

# Practice Techniques

*From Fundamentals of Jazz Improvisation:  
What Everybody Thinks You Already Know*

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## Practice Techniques

The following sections include Practice Techniques to develop facility over one's instrument, apply jazz style as learned in Chapter 3, expand one's jazz language, internalize jazz theory and melodic concepts, and prepare to improvise with freedom to create.

### SOURCES

Traditionally, jazz musicians learn their art from emulating what they hear live and from recordings. They also learn from talking to each other, informally as during a gig, or formally as in during a lesson. For example, Charlie Parker's genius grew from the threefold efforts of live gigging, an enormous amount of personal practice and having private lessons with Buster Smith and others. With his enormous amount of practice, the question is, "What did he practice?"

[https://www.youtube.com/watch?v=UvsqYo9r\\_dE](https://www.youtube.com/watch?v=UvsqYo9r_dE)

Accessed on 16 August 2021. Refers to Bobreynoldsmusic.com for complete recording and transcription

Paul: Another thing that's a major factor in your playing, is this fantastic technique, that nobody's quite equaled. I've always wondered about that, too—whether that came behind. Practicing or whether that was just from playing, whether that evolved gradually

Parker: Well, you make it so hard for me to answer, you know, because I can't see where there's anything fantastic about it all. I put quite a bit of study into the horn that's true, In fact, the neighbors threatened to ask my mother to move once. We were living out West. She said I was driving them crazy with the horn. I used to put in at least 11 to 15 hours a day. That's true, yes. I did that for over a period of 3 or 4 years. They also learned from the compositions that they played. Sometimes quoting and often by dissecting the musical content for the sound.

Paul: I guess that's the answer.

Parker: Well, that's the facts anyway.

Paul: I heard a record of yours a couple of months ago that somehow I've missed up to date, and I heard a little 2-bar quote from the Klosé book that was like an echo from home.

Parker: yeah, yeah—well, that was all done with books, you know, naturally it wasn't done with mirrors this time, it was done with books.

Paul: Well, that's very reassuring to hear, because somehow I got the idea that you were just sort of born with that technique, and you never had to worry too much about it, about keeping it working.

McLellan: You know, I'm very glad that he's bringing up this point, because I think that a lot of young musicians tend to think that...

Paul: Yeah, they just go out, Go out and make those sessions and live the life, but they don't put in that 11 hours a day with any of the books."

In a recorded private lesson from Charlie Parker, he admonished the student to learn all of his scales, major and minor. In an interview with Paul Desmond, Parker was also quoted to have said he played etude books.

Parker: "Oh definitely, study is absolutely necessary, in all forms. It's just like any talent that's born within somebody, it's like a good pair of shoes when you put a shine on it, you know?"

Practice Technique #1: Circular Patterns

Practice Technique #2: Chord Tones

Practice Technique #3: Independence

Practice Technique #4: Chromaticism

Practice Technique #5: Melodic Motives

Practice Technique #6: Application

Practice Technique #7 Chord Progression

# Practice Technique #1: Circular Patterns

When preparing to improvise on a tune it is advantageous to work over each chord in the composition using circular patterns. The following examples are in the key of C Major but can be adapted to every key and to almost any chord/scale quality. The major key signature is the same for minor and dominant, as in a ii V<sub>7</sub> I chord progression, so one circular pattern facilitates three chord qualities. Generally, patterns should encompass the range of one's instrument from the lowest note within the key at hand to the highest reasonable note. Patterns can start on the lowest note then proceed to the highest and back or they can start on the root and progress to the top, to the bottom, and back to the root. It is essential that the instrument's full range be developed with equal proficiency.

All melodic patterns, when played with an acceptable jazz style, can be applied to improvisation, keeping in mind that whole patterns are seldom played intact but fragments thereof permeate the literature. There is virtually an endless supply of patterns that are useful for developing one's proficiency and for application to improvised solos. Jazz melodies and transcriptions are primary sources. A popular published work is Jerry Coker's *Patterns for Jazz*. Many resources for jazz patterns can be found at [Jazzbooks.com](http://Jazzbooks.com). In addition, take advantage of instrument specific classical technique exercises, methods, and etude books, for example, Hanon, Arban, Clark, Taffanel et Gaubert, Klosé, and Baerman. If you apply a jazz style to the patterns from books like these, many can be successful. Chapter 12: Cells and Digital Patterns provides ideas for creating your own circular patterns. Certainly, much can be acquired through active listening and through one's creative imagination given sufficient experience in the idiom.

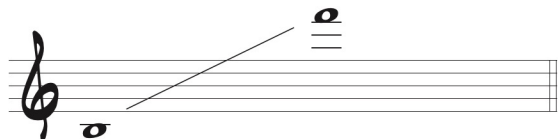
Practice all patterns with the foundational jazz articulation of tongue the upbeat, slur to the downbeat; rhythm instruments play slurred with even emphasis or a slight accent on up beats. (Refer to Chapter 3 for more on articulation.) Other articulations are appropriate depending on the line; one can gain knowledge regarding articulation through concerted listening to masters and through recording and listening to oneself. It is rare to use the foundational articulation for more than 25-30% of a phrase.

Start the pattern on each scale degree and repeat until comfortable. Always use a metronome; when medium swing tempos are employed, click on beats two and four. Starting on each degree helps flexibility and avoids the magnetism of root-to-root scale practice. This exercise also helps to strengthen extreme registers (lows and highs) and other areas of technical concern by focusing on small units.

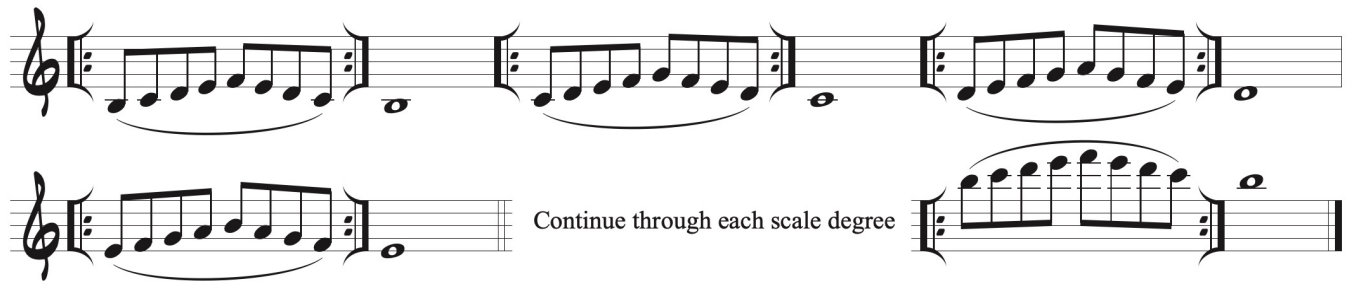
Examples are written for Saxophone in C Major.

## Range

Notes in the key of C Major on the saxophone include:



### 5-Note Pattern



The image shows two staves of music. The first staff contains three measures of a five-note ascending pattern (quarter notes) on a treble clef staff, each measure ending with a repeat sign. The second staff contains one measure of the same pattern, followed by the text "Continue through each scale degree", and then a measure showing the pattern continuing through the scale degrees with a slur over the notes.

A reasonable articulation for the 5-note pattern



The image shows a single staff of music with a treble clef. It contains two measures of the five-note pattern. The first measure has an 'x' over the second note and a 'v' under the fifth note. The second measure has an 'x' over the second note and a 'v' under the fifth note. The pattern continues with 'etc.' at the end.

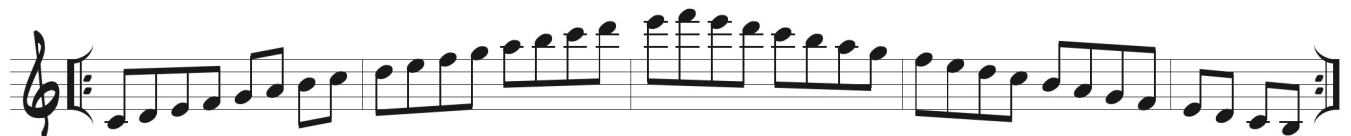
### 9-Note Pattern

This exercise is the same as the 5-note pattern but concentrates on a larger unit.



The image shows three staves of music. The first staff contains two measures of a nine-note ascending pattern (quarter notes) on a treble clef staff, each measure ending with a repeat sign. The second staff contains two measures of the same pattern, each measure ending with a repeat sign. The third staff contains one measure of the pattern, followed by the text "Continue through each scale degree", and then a measure showing the pattern continuing through the scale degrees with a slur over the notes.

### Full Range Scale



The image shows a single staff of music with a treble clef. It contains a single measure of a full range scale (quarter notes) on a treble clef staff, starting from the first line and ending on the first space.

### 3rds Half Octave

Continue through each scale degree

3rds Octave

Continue through each scale degree

3rds Full Range



Continue through each scale degree

4ths Full Range

Continue in like manner with 5th, 6th, 7th, and octave intervals.

Patterns

Experiment with articulation patterns.

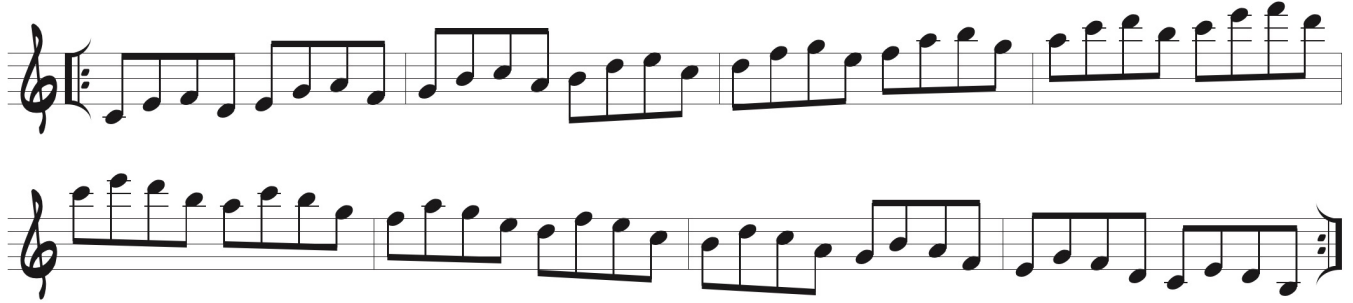


Pattern 1



Pattern 2

This pattern works best if starting on the tonic pitch or the dominant. Here, it begins with the tonic of C major. Starting on other notes changes the tonality, but may be applied if one is working on different chord qualities.



Pattern 3



Pattern 4

This example has the same considerations as example 2.



Triplet rhythms can be applied to Pattern 4.

Pattern 5

This example has the same considerations as example 2.



This melodic concept can be adapted to the interval of a 5<sup>th</sup>.

Pattern 6

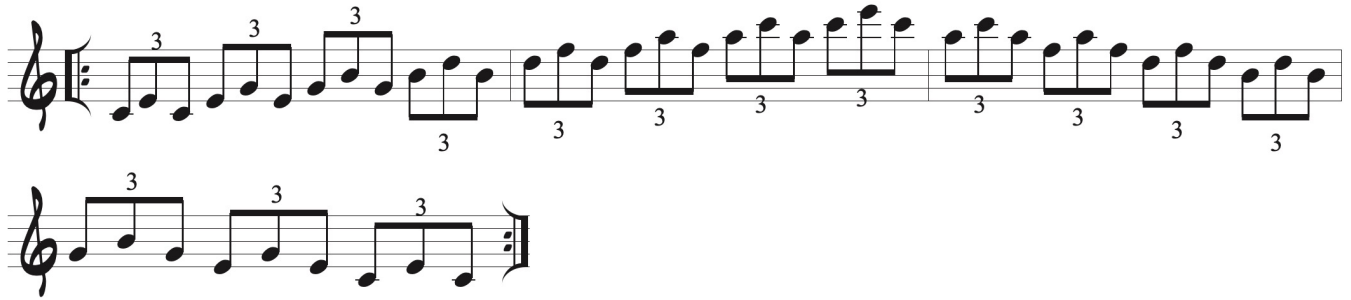
Pattern 6

Pattern 7

Pattern 7

Pattern 8

This example should be applied to the root of the chord quality being practiced. It arpeggiates through the 7<sup>th</sup> and into extensions. One can alter the 11<sup>th</sup> to a sharp 11 when applying to a major or dominant chord. No alterations are necessary when applied to a minor chord.

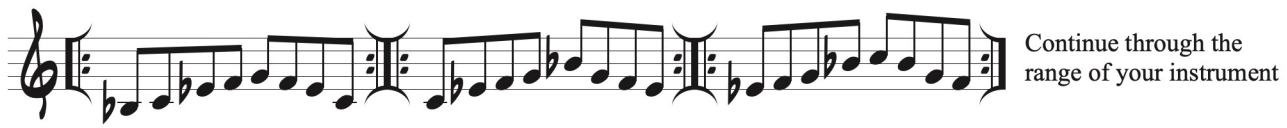


The previous three patterns can be inverted thus:



Practice technique #1 principles can be applied to other scale types besides major, minor (Dorian), and dominant (Mixolydian). The following examples apply PT 1 concepts to a pentatonic scale. These examples start on the lowest note of the saxophone range, proceeding to the highest note, except for examples 2 and 3 which start on the root.

Example 1—5-Note Pattern (C minor, E $\flat$  major)



Example 2—Scale (C minor)

C minor pentatonic uses the same notes as E $\flat$  major pentatonic. One can think in the same way as a major scale and its relative minor: C minor pentatonic is the relative minor to E $\flat$  major pentatonic. When playing the scale notes consecutively through the range of the instrument, the starting note establishes the quality.



Example 3—Scale (E $\flat$  major)





# Practice Technique #2: Chord Tones

The terms, *arpeggio*, *broken chord*, and *chord tones* refer to the notes that constitute the harmony of a chord. They are the *itches of resolution* in a linear improvisation. Consequently, it is imperative to gain facility over these notes for chord qualities used in jazz, namely major, minor, dominant, augmented, and diminished triads, seventh and ninth chords; and a multitude of altered chords.

It is assumed that students will have gained an understanding of arpeggios by means of a method or etude book before working through these exercises. Our focus is to gain flexibility with chord tones, independent of reading the notes on the page, for the purpose of improvisation.

The following exercises represent only a small sampling of the possibilities for developing fluency with arpeggios. Students should use their own initiative and inventiveness to go beyond what is included here.

## TRIADS

Determine the range to be worked; the first example is for saxophone; then learn the following triad exercises in 12 keys with major, minor, diminished, and augmented sonorities.

### Augmented and Diminished Triads

Augmented triads consist of two major thirds. One can find the correct pitches by taking a major triad and raising the 5<sup>th</sup> a half step.

Diminished triads consist of two minor thirds. One can find the correct pitches by taking a minor triad and lowering the 5<sup>th</sup> a half step.



### Additive Arpeggios

Start on the lowest triad note available on the instrument, in the key. Example 1 is an E<sub>b</sub> major triad. The lowest triad note on the saxophone in this key is B<sub>b</sub>. Each time the triad ascends, add one note. This provides gradual assimilation of the triad, repetition, and focus on the low register. It also allows for various turn around points to help break root polarity.

Major

Example 1a—*Bottom up*

Example 1a consists of two staves of music in B-flat major. The upper staff features an ascending melodic line starting on G4 and ending on D5. The lower staff features a descending melodic line starting on D5 and ending on G4. The music is written in a simple, stepwise fashion.

Example 1b—*Top down*

Now reverse the direction, starting the highest triad note within the predetermined range. Again, the example is for saxophone.

Example 1b consists of two staves of music in B-flat major. The upper staff features a descending melodic line starting on D5 and ending on G4. The lower staff features an ascending melodic line starting on G4 and ending on D5. The music is written in a simple, stepwise fashion.

Minor

Example 2a—*Bottom up*

Example 2a consists of two staves of music in B-flat minor. The upper staff features an ascending melodic line starting on G4 and ending on D5. The lower staff features a descending melodic line starting on D5 and ending on G4. The music is written in a simple, stepwise fashion.

