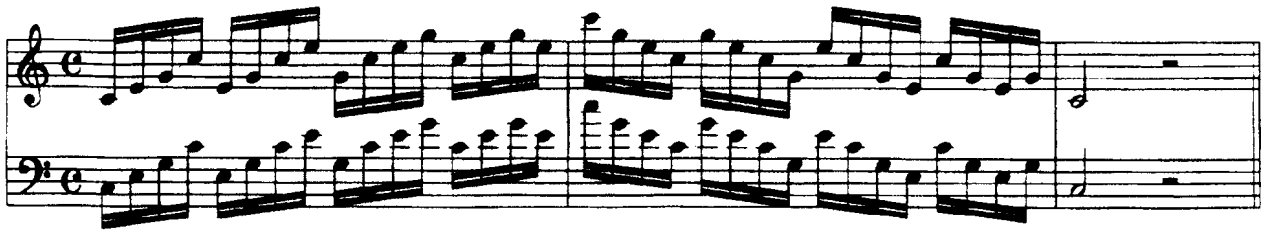
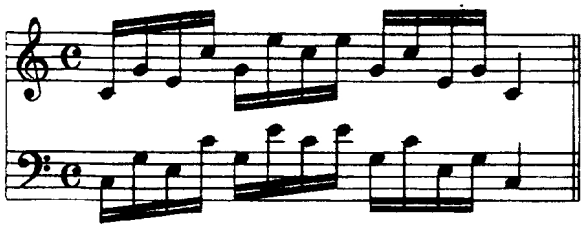
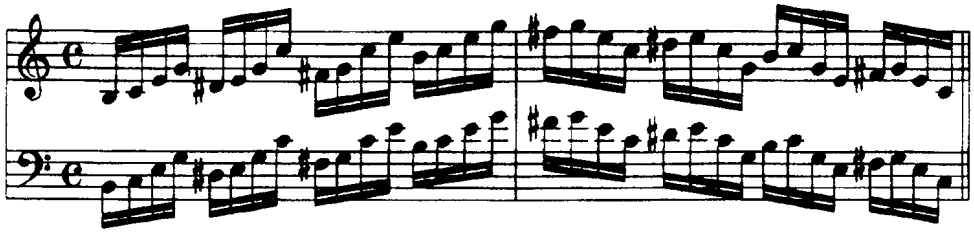
1.10 Broken Chord Pattern No.1



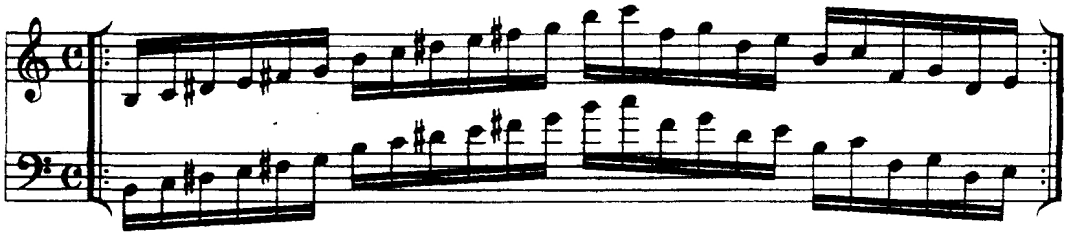
1.11 Broken Chord Pattern No.2



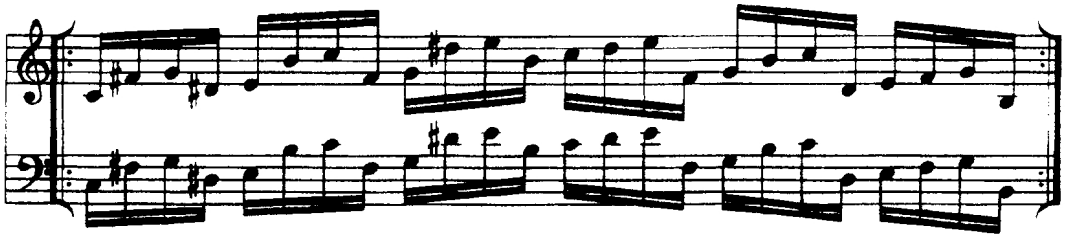
1.46 Broken chord pattern (from exercise 1.13) with LNTs



1.47 Arpeggio with LNTs



1.48 Broken chord pattern (from exercise 1.11) with LNTs

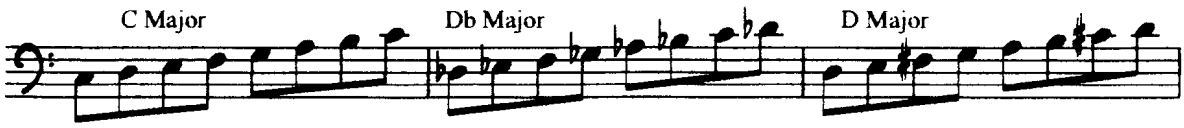


Arrow System

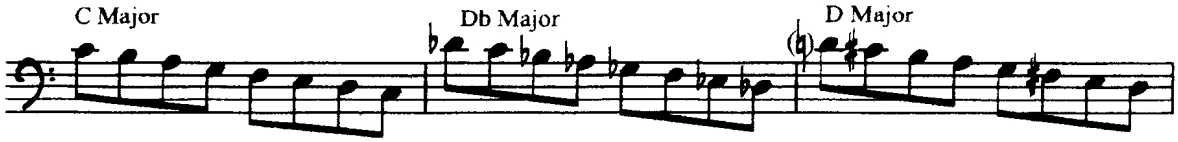
1. Half steps (chromatic)*
2. Maj. 2nds (whole tone)
3. min. 3rds (Diminished)
4. Cycle of 5ths

Major Scale *

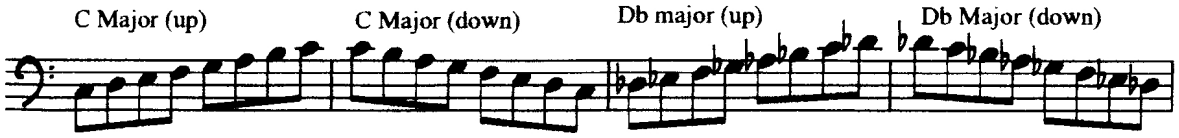
1. Ascending ↗



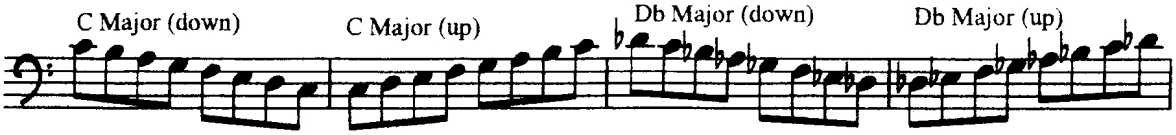
2. Descending ↘



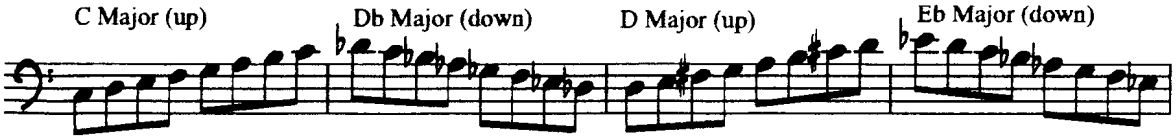
3. Ascending/Descending ↗ ↘



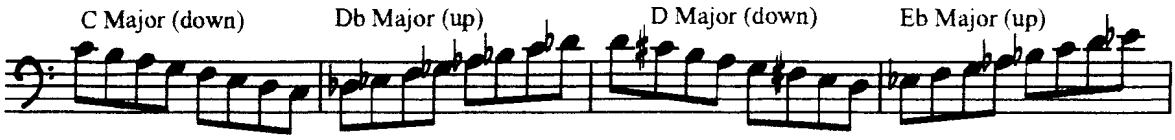
4. Descending/Ascending ↘ ↗



5. Ascend/Descend (alternating keys)

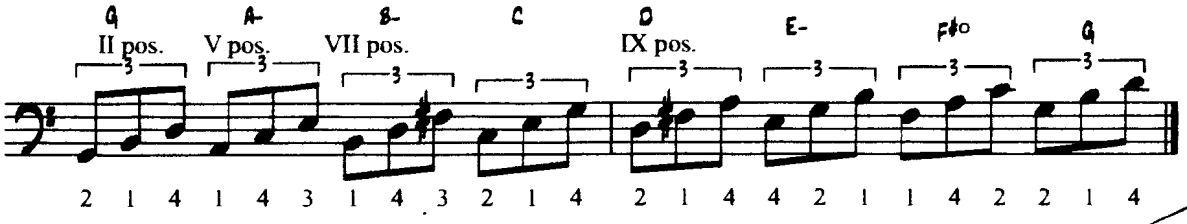


6. Descend/Ascend (alternating keys)

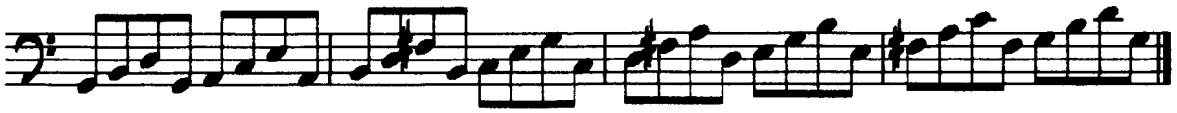


Major Scale Triad Studies

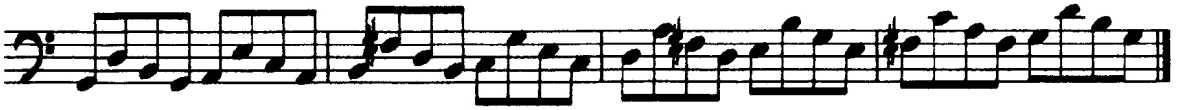
Ex. 1: Harmonized major scale in triads. Triplet rhythm.



