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AN APPROACH TO THE STUDY OF MUSIC

By Dr. Tim Lake

To begin this third article, in a series of four, concerning my approach to exploring the vast field of music, I would like to briefly restate the objective. These discussions attempt to create a method by which a young musician might begin with bluegrass music and develop the understanding and technique to perform any type of music. Since I am a banjo player, my experience is relative to the banjo, but I feel the approach is pertinent to any instrument. We began by discussing how the study of Scruggs style playing can provide a solid musical foundation concerning timing and tone. Secondly, we examined the understanding of scales and how they allow us to perform fiddle tunes. Once scale understanding is established, the student can move into any musical genre including jazz and classical styles. This article will suggest an approach to the study of jazz music while the next will discuss classical. I want to mention that by suggesting this approach I, in no way, mean to imply any musical hierarchy as is sometimes assumed. As I have stated previously, I view no form of music as "greater than" any other and quite to the contrary view all music as being the same. These articles are only a suggested approach to the study of music for a person who comes from an acoustic musician's background.

While major and minor scales provide us with the melodic foundation to perform fiddle tunes on the banjo, it is much more important to realize that the knowledge of scales is the fundamental underpinning of all music. Now that we are able to perform scales, we can move on to genre that nowadays are not always associated with the banjo such as jazz. On September 6, 1997, I had the great pleasure to perform at the Kentucky Center For The Arts, Bomhard Theater as a member of "The Blue Monday Chamber Ensemble," under conductor Robert Bernhardt with piano soloist Leon Bates, to perform one of the seminal pieces of American musical history; George Gershwin's *Rhapsody In Blue*. Not only is this masterpiece viewed as a wonderful integration of classical and jazz genre but guess what, Ferde Grofe, the arranger, wrote a plectrum banjo part in the original orchestration. The premiere of *Rhapsody In Blue* was performed by Paul Whiteman's Orchestra in February, 1924, and a fellow named Mike Pingitore played banjo in the band. Paul Whiteman's Orchestra was a small chamber ensemble and not the huge symphony orchestra that we associate with most present day performances of the piece. In fact, of the many times that piano virtuoso Leon Bates has played this piece, ours was his first performance with the banjo. I mention the banjo not because I think its presence was revolutionary or peculiar, but because I think it is important to realize that the presence of a banjo in jazz music during the early part of the twentieth century was quite commonplace. In fact, the banjo was an integral part of almost every Big Band until the mid 1930's when it was replaced by the electric guitar.

Today, Bela Fleck has brought the banjo back into the world of jazz music. Many are quick to point out the obvious differences between the 5-string banjo and the plectrum banjo, but I would just as quickly mention that a single-note line on a 5-string and a single-note line on a plectrum are both single-note lines on a banjo. I prefer to adopt an overview of the banjo tradition in jazz music as one that celebrates the artistry of a Mike Pingitore as it is so masterfully carried on through the music of Bela Fleck. Mike Pingitore's part in *Rhapsody In*

Blue was a written one and would not allow for the wonderful improvisations that are Bela Fleck's trademark. However, some of the banjo lines in *Rhapsody In Blue* were quite imaginative and perhaps allow us a glimpse into the scales and knowledge required to even approach the vast and complex field of jazz improvisation. Regarding improvisation, remember that you must be able to sing the line in order to play it on your instrument so you must begin by listening to the jazz masters. The list of jazz greats is far too numerous, so I can only mention Duke Ellington, Count Basie, Ella Fitzgerald, Charlie Parker, and Jim Hall as being some of my favorites.

Begin by learning the standard songs associated with the genre such as *Satin Doll*, *All The Things You Are*, and *Autumn Leaves*, just to name a few. A list of great songs in this genre would be as numerous as that of great players. It is sufficient to say that some of the most beautiful songs ever written in the history of mankind are now associated with the field of jazz, and they will provide you with a lifetime full of wondrous melodies. My father would often point out that the songs that I called 'jazz songs' were old 'pop songs' to him. I have often thought how lucky my parents were to have grown up listening to such masterful songwriters as Jerome Kern, Duke Ellington, and countless others. Begin by learning the melodies to the songs, and work out 'chord melodies' on the banjo. A 'chord melody' is created when we build a chord below the melody notes of the song. This 'chord melody' approach comes from the jazz tradition of Mike Pingitore and is still strongly represented by the banjo style in Dixieland music. I play plectrum banjo in a Dixieland band called The Colonel's Choice and have incorporated 'chord melodies' such *Back Home In Indiana* on the 5-string banjo. I recorded a medley of 'chord melody' songs beginning with *Back Home In Indiana*, *One Note Samba*, *The Shadow Of Your Smile*, and *How High The Moon* on my *Only In The Movies* album (Padraig Records PAD35437CD). In order to learn chord melodies we must first examine how chords are built by harmonizing major scales.