Example 2b—*Top Down*



Augmented

Example 3a—*Bottom up*

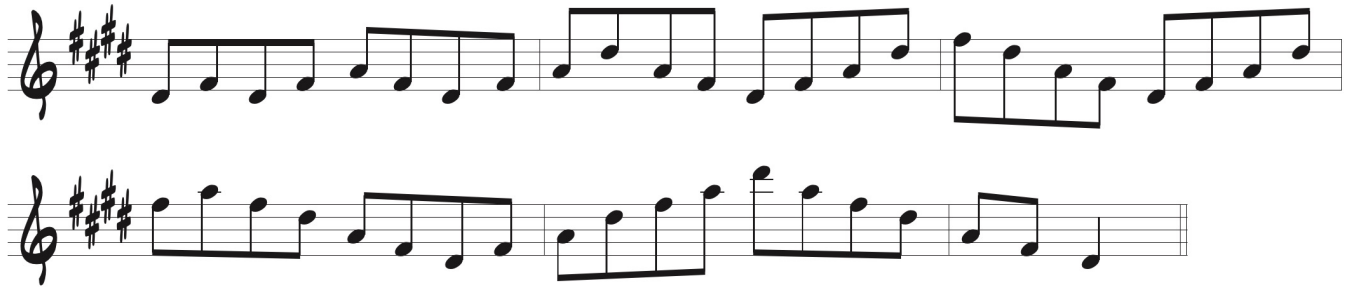


Example 3b—*Top Down*

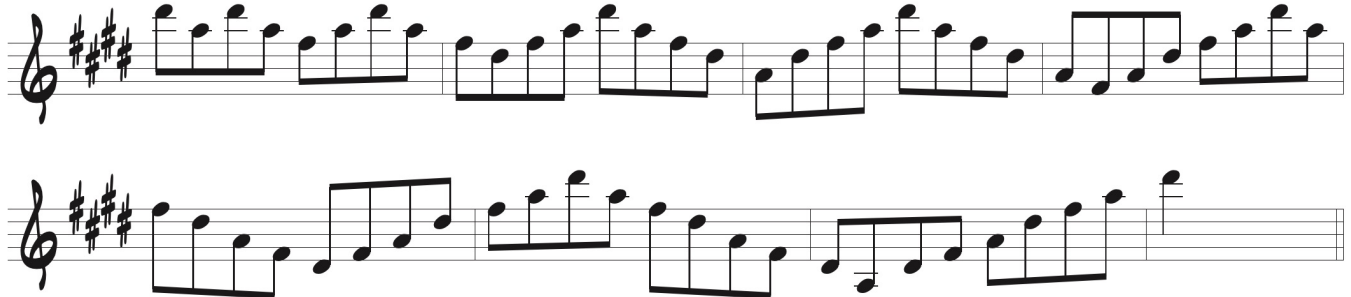


Diminished

Example 4a—*Bottom up*

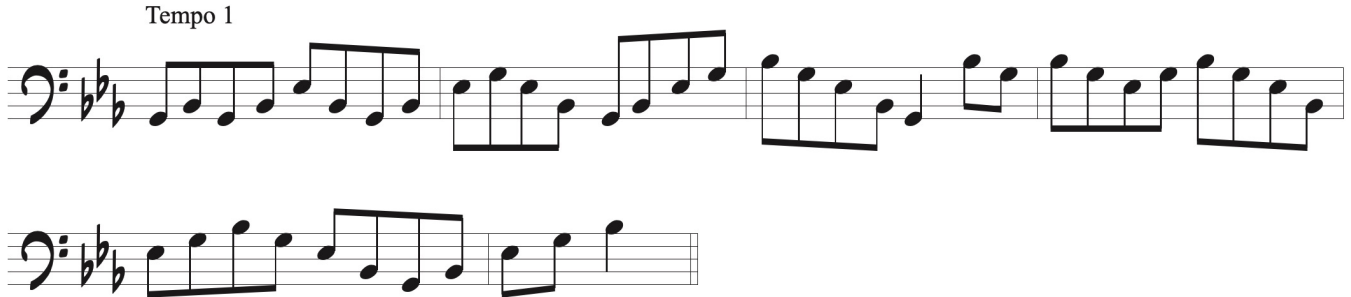


Example 4b—*Top Down*

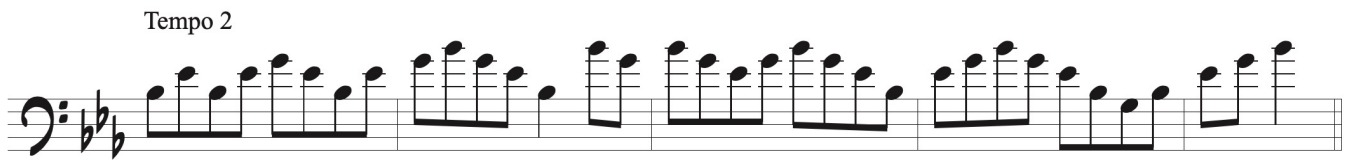


**Adapt the exercises to the considerations of your instrument.** For example, slide positions for the low register of the trombone are farther apart than the high register. It may be prudent to separate the exercise into low register and high register versions with a slower tempo for the low register, and a faster tempo for the high register.

Example 1—Additive Arpeggios in E $\flat$  major, Trombone, *Low Register (Tempo 1: Slower)*



Example 2—Additive Arpeggios in E $\flat$  major, Trombone, *High Register (Tempo 2: Faster)*



### Triad Stiles

*Stiles are an old-fashioned means of walking over a fence; basically, a step ladder going up one side and down the other. Thinking of the chord tones as steps of a stile, you can vary this exercise by ascending or descending in different ways.*

Play the stile exercises in 12 keys, with major, minor, augmented and diminished sonorities. The examples below are in A $\flat$  major.

#### Example 1—*Isolated Inversions*

Practice each triad inversion repeatedly until it is comfortable.

The musical notation for Example 1 consists of two staves in A $\flat$  major. The first staff contains three measures of eighth-note runs: the first measure is the root position triad (A $\flat$ , C $\flat$ , E $\flat$ ) ascending and then descending; the second measure is the first inversion triad (C $\flat$ , E $\flat$ , A $\flat$ ) ascending and then descending; the third measure is the second inversion triad (E $\flat$ , A $\flat$ , C $\flat$ ) ascending and then descending. The second staff contains three measures of eighth-note runs: the first measure is the first inversion triad (C $\flat$ , E $\flat$ , A $\flat$ ) ascending and then descending; the second measure is the second inversion triad (E $\flat$ , A $\flat$ , C $\flat$ ) ascending and then descending; the third measure is the root position triad (A $\flat$ , C $\flat$ , E $\flat$ ) ascending and then descending.

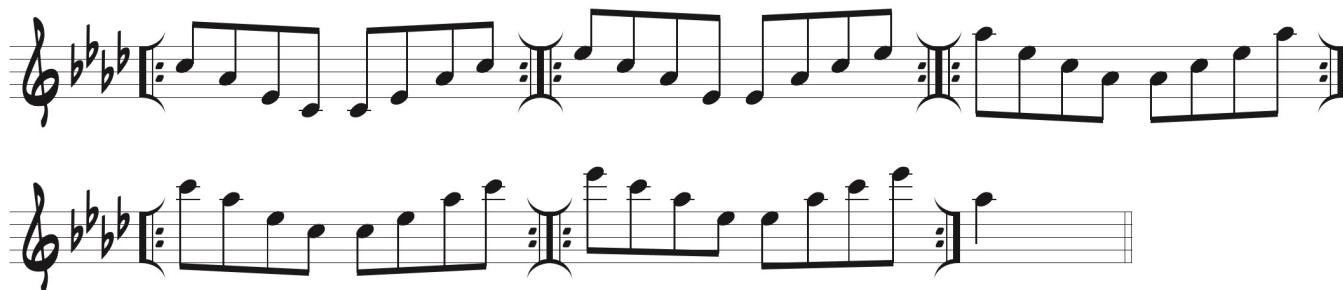
#### Example 2—*Full Range*

Start on the root. Play chord tones up and down then proceed to the next chord tone ascending. Continue in the same manner descending to the bottom of the horn and return to the root.

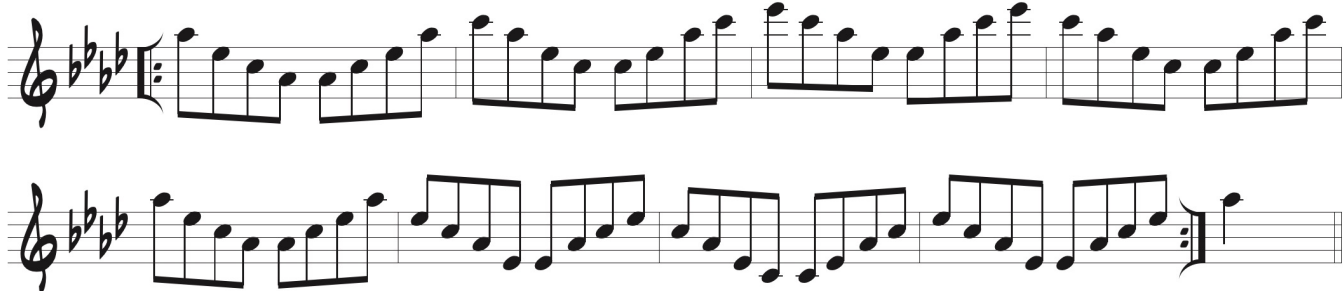
The musical notation for Example 2 consists of two staves in A $\flat$  major. The first staff shows a sequence of eighth-note runs starting from the root (A $\flat$ ) and moving up through the chord tones (C $\flat$ , E $\flat$ ) to the next chord tone (A $\flat$ ), then descending. The second staff shows a sequence of eighth-note runs starting from the root (A $\flat$ ) and moving down through the chord tones (C $\flat$ , E $\flat$ ) to the bottom of the horn, then ascending back to the root.

#### Example 3—*Down first, Isolated inversions*

Do the same exercise with descending triads. Starting down first is a different and important mindset.



Example 4—Down first, full range



Triad Ladders

As with stiles, the chord tones make up the rungs of Triad Ladders. They can ascend or descend in the same way that arpeggios can ascend or descend, but unlike the stiles exercise, they only go one direction. Start each ladder on consecutive inversions to cover the range of your instrument. These should be practiced in varied combinations: Ascending arpeggio/ascending range, Ascending arpeggio/descending range, Descending arpeggio/ascending range, Descending arpeggio/descending range. As always, apply to major, minor, augmented, and diminished triads in all 12 keys.

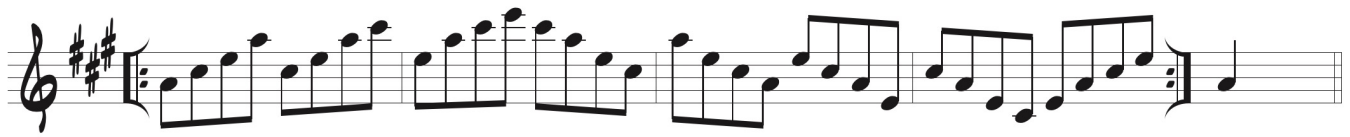
Example 1— Ascending arpeggio, ascending range /Ascending arpeggio, descending range



Example 2—Descending arpeggio, ascending range /Descending arpeggio. descending range



Example 3— Ascending arpeggio, ascending range / Descending arpeggio, descending range



Example 4—Descending arpeggio, ascending range /Ascending arpeggio descending range



### Every Other Note Pattern

These are like playing a scale in thirds, except with chord tones. (48 permutations via major, minor, augmented, and diminished in 12 keys.)



### Triad Scales

These circular patterns build triads on each scale degree, working over muscle memory for major, minor and dominant sonorities. Triad scales may have several different means to turn around at top and bottom. Students should use their own creativity. Triad scales can start on the lowest note of the instrument or the highest regardless of perceived root. Students should practice triad scales starting on different notes and in the 12 keys.

Example 1— Ascending arpeggio, ascending range /Ascending arpeggio, descending range

The first system of musical notation for Example 2 consists of three staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a repeat sign. It contains four measures of music: the first measure has a quarter note G4, an eighth note A4, and a quarter note B4; the second measure has a quarter note A4, an eighth note G4, and a quarter note F4; the third measure has a quarter note G4, an eighth note F4, and a quarter note E4; the fourth measure has a quarter note F4, an eighth note E4, and a quarter note D4. The second staff contains four measures of music: the first measure has a quarter note D4, an eighth note E4, and a quarter note F4; the second measure has a quarter note E4, an eighth note F4, and a quarter note G4; the third measure has a quarter note F4, an eighth note G4, and a quarter note A4; the fourth measure has a quarter note G4, an eighth note A4, and a quarter note B4. The third staff contains four measures of music: the first measure has a quarter note B4, an eighth note A4, and a quarter note G4; the second measure has a quarter note A4, an eighth note G4, and a quarter note F4; the third measure has a quarter note G4, an eighth note F4, and a quarter note E4; the fourth measure has a quarter note F4, an eighth note E4, and a quarter note D4.

Example 2—Descending arpeggio, ascending range /Descending arpeggio, descending range

The second system of musical notation for Example 2 consists of three staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a repeat sign. It contains four measures of music: the first measure has a quarter note G4, an eighth note A4, and a quarter note B4; the second measure has a quarter note A4, an eighth note G4, and a quarter note F4; the third measure has a quarter note G4, an eighth note F4, and a quarter note E4; the fourth measure has a quarter note F4, an eighth note E4, and a quarter note D4. The second staff contains four measures of music: the first measure has a quarter note D4, an eighth note E4, and a quarter note F4; the second measure has a quarter note E4, an eighth note F4, and a quarter note G4; the third measure has a quarter note F4, an eighth note G4, and a quarter note A4; the fourth measure has a quarter note G4, an eighth note A4, and a quarter note B4. The third staff contains four measures of music: the first measure has a quarter note B4, an eighth note A4, and a quarter note G4; the second measure has a quarter note A4, an eighth note G4, and a quarter note F4; the third measure has a quarter note G4, an eighth note F4, and a quarter note E4; the fourth measure has a quarter note F4, an eighth note E4, and a quarter note D4.

Example 3— Ascending arpeggio, ascending range/ Descending arpeggio, descending range

The first system of musical notation for Example 3 consists of three staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a repeat sign. It contains four measures of music: the first measure has a quarter note G4, an eighth note A4, and a quarter note B4; the second measure has a quarter note A4, an eighth note G4, and a quarter note F4; the third measure has a quarter note G4, an eighth note F4, and a quarter note E4; the fourth measure has a quarter note F4, an eighth note E4, and a quarter note D4. The second staff contains four measures of music: the first measure has a quarter note D4, an eighth note E4, and a quarter note F4; the second measure has a quarter note E4, an eighth note F4, and a quarter note G4; the third measure has a quarter note F4, an eighth note G4, and a quarter note A4; the fourth measure has a quarter note G4, an eighth note A4, and a quarter note B4. The third staff contains four measures of music: the first measure has a quarter note B4, an eighth note A4, and a quarter note G4; the second measure has a quarter note A4, an eighth note G4, and a quarter note F4; the third measure has a quarter note G4, an eighth note F4, and a quarter note E4; the fourth measure has a quarter note F4, an eighth note E4, and a quarter note D4.

Example 4—Descending arpeggio, ascending range / Ascending arpeggio, descending range

Musical notation for Example 4, consisting of three staves in G major. The first staff begins with a repeat sign and contains a descending arpeggio (G4-A4-B4-C5) followed by an ascending range (D5-E5-F5-G5). The second staff contains an ascending arpeggio (G4-A4-B4-C5) followed by a descending range (D5-E5-F5-G5). The third staff shows a descending arpeggio (G4-A4-B4-C5) followed by an ascending range (D5-E5-F5-G5).

Triad Scale with additional patterns

Musical notation for Triad Scale with additional patterns, consisting of one staff in G major. It shows a triad scale (G4-A4-B4-C5) followed by additional patterns: G4-A4-B4-C5, G4-A4-B4-C5, G4-A4-B4-C5, and G4-A4-B4-C5.

Example 1

Musical notation for Example 1, consisting of four staves in G major. The first staff begins with a repeat sign and contains a descending arpeggio (G4-A4-B4-C5) followed by an ascending range (D5-E5-F5-G5). The second staff contains an ascending arpeggio (G4-A4-B4-C5) followed by a descending range (D5-E5-F5-G5). The third staff shows a descending arpeggio (G4-A4-B4-C5) followed by an ascending range (D5-E5-F5-G5). The fourth staff shows a descending arpeggio (G4-A4-B4-C5) followed by an ascending range (D5-E5-F5-G5).

Example 2



Example 3



Example 4



Example 5—Patterns may remain constant throughout the ascending and descending scale, or use one pattern ascending and a different pattern descending. Alternating between two patterns as the scale ascends and descends creates more diversity and melodic interest while working triads.



Arpeggiated scale patterns for diminished and augmented sonorities can be applied to whole-tone and diminished scales.

*Whole tone scales*



Whole-tone scales are of limited transposition. Technically there are only two before they start repeating the same scale on different starting notes. Each note could be considered the root, third, or augmented 5<sup>th</sup> depending on the chord to which it is applied. Applying the triad scale pattern to both of these scales will cover augmented triads in 12 keys. Each scale degree, playing every other note, makes an augmented triad. The triad scale pattern will create a sequence of augmented triads when applied to the whole-tone scale

These should be played with the varied permutations of ascending or descending triad and ascending or descending range.

Example 1—Augmented Triads on D Whole-tone scale (ascending augmented triads, ascending whole tone scale/descending augmented triads, descending whole tone scale)



### *Diminished scales*



Diminished scales are also of limited transposition; there are three diminished scales before they start repeating the same scale on different starting notes. Applying the triad scale pattern to each of the following scales will cover diminished triads in 12 keys. Each scale degree, playing every other note, makes a diminished triad. The triad scale pattern will create a sequence of diminished triads when applied to the diminished scale.

These should be played with the varied permutations of ascending or descending triad and ascending or descending range.

Example 2—Diminished Triads on G diminished scale (ascending diminished triads, ascending diminished scale/ascending diminished triads, descending diminished scale)

## 6<sup>th</sup> CHORDS

Harmonies with a major 6<sup>th</sup>, and sometimes with a major 9<sup>th</sup>, were standard tonic sounds from the Swing through Bebop and into the Hard Bop eras (1920's to 1950's). 6<sup>th</sup> chords need only be practiced in major and minor modes. Otherwise, practice for 6<sup>th</sup> chords follows the same parameters as triads—range of instrument, 12 keys, and types of exercise. Please note that minor 6<sup>th</sup> chords use major 6ths in their harmony, e.g., in the key of g minor, play e natural instead of e flat. Follow the examples below to see how 6<sup>th</sup> chords fit over the same exercises we worked for triads.

Practice 6<sup>th</sup> chords with the same techniques as triads.

### Additive arpeggio

- Ascending
- descending

### Stiles

- Isolated inversions, up first
- Isolated inversions, down first
- Full range, up first
- Full range, down first

### Ladders

- Ascending arpeggio, ascending range / Ascending arpeggio, descending range
- Descending arpeggio, ascending range / Descending arpeggio, descending range
- Ascending arpeggio, ascending range / Descending arpeggio, descending range
- Descending arpeggio, ascending range / Ascending arpeggio, descending range

## Every other note pattern

The following examples are designed to clarify the practice concepts. Not all permutations of every technique is included; the intent is for one to internalize the chords, rather than to depend on notation.

### Additive arpeggios

Example 1—*Bottom Up*

Example 1—*Bottom Up* is a musical exercise in G major (one sharp) consisting of four staves. The first staff contains 16 eighth notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4, B3, A3, G3, F#3, E3. The second staff contains 16 eighth notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4, B3, A3, G3, F#3, E3. The third staff contains 16 eighth notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4, B3, A3, G3, F#3, E3. The fourth staff contains 16 eighth notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4, B3, A3, G3, F#3, E3.

Example 2—*Top Down*

Four staves of musical notation in G major (one sharp). The notation consists of eighth and sixteenth notes, often beamed together. The first three staves are filled with continuous rhythmic patterns, while the fourth staff concludes with a few final notes and a double bar line.