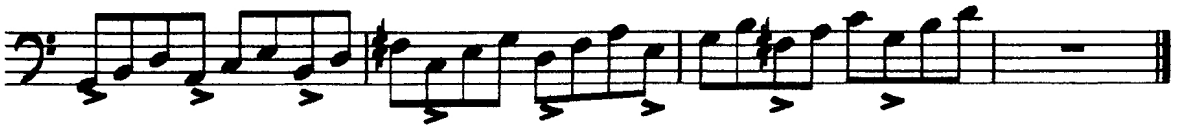
Ex. 2: Pattern using 1-3-5-1 of each chord.



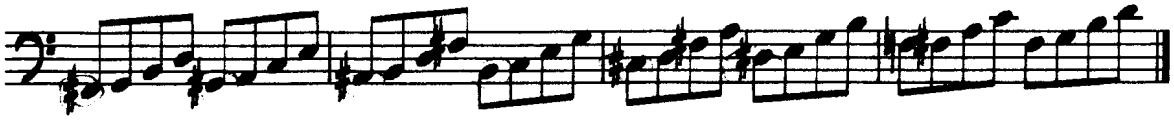
Ex. 3: Pattern using 1-5-3-1 of each chord.



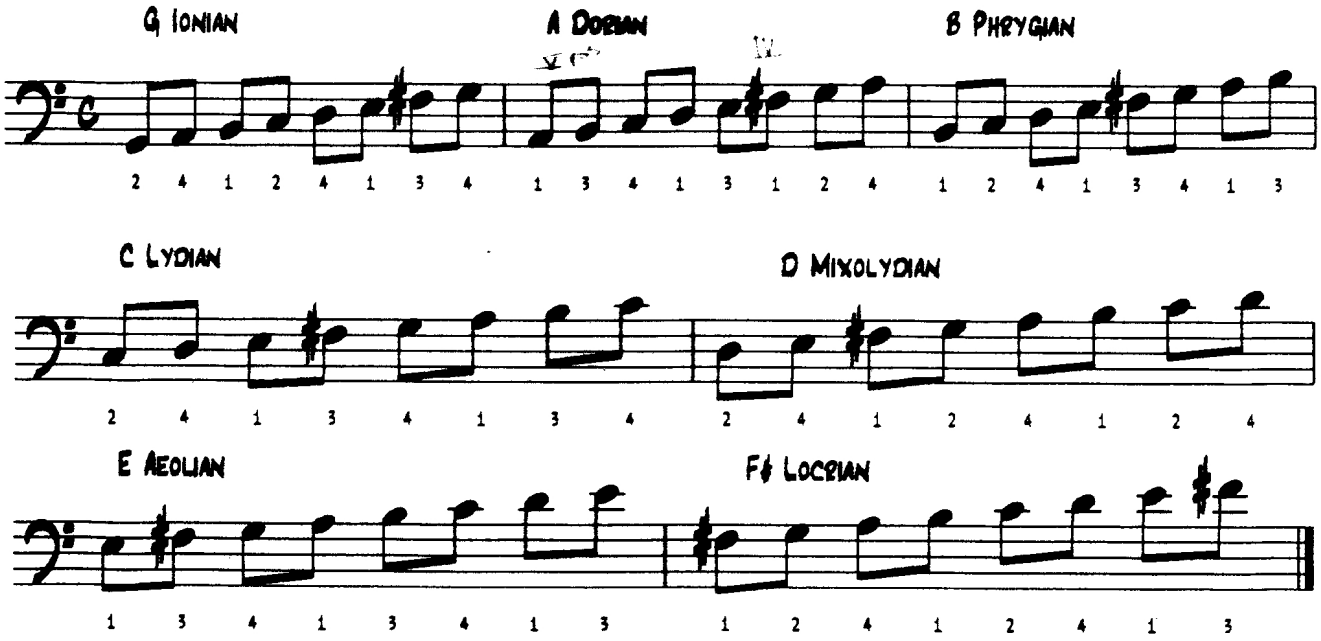
Ex. 4: Triads (1-3-5) with rhythmic displacement. Notice the accents.



Ex. 5: Triads preceded by leading tone.



1-Octave Major Modes



These are movable scales. It is recommended that you practice all of the major modes in all 12 keys using the arrow system. Remember to use your metronome. Do all of the exercises slowly at first, but accurately. Once you have a handle on the exercise, increase the speed on the metronome while striving to maintain accuracy.

1) CHROMATICISM - Written Examples (usually in "C" for ease of understanding)

Consult the Chord Charts in Part Two for the sequence of keys for all exercises.

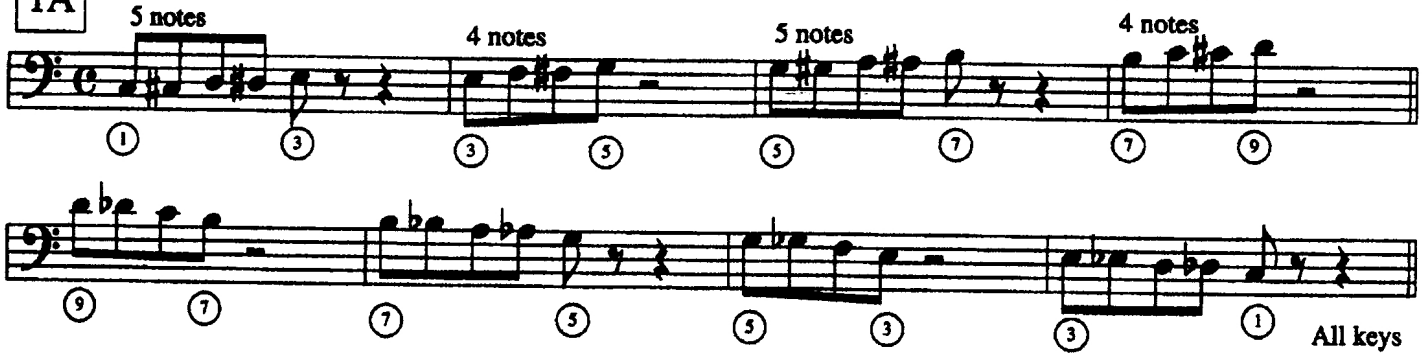
Chromatic Scale - MAJOR

For all metronome practice ♩= 60

1) swing/legato and 2) latin/detached

1A Use with CD I, Tr. 1 - 1st 8 bars

Circled numbers are chord tones 1 3 5 7 9



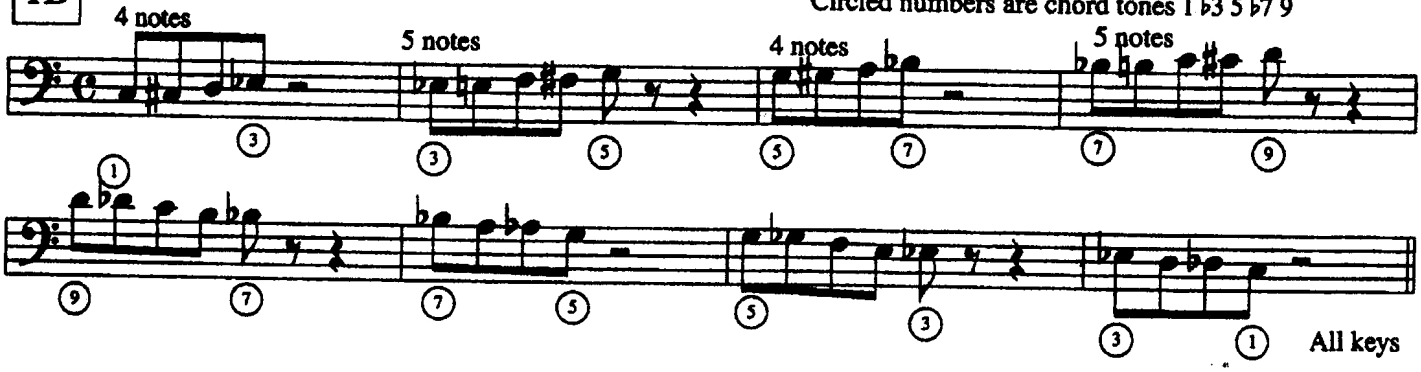
All keys

Chromatic Scale - MINOR

Different chord tones and arrangement of the 4 and 5 note phrases.

1B Use with CD I, Tr. 2 - 1st 8 bars

Circled numbers are chord tones 1 ♭3 5 ♭7 9



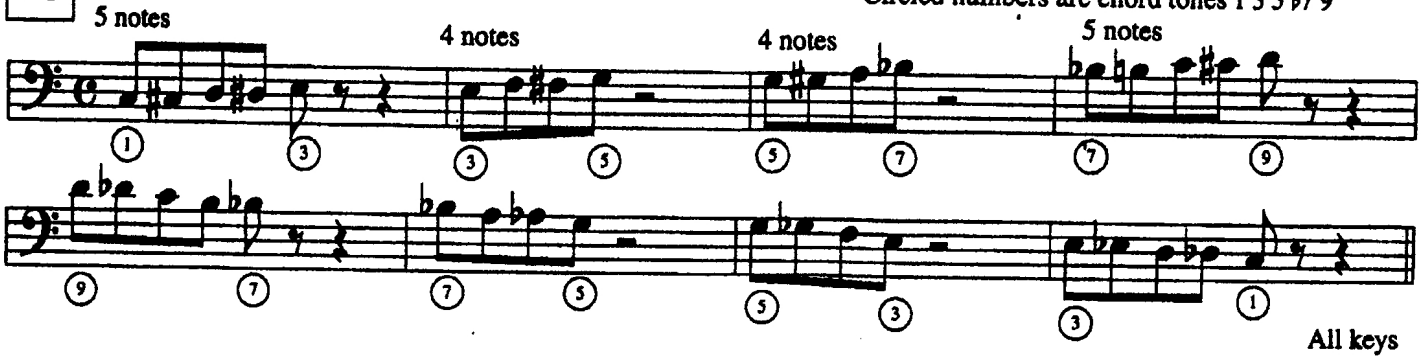
All keys

Chromatic Scale - DOMINANT

Different chord tones and arrangement of the 4 and 5 note phrases.

