Learned your scales…what's next?

By John Cipolla

This article suggests ways to practice scales on the clarinet or saxophone to develop a keener sense of rhythmic and metric awareness. With practice, these skills can translate into being a better overall musician who is continually inspired, challenged and always growing. The article begins with preliminary rhythm exercises that can be done with your hands tapping on a djembe drum or on your legs in the sitting position. These exercises are based on instruction I received in private lessons with Mike Longo–Dizzy Gillespie's pianist and musical director for many years–in June and November 2009. Tapping rhythms away from your instrument is a good way to isolate the rhythms and engrain a solid sense of pulse, learning to hear how different meters can be heard over a steady pulse.

Following the preliminary exercises are some polyrhythmic exercises (2:3, 3:2, 3:4, 4:3) that begin first on a drum or tapping the hands on the legs and then progress to applications playing with scales and a metronome. The next set of exercises I learned from Barry Harris' classes in New York City in December 2008. Harris is a noted jazz pianist and pedagogue who has been teaching jazz improvisation classes in New York City for over twenty-five years. These exercises add half-steps to descending scales to interrupt the rhythm and meter of the line. The exercises also explore options of starting these "half-step" scales on various parts of the bar and on up or down beats. The article ends with exercises based upon my study of the music of Charlie Parker and Bud Powell, which mix together a number of different rhythmic and concepts.

I encourage both teachers and students to use these exercises as starting points to build a collection of their own ways to practice scales. Clarity and precision in expression can only take place if one has a well–developed technique. This article focuses on a neglected area of study in a player's technical development of scales–that of polyrhythm and meter when playing scales. Although I learned these exercises from jazz musicians, I view these exercises as a way to help broaden <u>any</u> musician's approach to scale technique. This will, in turn, help a player develop into a more comprehensive musician–connecting the ear and mind with the fingers. There may be some adjustments in learning these exercises as you learn to hear groups of notes within different meters and also learning to think in scale degrees or numbers. Fluency in these areas will develop the more a player practices these types of exercises. And along with the fluency will come cleaner finger technique and a sharper sense of hearing as it relates to rhythm and meter.

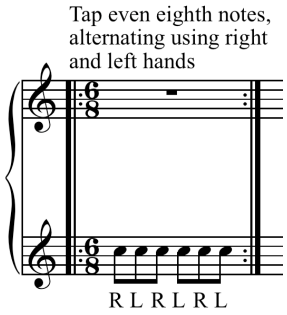
Preliminary Rhythm and Meter Exercises

Many advanced players know all their major and minor scales. Yet, when they are asked to play a scale starting on a different note than the root, or on a different part of the bar, the scale becomes more difficult for them to execute. These preliminary rhythm and meter exercises serve as a warm-up to tune the ears into pulse, rhythm and meter. These are most effective if the player learns by tapping the hands on a djembe drum. The drum will help internalize the pulse and meter because of the physical movement the rhythms on a drum. This is something that Mike Longo teaches in his DVD video *The Rhythmic*

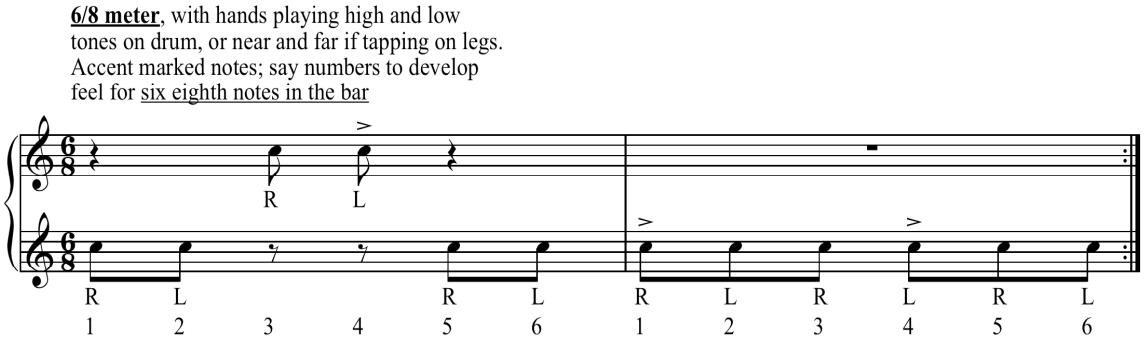
Nature of Jazz[1] and in his private studio in New York City. These exercises can apply to any music because they foster a strong sense of inner pulse, rhythmic and metric time conception. Here are some exercises that should be used as a warm-up before playing your instrument.

