave out the 5th of the dominant chord. However, in the two redistributions with the tonic and the mediant in the melody there are two alternative possibilities.



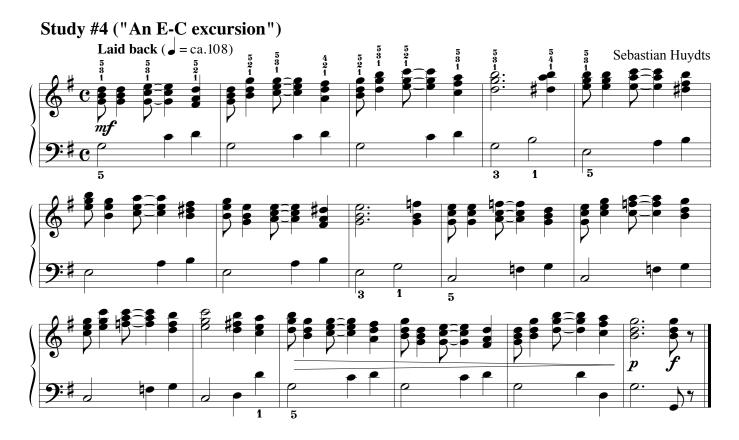
Performance

- 1. Perform pp.3-4: Daily exercises $\square \#1 \square \#2 \square \#3$ in keys from ______to____.
- **2.** Review p.119: Inversions of triads and fingering.
- 3. Perform pp.____: studies #1A/B and #2 in choice of keys _____.
- **4.** Study #3 is based on this week's progression. After you have studied and memorized the progression, play this study in the original and to the keys of ___ and ___ and ___ . *In addition, transpose the study to its relative minor. Play that version also in the relative minors of the other keys.*

Study #3 ("Gently rolling down")



6. (Advanced) Study #4 focuses on the redistribution of chord tones and requires you to rapidly change chord positions. Play rhythmically free, try a bit of swing here.



7. (Advanced) Study #5 shows you this week's progressions in a two-voice style. It focuses on filling up the intervals of the chords with neatly stepwise ascending and descending runs. Play this study in the original and all sharp keys (up to 6 sharps.) In addition, transpose the study to its relative minor (you will need a mixture of melodic and harmonic minor here!) Play that version also in all sharp keys.



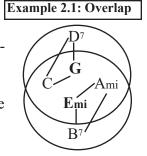


Harmonization

Harmonizations 1a and 1b are due

1. Mixing relatives.

As you know, relative keys share a key signature, virtually the same pitches, and therefore most diatonic triads. Example 2.1 shows you how the diatonic triads of G major and E minor overlap. The resulting acoustic kinship has made many composers, such as Frédéric Chopin (1810-1849), consider relative keys one and the same diatonic environment. By mixing their respective functions and applying them to common tones, a greater variety in harmony is possible without giving the impression of leaving the original key. We are going to explore this idea in our harmonizations. Let's first look at some examples.



2. Harmonizations 1 and 2 use the exact same melody. Harmonization #1 uses only I-IV-V of G major, whereas #2 also uses, where possible, i-iv-V of E minor, its relative. Listen to or play the result.



You surely know that in harmonic analysis the chords **Ami** and **Emi** are labeled **ii** and **vi** of G major. However, these chords fall outside of the Tonic-(sub-)Dominant chords we limit ourselves to. Thus, the trick of considering relative keys as one and the same adds *variety* without the need for new names.

3. Homework assignment: Work out harmonization 2a in keyboard style. Use I-IV-V of G major and i-iv-V of E minor where possible, but make sure to start and end in G major.

Harmonization 2a



Assignments for wk 2b:

-Practice pp.3-4: Daily exercises □#1 □#2 □#3 in keys from ______to ____.
 Practice pp. 2: Studies #3 and # in . Review Studies #1 and #2.
- 3.Written work: (due Week 3A) See Harmonization at section 3 above...

Harmonizing at sight

Being able to understand and work out the harmonic possibilities of any given note in a melody is extremely important for any working musician. In your theory classes you have practiced this in your written assignments, which left you ample time for consideration. In this course we go a step further; We give you small melodic excerpts, starting with 3 to 4 notes, we set a tempo, and off we go. In the beginning, we keep it really simple: Only root positions, and only the basic three functions I, IV and V and their relative minor i-iv-V, using very simple rhythms. The challenge is to not allow parallel octaves or fifths to occur between the outer voices.

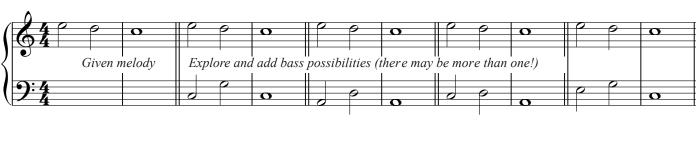
1. **Preparation:** Prepare your left hand first for the key to come, play a five-finger exercise in the left hand, and practice the I, IV and V chord inversions in the right hand. Prepare to play the basic three functions by playing a basic cadence (keyboard style). If you feel confident, immediately prepare for the relative minor as well. If you're not a pianist, there is no need for you to go out of the basic five finger position at this point with your left hand. Your right hand should be prepared to play, mix and match all inversions of the triads of I, IV and V.

Example 2.2: Harmonizing at sight preparation



2. Performance: Count of one or two measures in the tempo, and play the melody without anything, but perfectly in time (observe all values), and imagine the harmonic possibilities. Then play the same excerpt, this time with roots in the bass, repeat to see if there are other good sounding possibilities. Finally, play the excerpt again, this time with roots, and the missing chord tones *below* the melody notes, repeat again for different possibilities. The melody *always* stays on top in this exercise.

Example 2.3: Performance Sequence



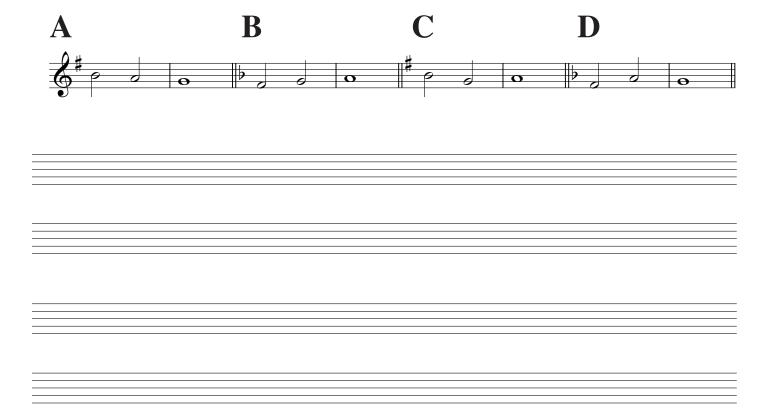


KHI, Lesson 2B

Harmonizing at sight and in practice

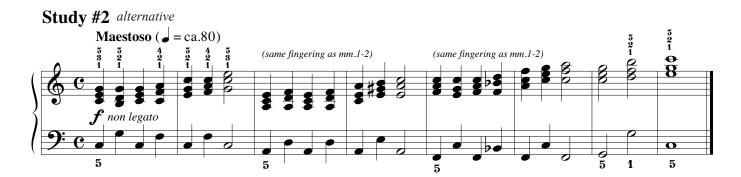
In-class activity #1: First play, then analyze and label all progressions as shown in example 2.3 on the previous page.

In-class activity #2: Harmonize melodic excerpt A given below using the procedure described on the previous page. Although this is not a written exercise, it may be helpful to write down a progression or two that you would not have likely picked at sight, but discovered while experimenting.



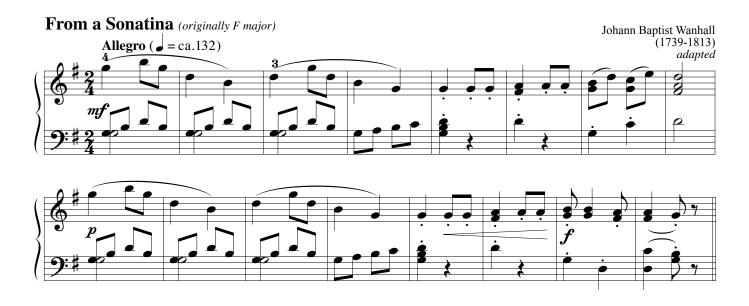
Performance

- **1.** pp.3-4: Daily exercises □#1 □#2 □#3 in keys from ______to ____.
- 2. Perform pp.11/12: Studies #3 and #_____ in assigned keys.
- **3.** Review Studies #1 and #2, and play the alternative to Study #2.



Analysis

- 1. Discuss Week1 harmonization assignment.
- 2. Looking at examples, you will notice that there many different ways possible to bring some life to the tried and proven I-IV-V sequence. A case in point is the opening of the lively Sonatina in F by J.B.Wanhall, shown below (adapted for our purposes, and transposed to this week's key.)
- a) Add a Roman Numeral analysis below the bass of the piece.
- b) What type of voicing is used?
- c) Why would keyboard style harmonization have been impractical in the first 5 measures?
- d) Why are there two voices in the bass in the first three measures?
- e) What type of accompaniment would you call the first three measures?
- f) How are the chords in the right hand treated in mm.7-8?
- g) Explain the last measure: Is it keyboard style or block chord style voicing.



Assignments for wk 3a:

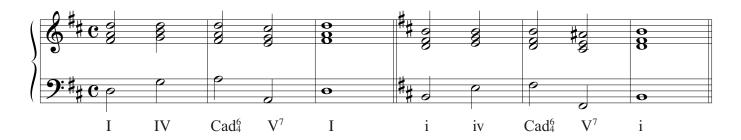
- 1.**Practice** pp.3-4: Daily exercises $\square #1 \square #2 \square #3$ in keys from ______to____.
- 2.**Practice** Studies #1, #2, #3 and #_____ in all assigned keys.
- 3.Practice harmonizing at sight exercises B, C and D on page13.
- 4.Review and learn all vocabulary and concepts from week 1 and week 2.
- 5. Written work (Due Tuesday Week 3): see Harmony Wk. 2A

Additional assignments

Lesson 3 progression: I-IV-Cad⁶-V⁷-I, i-iv-Cad⁶-V⁷-i

Many chords exist that can be inserted in between the three functions of the standard **I-IV-V** progression. Doing so adds harmonic variety and excitement, and prevents the formula from becoming all too stale. In the weeks ahead, we will take the **I-IV-V** progression and explore inserting diatonic and chromatic chords.

The cadential \(^4\) is most commonly used preceding the last dominant before the closing tonic. As such, it signals the end of a phrase or piece, and stronger so than if the phrase/piece were to close with just a V-I progression. Because of the tendency to be heard as conclusive, the cadential \(^4\) should be used with caution in other places in a harmonic progression. However, as example 3.1 shows, the use of I\(^4\) is of course perfectly possible if used correctly.



In class assignment 1: Write out the cadences with the remaining redistributions of the right hand. **In class assignment 2:** Transpose the above to the keys of C & G major and their relative minor keys.

Example 3.1: The use of the cadential 6/4



Performance

- **1.** pp.3-4: Daily exercises □#1 □#2 □#3 in keys from ______to ____.
- 2. Perform Studies #'s in the keys of
- **3.** Study #6 is based on this week's progression. After you have studied and memorized the progression, play this study in the original and the keys of C, G and



4. (In class) Harmonize A—B using a progression that involves the cadential ⁶₄.



Harmonization

Harmonization 2a is due

Finish Harmonization 3 in keyboard style, mixing I-IV-V of D major and i-iv-V of B minor wherever possible. Use the cadential 6/4 at the end of the phrase. Use the roots in the bass, except for Cad⁶.



Assignments for wk 3b:

- 1.**Practice** pp.3-4: Daily exercises $\square \#1 \square \#2 \square \#3$ in keys from ______to____.
- 2.**Practice** Studies #1–3 and #_____ and #6 in assigned keys.
- 3.Written work: (due Week 4A) See Harmonization above.

We continue with harmonizing at sight. Follow the preparation and performance instructions as explained on page 12.

1. Review the sight reading principles as explained in week 2B.

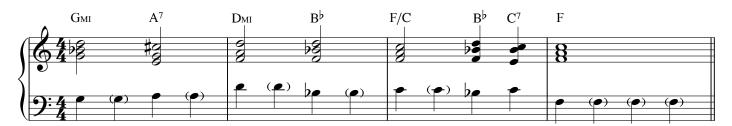
In-class activity #1: At the keyboard, harmonize melodic excerpt A given below using the procedure described on page 12. Start as simple as possible before you try something more fancy. Write down a progression that you would not have likely picked at sight, but discovered while experimenting.



- 2. Harmonic shorthand for keyboard players has been used for centuries. Figured bass functioned for centuries only indicating the bass, and leaving the melodic and harmonic, and to some extent rhythmic interpretation to the performer. In this course, we will introduce the two main forms of short hand that are used in contemporary music, namely slash notation (sometimes called rhythmic notation) and lead sheet notation (sometimes called fake sheet). For practical reasons we skip figured bass, but in case you are interested: In the back of the materials there are some extra chapters that introduce this technique, and offer some guidance for continued study.
- **3. Slash notation** is a form of shorthand musical notation which indicates that you have to create your own rhythm pattern (called "comp") using the harmony described by the chord symbol given above the staff. The staff shows a slash on each beat (e.g. so that in 4/4 time there are four slashes per measure). Example 3.2 shows what we call the beat chart (which uses slash notation).



