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Bluegrass Mandolin Improvisation, Theory, and Practice

By Brad Laird

Bluegrass mandolin players all improvise on some level. Improvising, at its core, is the act of communicating your own thoughts, feelings and emotions, through musical notes which you cause to be sounded by an instrument. It is quite unlike playing a song that someone else wrote, note for note, which is more like a tape recording and contains very little emotional content which originated in your own mind. Improvising is speaking, communicating, and inventing.

This material can become a little overwhelming if you try to read it quickly. Take it slow. Read this material over and over and if something doesn't make sense try to understand it before forging ahead. This book is mostly about teaching you concepts. If you are hoping to find a bunch of "hot licks" that you can use, you won't find them here. What I am hoping to teach you is to understand some principles applied when improvising and then it will be up to you to devise the licks yourself. I think, also, that the more you begin to understand about these concepts, the more you will gain when you listen to the playing and recordings of some of the great mandolin players. What may have seemed rather magical and beyond comprehension may begin to make more sense and seem more within your own reach when you understand some of what is going on within their playing.

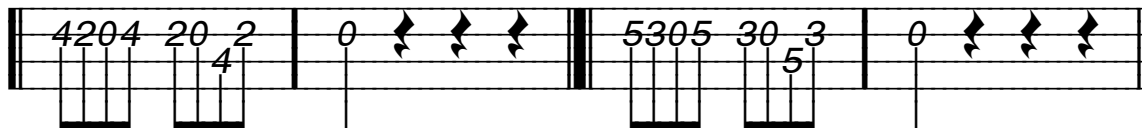
This book is a mixture of ideas and exercises designed to increase your technical ability along with ideas and exercises designed to increase your ability to choose what to play. The combination of knowing what to play and being able to play it are what makes a good improvising player.

Most of us began playing the mandolin by learning a few tunes note for note. Our first baby steps into the realm of improvising came by either not being technically able to play a tune at some speed so we changed the tune to suit us, or we made mistakes in fingering which we liked.

Let me show you the exact fingering error that first led me to begin exploring improvisation on the mandolin (in September, 1979).

The "right notes"

The "wrong notes"?



When I accidentally played example #2, by having my fingers at the wrong frets, I heard something that got me really excited. I wasn't quite sure what I had done but I knew I liked it and it sounded cool. I didn't know that I had stumbled onto playing a "blues scale."

Locating new exciting musical notes by just moving around randomly is risky to say the least. This is about like a monkey banging on a typewriter. Sooner or later the monkey might type something that makes sense but mostly it will appear that he is tearing up a typewriter. There are discoveries to be made by randomly banging away, and I don't discount it's value, but I do suggest that learning more about what you are trying to do will increase the chances that you play something good.

Using the monkey at the typewriter analogy again consider the following two passages typed by two different monkeys, Jethro and Stubby:

Jethro typed:

"lafowl wlfjos fnlsf kso09s bill alskf ow3monro 9sjfk"

Stubby typed:

"bill monroe was a genius jslf oammw9cns;l alkjf"

When you examine Jethro's work you might be astonished to find that he typed Bill Monroe's name. With one spelling error. That monkey got lucky. But when you see what Stubby typed you must draw the conclusion that this monkey is intelligent beyond belief!

Even if you are using random motion as an experimental tool to find new things that sound good keep in mind that the more you know, the more you understand, and the more practiced your fingers are at doing what you want them to do, the more likely that your musical output will be intelligent and satisfying.

On the subject of getting your fingers to do what your mind commands consider this. What if Jethro was actually smarter than Stubby but he just does not have the motor skills to hit the keys he intended to hit? We are all like that to some degree or another. We have ideas, but can't seem to get the fingers and the pick to do what we ask of them. On the other hand I see players all the time who play really well. They seem to be able to execute things on the mandolin flawlessly and at high speed. But, many of the same players do not impress me in what they are saying musically. They learned to do all sorts of amazing things on the instrument but they don't seem to be saying anything at all. They bring to mind another monkey I will call Bongo that has learned to type the following at an extreme rate of speed.