Warm Up Exercises by Mike Longo (Pulse, Meter, Rhythm)
Exercises No. 1-4 develop an awareness of how 6/8, 3/4, and 12/8 meters can all be heard over the same steady eighth note pulse.

Exercise No. 1, Tapping even eighth notes

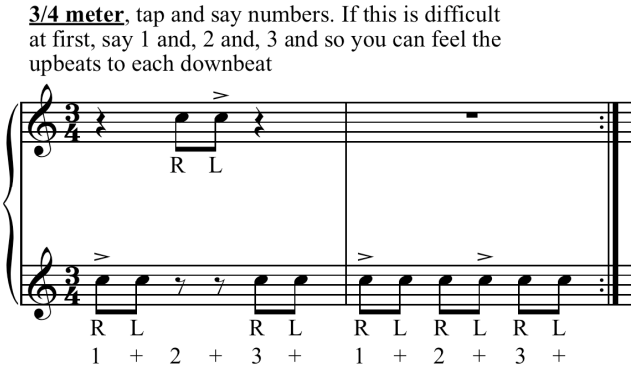


Exercise No. 2, Tapping a 6/8 rhythm, accenting the first and fourth eighth notes

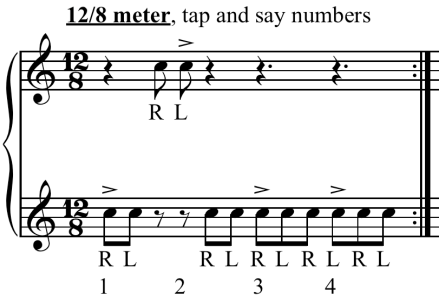


[1] *The Rhythmic Nature of Jazz*, DVD, by Mike Longo (New York, NY: Consolidated Artists Productions, 2010).