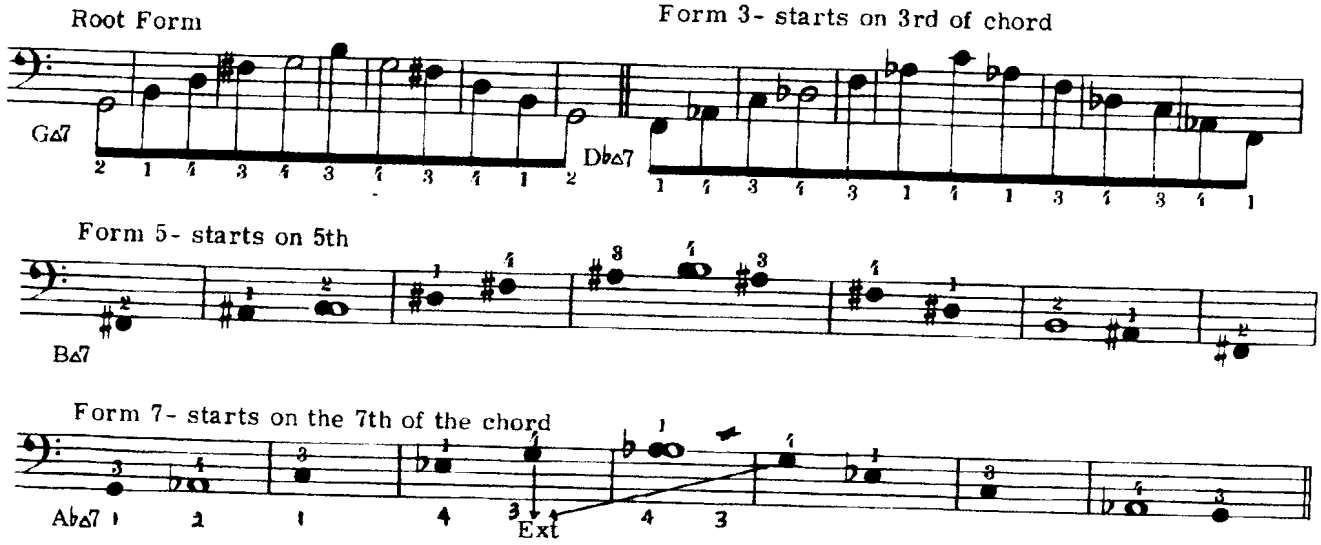
1C Use with CD I, Tr. 3 - 1st 8 bars

Circled numbers are chord tones 1 3 5 ♭7 9

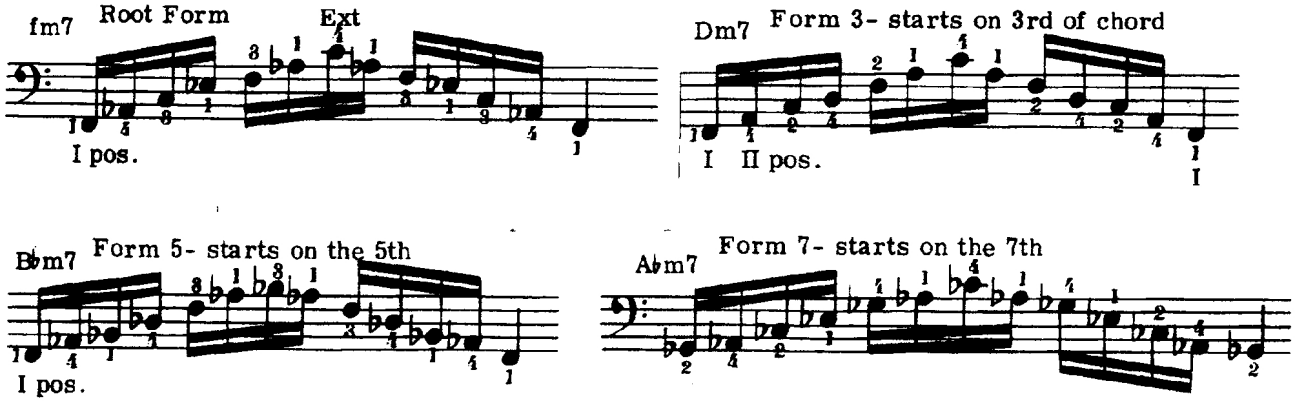


All keys

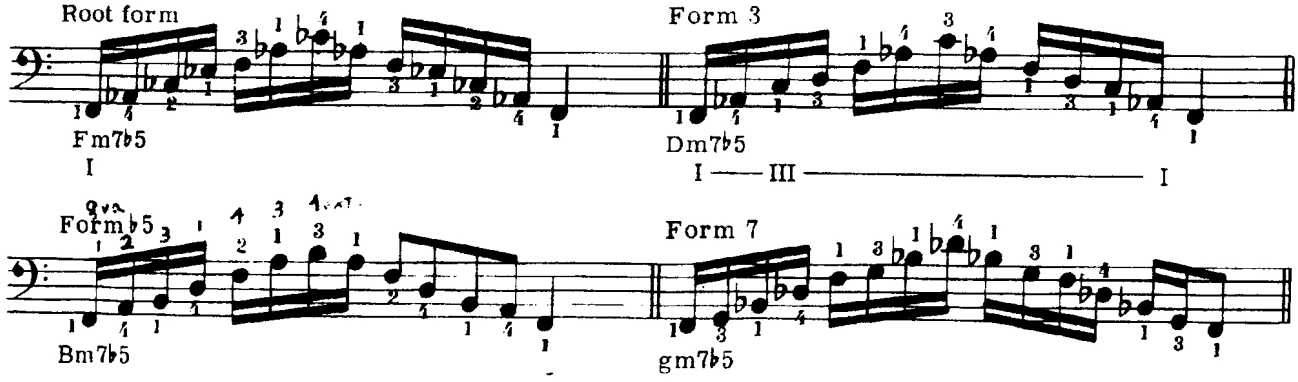
Movable Major 7th Forms



Movable Min. 7th Forms

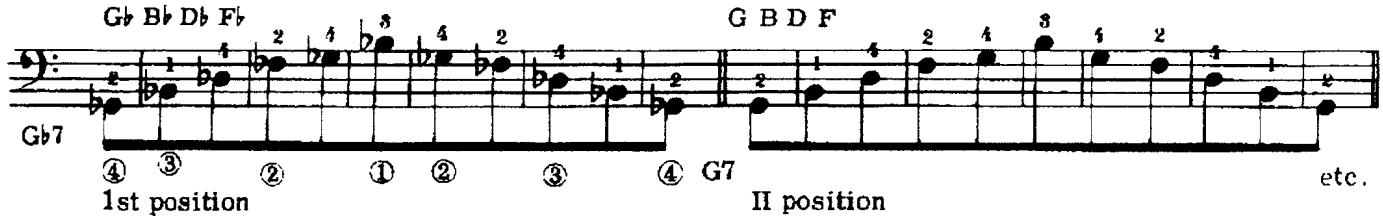


Movable m7♭5 Forms

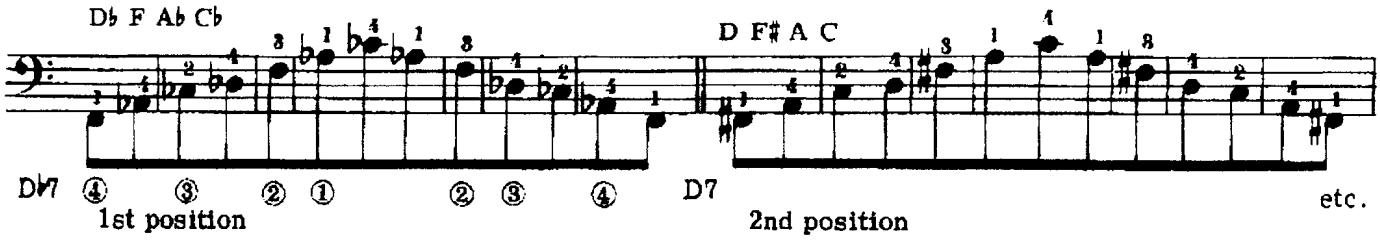


A few 1st position moveable dominant 7th arpeggio forms.