Stiles

Example 1—*Isolated Inversions*

Two staves of musical notation in B-flat major (two flats). The notation features eighth and sixteenth notes with repeat signs (double bar lines with dots) indicating isolated inversions. The first staff has four measures, and the second staff has four measures, each with a repeat sign at the end.

Example 2—*Full Range*

Example 3—*Down first, Isolated inversions*

This musical example consists of three staves in G minor. The first staff features a melodic line with eighth-note patterns and some chromaticism. The second staff continues the melodic line with similar rhythmic patterns. The third staff provides a bass line with a steady eighth-note accompaniment, including some chromatic movement.

Example 3—*Down first, Isolated inversions*

Example 4—*Down first, full range*

This musical example consists of three staves in G minor. The first staff shows a melodic line with eighth-note patterns and some chromaticism. The second staff continues the melodic line with similar rhythmic patterns. The third staff provides a bass line with a steady eighth-note accompaniment, including some chromatic movement.

Example 4—*Down first, full range*

Example 5—*Down first, full range*

This musical example consists of three staves in G minor. The first staff features a melodic line with eighth-note patterns and some chromaticism. The second staff continues the melodic line with similar rhythmic patterns. The third staff provides a bass line with a steady eighth-note accompaniment, including some chromatic movement.

## Ladders

Practice with Ladders on 6<sup>th</sup> chords in varied combinations of arpeggio and range directions.

- Ascending arpeggio, ascending range / Ascending arpeggio, descending range
- Descending arpeggio, ascending range / Descending arpeggio, descending range
- Ascending arpeggio, ascending range / Descending arpeggio, descending range
- Descending arpeggio, ascending range / Ascending arpeggio, descending range

Example—*Ascending arpeggio, ascending range / Ascending arpeggio, descending range (A min.<sup>6</sup>)*



## Every Other Note Pattern

Example—*D major*

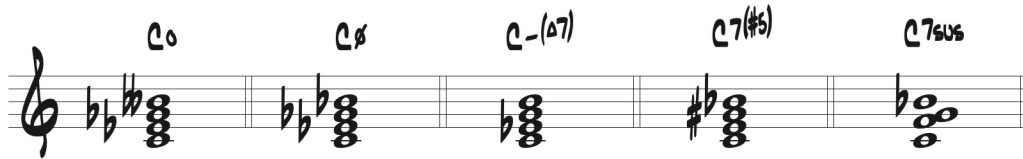


## 7<sup>th</sup> CHORDS

Seventh chords are integral to jazz and may be accompanied by various extensions (9, 11, and 13) and alterations. Initial work should focus on major, minor, and unaltered dominant chords.



Once these facility over these qualities is firmly established, go back and do the same exercises using half diminished, fully diminished, altered dominants, and sus chords.



Extensions will be worked in the next section.

Practice 7<sup>th</sup> chords with the same techniques as triads and 6<sup>th</sup> chords

#### Additive arpeggio

- Ascending
- Descending

#### Stiles

- Isolated inversions, up first
- Isolated inversions, down first
- Full range, up first
- Full range, down first

#### Ladders

- Ascending arpeggio, ascending range / Ascending arpeggio, descending range
- Descending arpeggio, ascending range / Descending arpeggio, descending range
- Ascending arpeggio, ascending range / Descending arpeggio, descending range
- Descending arpeggio, ascending range / Ascending arpeggio, descending range

#### Every Other Note Pattern

The following examples are designed to clarify the practice concepts. As before, not all permutations of every technique is included; the intent is for one to internalize the chords, rather than to depend on notation.

#### Additive Arpeggios

Example 1—*G Maj<sup>7</sup>, bottom up*

Four staves of musical notation in G major (one sharp). Each staff shows a descending additive arpeggio exercise. The first staff contains 16 eighth notes, the second 15, the third 14, and the fourth 13, each starting on G4 and descending by step.

Continue with additive arpeggio descending as before.

Stiles

Example 1—*Isolated Inversions* (G min.<sup>7</sup>)

Two staves of musical notation in G minor (two flats). The first staff shows a descending arpeggio in the lower register (G2 to G3) with four measures. The second staff shows an ascending arpeggio in the upper register (G3 to G2) with three measures. Vertical double bar lines separate the measures.

Example 2—*Full Range* (G min.<sup>7</sup>)

The image shows four staves of musical notation in G minor (one flat). The first staff begins with a repeat sign and contains six measures of eighth-note arpeggios, alternating between ascending and descending directions. The second staff continues with similar eighth-note arpeggios. The third staff features eighth-note arpeggios with some sixteenth-note runs. The fourth staff concludes with eighth-note arpeggios and ends with a repeat sign and a final note.

Continue with *Isolated Inversions* and *Full Range*—down first

### Ladders

Practice with varied combinations of arpeggio and range directions.

- Ascending arpeggio, ascending range / Ascending arpeggio, descending range
- Descending arpeggio, ascending range / Descending arpeggio, descending range
- Ascending arpeggio, ascending range / Descending arpeggio, descending range
- Descending arpeggio, ascending range / Ascending arpeggio, descending range

Example—Ascending arpeggio, ascending range / Ascending arpeggio, descending range (A min.<sup>7</sup>)

The image shows two staves of musical notation in A minor (no sharps or flats). The first staff begins with a repeat sign and contains six measures of eighth-note arpeggios, alternating between ascending and descending directions. The second staff continues with similar eighth-note arpeggios and ends with a repeat sign and a final note.

Continue with other combinations of arpeggio and range directions.

### Every other Note Pattern

The image shows one staff of musical notation in A major (one sharp). It begins with a repeat sign and contains six measures of eighth-note patterns, alternating between ascending and descending directions. The staff ends with a repeat sign and a final note.

## 9<sup>th</sup> CHORDS—Root Position

One of the purposes of practicing arpeggios is to establish notes of resolution for improvisation—these are the notes that sound the harmony: they are the *in* notes. The stepwise motion created by 9<sup>th</sup> chord inversions makes the 9<sup>th</sup> sound like a passing tone, between the root and the 3<sup>rd</sup>, as opposed to a chord tone. For example, root position, C E G B D for C Maj.<sup>9</sup>, is distinct, but first inversion E G B C D E, has a four-note stepwise sequence. Consequently, we will first practice root position arpeggios from the bottom up and the top down, then move to rootless arpeggios and other combinations.

One of the best ways to practice 9<sup>th</sup> chord arpeggios is with a root progression through 12 keys (4ths, 3rds, chromatically, etc.) This will be expanded in practice technique #3.

### Root Position

Example 1—*Ascending Arpeggio, Ascending Chromatic Root Progression*

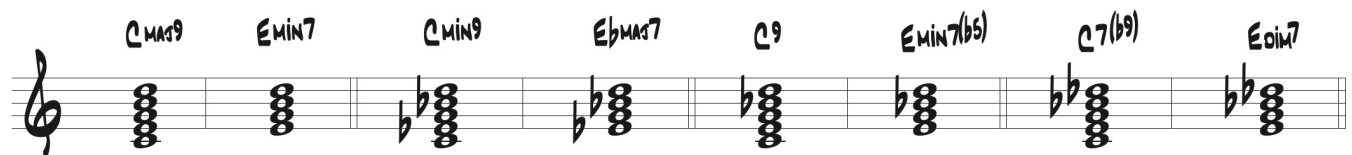


Example 2—*Descending Arpeggio, Ascending Chromatic Root Progression*



Arpeggio patterns for 9<sup>th</sup> chords work well if one omits the root. When the root is missing, a different chord quality may be heard. For example, a C Maj<sup>9</sup> without the root leaves the notes of an E min<sup>7</sup>.

### Rootless Voicings



While playing these patterns, keep the root in mind.

### Additive Arpeggios

Playing a drone, as on the piano, while practicing the exercise will help keep the root in mind and preserve the sound of the 9<sup>th</sup> chord.

Example 1—*Bottom up*

The musical score for Example 1—*Bottom up* consists of four systems, each with a treble and bass staff. The bass staff in every system contains a sustained drone note (G2) with a long horizontal line above it, indicating it is held for the duration of the exercise. The treble staff in each system contains a sequence of notes that ascend and then descend, starting from a lower register and moving towards a higher register across the systems. The notes are primarily eighth and quarter notes, with some beamed eighth notes in the final system.

Example 2—*Top Down*

Stiles

Example 1—*Isolated Inversions, bottom up*

The following example is an  $A^{7(9)}$ , which is the dominant of D minor. It first establishes the sound of the 9<sup>th</sup> chord in root position, then proceeds to the lowest arpeggio note available (example is for saxophone). Without the root, the remaining notes technically result in diminished 7 chords: be sure to think of the root as you pass through the inversions.

Example 2—*Isolated Inversions, down first*

The image shows three staves of musical notation in G major. The first staff contains four measures of music, each with a repeat sign. The second staff contains four measures of music, each with a repeat sign. The third staff contains two measures of music, each with a repeat sign. The notes are: Staff 1: G4, A4, B4, C5; C5, B4, A4, G4; G4, A4, B4, C5; C5, B4, A4, G4. Staff 2: G4, A4, B4, C5; C5, B4, A4, G4; G4, A4, B4, C5; C5, B4, A4, G4. Staff 3: G4, A4, B4, C5; C5, B4, A4, G4.

Example 2—*Isolated Inversions, down first*

Example 3—*9<sup>th</sup> Chord Stiles full range, up first*

The image shows three staves of musical notation in G major. The first staff contains four measures of music, each with a repeat sign. The second staff contains four measures of music, each with a repeat sign. The third staff contains two measures of music, each with a repeat sign. The notes are: Staff 1: G4, A4, B4, C5; C5, B4, A4, G4; G4, A4, B4, C5; C5, B4, A4, G4. Staff 2: G4, A4, B4, C5; C5, B4, A4, G4; G4, A4, B4, C5; C5, B4, A4, G4. Staff 3: G4, A4, B4, C5; C5, B4, A4, G4.

Example 3—*9<sup>th</sup> Chord Stiles full range, up first*

Example 4—9<sup>th</sup> Chord Stiles full range, down first

Ladders

As with “Stiles,” use rootless arpeggios playing the root when its inclusion is the first or last note of the pattern, falling between the 3<sup>rd</sup> and 4<sup>th</sup> inversions (where the 7<sup>th</sup> and 9<sup>th</sup> are the lowest notes). As before, practice the combinations of ascending or descending arpeggios and ascending or descending range. Always keep the chord root in mind.



C major pentatonic
G minor pentatonic
B $\flat$  major pentatonic

The image shows three pentatonic scales on a single staff in treble clef. The first scale is C major pentatonic, starting on C4 and moving up stepwise to G4. The second scale is G minor pentatonic, starting on G3 and moving up stepwise to D4. The third scale is Bb major pentatonic, starting on Bb3 and moving up stepwise to F4. Above each scale is its name and a chord symbol: C major pentatonic (C), G minor pentatonic (G $\flat$ ), and Bb major pentatonic (B $\flat$ ).

## 11<sup>th</sup> and 13<sup>th</sup> CHORDS

Elevenths and thirteenths can provide color to an improvisation. On major chords, the eleventh is often raised. The thirteenth is the same note as the sixth, so these have been practiced previously—though, when applied to a chord with a seventh, thirteenths have a uniquely different sound.

### Additive Arpeggio

The following additive arpeggio stacks thirds until it returns to tonic. Again, the exercise begins on the lowest note according to the range of the instrument. Since we are stacking thirds, the first note here is the thirteenth.

#### Example 1—*Bottom Up Additive Arpeggio (F Maj<sup>13</sup>(#11))*

The image shows three staves of musical notation for Example 1. The key signature has one flat (Bb). The first staff starts on F3 and ascends by thirds: F3, Ab3, C4, Eb4, G4, Bb4, D5. The second staff continues the sequence: F4, Ab4, C5, Eb5, G5, Bb5, D6. The third staff continues: F5, Ab5, C6, Eb6, G6, Bb6, D7. The exercise ends on the tonic F3.

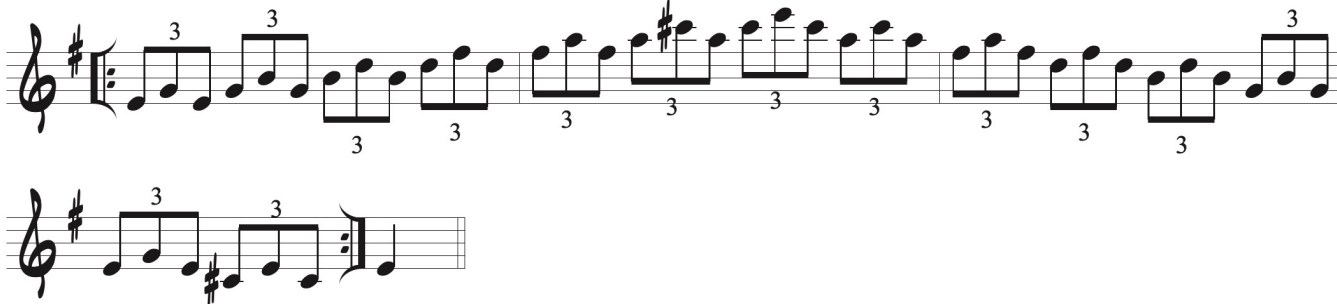
#### Example 2—*Top down (F Major<sup>13</sup>(#11))*



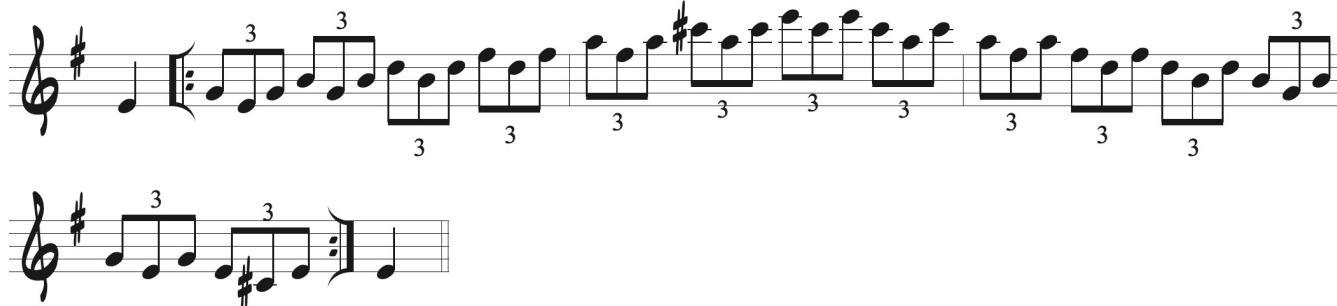
Thirds Pattern

Fragments of this line are often heard in improvisations. Thirds are played in triplet groups with ascending or descending cells, up or down the range. Like the additive arpeggios above, thirds travel through elevenths and thirteenthths.

Example 1—*Extensions Triplet Pattern, ascending cell (E min<sup>13</sup>)*



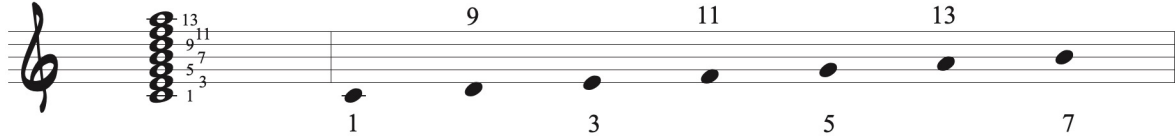
Example 2—*Extensions Triplet Pattern, descending cell (E min<sup>13</sup>)*



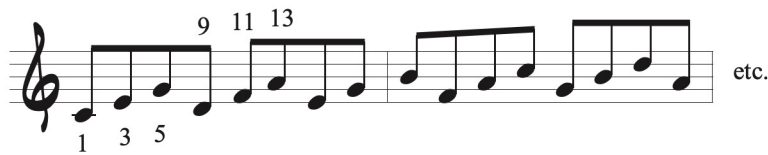
Scale = Chord

When the notes of a scale are stacked in thirds, they constitute chord tones from 1 through 13. Practicing scale patterns equates to practicing chords with all their extensions.

Tones of 13<sup>th</sup> chord make a scale



Example—Triad Scale: Extensions



## MELODIC PATTERNS

The following examples include arpeggios as part of the melodic line.

### Ascending Arpeggio

Example 1—*Ascending triplet starting with half-step pickup to the root.*

Triplet ascends 1 3 5, and lands on the 7<sup>th</sup>. This pattern may be applied to any chord quality: major, minor, dominant, etc., and may be found at the onset or in the middle of a line. The arpeggio pattern is isolated below, but doesn't usually end doesn't usually end as indicated—the line continues according to the improvisation.



Example 2—*Ascending triplet, starts with half-step pickup to the third.*

Triplet ascends 3 5 7, and lands on the 9<sup>th</sup>. This pattern may be applied to any chord quality: major, minor, dominant, etc.



Take the pattern through a root progression, such as the cycle of 4ths (Practice Technique #3).

Musical notation showing a descending arpeggio pattern over three chords: Cmin9, Fmin9, and Bbm9. Each chord is followed by a triplet of notes descending from the 5th to the 3rd of the chord. The pattern is repeated with "etc." indicating it continues.

Descending Arpeggio

Example 1—*Descending arpeggio starting on 5<sup>th</sup>*

The following motive is a descending arpeggio starting on the 5<sup>th</sup>, preceded by a half-step up pickup and followed by a resolution to the third. This motive is most often found within a phrase, as opposed to at the beginning or the end. Notice that the motive as applied to a Major chord and a dominant chord is the same, since there is no 7<sup>th</sup> for differentiation.

Musical notation showing a descending arpeggio starting on the 5<sup>th</sup> of three chords: Cmaj7, C7, and Cmin7. Each chord is followed by a triplet of notes descending from the 5<sup>th</sup> to the 3<sup>rd</sup> of the chord.

Practice around a root progression such as ascending major 2nds.

Musical notation showing a descending arpeggio starting on the 5<sup>th</sup> of three chords: Cmaj7, Dmaj7, and Emaj7. Each chord is followed by a triplet of notes descending from the 5<sup>th</sup> to the 3<sup>rd</sup> of the chord. The pattern is repeated with "etc." indicating it continues.

Example 2—*Descending arpeggio, change chord qualities*

This motive starts on the seventh and is particular to a chord quality. It is placed within a phrase, as opposed to the beginning or end.