The chord symbols indicate more or less where the harmony changes (hence calling the progression "(the) changes"). We are going to introduce you to interpreting a beat chart. We have provided a very simple interpretation below (if you can, go fancier on the rhythm):



In-class activity #2: Interpret the following beat chart at tempo ___=___

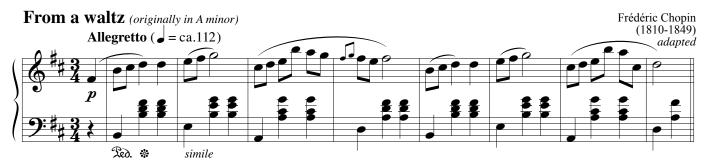


Analysis

- 1. Discuss week 2 harmonization assignment.
- **2. Accompaniment patterns** are used to prolong harmonies at the keyboard while providing a rhythmic pattern as well. After all, the piano cannot sustain notes very long, so repetition is needed to keep the harmony active; sustained notes cannot provide rhythm (other than its attack), necessitating repetition. Many accompaniments are a variation on the so called Um-pah concept.
- a) Describe the accompaniment in piano II of the four hand version. What style is used?



b) In the excerpt below, you see a very typical waltz accompaniment. On which beat do you find the lowest notes? Can you explain why? How does the accompaniment compare to that of the Joplin excerpt?



c) Can you say for sure what key this piece is written in? Which key appears most likely?

Assignments for wk 4a:

- 1.pp.3-4: Daily exercises □#1 □#2 □#3 in keys from to
- 2.**Practice** Studies #1–3 and # and #6 in assigned keys.
- 3.Work out and practice exercises _____ from page 21
- 4.Study the analysis from week 2B and 3B, review all concepts from weeks 1–3
- 5.Written work (Due week 4A): See week 3A

Lesson 4 progression: I-vi-IV-V⁷-I, i-VI-iv-V⁷-i

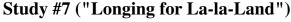
In progressions from **I** to **IV**, we can make an "in-between" step, playing a **vi** harmony. The **vi** harmony is of course the relative minor of the major key, **vi** has two common tones with **I** which makes the two chords sound very similar. In fact, so much so, that **iv** can substitute **I** successfully. That partially explains the "key confusion" that we have talked about since the harmony section of week 2A.



In class assignment 1: Write out the redistributions in the original key and in the keys of _____. In class assignment 2: Combine the first two measures above with the first redistribution of the minor cadence (the first right hand triad is first inversion.) What do you notice?

Performance

- 1. pp.3-4: Daily exercises $\square #1 \square #2 \square #3$ in keys from to .
- **2.** Perform Studies #_____ in assigned keys.
- **3.** Study #7 is based on this week's progression. After you have studied and memorized the progression, play this study in the original key and in the keys of ______ Advanced students (optional), transpose the study to its relative minor. As a result the major and minor sections switch. In addition, you may not be able to use the harmonic minor scale all the time!





Harmonization

Harmonizations 3a and 3b are due

"Block chord" style harmonization—Melody in the right hand, chords in the left hand.

We left **block chord** accompaniment (as was used in the previous keyboard courses) aside for a while. One reason is that we have been focusing on **root position** harmonic functions. Avoiding parallels becomes impossible when using block chord accompaniment in root position. Yet, if used as accompaniment, parallel harmonies can sound quite good. They are often used effectively, especially in beginner's literature. We will use this week's progression to explore block chord accompaniment and show a typical keyboard technique; melody in the right hand accompanied by broken chords in the left hand.

1. Accompaniment styles: block chord and open position voicing of the Um-pa (pa) bass. Compare the left hand of example 4.1 and 4.2. The open position oom-pa-pa provides for a much richer sound, and takes the attention away from the parallel harmonies. This is a typical way of voicing the waltz accompaniment for the piano, one that prolongs the harmony, and provides the waltz rhythm.



- 2. Work out Harmonization 4 in three stages using the triads of I (i) IV (iv) and V and the Cad⁶
- a) Use block chords in the left hand, use root positions only (use T-SD-D of both relative keys if possible.) You will get parallels. Use no more than two chords per measure, in half and whole notes.
- b) Make a quarter note **Um-pa** accompaniment as in example 4.1 (mind the 4/4 time!)
- c) Change the Um-pa from b) to open position voicing, but avoid large position changes.



Assignments for wk 4b:

- 1. Practice pp.3-4: Daily exercises □#1 □#2 □#3 in keys from ______to ____.
- 2. **Practice** p.22: Study #7 in keys of ______. Review Studies #1, #2, #3, ____ and #6.
- 3.Written work: (due Week 5A) See Harmonization at section 3 above...

KHI, Lesson 4B

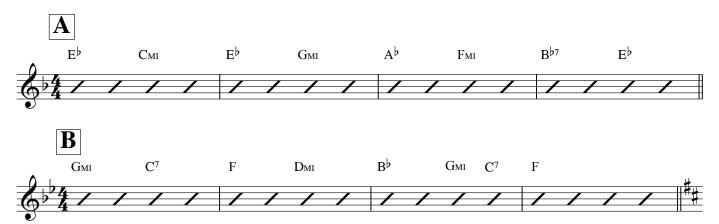
Harmonizing at sight and in practice, harmonic shorthand with chord symbols

We continue with harmonizing at sight. Follow the preparation and performance instructions as explained on page 12. Also review the sight reading principles for harmonic shorthand as explained on page 17. All sight-reading exercises assume Keyboard Style harmony (see lesson 1).

1. Harmonize the excerpts below at sight.



2. Interpret the beat-charts given below. Choose the right hand inversions so that you keep the hand as much as possible in the same position.



Performance

- **1.** pp.3-4: Daily exercises □#1 □#2 □#3 in keys from ______ to ____.
- **2.** Perform Study #7 in keys of ______. Review Studies #1, #2, #3, ____ and #6.

Analysis Examples from the literature

- 1. Discuss wk.3 harmonization assignment.
- 2. Listen to the twp pieces on the next page.
- a) Make a quick harmonic analysis of both.
- b) What do the two pieces have in common in the way that harmony is treated?
- c) What type of accompaniment does Beethoven use?
- d) What type of accompaniment does Türk use?
- e) Explain why the harmonic treatment and the accompaniments are appropriate for both pieces.



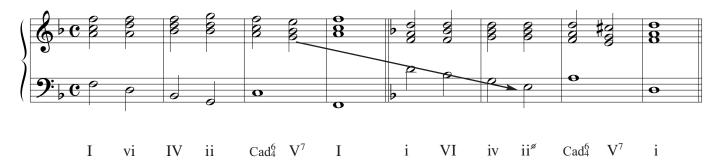


Assignments for wk 5a:

- 2.**Practice** Studies Study #7 in keys of ______. Review Studies #1, #2, #3, ____ and #6.
- 3.Work out and practice Figured Bass exercises ______.
- 4.Review theory, concepts and vocabulary from weeks 1–4
- 5. Written work (Due week 5A): see week 4A.

Lesson 5: The use of ii⁽⁶⁾ in Major and minor

1. In the progression from IV to V, we can also make an "in-between" step by playing a ii harmony in root position. ii may be followed by a cadential ⁶, although this is not essential. The minor version of this progression has a peculiarity in that the doubling of the root doesn't sound particularly pleasing. Instead of doubling the root, we play the tonic, thereby creating a half-diminished (tetra-)chord. The arrow indicates the pitch in question.



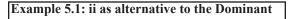
2. Inversions of the functions; changing the bass of ii (II).

In Keyboard 2 we introduced an ending cadence that for the sake of ease of playing contained ii⁶ (see also p.6.) In this class, for the sake of ease of theory, we have concentrated on root versions of the Tonic, Sub-Dominant and Dominant functions. In the next two weeks we will study inversions of some of the functions discussed so far. We start with ii (II).

a) ii⁶ substitutes IV. When used in first inversion (when $\hat{4}$ is in the bass), ii resembles IV so strongly (with two common tones), that it can substitute IV alltogether. Just play the I-ii⁶- Cad⁶₄ - V - I cadence and judge for yourself.

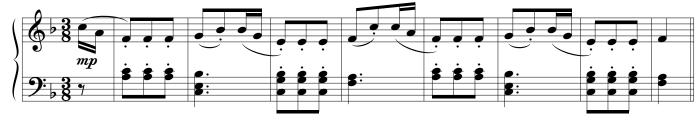
The excerpt from Kuhlau in example 5.1 shows how ii⁶ can also provide a more exciting harmony for melody notes, like $\hat{2}$ in this case, that ordinarily would be harmonized with V. To hear how this works, play or listen to example 5.2, and then compare that to the original below. In addition, notice that I is also used in first inversion in mm.1 and 5 (disregarding the pick-up measure.)

To show that ii⁶ works equally well in minor, example 5.3 shows the Kuhlau excerpt transposed to the relative of this week's key.





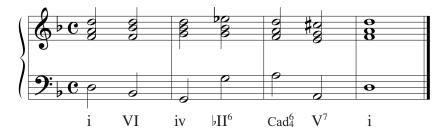
Example 5.2: Only V and I lessens tension, not particularly good in this case



Example 5.3: ii6 functions similarly in minor



b) The Neapolitan six. In the minor key, ii^{\$6\$} is at times substituted by a chromatically altered version. By lowering 2 a half step, ii^{\$6\$} becomes \$\perp \text{II}^6\$. Many composers have found that the resultant chord heightens the dramatic effect within the cadence; Beethoven, for instance, used that particular chord often. In theory, it has become known most commonly under the name Neapolitan Sixth (origin of name unknown) or simply \$\perp \text{II}^6\$ sometimes the term Phrygian II is used. It is used mostly in the minor mode, although it can just as easily be employed in the major mode. In the cadence it substitutes ii^{\$6\$} or iv⁶ (or ii⁶ or IV⁶ in major.) Later this semester we will learn about more possibilities of this chord. Example 5.4 shows how \$\perp \text{II}^6\$, replaces ii^{\$6\$} at the end of the phrase in the minor version of the Kuhlau excerpt.



Example 5.4: The Neapolitan 6 substituting ii6 in minor



Performance

- **1.** pp.3-4: Daily exercises □#1 □#2 □#3 in keys from _____to____.
- **2.** Perform Study #7 in keys of ______. Review Studies #1, #2, #3, ____ and #6
- **3.** Studies #8 and #9 are based on this week's progression. After you have studied and memorized the progression, play this studies in the original key and in the keys of ______ Advanced students add keys of ______ Advanced students add

Study #8 ("Evoking Elly")





Study #9 ("Searching for Scarlatti")





Assignments for wk 5b:

Harmonization 4 is due

- 1.**Practice** pp.3-4: Daily exercises $\square \#1 \square \#2 \square \#3$ in keys from to
- 2.**Practice** progression from wk. 1–5 in all major and minor keys.
- 3.**Practice** Study #8 in all (assigned) keys and/or p.___: Study #____
- 4. ... Written work (Due week 6A): Write out two versions of sight-reading exercises 1C and 1D, and a single version of exercises 2A and 2B on page 21 (lesson 5A).

Harmonization at sight

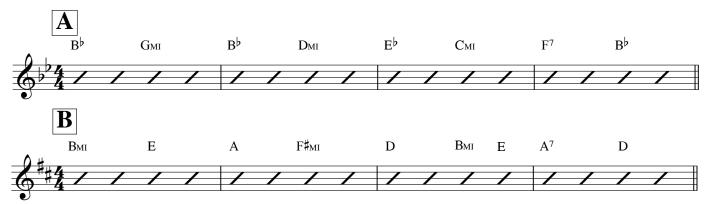
Follow the preparation and performance instructions as explained on page 12. Also review the sight reading principles for harmonic shorthand as explained on page 17.

All sight-reading exercises assume Keyboard Style harmony (see lesson 1).

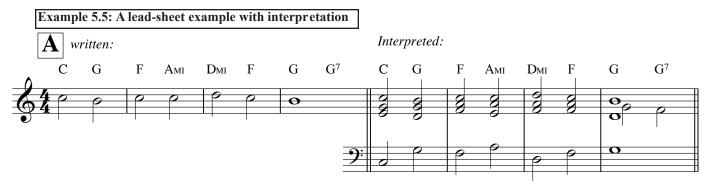
1. Harmonize the excerpts below at sight.



2. Interpret the beat-charts given below. Choose the right hand inversions so that you keep the hand as much as possible in the same position.



3. Lead sheet notation is very similar to slash notation; it also provides the bass-line and it also requires you to improvise your own rhythm pattern using the harmony described by the chord symbol given above the staff. However, you have to combine the chord symbols with the melody note indicated, which limits your choice of voicing. Example 5.5 shows what we call the *lead sheet*, followed by a very simple interpretation.



Following the example given above, interpret the lead sheet given below (letter B). Use the simplest interpretation possible (if you can, go fancier on the rhythm):



KHI, Lesson 5B

Introduction

Performance

- **1.** pp.3-4: Daily exercises □#1 □#2 □#3 in keys from ______to ____.
- 2. Perform Study #8 and/or 9 in keys of ______. Review Studies #_____.





Analysis Examples from the literature

- 1. Discuss wk.4 harmonization assignment.
- 2. Paly/listen to the two pieces on pp.28/29.
- a) Make a harmonic analysis of both.
- b) What type of voicing do both pieces favor predominantly?
- c) Compare the harmonic structure of both pieces. What do the pieces have in common in the first phrase (you need to determine how long the first phrase is for this.)
- e) As of measure 21, the Tchaikovsky excerpt features harmonies that we haven't discussed in this class yet. However, things are not as complicated as they may seem if you disregard the bass. What does the bass do starting in m.21?
- f) What are the main three harmonies that mm.21-end of the Tchaikovsky excerpt utilizes?
- g) How do you explain all the chromatic alterations that take place in the aforementioned excerpt?

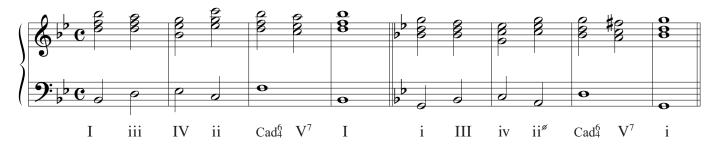
notes

Assignments for wk 6a:

- 2. Practice Studies #1, #2, #3, #6, #7, #8 and #9 in all (assigned) keys.
- 3. Preview and analyze p.35: Culmination study.
- 4.Review theory, concepts and vocabulary from weeks 1–5.
- 5. Written work (Due week 6A): Write out two versions of sight-reading exercises 1C and 1D, and a single version of exercises 2A and 2B on page 21 (lesson 5A).

