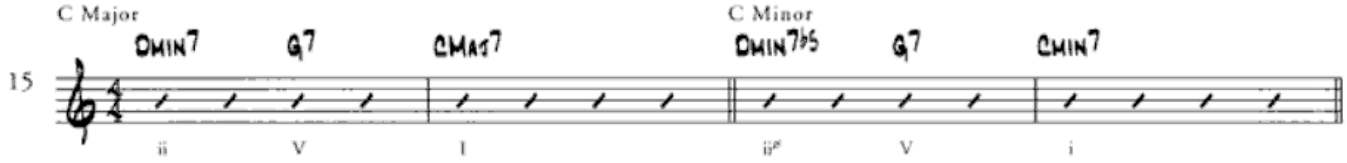
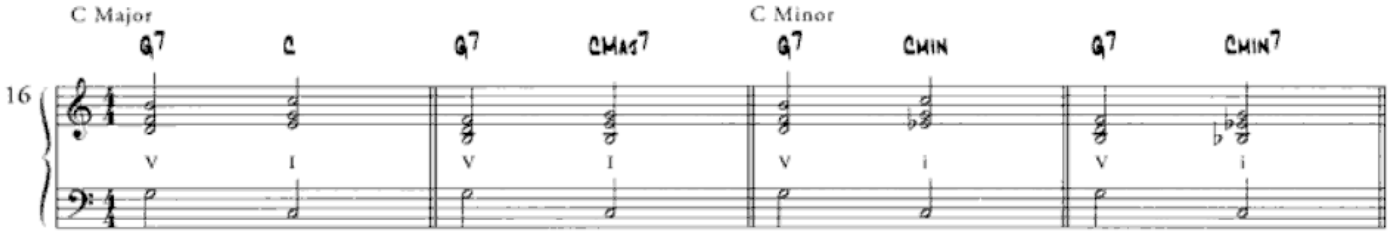
Chord Changes and the ii–V–I Progression

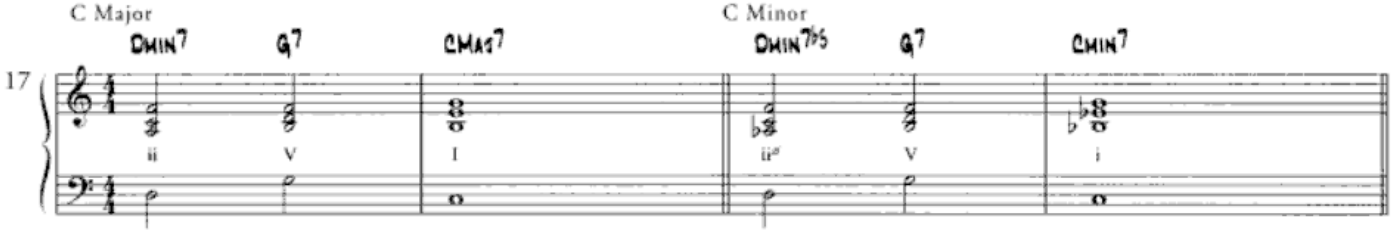
Using Roman numerals, we can identify the common ways in which chords move from one to the next. In jazz, these specific combinations of chords, or *progressions,* are most often referred to as *chord changes* or simply *changes*. The progression that serves as the backbone for the majority of jazz tunes is the famous ii–V–I (ii–V–i in minor).



Most music builds excitement (*tension*) and then gives the listener some closure (*resolution*). The study of jazz chord progressions is really a study of how to build up different amounts of tension and how to achieve different levels of resolution. The dominant chord resolving to the I or i chord a perfect 5th below is the essence of tension and resolution in Western harmony. Play this and hear for yourself how this works in both major and minor keys.