Musical notation showing a descending arpeggio starting on the 7<sup>th</sup> of three chords: Cmaj7, C7, and Cmin7. Each chord is followed by a triplet of notes descending from the 7<sup>th</sup> to the 5<sup>th</sup> of the chord.

Practice around a root progression.



## ii Vs with Arpeggios

The following two examples are from Charlie Parker solos and use arpeggios in a ii V progression. These can be worked through twelve keys (Practice Technique #5)

### Example 1—*One measure ii V*

This Parker motive starts on the 5<sup>th</sup> of the minor chord and arpeggiates through the seventh, landing on the third of the dominant.



### Example 2—*Two measure ii V*

Parker starts this motive with a half-step leading to the root of an E minor arpeggio and ascends through the chord tones, landing on the seventh. In the second whole measure, beat three of the A<sup>9</sup>, starts on the third, and arpeggiates to the 9<sup>th</sup>.



# Practice Technique #3: Independence

Jazz improvisation often requires the performer to move quickly from chord to chord. Each harmony in a composition can contain its own unique spectrum of sound. The performer may have to *shift gears*, so-to-speak, and utilize a different aural and physical condition for each situation. Practicing movement from key to key within the same chord/scale type helps to make the keys and qualities independent without reference to a crutch. Practice Technique #2 can help the performer internalize the theory of a particular chord/scale and to progress towards the realization of chord progressions.

There are two main objectives for this practice technique. One is to make chord, scale, and patterns independent of a reference (i.e. minor uses the key signature of major, a whole step below, or is major with a flat 3 and a flat 7; dominant is the major key, a fifth below, or major with a flat 7.) These and other means to recognize chords/scales are successful as a first step in one's understanding, but ultimately need to be supplanted with real knowledge and facility. One does not have time to use such devices while improvising—one must simply *know*. This is similar to learning a new language—you don't have time to think of the translation in your head; the words have to connect with their meaning directly. The second objective is to break away from the polarity of root to root playing. The practice techniques initially start on roots, but are to be applied to 3<sup>rd</sup>, 5<sup>th</sup>, and 7<sup>th</sup> as starting notes for scales, and arpeggios are to be worked in 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> inversions. The ability to start at any point of a scale or chord clarifies the parts of the melody/improvisation that will serve as goal notes, and alternatively, notes of resolution. (This is not to suppose that 9<sup>ths</sup> or 13<sup>ths</sup>, for example, shouldn't be sustained or emphasized.)

**The following examples are major, but should be applied to any chord/scale that one is incorporating into his or her repository (such as minor and dominant).** After working the following process in root position, it is imperative that one apply the same techniques starting scales on the 3<sup>rd</sup>, 5<sup>th</sup>, and 7<sup>th</sup> degrees. Similarly, arpeggios must be practiced in root, 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> inversions.

There are four parts to consider. The student is welcome to explore whichever section is most appropriate to develop current levels.

Part 1: Last notes sustain, giving time to think of the next key.

Part 2: More advanced, skipping immediately to the new key makes the mind and body behave in a manner more similar to realizing a chord progression.

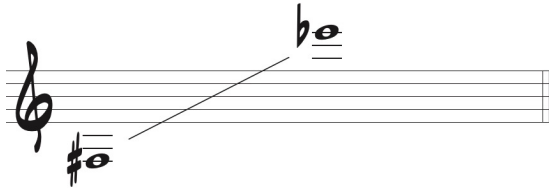
Part 3: Arpeggios

Part 4: This section explores root progressions other than the circle of 5ths (cycle of 4ths).

Determine the reasonable range of your instrument. For the examples in Practice Technique #3, the trumpet range of low G to high D is maintained. Certainly, if one is extending one's range, those notes should be included.

Examples are written for Trumpet.

Range



## PART I

### Ascending/Descending (Sustain)

#### *Pairs: Low Register*

Think about next scale

Think about next scale

Think about next scale

Think about next scale

Continue through cycle: A $\flat$ -D $\flat$ , D $\flat$ -G $\flat$  (F $\sharp$ ), F $\sharp$ -B, B-E, E-A, A-D, D-G, G-C

#### *Pairs: High Register*

Think about next scale

Think about next scale

Think about next scale

Think about next scale

Continue through cycle: A $\flat$ -D $\flat$ , D $\flat$ -G $\flat$  (F $\sharp$ ), F $\sharp$ -B, B-E, E-A, A-D, D-G, G-C

#### *Fours: Low*

Think about next scale

Think about next scale

Think about next scale

Think about next scale

Continue through remaining sets: A $\flat$ -D $\flat$ (C $\sharp$ )-G $\flat$  (F $\sharp$ )-B and E-A-D-G

*Fours: High*

Think about next scale

Think about next scale

Think about next scale

Think about next scale

*Cycle: Low*

The image displays a musical score for a single melodic line, presented across six staves. The notation is in treble clef. The first staff begins with a key signature of one flat (Bb). The second staff changes to two flats (Bb, Eb). The third staff features a chromatic scale section with sharps and flats. The fourth staff has a key signature of three sharps (F#, C#, G#). The fifth and sixth staves continue with chromatic and diatonic patterns.

*Cycle: High*

Descending/Ascending (Sustain)

*Pairs: Low*

Continue through cycle: A $\flat$ -D $\flat$ , D $\flat$ -G $\flat$  (F $\sharp$ ), F $\sharp$ -B, B-E, E-A, A-D, D-G, G-C

*Pairs: High*



Continue through cycle: A $\flat$ -D $\flat$ , D $\flat$ -G $\flat$  (F $\sharp$ ), F $\sharp$ -B, B-E, E-A, A-D, D-G, G-C

*Fours: Low*



Continue through remaining sets: A $\flat$ -D $\flat$ (C $\sharp$ )-G $\flat$  (F $\sharp$ )-B and E-A-D-G

*Fours: High*



Continue through remaining sets: A $\flat$ -D $\flat$ (C $\sharp$ )-G $\flat$  (F $\sharp$ )-B and E-A-D-G

*Cycle: Low*

The image displays a musical score for a single melodic line, written in treble clef. It consists of seven staves of music. The first staff begins with a repeat sign. The music is composed of eighth and sixteenth notes, with occasional rests. The key signature starts with one flat (B-flat) and changes to one sharp (F#) in the third staff. The piece concludes with a double bar line and repeat dots.

*Cycle: High*

**Now repeat the whole process starting on the 3<sup>rd</sup> scale degree.** It would be cumbersome to write out the same process starting on each chord tone. Here is the first scale pair, ascending and descending—continue as above.

**Example 1**  
Ascending/Descending (Sustain)

*Pairs: Low Register—Beginning on the 3<sup>rd</sup> degree of the C major scale, jumping to the 3<sup>rd</sup> degree of the F major Scale.*

**Example 2**  
Descending/Ascending (Sustain)

*Pairs: Low Register—Beginning on the 3<sup>rd</sup> degree of the C major scale, jumping to the 3<sup>rd</sup> degree of the F major Scale.*



**Now repeat the whole process starting on the 5<sup>th</sup> degree of the C major scale, jumping to the 5<sup>th</sup> degree of the F major Scale.**

Example 1

Ascending/Descending (Sustain)

*Pairs: Low Register—Beginning on the 5<sup>th</sup> degree of the C major scale, jumping to the 5<sup>th</sup> degree of the F major Scale.*



Example 2

Descending/Ascending (Sustain)

*Pairs: Low Register—Beginning on the 5<sup>th</sup> degree of the C major scale, jumping to the 5<sup>th</sup> degree of the F major Scale.*



**Repeat the process starting on the 7<sup>th</sup> degree of the C major scale, jumping to the 7<sup>th</sup> degree of the F major Scale.**

Example 1

Ascending/Descending (Sustain)

*Pairs: Low Register—Beginning on the 7<sup>th</sup> degree of the C major scale, jumping to the 7<sup>th</sup> degree of the F major Scale.*



Example 2

Descending/Ascending (Sustain)



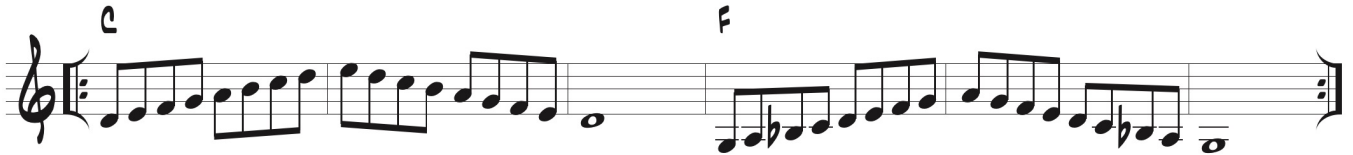
*Pairs: Low Register—Beginning on the 7<sup>th</sup> degree of the C major scale, jumping to the 7<sup>th</sup> degree of the F major Scale.*



**Now repeat the whole process starting on the 9<sup>th</sup> degree of the C major scale, jumping to the 9<sup>th</sup> degree of the F major Scale.**

**Example 1—Ascending/Descending (Sustain)**

*Pairs: Low Register—Beginning on the 9<sup>th</sup> degree of the C major scale, jumping to the 9<sup>th</sup> degree of the F major Scale.*



**Example 2—Descending/Ascending (Sustain)**

*Pairs: Low Register—Beginning on the 9<sup>th</sup> degree of the C major scale, jumping to the 9<sup>th</sup> degree of the F major Scale.*



## PART II

**Repeat all previous exercises skipping to the next scale instead of sustaining.**

- Ascending/Descending (Skip)
- Descending/Ascending (Skip)
- Ascending
- Descending
- Ascending/Descending Alternation
- Descending/Ascending Alternation
- Starting on each chord tone

Ascending/Descending (Skip directly to next chord with no sustain)

*Pairs: Low*

Three staves of musical notation in treble clef, showing ascending and descending patterns. The first staff starts with a treble clef and a key signature of one flat (Bb). The second staff starts with a treble clef and a key signature of two flats (Bb, Eb). The third staff starts with a treble clef and a key signature of three flats (Bb, Eb, Ab). Each staff contains four measures of music, with the first two measures ascending and the last two measures descending. The notes are quarter notes, and the patterns are: Staff 1: G4, A4, Bb4, C5, Bb4, A4, G4; Staff 2: F4, G4, Ab4, Bb4, Ab4, G4, F4; Staff 3: E4, F4, G4, Ab4, G4, F4, E4.

Continue through cycle: E $\flat$ -A $\flat$ , A $\flat$ -D $\flat$ , D $\flat$ -G $\flat$  (F $\sharp$ ), F $\sharp$ -B, B-E, E-A, A-D, D-G, G-C

Descending/Ascending (Skip)

*Pairs: Low. Begin pattern descending.*

Three staves of musical notation in treble clef, showing descending and ascending patterns. The first staff starts with a treble clef and a key signature of one flat (Bb). The second staff starts with a treble clef and a key signature of two flats (Bb, Eb). The third staff starts with a treble clef and a key signature of three flats (Bb, Eb, Ab). Each staff contains four measures of music, with the first two measures descending and the last two measures ascending. The notes are quarter notes, and the patterns are: Staff 1: G4, A4, Bb4, C5, Bb4, A4, G4; Staff 2: F4, G4, Ab4, Bb4, Ab4, G4, F4; Staff 3: E4, F4, G4, Ab4, G4, F4, E4.

Continue through cycle: E $\flat$ -A $\flat$ , A $\flat$ -D $\flat$ , D $\flat$ -G $\flat$  (F $\sharp$ ), F $\sharp$ -B, B-E, E-A, A-D, D-G, G-C

Ascending

*Pairs: Low*

Musical notation for a set of three staves. The first staff has a treble clef and a key signature of one flat. The second staff has a treble clef and a key signature of two flats. The third staff has a treble clef and a key signature of three flats. Each staff contains a sequence of notes with repeat signs.

Continue through remaining sets

*Pairs: High*

Musical notation for a set of three staves. The first staff has a treble clef and a key signature of one flat. The second staff has a treble clef and a key signature of two flats. The third staff has a treble clef and a key signature of three flats. Each staff contains a sequence of notes with repeat signs.

Continue through remaining sets

*Fours: Low*

Musical notation for a set of one staff. The staff has a treble clef and a key signature of one flat. It contains a sequence of notes with repeat signs.

Continue through remaining sets

*Fours: High*

Musical notation for a set of one staff. The staff has a treble clef and a key signature of one flat. It contains a sequence of notes with repeat signs.

Cycle: Low

The 'Cycle: Low' section consists of three staves of music. The first staff contains four measures of ascending eighth-note patterns, starting on a middle C and moving up to a G. The second staff contains four measures of descending eighth-note patterns, starting on a G and moving down to a middle C. The third staff contains four measures of ascending eighth-note patterns, starting on a middle C and moving up to a G. The key signature changes from one flat (B-flat) to one sharp (F-sharp) between the second and third staves.

Cycle: High

The 'Cycle: High' section consists of three staves of music. The first staff contains four measures of ascending eighth-note patterns, starting on a G and moving up to a D. The second staff contains four measures of descending eighth-note patterns, starting on a D and moving down to a G. The third staff contains four measures of ascending eighth-note patterns, starting on a G and moving up to a D. The key signature changes from one flat (B-flat) to one sharp (F-sharp) between the second and third staves.

Descending

**Go back through the ascending exercises above, descending as in this example, then continue with Ascending/Descending Alternation.**

Example: Pairs: Low

The 'Example: Pairs: Low' section consists of two staves of music. The first staff contains two measures of ascending eighth-note patterns, starting on a middle C and moving up to a G, followed by two measures of descending eighth-note patterns, starting on a G and moving down to a middle C. The second staff contains two measures of ascending eighth-note patterns, starting on a middle C and moving up to a G, followed by two measures of descending eighth-note patterns, starting on a G and moving down to a middle C. The key signature changes from one flat (B-flat) to one sharp (F-sharp) between the two staves.

Continue through remaining sets

Ascending/Descending Alternation

For progressive learning, maintain a consistent direction for each key. To do this, pairs will alternate ascending/descending, descending/ascending.

*Pairs: Low*

The first staff of music shows an ascending sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5. This is followed by a descending sequence: B4, A4, G4, F4, E4, D4, C4. A double bar line with repeat dots follows. The second staff continues with a descending sequence: B4, A4, G4, F4, E4, D4, C4, B3. This is followed by an ascending sequence: B3, C4, D4, E4, F4, G4, A4, B4. A double bar line with repeat dots follows. The third staff continues with a descending sequence: B4, A4, G4, F4, E4, D4, C4, B3. This is followed by an ascending sequence: B3, C4, D4, E4, F4, G4, A4, B4. A double bar line with repeat dots follows. The fourth staff continues with a descending sequence: B4, A4, G4, F4, E4, D4, C4, B3. This is followed by an ascending sequence: B3, C4, D4, E4, F4, G4, A4, B4. A double bar line with repeat dots follows.

Continue through remaining sets

*Pairs: High*

The first staff of music shows an ascending sequence of notes: C5, D5, E5, F5, G5, A5, B5, C6. This is followed by a descending sequence: B5, A5, G5, F5, E5, D5, C5. A double bar line with repeat dots follows. The second staff continues with a descending sequence: B5, A5, G5, F5, E5, D5, C5, B4. This is followed by an ascending sequence: B4, C5, D5, E5, F5, G5, A5, B5. A double bar line with repeat dots follows. The third staff continues with a descending sequence: B5, A5, G5, F5, E5, D5, C5, B4. This is followed by an ascending sequence: B4, C5, D5, E5, F5, G5, A5, B5. A double bar line with repeat dots follows. The fourth staff continues with a descending sequence: B5, A5, G5, F5, E5, D5, C5, B4. This is followed by an ascending sequence: B4, C5, D5, E5, F5, G5, A5, B5. A double bar line with repeat dots follows.

Continue through remaining sets

*Fours: Low*

The staff of music shows an ascending sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5. This is followed by a descending sequence: B4, A4, G4, F4, E4, D4, C4. A double bar line with repeat dots follows. The second staff continues with a descending sequence: B4, A4, G4, F4, E4, D4, C4, B3. This is followed by an ascending sequence: B3, C4, D4, E4, F4, G4, A4, B4. A double bar line with repeat dots follows. The third staff continues with a descending sequence: B4, A4, G4, F4, E4, D4, C4, B3. This is followed by an ascending sequence: B3, C4, D4, E4, F4, G4, A4, B4. A double bar line with repeat dots follows. The fourth staff continues with a descending sequence: B4, A4, G4, F4, E4, D4, C4, B3. This is followed by an ascending sequence: B3, C4, D4, E4, F4, G4, A4, B4. A double bar line with repeat dots follows.

Continue through remaining sets

*Fours: High*

The staff of music shows an ascending sequence of notes: C5, D5, E5, F5, G5, A5, B5, C6. This is followed by a descending sequence: B5, A5, G5, F5, E5, D5, C5. A double bar line with repeat dots follows. The second staff continues with a descending sequence: B5, A5, G5, F5, E5, D5, C5, B4. This is followed by an ascending sequence: B4, C5, D5, E5, F5, G5, A5, B5. A double bar line with repeat dots follows. The third staff continues with a descending sequence: B5, A5, G5, F5, E5, D5, C5, B4. This is followed by an ascending sequence: B4, C5, D5, E5, F5, G5, A5, B5. A double bar line with repeat dots follows. The fourth staff continues with a descending sequence: B5, A5, G5, F5, E5, D5, C5, B4. This is followed by an ascending sequence: B4, C5, D5, E5, F5, G5, A5, B5. A double bar line with repeat dots follows.

Continue through remaining sets

*Cycle: Low*

*Cycle: High*

Descending/Ascending Alternation

**Repeat all previous alternation exercises descending/ascending.**

*Example: Pairs: Low*

Continue through remaining sets

**Go back and repeat all the exercises in Part II, starting on the 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> degrees.**  
 The following examples are given to illustrate how this can be done.

Example 1,  
Ascending/Descending

*Pairs: Low, starting on the 3<sup>rd</sup> degree of the C major scale, jumping to the 3<sup>rd</sup> degree of the F major Scale.*



Continue through remaining pairs: F - B $\flat$ , B $\flat$  - E $\flat$ , E $\flat$  - A $\flat$ , etc.