How Music Works

Diagram 1:

Harmonization Of Major Scales

I7	ii7	iii7	IV7	V7	vi7	vii°7	I7
Cmaj7	Dm7	Em7	Fmaj7	G7	Am7	Bdim7	Cmaj7
C#maj7	D#m7	E#m7	F#maj7	G#7	A#m7	B#dim7	C#maj7
Dbmaj7	Ebmaj7	Fm7	Gbmaj7	Ab7	Bbm7	Cdim7	Dbmaj7
Dmaj7	Em7	F#m7	Gmaj7	A7	Bm7	C#dim7	Dmaj7
Ebmaj7	Fm7	Gm7	Abmaj7	Bb7	Cm7	Ddim7	Ebmaj7
Emaj7	F#m7	G#m7	Amaj7	B7	C#m7	D#dim7	Emaj7
Fmaj7	Gm7	Am7	Bbmaj7	C7	Dm7	Edim7	Fmaj7
F#maj7	G#m7	A#m7	Bmaj7	C#7	D#m7	E#dim7	F#maj7

Gbmaj7 Abm7 Bbm7 Cbmaj7 Db7 Ebm7 Fdim7 Gbmaj7
 Gmaj7 Am7 Bm7 Cmaj7 D7 Em7 F#dim7 Gmaj7
 Abmaj7 Bbm7 Cm7 Dbmaj7 Eb7 Fm7 Gdim7 Abmaj7
 Amaj7 Bm7 C#m7 Dmaj7 E7 F#m7 G#dim7 Amaj7
 Bbmaj7 Cm7 Dm7 Ebmaj7 F7 Gm7 Adim7 Bbmaj7
 Bmaj7 C#m7 D#m7 Emaj7 F#7 G#m7 A#dim7 Bmaj7
 Cbmaj7 Dbm7 Ebm7 Fbmaj7 Gb7 Abm7 Bbdim7 Cbmaj7

* Diminished seven chords (vii^o7) are derived from harmonic and melodic minor scales. Diatonically, half-diminished seven chords (vii^b7) harmonize the seventh scale degree in major keys. However, I always explain diminished seven chords (vii^o7) first because we find these chords included in all basic chord books.

In order to better understand the above chart, you should refer to the 'Major Scale' chart from the October issue of Acoustic Musician. In this issue, we created the notes that comprise all major scales. The above chart lists the chords that are created when we harmonize each note of the major scale to the seventh scale degree. In other words, these are the chords that are found diatonically pursuant to each key. The term 'diatonic' refers to a designation for major and minor scales as opposed to the chromatic scale and is often used to describe melodies and harmonies that are confined to these scales, to the exclusion of chromatic notes. For example, in the key of C major C, E, and G are diatonic notes that create a C chord while a C# note is a chromatic note that is not diatonic.

In order to create jazz solos, it is imperative to know and understand the harmonization of each key so we can isolate the proper key center and scale for melodic improvisation. To further complicate matters, we often find more than one key center within the same jazz song. Unlike folk and bluegrass songs that often begin and end without changing key, it is not unusual for a jazz song to change key centers within the context of every few measures. When I started to play over jazz chord changes, it was not unusual to begin by using a scale that sounded good only to find that the same scale produced horrible sounds a few measures later. To better understand this concept, we need to realize the power of the V7 chord and its function in the establishment of a key center.

As we look at the 'Diagram 1' chart above, it is imperative to recognize chord function. Major seven chords are found as either I7 chords or IV7 chords in a key so we must recognize that this chord quality is not specific to one key only. For example, a Dmaj7 chord is not only a I7 in the key of D major but it is also a IV7 in the key of A major. Therefore, when we see a Dmaj7 chord we can not be certain whether we are in the key of D or A major. Minor seven chords are found as either ii7, iii7, or vi7 chords in any major key. For example, a Dm7 chord is a ii7 in the key of C major, a iii7 chord in the key of Bb major, or a vi7 chord in the key of F major. Therefore, a Dm7 chord belongs to three major keys and does not designate one specific key center.

Explaining diminished seven (1 b3 b5 bb7) and half-diminished seven (1 b3 b5 b7) chords can be a daunting task for the best theory professors. Accordingly, these chords are often

misunderstood and misnamed in written music. Diatonically, the seventh scale degree in a major key and the second scale degree in a minor key are harmonized by half-diminished seven chords. A diminished seven chord is created in a minor mode from melodic and harmonic minor scales. Please make sure to take notice of the explanation under the seventh scale degree in 'Diagram 1'. I am trying to condense as much music theory as possible in four short articles, so I have decided to introduce a diminished seven chord now with major keys and explain the half-diminished seven chord in the next article along with the harmonization of minor keys. It is quite common to introduce diminished seven chords in this order. For example, every beginning guitar player has puzzled over the diminished seven chord page in their trusty Mel Bay chord book and wondered why only three chord diagrams were provided, each given four names, and absolutely no explanation. It is important to note that the Mel Bay chord book introduces diminished seven chords but does even address the half-diminished seven chord which occurs diatonically in major and minor key harmonization.