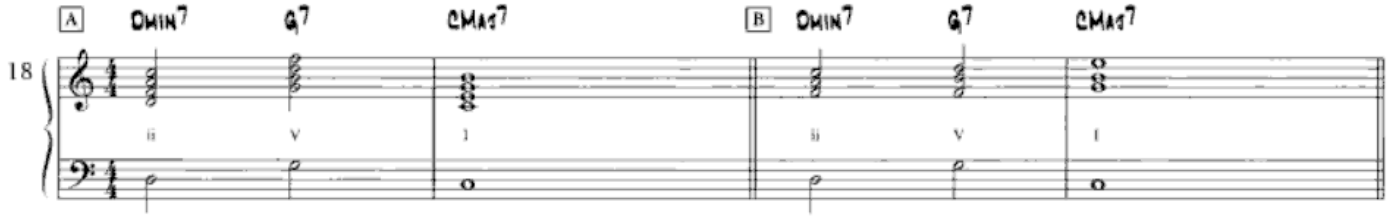


The next step is the ii chord. Since our ears are used to the sound of one chord moving to another chord a 5th below, as in example 16, we can precede the V chord with the chord a 5th above—the ii chord. However, the dominant 7 chord that serves as the V in both major and minor keys has an unstable sound that wants to resolve—that's why it sounds so good when it resolves to the I chord. By going from ii to V, you actually prolong and intensify the tension, which in turn makes the resolution more dramatic.



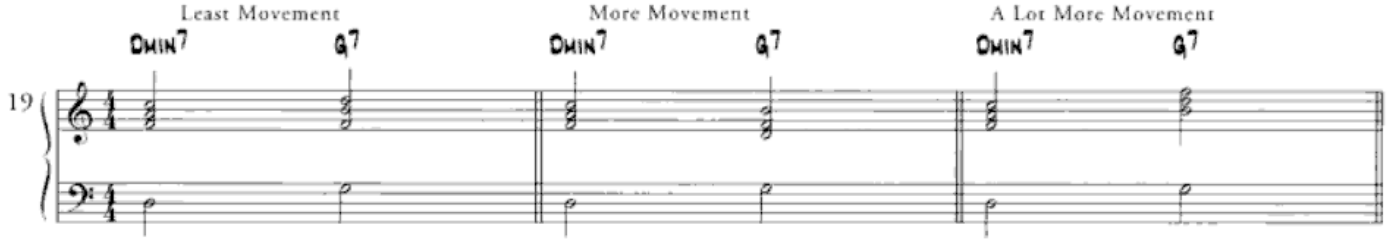
Voice Leading

If you've spent any time with harmony, you've surely dealt with *voice leading* on some level. Voice leading is the smooth movement of the notes (or *voices*) from one chord to the next, and it applies to any type of voicing. The whole idea comes from vocal groups. If you have four voice parts in a choir, the goal is to create rich-sounding chords with those four voices. Just as important, though, is that each voice in the choir has smooth, singable lines, rather than a sequence of acrobatic leaps. Good voice leading bridges the gap between these two goals. Compare the voice leading in examples 18A and 18B.



If you follow any individual voice in the first two bars, you'll find a series of leaps that would be difficult to sing. Although at the keyboard you don't need to literally sing the lines, the result of this leaping is that the chords don't sound as if they relate to one another. Even though it uses the same basic chords, the second example sounds more like a "natural" progression because of the voice leading that allows for smooth movement between voices.

A basic technique for getting started with voice leading is to calculate the shortest distance each voice can move to arrive at the next chord. In other words, you must figure out which appropriate voicing for the following chord will involve the least movement.



Note that the roots played by the left hand are not expected to follow the guidelines of smooth voice leading. In fact, it is the leaping movement of the roots that clarifies the harmonic movement in the smoothly changing chord voicings above.

Having a solid grasp of voice leading is useful beyond helping you play chords smoothly. Since chords often form the basis for improvised solo lines, mastery of voice leading is crucial in developing fluency as a soloist. When you practice, work on being able to lead any voice in a chord to a nearby voice in the next chord.

