

Pentatonic Scales and Chords

Another source of pitches, besides chords tones, is pentatonic scales. A *pentatonic scale* is a five-note scale derived from the major scale. Jazz pianists commonly use the unique sound of pentatonic scales when improvising and comping.

SCALES

The pentatonic scale omits two degrees from the original major scale: the 4th and 7th scale degrees. The major scale's tritone is thus avoided, preventing the feeling that the music needs to resolve. This makes the pentatonic scale ideal for improvisation.

Major Pentatonic

The pentatonic scales available in a major chord begin on its related scale's 1st and 5th scale degrees. In the key of C major, or on a C major chord, the available pentatonic scales for improvising are C pentatonic and G pentatonic.



Fig. 15.1. C Pentatonic Scale



Fig. 15.2. G Pentatonic Scale

Minor Pentatonic

The available pentatonic scales of a minor chord are the pentatonic scales based on its related scale's $\flat 3$ rd and $\flat 7$ th degrees. In the key of C minor, or on a C minor chord, the available pentatonic scales for improvising are $E\flat$ pentatonic and $B\flat$ pentatonic.



Fig. 15.3. $E\flat$ Pentatonic Scale



Fig. 15.4. $B\flat$ Pentatonic Scale

IMPROVISING WITH PENTATONIC SCALES

A common way to improvise using pentatonic scales is to play them in varying patterns and rhythms up and down the keyboard, as we did with chord tones. Refer to exercises 15.2, 15.3, 15.5, and 15.6 to practice this technique.

Intervallic Links

A contemporary improvisation practice is to link intervals using whole or half steps. These intervals can be major thirds, minor thirds, and perfect fourths, ascending or descending with a half-step link from above or below, constant or variable (shifting direction). Like pentatonic scales, the tritone is omitted, thus negating tonal direction (no cadential material).

Major 3rd Ascending, Half-Step Link Ascending

Minor 3rd Ascending, Half-Step Link Ascending

Major 3rd Descending, Half-Step Link Ascending

Minor 3rd Descending, Half-Step Link Ascending

Major 3rd, Whole-Step Link Variable

Perfect 4th, Whole-Step Link Variable

Minor 3rd Descending, Half-Step Link Descending

Perfect 4th Descending, Half-Step Link Descending

Minor 3rd, Whole-Step Link Variable

Fig. 15.5. All Intervallic Links

You can also alternate pentatonic scales in your improvisations with intervallic links.

Fig. 15.6. Pentatonics and Intervallic Links

Dominant Chord Replacement

Another easy way to improvise with pentatonic scales involves removing the dominant functioning chords from a progression. The tritone is therefore avoided in both the improvisation and the comping. Unlike the tension resolution or melodic tension units methods, it also removes the need to pay attention to chord tones. The result is a contemporary jazz sound.

Let's try it. Here is a simple ii-V-I progression.

Fig. 15.7. ii-V-I Progression

1. Replace all dominant chords with major or minor seventh chords. Use a chord with flat notes to replace a chord with sharp notes, and vice versa. Here, the B \flat 7 has been replaced with B-7.

Fig. 15.8. B-7 Replaces B \flat 7

2. Now use the available pentatonic scales (whose roots are the notes above) to improvise over the progression. In figure 15.8, measures 1 and 2, the pentatonic scales beginning on the flat-3rd degree of each chord are used; the pentatonic scale based on the root is used in measure 3. This improvisation can also be considered as built from inversions of 3-part fourth voicings.

Fig. 15.9. Pentatonic Scales Applied to Progression

Here is another example.