Example 2  
Ascending

*Fours: High, starting on the 5<sup>th</sup> degree of the C major scale, jumping to the 5<sup>th</sup> degree of the F major Scale, and so on through the cycle of fourths.*



Example 3—Ascending/Descending Alternation

*Cycle: High*

starting on the 7<sup>th</sup> degree of the C major scale, jumping to the 7<sup>th</sup> degree of the F major Scale, etc.



Example 4  
Descending/Ascending alternation

*Fours: Low, starting on the 9<sup>th</sup> degree of the C major scale, jumping to the 9<sup>th</sup> degree of the F major scale.*



Continue through remaining sets

### PART III

#### Arpeggios

Jazz chords may include suffixes such as 6, 7, 9, 11, or 13. Some exercises to gain facility over these possibilities, have been worked in practice technique #2. When working in our present context (Practice Technique #3) using chord tones within the octave facilitates starting arpeggios on different chord tones while maintaining fundamental chord qualities and shifting from key to key. For example, on a major chord, if we start on the 3<sup>rd</sup>, and play 3 5 7 1 ascending and 3 1 7 5 descending we hear the chord quality and retain arpeggiation focus. If, however, we start on the 3<sup>rd</sup> and arpeggiate a 9<sup>th</sup> chord ascending and descending, we create a scale fragment due to prolonged stepwise motion: 3 5 7 1 9 3 9 1 7 5 (for C major, notes are E G B C D E D C B G). When ascending and descending or descending and ascending, starting on each chord tone represents an inversion. Exercises that descend only are done to emphasize starting notes, not inversions, since the lowest note of the arpeggio represents the actual inversion.

#### **Practice all previous exercises using arpeggios:**

- Ascending/Descending (Sustain)
- Descending/Ascending (Sustain)
- Ascending/Descending (Skip)
- Descending/Ascending (Skip)
- Ascending
- Descending
- Ascending/Descending Alternation
- Descending/Ascending Alternation
- Starting on each chord tone

#### Example 1

Root Position 7<sup>th</sup> chords

*Pairs: High, Ascending, (Skip)*



Continue through remaining sets

#### Example 2

7<sup>th</sup> chords, starting on root, (Skip)

*Fours: High, Descending/Ascending Alternation.*

**Go back and repeat all the arpeggio exercises in Part II, in first, second, and third inversions.** Following are three examples to give you an idea of how to practice inversions. These are not all of the exercises one should practice. Follow similar sequences as previously demonstrated, but with arpeggios in their inversions.

**Example 1—1st Inversion**

*Pairs, Low, Ascending/Descending, sustain*

Continue through remaining pairs: F - B $\flat$ , B $\flat$  - E $\flat$ , E $\flat$  - A $\flat$ , etc.

**Example 2—2nd Inversion**

*Fours: High, Ascending*

Continue to next set of four (A $\flat$ , D $\flat$ , G $\flat$ /F $\sharp$ , C $\flat$  (B)) Then the last set (E, A, D, G)

**Example 3—3rd Inversion**

*Cycle: Low, Ascending/Descending*

Start on the 7<sup>th</sup>. Technically, the descending arpeggio in this example is in root position, due to the last note being tonic. Our purpose here is to begin on different chord tones.

### 9<sup>th</sup> Chords

As previously explained, 9<sup>th</sup> chords in inversions turn into scale fragments: Consequently, our examples with 9<sup>th</sup> chords will start on the root ascending and on the 9<sup>th</sup> descending.

#### Example 1—Root position, 9<sup>th</sup> chords

*Pairs: Low, Ascending/Descending, (Sustain)*

Continue through remaining sets

#### Example 2—Root Position, 9<sup>th</sup> chords

*Pairs: Low, Descending/Ascending, (Sustain)*

Continue through remaining sets

## PART IV

### Additional Root Progressions

The purpose of these exercises is to prepare the improvisor for any combination of roots in a chord progression by working root sequences formed by fundamental intervals.

- Chromatic
- Major Seconds
- Minor Thirds
- Major Thirds
- Perfect Fourth (as applied in Parts 1, 2, and 3)
- Tritone

In Part 4, all root progressions will ascend and descend in combination with ascending or descending scales, arpeggios, and melodic patterns. One should be sure to adjust the starting and end points to encompass the instrument's full range.

**Apply all previous exercise concepts to the root progressions in Part IV:**

- Ascending/Descending (Sustain)
- Descending/Ascending (Sustain)
- Ascending/Descending (Skip)
- Descending/Ascending (Skip)
- Ascending
- Descending
- Ascending/Descending Alternation
- Descending/Ascending Alternation
- Starting on each chord tone

**Root Progression—Chromatic**

Example

*Ascending Scale, starting on root*

The image shows a musical exercise for a chromatic ascending scale. It consists of three staves of music in treble clef. The first staff shows an ascending scale starting on a root note (indicated by a sharp sign) and moving up by half steps. The second staff continues the ascending scale by half steps, with a double bar line and the instruction "Continue ascending by half steps". The third staff shows the scale descending by half steps, with a double bar line and the instruction "Continue descending by half steps". The notation includes various accidentals (sharps and flats) to indicate the half-step intervals.

Root Progression—Major Seconds: Root sequences by whole step make a cycle that only includes 6 keys, so one must begin a new set a half step higher to complete twelve keys.

Example

*Descending/Ascending Alternation, starting on the 3<sup>rd</sup> degree of the scale*

Set 1: D, E, F<sup>♯</sup>, A<sup>b</sup>, B<sup>b</sup>, C

The musical notation for Set 1 consists of five staves of music in treble clef. Each staff shows a scale starting on a specific root, with the root name written above the staff. The scales alternate between descending and ascending directions. The sequence of roots is D, E, F<sup>♯</sup>, A<sup>b</sup>, B<sup>b</sup>, C, F<sup>♯</sup>, A<sup>b</sup>, B<sup>b</sup>, C, D, E, F<sup>♯</sup>, A<sup>b</sup>, B<sup>b</sup>, C, E, D, C, F<sup>♯</sup>, A<sup>b</sup>, E.

Set 2: E<sup>b</sup>, F, G, A, B, C<sup>♯</sup>



Set 2: C, E $\flat$ , F $\sharp$ , A

Musical notation for Set 2: C, E $\flat$ , F $\sharp$ , A. The notation shows three staves of music in treble clef, each with a common time signature (C). The first staff has chords C, E $\flat$ , F $\sharp$ , and A. The second staff has chords C, E $\flat$ , F $\sharp$ , and E $\flat$ . The third staff has chords C, A, F $\sharp$ , and E $\flat$ .

Set 3: D $\flat$ , E, G, B $\flat$

Musical notation for Set 3: D $\flat$ , E, G, B $\flat$ . The notation shows three staves of music in treble clef, each with a common time signature (C). The first staff has chords D $\flat$ , E, G, and B $\flat$ . The second staff has chords D $\flat$ , E, G, and E. The third staff has chords D $\flat$ , B $\flat$ , G, and E.

Root Progression—Major Thirds: Root sequences by major 3rds include only 3 keys, so one must play four sets, each a half step higher to complete twelve keys.

Example: *Pairs Ascending*.

Set 1: G, B, E $\flat$

The image shows a musical score for three staves. The first staff begins with a treble clef and a key signature of one sharp (F#). Above the staff, the chord G is written above the first measure, B above the second measure, B above the third measure, and Eb above the fourth measure. The second staff begins with a treble clef and a key signature of one flat (Bb). Above the staff, the chord Eb is written above the first measure, G above the second measure, G above the third measure, and B above the fourth measure. The third staff begins with a treble clef and a key signature of one sharp (F#). Above the staff, the chord B is written above the first measure, and Eb above the second measure. The music consists of eighth and sixteenth notes, with repeat signs at the end of each staff.

Set 2: A $\flat$ , C, E

Set 3: A, C $\sharp$ , F

Set 4: B $\flat$ , D, F $\sharp$

# Practice Technique #4: Chromaticism

There are three principles for adding color to solos that can apply to all chords and all scale situations.

1. Pickup notes and chromatic approach tones
2. Passing tones
3. Enclosures

## PICKUP NOTES AND APPROACH TONES

Any note can be approached by either a diatonic or chromatic pitch from above or below. The note to be approached depends on the sound desired, but chord tones are most common. Chromatic approach tones can be pickup notes at the onset of a phrase or motive or lead by half-step to notes within a line.

At the onset



At onset and within



### Half-Step Approach Exercises

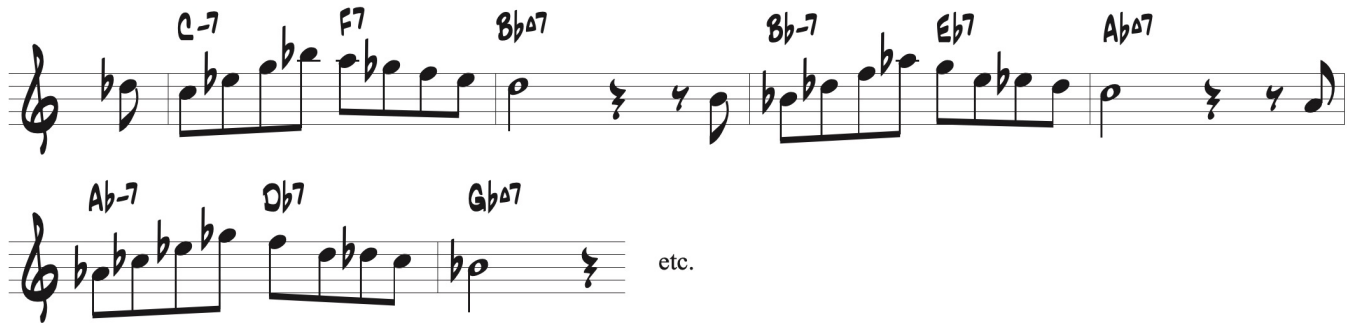
Chromatic approach tones can be practiced in combinations of the following options.

- Arpeggios: varied qualities, ascending, descending.
- Scales: ascending, descending,
- Starting notes: chord inversions, scale, chord tone
- Root progressions: See Practice Technique #3, part 4.

Concepts for Practice Technique #3 apply, such as pairs, ascending and descending combinations, etc.

Example 1—Half-step from below, dominant arpeggio, ascend descend, starting on 3<sup>rd</sup>, ascending minor third root progression.





Practice both sets: set 1--B, A, F# E D C; set 2—A G F E, C# B.

### PASSING TONES

Chromatic passing tones (PT) can be placed anywhere that enhances the success of an improvised line according to the dictates of the soloist. However, certain placements became more frequent with the bebop players. These placements ensured emphasis of chord tones on the beats to help outline the harmonic progression amidst melodic passages.

The following principles are based on the analysis of twelve Charlie Parker improvisations. The numbers in this list refer to the examples in the notation.

1. Placement of a half-step between the root and  $\flat 7$  of a dominant chord is the most common chromatic passing tone. Below, the example shows G  $F\sharp$  to F on  $G^7$ . A half-step between 1 and  $\flat 7$  is possible on a minor chord, but it is rare (only one instance in the twelve analyzed Parker solos).
2. Parker did not play many tunes in minor keys. Most use of minor is as part of a ii V progression. Here, Parker places a half-step between 4 and  $\flat 3$ , which are the same pitches as 1 to  $\flat 7$  on the V chord. On  $G^7$ , 1 is G and  $\flat 7$  is F, with  $F\sharp$  between. So, on D minor (d min.  $G^7$  ii V) 4 is G and  $\flat 3$  is F with  $F\sharp$  between. It is common for Parker to blanket a ii V with V.
3. Moving chromatically from the 9<sup>th</sup> to the root is common in Parker's playing and can apply to major, minor, and dominant chord qualities.
4. On dominant harmonies the chromatic movement from the 9<sup>th</sup> to the root may continue to the  $\flat 7$ . This movement can be applied to a minor chord, although this is uncommon in Parker's playing.
5. The most used stepwise chromatic motion on major chords is from the 6<sup>th</sup> to the 5<sup>th</sup>. In Parker's time, sixth chords ( $G^6 = G B D E$ ) were common especially as tonic. This chromatic placement emphasizes the 6<sup>th</sup> as a chord tone.
6. If one starts on the 7<sup>th</sup> of a major chord, the  $\flat 7$  becomes a passing tone to the 6<sup>th</sup> where chromatic movement may continue to the 5<sup>th</sup>.
7. Parker occasionally played 16<sup>th</sup> note approaches to the 3<sup>rd</sup> by ascending chromatically from the 9<sup>th</sup> (=2<sup>nd</sup>). Chromatic movement from the 3<sup>rd</sup> to the 9<sup>th</sup> can be either ascending or descending, as is true of all chromatic motion. This placement is fairly rare in Parker's playing.
8. Chromatic movement from the 3<sup>rd</sup> to the root aligns chord tones, but was not seen in any of the twelve Parker solos analyzed for this discussion. These passing tones, as well as  $\sharp 7$ , may be applied to major and dominant qualities.

9. On dominant chords chromatic movement may continue to the  $\flat 7$ . Again, this was not seen any of the twelve Parker solos analyzed.
10. Triplet motion by half-steps from the 3<sup>rd</sup> to the 5<sup>th</sup> is heard from various Bebop musicians. Parker only did this once in the twelve solos.

The image shows ten measures of bebop scales in G major, each with a chord symbol above and fingering below. The scales are:
 

- Chord: G7. Notes: G (1), A# (1), Bb (b7), C (4). Fingering: 1, b7.
- Chord: D-7. Notes: D (4), Eb (b3), F (9), G (1). Fingering: 4, b3.
- Chord: G7. Notes: G (9), Ab (1), Bb (9), C (b7), D (6), E (5). Fingering: 9, 1, 9, b7, 6, 5.
- Chord: G9. Notes: G (9), Ab (9), Bb (9), C (b7), D (6), E (5). Fingering: 9, 9, b7, 6, 5.
- Chord: CΔ7. Notes: C (M7), Db (5), Eb (3), F (9), G (3), Ab (1), Bb (3), C (3), D (3), E (5), F (3). Fingering: M7, 5, 3, 9, 3, 1, 3, 3, 5, 3.
- Chord: CΔ7. Notes: C (M7), Db (5), Eb (3), F (9), G (3), Ab (1), Bb (3), C (3), D (3), E (5), F (3). Fingering: M7, 5, 3, 9, 3, 1, 3, 3, 5, 3.
- Chord: CΔ7. Notes: C (M7), Db (5), Eb (3), F (9), G (3), Ab (1), Bb (3), C (3), D (3), E (5), F (3). Fingering: M7, 5, 3, 9, 3, 1, 3, 3, 5, 3.
- Chord: G7. Notes: G (9), Ab (9), Bb (9), C (b7), D (6), E (5). Fingering: 9, 9, b7, 6, 5.
- Chord: G7. Notes: G (9), Ab (9), Bb (9), C (b7), D (6), E (5). Fingering: 9, 9, b7, 6, 5.
- Chord: G7. Notes: G (9), Ab (9), Bb (9), C (b7), D (6), E (5). Fingering: 9, 9, b7, 6, 5.

### Bebop Scales

Due to the prevalence of a half-step placed between the root and the  $\flat 7$  on dominant chords and between the 6<sup>th</sup> and 5<sup>th</sup> of major chords, jazz pedagogues have labeled these placements as Bebop Scales. As is evident from the example below, this places the chord tones on beats regardless of which chord tone starts the line. The 6<sup>th</sup> on a major chord is considered a chord tone. Also notice that the lines are descending, a common tendency for bebop scales. Caveat: these scales and their reasoning have come to us via jazz pedagogues over many decades; however, it should be noted that the inclusion of a full scale in a Bebop improvisation is very rare—Parker seldom played more than three or four notes in succession diatonically (sometimes more if chromatic).

#### Dominant Bebop Scale

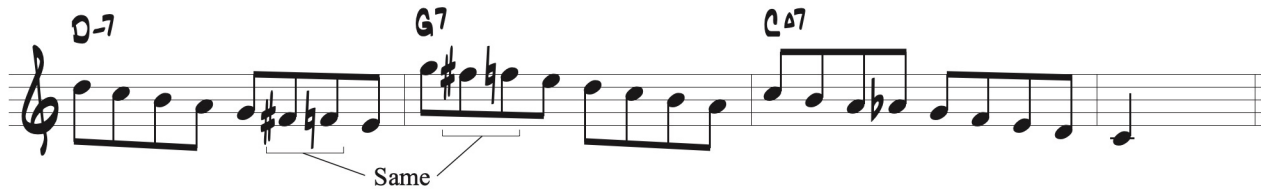
#### Major Bebop Scale

The image shows two musical lines. The first line is for the Dominant Bebop Scale (G7), starting on G and descending: G, A#, Bb, C, D, Eb, F, G. The second line is for the Major Bebop Scale (CΔ7), starting on C and descending: C, Db, Eb, F, G, Ab, Bb, C.

There are two placements for chromatic passing tones in minor scales, the first being much more common. In this, the half-step is between the 4<sup>th</sup> and the minor 3<sup>rd</sup>. The other placement is between the root and the  $\flat 7$ , like with dominant scales. When this placement is used, the scale seldom, if ever, descends past the 5<sup>th</sup>.

The image shows two musical lines for minor scales. The first line shows a scale starting on D with a chromatic half-step between the 4<sup>th</sup> and 3<sup>rd</sup> (D, Eb, F, G, Ab, Bb, C, D). The second line shows a scale starting on D with a chromatic half-step between the root and the  $\flat 7$  (D, Eb, F, G, Ab, Bb, C, D).

One reason for the half-step being between the 4<sup>th</sup> and the ♭3 is its relation to the dominant in a ii V progression. In the key of C major, ii is D minor and V is G dominant. Stepwise motion for these chords uses the same key signature as tonic (C major), no sharps and no flats. D minor equals chord tones D F A C and scale degrees D F G A B C. G dominant equals chord tones G B D F, and scale degrees G A B C D E F. The bebop scale for G<sup>7</sup> places an F# between G and F natural. The bebop scale for D minor also places an F# between G and F natural.



### Chromatic Passing Tones Exercises

Apply chromatic passing tones to patterns from Practice Technique #1: Circular Patterns.