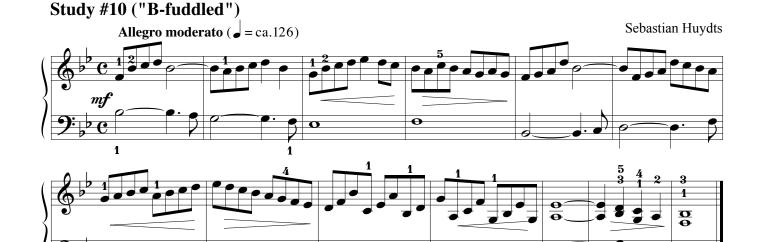
Lesson 6: The use of iii/III in Major and minor

In the progression from week 5, we can substitute the "in-between" **vi (VI)** for a **iii (III).** We have to be a bit more careful though to avoid parallels between IV and the Cad⁶ (hence the jump in chord position from IV to ii, other solutions are possible too). The rest of the progression remains the same (including the half diminished quality in ii minor.) In major, **iii** is sometimes used to substitute the dominant. This does not work in the minor mode.



In class assignment 1: Explain why III doesn't successfully function as a substitute for the dominant in the minor mode.

In class assignment 2: Write out the redistributions in the original key and in the keys of





2 1 2

121

121

2 1

2

Study #12 ("Minor transgression")



Performance

- 1. pp.3-4: Daily exercises $\square #1 \square #2 \square #3$ in keys from ______to ____.
- 2. Introduce Studies # 10, 11 and/or 12.
- **3.** Perform Studies _____ in the keys of _____.

Harmonization

- 1. Review of harmonization / accompaniment styles, use of functions in root position.
- 2. a) Write out the following progression in E^b major, using **keyboard style** harmony:

 E^{\flat} : I - IV - ii - V - iii - vi - ii - V⁷ - I. Write the appropriate chord symbols above the staff.

b) Create a simple keyboard style version of the song "We wish you a merry X-mas", set in the key of E^{\flat} major. All functions discussed in assignment **3a**) have to be used at least once, in root position only. Do not harmonize every note; instead, harmonize only the notes that fall on the strong beats. Practice your version.

Assignm	ents	for	wk	6b:

- 2.**Practice** Studies #______ in the keys of ______
- 3.Review midterm requirements and prepare your questions.
- 4. Written work (Due week 7A): see 2a/b of Harmonization.

Harmonization at sight

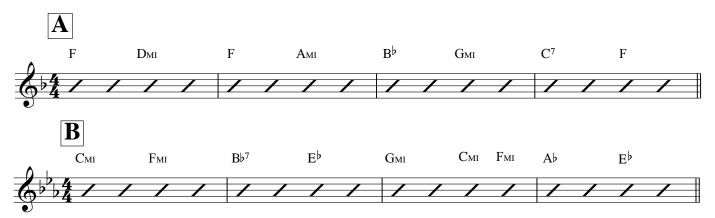
Follow the preparation and performance instructions as explained on page 12. Also review the sight reading principles for harmonic shorthand as explained on page 17.

All sight-reading exercises assume Keyboard Style harmony (see lesson 1).

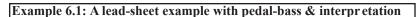
1. Harmonize the excerpts below at sight. We now harmonize four notes.

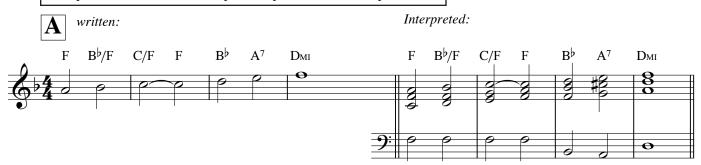


2. Interpret the beat-charts given below. Choose the right hand inversions so that you keep the hand as much as possible in the same position.

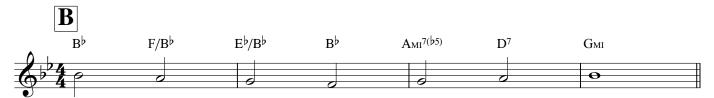


3. We continue lead sheet interpretation. Something that is very easy to express using chord symbols is the so-called pedal-bass. The bass stays on one note, while the harmonies on top change. This form of harmonizing has remained popular through all ages and styles since the baroque.





Following the example given above, interpret the lead sheet (with pedal-bass)given below (letter B). Use the simplest interpretation possible (if you can, go fancier on the rhythm):



Performance

- 1. pp.3-4: Daily exercises $\square #1 \square #2 \square #3$ in keys from to .
- 2. Perform Studies # in keys of ...
- 3. Optional (for the pianists!) Introduce the Week 6 Culmination Study.

Analysis

- 1. Discuss wk.5 harmonization assignment.
- 2. Play/listen to the piece below.



a) Make a quick harmonic analysis by writing chord symbols above the top staff, and Roman Numerals below the bass staff. Then re-write the entire piece as a simple chord progression below. Leave out all direct repetitions.

Assignments for wk 7a:

1 Practice pp.3-4: Daily exercises $\square #1 \square #2 \square #3$ in keys from to

2.**Practice** Studies #______ in keys of ______.

3..... Written work (Due week 7A): see 2a/b of Harmonization.

Week 6 Culmination Study ("Grand Cata-Cloppe")



Suggested preparation for "Grand Cata-Cloppe"



Lesson 7: Putting it all together...

Midterm (test 2) requirements:								
1.	The Scale / Circle of 4 th Exe	ercise on page 3 in	n major from	to, i1	n minor from	_ to		
2.	Week 1—6 progressions sep	arate in all keys r	nentioned above.					
3.	Studies #	in the ke	eys of		·			
4.	Harmonization at sight simil	ar to exercises do	ne so far.					
	To receive full credit, all scales, progressions, exercises and studies need to be performed at a steady tempo without interruptions.							
5.	In-class assignment: You will do harmonization assignments in-class at the keyboard. You will be quizzed on all harmonization concepts discussed during this semester, including figured bass and chord symbol reading. You may be asked to explain concepts.							
	Performance (keyboard skills) self-test: Allow yourself no more than 10 minutes to complete the following:							
1)	Scale / Circle of 4th Exercise	e: 20% (each prog	gression 10 points	s)				
(K	eys ranging from to	(major) and	to (minor	r))				
a.	Circle of 4th study: From to major and/or minor.							
b.	Scale and Triad exercise: From to major and/or minor.							
2)	2) Progressions in Keyboard Style: 30% (each progression 10 points)							
a.	I–IV–V–I: Key_	major	&/or	Key_	minor			
b.	I-vi-IV-ii ⁶ -I ⁶ -V-I: Key_	major	&/or	Key_	minor			
c.	I-iii-IV-ii ⁶ -I ⁶ -V ⁷ -I: Key_	major	&/or	Key_	minor			
3) Studies: 20% (each study 10 points if played without hesitation)								
0	Study # in							

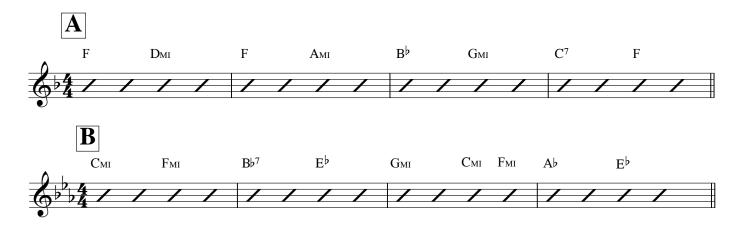
b. Study #___ in ____

4) Harmonization at sight: 30% (each harmonization 10 points if played without hesitation):

a. Harmonize a melody at sight (keyboard style)



b. Interpret a beat chart (keyboard style, simple rhythm)



c. Interpret a lead sheet (keyboard style, simple rhythm, keep melody on top)



Recommendations/Follow-up:

If you score 80% or higher on both parts of the self-test: Keep up the good work, you're doing great!

If you score between 70% (C-) and 79% (C+) on the performed part:

Keep practicing week 1–6 progressions and assignment; focus on a steady tempo, getting fluent in combining inversions of triads in the right hand. Make sur e you can play I-IV-V-I in any key without hesitation. Practice this several times per week in addition to the new assignments. If you feel you need help, see the keyboard tutors or make an appointment with your instructor during office hours.

If you score below 70% on the performed part:

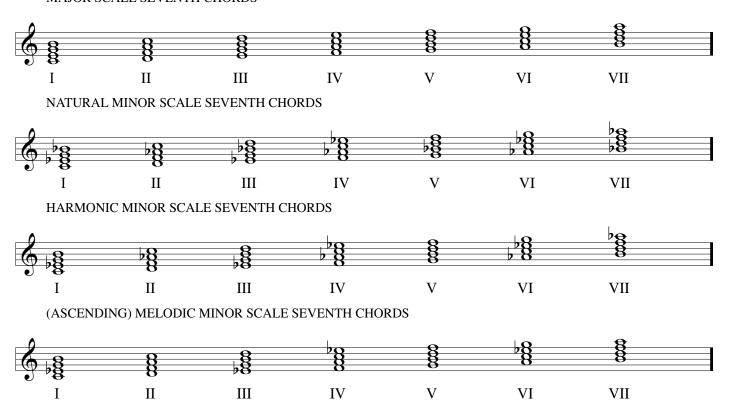
You urgently need to review the Keyboard II syllabus regarding scales and triad inversions. Practice all technique exercises and transpose those to all keys.

Lesson 8: an introduction to jazz seventh chords

The Identification and Construction of Jazz Seventh Chords

Below are the seventh chords built respectively on each scale degree of a C major scale, a C natural minor scale, a C harmonic minor scale and a C melodic minor scale (ascending part only). Each chord is constructed in thirds using only the notes of its particular scale.

MAJOR SCALE SEVENTH CHORDS



We will identify seventh chords by their third and seventh combination with fifths considered as non-essential chord tones. If we take a survey of the seventh chords in the four scales above, we find only five different combinations of third and seventh. These distinctive third and seventh pairs identify what we will call the **five main chord types**.

The **five main chord types** are listed below with their identifying 3rd/7th pair and their common chord symbols.

CHORD NAME		THIRD/SEVENTH	CHORD SYMBOL		
Major Seventh Chord	=	Major 3rd + Major 7th	C^{MA7} or $C^{\Delta7}$		
Minor Seventh Chord	=	Minor 3rd + Minor 7th	Cmi ⁷ or C- ⁷		
Dominant Seventh Chord	=	Major 3rd + Minor 7th	C ⁷		
Minor Major Seventh Chord	=	Minor 3rd + Major 7th	Cmi^{MA7} or $\text{C-}^{\Delta7}$		
Diminished Seventh Chord	=	Minor 3rd + Diminished 7th	Cdim ⁷ or C ^o ⁷		

In class activity: identify the major, natural minor, harmonic minor and melodic minor scale seventh chords above.

Procedure:

- 1) assume that the bass note is the root and write it down [e.g., C] above the staff as a capital letter;
- 2) identify the third and seventh and write down the appropriate chord symbol [e.g., Cmi7];
- 3) check the fifth: if it is perfect, do nothing; if it is altered, add that to the chord name [e.g., Cmi7\(\dagger 5 \)], except for diminished seventh chords where the fifth by definition is lowered.

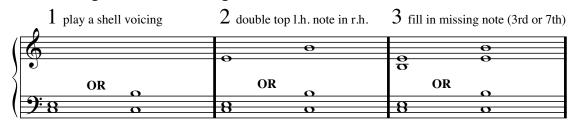
Constructing Seventh Chords

Besides learning to play and analyze written progressions and pieces, we will be harmonizing melodies and realizing chord symbols. For this we need a simple and practical way of constructing seventh chords both on paper and at the keyboard.

As we have seen, the root plus the third and seventh of a chord at minimum are needed to be able to identify it. We will build chords with these three notes on the bottom and add a melody note on top. This will give us a four part texture that we will play in chorale (SATB) style, i.e. with two notes in each hand. The left hand harmonies that we will see in this and subsequent lessons are **shell voicings**: two-note chords consisting of either the root and third or the root and seventh. We will need to complete our basic chords by adding the missing chord tone (either the third or seventh) plus the melody in the right hand. **N.B.**, in all circumstances, the bottom three chord tones will consist of root plus third and seventh. For each chord there are two possible shell voicings: root/3rd or root/7th. Therefore each four-note chord also has two possible forms.

In order to build any seventh chord without a given melody, follow these steps:

- 1) play a shell voicing,
- 2) double the top left hand note one octave higher in the right hand (this note will serve as the melody in this instance),
- 3) add the missing 3rd or 7th in the right hand as the "alto" voice.



It is important to learn to quickly construct chords in this manner and to recognize them when they are written out. All **five main chord types** should be practiced in all keys (i.e. with all twelve possible bass notes) following the above procedure!!

naj 7th		dom 7th		min 7th		min maj 7	th	dim 7	7th
(6	0		20		90	<u> </u>	О) 20
) 0 0	0	00	•	, o	9-0	O	70	b) O	7-0
	0		20		20		0	-	220
(): 8	0	8	0	98	0	98	0	ρ8	0

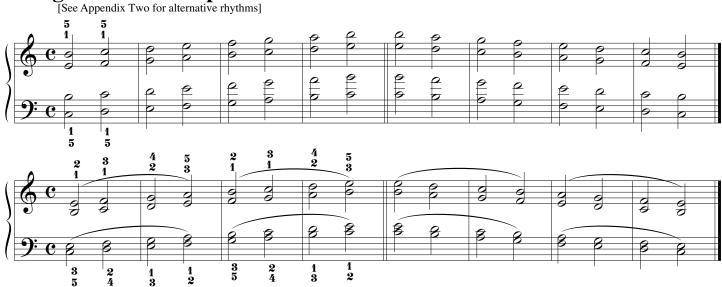
In class activity: practice constructing some of the following seventh chords.



Performance

1. *Progression #1* gives us the diatonic seventh chords of a major scale moving by step. The chords are constructed in the above manner. There are two versions of the progression, each with its own shell voicing type. Practice this progression in the keys of ______. Write in the chord names.