Original Progression:

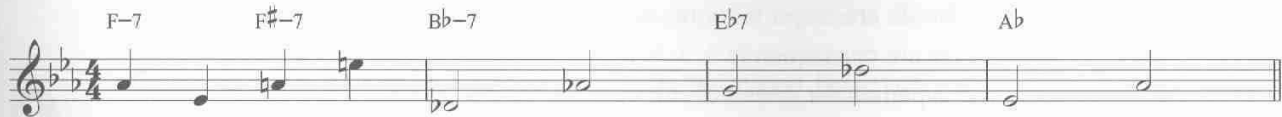


Fig. 15.10. Progression with Chord Tones

Progression with Replaced Dominant-7 Chord:



Fig. 15.11. Improvisation

THREE-PART FOURTH VOICINGS

While improvising using pentatonic scales on major and minor seventh chords, three-part fourth voicings can be used for comping. These voicings are built with two perfect fourths and are constructed on different degrees of the major and minor chord scales.

They can also be arpeggiated and used to improvise. See practice exercises 15.1 and 15.4.

Three-part fourth voicings for a major chord are constructed on the 2nd, 3rd, 6th, and 7th degrees of the major chord scale.

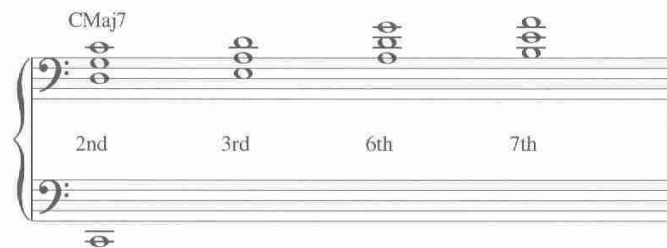


Fig. 15.12. Three-Part Fourth Voicings of CMaj7

Three-part fourth voicings of a minor chord are constructed on the 1st, 2nd, 4th, and 5th degrees of the minor chord scale.

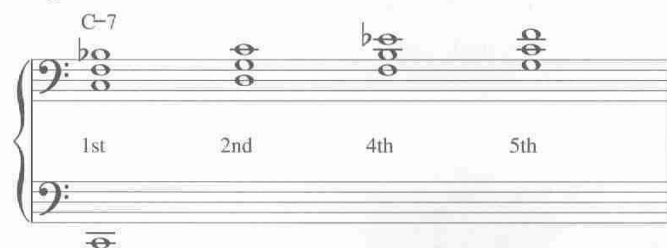


Fig. 15.13. Three-Part Fourth Voicings of C-7

Play chords in both hands, either the same or different, to create rich 6-part voicings when comping.

6/9 Chords and Inversions

The 6/9 chords are major 6 chords with tension 9 substituting the root. The chord tones are consequently 9, 3, 5, and 6. In other words, they contain the notes of the pentatonic scale without the root.

Here is a 6/9 chord and its inversions.

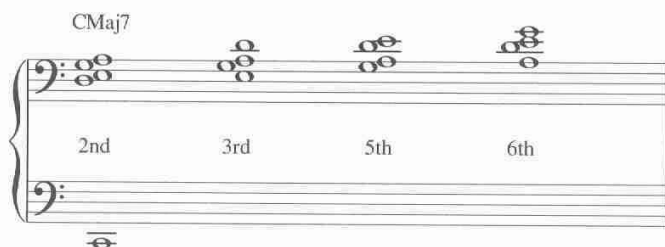


Fig. 15.14. 6/9 Chord and Inversions

6/9 Chord Substitutions

You can also use 6/9 chords to substitute major 6, minor 6, major 7, and minor 7 chords.

If you have a minor-7 chord, you can use a 6/9 chord based on the minor 3rd above or the major 3rd below the minor-7 chord's root. For example, you can substitute a D-7 with F 6/9 or B \flat 6/9. This results in a minor-7 chord without the 3rd. (However, the 6/9 chord found a major 3rd below the root does contain the 3rd.)

An F6/9 substitution would form a voicing made of D-7 chord tones 1, \flat 7, 5, and 11. The \flat 3 has been omitted. A B \flat 6/9 substitution would include the \flat 3, creating a voicing made of D-7 chord tones 11, \flat 3, 1, and \flat 7.

USING 6/9 VOICINGS

The 6/9 voicing automatically reduces the resulting flat-9th interval between major 7ths and roots, minor 3rd and 9th, and \flat 7 and 13.

