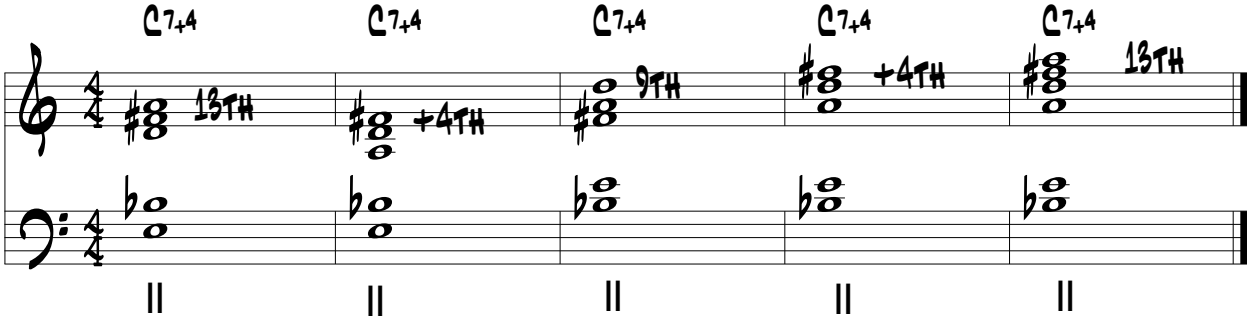
superimposed on top. They are played on dominant chords with alterations[14] that is, dominant chords with at least one alteration (b9, +9, +4, or b13), often with more than one. Upper structures are kind of backwards: the most delicate and unstable interval, the *tritone,* is on the bottom, while the strongest and most robust chord, a major triad, is on the top. The overtone series can play havoc with this instability, which you must pay attention to when problems arise (more on this below).

First, look at the Roman numeral underneath each chord: the first chord, played on a C7+4, has a II underneath it. That is because the *root* of the triad, D, is a major second above the *root* of the notated chord (C7+4). Hence "II." Roman numerals differentiate between different upper structure chords.

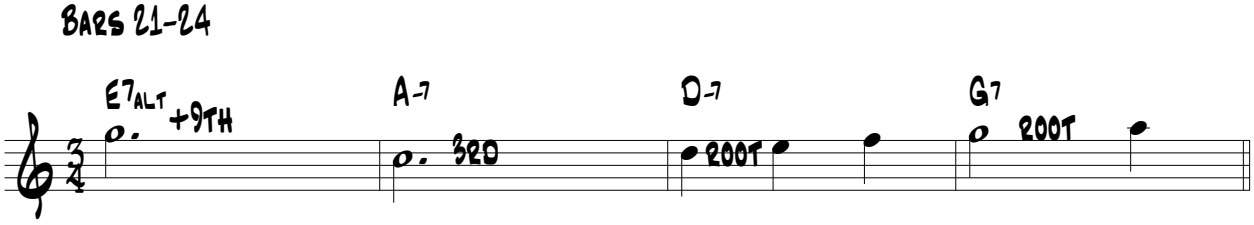
In addition, the 3rd and 7th on the bottom of the voicing can be reversed, putting the 7th on the bottom and the 3rd on top.[15] Furthermore, because triads can be played in three different positions – root position, first inversion, and second inversion – any of the three notes of the triad can be used as a melody note. **FIGURE 1-5** shows a C7+4 chord with five choices to harmonize a melody note. Either the 13th, +4, 9th, or 13th can be in the melody. See how the left hand *tritone* is reversed, first with the 3rd on the bottom, then the 7th, as the chord rises on your piano. Both left hand and right hand need to be fairly close together for *upper structures* to sound good.

FIGURE 1-5 UPPER STRUCTURE CHORD "II" IN VARIOUS POSITIONS



Notice also that the space between your hands is kept small, never more than a 4th, because if it increases by anything more than that, the chord will sound somewhat empty. In addition, if the melody note is played high on the piano (as it is in the last bar on the line), it needs to be doubled, to avoid a tinny, "music box" effect, and to get a fuller sound (see fifth bar of Figure 1-5). So a pianist has five different choices to use these voicings with a melody note on a dominant chord with a +4.