Chromatic half-steps will probably not be played with some of the turnaround points in these patterns, but they will help to internalize the half-step placements for improvisation.

Start on lowest note of the instrument then proceed through the range to the highest practical note. Carry the patterns through twelve keys.

Example 1—5-Note Pattern, half-step between 1 and ♭7 (dominant bebop scale)



Example 2—C maj<sup>7</sup>, half-step between 6 and 5 (major bebop scale)



Example 3—Major bebop with triplet pair (F Maj<sup>7</sup>)

This is also a circular pattern appropriate to Practice Technique #1. Scale pitches can be either dominant bebop or major bebop scales. A chromatic triplet pattern is placed between the 3<sup>rd</sup> and 5<sup>th</sup>. Play through the full range of the instrument.

Example 4—Dominant bebop with triplet pair (F7)

Isolate any of the above 10 half-step placements and play them over any root progression. The following example addresses the half-step between the 9<sup>th</sup> and the root, which can apply to major, minor, or dominant chord qualities. For all half-step placement practice, one must think the root of the chord to which it applies.

Example 5—9 to 1 cycle

Example 6—Melodic motive, descending major 2nds root progression

Take a melodic motive that contains a chromatic passing tone through a root sequence. This motive places a chromatic passing tone between 1 and  $\flat 7$  of a dominant chord. Apply to a root progression; this example descends by major seconds.



### ENCLOSURES

Notes, usually chord tones, can be approached from above and below with diatonic and chromatic pitches. This surrounding is called an *enclosure*. There are two types—diatonic and chromatic, both of which can be extended in various ways and inverted.

#### Diatonic

A diatonic enclosure has a scale tone above the note of resolution and a chromatic pitch below.



As constant eighth-notes



#### Chromatic

Chromatic enclosures have notes a half-step away from a chord tone above and below.



#### Inverted

To invert an enclosure, one starts with the lower note instead of the upper note.



These enclosures (diatonic, continuous, inverted, chromatic) can be practiced as perpetual motion/circular patterns, i.e. Chapter 6, "Practice Technique #1."

#### Extended

To extend an enclosure, a note is added by skipping from the starting note to a note a whole-step away from the chord tone, then moving by half-step to the resolution.

In D

On dominant

Enclosures can also be extended by adding an extra note at the onset.

In D

Extended enclosure patterns can also be practiced as perpetual motion/circular patterns. This will help to develop muscle memory and habit, which will allow an easier implementation of extended enclosure concepts into one's solo improvisation.

Musical notation for a D minor 7th scale exercise. The first staff is marked "D MIN 7" and shows a melodic line with an enclosure on the second beat. The second staff shows the continuation of the scale.

Enclosure Exercises

Example 1—Diatonic (A maj<sup>7</sup> or A<sup>7</sup>)

Musical notation for Example 1: Diatonic enclosure exercise for A major 7th. The first staff shows a melodic line with an enclosure on the second beat. The second staff shows the continuation of the scale.

Example 2—Diatonic Offset (A maj<sup>7</sup> or A<sup>7</sup>)

Example 1 resolves the enclosure to the beat 2 and 4. Here, we shift the enclosure to resolve on beats 1 and 3. Work with a metronome set to 2 and 4.

Musical notation for Example 2: Diatonic offset enclosure exercise for A major 7th. The first staff shows a melodic line with an enclosure on the first beat. The second staff shows the continuation of the scale.

Example 3—Diatonic in 8ths (A maj<sup>7</sup> or A<sup>7</sup>)

Changing quarters to eighths creates an interesting melodic line and serves to develop technical facility.



Example 4—Inverted (A maj<sup>7</sup> or A<sup>7</sup>)

Inverted enclosures may also be applied to the shifted beats of Example 2 and all 8ths notes as in Example 3.



Example 5—Chromatic (A maj<sup>7</sup> or A<sup>7</sup>)

Apply chromatic enclosures to Examples 1, 2, 3, and 4 by lowering the upper note a half-step, except scale degree 4, which is already a half-step away from the 3<sup>rd</sup>.



Example 6—Extended enclosure on major (A maj<sup>7</sup>)



The choice of an extended enclosure from above or below depends on the consonance of the second note, which falls on a downbeat. For example, in A major if the enclosure comes from below, the notes would be B $\flat$ , G and G $\sharp$  resolving to A. The B $\flat$  is on an upbeat, while the G lands on a downbeat, but this note is not a chord tone, nor is it diatonic to the key. However, if we play G $\sharp$  B and B $\flat$ , resolving to A, the B $\flat$ , falling on a downbeat, is the major 9, which is a chord tone. Notice in Examples 6, 7, and 8, how the consonances fall on downbeats, while the chromatic pitches are on upbeats.

Example 7—Extended enclosures on minor (A $^{-7}$ )



Example 8—Extended enclosures on dominant (A $^7$ )



Example 9—Chromatic enclosure on 3rd, descending chromatic root progression

Choose a chord tone to emphasize and a root progression. This example focuses on the 3<sup>rd</sup> of a dominant chord, and is applied to a descending chromatic root progression. Always keep the chord in mind when isolating a chord tone.

Example 10—Extended enclosure on root, Cycle root progression

Example 10—Extended enclosure on root, Cycle root progression

This extended enclosure on the dominant was very popular with the Bebop players. It includes the  $\flat 9$ , moving to the  $\flat 7-1$  chromatic passing tone set that is so common.

Example 11—Inclusive pattern

Example 11—Inclusive pattern

This inclusive pattern starts with a chromatic pickup note from below to the third, followed by chromatic passing tones from the 3<sup>rd</sup> to the 5<sup>th</sup>, via triplets. Beat 4 in the first full measure is a chromatic enclosure on the root with a Bebop scale chromatic passing tone between 1 and  $\flat 7$  on beat 1 of measure 2. Beats 3 to 4 of measure 2 contain a chromatic enclosure on the 5<sup>th</sup> (A $\flat$ , F $\sharp$ , G), moving to an extended enclosure starting on the upbeat of 4 and resolving to the 3<sup>rd</sup> on beat 2 of measure 3 (F D D $\sharp$  E), which then resolves to the root above. The pattern is asymmetrical in length, as is common with Charlie Parker.

Taking this pattern through twelve keys helps to internalize habits for improvisation by its varied components that can be fragmented accordingly.

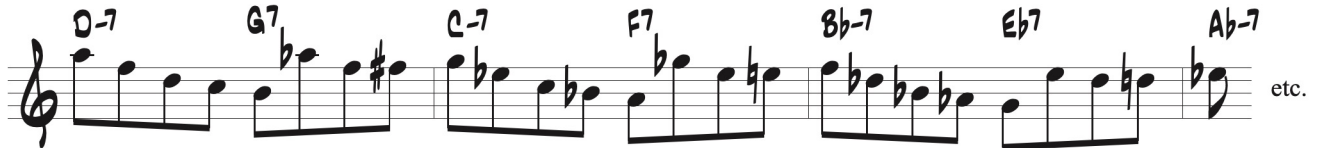
Example 11—Inclusive pattern (Detailed)

Labels in the diagram:

- Chromatic pickup
- 3 to 5 chromatic passing tones
- Chromatic enclosure on 1
- Bebop scale 1 2  $\flat 7$  chromatic passing tone
- Chromatic enclosure on 5
- Extended enclosure on 3

Example 12—Extended enclosure on 1, ii V cycle

This example contains an extended enclosure on the dominant chord. We see the ♭9 on the upbeat of 3 followed by the ♭7, chromatic passing tone, and resolution over the barline to the tonic of the dominant, which is the fifth of the I, but in the cycle, it is ii of the next ii V. The first four chords of this cycle can be applied to the iii vi ii V of rhythm changes with the vi changed to VI. The root progression follows the cycle of ascending fourths, alternating minor and dominant chord qualities. To cover twelve keys, the sequence must be repeated up a half-step.



# Practice Technique #5: Melodic Motives

Almost everything in music can be considered a pattern of one type or another. There are melodic patterns, rhythmic patterns, and patterns of both melody and rhythm. Recognition of the principle of patterns is ancient. The medieval composer identified a *talea* (rhythm) and a *conor* (pitch), which they manipulated in various combinations and fragments. So it is with jazz improvisation. We use scale and arpeggio fragments, patterns standard to the tradition, and those we contrive.

Patterns can be categorized into three types:

1. Circular
2. Digital
3. Melodic

Circular patterns are generally based on some chord/scale type. They can be played up the range of one's instrument, down and back again. They make a loop of melodic possibility. This type is invaluable for gaining mastery of a harmony and are most often used in fragments when applied to improvisation.

Example 1—Circular

From Jerry Coker's *Patterns for Jazz*, and from Practice Technique #1



The image displays three staves of musical notation in treble clef, each containing several melodic patterns. Above the notes are handwritten chord symbols and fingerings. The first staff includes chords Eb-7, Ab7, C#7, E7, A7, and C7. The second staff includes F#7, B-7, E7, A7, and C7. The third staff includes F#7, Ab7, and C#7. Fingerings are indicated by numbers 1-5 below the notes.

Melodic patterns don't fit into either of the above categories. They cannot be played in a circular fashion and their notes will not lend themselves to digital analysis due to a chromatic element not within the confines of a known scale.

Example 3—Melodic 1  
Charlie Parker *Confirmation*

A single staff of musical notation in treble clef, showing a melodic line with slurs and accents. Above the notes are handwritten chord symbols: C#7, F#7, and B-7.

Example 4—Melodic 2  
Charlie Parker *Confirmation*

A single staff of musical notation in treble clef, showing a melodic line with slurs and accents. Above the notes are handwritten chord symbols: B-7, E7, A-7, D7, and G7.

There are many valid reasons to study and memorize patterns.

1. They teach us the jazz language like a vocabulary list. We can learn to speak by mimicking jazz masters as we learned to speak by listening and mimicking our parents.
2. They teach us jazz theory. When analyzed we see the relationships between harmony and melody. We learn what works theoretically and why so that we can adapt this knowledge to other improvisational situations. Practicing patterns helps us to internalize theory and

takes it beyond the intellectual to the physical. The combination of mind and body helps the language to enter our soul. It helps us to use what we know.

3. They help us learn jazz style by mimicking the manner in which the notes are played (articulation, subdivision, rhythm, etc.).
4. They serve as an ear-training tool, especially when patterns are transcribed (lifted from a recording, written or not).
5. They help us learn characteristics of specific tunes. Amidst the similarities every tune is unique. We can learn successful ways to improvise on a tune by learning what others have successfully done.
6. They serve as a *springboard* to generate other ideas. One can think of a pattern and play a variation or something quite different. This generates creativity rather than stifling it. The springboard, like a diver being thrust into the air, can give us impetus when we are at a loss during an improvisation.
7. They help to develop facility over our instrument. Whether the pattern is circular, digital, or melodic, mastering patterns improves our ability to make our instruments play what we hear. Without the skill from patterns (scales and arpeggios included) we have no freedom.
8. They help to draw in the listener. Solos where every note is connected to every other note in uniquely original ways are difficult for audiences to relate to. When something familiar is played the listener feels more a part of what's going on. (Overuse of known patterns is equally as objectionable or worse and will sound trite, unoriginal.)

### Step 1—Analyze

Select a pattern, analyze, transpose, and memorize in 12 keys. A worksheet is provided at the end of Practice Technique #5.

$C\Delta 7$   $C\Delta 9$  or  $C\Delta 9(\#11)$

9th 7th 5th 3rd 7th

down 3rd up scale down 3rd up scale down 3rd up scale down 3rd up scale

### Step 2—Write

Write the motive with a pencil on staff paper in twelve keys. The purpose is not to have something to read. The exercise of taking a motive through 12 keys helps one to understand the motive at the higher level and the tactile process of writing the motive by hand helps the brain to process the information, allowing it to enter one's memory and increase retention.

Pattern in 12 Keys  
WORKSHEET

Select a pattern, analyze, memorize in 12 keys.

Pattern Analysis:



Write in 12 Keys then memorize:



Step 3—Rote

Learn to play the motive in twelve keys by memory, using a combination of ear and understanding of the analysis, rather than by reading the notation. After doing the initial exercise of notating the motive in all keys, additional motives may be transposed by ear.

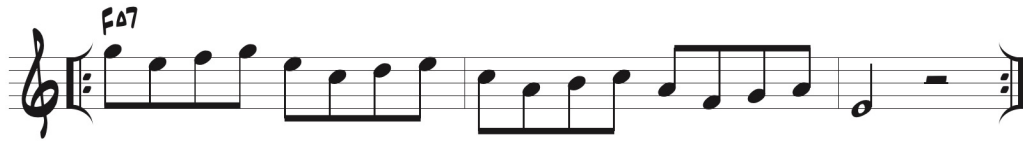
Apply Practice Technique #3

Step 1—Pairs

Learn the melodic motive initially in one key, repeating until it is fluent. Decide upon a root progression; the following examples are around the cycle of fourths.



Learn the melodic motive in the second key of the root progression.



The image shows three staves of musical notation in treble clef, 4/4 time. The first staff begins with a C7 chord and contains a melodic line of eighth and quarter notes. The second staff begins with a Bb7 chord and continues the melodic line. The third staff begins with an Eb7 chord and concludes the melodic line with a double bar line and repeat dots.

Continue to the next four keys (A, C#, F#, B), then the next (E, A, D, G).

### Step 3

Play the melodic motive around the root progression in all twelve keys repeatedly.

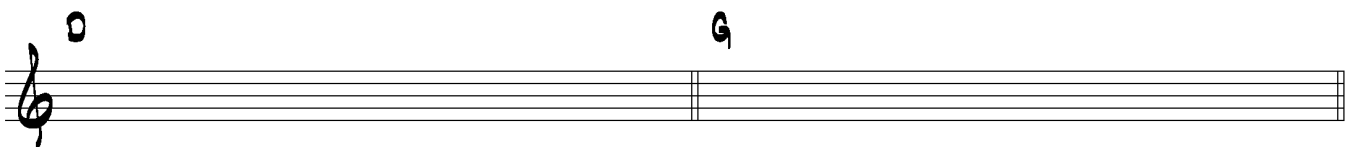
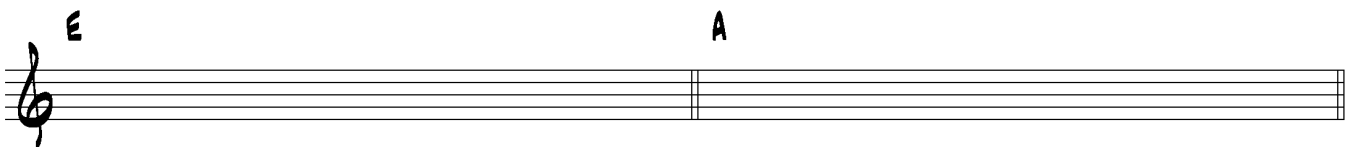
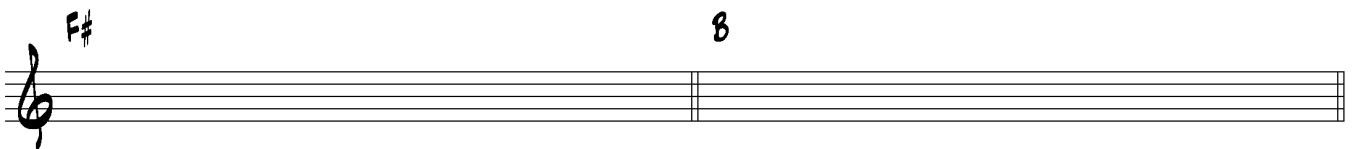
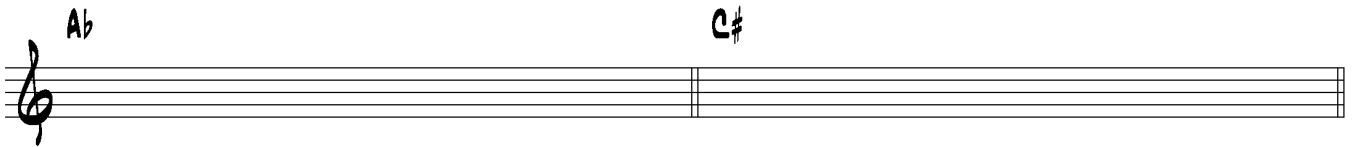
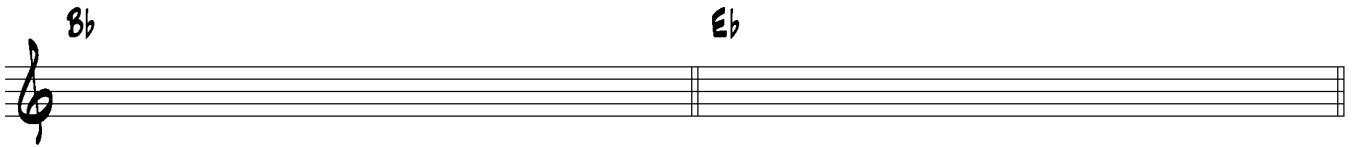
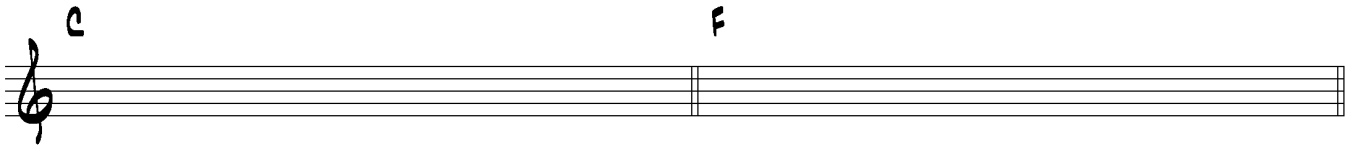
# Pattern in 12 Keys WORKSHEET

Select a pattern, analyze, memorize in 12 keys.

Pattern Analysis:



Write in 12 Keys then memorize:



# Practice Technique #6: Application

The principal objective of Practice Technique #4 is to apply improvisation to one harmony and key at a time. This familiarity of sound will eventually be applied to chord progression. Practicing with someone or a live group is always best. For working on your own, Jamey Aebersold's *Major and Minor*, vol. 24 and *Dominant 7<sup>th</sup> Workout*, vol. 84 are great recorded accompaniments for this exercise. Both of these resources stay on one chord for the whole track, allowing you to explore a single chord quality and key while applying the elements below. Alternatively, try sitting at the piano, and with the sustain pedal down, sound the chord you wish to work on, and play over the harmony on your instrument.