Exercise No. 3, Tapping a 3/4 Rhythm

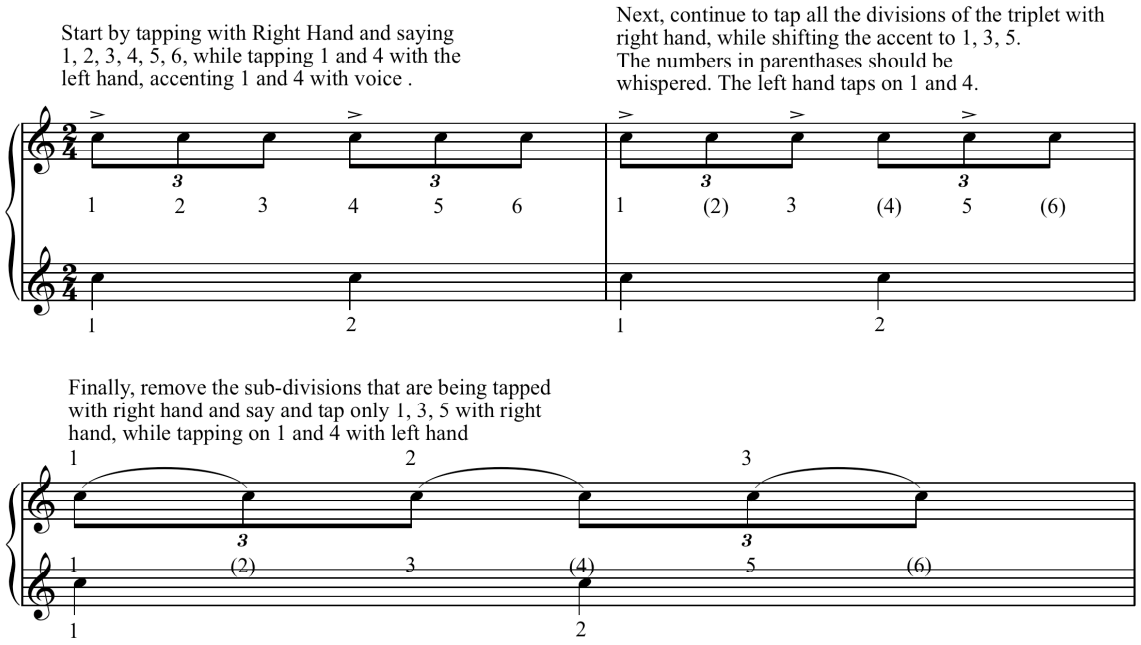


Exercise No. 4, Tapping a 12/8 Rhythm



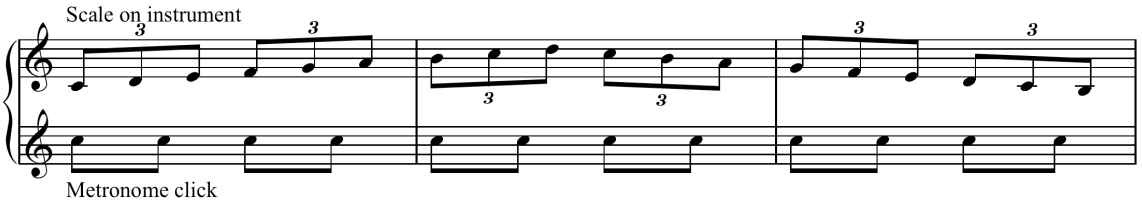
Exercises No. 5, Two against Three/Three against Two

This exercise can be done tapping on a drum or the legs to start with, and then can be moved to the instrument. Start with hands tapping at the same time and while tapping 2 in one hand and 3 in the other, vary saying 1, 2, 1, 2, then 1, 2, 3, 1, 2, 3 so you develop a feel for what the 2 feels like against the 3 and how the 3 feels against the 4.



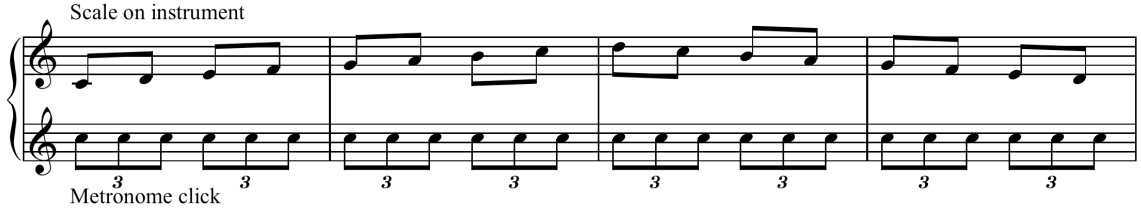
Exercises No. 6, Three Against Two

In this exercise, put the metronome on 60. The metronome beats the quarter note while scale is played in triplets against the quarter note.

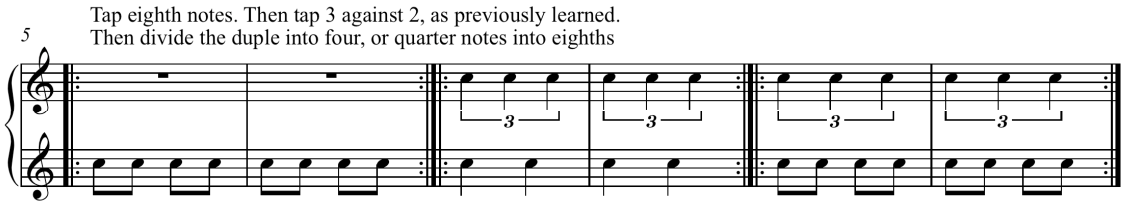


Exercise No. 7, Two Against Three

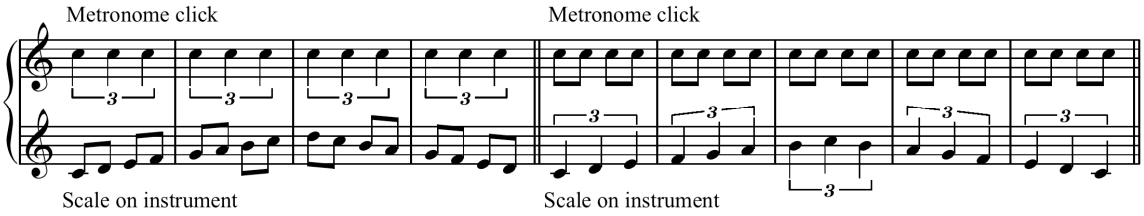
Next, the metronome beats each eighth note of an eighth note triplet, while scale is played in eighth notes against the triplet.