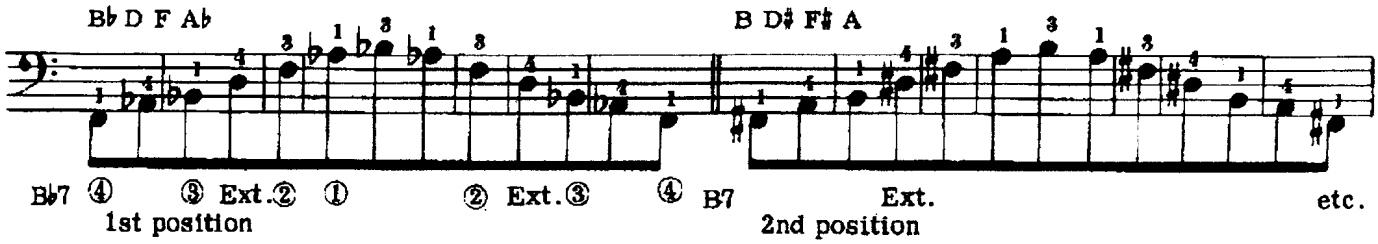
Root form



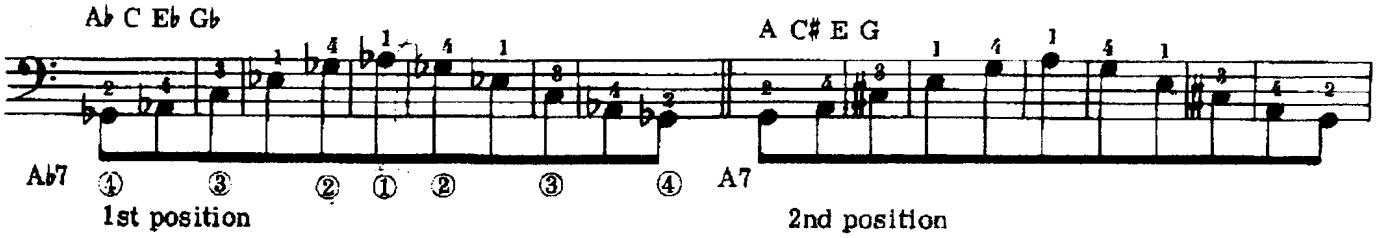
Form 3 - Starts on the 3rd of the chord



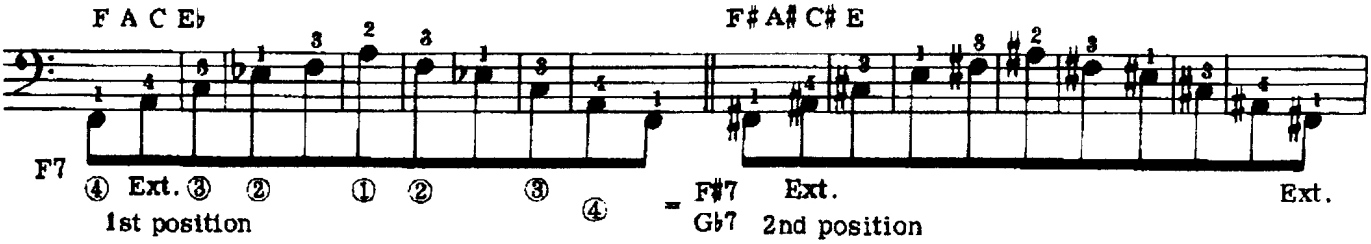
Form 5 - Starts on the 5th of the chord



Form 7 - Starts on the 7th of the chord



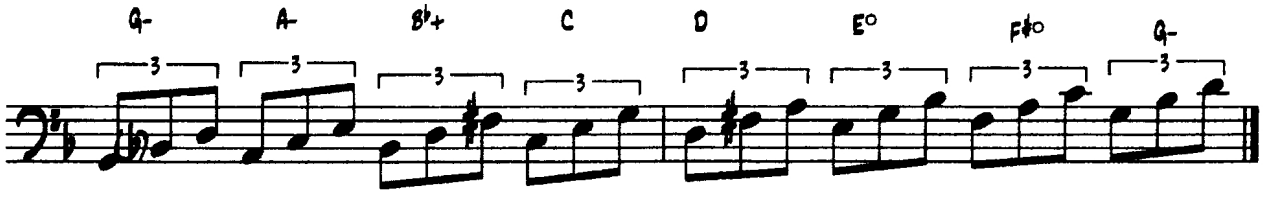
Root form



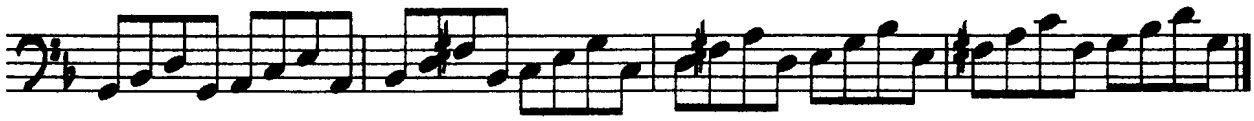
Play these moveable forms up and down the fingerboard.
Memorize, play with volume and speed and alternate fingering.

Melodic Minor Scale Triad Studies

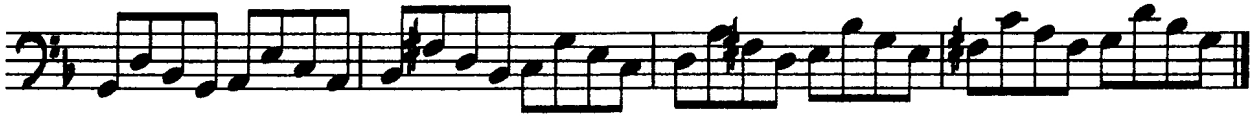
Ex. 1: Harmonized melodic minor scale in triads. Triplet rhythm.



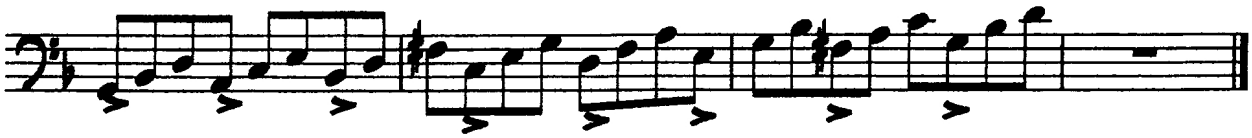
Ex. 2: Pattern using 1-3-5-1 of each chord.



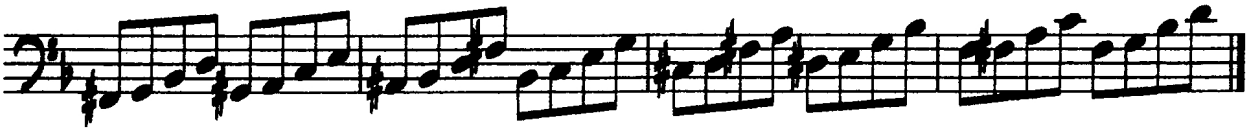
Ex. 3: Pattern using 1-5-3-1 of each chord.



Ex. 4: Triads (1-3-5) with rhythmic displacement. Notice the accents.



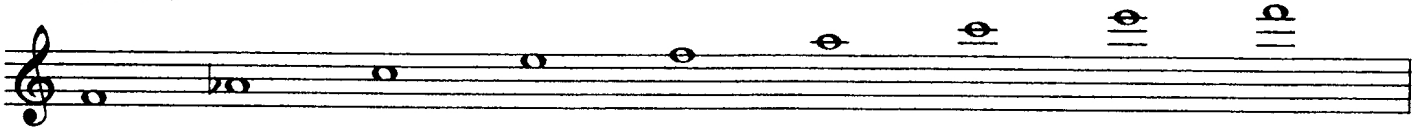
Ex. 5: Triads preceded by leading tone.



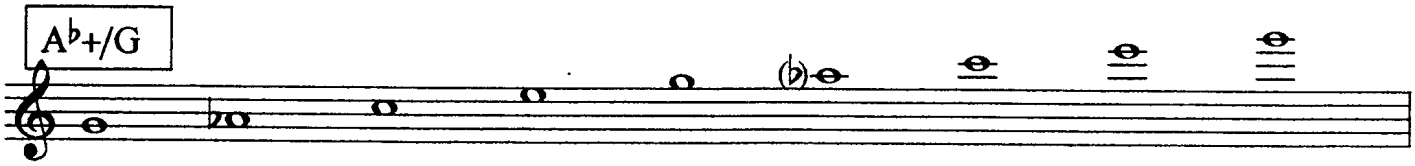
C

Melodic Minor Arpeggios (2-octave)

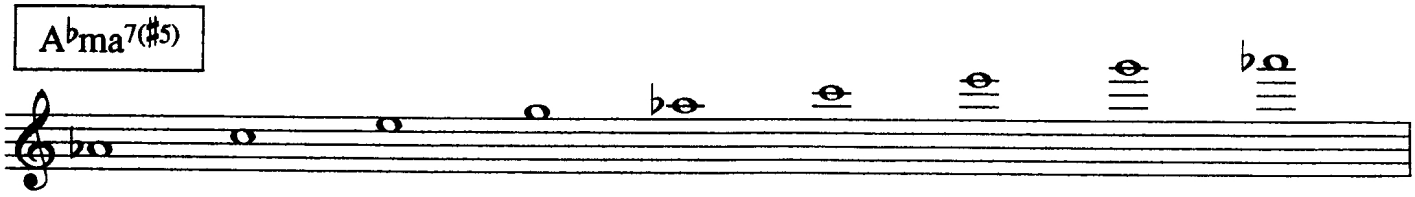
Fm(ma7)



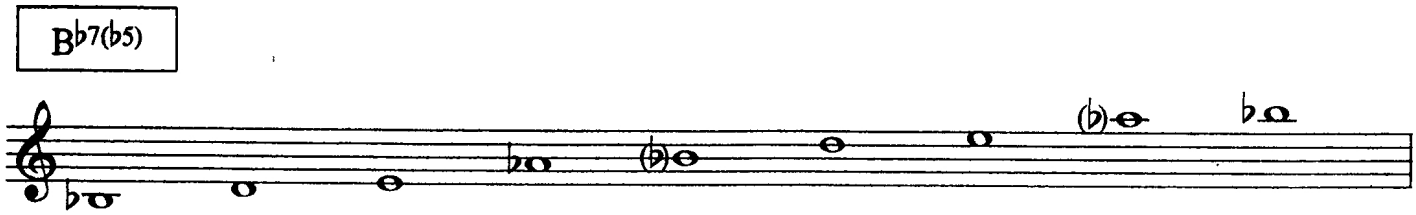
A♭+/G



A♭ma7(♯5)



