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.

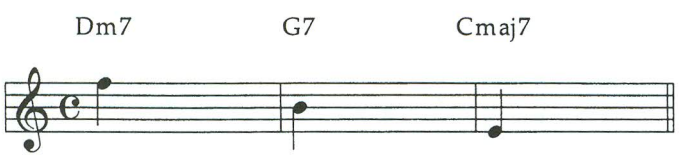
NARROWING THE NOTE CHOICES FROM THE TWELVE CHROMATIC PITCHES AVAILABLE:

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.

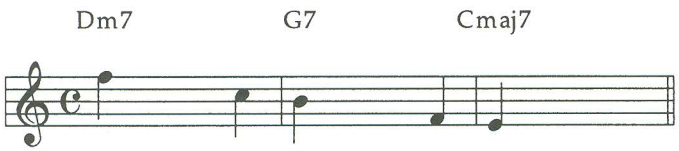
Determining the key center will further help narrow the field. In a key center there are seven pitches. We have already ruled out the root (the bass has it), and that leaves six. In most instances any of these six pitches will sound fine, but may not always be harmonically specific. The note F is the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

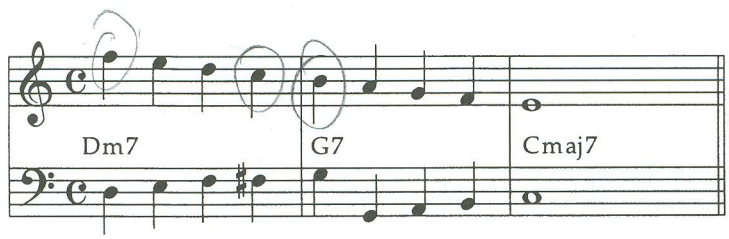
How many ways are there to connect these consonances and dissonances, thirds to sevenths to thirds? For an improvisation class, students were to bring in short examples from jazz solos. As a class, we would extract basic principles of music from the examples. We noticed after a very short time, that 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

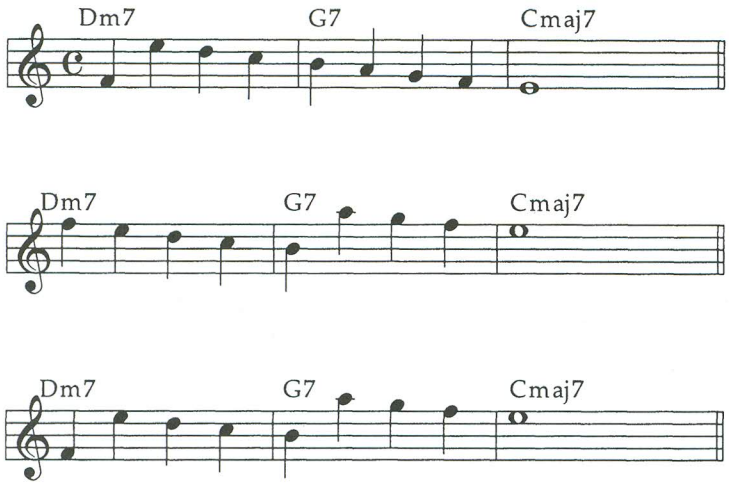
Placing the third on beat one and waiting for beat four to play the seventh, leaves only two beats to fill to create a "walking" quarter note melody line to counter the walking bass line. By moving down the scale, a stepwise line is created from the third of the ii chord through the V7 chord and down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



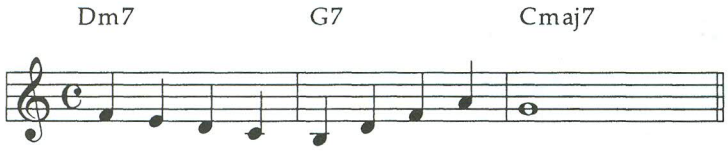
This is the basis for Outline No.1. It works well with any clear bass line, as shown. It is found more often than the other outlines. This could be due to its harmonic clarity, and its pleasing descending stepwise progression.

There are some variations of outline No.1.

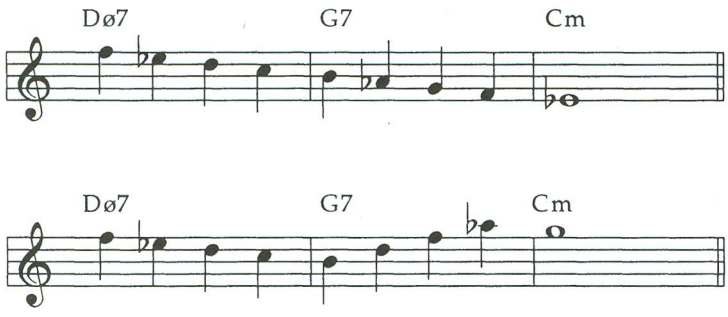
The first variation is octave displacement, usually after the target note:



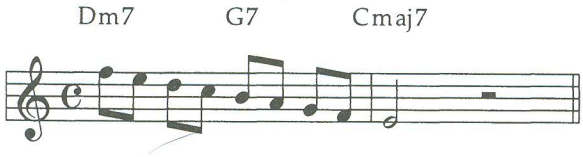
Another variation is using an ascending arpeggio (3-5-7-9) on the V7 chord resolving to the fifth of the tonic chord:



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:

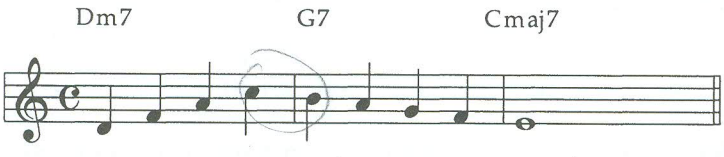


Any of the variations work when the harmonic rhythm is diminished (changed from whole notes to half-notes):