Bongo types: "abcdefghijklmnopqrstuvwxyzabcdefghijklmnopqrst..."

He can type this over and over for hours filling page after page with the alphabet and only stopping for a banana now and then. It is fair to say that Bongo is an amazing monkey. Many of the "best" mandolin players around play like Bongo. Play great. Say nothing. It is still impressive in a way, but I am more impressed by the output of the following monkey I will call Jimbo:

Jimbo the Monkey stares at the typewriter and then types: "I hate banannus." He then closes his eyes, takes a deep breath and types "why?" He then picks up a banana, examines it, and lays it down uneaten. Then he types "WhY!!!?"

His spelling errors and his slow speed lead some to think he is not as talented as Bongo. But Jimbo has said something. Something amazing.

What if we could combine the technical ability of Bongo with the intelligence and sensitivity of Jimbo? The truly great players are able to do this. Development of your technical ability is important but it is just as important, perhaps more important, to develop your ability to use the instrument as a means of speaking and communication of ideas and feelings. This is hard to learn and hard to teach. The technical side, though challenging to accomplish, is much easier to explain.

Learning to speak the language of music

Do you play and then listen to what comes out (Post analysis) and judge whether it was good or bad? Or do you think of something to play (Predetermination) and project it out through the instrument? In other words, are you using the instrument to communicate things that originated within your mind? Being able to improvise musically is much like the ability to speak. A baby learns a few sounds and syllables and is soon communicating.

Think of what a baby can say with just the following sounds:

"maa", "waaaaaaaaa", and "daa"

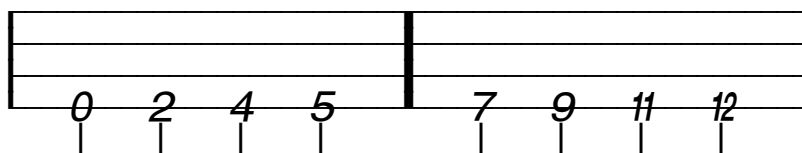
formed by starting on some note and by moving upwards in intervals of either one or two semi-tones.

The exact pattern of ascension for a major scale is:

Note number	+	number of semi-tones	=	Note number
1		2		2
2		2		3
3		1		4
4		2		5
5		2		6
6		2		7
7		1		8

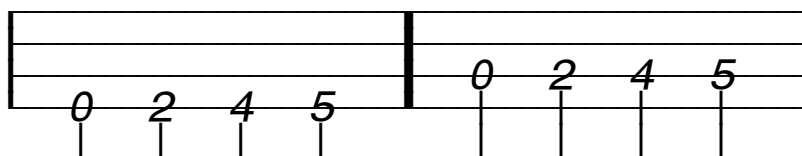
So if we start on any note and climb by the pattern of semi-tones 2-2-1-2-2-2-1 we will have created a major scale. This is true no matter what note you start on.

Let's look at a major scale on the mandolin.

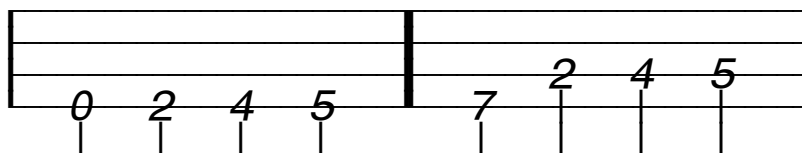


We will use the G string as our starting point. Our note number one is G. If we go up 2 frets we have the second note of the G major scale. If we go up 2 more frets we have the third note. Continue upwards using the 2-2-1-2-2-2-1 pattern and we have played all of the notes of the G scale and we ended on a high G note.

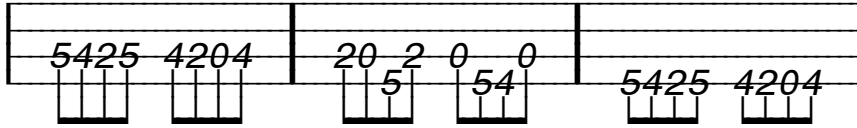
Notice that when we arrived at the 7th fret (the 5th note of the scale) we were playing the same note as our open 3rd string. So we could get the exact same notes, played on two strings instead of one, by jumping over to the 3rd string for the upper notes of the scale.