Progression #1: Stepwise Diatonic Seventh Chords



2. Introduce *Strutting With Some Stretto*. Analyze the progression. Write in the chord names. Play in the keys of

Strutting With Some Stretto



3. Introduce *Parallel Lines*. Analyze the progression. Play in the keys of ______

Parallel Lines



Analysis

Chord construction and the appropriate use of harmonic progressions are important elements of our study of keyboard harmony, but other elements also merit attention. Texture and chord placement are very important items. Notice how differently chords are used in *Strutting With Some Stretto* and *Parallel Lines*. In the latter piece every note is harmonized in parallel fashion while in *Strutting With Some Stretto* chords are placed judiciously for rhythmic effect and some chords appear in a more horizontal (linear) than vertical form. In subsequent lessons, notice how chords are used not just which chords are used.

Assignments for lesson 8b:

- 1. ... Write in the chord names for all the major scale, natural minor scale, harmonic minor scale, and melodic minor scale seventh chords.
- 2. ... Practice playing both versions of each of the five main chord types in all keys, i.e. with any bass note.
- 3. ...**Practice** *Progression* #1 in the following keys ...
- 4. . . . Practice *Two Ways About It*. Also write in the chord names for this piece. Be prepared to discuss the form of the piece as it relates to its harmonic progression. Is there any use or implication of functional harmony?

Twinkle, Twinkle, Little Star



Analysis

In order to identify all of the chords in the above harmonization of *Twinkle, Twinkle, Little Star*, you will need to know **three common seventh chord variants**. The **major sixth chord** is a variant of the major seventh chord in which the major seventh is replaced by a major sixth. The **minor sixth chord** is a variant of the minor major seventh chord in which the major seventh is replaced by a major sixth. And lastly, the **suspended fourth chord** is a variant of either a dominant seventh chord or a minor seventh chord in which the third is replaced by a perfect fourth.

	CHORD NAME		"THIRD/SEVENTH"	CHORD SYMBOL			
	Major Sixth Chord	=	Major 3rd + Major 6th	C6			
	Minor Sixth Chord	=	Minor 3rd + Major 6th	Cmi ⁶ or C- ⁶			
	Suspended Fourth Chord	=	Perfect 4th + Minor 7th	C^7 sus4 or			
In class: identify the chords in <i>Twinkle</i> and write the correct chord symbol above C_4^{\prime}							

each of them.

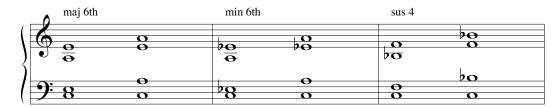
N.B.: 1) all chords are in root position; 2) all chords have the root/3rd/7th as the lowest three notes.

Advanced students should identify the non-essential chord tones (i.e., 5ths, 9ths, 11ths, and 13ths) which are in the top voice. Assume that the spelling of all chords is theoretically correct (i.e., there is no use of enharmonic spelling).

Observe that the **three common variants** are used above in the following way: each is next to the chord from which it is derived. Major and minor sixth chords follow (i.e. "resolve") major and minor major seventh chords respectively. Suspended fourth chords precede (i.e. "prepare") dominant seventh chords.

Performance

1. Practice constructing the three common variants in the manner that you have been practicing the five main seventh chord types. Again, there are two forms of each chord. Both forms of each chord should be constructed in all keys (i.e. on all twelve possible bass notes).



2. Introduce *Bossa Nova Fácil I*. Analyze the progression. Write in the chord names. Note that the harmonies are clear even though there are usually only three notes per chord. This piece combines stepwise harmonic motion with a bossa nova rhythm in the left hand. Practice the hands separately; the left hand first and then the right hand. Only when each hand can be played proficiently should you try to play them together.





EXERCISES

Play the following progressions.

$$I^{\Delta 7}-IImi^{7}-IIImi^{7}-IV^{\Delta 7}-V^{7}-VImi^{7}-VII^{\emptyset 7}-I^{\Delta 7}$$

$$I^{\Delta 7} - VII^{\phi 7} - VImi^7 - V^7 - IV^{\Delta 7} - IIImi^7 - IImi^7 - I^{\Delta 7}$$



MELODIES



Notes on the Harmonization Exercises

- Each lesson will include an exercise section with material to be assigned as homework and/or in class activities and to use for self-study and test preparation. All examples, whether on paper or at the keyboard, should be worked out in the four voice chorale style described above. Occasionally only three voices may be needed to give the necessary harmony.
- Parallel octaves and fifths are allowed in this style; note the extended example of their use in measures two through four of *Twinkle*. Also, note the voice-leading in *Twinkle*: roots move to roots, 3rds and 7ths move as a pair to the next closest 3rd/7th pair, the melody occupies the top voice and may double one of the bottom three chord tones or add a new chord tone. The lower three notes of all of the chords in *Twinkle* are root-3rd-7th (or root-7th-3rd) no matter what the melody is.
- Melodies without chord symbols (exercises 11-15) should, of course, be harmonized using exclusively or in part the progression studied in that lesson. For the exercises in this lesson, that means stepwise motion.

BE PREPARED TO PLAY YOUR COMPLETED HOMEWORK!!

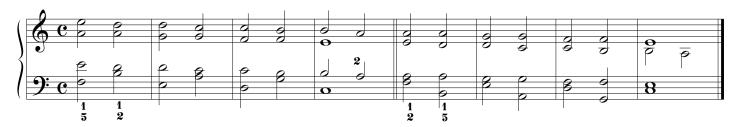
Assignments for lesson 9a:

- 1. Practice playing both versions of each of the five main chord types in all keys, i.e. with any bass note, as well as their three common variants.
- 2. Practice Two Ways About It and/or Bossa Nova Fácil I.
- 3. **Practice** Progression #1 in the following major keys:
- 4. Write in the names for all of the chords in *Twinkle, Twinkle, Little Star*. For all subsequent lessons, this should be done for any assigned piece.
- 5. ... Written work: write out EXERCISES #______. Be careful to use 1) the correct chords, 2) the suggested chord construction and 3) smooth voiceleading of the thirds and sevenths. This is due at the beginning of next class (lesson 9A).

Lesson 9: circle of fifths progressions

Progression #2: Diatonic Circle of Fifths in Major

[See Appendix Two for alternative rhythms]

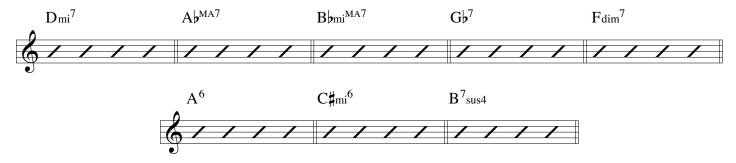


The most dynamic relationship in functional harmony is the dominant-tonic relationship, V-I. The diatonic circle of fifths extends this movement by descending fifth to all scale degrees. The bass in the above example starts on the fourth degree of the scale and proceeds through all of the scale degrees before arriving at the tonic: i.e. IV-VII-III-VI-I. All of the descending fifths in the bass in this progression are perfect except for the movement from IV to VII. In that instance, the descending fifth is diminished. This progression could start elsewhere and still be a complete diatonic circle of fifths: II-V-I-IV-VII-III-VI, for example.

N.B., the final tonic chord in this and subsequent progression examples, as well as in many pieces, is represented by a major seventh chord that resolves to a major sixth. Either chord is acceptable as the tonic. An interval of a major seventh is more dissonant than that of a major sixth and the movement from a tonic major seventh chord to a major sixth chord can be heard as a resolution of this dissonance.

Performance

- 1. Play *Progression #2* in the keys of .
- 2. Review Progression #1, Strutting With Some Stretto, Parallel Lines, and/or Bossa Nova Fácil I.
- 3. Review seventh chord construction. Play each of the following chords two ways: 1) with a root/third shell voicing or 2) with a root/seventh shell voicing.



4. Introduce *Bossa Nova Fácil II*. *Bossa Nova Fácil I & II* illustrate the relationship between diatonic and circle of fifths progressions. In *Bossa Nova Fácil I*, the bass descends by scale degree from the tonic to the tonic an octave lower. Throughout *Bossa Nova Fácil II*, this stepwise bass movement is transformed into circle of fifths movement by the interpolation of chords. For example, the IV-III-II-I progression in the second half of *Bossa Nova Fácil II* becomes IV-<u>VII</u>-III-<u>VI</u>-II in *Bossa Nova Fácil II* by the insertion of the three underlined chords. Write in the chord names!

Bossa Nova Fácil II

Quietly rhythmic (=ca. 144)

Dennis Luxion



Roman numerals are used to describe chord progressions. The system of notation that we will use differs from what is generally used in the analysis of Western Art Music. We will use roman numerals as generic replacements for letters in chord symbol notation in order to highlight the relationships between chords and facilitate transposition. Unlike some systems of notation where uppercase indicates major and lowercase indicates minor, all chord letter names and roman numerals will be given in uppercase. Minor chords will be indicated by the addition of a chord suffix (mi or -), not by changing to lowercase. For example, the diatonic seventh chords of a C major scale are:

CMA7, Dmi7, Emi7, FMA7, G7, Ami7, Bmi7b5.

According to the system used here, this progression in roman numeral notation would be given as C: IMA7, IImi⁷, IVMA7, V⁷, VImi⁷, VIImi⁷, VIImi⁷.

Each roman numeral only refers to the root note of the chord and is assumed to be a major or perfect interval up from the tonic unless modified by a flat or sharp (in other words, a member of the major scale built from the tonic). All chord suffixes must be included to avoid any ambiguity. These rules apply to both major and minor keys. Thus, the diatonic seventh chords of an A natural minor scale:

Ami⁷, Bmi^{7b5}, CMA⁷, Dmi⁷, Emi⁷, FMA⁷ and G⁷

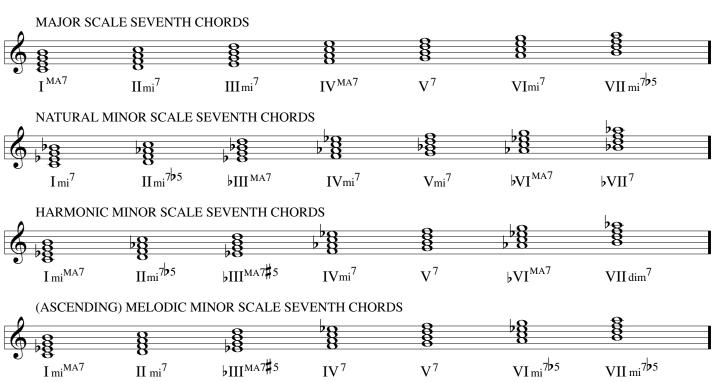
would be given as

Ami: Imi⁷, IImi⁷, IIIIMA⁷, IVmi⁷, Vmi⁷, VIMA⁷ and VII⁷.

The flat symbol before the roman numeral indicates that the root of that chord has been lowered a half step from the assumed pitch: e.g., HII is a minor third not major third above the tonic. This might be easier to understand if C natural minor is taken as an example, since in this scale the flatted roman numerals correspond to black keys:

Cmi⁷, Dmi⁷, EbMA⁷, Fmi⁷, Gmi⁷, AbMA⁷ and Bb⁷.

Using these guidelines, the roman numerals for the basic seventh chords of all major, natural minor, harmonic minor, and melodic minor scales are as follows.



In class activity: write in the roman numerals for Bossa Nova Fácil II and/or _____

While writing in roman numerals in this manner might seem unwieldy, is has the benefit of being unambiguous even with chromatic chords.

Assignments for lesson 9b:

- 1. Practice playing both versions of each of the five main chord types and their three common variants in all keys, i.e. with any bass note.
- 2. Practice Strutting With Some Stretto, Parallel Lines, and/or Bossa Nova Fácil II.
- 3.Review *Progression #1* in the following major keys:
- 4.**Practice** *Progression #2* in the following major keys: ______.
- 5.Write in the roman numerals for *Progressions #1* and #2.

Progression #3: Diatonic Circle of Fifths in Minor

[See Appendix Two for alternative rhythms]

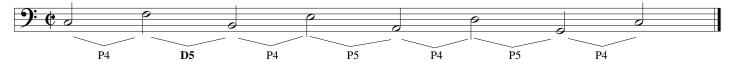


Whereas a diatonic circle of fifths in major involves the chords of only one scale, a diatonic circle of fifths in minor borrows chords from three scales: natural, harmonic and melodic minor. The natural minor scale is harmonically unsatisfying because it is missing a dominant seventh chord on the fifth degree of the scale. Raising the leading tone of the scale corrects this problem and at the same time creates the "harmonic minor" scale. This scale has its own problem of having an augmented second between scale degrees six and seven. Raising the sixth degree of the harmonic minor scale one half step yields the (ascending) melodic minor scale and eliminates the unwanted augmented interval.

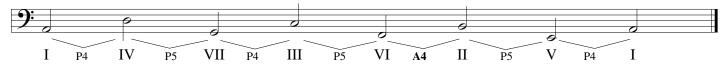
A satisfying diatonic circle of fifths progression in minor borrows from each of these minor scales as needed. For the most part the chords are borrowed from the natural minor scale. In *Progression #3*, the first five chords (scale degrees IV-VII-III-VI-II) have their origins in that scale. The sixth chord, V⁷, is borrowed from the harmonic minor scale for the reason noted above. The I chords (Imi^{MA7} and Imi⁶) are borrowed from the melodic minor scale in order to have the desired sixth and seventh degrees.

The main reason for using the natural minor scale for most of the chords lies in the bass line. Below are the major scale and minor scales arranged in a diatonic circle of fifths (fourths).