PT 4 builds on the following steps, with examples following:

## A. The Sound of *In*

- Play 1 3 5 7 chord tones
- Sing 1 3 5 7 chord tones
- Play 9 11 13 diatonic color tones
- Sing 9 11 13 diatonic color tones

## B. Scale

- Ascending (root, 3rd, 5th, 7th, 9th)
- Descending (root, 3rd, 5th, 7th, 9th)
- Phrase endings

IMPROVISE

## C. Arpeggio

- Ascending (root, 3rd, 5th, 7th)
- Descending (root, 3rd, 5th, 7th)
- 9th Chords (root and descending from the 9<sup>th</sup>)
- Phrase Endings

IMPROVISE

## D. Circular Scale Patterns

- Apply a pattern from Practice Technique #1
- Add another PT #1 pattern

IMPROVISE

## E. Rhythm Blocks (Chapter 3)

- Vocabulary
- Apply *Considerations*

IMPROVISE

## F. Triplets and Turns

- Ascending
- Descending
- Horizontal
- Turns

IMPROVISE

## G. Melodic motives

IMPROVISE

## H. Chromaticism

- Chromatic passing tones
- Single half-step approach tones
- Chromatic enclosures
- Diatonic enclosures
- Extended enclosures

IMPROVISE

## I. Color

- Possibilities
- delayed resolutions
- in and out
- tone spectrum (scales)

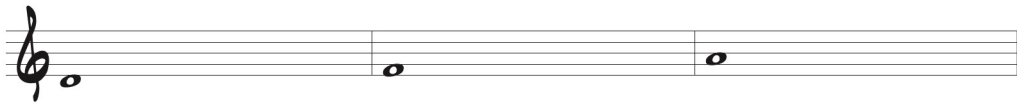
Examples are in C major. Change octaves and clef according to your instrument.

### A. The Sound of In

Play each 1 3 5 7 chord tone over a recorded rhythm section track or sustained on the piano, and listen to the consonant sound (the Sound of *In*). Then sing the chord tones.



Play the 9 11 13 diatonic *color* tones. Then sing them. The 11<sup>th</sup> on major chords is sometimes referred to as an avoid note. This is due to the consonant, *at rest* sound of major chords and the rub between the 3<sup>rd</sup> and 4<sup>th</sup> scale degrees. As are most sounds, this is subjective. On minor chords, the 11<sup>th</sup> is a consonant color tone, due to its being a whole step away from the minor third. On dominant chords, the 11<sup>th</sup> is less problematic due to the *active* nature of the harmony caused by the 3<sup>rd</sup> to minor 7<sup>th</sup> tritone.



### B. Scale

Ascending/Descending



Phrase Endings

Examples use familiar material, in the form of a scale, to help you focus on the phrase ending—in addition use melodic motives that incorporate the various phrase endings, see “Melodic Patterns” below.

Short Upbeat

The image displays five musical staves, each containing a melodic phrase. Each phrase is divided into two measures by a double bar line. The first measure of each phrase begins with a melodic motif that includes a quarter rest on the first beat and a dotted quarter note on the second beat. The second measure concludes with a phrase ending, marked by a downward-pointing 'v' symbol. The five staves illustrate different melodic patterns, including scales and various rhythmic groupings, all designed to focus on the phrase ending.

Short Downbeat

Long Upbeat—may be *du-dah* as written, or *du-wah*, if slurred

Long Downbeat—the penultimate note in ascending scales may be ghosted.

Improvise: Try starting on different notes, play fragments of scales, vary the direction, and apply different phrase endings.

**C. Arpeggios**

Ascending/Descending

Practice arpeggios 1357 to allow for inversions as below. This is the prime method used when applying arpeggios to chord progressions to facilitate inversions.

Arpeggio to the 9<sup>th</sup> in Root Position

Phrase Endings—Play each of the following examples in their inversions as above.

Improvise: Try starting on different notes, play fragments of scales, vary the direction, and apply different phrase endings. Add arpeggiations in the same manner and mix with scale concepts.

### D. Circular Scale Patterns

Choose any of the patterns learned from Practice Technique #1.

Example:

Three musical staves in treble clef, each showing a circular scale pattern. The patterns consist of eighth notes with slurs, ending with a repeat sign and a whole rest. The first staff starts on C4, the second on D4, and the third on E4.

Continue pattern on each scale degree.

Improvise: Try starting on different notes, play fragments of scales, vary the direction, apply different phrase endings, and arpeggiations. Add pieces of circular patterns to previous concepts.

Four musical staves in treble clef. The first three staves contain various rhythmic and melodic patterns, including slurs, accents, and rests. The fourth staff shows a series of slanted lines representing a rhythmic pattern.

### E. Rhythm Blocks

Choose a Rhythm Block (Chapter 3).

Example: 3C

A single musical staff in treble clef, key signature of one sharp (F#), and 3/4 time signature. The notes are quarter notes: F#, G, A, followed by a whole rest.



### Descending Triplets



Musical notation showing four measures of descending triplets. Each measure contains a triplet of eighth notes descending in pitch, followed by a quarter rest. The triplets are marked with a '3' and a slur.

### Horizontal Triplets



Musical notation showing four measures of horizontal triplets. Each measure contains a triplet of eighth notes moving horizontally, followed by a quarter note. The triplets are marked with a '3' and a slur.

### Turns

from 6 to 5 and from 3 to 1. (Also apply turns from 1 to 6 and from 5 to 3, see Chapter 3)



Musical notation showing two staves of turns. The first staff contains four measures of turns from 6 to 5, and the second staff contains four measures of turns from 3 to 1. Each turn is marked with a '3' and a slur.

Improvise: Try starting on different notes, play fragments of scales, vary the direction, apply different phrase endings, arpeggiations, circular patterns, and rhythm blocks. Add triplets and turns to previous concepts.



Musical notation showing three staves of improvisation exercises. The first two staves contain various melodic patterns with triplets and turns. The third staff contains a rhythmic pattern of eighth notes, marked with a '3' and a slur, and labeled "(first time only)".

### G. Melodic Motives



## H. Chromaticism

### DIATONIC

*C<sub>MA7</sub> or C<sub>7</sub>*

As constant eighth-notes

### CHROMATIC

### INVERTED

### Chromaticism

- a. Chromatic passing tones
- b. Single half-step approach tones
- c. Chromatic enclosures
- d. Diatonic enclosures
- e. Extended enclosures

Improvise: Try starting on different notes, play fragments of scales, vary the direction, apply different phrase endings, arpeggiations, circular patterns, rhythm block rhythms., melodic motives, and chromaticism to previous concepts.



### I. Color

#### Possibilities

The root, third, and 7<sup>th</sup> determine the quality and function of a chord—they must remain intact as we add color. The amount of color depends on context and performer preference. Moving from consonance to dissonance (color) the root and unaltered 5<sup>th</sup> are the most *in*. The 3<sup>rd</sup> and 7<sup>th</sup> are subtly more interesting while the 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> provide the most color in a consonant context. (Some players *avoid* the unaltered 11<sup>th</sup> on major chords.) Almost any chromatic pitch—a note not in the key of the chord—can be sounded if it is properly prepared, musically applied, and the player has the sound of the chord in mind. This being said, there are some alterations that one might wish to try first.



#### Delayed Resolutions

A note that might sound dissonant and harsh at first, may sound colorful and pleasing, if resolved; even if the resolution is delayed.



#### In and Out

Non-diatonic pitches can be incorporated into one's improvisation if the melodic line is strong and consonant notes are interspersed. Another method is to shift riffs or patterns in and out of the key (side stepping or side slipping), either out and back, or by stepwise sequence.

The image shows three musical examples in C major 7th chord (CΔ7) illustrating improvisation techniques:

- Non-diatonic pitches interspersed:** A melodic line in C major with occasional notes from other scales (like D natural and F natural) interspersed with the diatonic notes.
- Side-stepping--in out in:** A melodic line that shifts between different keys or modes (e.g., C major, D minor, E minor) and returns to the original key.
- Side-stepping--sequence:** A melodic line that shifts between different keys or modes in a sequence (e.g., C major, D minor, E minor, F major, G major).

### Tone Spectrum (Scales)

The term *tone spectrum* refers to a collection of pitches that creates a color when used intact. Notes can be used in any order, with any rhythm and articulation, and will maintain the color of the spectrum in one's ear. Scales intended for specific alterations such as major, minor, and dominant may be superimposed even if the rhythm section or other accompanying instruments are not sounding the alteration. For example, if a pianist plays C Maj<sup>7</sup>, another player improvising could use the spectrum called the Major Augmented scale, which raises the 4<sup>th</sup> and 5<sup>th</sup> degrees—This is the scale that is most consonant with C Maj<sup>7</sup>(<sup>#5</sup>). There are many such options. See Chapters 4 and 5.

The image shows two musical examples illustrating the Major Augmented scale:

- Major Augmented (3rd mode of ascending melodic minor):** A chord (CΔ7) and a scale (C major augmented) consisting of the notes C, D, E, F#, G, A, B, C.
- Major Augmented (3rd mode of ascending melodic minor):** A melodic line in C major augmented, showing the scale notes in various rhythmic patterns.

Improvise: Try starting on different notes, play fragments of scales, vary the direction, apply different phrase endings, arpeggiations, circular patterns, rhythm block rhythms., melodic motives, and chromaticism to previous concepts

♩♩7

3 3 3 3

3 3

# Practice Technique #7: Chord Progression

There are many methods for learning a chord progression. Eight are contained herein:

- A. Chord Tones
- B. Arpeggios
- C. Stepwise Motion
- D. Guide Tones
- E. Chromaticism
- F. Melodic Motives
- G. Circular Patterns
- H. Scale Shifting
- I. Isolation
- J. A cappella

All eight techniques are demonstrated using chord changes to the A section (first 8 bars) of Charlie Parker's *Yardbird Suite*, alto saxophone key.

It is advantageous to practice with a rhythm section, either live or recorded. This helps one play in time and acquaints the ear to the chord changes. Playing the exercises at a slower rate than the tune suggests is often necessary and can be done with a metronome alone, or with a backing track through Transcribe, a laptop computer, or the Amazing Slow-Downer on a mobile device, (or any of the many programs or apps designed to slow down an audio file). Often, working eight bars at a time is more effective than playing through the whole tune at first. It is also valuable to loop the section (setting a recorded rhythm section to continuous repeat).

## A. Chord Tones

Listen to the color of each chord tone. Chord tones represent what is right for a harmony; they are *the sound of IN*. Chromatic passing notes and pickup notes, blues notes, "side-slipping" or playing "outside" mean nothing unless compared to *the sound of IN*. If one learns *outside* pitches such as blues notes first, the ear may not recognize that they are outside the chord and not give them the grind or soul they are intended to provide. Again, one must first learn *the sound of IN*.

Start by sustaining the root of each chord in the progression in time.

The image displays two staves of musical notation in treble clef, illustrating the chord tones for the first 8 bars of the A section of Charlie Parker's *Yardbird Suite*. The notes are sustained, representing the root of each chord in the progression.

Staff 1 (Measures 1-6):

- Measure 1: A<sup>7</sup> (A)
- Measure 2: D<sup>-7</sup> (D)
- Measure 3: G<sup>7</sup> (G)
- Measure 4: A<sup>7</sup> (A)
- Measure 5: G<sup>7</sup> (G)
- Measure 6: F<sup>#7</sup> (F#)

Staff 2 (Measures 7-8):

- Measure 7: B<sup>7</sup> (B)
- Measure 8: E<sup>7</sup> (E)

Now play all the thirds in time.

Musical notation for playing thirds in time. The top staff shows chords A $\Delta$ 7, D-7, G7, A7, G7, F#7 with notes G#4, B4, D5, F#5, G#5, B5. The bottom staff shows chords B7, B-7, E7, C#-7, F#7, B-7, E7 with notes B3, D4, F#4, G#4, B4, D5, F#5.

Now practice playing 5ths in the same manner, and then 7ths.

Playing the chord tones also serves in an ear-training capacity. In addition to learning the notes of the harmony on one's instrument, sing the chord tones, in time with backing track.

This same technique is valuable to explore color tones, such as the 9<sup>th</sup>, 13<sup>th</sup>, or altered pitches.

### B. Arpeggios

Practicing arpeggios ascending, descending, and in all their inversions is foundational for locking the soloist into the progression, facilitating notes of resolution that will define harmony to the listener. This practice leads to muscle memory and ear training for goal notes, arpeggiated motives and the sound of *IN* amidst the colors of extensions and altered pitches.

It is imperative to practice arpeggios in their inversions, up and down, down and up, starting on 3rds, 5ths, and 7ths. Improvisation becomes a problem when lines always begin on the roots, — predictable and colorless. Seventh chords are the primary arpeggios in this exercise, because they allow inversions clearly.

#### Exercise 1—Root position

Musical notation for Exercise 1—Root position. The top staff shows chords A $\Delta$ 7, D-7, G7, A7, G7, F#7 with ascending arpeggios. The bottom staff shows chords B7, B-7, E7, C#-7, F#7, B-7, E7 with ascending arpeggios.

#### Exercise 2—Starting on 3<sup>rd</sup>

Exercise 3—Starting on 5<sup>th</sup>

Exercise 4—Starting on 7<sup>th</sup>

Exercise 5—Starting on Root, descending

Exercise 6—Starting on 3<sup>rd</sup> descending

Exercise 6 consists of two staves of music. The top staff contains six measures of descending eighth-note arpeggios, each starting on the 3<sup>rd</sup> degree of the scale. The chords are labeled above the staff: A $\Delta$ 7, D-7, G7, A7, G7, and F#7. The bottom staff contains seven measures of descending eighth-note arpeggios, each starting on the 3<sup>rd</sup> degree of the scale. The chords are labeled above the staff: B7, B-7, E7, C#-7, F#7, B-7, and E7. The key signature has one sharp (F#).

Continue with descending arpeggios, starting on 5<sup>th</sup> and 7<sup>th</sup>.

Exercise 7—9<sup>th</sup> chords, ascending.

9ths are best practiced from the root ascending, and on the 9ths descending. Inverted ninth arpeggios tend to sound like scale fragments. When the chord only has two beats, start on the third.

Exercise 7 consists of two staves of music. The top staff contains six measures of ascending eighth-note arpeggios, each starting on the root of the chord. The chords are labeled above the staff: A $\Delta$ 7, D-7, G7, A7, G7, and F#7. The bottom staff contains seven measures of ascending eighth-note arpeggios, each starting on the root of the chord. The chords are labeled above the staff: B7, B-7, E7, C#-7, F#7, B-7, and E7. The key signature has one sharp (F#).

Exercise 8—9<sup>th</sup> chords, descending

Exercise 8 consists of two staves of music. The top staff contains six measures of descending eighth-note arpeggios, each starting on the 3<sup>rd</sup> degree of the scale. The chords are labeled above the staff: A $\Delta$ 7, D-7, G7, A7, G7, and F#7. The bottom staff contains seven measures of descending eighth-note arpeggios, each starting on the 3<sup>rd</sup> degree of the scale. The chords are labeled above the staff: B7, B-7, E7, C#-7, F#7, B-7, and E7. The key signature has one sharp (F#).

### C. Stepwise motion

Scales should not be thought of as stale alphabetical listings of theoretical pitches. Rather, one might think of them thus:

1. Scales are chords with extensions. If a scale is represented as 1 2 3 4 5 6 7 8 within the octave, the extensions are 9 10 11 12 13 14 15. With octave displacement 1=8 2=9 3=10 4=11 5=12 6=13 7=14 8=15. In tertian harmony, the most common in Western art music, we sound every other note of a scale to create a chord, stacked thirds. When this process is taken beyond the octave we get 1 3 5 7 9 11 13. Extensions 8 10 12 14 and 15 are redundant and not included.
2. Notes of a scale may be placed in any order during an improvisation. Collectively, they represent a spectrum of sound that represents or produces a unified color. Not all notes of the scale need be played. When we keep a collection of pitches together, in whatever order, over a period of time however short we create a harmonic effect. This combined with strong melodic organization moves the music with strong forward motion.
3. Notes of a scale played in stepwise motion produce a smooth, lyrical sound. However, playing more than three or four notes sequentially is rare.
4. Scales are not created theoretically first and then applied to performance. Indeed, it happens the other way around. Musicians look back to what has been done and label tendencies. If one were to play a harmony then systematically check each of the twelve possible notes of our tonal system against that harmony, one undoubtedly would choose certain notes over others. These notes placed in an alphabetical stepwise order become a scale. It is highly likely that this scale is something recognized by the jazz community as appropriate to the chord and has already been given a name.

This technique requires starting scales on the root, on the 3<sup>rd</sup>, the 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup>. The direction of the scale changes from upward to downward in various combinations. Young players' improvisations frequently begin each chord on the root, usually followed by upward scale motion. This practice technique helps to break that monotony.

Eighth notes are the rhythmic foundation of most jazz music to which varied rhythms are applied. Chords with duration of two measures allow scales to ascend and descend, or vice versa. If a chord lasts for four beats, a full scale, ascending or descending can be played. Chords that last two beats require special consideration because they only have room for four notes of the scale using eighth notes.

#### TWO-BEAT PATTERNS

The following two-beat pattern groups show possible stepwise motion beginning on the root, third, fifth, seventh, and ninth, in both ascending and descending directions. All examples are in C: C Maj<sup>7</sup>, C<sup>7</sup>, C min<sup>7</sup>, or D min<sup>7</sup> G<sup>7</sup> (ii V in C). Each pattern is separated by a double bar. When applied to a chord progression, transpose the desired pattern to the appropriate chord.

Group 1—1235 based patterns

(K) Root (1235)

Musical notation for (KL) Third (3457). The notation is on a single staff in treble clef, showing a sequence of eighth notes. Chord symbols above the staff are: C<sup>Δ7</sup> C7, C-7, D-7 G7, D-7 G7.