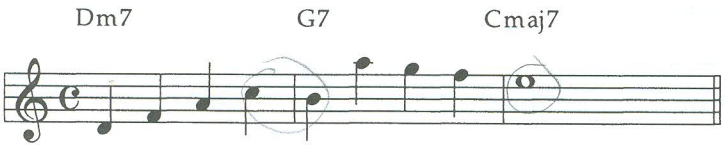


OUTLINE NO.2

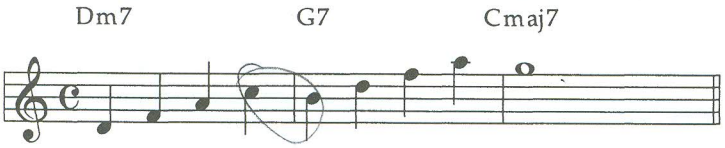
I call outline no.2 the "'Round Midnight" outline. It occurs two times in the A section of *'Round Midnight.* Outline no.2 is an ascending arpeggio of the ii chord (1-3-5) with the added restless tone (7) above the chord, which resolves to the third of the V7 chord. The outline may continue down the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



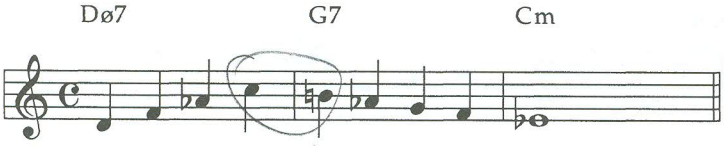
or continue down the scale, but with octave displacement:

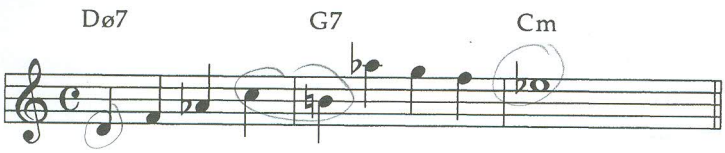


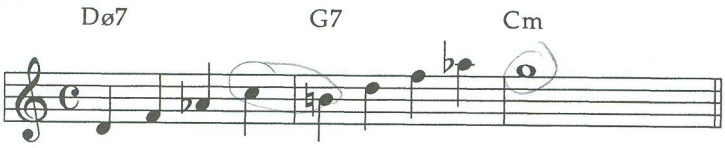
or, after reaching the third of the V7 chord, may arpeggiate the V7 chord (3-5-7-9)



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

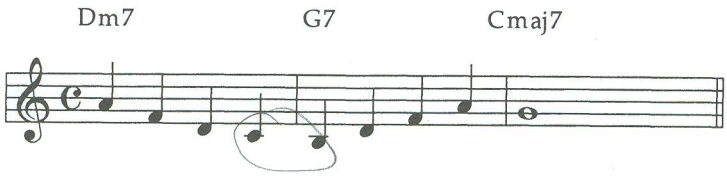




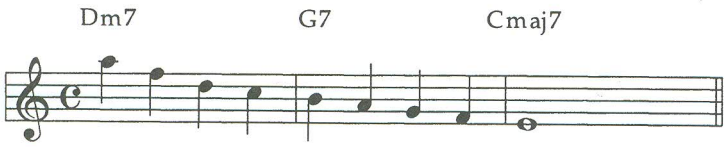


OUTLINE NO.3

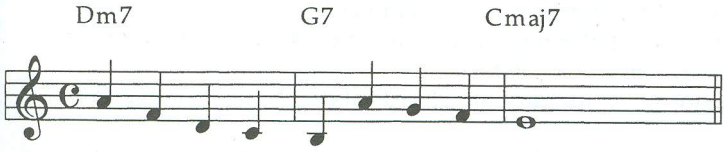
While outline no.2 begins with an ascending arpeggio of the ii chord (1-3-5), outline no.3 begins with the *descending* arpeggio of the ii chord (5-3-1), adds the restless tone (7) below the chord, which resolves to the third of the V7 chord. The seventh usually occurs on the upbeat; the target third 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.



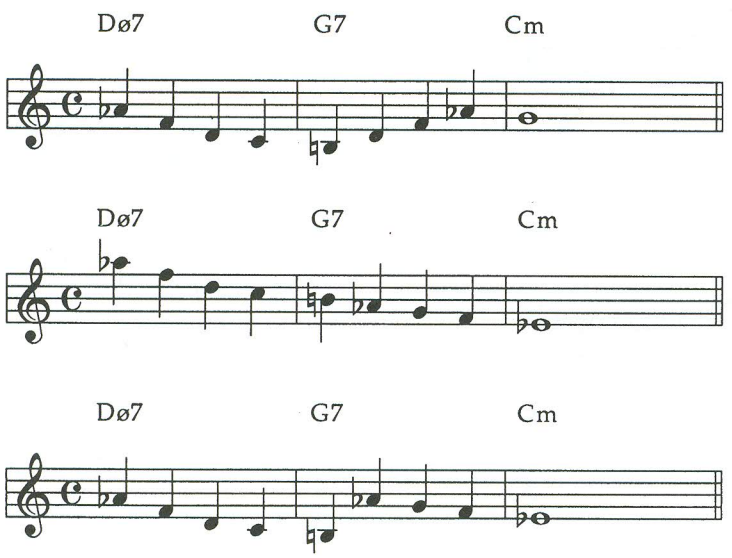
One variation is for the line to continue down the scale landing on the third of the tonic chord:



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.