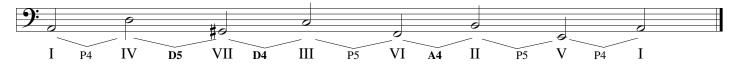
MAJOR SCALE ARRANGED IN A CIRCLE OF FIFTHS



NATURAL MINOR SCALE ARRANGED IN A CIRCLE OF FIFTHS



HARMONIC MINOR SCALE ARRANGED IN A CIRCLE OF FIFTHS



MELODIC MINOR SCALE ARRANGED IN A CIRCLE OF FIFTHS



Note how a major scale so arranged has only one imperfect interval. This is also true for a natural minor scale, since it has an identical interval content. A similar arrangement of a harmonic minor or melodic minor scale includes three imperfect intervals. Since the most harmonically satisfying circle of fifths is the one with the most perfect intervals, the natural minor scale is used as the basis for this progression.

Performance

- 1. Play *Progression #3* in the keys of ______. Write in the roman numerals.
- 2. Review Progression #2 and Bossa Nova Fácil II.
- 3. Introduce *Major/Minor Mix I* and/or *Fantasia Cubana*. Analyze their progressions. Write in the chord names. Play in the keys of _______.

Major/Minor Mix I





Fantasia Cubana







Analysis

In class activity: analyze Odd Idea and/or Gentle Waltz.

- 1. Write in the chord names and roman numerals.
- 2. Discuss the following:
 - a. How are the basic chords (root/third/seventh) used to generate rhythm in *Gentle Waltz*? in *Odd Idea*?
 - b. Locate the minor circle of fifths progressions in *Gentle Waltz* and *Odd Idea*. What other chord progressions are there in *Odd Idea*?
 - c. *Progressions #1-3* are presented as four voice chords moving as blocks. How does that texture compare to what is happening in *Gentle Waltz* and *Odd Idea*?





Odd Idea



EXERCISES

Write and/or play the following exercises as specified by the instructor.

 $IV^{\Delta 7} - VII^{\phi 7} - IIImi^7 - VImi^7 - IImi^7 - V^7 - I^{\Delta 7} - I^6$ in these major keys: ______

 $IVmi^7 - \flat VII^7 - \flat III^{\Delta 7} - \flat VI^{\Delta 7} - II^{\varnothing 7} - V^7 - Imi^{\Delta 7} - Imi^6 \quad \text{in these minor keys:} \\ \underline{\hspace{1cm}}$





Lesson 10: II-V-I

Progression #4: II-V-I

[See Appendix Two for alternative rhythms]



The II-V-I progression represents the basic cadential formula for jazz and can be described as predominant-dominant-tonic. This progression is, of course, nothing but the last three chords of a diatonic circle of fifths in either major or minor.

Progression #4 presents IImi⁷-V⁷-I^{MA7}-I⁶ in major followed by IImi⁷b⁵-V⁷-Imi^{MA7}-Imi⁶ in the relative minor. Notice the similarities between *Progression #4* and *Progression #3*.

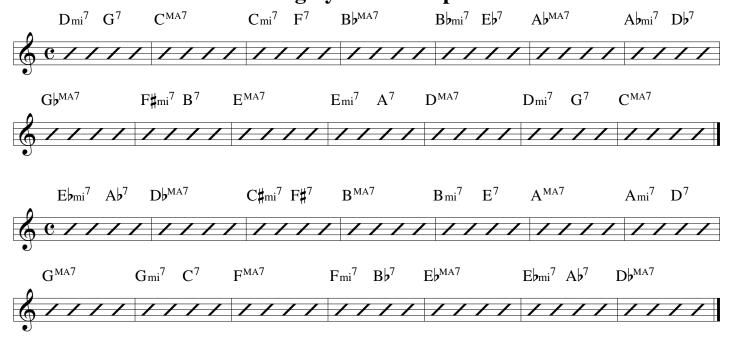
In the performance pieces for this lesson, the progression appears either as II-V-I or as I-II-V. Also, II-V can be used as an independent unit.

Performance

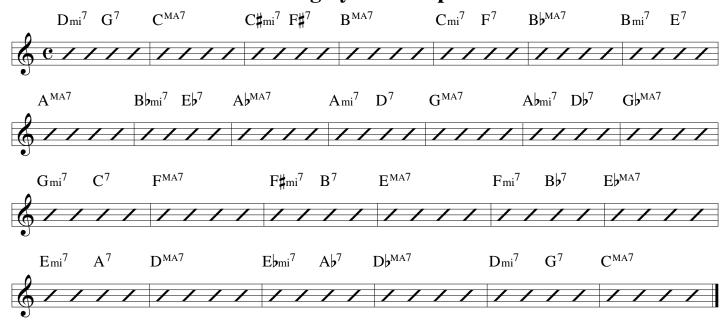
1.Play *Progression #4* in the keys of ______. Write in the roman numerals.

2. Introduce *II-V-I Pattern A* or *II-V-I Pattern B*. *Patterns A* and *B* present II-V-I progressions descending by step (whole step in *A* and half step in *B*) and traversing all twelve major keys. Note that for *Pattern A* to cover all twelve keys it must be played twice, the second time transposed up a half step.

II-V- I Pattern A: Descending by Whole Steps



II-V- I Pattern B: Descending by Half Steps



3. Introduce *Balladette*. Write in the chord names and roman numerals. Analyze the progression in terms of it being a succession of changing key centers. How are these key centers related?



Analysis

Introduce Meanders. Write in the chord names and roman numerals. As in Balladette, analyze the progression in terms of it being a succession of changing key centers. Differentiate between the main structural key centers and other key centers of lesser importance. How are the main key centers related? Discuss partwriting in *Meanders* and how it is intertwined with rhythm and harmony.

Meanders



Assignments for lesson 10b:

- 1. Practice Progressions #4 in the keys of ______ in the keys of ______ in the keys of ______
- 3. Practice II-V-I Pattern A or II-V-I Pattern B.
- 4. Practice Balladette, Bossa Nova Fácil II, Major/Minor Mix I and/or Fantasia Cubana. Write in the chord names and roman numerals for the assigned pieces.
- 5.**Review** the following pieces:

Review for Lesson 11A/B test:

- 1. **Review** Progression #1 in the following keys:

 Progression #2 in the following keys:

 Progression #3 in the following keys:

 Progression #4 in the following keys:
- 2. **Review** Strutting With Some Stretto, Parallel Lines, Bossa Nova Fácil II, Major/Minor Mix I Fantasia Cubana, Balladette, and/or
- 3. **Review** *II-V-I Pattern A* or *II-V-I Pattern B*.
- 4. **Study** the EXERCISE section of lessons 8-10. Be prepared to do this work either at the keyboard or on paper.
- 5. **Analysis**: be prepared to analyze a short piece by correctly writing in the chord names and roman numerals. Use the following piece, *A Wiggy Jig*, for practice.





EXERCISES

Write and/or play the following exercises as specified by the instructor.

 $IImi^7 - V^7 - I^{\Delta 7} - I^6$ or $I^{\Delta 7} - I^6 - IImi^7 - V^7$ in these major keys:

 $II^{\phi7} - V^7 - Imi^{\Delta7} - Imi^6$ or $Imi^{\Delta7} - Imi^6 - II^{\phi7} - V^7$ in these minor keys:





Assignments for lesson 11a:

- 1.**Review** for test.
- 2. Written work: write out EXERCISES # ______.

 This is due next class (11A).

Lesson 11: test

Performance

1. Play <i>Progression</i> #1 in the follo	owing keys:	·
Progression #2 in the follo	owing keys:	
Progression #3 in the follo	owing keys:	·
Progression #4 in the follo	owing keys:	

- 2. Play II-V-I Pattern A or II-V-I Pattern B.
- 3. **Play** Strutting With Some Stretto, Parallel Lines, Bossa Nova Fácil II, Major/Minor Mix I, Fantasia Cubana, Balladette and/or ______.

Analysis

Be prepared to analyze any piece or example in lessons 8-10. If the test piece is from outside the lesson material, it will be similar in nature.

Harmonization Exercises

Be prepare to find satisfactory solutions to harmonization exercises similar to those found at the end of lessons 8-10. This work will be done in part on paper and in part at the keyboard.

Assignment for Lesson 12A:

Working with Fakebooks and Leadsheets

Fakebooks are compilations of songs in a do-it-yourself format. Melodies are written out in full while harmonies are given in chord symbol format. The accompaniment has to be made up (faked) from the chord symbols. A piece written out in this format is called a **leadsheet** since only the lead line (melody) is given. Fakebooks exist for all genres of music. Ones can be found that contain jazz, pop, classical or various ethnic pieces. They are used where rehearsal time is minimal and improvisational skills are assumed.

In Appendix Three, a number of jazz standards are given that illustrate *Progressions #1-12*. In preparation for Lesson 12A, look at the following leadsheets in Appendix Three:

Another Star
I'm Old-Fashioned
Take Five
Autumn Leaves
Lady Bird
Cherokee

In these six songs are examples of each of the progressions that we have looked at. *Progression #1* is not to be found in its entirety, but passages of stepwise motion do exist.

Try to find some examples of *Progressions #1-4* and come prepared to play them with the correct harmonies using the chord building method that we have studied and used for the harmonization exercises.

Lesson 12: turnaround progressions

Progression #5: I-VI-II-V (Turnaround)

[See Appendix Two for alternative rhythms]





The **turnaround** progression, I-VI-II-V, is used for many different purposes. It is often used at the end of a song to lead back to the beginning (see the end of *I'm Old Fashioned*, *Blame It On My Youth* or *My Romance* in Appendix Three). It is also used for introductions or open-ended vamps. Additionally, it can serve as the harmonic underpinning of a phrase of a song, or, as in the case of *Blue Moon* (Appendix Three), be the sole harmonic progression in a complete section of a song. The progression may appear as I-VI-II-V or as II-V-I-VI (compare the A section of *Blue Moon* with the B section).

It is important to note that it is standard in the minor turnaround progression to use the VI chord borrowed from melodic minor, VImi^{7\(5\)} (not \(\bar{V}\)I^{MA7} from natural minor).

A I^{MA7}-I⁶-IImi⁷-V⁷-I^{MA7} progression is very similar to the turnaround progression I^{MA7}-VImi⁷-IImi⁷-V⁷-I^{MA7}. Reasons for using the VI chord include regularizing or otherwise changing the harmonic rhythm, altering the bass line, or adding a new harmonic color.

Analysis

- 1. Locate examples of *Progressions #1-4* in the following songs in Appendix Three: *I'm Old-Fashioned*, *Another Star*, *Take Five*, *Autumn Leaves*, *Lady Bird*, and *Cherokee*.
- 2. Besides finding examples of *Progression #5* in *Blue Moon*, look for them in *I'm Old Fashioned* and *Easy Living* (Appendix Three).
- 3. Compare the first two measures of *Progression #5* with measures 3 and 4. How are the VImi⁷ chord and I⁶ related? Why and when might they be interchangeable?

Performance

- 1. Play *Progression #5* in the keys of ______. Write in the roman numerals.
- 2. Introduce *Major/Minor Mix II* and/or *Melancholy Air*. Analyze their progressions. Write in chord names and roman numerals.





Assignments for lesson 12b:

- 1.**Practice** *Progression #5* in the keys of ______.
- 2.**Review** *Progressions* # in the keys of ...
- 3. Practice Major/Minor Mix II and/or Melancoly Air.

Progression #6: III-VI-II-V (Alternate Turnaround)

[See Appendix Two for alternative rhythms]





In a turnaround progression, III can often substitute for I. In situations where the progression is repeated, this helps to relieve the monotony or predictability. For an example see *Peri's Scope* (Appendix Three). In minor, if this substitution is made, then the VI chord should be borrowed from harmonic minor, VI^{MA7} , making the progression $III^{MA7} - VI^{MA7} - IImi^{7/5} - V^7 - Imi^{MA7}$.

Performance

- 1. Play *Progression #6* in the keys of ______. Write in the roman numerals.
- 3. Introduce *Left Hand Tune* and/or *Stepping Up*. Write in the chord names and roman numerals. Analyze their progressions. Does *Stepping Up* include the progression III-VI-II-V or only a series of II-V progressions?

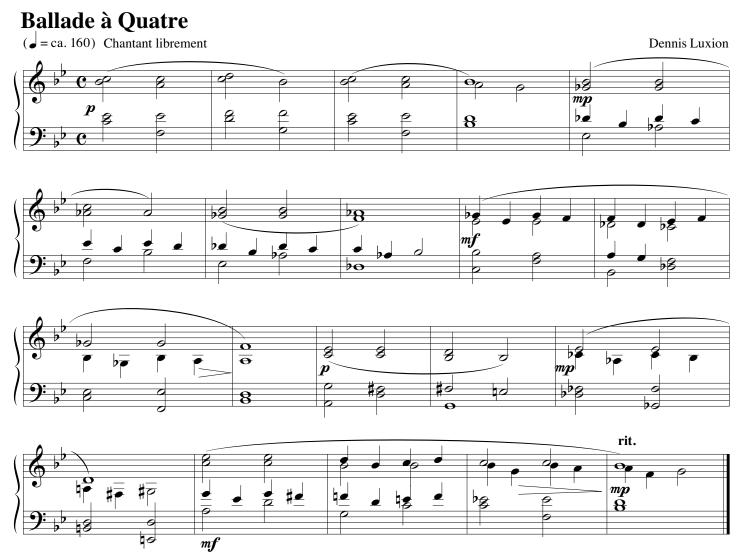
Left Hand Tune



Stepping Up (= ca. 108) Dennis Luxion 3 The control of the co

Analysis

Analyze and discuss the harmonies of Ballade à Quatre. Write in chord names and roman numerals.



EXERCISES

Write and/or play the following exercises as specified by the instructor.

 $IImi^7 - V^7 - I^{\Delta 7} - VImi^7$ or $I^{\Delta 7} - VImi^7 - IImi^7 - V^7$ in these major keys:

 $II^{\emptyset7} - V^7 - Imi^{\Delta7} - VI^{\emptyset7}$ or $Imi^{\Delta7} - VI^{\emptyset7} - II^{\emptyset7} - V^7$ in these minor keys:





Assignments for lesson 13a:

- 1. Practice Major/Minor Mix II, Melancoly Air, Left Hand Tune and/or Stepping Up.
- 2.**Practice**: *Progression #5-6* in the keys of
- 3. Practice Five Finger Exercise in the keys of ______.

 and Five Finger Exercise in Minor in the keys of
- 4. At the keyboard: work out and be able to perform EXERCISES #
- 5. Written work: write out EXERCISES # ______.