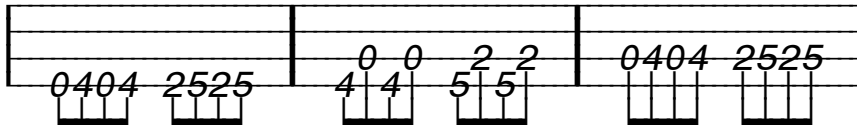
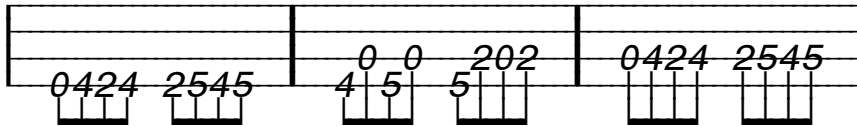
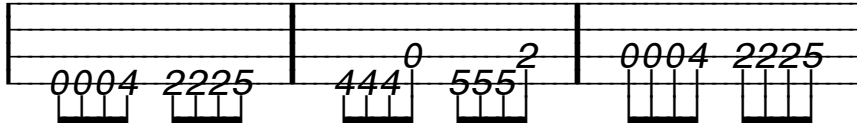
Remember this little rule: Any note played at the seventh fret could also be played as the next higher string played open. Here is another way of playing the G major scale. This version uses the 7th fret note before changing to the 3rd string.



Now let's look at a similar pattern which is descending.



There are hundreds of possible ways you can shuffle the notes of a scale in a pattern. Here are a couple of other ones to get your ideas flowing:

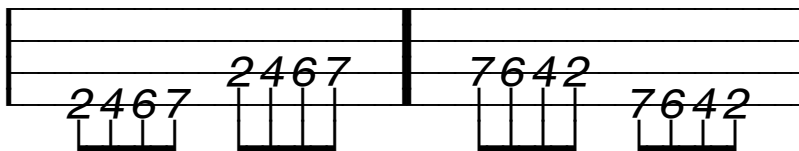


All of these type patterns are useful for training the fingers to jump from note to note with confidence. The example patterns, and plenty of others, can be applied to any scale.

Much of what we have played so far has been designed to train your fingers to go where you want them. Let me digress a bit and give you some practice tips which will help you progress in the most efficient manner.

How to spend an hour playing 16 notes

Here are 16 notes. (The A major scale, but it could be anything you are practicing.) Play them once or twice and then read this section.



1) When improvising most of what you play is made up at the moment and I suppose I could just jam away using pentatonics over chords, and then go analyze the tape and tab out what I played. But, tomorrow I would play something different and hopefully better.

2) Memorizing some random sequence of notes that I thought up on the fly, is not improvising! Copying someone else's improvisation is not improvisation in the truest sense. The music must come from you.

3) Remember the old saying about "teach a man to fish". That is what this book is all about. If someone feeds you a meal of licks you will soon be hungry. If you learn to fish then you can feed yourself.

Learning note sequences that other people invented is a great tool for learning. Imitation leads to innovation--if you seek innovation. Great imitation for the sake of imitation is a hollow victory. Playing Sam Bush or Bill Monroe, note for note, nuance for nuance, is extremely difficult and I would admire anyone with the determination to do it well. Did Sam Bush or Bill Monroe do that? Who are they copying? Yes, they both learned from others. Sam Bush can do a great job of playing Bill Monroe's music. But, even his copies are presented through his own hands and mind and come out sounding like Sam Bush playing Bill Monroe. The only person who should try to play like Sam Bush is Sam Bush. And he does!

The real satisfaction in playing comes when you combine everything you have learned from others and it comes out of your head as your own music. Copy to learn. But, allow your own personality, mood, limitations, special abilities, and knowledge to shape what you have learned into your own musical expression.