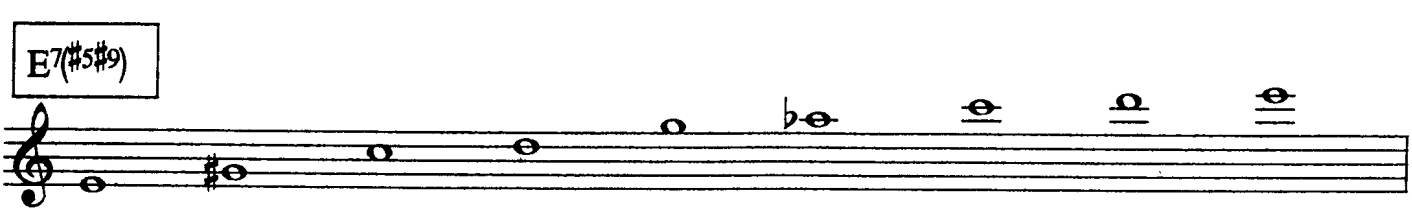
B♭7(♭5)



C7(♯5)

D∅

E7(♯5♯9)



Melodic Minor Modes on an Altered Dominant Chord

Here is a list of the **starting tones** of the melodic minor modes on an altered dominant chord. The chord being played in this example is a B7 altered. The chart shows which melodic minor mode you would use on this chord, and from which starting tone (relative to the root of the B7 chord, that is) you would begin each mode:

CHORD:	**B7 alt.**	
You play:	**C** Melodic Minor	from the **b9**
	D Phrygian #6	" " **#9**
	Eb Lydian Augmented	" " **M3**
	F Lydian Dominant	" " **b5 (tri-tone)**
	G Mixolydian b6	" " **#5 (b6)**
	A Locrian #2	" " **b7**
	B Altered	" " **root**

What this chart shows is that when you have an altered dominant chord, you can can play *any* of the melodic minor modes against it, provided you start on the appropriate tone. Each one of these modes sounds great on this chord. Needless to say, if the scales work then arpeggios will work as well. Experiment with the different sounds you get when playing each mode. Begin creating patterns on each of the modes so that you can apply them in a musical way.

II. *LINEAR HARMONY*

Students often conceive of harmony as strictly vertical; as chords spelled up or down. Chords are vertical., but harmony and melodies are linear and occur over time. Applying principles of harmony to melodic development helps us think of harmony and melody as one unified concept.

Jazz improvisation often means creating counterpoint from a given harmonic progression; inventing a counter melody to the bass line. Choosing the best notes is crucial for counterpoint. The experienced jazz improviser does not depend on a piano playing chords for his lines to make sense. The lines make sense because of well chosen and well placed notes in relation to the bass line.

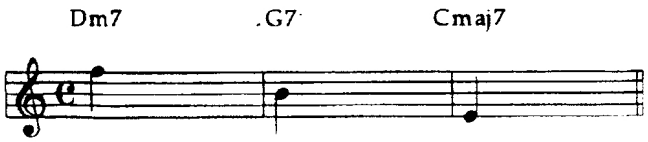
NARROWING THE NOTE CHOICES FROM THE TWELVE CHROMATIC PITCHES AVAILABLE:

The bass player's role is to create a line based on the root progression. If the improviser is to create a counter line to the bass line, the roots of the chords would not be the best choice for emphasis in the melody: if the roots are sounding in the bass and the melody there is no counter point, just parallel octaves. Eliminating the root leaves eleven other notes to choose from; all of which are used by jazz artists. Each of the eleven remaining notes have relative degrees of harmonic clarity.

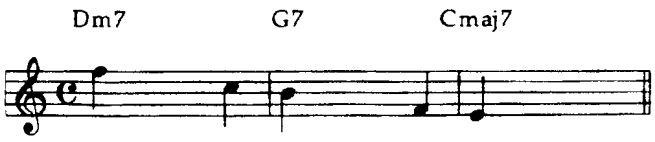
Determining the key center will further help narrow the field. In a key center there are seven pitches. We have already ruled out the root (the bass has it), and that leaves six. In most instances any of these six pitches will sound fine, but may not always be harmonically specific. The note F is the key of C major, but would not be the first choice to emphasize for harmonic clarity over a C chord.

A chord symbol usually suggest three to four pitches. For example: Dm7 suggests D-F-A-C. These tones are obviously harmonically specific, and should be considered for the counterline. The D is covered by the bass. The A tells us nothing of the quality of the chord. The C is dissonant in the sense it is restless; it wants to pull down to B natural. F reveals the minor quality of the chord and is the best choice for harmonically specific counterpoint over the D in the bass. Playing just the F over the D in the bass sounds like a complete minor chord even though only two notes are being played.

In the case of a ii - V7 - I progression in C major (Dm7 - G7 - C) the bass improvises a line starting on D and leads to G. F, the third of the chord, is a good choice for beginning a counter line. With the F sounding over the D, the minor chord is heard. For the same reasons, the B is the clearest choice for the G chord, the E for the C chord. After determining the best choices for target notes, the challenge is to connect them in an interesting way.



Our ears tell us that the sevenths are restless and want to resolve downward. From the study of traditional harmony, we find the 7th of chords in these progressions resolve downward to the third of the following chord. The seventh is the pointer. The seventh of D minor 7, C, resolves stepwise to the B of the G chord. The seventh of G is F resolving stepwise down to the E of the C chord. The framework of the line is smoother and less angular than before.



The seventh creates tension and the desire to hear the resolution to the third of the following chord. For this reason, it is often the last note played before moving to the next chord. Sometimes it is delayed into the next measure, creating a suspension.

Linear harmony is melodic lines that connect the chords smoothly using the significant tones with careful rhythmic placement. Good voice leading is observed; sevenths resolve to thirds, ninths to fifths. Thirds are more consonant and usually occur earlier in a melody line before the more dissonant sevenths. Sevenths typically resolve over the barline to the third of the next chord beginning the cycle again. Consonance/dissonance/resolution.

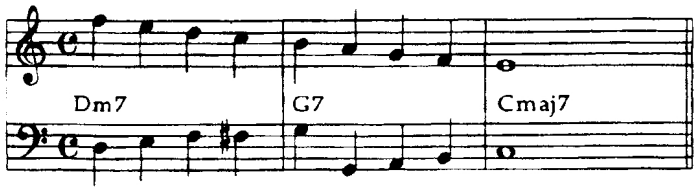
How many ways are there to connect these consonances and dissonances, thirds to sevenths to thirds? For an improvisation class, students were to bring in short examples from jazz solos. As a class, we would extract basic principles of music from the examples. We noticed after a very short time, that all of the examples seem to fit into three categories. They were based on the same three basic skeletal frameworks. All of them followed the principles of linear harmony: consonant notes (usually thirds) in rhythmically significant places leading to dissonances (sevenths) which resolved to consonant notes again, usually over the barline.

The three frameworks, or outlines, are found at the heart of much music based on a harmonic system. Knowing the outlines should not in any way stifle creativity. On the contrary, knowing them should inspire creativity. The outlines are skeletons. Our bodies all have similar skeletons yet we all look unique. All houses have similar framework and yet are recognizable different. Many sentences share the same structure of parts of speech, and yet can express many diverse ideas. Hundreds of musical examples can have the same basic outlines and still retain their individual musical identity.

Creating the Basic Outlines

OUTLINE NO.1

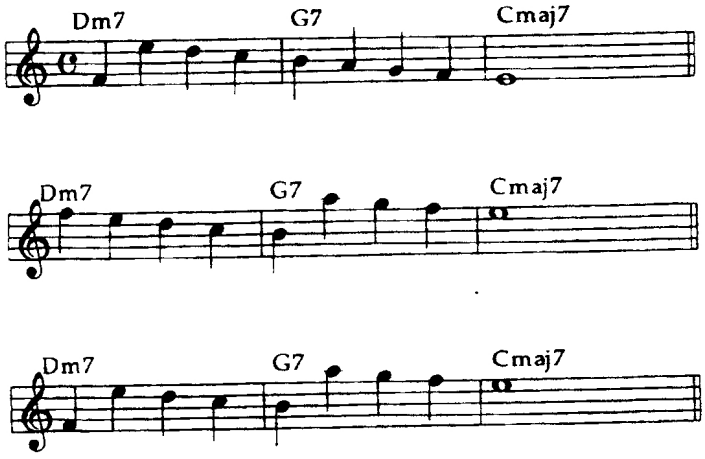
Placing the third on beat one and waiting for beat four to play the seventh, leaves only two beat to fill to create a "walking" quarter note melody line to counter the walking bass line. By moving down the scale, a stepwise line is created from the third of the ii chord through the V7 chord and down to the third of the I chord.



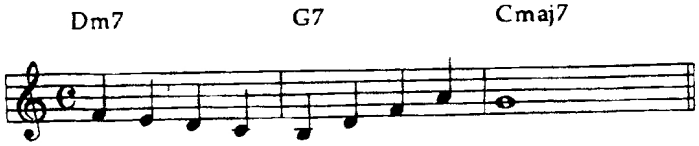
This is the basis for Outline No.1. It works well with any clear bass line, as shown. It is found more often than the other outlines. This could be due to its harmonic clarity, and its pleasing descending stepwise progression.

There are some variations of outline No.1.

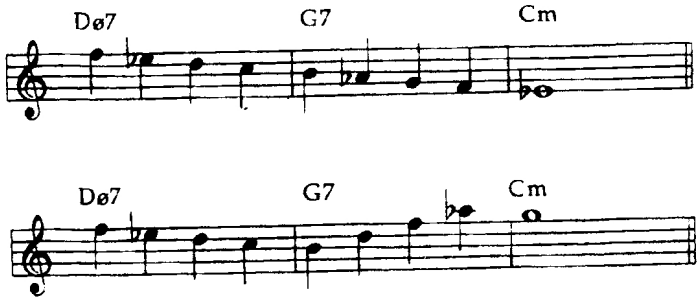
The first variation is octave displacement, usually after the target note:



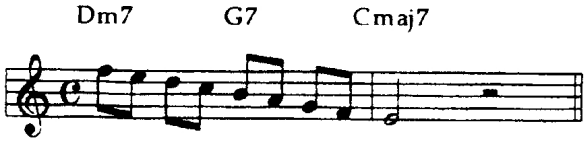
Another variation is using an ascending arpeggio (3-5-7-9) on the V7 chord resolving to the fifth of the tonic chord:



Any of the variations apply in a minor key as well. Keep in mind the key signature, and raise the leading tone to create a V7 chord. The ii7 becomes iiø7 and the V7 chord has a flatted 9.