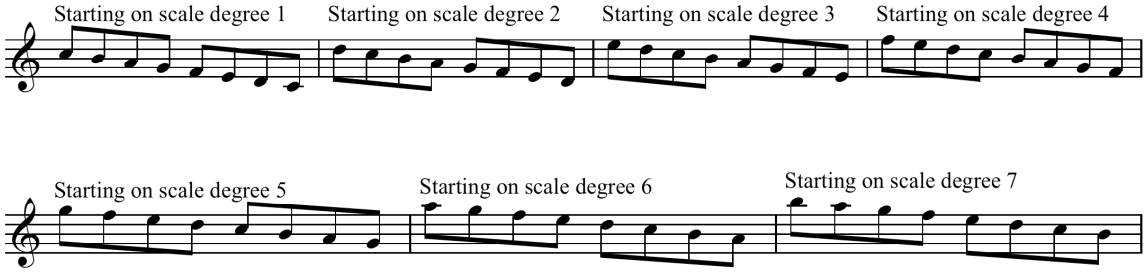
Exercise No. 8, Three Against Four/Four Against Three
Do this same type of exercise with 3 against 4 and 4 against 3.



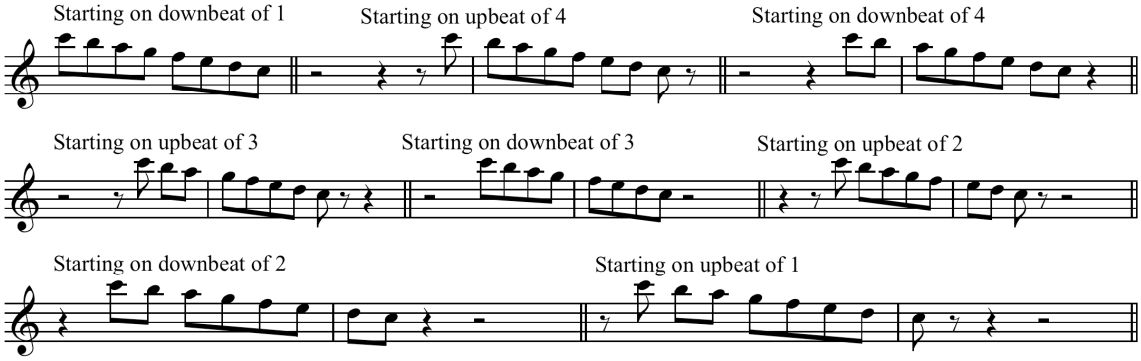
Exercise No. 9, Three Against Four/Four Against Three on the instrument
Next, try playing a scale with the metronome on either three clicks against the four scale notes, or the other way around, four clicks against the three scale notes. Try this with various scales, beyond one octave, and at various tempos.