 This is due next class (13A).

Lesson 13: extended turnaround progressions

Progression #7: I-II-III-VI-II-V (Extended Turnaround)

[See Appendix Two for alternative rhythms]





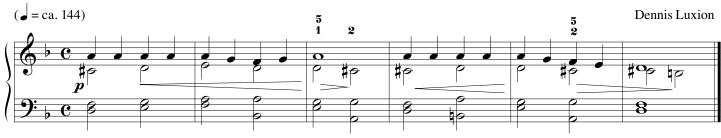
This progression, I-II-III-VI-II-V-I, combines stepwise movement with the circle of fifths movement of the turnaround progression III-VI-II-V-I. This creates a longer harmonic phrase and introduces the concept of using passing chords (in this case, the II chord which is used to connect I and III).

The progressions illustrated in this text are based on functional harmony: the establishing of tonal centers through the use of cadences, and the relationships between the chords used for that purpose. While certain progressions, such as II-V-I, have important roles in the establishment of tonal centers, other progressions or chords may be purely decorative or elaborative. One progression that was a favorite of Bill Evans is II-III-IV-V. Used in place of II-V, this is an example of the use of stepwise movement to decorate a simple functional progression. The progression II-III-IV-V may be found at the end of Bill Evans' tune *Peri's Scope* (Appendix Three).

Performance

- 1. Play *Progression #7* in the keys of ______. Write in the roman numerals.
- 2. Review *Progressions #5-6* in the keys of ______.
- 3. Review Major/Minor Mix II, Melancholy Air, Stepping Up and/or Left Hand Tune.
- 4. Introduce *A Sad Tale* and/or *The Long And Short Of It*. Analyze the progressions and write in the chord names and roman numerals. Explain why there are two different chords on degree VI in *A Sad Tale*.

A Sad Tale



The Long And Short Of It



Analysis

Analyze *Calyptic*. Locate all examples of the progression I-II-III-VI-II-V. How has this progression been modified by 1) the addition of chords and 2) the replacement of some chords with others?





Assignments for lesson 13b:

- 1.**Practice** *Progression* #7 in the keys of
- 2. Review *Progressions* #5-6 in the keys $\overline{\text{of}}$
- 3. Practice A Sad Tale and/or The Long And Short Of It.
- 4. Review Major/Minor Mix II, Melancholy Air, Stepping Up and/or Left Hand Tune.

Progression #8: I-IV-III-VI-II-V (major only)

[See Appendix Two for alternative rhythms]



This progression is just a slight variation of the last one. Since the progression opens I-IV-III, rather than I-II-III, it is more based on the circle of fifths then on stepwise motion.

Performance

- 1. Play *Progression #8* in the keys of ______. Write in the roman numerals.
- 2. Review *Progressions #5-7* in the keys of ______.
- 3. Review Major/Minor Mix II, Melancholy Air, Stepping Up, Left Hand Tune, A Sad Tale and/or The Long And Short Of It.
- 4. Introduce *It's An Easy Waltz*. Discuss the form and harmonies. Write in the chord names and roman numerals.

It's An Easy Waltz



Analysis

- 1. Analyze *Blame It On My Youth* and *My Romance* in Appendix Three. Locate any uses of *Progressions* #7-8. Show how these progressions have been modified to fit the melodies of the songs.
- 2. Analyze *Brasiliana*. Locate all examples of *Progressions* #7-8. What other progressions are used that we have studied? Discuss the progression in the second ending and how it works.

The harmonic rhythm changes in the piece. Discuss the effect of that change and its relation to form.



EXERCISES

Write and/or play the following exercises as specified by the instructor.

$$I^{\Delta 7}-IImi^{7}-IIImi^{7}-VImi^{7}-IImi^{7}-V^{7}-I^{\Delta 7}-I^{6}$$

in these major keys: _____

 $\operatorname{Imi}^{\Delta 7} - \operatorname{II}^{\varnothing 7} - \flat \operatorname{III}^{\Delta 7} - \flat \operatorname{VI}^{\Delta 7} - \operatorname{II}^{\varnothing 7} - \operatorname{V}^{7} - \operatorname{Imi}^{\Delta 7} - \operatorname{Imi}^{6}$ in these minor keys:





Assignments for lesson 14a:

- 1. Practice It's An Easy Waltz.
- 2. Review Major/Minor Mix II, Melancholy Air, Stepping Up, Left Hand Tune, A Sad Tale and/or The Long And Short Of It.
- 3.**Practice** *Progression* #8 in the keys of
- 4.**Review** *Progressions* #5-#7 in the keys of
- 5. At the keyboard: work out and be able to perform EXERCISES #
- 6.Written work: write out EXERCISES # ______.

 This is due next class (14A).

Lesson 14: chromatic progressions

Progression #9: Chromatic Walkdown

[See Appendix Two for alternative rhythms]



Up to this point, the chord progression examples have used purely diatonic harmonies. These two chord progressions illustrate the use of some types of chromaticism. In *Progression #9*, the bass walks down chromatically from #IV to I. Because of similarities with the extended turnaround and the diatonic circle of fifths, the "chromatic walkdown" can sometimes be used in their stead (see *Down and Around* below or *Let's Go Fishing* in Appendix One). Show what these similarities are.

For other examples of this progression, see *That's All* in Appendix Three and *Carnaval Eterno* below.

Progression #10: Chain of Dominants

[See Appendix Two for alternative rhythms]



In *Progression #10*, the chromaticism appears in the top two voices. Note that the third/seventh pair is moving down chromatically while the bass in moving around the circle of fifths. This progression is a chain of dominant sevenths. For an examples of this progression, see *Rosetta* (Appendix Three), *Mountaineer* (Appendix One), and *Count Me In!* and *Shout It Out!* in lesson 14B.

Tritone Substitutions

Since dominant chords a tritone apart share the same third and seventh, they are often used interchangeably. A dominant seventh that replaces its counterpart at the tritone is called a **tritone substitution**. In *Progression #9*, note the use of a tritone substitution for the dominant and its enharmonic spelling. What chord is used and how should it be spelled? Is there any reason for the enharmonic spelling?

Because *Progression #10* is a chain of dominant seventh chords, it is open to much tritone substitution. In the song *Rosetta*, is there any chord that could rightfully be considered a tritone substitution?

Dominant chords, or their tritone substitutions, may also be introduced into the progressions previously studied as **secondary dominants** (i.e., dominants of scale degrees other than I). These secondary dominants could either replace chords of the progression or be added to them. In the case of a II-V-I, we could have II⁷-V⁷-I^{MA7} (replacement) or II⁷-IImi⁷-V⁷-I^{MA7} (addition) or IImi⁷-V⁷-I^{MA7} (addition/tritone substitution).

Performance

- 1. Play *Progressions* #9-10 in the keys of ______. Write in the roman numerals.
- 2. Introduce *Carnival Etern*o and *Down And Around*. Analyze and discuss their chord progressions. Write in chord names and roman numerals. In *Down And Around*, note how virtually the same melody is harmonized in two different ways. Discuss.

Carnaval Eterno



Down And Around



Assignments for lesson 14b:

- 1.**Practice** *Progressions* #9-10 in the keys of _____
- 2.**Review** *Progressions* #5-8 in the keys of _____
- 3. Practice Carnaval Eterno and/or Down And Around.
- 4. ... Review Major/Minor Mix II, Melancholy Air, Stepping Up, Left Hand Tune, A Sad Tale, The Long And Short Of It and/or It's An Easy Waltz.

Progression #11: Diminished Seventh Turnaround (major only)

[See Appendix Two for alternative rhythms]



Progression #12: IV-#IV-I (major only)

[See Appendix Two for alternative rhythms]



These two short chord progressions illustrate some uses of diminished seventh chords. In *Progression* #11, diminished sevenths are used as secondary dominants. $\sharp I^{O7}$ and $\sharp II^{O7}$ resolve to IImi⁷ and IIImi⁷ respectively, each of the diminished chords functioning as the VII^{O7} of the target chord. Although they are root position chords, the diminished sevenths create the same bass line that first inversion dominant sevenths would. Note the similarity between this progression and I-VI-II-V-III (*Progressions* #5-6). For examples of this progression see *Easy Living* (Appendix Three) and *Penguins* (Appendix One).

Progression #12 is a very common harmonic sequence: IV⁶-#IV^{O7}-I⁶/V. This progression not only includes an inversion, I⁶/V, but for voiceleading reasons, this chord consists of the fifth plus the third and sixth of the chord - no root. Show how this progression is similar to II7-#II^{O7}-III7. For an example of this progression see *Solitude* (Appendix Three).

Performance

- 1. Play *Progressions #11-12* in the keys of ______. Write in the roman numerals.
- 2. Introduce *Count Me In!* and *Shout It Out!*. Analyze and discuss their chord progressions. Write in chord names and roman numerals.

Shout It Out!

 $(\beta = \text{ca. }92)$ Swing Dennis Luxion





Count Me In!

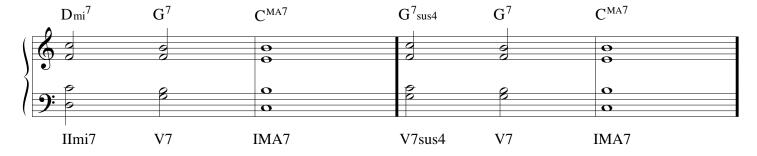


Analysis

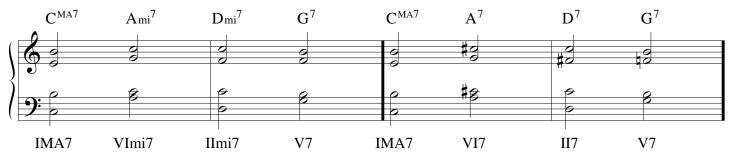
Varying Dominant Seventh Chords

As we have seen, a dominant seventh may occasionally be replaced by another dominant seventh which shares the same third and seventh (tritone substitution). There are other ways in which dominant chords me be varied. II-V progressions may be thought of as a unit which may be replaced by the V chord alone. Likewise a V chord may be replaced by a II-V.

In a similar manner the predominant function of II could be taken up by a suspended fourth version of the V⁷ chord. Note that a IImi⁷-V⁷-I^{MA7} progression varies from a V⁷sus4-V⁷-I^{MA7} progression only in the bass note of the first chord.



As a case study, let us begin with a basic turnaround progression, I-VI-II-V-(I). In purely diatonic harmonies this progression would be I^{MA7} -VImi⁷-IImi⁷-V⁷-(I^{MA7}). In a frequently used variation of this progression secondary dominants (V⁷/II and V⁷/V) replace the VI and II chords.



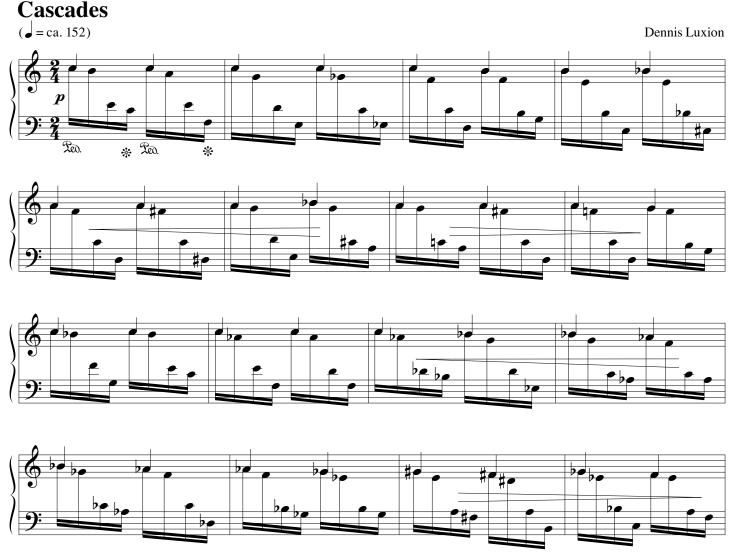
This new turnaround progression, IMA7-VI7-II7-V7-(IMA7) can be varied in a number of ways.

- 1) the dominant seventh chords could be replaced by II-V's.
- 2) the dominant seventh chords could be prefaced by suspended fourth chords.
- 3) tritone substitutions could be made. Explain how Bbmi⁷-Eb⁷ could replace A7.



Culmination Study: Cascades

The following piece, *Cascades*, includes most of the progressions that we have studied. Discuss the form. How do harmony and form interact. Write in the chord names and roman numerals. Look for examples of the following progressions: #2 and/or #3, #4 and/or II-V-I Pattern A, #5 and/or #6, #7 and/or #8, #9,





EXERCISES

Write and/or play the following exercises as specified by the instructor.

 $\sharp IV^{\emptyset7} - IVmi^6 - IIImi^7 - \flat IIIdim^7 - IImi^7 - \flat II^7 - \flat II^7 - \downarrow II^6$ in these keys:

 $I^{\Delta 7} - \#I \text{dim}^7 - II \text{mi}^7 - \#II \text{dim}^7 - III \text{mi}^7 - VI^7 - II^7 - V^7 - I^{\Delta 7} - I^6 \text{ in these keys:}$





Assignments for lesson 15a (review for final):

- 1. Practice Shout It Out! and/or Count Me In!.
- 2. Review Major/Minor Mix II, Melancholy Air, Stepping Up, Left Hand Tune, A Sad Tale, The Long And Short Of It, An Easy Waltz, Carnaval Eterno and/or Down And Around.
- 3.**Practice** *Progressions* #11-12 in the keys of ______
- 4.Review *Progressions #5-#10* in the keys of
- 5. At the keyboard: work out and be able to perform EXERCISES #______
- 6. Written work: write out EXERCISES # ______.

 This is due next class (15A).