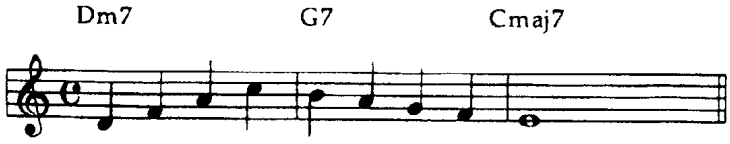


Any of the variations work when the harmonic rhythm is diminished (changed from whole notes to half-notes):

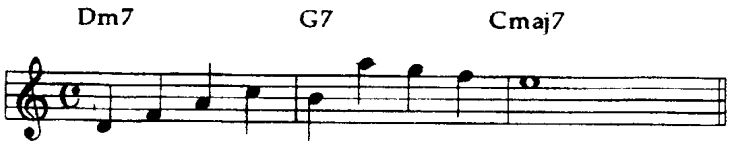


OUTLINE NO.2

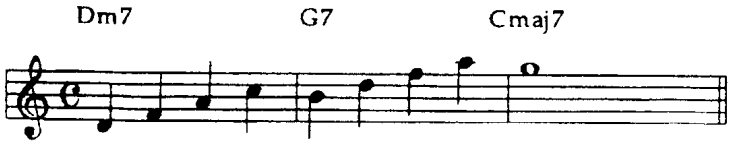
I call outline no.2 the "'Round Midnight" outline. It occurs two times in the A section of *'Round Midnight*. Outline no.2 is an ascending arpeggio of the ii chord (1-3-5) with the added restless tone (7) above the chord, which resolves to the third of the V7 chord. The outline may continue down the scale arriving at the target third of the tonic:



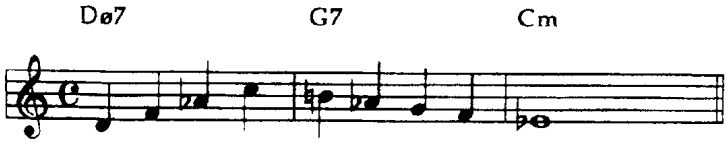
or continue down the scale, but with octave displacement:

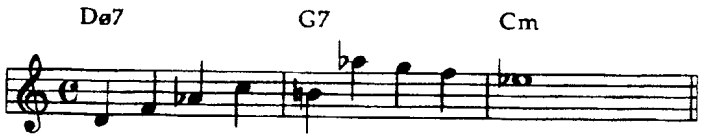


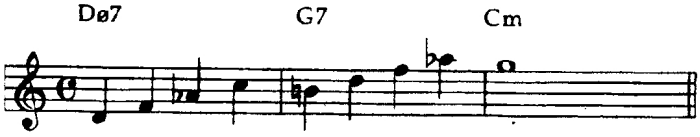
or, after reaching the third of the V7 chord, may arpeggiate the V7 chord (3-5-7-9)



All versions of outline no.2 work in minor keys.

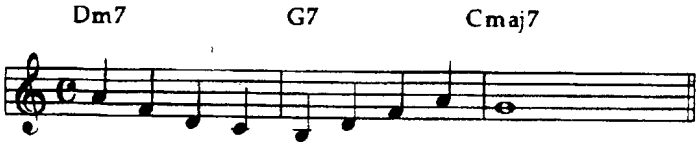




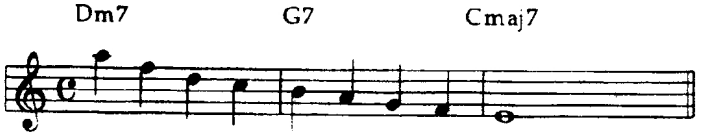


OUTLINE NO.3

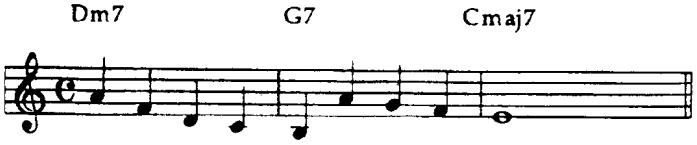
While outline no.2 begins with an ascending arpeggio of the ii chord (1-3-5), outline no.3 begins with the *descending* arpeggio of the ii chord (5-3-1), adds the restless tone (7) below the chord, which resolves to the third of the V7 chord. The seventh usually occurs on the upbeat; the target third on the strong downbeat. After reaching the dominant chord, the line most often changes direction and arpeggiates up from the third (3-5-7-9) to finally resolve on the fifth of the tonic chord.



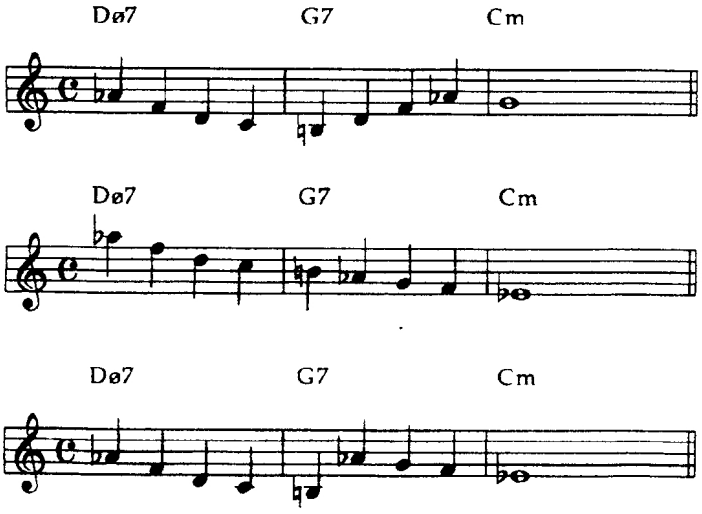
One variation is for the line to continue down the scale landing on the third of the tonic chord:



Another variation is for the scale direction to be changed with octave displacement:



All versions of outline no.3 work in minor keys.

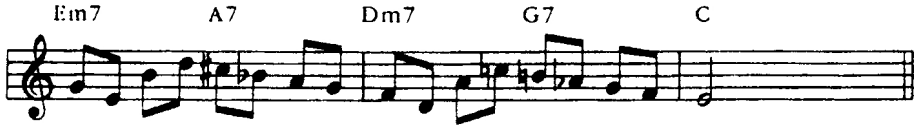


Melodies can move in steps or leaps. The three outlines represent a descending step line, an ascending arpeggiated line, and a descending arpeggiated lines.

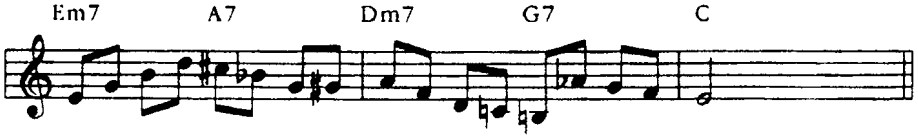
SUGGESTED EXERCISES:

1. The basic outlines are shown over a ii - V7 - I progression in C major (Dm7 - G7 - C), the most common progression in the key of C major. On staff paper write outline no.1 in all major keys. Identify the chords above by their name (i.e. Dm7 - G7 - C).
2. On staff paper write outline no.2 in all major keys. Identify the chords above by their name (i.e. Dm7 - G7 - C).
3. On staff paper write outline no.3 in all major keys. Identify the chords above by their name (i.e. Dm7 - G7 - C).
4. Practice singing the all three outlines. Use the outlines to sing modulations to closely related keys and back again making sure to sing the necessary accidentals.

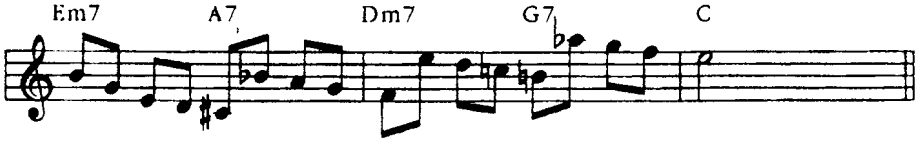
Outline no. 2 & outline no. 2



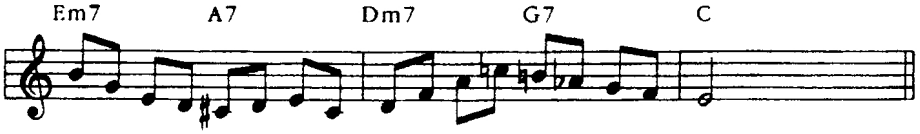
Outline no. 2 & outline no. 3



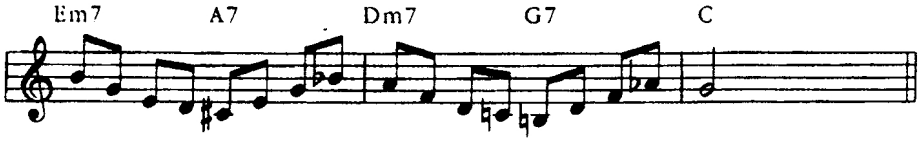
Outline no. 3 & outline no. 1



Outline no. 3 & outline no. 2

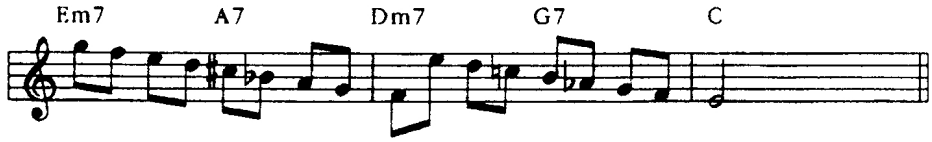


Outline no. 3 & outline no. 3

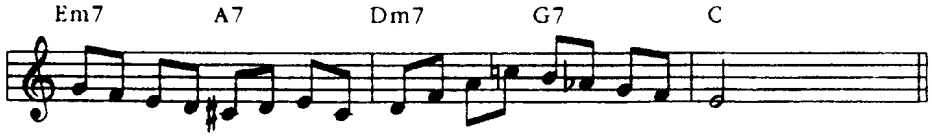


10.65 Turnaround with Nine Possible Outline Combinations

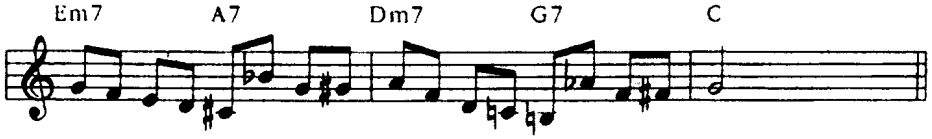
Outline no. 1 & outline no. 1 .