(KL) Third (3457)

Musical notation for (KL2) Fifth (5679). The notation is on two staves in treble clef, showing a sequence of eighth notes. Chord symbols above the staves are: C<sup>Δ7</sup> C7, C-7, D-7 G7, D-7 G7.

(KL2) Fifth (5679)

Musical notation for (L) Seventh (7194). The notation is on a single staff in treble clef, showing a sequence of eighth notes. Chord symbols above the staff are: C<sup>Δ7</sup> C-7, C-7, D-7 G7, D-7 G7.

(L) Seventh (7194)

The raised 4<sup>th</sup> on major chords is considered by some to be *the* sound of major in a modern context. Many players do not emphasize the fourth and consider it an *avoid* note. In some of the following examples, and f<sup>♯</sup> is notated, instead of the diatonic f<sub>2</sub>,

Musical notation for (Q) Ninth 9346. The notation is on a single staff in treble clef, showing a sequence of eighth notes. Chord symbols above the staff are: C<sup>Δ7</sup> C7, C-7, D-7 G7, D-7 G7. The notes include a raised fourth (F#) in the major chord sections.

(Q) Ninth 9346

Chord symbols: C $\Delta$ 7, C7, C-7, D-7, G7, D-7, G7

Group 2—1231 based patterns

(M) Root 1231

Chord symbols: C $\Delta$ 7, C7, C $\Delta$ 7, C-7, C7, C-7, D-7, G7, D-7, G7

(N) Third 3453

Chord symbols: C $\Delta$ 7, C7, C-7, D-7, G7, D-7, G7

(O) Fifth 5675

Chord symbols: C $\Delta$ 7, C7, C $\Delta$ 7, C7, C7, C-7, C-7, D-7, G7, D-7, G7

(P) Seventh 7197

Chord symbols: C $\Delta$ 7, C7, C7, C-7, D-7, G7, D-7, G7

® Ninth 9349

$C\Delta 7$   
 $C7$

$C\Delta 7$

$C-7$

$C7$   
 $C-7$

$D-7$

$G7$

$D-7$

$G7$

Group 3—1212 based patterns

(S) Root 1212

$C\Delta 7$   
 $C7$   
 $C-7$

$C\Delta 7$

$C-7$

$D-7$

$G7$

$D-7$

$G7$

(T) Third 3434

$C\Delta 7$   
 $C7$

$C-7$

$D-7$

$G7$

$D-7$

$G7$

(U) Fifth 5656

$C\Delta 7$   
 $C7$   
 $C-7$

$D-7$

$G7$

$D-7$

$G7$

(V) Seventh 7171

(W)Ninth 9393

### APPLICATION

Decide the parameters of practicing scales over a chord progression. There are limitless ways to apply the patterns. For our purposes here, consider the following:

- Scale type: diatonic, altered
- Starting note: root, 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, or 9<sup>th</sup>
- Direction: ascending or descending
- Two-beat pattern: examples 1-3, match starting note and direction

Example 1

Diatonic Scale, starting on root, ascending, 1235 two-beat pattern

(X) Scale Progression 1

Example 2

Diatonic scale, starting on 3<sup>rd</sup>, descending, 1231 two-beat pattern group (descending from 3<sup>rd</sup>=3213)

(Y) Scale progression 2

The image shows two staves of musical notation for a scale progression. The top staff contains six measures with chords: A<sup>Δ</sup>7, D-7, G7, A7, G7, and F#7. The bottom staff contains seven measures with chords: B7, B-7, E7, C#-7, F#7, B-7, and E7. Each measure features a melodic line with notes and accidentals, illustrating voice leading between the chords.

Apply as many of these principles as time permits, being sure to include starting points on all chord tones and working ascending and descending directions. If doing this from memory is inhibiting, try writing it out a few times—but not for the purpose of reading.

D. Guide Tones

Guide tones help the improviser take advantage of voice leading, notes that have melodic pull, to give direction to a line and delineate the chord progression. The root, 3<sup>rd</sup> and 7<sup>th</sup> define chord quality and function. Improvisors need not be concerned with the root—that’s the bass player’s job. The general rule is *3<sup>rd</sup>s go to 7<sup>ths</sup> and 7<sup>ths</sup> go to 3<sup>rd</sup>s*. This is most successful with cyclical motion such as ii V7 I, chains of ii Vs, iii vi ii V, etc. For example D minor to G7 to C major moves the 3<sup>rd</sup> of D to the 7<sup>th</sup> of G to the 3<sup>rd</sup> of C or F to F to E. The 7<sup>th</sup> of D moves to the 3<sup>rd</sup> of G to the 7<sup>th</sup> of C or C to B to B. Sometimes notes change; sometimes they remain the same. In non-cyclical motion *3<sup>rd</sup>s may go to 3<sup>rd</sup>s or 7<sup>ths</sup> to 7<sup>ths</sup>*. The improviser may not play guide tones directly but they are the structure around which notes are added.

Example 1—Starting on 3<sup>rd</sup>

The image shows two staves of musical notation for Example 1. The top staff contains six measures with chords: A<sup>Δ</sup>7, D-7, G7, A7, G7, and F#7. The bottom staff contains seven measures with chords: B7, B-7, E7, C#-7, F#7, B-7, and E7. Each measure features a single note representing the 3<sup>rd</sup> or 7<sup>th</sup> of the chord, with a number (3 or 7) below it indicating the scale degree.

Example 2—Starting on 7<sup>th</sup>

7 3 7 7 7 7

3 3 7 3 7 3 7

Practicing guide tones over a recorded rhythm section set to a loop helps fluency and ear.

E. Chromaticism

(BB) Bebop scales

(CC) Chromatic from 9th

DD half step below

A $\Delta$ 7 D-7 G7 A7 G7  
 F#7 B7 B-7 E7  
 C#-7 F#7 B-7 E7

EE half step above

A $\Delta$ 7 D-7 G7 A7 G7  
 F#7 B7 B-7 E7  
 C#-7 F#7 B-7 E7

FF Enclosure

A $\Delta$ 7 D-7 G7 A7 G7  
 F#7 B7 B-7 E7  
 C#-7 F#7 B-7 E7

GG Extended enclosure

Musical notation for 'GG Extended enclosure' in G major, 7/8 time. The piece consists of three staves of music. The first staff contains measures 1-4 with chords AΔ7, D-7, and G7. The second staff contains measures 5-8 with chords A7, G7, F#7, and B7. The third staff contains measures 9-12 with chords B-7, E7, C#-7, F#7, B-7, and E7. The melody is primarily eighth notes with some quarter notes, featuring a characteristic 'enclosure' pattern where a note is approached from a chromatic interval before resolving to the target note.

F. Melodic Motives

Borrowing melodic motives obtained from the masters can help one realize a chord progression. Apply the same motive in as many places as appropriate to the chord changes, transposing to the different keys. When improvising, don't be concerned with the motives. This is an exercise to get one's ear into the changes, to develop language and style.

(KK) Step 1

Apply the motive and rest for the other chords

Musical notation for '(KK) Step 1' in G major, 7/8 time. It consists of two staves. The first staff shows a melodic motive in the first measure (chord EΔ7), followed by rests for the second, third, and fourth measures (chords E-7, A7, and G7). The second staff shows the same melodic motive in the first measure (chord DΔ7), followed by rests for the second, third, and fourth measures (chords D-7, G7, and E7). This exercise demonstrates how a single melodic motif can be applied across different chord changes.

(LL) Step 2

After the motive is comfortable, improvise lightly between motive placements.

Step 3

Move to another melodic motive that works on a different chord quality or sequence in the same chord progression.

(RR)

Some motives can be placed on chords where they are not initially apparent. Any time a Dominant chord can be played, a ii V motive may be superimposed. Conversely, anytime ii V chord progression appears, a dominant motive may be played.

Example 1—ii V on V

A ii V motive can be placed on a dominant chord. For example, the motive in measure 2 can be superimposed on measures 4 and 5.

(PP)

### Example 2—V on ii V

A dominant motive can be placed on a ii V chord progression. For example, the motive in measure 4 can be superimposed on measure 2, 6, 7, and 8.

(UU)

Musical notation for Example 2, showing a ii V progression with a dominant motive superimposed on measures 2, 6, 7, and 8. The notation is in treble clef and consists of two staves. The first staff shows the ii V progression: A $\Delta$ 7, D-7, G7, A7, G7, F#7. The second staff shows the dominant motive superimposed on measures 2, 6, 7, and 8: B7, B-7, E7, C#-7, F#7, B-7, E7.

### Example 3—One measure ii V on two measure ii V

A one measure ii V motive can be placed on a two measure ii V motive by playing it twice, once on the ii measure and once on the V measure (two repetitions of the one measure ii V motive).

(MM)

Musical notation for Example 3, showing a one measure ii V motive placed on a two measure ii V motive. The notation is in treble clef and consists of two staves. The first staff shows the two measure ii V progression: E $\Delta$ 7, E-7, A7. The second staff shows the one measure ii V motive placed on the two measure ii V progression: D $\Delta$ 7, D-7, G7.

## G. Circular Patterns

Practice eight to ten circular patterns on each chord (Practice Technique #1). One circular pattern works for both the ii and V chords of a ii V progression—for example, the key signature for d minor is the same as for G $\Delta$ 7. Start with stepwise motion over the range of your instrument (scale), then work 3rds and 4ths, then move to other patterns. Keep in mind that fragments of circular patterns can be used to help create melodies during improvisation.

### Example 1—Stepwise motion

*Yardbird Suite* alto saxophone key measure 1

(VV)

Musical notation for Example 1 (VV) in A major (three sharps). The piece is in 4/4 time and begins with an A7 chord. The melody consists of eighth notes in the first two measures, followed by a triplet of eighth notes in the third measure, and then a sequence of eighth notes in the fourth measure. The piece concludes with a double bar line and repeat dots.

Example 2—Thirds

(WW)

Musical notation for Example 2 (WW) in A major (three sharps). The piece is in 4/4 time and begins with an A7 chord. The melody is composed of eighth notes, with the first two measures featuring a triplet of eighth notes. The piece concludes with a double bar line and repeat dots.

Example 3—Fourths

(XX)

Musical notation for Example 3 (XX) in A major (three sharps). The piece is in 4/4 time and begins with an A7 chord. The melody consists of eighth notes, with a triplet of eighth notes in the third measure. The piece concludes with a double bar line and repeat dots.

Example 4—1 2 3 1 pattern

Continue with 4 to 6 additional patterns.

Measure 2 of *Yardbird Suite* in the alto saxophone key is D<sup>-7</sup> G<sup>7</sup>, which is the ii V in the key of C. Circular patterns can be worked starting on the tonic of the ii V (C in this case). Many patterns will be the same, regardless of starting note; however, be aware that some patterns may shift note groups if started on ii. Consequently, starting patterns for ii V measures works best to start on I (C) or V (G). If one prefers to blanket the ii V with ii, start the circular pattern on the root of ii (D).

Example 5—Stepwise Motion

2<sup>nd</sup> measure of *Yardbird Suite*, alto saxophone key, starting on I of ii V.

Example 6—Thirds  
(FFF)



## H. Scale Shifting

Scale shifting can be quite challenging. In this technique one starts the exercise on any scale tone that fits the first chord; a chord tone preferably. One then proceeds upward to the top of one's instrument, turns around and plays downward to the bottom, and returns. In the course of this circular melodic direction, one changes scales as new harmonies arrive, always staying in time and playing each chord for the duration given in the tune. Move to the closest note of the new scale and keep going.

Example—1 Starting on root, saxophone, *Yarbird Suite*, alto key.

(HH)

Musical notation for Example 1, starting on the root. The notation shows two staves of music in G major. The first staff contains measures 1-5 with chords A $\Delta$ 7, D-7, G7, A7, G7, and F#7. The second staff contains measures 1-5 with chords B7, B-7, E7, C#-7, F#7, B-7, and E7. The melody in the first staff starts on G4 and moves up to G5, then down to G4, and finally down to G3. The melody in the second staff starts on B3 and moves up to B4, then down to B3, and finally down to B2.

Example 2—Starting on third

(QQ)

Musical notation for Example 2, starting on the third. The notation shows two staves of music in G major. The first staff contains measures 1-5 with chords A $\Delta$ 7, D-7, G7, A7, G7, and F#7. The second staff contains measures 1-5 with chords B7, B-7, E7, C#-7, F#7, B-7, and E7. The melody in the first staff starts on B4 and moves up to B5, then down to B4, and finally down to B3. The melody in the second staff starts on D4 and moves up to D5, then down to D4, and finally down to D3.

## I. Isolation

Practice improvising on each chord separately. Play at the performance tempo of the piece you are working on, improvising freely on the chord. Stay in time and remain on the same chord until it feels comfortable and easy.

On ii V measures, there are several options to consider.

- 1) Blanket the measure with the V chord.
- 2) Blanket the measure with the ii chord.
- 3) Improvise the ii V intact repeatedly.

Example—Open repetitions

(II)

The image shows two staves of musical notation. Each staff contains six measures of music. The notes in each measure are represented by four slashes (/ / / /). Above each measure is a chord symbol. The top staff has the following chords: A7, D-7, G7, A7, G7, F#7. The bottom staff has the following chords: B7, B-7, E7, C#-7, F#7, B-7, E7. Vertical lines connect the two staves at the beginning and end of each measure.

## J. A Cappella

Eventually, one should become independent of any crutch and improvise in time, without a rhythm section, delineating the chord progression in one's melodic content sufficiently for the listener to hear the harmonic flow and know where the performer is in the tune.

Playing in time without a rhythm section is challenging. However, it is imperative that any soloist be able to lead rather than follow. To this end, the soloist always keeps the form intact independently. When all players, including the soloist, do this, the tune has strength and achieves professionally competent musicality.

One's ears reach out to confirm but never to follow. Following requires a response to what has been heard. This is great for call and response communication; it is mandatory for integrated melodic lines, but for keeping one's place in the form and for accuracy and unification of pulse, following is detrimental. It places the follower behind, not Basie laid back but just late. If others do the same, the tune continually slows. Laid back or right on, the performer must be consistent and not dependent.

All previous practice techniques help to prepare for independent improvisation. Practicing patterns and other exercises with a metronome and with proper style (rhythm, subdivision, articulation) is imperative.

The following systematic approach may be helpful, and needs to be worked in pairs. One person claps time and counts beats aloud, while the other person improvises and tries to feel time duration. The person counting should count off the exercise, clap the beats, speak beat numbers, and say, "Stop" on beat one at the end of the number of measures being practiced.

1. Set the metronome to a flat four (1 2 3 4, clicking on every beat) and improvise one measure, stopping on beat one of the second measure. Try to “feel” the duration of the improvised measure. Repeat as many times as necessary.

A musical staff with a treble clef. Above the staff, the first measure is labeled 'AΔ7' and contains four diagonal slashes representing beats 1, 2, 3, and 4. The second measure is labeled 'D-7' and contains one diagonal slash representing beat 1, followed by the word 'Stop'.

2. Do the same over the duration of two measures.

A musical staff with a treble clef. The first measure is labeled 'AΔ7' and contains four diagonal slashes representing beats 1, 2, 3, and 4. The second measure is labeled 'D-7' and contains two diagonal slashes representing beats 2 and 2. The third measure is labeled 'G7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The fourth measure is labeled 'A7' and contains one diagonal slash representing beat 3, followed by the word 'Stop'.

3. Again, but over the duration of four measures.

A musical staff with a treble clef. The first measure is labeled 'AΔ7' and contains four diagonal slashes representing beats 1, 2, 3, and 4. The second measure is labeled 'D-7' and contains two diagonal slashes representing beats 2 and 2. The third measure is labeled 'G7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The fourth measure is labeled 'A7' and contains two diagonal slashes representing beats 3 and 2. The fifth measure is labeled 'G7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The sixth measure is labeled 'F#7' and contains four diagonal slashes representing beats 4, 2, 3, and 4. The seventh measure is labeled 'B7' and contains one diagonal slash representing beat 4, followed by the word 'Stop'.

4. Try eight measures. Some feel eight measure durations as two sets of four.

A musical staff with a treble clef. The first measure is labeled 'AΔ7' and contains four diagonal slashes representing beats 1, 2, 3, and 4. The second measure is labeled 'D-7' and contains two diagonal slashes representing beats 2 and 2. The third measure is labeled 'G7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The fourth measure is labeled 'A7' and contains two diagonal slashes representing beats 3 and 2. The fifth measure is labeled 'G7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The sixth measure is labeled 'F#7' and contains four diagonal slashes representing beats 4, 2, 3, and 4. The seventh measure is labeled 'B7' and contains four diagonal slashes representing beats 4, 2, 3, and 4. The eighth measure is labeled 'B-7' and contains two diagonal slashes representing beats 2 and 2. The ninth measure is labeled 'E7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The tenth measure is labeled 'C#-7' and contains two diagonal slashes representing beats 2 and 2. The eleventh measure is labeled 'F#7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The twelfth measure is labeled 'B-7' and contains two diagonal slashes representing beats 2 and 2. The thirteenth measure is labeled 'E7' and contains four diagonal slashes representing beats 3, 3, 4, and 4. The fourteenth measure is labeled 'AΔ7' and contains one diagonal slash representing beat 3, followed by the word 'Stop'.

5. Now set the metronome on 2 and 4 and follow the same process.
6. As a more advanced technique, set the metronome on other beats such as only beat 4, or 3, or every other measure, etc.

Handwritten musical notation for guitar chords on two staves. The notation consists of two staves, each with a treble clef and a key signature of one sharp (F#). The chords are written above the staves, and the notes are represented by diagonal slashes on the staff lines.

**Staff 1 (Top):**

- Measure 1: A<sup>7</sup>
- Measure 2: D<sup>-7</sup>
- Measure 3: G<sup>7</sup>
- Measure 4: A<sup>7</sup>
- Measure 5: G<sup>7</sup>
- Measure 6: F#<sup>7</sup>

**Staff 2 (Bottom):**

- Measure 1: B<sup>7</sup>
- Measure 2: B<sup>-7</sup>
- Measure 3: E<sup>7</sup>
- Measure 4: C#<sup>-7</sup>
- Measure 5: F#<sup>7</sup>
- Measure 6: B<sup>-7</sup>
- Measure 7: E<sup>7</sup>