Lesson 15: final exam

Performance

1. Play	Progression #5 in the keys of	.•
	Progression #6 in the keys of	.•
	Progression #7 in the keys of	
	Progression #8 in the keys of	.•
	Progression #9 in the keys of	
	Progression #10 in the keys of	
	Progression #11 in the keys of	
	Progression #12 in the keys of	
2. Play	Five Finger Exercise in the keys of	·
	Five Finger Exercise in Minor in the keys of	·
3. Play	Major/Minor Mix II, Melancholy Air, Stepping Up, Left Hand Tune, A Sad Tale, The Short Of It, An Easy Waltz, Carnaval Eterno, Down And Around, Shout It Out!, Counand/or	_

Analysis

Be prepared to analyze any piece or example in lessons 12-14. If the test piece is from outside the lesson material, it will be similar in nature.

Harmonization Exercises

Be prepared to find satisfactory solutions to harmonization exercises similar to those found at the end of lessons 12-14. This work will be done in part on paper and in part at the keyboard.

final exam

Appendix One: selected reharmonizations from Kybd I & II





Appendix One KH1 -83-



Appendix One KH1 -84-



Appendix One KH1 -85-

Appendix Two: alternative rhythms for seventh chord progressions









Appendix Three: leadsheets





Horns and background vocals at letter B are like letter A each time (horns on bars 9-16 only).

Second & Third Verses

2. For you, love might be a toast of wine, But with each sparkle know the best for you I pray.

For you, love might be for you to find, But I will celebrate our love of yesterday. 3. For you, there might be another star,
But through my eyes the light of love is all
I see.

For you, there might be another song, But in my heart your melody will stay with me.





©1942 T.B.Harms Co., Copyright Renewed c/o The Welk Music Group, Santa Monica, CA 90401. Authorized Selling Agent in Japan: High Note Publishing Co., Ltd. Used by permission of JASRAC License #8670719. International Copyright Secured. All Rights Reserved. Used By Permission.





©1947,1950,1987 Enoch Et Cie. Renewed 1975,1978 Enoch Et Cie. Sole Selling Agent For U.S.A. (Including its Territories and Possesions) & Dominion of Canada: Morley Music Co., by agreement with Enoch Et Cie. Sub-publisher in British Commonwealth is Peter Maurice Co. Ltd., London. International Copyright Secured. All Rights Reserved. Used By Permission.



©1947 (Renewed) by Consolidated Music Publishers, a Div. of Music Sales Corp. (ASCAP). International Copyright Secured. All Rights Reserved. Used By Permission.



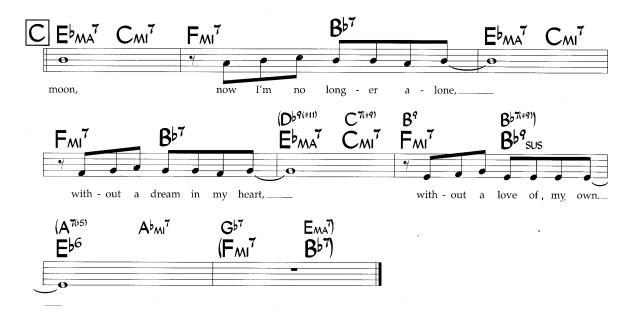
Peri's Scope

BILL EVANS



TRO © 1965 (renewed) and 1975 FOLKWAYS MUSIC PUBLISHERS, INC., New York, NY





Alternate chords are as played by Art Blakey.



©1934 T.B.Harms Co. Copyright Renewed. c/o The Welk Music Group, Santa Monica, CA 90401. Authorized Selling Agent in Japan: High Note Publishing Co., Ltd. - used by permission of JASRAC License #8670719. International Copyright Secured. All Rights Reserved. Used By Permission.

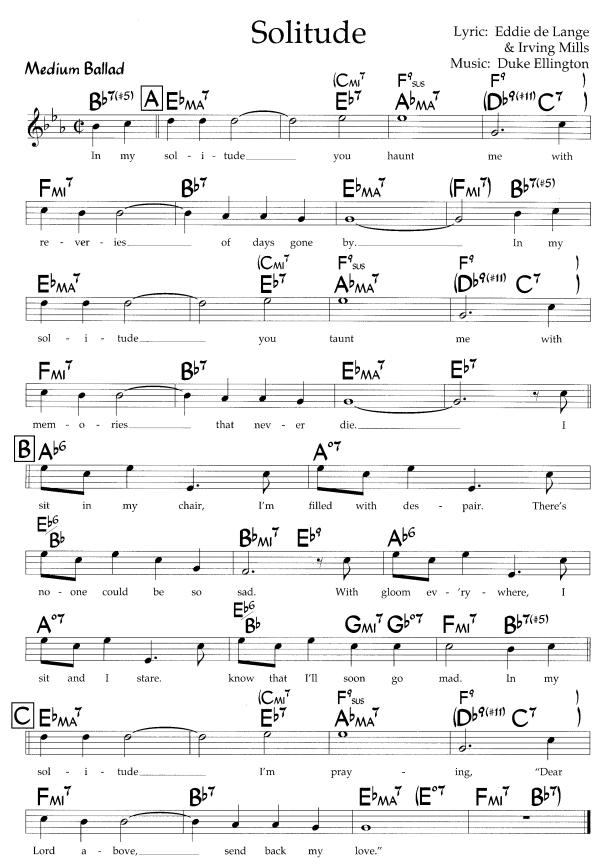


©1935 T.B.Harms Co. Copyright Renewed. c/o The Welk Music Group, Santa Monica, CA 90401. Authorized Selling Agent in Japan: High Note Publishing Co., Ltd. Used by permission of JASRAC License #8670719. International Copyright Secured. All Rights Reserved. Used By Permission.

THAT'S ALL ALAN BRANDT **BOB HAYMES** Ballad Eb △ 7#11 B> △ 7 Bb A7 C m⁷ D m⁷ C m⁷ 1. Dm7 G7 Db o 7 Eb m6 $D m^7$ G 7 D_m⁷ Bb 7 b9 2. C m⁷ Bbg F m⁷ F 7 C_m⁷ F7 Bb 7 b9 C 7 9 Ab7 EDA7 C 7 9 F m⁷ G m⁷ Eb A 7 C 7 9 D 7 9 $C m^7$ F 7 G m⁷ **F** △ 7 E> 4 7 11 Bb A7 $D m^7 C m^7$ D m7 G 7 BD A7 $C \; m^{7 \; \text{\tiny 7}} \; \cdot \; \cdot \; \cdot$ Bb § E m765 Db o 7 Eb m6 D m⁷ C m⁷







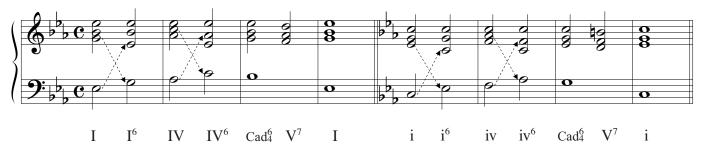
©1934 (renewed 1962)EMI Mills Music, Inc., Scarsdale Music Corp. and Famous Music Corp. in the USA. Used by Permission of CPP/Belwin, Inc., Miami, FL All Rights Reserved

1. Overview of progressions based on I–IV–V and their variations.

The basis for tonal harmony is the Tonic–Pre- (or Sub-)Dominant–Dominant relationship. The dynamic that this trinity creates is the driving force behind all harmonic progressions at all levels in the tonal idiom. The table below presents an initial selection of possible combinations, substitutions and variations within the typical order of the standard progression. In practice one can mix and match freely, provided proper voice-leading practice is observed, i.e., avoidance of parallel octaves and fifths between the outer voices in keyboard harmony style. All progressions can be transposed to minor.

TONIC				Pre- Dominant				Dominant	TONIC
I				IV				V	I
I		I^6		IV		IV ⁶	Cad ⁶	V^7	I
I				ii ⁶			Cad ⁶	V^7	I
I		vi		IV			Cad ⁶	V^7	I
I		vi		IV		ii ⁶	Cad ⁶	V^7	I
I		iii		IV			Cad ⁶	V^7	I
I		iii		IV		ii ⁶	Cad ⁶	V^7	I
I	vii°6	${ m I}^6$	vi	ii ⁶			Cad ⁶	V^7	I
I				IV		ii ⁶	Cad ⁶	V^7	I
I		${ m V_{/}_{IV}}$		IV		$V_{/V}$	Cad ⁶	V^7	I
I				$ h$ II 6			Cad ⁶	V^7	I
I				IV	IV ⁶	It+6	(Cad ⁶ ₄)	V^7	I
I				IV	IV ⁶	Gr ⁺⁶ must use co	Cad ⁶ ombination	V^7	I
I				IV	IV ⁶	Fr ⁺⁶	(Cad ⁶ ₄)	V^7	I
			andir Fo	ii ⁷				V ⁷	\mathbf{I}^7

- 2. Inversions of triads and 7th chords. In order to smoothly connect one function to another, we use inversions. The notion that the hands should move as little as possible (to create a smooth transition) means that you have to look for the inversion that is most closely positioned to the chord you are coming from. (Note however that avoiding undesirable parallels takes precedence over finding the closest inversion.)
 - a. The use of I⁶ and IV⁶ (in major and in minor)



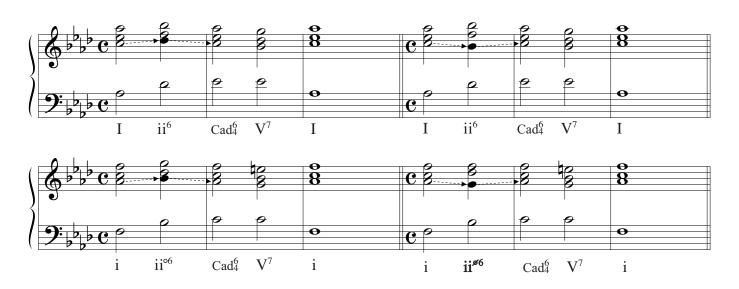
Study #14 ("Soft and simple")



Study #15 ("Thumb-Trot")

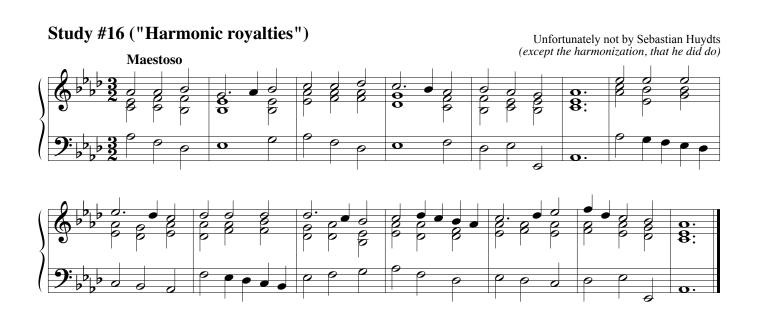


b. The use of ii⁶ and vii⁶ (in major and in minor)



c. The use of V⁶ (in major and in minor)





d. Inversions of the dominant and other 7th chords.

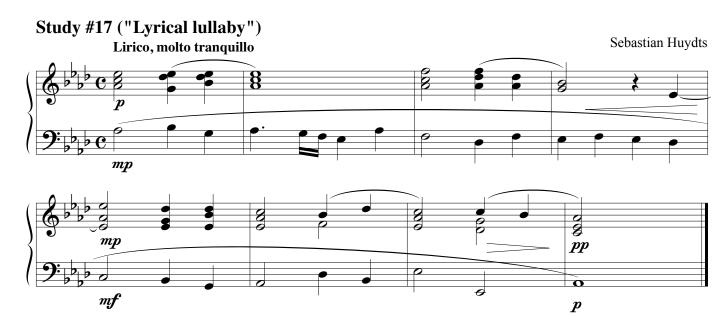
- 1. 7th chord inversions function similar to the inversions of I, ii, IV and V.
 - a) They make it possible to approach the different harmonic functions within a key by diatonic stepwise motion in the bass.
 - **b)** They provide added harmonic variety. Although an inversion is technically the same chord as its root position (after all, the pitches are the same), the lowest note is crucial in it's harmonic perception.
- 2. The root position and the 3 inversions of the **dominant** 7th chord fulfill a specific function. We will highlight and illustrate their main tendencies (=within the key, we are not yet dealing with chromatic alterations or modulation at this time) and diatonic alternatives with a few examples.
 - a) The root position strongly suggests resolution to I, but can just as easily be followed by (among others) I^6 , vi, or other inversions of itself, such as V_2^6 and V_2^4 depending on the ultimate goal.
 - b) V_3^6 strongly suggests resolving to I, but may be followed (a.o.) by its root position, or by IV^6 or ii⁴/₃.
 - c) V_3^4 strongly suggests resolving to I, but may be followed (a.o.) by I_4^6 , or by I_4^6 or I_4^{17} .
 - d) V_2^4 strongly suggests resolving to I^6 , but may be followed (a.o.) by IV or ii^6 .

"A Diligent Dominant"

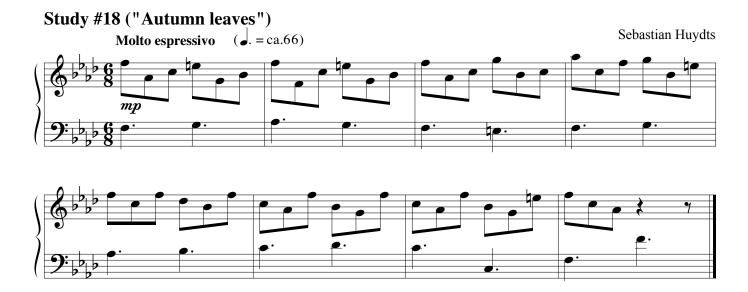
(Different resolutions of the Dominant 7ty and its inversions, and how this creates useful prolongation)







Appendix Four KH1 -109-



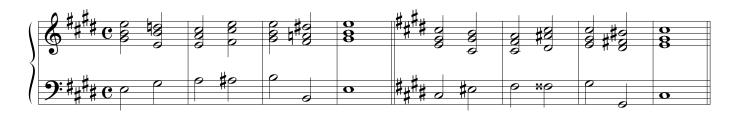
3. Secondary dominants and pre-dominants.

a) Secondary dominants in root position. In order to hear a key other than the home key as a tonic (be it temporary or permanent), one needs the same harmonic dynamic that defines the home key. In other words, one needs dominants and pre-dominants around the alternative key. To avoid confusion between the (pre-) dominant proper and the (pre-) dominant of a chord different from the tonic chord, we use the term *secondary* (pre-) dominant for the latter. E.g., in the key of C major, G⁷ is the dominant proper, but A⁷ is a *secondary* dominant for ii (a D minor triad), B⁷ is a *secondary* dominant for iii (an E minor triad) and so forth.