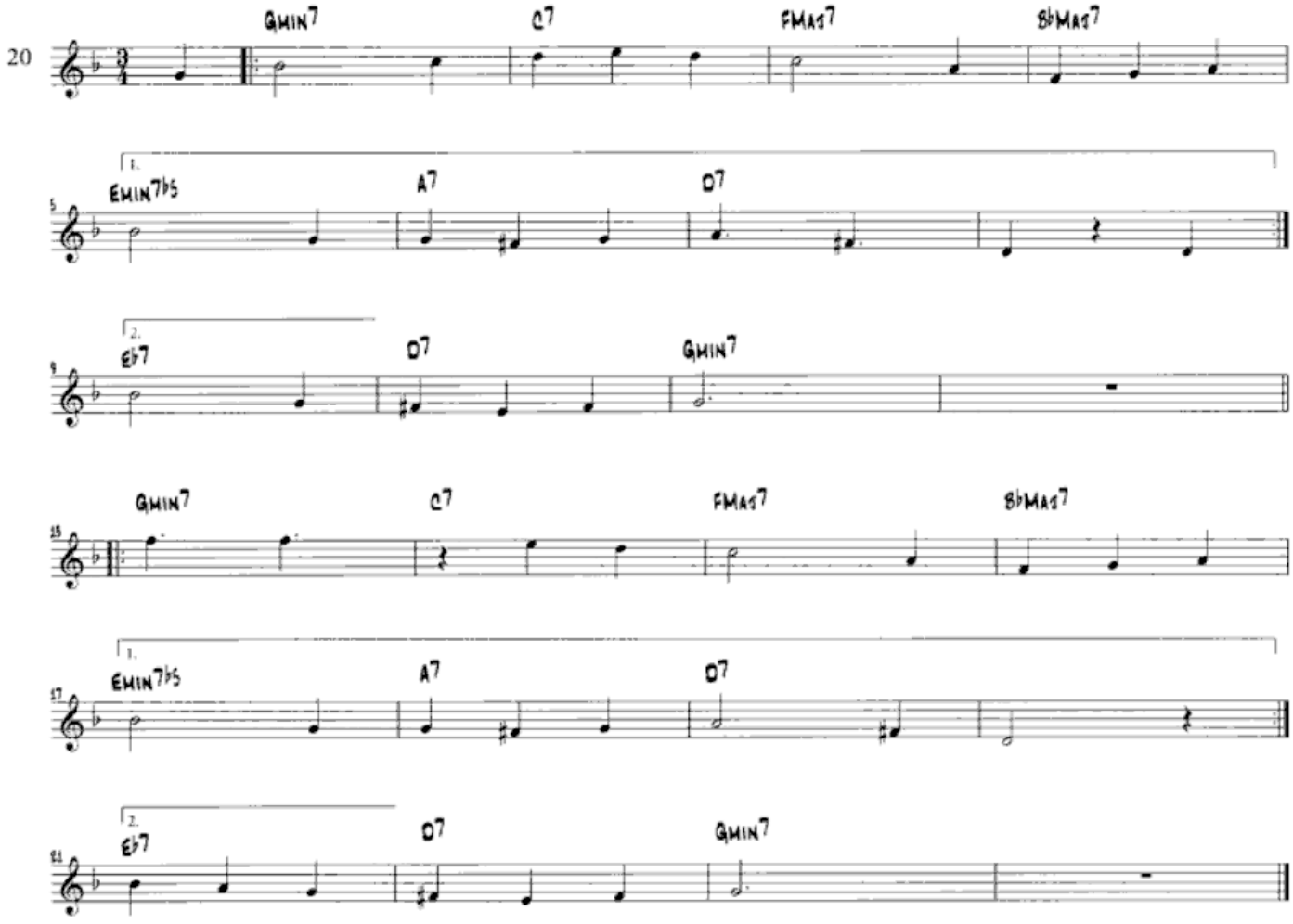
Lead Sheets

Lead sheets are probably the most common way of notating jazz tunes or other songs that are to be played in a jazz setting. In contrast to fully notated music, a lead sheet provides you with the bare-bones musical information—melody, chords and form—that you need to play a tune. This allows for a creative, personal interpretation and gives you a jumping-off place for improvisation.