PRACTICE

Once you have practiced the following exercises, apply the techniques in this chapter to your improvisations of the lead sheets in appendix B.

Practice the first six exercises the same manner as the Melodic Chord Tone Units exercise. Once you are comfortable playing them, practice the exercises in all other keys. Play the right hand all the way up the keyboard, then down.

Exercise 15.1. Major 3-Part Fourth Voicing Inversions



TRACK 41

CMaj7

Exercise 15.2. Major Pentatonics Starting on the 1st Degree



TRACK 42

CMaj7

Exercise 15.3. Major Pentatonics Starting on the 5th Degree



TRACK 43

CMaj7

Exercise 15.4. Minor 3-Part Fourth Voicing Inversions



TRACK 44

C-7

Exercise 15.5. Minor Pentatonics Starting on the $\flat 3$ rd Degree



TRACK 45

C-7

simile

Exercise 15.6. Minor Pentatonics Starting on the $\flat 7$ th Degree



TRACK 46

C-7

simile

Exercise 15.7. Improvising on Replaced Dominant-7 Chords

The top line of chords displays the original version of the progression, and the bottom line is the new contrasting progression without dominant chords, alternating flat regions with sharp regions. The contrasting chord can be found one half step above or below the chord being approached.



TRACK 47

E-7 $\flat 5$ A7 C-7 F7
 B \flat Maj7(#11) C \sharp -7 C-7 F \sharp -7

B \flat 6(9) A6(9) A \flat 6(9) D6(9)

F-7 B \flat 7 E \flat E-7 A \flat
 F-7 B-7 B \flat -7 E-7 A \flat

D \flat 6(9) G6(9) G \flat 6(9) C6(9) A \flat 6(9)

Exercise 15.8. Improvising on Replaced Dominant-7 Chords



TRACK 48

Exercise 15.8. Improvising on Replaced Dominant-7 Chords. The score is in 4/4 time and consists of two systems of piano accompaniment. The first system has four measures with chords F-7, B-7, B \flat -7, and E-7. The second system has five measures with chords A \flat 6, D \flat 6, B-7, B \flat -7, A-7, D \flat Maj7 \flat 5, and C.

Exercise 15.9. 6/9 Chord Arpeggios with Fourth Voicings

Exercise 15.9. 6/9 Chord Arpeggios with Fourth Voicings. The score is in 4/4 time and consists of two systems of piano accompaniment. The first system has four measures showing arpeggiated 6/9 chords with fourth voicings.

Exercise 15.10. 6/9 Chords with Inversions

Exercise 15.10. 6/9 Chords with Inversions. The score is in 3/4 time and consists of two systems of piano accompaniment. The first system has four measures showing 6/9 chords with inversions.

Exercise 15.11. Pentatonics Starting on the Root with 6/9 Chords

Exercise 15.11. Pentatonics Starting on the Root with 6/9 Chords. The score is in 3/4 time and consists of two systems of piano accompaniment. The first system has four measures showing pentatonic scales starting on the root with 6/9 chords.

Exercise 15.12. Pentatonics Starting on the 5th with 6/9 Chords

Exercise 15.13. Improvisation on 6/9 Chord and Inversions

Exercise 15.14. Using 6/9 Chords

1. Analyze these progressions, made up of V/I, V/II, and \flat II7 (substitute dominant).
2. Harmonize melodies using 4-part close voicings, substituting tensions where possible, and using alternate harmonizations.
3. Improve root motion (when the root repeats) by using 11 for 1 with minor-7th chords and \flat 5 for 5 in dominant-7th chords.

A-7 D7 D-7 G7 G-7 C7 F-7 Bb7 Eb
 B-7 E7 E-7 A7 D-7 G7 C-7 F7 Bb
 C#-7 C7 B-7 E7 Bb-7 A7 Ab-7 G7 Gb
 E-7 Eb7 D-7 Db7 C-7 F7 E-7 A7 D

Exercise 15.15. Intervallic Links

Identify the different types of intervallic links in this exercise. Then improvise on the lead sheets in appendix A using intervallic links in your improvised lines.