Depending on its enharmonic spelling, a diminished seven can be viewed as a viio7 chord in any one of four keys. Hence, Mel Bay's basic chord book had only three diminished seven chord diagrams because each chord position could belong to any of four keys and four divided into twelve possible keys equals three. For example, the definition of a diminished seven chord is 1, b3, b5, and bb7. Therefore, the notes that it takes to make a Bdim7 chord are 1=B, b3=D, b5=F, and bb7=Ab. A Ddim7 chord is made up of 1=D, b3=F, b5=Ab, and bb7=Cb. A Fdim7 chord is comprised of 1=F, b3=Ab, b5=Cb, and bb7=Ebb. Finally, a G#dim7 chord is 1=G#, b3=B, b5=D, and bb7=F. Each of these chords is made up of the same notes enharmonically named. These chords are not tonally specific to key considering that they can belong to any of four keys. Each diminished seven chord resolves up by half-step to the I chord (viiio7-I). For example, Bdim7 resolves to C, Ddim7 resolves to Eb, Fdim7 to Gb, and G#dim7 to A.

The chord quality that is found only once for each major key and therefore is specific to only one key is the V7 chord. In other words, a G7 chord can only be found in the key of C major, B7 is only found as the V7 in the key of E major, and so on. A helpful hint to singers can be found through this understanding. All lead singers, including myself, have at one time or another had trouble finding the pitch at which to begin a song. Most of the time we strum the I chord of the song in order to remedy this situation. However, the I chord is not specific to key because we have three major chords in every key (I, IV, & V). For example a G chord is a I in G major, a IV in D major, and a V in C major. A better solution is to play the V7 chord in the key you need and resolve it to the I chord (V7-I). The tonally specific V7 chord will always resolve to the I chord of the key we need and provide the proper pitch for the song.

If the V7 chord is specific to only one key, then it makes sense to look for this chord when creating solos over jazz songs with multi-key centers. Once I have identified the key, I can play notes from that major scale to create my solo. On my *Only In The Movies* compact disc, I recorded a Jimmy Giuffre tune called *Four Brothers*. This song is written in the key of Ab but the first chord is Bb7. Please refer to Diagram 2 for the chord changes.

Diagram 2:

Four Brothers

Ab Bb7 Bbm7 Eb7 Abmaj7 F7 Bbm7 Cm7 F7 Bbm7 Eb7 Abmaj7

V7 ii7 V7 I7 V7 i7 ii7 V7 ii7 V7 I7
 \ / \ / \ / \ / \ /
 Key center: Eb _____ Ab _____ _Bbm_ _Bb_ _____ Ab _____

The first chord Bb7 belongs to the key of Eb major so I can play an Eb scale over this chord when working out a solo. The next three chords Bbm7, Eb7, and Abmaj7 are actually the ii7, V7, and the I7 in the key of Ab major, so an Ab scale will work nicely for this passage. The F7 and Bbm7 are V7 and i7 in the key of Bb minor. We will harmonize minor keys in the next article. The Cm7 and F7 chords are ii7 and V7 in the key of Bb major, while the last three changes bring us back to the key of Ab major. For banjo players with instruments tuned to a G major chord, this *Four Brothers* tune is a challenge indeed. I should mention that I tune my 5th string up a half-step to Ab in order to play this song with a roll.

We banjo players use a variety of tunings and are all united by a common fact that when we play single-note lines with a pick on a banjo, we usually achieve a staccato sound that is quite unique. On a 5-string banjo we can play the same notes with a roll and achieve a smoother legato line. One of my constant struggles involves the lack of sustain associated with banjo sound and the effect that this characteristic has on interpretation. We usually create more sustain through tremolo effects and amplification. To play in keys such as the key of Ab, we can not avoid the necessity to play single note lines in a plectrum manner in order to accommodate for the fact that our banjo is tuned to an open G chord. For this reason, it is very important to practice scales in a plectrum manner as well as with a roll. I have found that keys such as Ab major are particularly difficult because we do not have a D note in the key, and our first string is tuned to D. The Db note in the key of Ab makes the use of our first string in a roll tonally non-diatonic. Therefore, we can approach these keys in a plectrum manner. However, the keys of Eb and Bb major sound very good when played with a roll or in a plectrum style. Begin by learning the chords in each key, and then add a roll to discover new harmonic possibilities. The fifth string will need to be adjusted to accommodate key centers that do not have a G note in the key.

Of course it is possible to learn to be a great improviser without beginning with an intense study of music theory as your guide, but as I always tell my students, knowledge and understanding can only strengthen your position and quicken your course. I am quite sure that after a while great jazz artists such as Charlie Parker could have cared less about what V7 chord they were playing over. I am also sure that players such as Charlie Parker stopped reading helpful articles such as this soon after they entered the improvisational stratosphere. For all of us mere mortals, the understanding of music will open doors to rooms full of wonderful music that we probably never imagined we would play when we began. Thus the majority of musicians who were not graced with the divine gift of a Charlie Parker can none-the-less aspire to great heights of musical achievement through the oldest of all human means; hope and hard work.