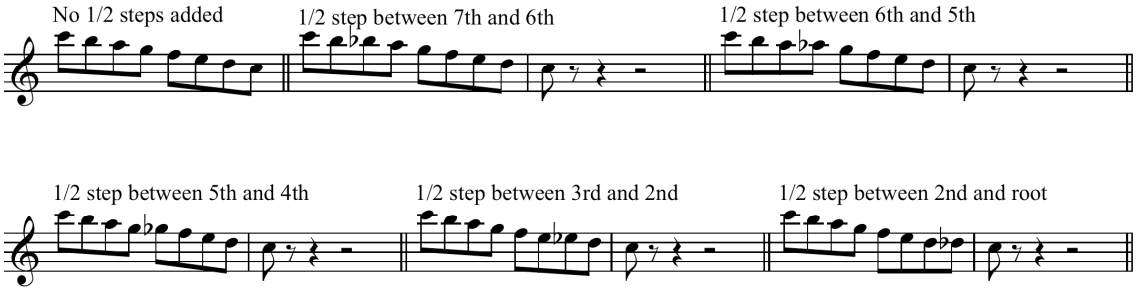
Exercise No. 10, Octave Scales From Each Scale Degree
Master jazz musician and educator, Barry Harris, notes in his improvisation classes in New York City, that many jazz musicians begin their phrases with a descending line that is later embellished in a variety of ways. So for the purposes of the following series of exercises, a descending scale will be used as the starting point for playing a scale exercise. Begin by playing a scale down one octave, each time starting on a different scale degree–tonic, second, third, etc. Try this on various scales. This helps to retrain the ear to hear that a scale does not always have to begin on the tonic.



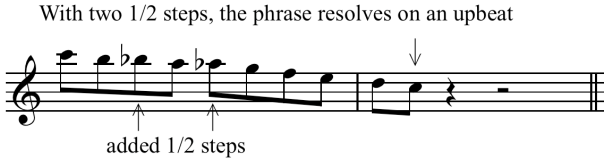
Exercise No. 11, Octave scales starting on different parts of the beat
Next, play the same octave scale, this time always starting on the tonic, but starting on different beats and on either an up or downbeat.



Exercise No. 12, Half–steps
Bud Powell and Charlie Parker often added half–steps to their scales. Barry Harris notes that this helped them to emphasize a note–often a chord tone–at different points in a bar, such as on beat one, up–beat of beat 4, etc. It also helped them to resolve a phrase on a particular chord on a strong beat if the phrase was originally going to resolve on an upbeat. Therefore, the choice to put in these half-steps into a scale means that these musicians considered rhythm and meter to be equally as important as the notes they were playing in the scales. Half-steps can be added between two notes of the scale, such as between the 7th and 6th, 6th and 5th, 3rd and 2nd, or the 2nd and root. Below are examples.

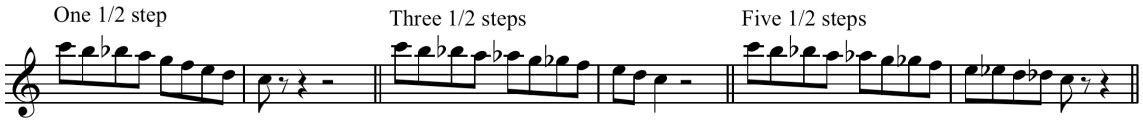


Notice though, that when <u>two</u> ½ steps are added, the phrase resolves on an upbeat, which doesn't have a sound of finality when played because the final tone is on an upbeat.



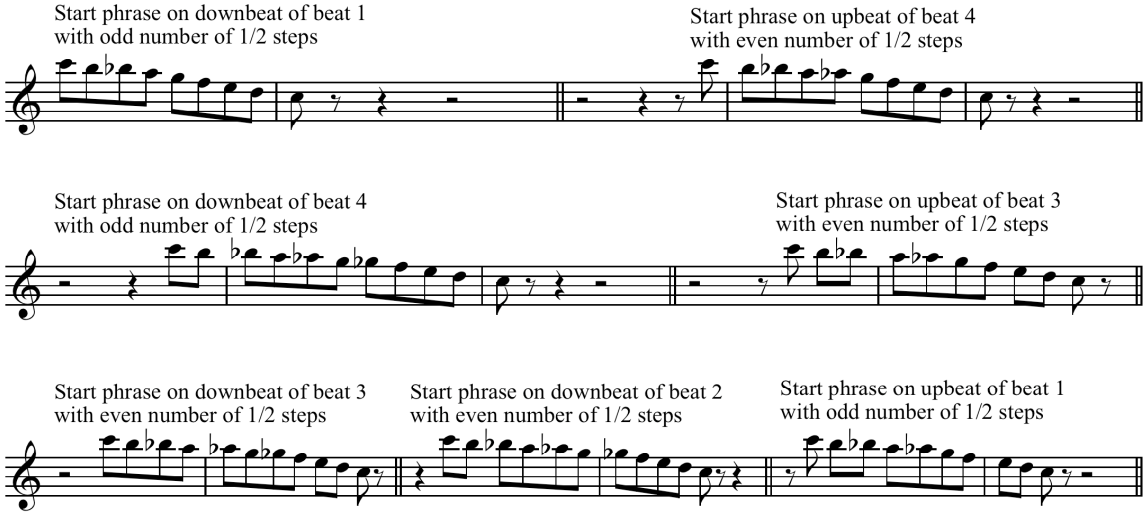
Therefore, there are two main options to help the phrase to resolve on a downbeat. First, is to add <u>odd</u> numbers of ½ steps (1, 3, or 5 half-steps to a descending scale).