I read all of that but what do I play?

It is difficult it is to try to teach "what to play" in the context of improvising. But, it is my hope that you will gain some ideas from this book that help you in that direction. Let's look at some of the different ways to improvise:

Playing the melody

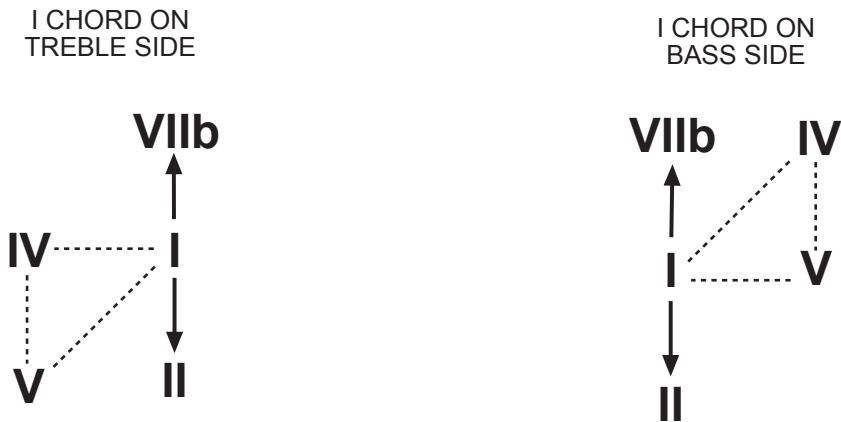
This is something that people tend to forget when improvising. But, the best improvisers give the melody great respect. You should too. Improvising begins and ends with the melody. After all, songs start with a melody, a tune. Chords are added to the melody to enhance the melody and it is the melody that determines the chords.

But, many improvisers concern themselves more with the chords than the melody. I have done that up to this point in this book! We have looked at which scales and patterns are "safe" against various chord progressions, but have we forgotten the melody? Let's not.

Honestly in many bluegrass songs, especially instrumentals and banjo instrumentals in particular, the melody is hard to determine. Can you hum the tune to Foggy Mountain Breakdown? The melody of the song is buried in such a cascade of rippling notes that it is hard to decide what notes comprise the melody. So, when playing a song like FMB on a fiddle or mandolin, it becomes impossible to play all the notes of the banjo version, so we reduce the song to the notes that seem to stick out the most and the chords that we hear. This type of song, one with a vague melody, is an excellent candidate for playing pattern oriented licks without worrying too much about the melody.

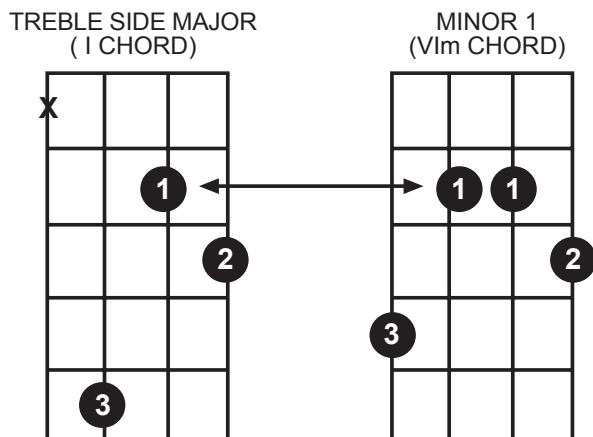
But, what about a song like Salty Dog? If we listen to the banjo break it seems as complex as FMB! But, listen to the singer! There is the melody! When you take a solo on Salty Dog do you play the melody? Do you hint around at the melody notes while you jump all over the fingerboard? Do you strongly play a melody and just add a few fills here and there? Or do you tend to just play things that "work" with the chords?