You'll often encounter lead sheets in the context of a *fake book* or *real book,* which is essentially a single-volume collection of lead sheets for different tunes. (In case you're wondering: Despite the name, some fake books are considered a "legit" source of tunes.)

Example 20 uses lead sheet–style notation for a jazzed-up version of the old classic "Greensleeves." This tune has been recorded by many jazz artists, including John Coltrane, Jimmy Smith, Ben Webster, Coleman Hawkins, Oscar Peterson and Ray Bryant.

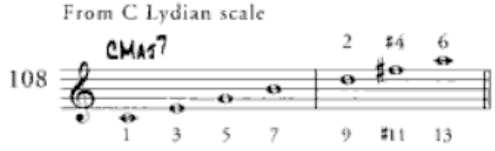
Greensleeves



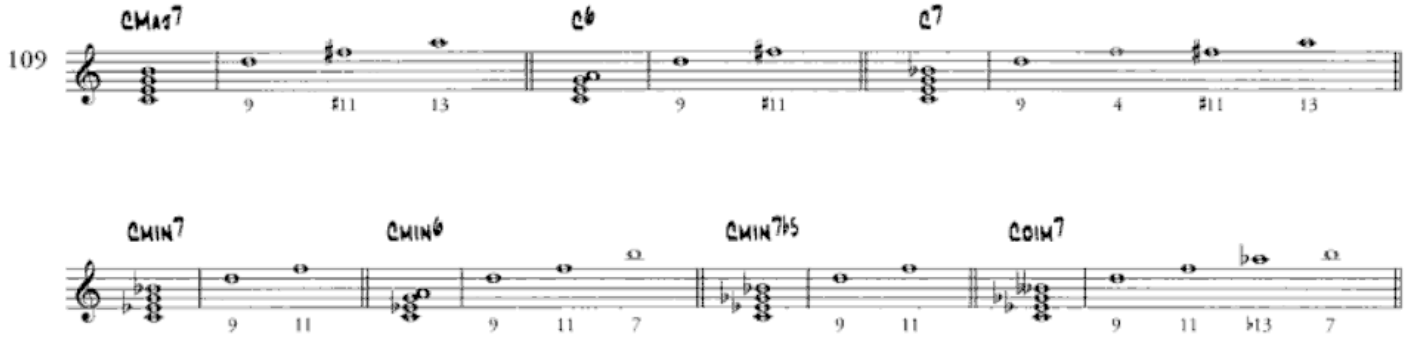
Chord Extensions

By turning triads into 7th chords, we've already looked at ways of adding notes to a chord to achieve a richer sound. Modern jazz pianists often add *extensions* (often called *color tones* or just *colors*) to chords for still more richness. These tones can also be incorporated into one's improvisation.

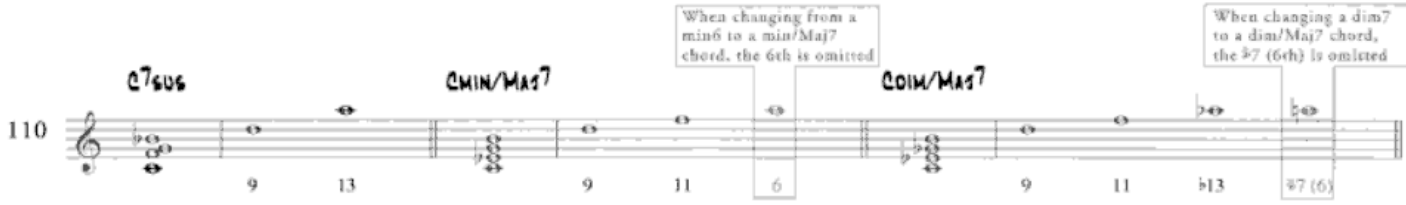
Take a look at the C Major 7th chord to the right. It is a series of stacked 3rds, or a scale (in this case, C Lydian) in which every other note is skipped. If you continue stacking 3rds, you wind up with 9, ♯11 and 13. In a scale, you would call these notes 2, ♯4 and 6, but the numbers 9, 11 and 13 are used instead to clarify that these notes are in the second octave. From a structural standpoint, they're not among the fundamental chord tones, but rather added on top of them. Notice how the ♯11 avoids clashing with the 3rd in the chord in a way that a ♮11 would be unable to do. Example 109 shows the extensions most commonly used on 7th and 6th chords.