Exercise No. 13, Examples of 1, 3, or 5 half steps in a scale

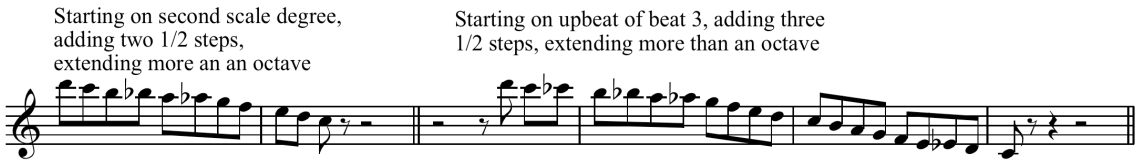


Exercise No. 14, Begin on different beats/varying numbers of half steps
The second option is to begin the phrase before beat 1 of the previous bar. The rule though, is that if one adds an odd number of half-steps, the phrase can begin on a downbeat. If an even number of half-steps is added, the phrase needs to begin on an upbeat in order for it to resolve on a downbeat. This may sound technical to think about, but by singing and playing the rhythms and notes, the player develops a feel for what a phrase feels like when it resolves on different beats and on an up or downbeat.

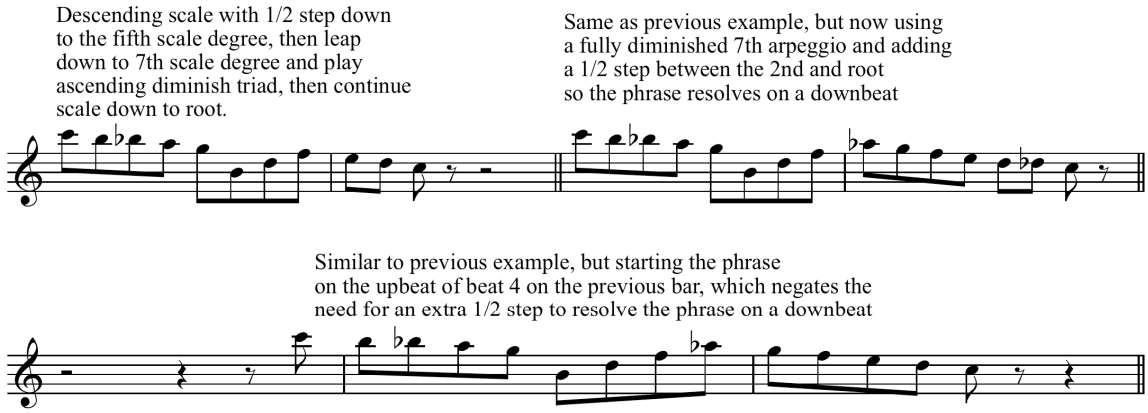
There are many possibilities to practice scales in this manner, such as varying the numbers of odd and even ½ steps put into the scale. The example below limits the possibilities and displays only 1, 2, or 3 half-steps. Mixing how many half-steps to include in a phrase or scale, along with what part of the beat and bar to start on, can offer the player many hours of challenging practice. When doing this kind of practice, try to be intentional about what beat you are starting on. Also, try to be aware of what scale degree you are on at all times, including familiarizing yourself with the rhythmic/metric feel of how each of the changes you make to the scale effects the rhythm and meter.