So, let's expand our basic mapping to include these two chords:



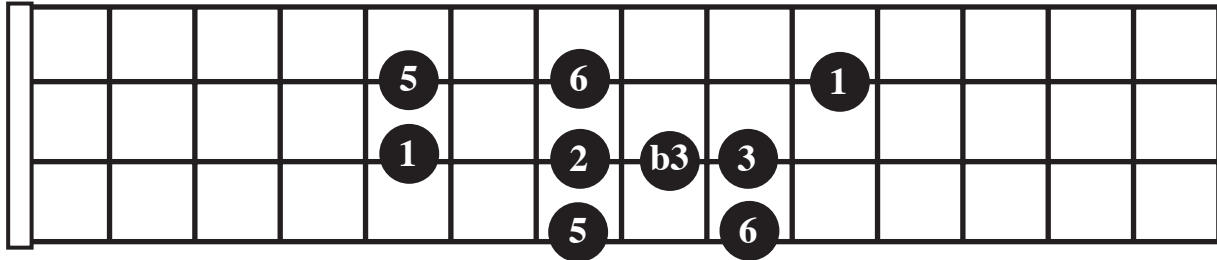
Now, let's see how the two most common minor chords work into our pattern. The most common minor chord you will encounter is the VI_m. This is always a good guess if you hear a minor chord, but can't identify it. It is the relative minor chord. In the key of G this is an E_m. In C it is the A_m chord.

The thing to keep in mind is that if you use the two minor chord forms shown, the relative minor chord always ends up in a position where the first finger is on the same fret as the it was on the I chord. If your I chord is on the treble side, as in the key of A, the VI_m (F_{#m}) is formed using minor chord form 1, and the first finger lines up on the same fret as in the I chord. If this sounds complicated play G and E_m and watch your left index finger.



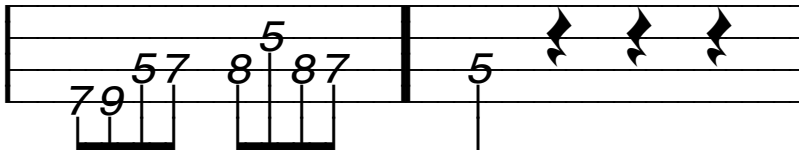
RULE FIVE: When the I chord is on the treble side, the relative minor (VI_m) chord, using minor chord form 1, "lines up" with the I chord so that the first finger is on the same fret.

Here is our basic pentatonic pattern with one added note, the b3:



In the pentatonic scale we have 1-2-3-5-6 only. But in the above diagram I have added one note, a flattened 3rd. This is a slightly expanded G pentatonic scale pattern. How do I know it is a G pentatonic? All of the notes numbered 1 are on G's. (See appendix for fingerboard chart.)

Let's play an example of a lick using the notes shown above with the b3 note thrown in:

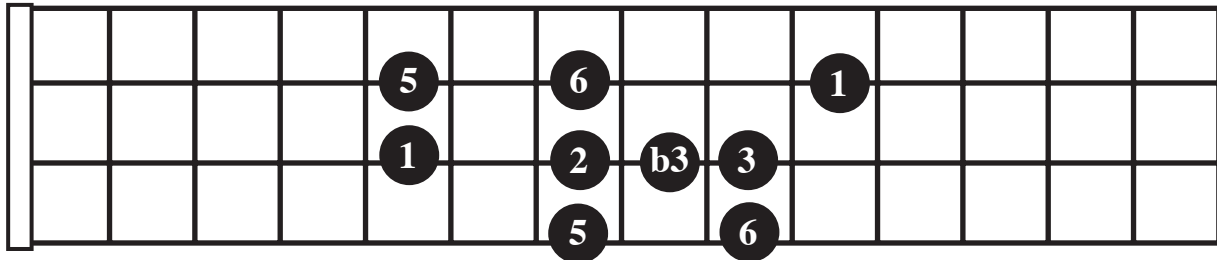


This pentatonic scale sounds more "bluesy" with the addition of the flattened 3rd note, doesn't it? Let's look at a complete description of the notes of the blues scale. The blues scale is built using:

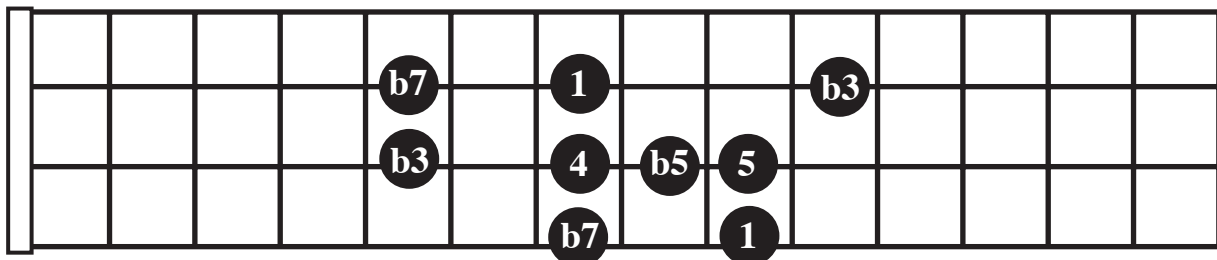
1 b3 4 b5 5 b7 1

This is quite different than the pentatonic scale which uses 1,2,3,5 & 6/ Or is it really? Compare the two diagrams that follow:

The first is the G pentatonic with that added b3 note.



The second is a map of the blues scale:



octave it is played in. That bottom note has a great power in creating the "feeling" of the chord and substituting another note of the triad on the bottom can upset the major chord sound.

In theory, so long as C, E, and G are played together, stacked in any order, you have a C major chord. Stacking the notes in different sequences are called inversions and definitely have a different sound than the original triad. Some inversions of the C triad are EGC, GEC, or CGE. They all contain the same notes but sound different. For a true major triad, stack them upward as in the original example.

Self Test #2

1. What is the ascending fret pattern used to create a major scale?
a. 2 - 1 - 1 - 2 - 2 - 1 - 2 b. 2 - 2 - 2 - 2 - 2 - 2 - 2
c. 1 - 2 - 2 - 1 - 2 - 2 - 1 d. 2 - 2 - 1 - 2 - 2 - 2 - 1

2. Spell the notes for a major scale with F as the root note:

3. Spell the notes for a major scale with Ab as the root note:

4. In the F major scale you spelled in question #2, what are the notes of the major triad?

5. What is it called when a the notes of a chord are stacked in a different order than the usual root, 3rd, and 5th?

Expanding to Other Chords

Notice that in creating the major triad we are simply skipping every other note of the scale to create the triad. This can be taken further in what is called the tertiary system by looking at two octaves of the major scale. In this case we will number all the way up for 2 octaves:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C	D	E	F	G	A	B	C	D	E	F	G	A	B	C

Remember that 8 is the same as 1, 9 is the same as 2, etc. We have simply added the second octave for the scale.

The Major 7th Chord

When we make a major triad we include the 1 - 3 - 5. To create a major 7th chord we continue our skipping pattern (all odd numbers) and include the 7th note. In this case it is a B note. The major 7th chord includes 1 - 3 - 5 - 7. This is the melancholy sounding chord we find in the song "Color My World."

The notes in the key of C are: C - E - G - B

SUGGESTIONS FOR USING THE ENCLOSED AUDIO PRACTICE CD

The CD included with this book is designed to give you the opportunity to put into practice the topics and techniques taught in the text. Here is a description of each track on the CD with comments and practice suggestions:

Track 1 - The Circle of 5ths Progression

This track starts on a C chord and plays that for 8 beats, then it moves to the V chord of C which is a G chord. Then it moves to the V chord of G which is a D and it progresses all the way around the circle of 5ths two complete times.

This track is an excellent opportunity to attempt to equalize your ability to play in all keys. Some keys will come easily and some will require more work. When you can comfortably improvise over all of the chords you know you have made real progress!

This track is recorded at 100 beats per minute. If you are working on difficult passages just play quarter notes. If you feel like going at a more “bluegrassy” pace, play 8th notes. The tempo is fast enough to get a good workout but you still have time to think.

You may notice that the guitar part was edited together from multiple takes. This was done to keep the chords sounding “bluegrassy” by using a capo instead of playing barre chords. The mandolin chops were done in one pass.