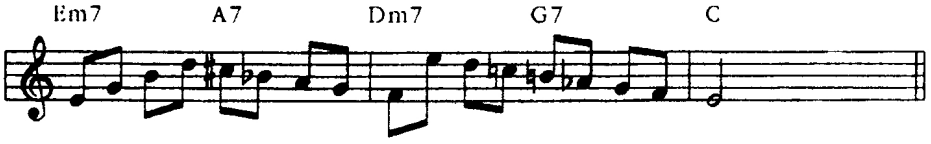
Outline no. 1 & outline no. 2



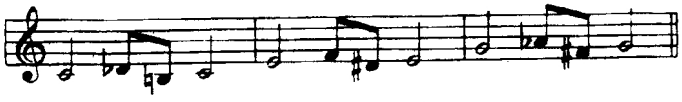
Outline no. 1 & outline no. 3



Outline no. 2 & outline no. 1



In the case of a C triad in the **key F *minor***: C, E and G are the essential tones. D flat is the UNT to C, B natural the LNT. F natural is the UNT to E, D# the LNT. A flat is the UNT to G, F# the LNT:



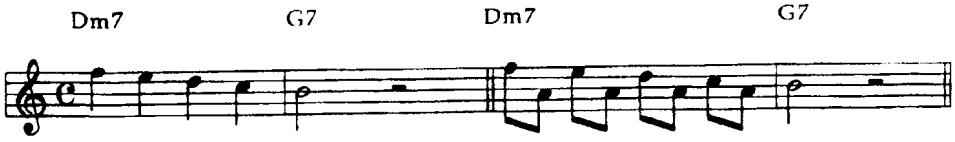
ARPEGGIATED TONES

Elaboration of the simple line by leaping to other notes from the chord often giving the line more angularity and interest.

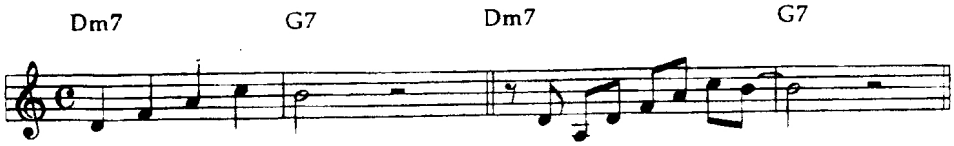
simple melody: with UNTs and PTs: arpeggiated tones replace UNTs:

A common arpeggiation tone is the fifth of the ii chord played in a lower octave.

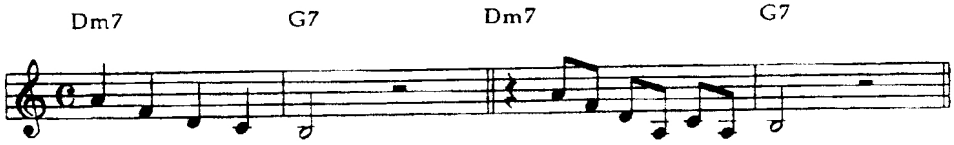
Outline no.1: with added arpeggiated tone:



Outline no.2: with added arpeggiated tone:



Outline no.3: with added arpeggiated tone:



EXTENSIONS

On outline no.2 the arpeggio is frequently extended the to 9th and sometimes to the 11th before descending to the 3rd of the V7 chord.

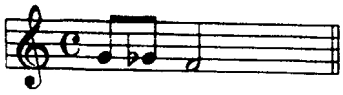
The *'Round Midnight* outline typically begins on the root of the ii chord. Bill Evans, Clifford Brown and others sometimes use the same idea, but begin on the 3rd of the ii chord.

CHROMATIC APPROACHES

Chromatic approaches usually involve a diatonic note and a chromatically altered note leading to an essential tone. It may begin with the diatonic tone followed by the chromatic tone as a passing tone into the essential tone, or it may begin with the chromatic tone then a diatonic neighbor tone leading to the essential tone. The chromaticism adds color to the lines and rhythmic interest with the additional pitches. The target notes often occur on strong beats in the measure. Target notes may be encircled by chromatic approaches from above and below. (see Encirling tones)

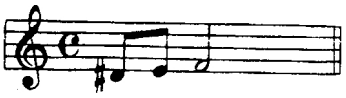
The third of the ii chord may be approached chromatically from a whole step above:

Dm7



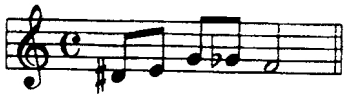
or from below:

Dm7



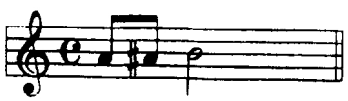
or from both:

Dm7

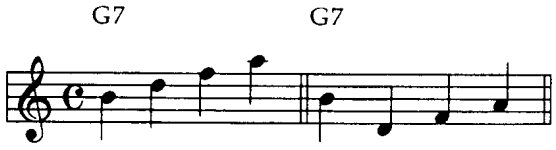


The 3rd of the V chord is often approached from below with a diatonic tone followed by the chromatic passing tone and then the 3rd:

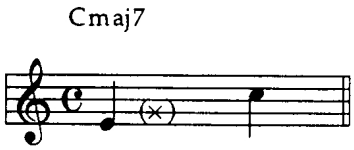
G7



3rd down to the 5th: Rather than an ascending arpeggio, 3 ↗ 5 ↗ 7 ↗ 9, the line will leap down a 6th, from the 3rd of the chord to the 5th of the chord skipping over the root, and then continue ascending the arpeggio: 3 ↘ 5 ↗ 7 ↗ 9.



3rd up to the root: Replace the descending leap from the 3rd of the chord to the root with a leap from the third up to the root, skipping over the fifth. This often ends the line; motion tends to stop after hearing the root of the tonic chord.

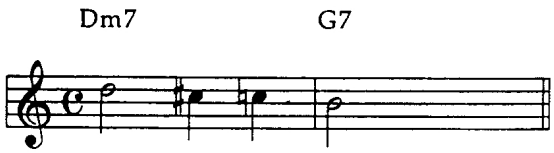


ENCIRCLING TONES

The use of both neighbor tones before the essential tone. In some cases the essential tone is approached by several chromatic approach steps above and below. (See examples under chromatic approaches)

C.E.S.H.

Jerry Coker's acronym for Chromatic Elaboration of Static Harmony. The most common example in a ii - V progression is the descending movement from the root of the ii chord to the third of the V7 chord. In the key of C (D minor - G7), the movement of D-C#-C-B. Other notes (the static harmony) are played in between the chromatic descending tones, sometimes implying compound melodies[1]. There are excellent examples of compound melodies throughout the literature, especially Bach solo cello sonatas. (See later examples in this book: Parker: ex.113)



ANTICIPATION

Arriving at the next chord ahead of time, often creating a small dissonance resolved when the harmony catches up with the melody.

DELAYED RESOLUTION

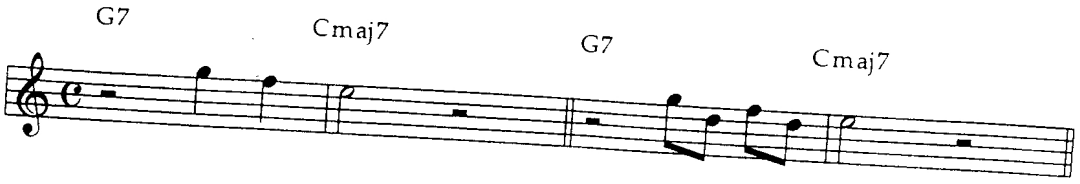
Suspending the resolution of one chord into the next chord. Arriving at the target chord late creating dissonance resolved when the melody catches up with the harmony.

---

1 A single melody line that implies two or more independent lines within is a compound melody.

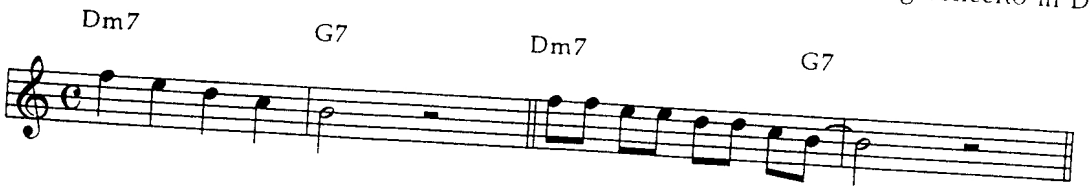
SAWTOOTH

A consistent up and down movement like the teeth on a saw. Often involves a pivot note or arpeggiated note: G-D-F-D-E.



ITERATION

Repeated notes can create eighth note motion where the outline may only imply quarter notes. Composers have used this device for centuries. (Listen to the Brandenburg concerto in D, by Bach.)