Exercise No. 15, Starting notes other than the tonic, playing more than an octave
Next, we can begin our scale on another note than the tonic. For instance, play the same C major scale, but now start it on the second scale degree and run it all the way down to the tonic again. In the examples below, not only is the scale extended more than an octave, but starting on an up or downbeat will determine how if an odd or even number of ½ steps are needed to resolve the phrase on a downbeat. Try this beginning on other scale degrees and varying the number of ½ steps in the scale. With enough singing, playing and repetition, you will develop a feel for adding an odd or even number of ½ steps to your scales.

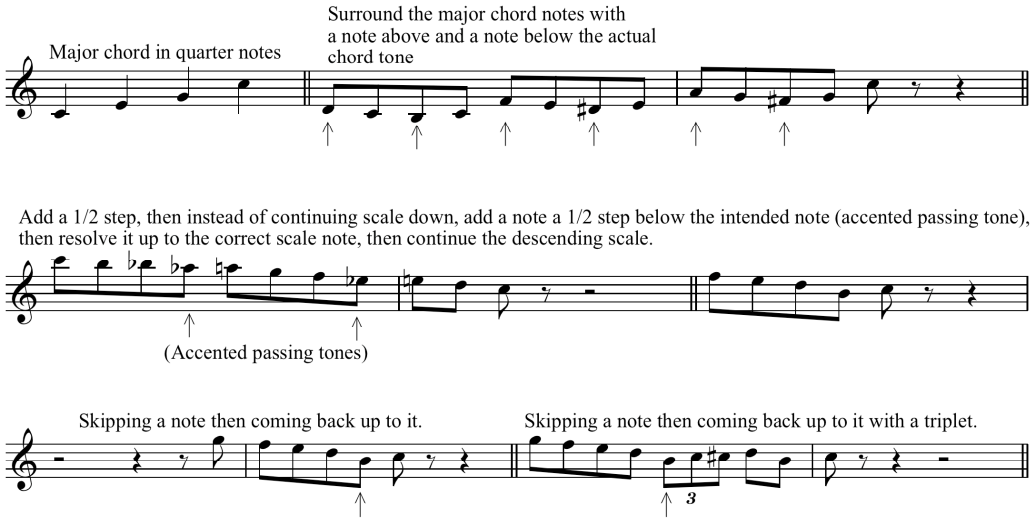


Exercise No. 16, Adding Diminished and Diminished 7th Triads to the Scale
Another approach is to add arpeggios into the scale–two of the more useful arpeggios being the diminished triad or the diminished 7th arpeggios. For instance, a scale could be played descending and then, leap down to another scale degree, arpeggiate up a diminished triad, and then continue with the same scale or even one in a different key. Depending on where the player decides to place the triads, this can really add some creative rhythmic variety to the scale. Here are some examples to try in your practicing. The possibilities are limited only by your imagination. This type of exercise interrupts the descending scale, through both harmonic and rhythmic ideas. It then essentially restarts where the scale left off so the scale can be completed.



Exercise No. 17, Surrounding Notes and Accented Passing Tones

In searching for ways to be inventive, Parker and Powell would often aim for a specific note, but delay getting to it by playing various notes that surround the "goal" note. There are a variety of ways to delay a scale note by surrounding it with other notes. Here are some examples. Try playing these surrounding note and accented passing tone exercises beginning on different notes and in different keys.



Conclusion

When a musician develops a keen sense of pulse, rhythm, and meter, their approach to technique development always stays fresh and creative. Learning to hear and accentuate metric groupings over a steady pulse is a very valuable tool that a musician has to utilize in expressing phrases as clearly as possible to the listener. The skills in developing this awareness require time both with and without ones instrument. Scales are an excellent point of entry to begin applying these exercises and studies because they are something that most musicians are familiar with and have developed to a reasonable degree of facility by a certain point in their musical development. Mastery of the exercises in this article should be viewed as points of development and continued improvement on a life-long journey to always improve and develop one's technique and overall musicianship–not an arrival and stopping point in one's development. Keeping a notebook of exercises is an excellent way to promote and organize growth in these areas. These exercises can serve as the beginning of this notebook, helping the musician to individually and creatively organize the quest for smoother technique, acute aural awareness, and clarity in musical expression.