Things to Try with Track 1 - Circle of 5ths

1. Play the root note for each chord. Play a C note for 8 beats, then a G note for 8 beats, then a D note for 8 beats, etc. This is good practice at locating all the notes on the fingerboard. Refer to the chart of the Circle of 5ths in the book if you want to. But, also try to do it without looking at the chart. Remember that while you are playing a C note against the C chord you are playing the 1. (Remember all that 1,2,3,5,6 stuff?) Do you recall that there is always a 5 note at the same fret, but one string higher? And that there is another 5 note located one string lower and up two frets? Just jump to one of those two choices and you will be playing the root of the V chord when the chord changes. It is possible to use this way of thinking and play the entire circle of 5th progression without really thinking about the names of the notes or the chords. Just think “I am on the 1, where is the 5?”



Measures 1 and 2 are C notes. Then jump one string higher and you are on the V chord note which is a G. Then where is G's V note? One string lower and two frets up. Keep going this way and you will end up way up the fingerboard. You can “reset” to a lower fret when you come to a chord which has an open string or a note that you can find easily down lower on the fingerboard.

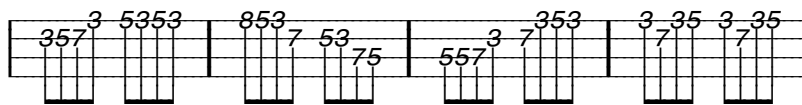
2. Play the basic 3 finger major chord for each chord. You can refer to the Circle of 5ths and play the chords that way or use the same method I just talked about to locate the entire 3 note chord. Refer back to the section of the book about Triangular Fingerboard Mapping. Just recall that if you are playing your I chord on the “bass side”, then your next V chord is right next door at the same fret on the “treble side”. Now that you have jumped to the V chord and are now on the “treble side”, consider this to be your I chord. Where is the V chord now? When your I chord is on the “treble side” your V chord is on the “bass side” two frets higher. If this is confusing re-read the Triangular Fingerboard Mapping section of the book beginning on page 31.

3. Play arpeggios for each chord. You can either play them from memory (you did learn them all

6. Play other pentatonics that are safe with the chords. Do you recall that it is “safe” to play notes of the pentatonic scale over any chord found in that key? Well let’s try another approach to playing the circle of 5ths progression. Remember how the V chord is one of the chords found in the key. It then stands to reason that you could play a C pentatonic scale over the C and the G chord, since the G chord is the V of C. Make sense? If not go back and study the text again.

In this example I have written 2 full measures of pentatonics so that it matches the CD track exactly. Notice how the notes played against the G chord (C’s V chord) are still C pentatonic scale notes...

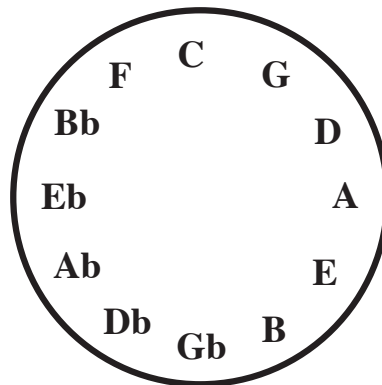
C (C Pentatonics) G (C Pentatonics) etc...



Let’s look at the entire Circle of 5ths progression and choose some other options for pentatonics that are safe with the chords. Remember the chords that are found in the key? They are:

I II m III m IV V VI m VII dim

There are only 3 major chords found in the key-- the I, IV and V. So let’s look at our old Circle of 5ths diagram.



Circle of 5ths

Remember that if you move clockwise from any chord it gives you its V chord. Counterclockwise one chord gives you the IV chord. And remember that both the IV and the V chord are found “in the key”. So, when the C chord is playing you have the choice of playing C pentatonic notes, F pentatonic notes (since C is the V of F) or G pentatonics (since C is the IV of G). Bottom line is this: For any chord, you can always play the pentatonic scale of the same name OR you may be “safe” in playing pentatonics scales based on the note to either side of the original note.