Notice the gray notes in several of the chords in example 109 (7, min6 and dim7). These are notes that can be used with these chords, but which slightly change the chord's identity rather than functioning as an extension.

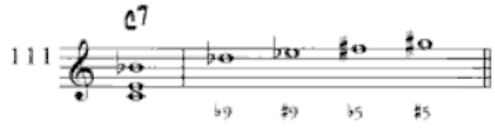


Because a ♮11 on a dominant 7th chord clashes so much with the 3rd, that note should be used instead of the 3rd. This creates a "suspended" chord, in which case the 11 is called 4. The major 7th can be used with both minor 6th and diminished 7th chords, but it likewise tends to take the place of the 6th (♭7) in either chord rather than serving as an extension. These differences are shown in example 110.



Altered Dominant Chords

All of the chord extensions above are meant to add color to a chord without fundamentally altering its identity. However, there is one case in which altering a chord's identity is frequently useful. *Resolving dominant chords* are dominant 7th chords that in one way or another serve the function of resolving to other chords. Because these chords resolve (not always the case with dominant 7th chords), they can handle colors that introduce more tension to their sounds. The four tones in example 111 are used in various combinations with the root, 3rd and 7th of a dominant chord to create an *altered dominant* or just *altered chord*, which adds extra tension to the chord.

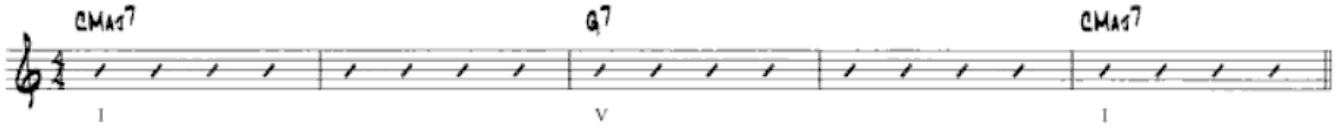


Substitution

While substitution is primarily a harmonic technique, it also applies to soloing, so we'll take a brief look at it here. (See Chapter 5 of *Jazz Keyboard Harmony* for a more thorough explanation of chord substitution.)

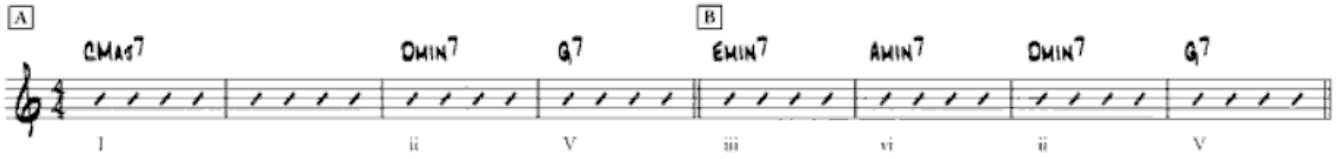
When you see a set of changes in a tune, you're not always required or even expected to follow it verbatim. In a jazz context, *substitution* is the act of taking an existing chord progression and adding or changing chords. Substitution can be prearranged, or it can happen spontaneously. The fundamental principle is that significant points of tonal resolution should be left alone. The function of substitution is to provide varied and stimulating journeys to these established points of resolution, so the approach is to find a point of resolution and then work backwards. Let's look at some common substitution techniques, beginning with the four-bar progression in example 112. The fifth bar, CMaj7, is included here as a point of resolution towards which the substitutions will lead.