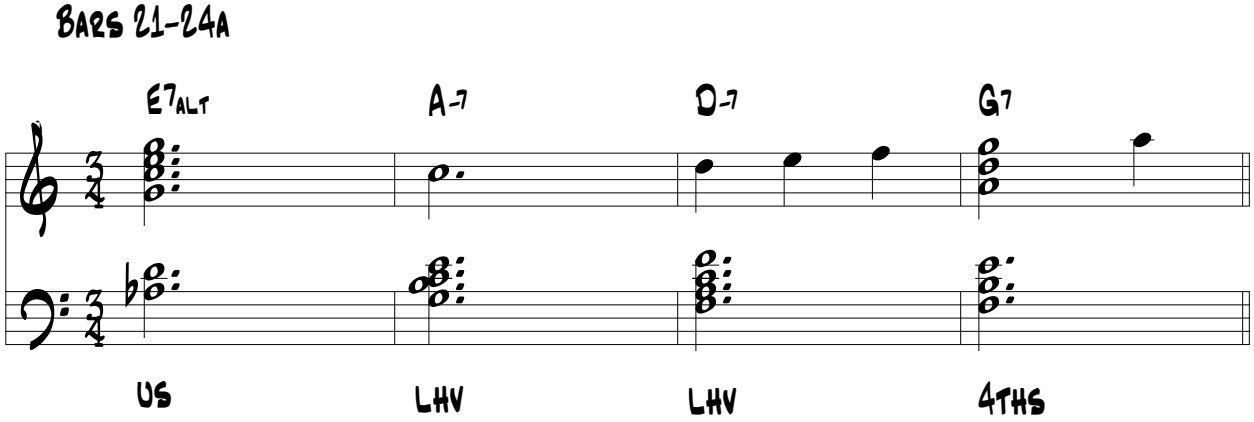
14 Not to be confused with the "alt" chord.
15 Shown as both in Figure 1-5.



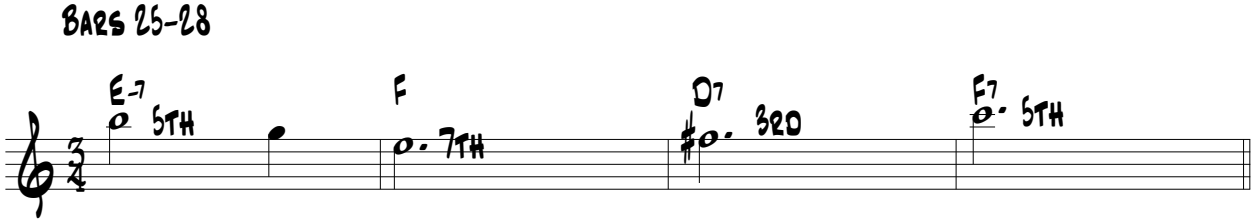
It calls for a *left-hand voicing.*

The last bar has a G7 chord with the melody note G. That's going to be a *fourth chord,* a simpler choice than the *everything chord.*

Bars 21-24a shows the harmonization of these four measures.



Bars 25-28 shows an E-7 chord with the 5th in the melody, calling for a *So What chord.* This is followed by an F major chord in the second bar with the 7th in the melody, also calling for a *So What chord.* This an interesting situation, an example of *parallelism,* where two identical chords follow one an another, but in a different place on the piano, often with different functions.