RHYTHMIC DEVICES

Includes displacement, augmentation, diminution, anticipation, complex combinations of subdivision to add interest to the basic outlines.

ADDING NOTES

Notes can be added before, within, and after the outline or any motive. Pick up notes begin with one or two notes before the outline begins. The notes can be diatonic or chromatic above or below, or arpeggiated tones.

USE OF TWO OR MORE OUTLINES WITHIN EXAMPLE

Sometimes the melody includes two or more outlines. The same outline can be used twice sequentially, or one outline can lead into another.

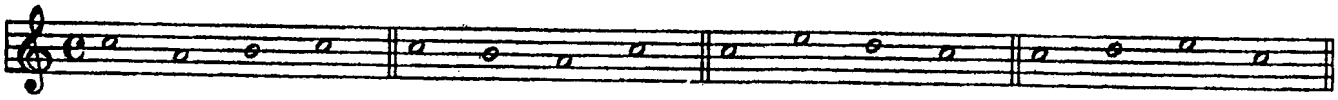
BORROWED CHORDS AND NOTES

(See the discussion on Diatonic chords and Roman numerals.) Some diatonic chords may be altered with tones "borrowed" from another key signature. When the harmony is altered, the lines are altered in the same way. Chords are often borrowed from the parallel minor key. iiø7 for a ii7, iv for IV, etc. Notes from the parallel minor key are often imposed on the dominant, creating more tension that diatonic tones, and therefore creating more release when arriving at the tonic major. Over G7, the dominant of C major, jazz musicians often use A-flat (flat 9) , B-flat (sharp 9) and E-flat (flat 13) from the parallel key of C minor. These borrowed tones, lowered diatonic pitches, have a greater downward pull than their diatonic counterparts. When modulating, chords are borrowed from the destination key. When moving from C major chord to a D minor chord, progressions pointing to the key of D minor often precede the D minor chord: V7 = A7, iiø7 - V7 = Eø7 - A7, or vii°7 = C#°7. The necessary notes to make the key change usually occur in the melodies over these changes: B flat and the leading tone C sharp.

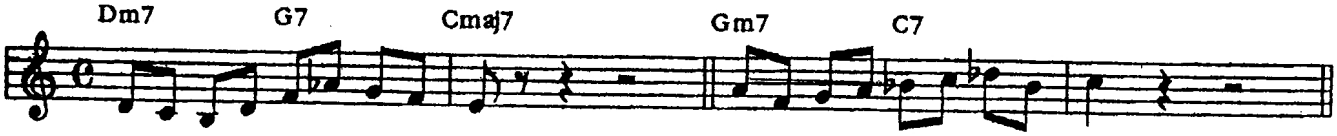
CYCLICAL QUADRUPLETS

One way to embellish a single note is to play the note, move away and back to that same note. A very common pattern that follows this concept involves the primary note and two other notes that return to the primary note. This pattern has four varieties and is has been called a Cyclical Quadruplet (CQ). Cyclical because it cycles back to the first pitch; quadruplet because it is a four note pattern. The four patterns below all have C as the primary pitch. CQ pattern no.2 is the retrograde, no.3 is the inversion, and no.4 is the retrograde inversion of CQ pattern no.1.

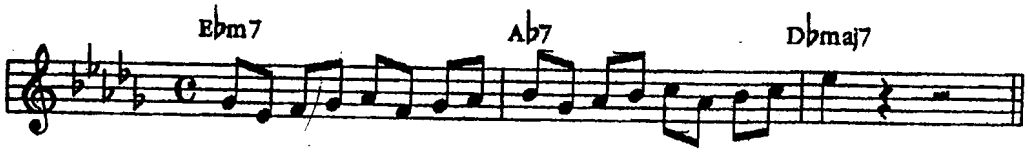
CQ No.1 CQ No.2 CQ No.3 CQ No.4



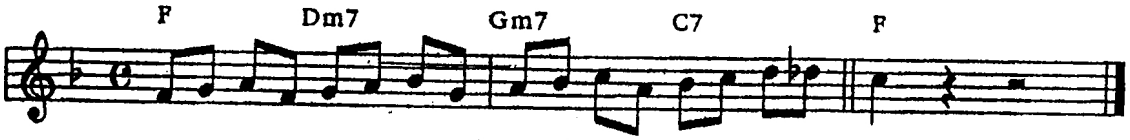
Here are some examples of CQ patterns from jazz improvisations by Charlie Parker, Art Farmer, Cannonball Adderley, Sonny Stitt, and Herbie Hancock. Charlie Parker used all four CQ patterns in these two examples. The first includes CQ patterns no.2 & 3; the second, patterns 1 & 4.



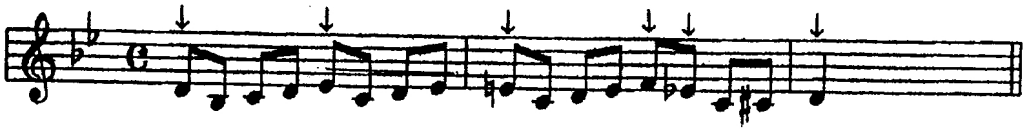
CQ pattern no.1



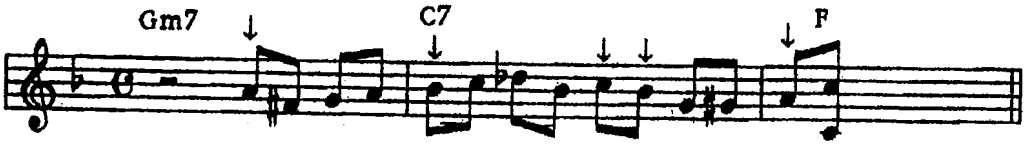
CQ pattern no.4



CQ pattern no.1 outlines a step progression

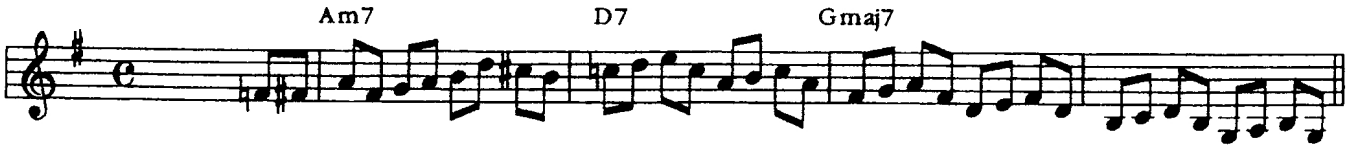


CQ pattern no.1



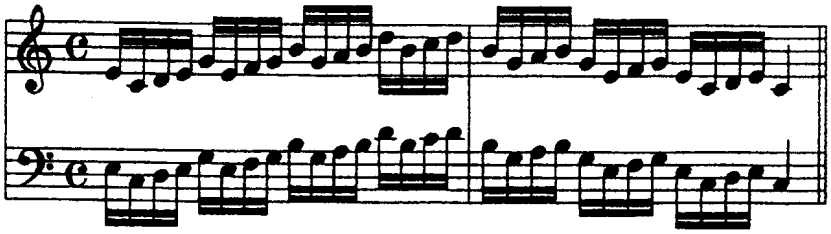
CQ patterns can be applied to arpeggios as they were applied to scales as shown in this excerpt from a Cannonball Adderley improvisation. Adderley used CQ pattern no.1 in the first measure and CQ pattern no.4 in the last two measures outlining a chord.

CQ patterns no.1 and no.4

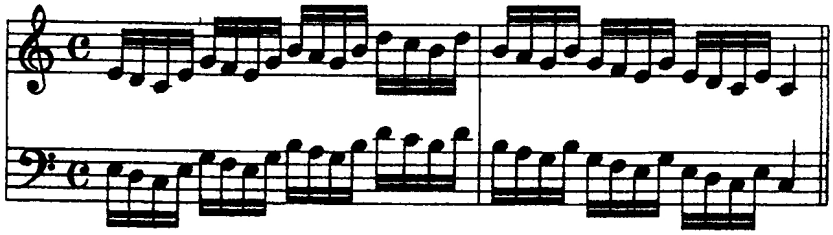


Here are some basic CQ exercises to add to arpeggio routines. These four exerscises are shown applied to a major 9 chord. Practice these patterns applied to minor 9, dominant 9, and other arpeggios.

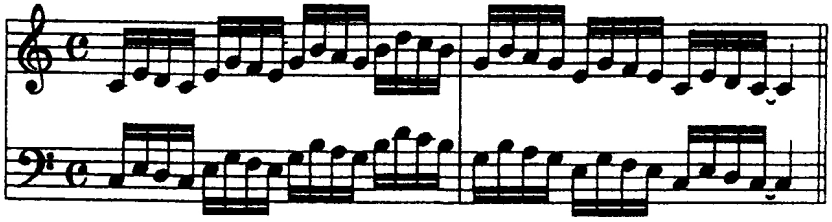
1.26 CQ Version No.1 applied to C major 9 arpeggio



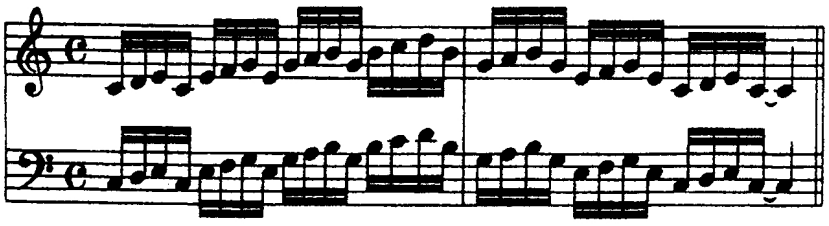
1.27 CQ Version No.2 applied to C major 9 arpeggio



1.28 CQ Version No.3 applied to C major 9 arpeggio



1.29 CQ Version No.4 applied to C major 9 arpeggio



NOW PLAY THESE PATTERNS CHORMATICALLY UP AND DOWN THE FINGERBOARD.