112



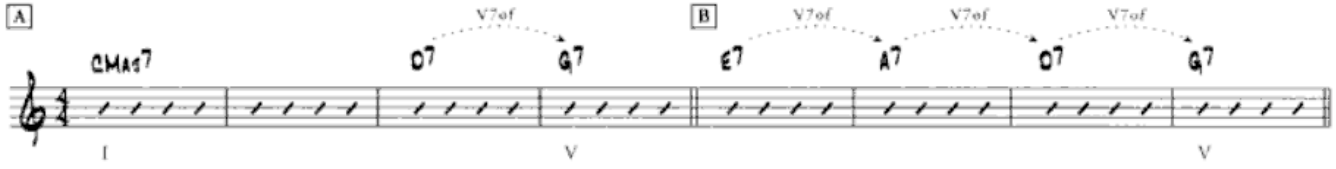
One common and basic substitution practice is to expand a V chord into a ii–V, as in example 113A. In turn, you can expand the expansion by approaching it through root movement in 5ths, as in example 11B.

113



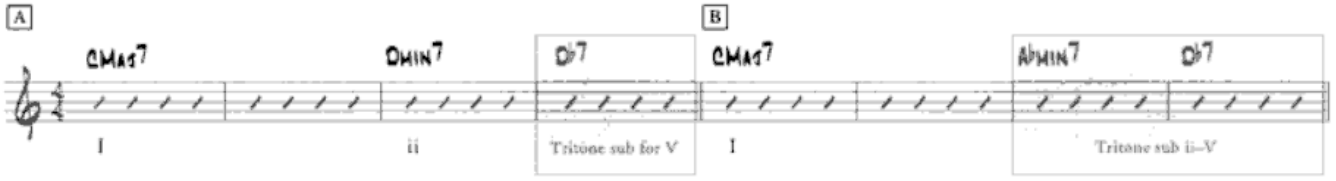
Dominant cycles create a sort of domino effect, whereby a dominant chord "resolves" to another dominant chord, as in example 114A. Such cycles can be stretched out to include several chords, as in example 114B.

114



In *tritone substitution*, you can add color by replacing a dominant 7th chord with the dominant 7th chord a tritone away, as in example 115A. You can create even more tension and surprise by preceding this new chord with the chord a 5th above, as in example 115B.

115

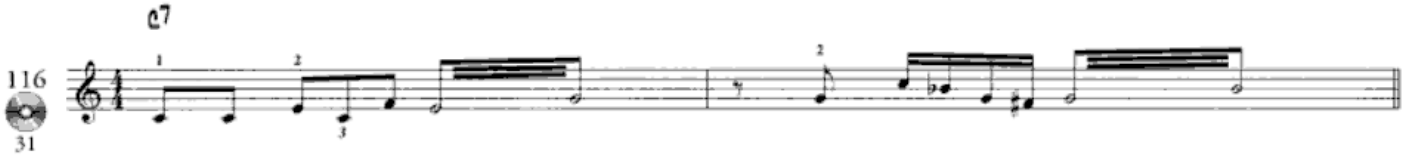


One reason the tritone substitution works is that the 3rd and ♭7 of the substitution chord are the ♭7 and 3rd (respectively) of the dominant chord. Usually, one or both of these will be enharmonically respelled in the substitution chord.