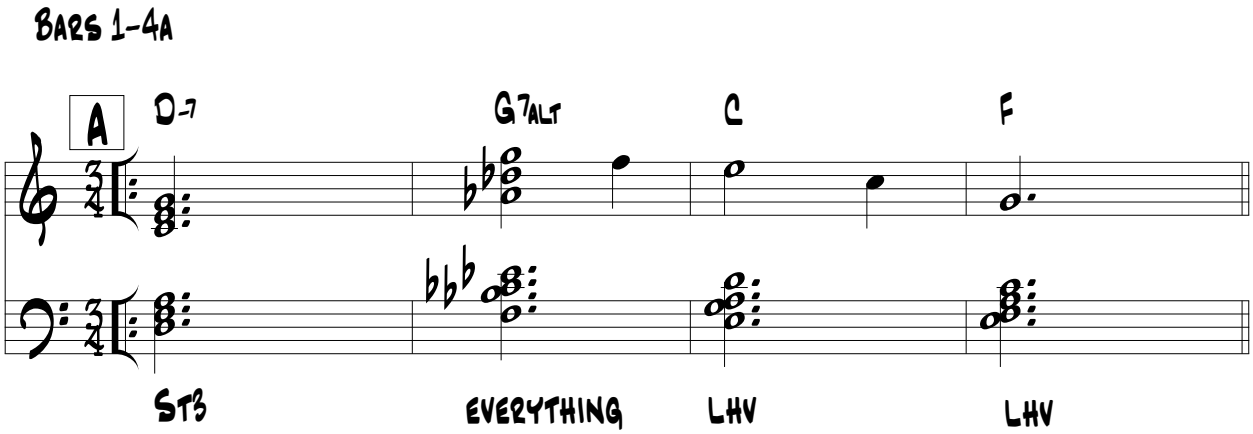
The third bar in Bars 25-28 has a D7 chord with the 3rd in the melody. This again calls for a *left-hand voicing.*

The last bar in Bars 25-28 shows an F7 chord with the 5th in the melody, an obvious candidate for a *Fourth Chord.*

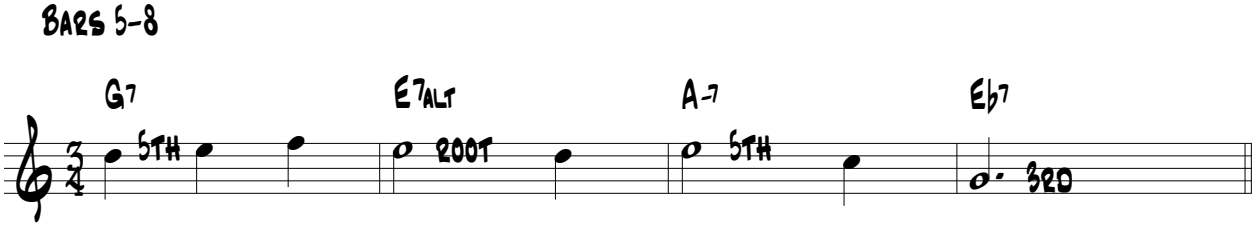
A word about left-hand voicings.[20] You should memorize the two sets shown, each played on a II-V-I in the key of C, in all twelve keys as soon as possible, as II-V-I is the most played chord progression found in jazz.

Now look at the fourth bar of *Bars 1-4*, a major 7th chord with the 9th in the melody. There is one, in the 4th bar of line 2, the *So What chords*. Playing it on this chord would put it too low on your piano, so a *left-hand voicing* again works best. If the chord sounds too harsh to you, simply omit the bottom E to create a root-position chord.

Now look at **Bars 1-4a,** for the first four bars harmonized. Play them and listen to the sounds. Left-hand voicings mix well with any two-handed voicing. When you switch from four notes to as many as six from chord to chord, they still flow smoothly.



Now look at Bars 5-8. The first melody note in the first bar, "D" is the 5th of a G7 chord. Looking at The Menu, this corresponds to the chord in the fourth bar of *fourth chords.* In the second bar of Bars 5-8, we see "E," the root in the melody of an E7alt chord. Look down The Menu and see if you can find an "alt" chord with the root in the melody. Yes, there is one on the *Upper Structures* line, in the second bar.



The example on The Menu is based on a C7alt chord, but the "alt" chord in Alice is an E7alt chord, so you'll have to transpose. Look at the Roman numeral beneath the chord – "bVI."

20 Practice them in all keys.