Harmonizing Jazz Melodies Using Clusters

As a jazz pianist, I am always looking for ways to arrange jazz tunes. One technique that I find myself working with involves using clusters in the right hand in parallel with the melody. Although the technique can be challenging, the sound is quite beautiful and gets at the heart of the sound and texture of jazz piano.

A cluster is generally described as a group of tones (usually three or more) that are closely spaced, usually in seconds. Although many jazz pianists use clusters to emphasize rhythmic and textural elements (for example, Thelonious Monk, Horace Silver, Cecil Taylor, and Chick Corea), the technique can also be applied in a way that fills out the harmony and creates a right hand chord voicing technique with a unique sound.

The basic approach involves five note clusters in the right hand; the four lowest notes are a second apart, and these are separated from the melody by a third. Since we are using clusters to harmonize melodies rather than to provide rhythmic or textural elements, this separation is helpful given that the melody can be heard more clearly. Melody is everything when you're playing the head!

This arrangement can be seen in the example below, where clusters are used to harmonize the C major scale:

Ex. 1: C Major Scale Harmonized in Clusters

As a first step, you'll want to play this arrangement in all twelve keys. Although the C major scale clusters are easy to play, some of the other keys present more of a challenge. Nevertheless, this is another benefit of practicing clusters: your technique will improve.

After working with major keys, you'll want to practice right hand clusters using the melodic minor scale, transposing it through all twelve scales:

Ex. 2: C Melodic Minor Scale Harmonized in Clusters

You may also want to practice other minor scales, such as the dorian, harmonic, and natural minors. Move on to the diminished scale, transposing it through all three scales:

Ex. 3: C Diminished Scale Harmonized in Clusters
Then you can move on to the whole-tone scale, transposing it through both whole-tone scales:

![C Whole-Tone Scale Harmonized in Clusters](image)

*Ex. 4: C Whole-Tone Scale Harmonized in Clusters*

Although the arrangements above give you a wide palette of right hand voicings—and these are the right hand voicings that you'll use most of the time, given the tonal requirements of the melody, you will need to use other cluster arrangements. For example, if you have to play the tonic and the tonic chord together, you cannot use the cluster in the standard arrangement above (example 1, first measure, fourth beat) since the note "F" is unworkable. The examples below give a few other possibilities for the tonic chord supporting the tonic scale degree:

![C Major Cluster Variants](image)

*Ex. 5: C Major Cluster Variants*

The last three (d, e, and f) may be undesirable given half step below the C (assumed as the melody note), but you want to consider all possibilities. These kinds of arrangements, moreover, don't always disguise the melody note. Consider as well that in some situations (as we'll discuss below) the C might also be played in the left hand; this gives added support and clarity to the melody. As you work out arrangements using clusters, these kinds of adjustment are always necessary, but not necessarily difficult if you use your ear and think about the chord tones that are available to you for any given chord.

After you've practiced the clusters in the right hand, you will want to begin applying the technique to jazz tunes. Most of the principles you'll use are the same as those that you would apply to any melody that you are harmonizing. Generally, the clusters chosen will derive from the scale that is implied by the key, such as in example 1 and 2, above. For example, with a II-V-I chord progression that harmonizes a melody, all of the clusters chosen can derive from the parent major or minor scale as long as none of the chords is chromatically altered. If a chord is non-diatonic (having a root other than one of the seven notes of the diatonic major or minor scale), or if it is altered (the chord's quality is changed from what you would normally expect to hear for that particular scale degree), you must find the scale that is appropriate given the chord's quality and the harmonic context within which it is found.

The left hand accompaniment is fairly straightforward. It can be as simple as playing a single bass note, different bass notes representing the root only, or any left hand bass pattern that arpeggiates the fundamental parts of the chord. You can also play chords in the left hand in addition to bass notes. Using this approach, the left hand plays a root, octave, or tenth on beat one, and a chord on beat three.

Below are three examples that demonstrate the technique. Example 6 is a right hand cluster harmonization of "It Could Happen to You":

![Example 6: Right Hand Cluster Harmonization](image)
Ex. 6: It Could Happen to You (Measures 1-16)

In this harmonization, most of the clusters are from the scale of Eb major (measures 1, 3, 5-6, 9, 11, 13, and 15) or an appropriate melodic minor scale. In measure 2, G half-diminished is harmonized with the sixth mode (G locrian #2) of the melodic minor (in this case the Bb melodic minor scale). The C7 uses a cluster voicing of C7b9#9. Measure 4 is the same as measure 2, but up a whole-step. Notice also the use of the fourth mode of the Ab melodic minor scale for Db7, producing the Db lydian-dominant scale. Notice, finally, in measure 16 how Bb7 is harmonized with Bb13sus4 to Bb7 #5#11. Play through the example and analyze the clusters in the arrangement.
In "Alone Together" (Example 7), most of the chord clusters are straightforward expressions of the chord adjusted to accommodate the melody. One harmonization technique that can be seen in measure 3 of this example is the tonic chord alternating with the diminished seventh chord functioning as a leading-tone chord to the tonic. This technique—often referred to as "Shearing Style," is often appropriate given that the harmonization takes every note of the melody into account—both the notes in the chord, and the non-chord passing tones. In harmonizing major or minor chords in Shearing style, the tonic chord clusters alternate with the leading-tone diminished seventh chord. Example 8 shows C6/9, while example 9 shows Cmin6/9:

In these examples, the resulting scale is the bebop major scale. The leading-tone chord contains—in addition to B-D-F-Ab, a fifth, additional note from the B diminished scale (C#, E, G, or Bb).

In "Close Enough for Love" (Example 10), one can see the use of harmonic sequences using clusters (measures 6-8) and the use of Shearing style cluster harmonizations (measures 1 and 5).
The style of using clusters is appropriate for both solo and rhythm section piano. Any cluster arrangement of a head can also be played by the pianist as part of the rhythm section. Simply play the melody in the left hand, one octave below the melody in the right. Clusters can also be used as left hand chord voicings. Practice examples 1 and 2 (above) in the left hand as a way to begin to develop the technique.

Analyze and practice these three examples. Then try creating your own harmonizations to a few tunes that you play.