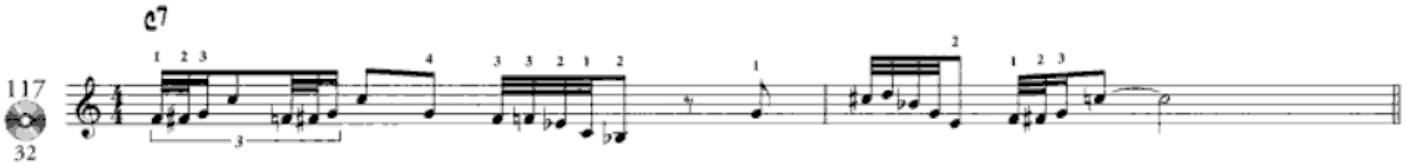
Blues Devices

Some devices and ornaments are strongly associated with the sound of the blues. Some that we have already looked at, like grace notes, can be very evocative of the blues, but can also be used for other purposes; others are virtually inseparable from the blues sound. This section will lay out and provide examples of some devices that are associated with blues keyboard and which a jazz player can use to impart a blues feeling while improvising. Play all of these examples at a medium-slow tempo.

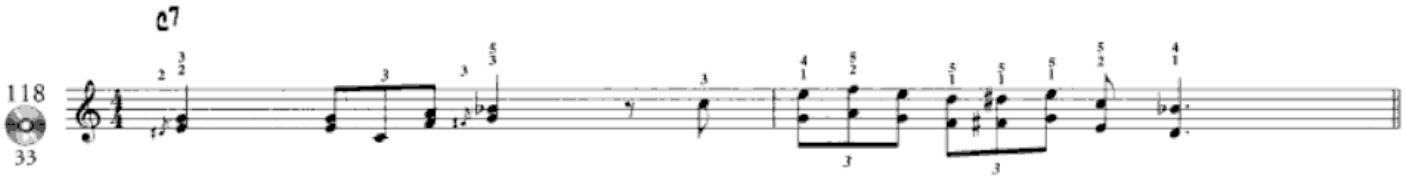
To play a *tremolo*, alternate between two notes as quickly as possible for a fluttering effect.



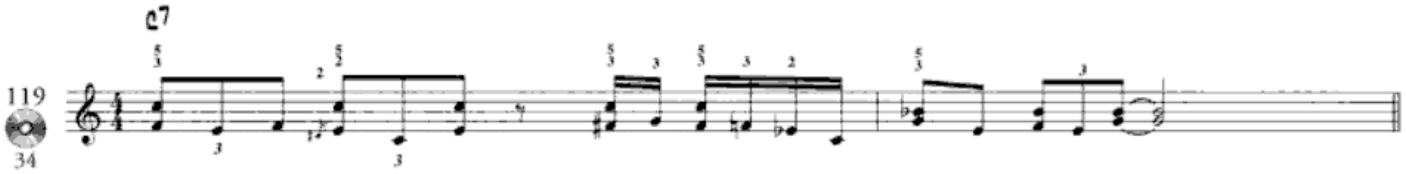
Crushed notes, which involve playing a series of notes very quickly without bringing out the articulation of individual notes, create a sweeping or smearing effect.



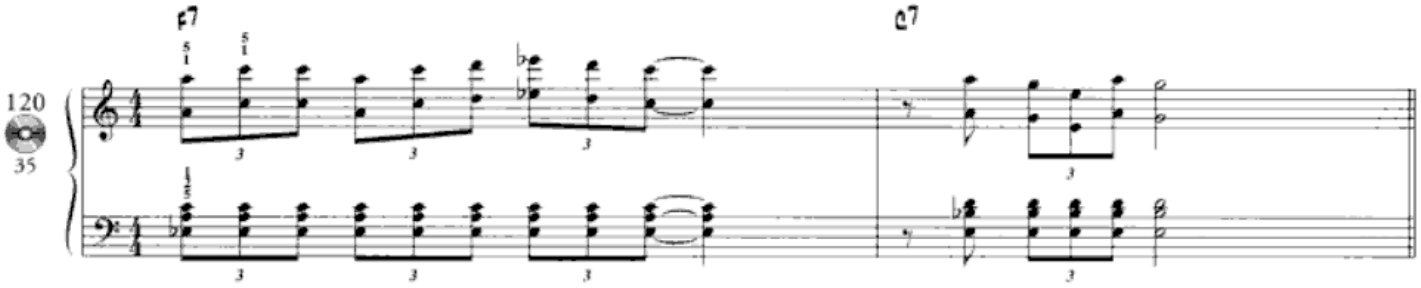
A *double-stop* is a pair of notes played simultaneously. 3rds and 6ths are common in blues-style playing.