In practice, the applications of secondary functions is quite simple if one considers every tonicization of a scale degree other than the tonic a key in its own right. T-SD-D relationships function the same for any key, both Major or minor. Following that logic, tonicizations and/or modulations simply become a concatenation of the same progression, where the pitch level changes, but the intervallic relationships remains identical.

b) Secondary dominants in inversions. The use of inversions allows for smoother bass lines.





c) Secondary dominants of ii, iii &vi. Secondary dominants are used for any of the chords diatonically related to the original key, i.e. that are found in the key (for now with the exception of vii°.)

These progressions can easily be rewritten to accomodate inversions or other melody notes:







4. Tonicization and modulation. Essentially, both terms are similar in that they define the process of moving to a key different from the original. The distinction between one or the other is mostly one of perception/duration. If the life span of the new key is relatively brief (a few measures), and the original key is still present in the mind and will be returned to soon, then we speak of tonicization. If the original key has been permanently left, and the progression has destroyed the notion of the previous tonic, then it is a modulation. In addition, modulations frequently carry a change of key signature (although this is certainly not a prerequisite.)

Example 1: Direct modulation.



Example 2: Pivot modulation.



Example 3: Chromatic modulation.

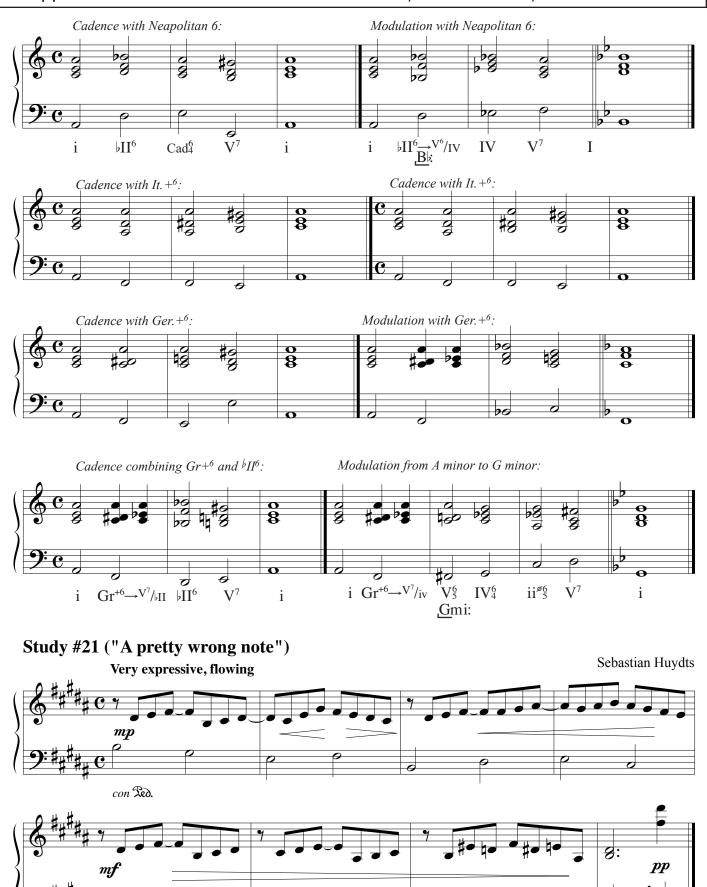




Study #20 ("Arpeggio")



- **5. Chromatic alteration** changes the sound of a diatonic chord by increasing its dissonance within the key. As such it focuses attention on the passage in which it occurs, and may confuse the function of the chord it substitutes. Chromatically altered chords are therefore often used in chromatic modulation. We will provide two prime examples:
- a) The **Neapolitan Sixth** or ${}^{\downarrow}$ **II**⁶ occurs mostly in the minor mode, although it can just as easily be used in the major mode. In the cadence it substitutes ii^{o6} or iv⁶ (or ii⁶ or IV⁶ in major.) The resultant chord can be cadenced on, as a result of which you end up on a key that is a half step up from the original. ${}^{\downarrow}$ **II**⁶ can be used as a chromatic pivot chord to modulate to other remotely related keys as well.
- b) The **Augmented Sixth** chord comes in three versions: The *Italian*, *German* and *French* Augmented Sixth. It substitutes IV or iv. The resultant chord (especially the Gr+⁶) is very effective to be used as a chromatic pivot chord to modulate to remotely related keys. This stands to reason; in the case of the It+⁶ and the Gr+⁶ the sound is identical to a (not "the"!) dominant 7 sonority.



Study #21b ("Cosmopolitan Thoughts")

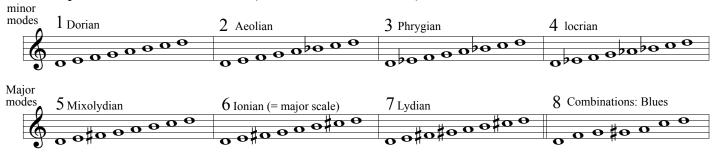
Sebastian Huydts



6. Overview of modes, altered modes and artificial scales.

The Dorian, Phrygian, Lydian and Mixolydian modes can be found by playing the major scale starting on scale degrees other than $\hat{1}$, $\hat{6}$ or $\hat{7}$. The T-SD-D functions work, but not as convincingly as in the major or minor scales.

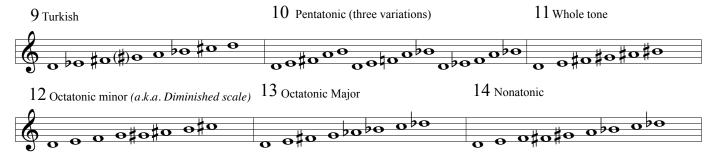
1 - Heptatonic or 7-note modes (a.k.a. "Church modes")



Altered modes add chromatics to the scale for which our keysignature system has not developed a notational standard (yet?). Examples are the Turkish mode, combinations of the modes that result in extra needed accidentals (think of a combination like Phrygian/Lydian/Dorian (H-W-1½-H-W-H-W))

The artificial scales (such as whole-tone, octatonic and nonatonic scales) are formulaic scales of limited transposition. In addition, the symmetric nature of these scales makes that T-SD-D functions cannot convincingly exist. Keysignatures are seldom used for these scales (Bártòk does so in *Mikrokosmos*).

2 - Other scales/modes







Largo.....broad, very slow.

A *tempo scale* is a collection of tempi arranged in order from lowest to highest. The following Italian tempo indications are the most commonly found and used:

Lento	slow.
Adagio	fairly slow. (literally: "At ease")
Andante	moderate walking pace.
Moderato	at a moderate pace. Also used as adjective ("Andante moderato" etc.)
Allegro	fairly fast, lively and brisk. (literally: "lively, happy, gay")
Vivace	similar to "Allegro", generally used for more lighthearted moods.
Presto	very fast.
These indications are	often modified with adjectives. Common examples include:
Adagio molto	fairly slow, really; take your time. (literally: "much at ease")
Andante semplice	at a moderate walking pace, keep it simple, no hurry.
Andante con moto	at walking pace, keep it moving (i.e., don't drag!)
Allegro agitato	nervously fast, agitated.
Allegro appassionato	fast with great passion.
Allegro assai	energetically fast, lively and brisk. (literally: "very lively, happy, gay")
Allegro con fuoco	burning fast, with great excitement.
Allegro con moto	fast, keep it moving forward. Often simply: "Con moto" with metronome marking.
Allegro deciso	fast and decisive.
Allegro ma non troppo	not too fast, lively or brisk. (literally: "lively, happy, gay, but not too much")

These indications are also often modified by diminutives and augmentatives:

Allegro vivacelightheartedly fast, vivacious.

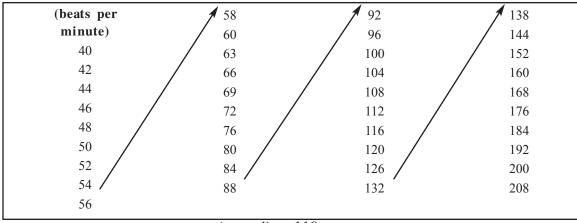
Presto volante fast like the wind.

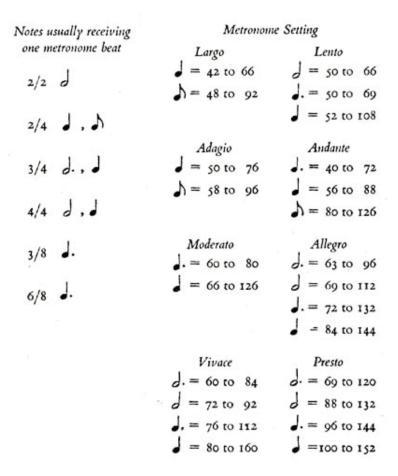
Larghetto	less than "Largo", therefore; a little bit faster than "Largo".
Adagissimo	same as "Adagio molto".
Andantino	less than "Andante", therefore; a little bit faster than "Andante".*
Allegrissimo	more than "Allegro", therefore; faster.
Prestissimo	extremely fast, often as fast as acoustically practical or physically possible.

^{*} The meaning of Andantino is disputed, and remains unresolved. A metronome marking is needed.

The Metronome Scale

In 1815, Johann Nepomuk Maelzel patented a mechanical device that he called the "metronome" that could be used to indicate various musical tempi. Tempi could be specified in terms of some number of beats per minute. For this device, Maelzel established a scale of tempi that has been the most common numerical scale by which musical tempi are specified. Maelzel provided a metronome and hearing aids to Beethoven, who became an avid user of both.





Metronome settings guideline for Italian tempo indications as provided by the Franz Metronome Company. These speeds are subjective, although considered fairly accurate.

The *presto* speed for the quarter note value is often taken higher.

Some practical advice:

- 1) As you can see from the list above, the tempo indications themsleves are by no means precise. Therefore, always add a (realistic!) metronome marking; doing so considerably speeds up understanding the "feel" of the piece and avoids unnecessary confusion or discussion when time is of essence.
- 2) Unless your tempo needs to be absolutely precise (for film cues etc.) use Maelzel's scale for metronome markings. That is; do not use absurdly precise values like J = 101 or similar. Use J = 100 or 104. Putting the abbreviation "ca." (= circa, approximately) after the equal sign indicates a sense of realism on your part. For further discussion as to why, we refer you to "Tempo Scales in Polytempo Music" by John Greschak at http://www.greschak.com/polytempo/ptts.htm.
- 3) If you are a contemporary American composer, and Italian is not your mother tongue, use descriptive English vocabulary in order to get the result you desire accross. Crockpot Italian only confuses musicians, and indicates a dilettante approach to music.

Standardized Chord Symbol Notation (Brandt/Roemer)

CHORD SYMBOLS	DO NOT USE THESE OR VARIANTS OF THEM. EDIT WHEN THEY OCCUR ON SCORES							
G	GMA	GMAJ	Gma	Gmaj	Gmj			
G6	G 6 Т Н	G(ADDE)	G(E)	GMA ⁶	G6			
G7			G(F)	G74	G(+7)			
GMI	G-	GM	Gm	Gmi	Gmin			
GM17	G-7	Gm7	Gm ⁷	Gmi ⁷	Gmin ⁷			
GMA7	G7	GM ⁷	Gmj ⁷	G74 GA	G7# G7+			
GMA9	GMA ⁷⁽⁹⁾	GMA (ADDA)	G7(9)	G 9(7)	G9 G2			
G+1	G+7	GAUG 7	G7+	G7(#5)	G7+5			
G+9	G9+	G7+(9)	G9 (#5)	G+7(9)	G9(5+)			
G 13	G9 (13)	G7(13)	G9(ADDE)	G 9(+E)	G9(+6)			
G°	GDIM	G 07	G-	G70	Gdim			
G 6/9	G6 (ADD 9)	G6 (ADD A)	GZ	G13(NO 7)	G 69			
G7 (65)	G7-5	G7 (5b)	67(5-)	G7(#4)	G-3			
GM17(65)	GA	G&7	GM17-5	GM17 50	GM1 75 b			
G7 (69)	G7 (-9)	G7 (ADD Ab)	G96	G 69	G9-			
GMI (MAT)	GMI (ADD F#)	GMI7	Gmi mj 7	6-7	Gm ⁷			
G7 (#9)	G7(+9)	G(+9)	G +9	G7 (\$3)	G 9+			
G7505	G7 (505 4)		67 (ALT 41H)	G7(+4)				
G9 (#11)	G+11	G"+	G"#	G9+11	G 9(b12)			

Notes:

- 1) Never use lower case letters: They can easily be misread.
- 2) Never use [—] to indicate minor (as in **G**). **G**MI is the only acceptable indication of g-minor.
- 3) Never use MA by itself: Use it always in combination with 7 or 9 as in MA7 or MA9.
- For instance: 6 by itself indicates G-major clearly and without doubt.
- 4) Only use **7** to indicate seven. The Germanic **7** is not used.

CHORD SYMBOLS

CHORD SYMBOLS

The chord symbols used in this book follow (with some exceptions) the system outlined in "Standard Chord Symbol Notation" by Carl Brandt and Clinton Roemer. It is hoped you will find them clear, complete and unambiguous.

Below are two groups of chord spellings:

1) The full range of chords normally encountered, given with a C root, and

2) Some more unusual chords, all of which appear in tunes in this book. (Note: some groups of notes below could be given different names, depending on context. See previous page for a definition of 'altered' chords).