Another popular double-stop technique is to keep the same top note throughout a phrase while the bottom voice moves to create the main melody. Notice how the fingerings in several cases involve sliding the same finger down from a black key to the adjacent white key.



Playing parallel octaves in the right hand is a widely used and dramatic technique. The left-hand chords use the same rhythm as that of the right-hand melody, creating a *block chord* (all notes sounding together) effect.

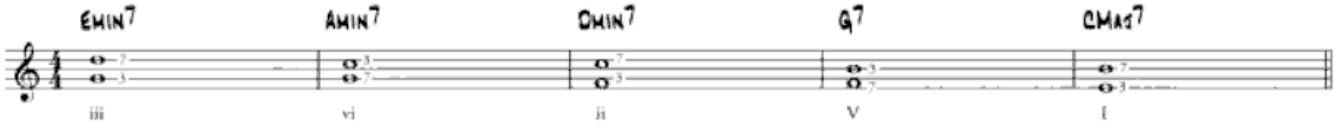


Shell Voicings and Guide-Tone Lines

Shell Voicings

One of the most widely used types of voicings in all of jazz harmony is the *shell voicing*. As the name indicates, shell voicings are stark and skeletal. The 5th is omitted; the root can be played in the bass register by the left hand or can be omitted entirely and left to the bassist (or whoever is covering the bass tones), leaving the 3rd and 7th of the chord. In addition to being used as they are, shell voicings can also serve as the basis for many more colorful voicings. Shell voicings provide the skeleton around which the chord is fleshed out, since the 3rd and 7th are central to defining the sound of a chord. Example 121 is a iii–vi–ii–V–I progression in shell voicings. If you want to reinforce the sound, you can play the roots in your left hand.

121

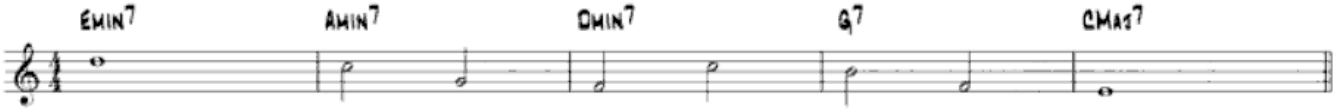


Notice the consistent smoothness of the voice leading. In this progression, as with most progressions in which the chord roots descend diatonically in 5ths, only one note changes with each successive change of chord. The 7th of each chord steps downward to the 3rd of the following chord while the 3rd of each chord stays put and becomes the 7th of the following chord.

Guide-Tone Lines

Guide-tone lines are melodic lines that emphasize the movement from one of the fundamental tones (3rd or 7th) to another at the moment the chords change. Example 122 shows a simple guide-tone line that continually moves from the 7th of one chord to the 3rd of the next.

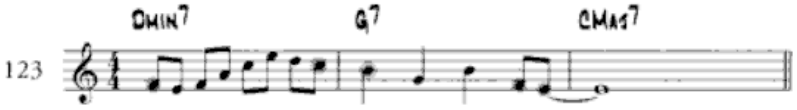
122



While the example above is rhythmically basic, guide-tone lines can also be more involved. The key is that the guide-tone transition occurs as the chords change. The notes can be short or long, anticipated or on the beat, exposed or preceded by other notes. In example 123, the guide tones are highlighted in gray.

= Guide Tone

123



Note that when dominant cycles are used, the options for guide tones increase—in fact, they usually double. While only one note changes in most cases where chords descend diatonically in 5ths, both notes change when dominant 7th chords descend in 5ths. This is the case also when dominant 7th chords are used in tandem with tritone substitution. Dominant chords a tritone apart share the same guide tones (see page 59, bottom), so the same rules apply.

124