Essentiel music theory for the guitar player

Foreword

The idea of this ebook is to arm the guitarist with the theoretical tools to understand any chord progression he or she might face. Either in a situation where you are faced with a chord progression that you to solo over or the other way around to give a fundamental knowledge of the relations between chords and intervals so you are able to create chord progressions yourself or even just to be able to understand what and why a piece of music consists of the chords that it does. The book is written with a guitar player's perspective and experiences and even though the theory is the same for any type of instrument the guitar player has a specific approach to the instrument that can in many cases challenge him or her in the understanding of music theory. Typically guitar players has a very pattern oriented approach to the instrument which will often prevent the player from understanding theory. Almost exclusively has the guitar players I have met and taught through the twenty five years I have been teaching guitar blindly played shapes and patterns of chords and scales and that's all good, that's a very effective way to learn to play the guitar but in almost all cases it has also prevented the player of knowing why they are playing what they do and also what they are are actually playing. A fun example is that if you as a guitar player what a random triad chord consists of he or she will give you the notes that a basic barre chord is made up of. But the thing is that because of the way the guitar is tuned the basic chords that guitar players learn are not built in the traditional and theoretically correct way. And that's all good as well, it get's the job done so that the player are able to play a piece of music without having to think too much about it. But once you get a basic understanding of music theory you will not only have infinite possibilities of creating beautiful chords and way more subtle voicings from our twelve tones but also become able to understand and solo and improvise over any progression you'll meet

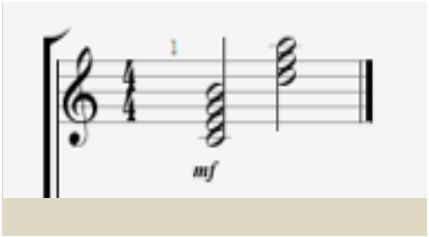
The Basics

The basic elements in music theory are scales, chords and arpeggios and its helpful of your understanding to now that the scale came first and so the chords and arpeggios was created from the scale. Even though the theory is the same for all instruments each instrument has a certain way that is easier to implement than others. Since the guitar is not a easy instrument to get an overview of there are some specific ways to easier understand or dive into the instrument. This is also seen in the way that the guitar is traditionally taught compared to something like the piano

Intervals

Everything that we are going to work with here is intervals. Our basic tool is a scale and we are taking benchmark in the major scale which consist of a variety of whole steps and half steps. Those whole and half steps can again be divided into thirds which means that if we take every second note in the scale we will get a third every time if we count our first note as well. this means that if for example we take the first and the third, that interval consist of two whole steps and are called a major third interval. If we then move into the next note Is in the scale and use the same formula of playing every second step(but including the first note as well we´ll call it a third) we get a whole step and a half step and this is also called a minor interval. This exact same formula can be continued all through the scale and this way we get a variety of minor and major intervals and this is what music theory is all about

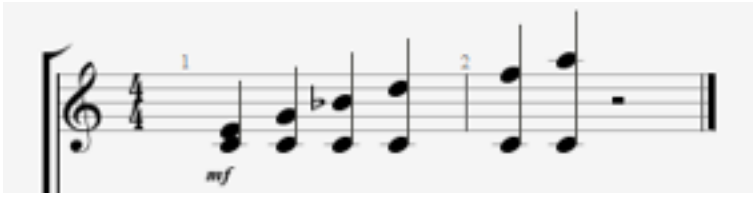
example 1



Example 1 is showing how the thirds are stacked. All seven notes of the C major scale is used here, I have divided it up in two since we cannot play seven notes at the same time on the guitar unless we play a seven string guitar. Its important to state that all theory does not work in pracsis so this specific example does not sound good of you where able to play all seven notes on your guitar. This is also somethin you can test on a piano. This is just my opinion of coures

Example 2

In example 2 you can see the intervals. The third, fifth, ninth, elleventh and thirteenth. The ninth is the same as the second note in the scale but one octave higher and the elleventh is the same as the fourth note in the scale one octave higher and finally the thirteenth is the same as the sixth note in the scale but one octave higher.

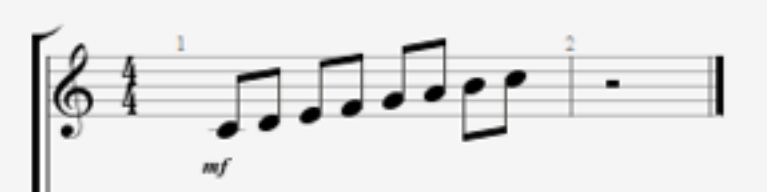


Scales

All theory used in the western world In all genres is seen in conjunction with the Major scale and in this program we mostly focus on the Major scale. The major scale can be used as seven different modes where the first one is called Ionian and is the same scale referred to when mentioning the Major scale. The same scale started on the second step(if we are in C Major it would be D) is called the Dorian scale and is a minor scale. The third scale is called the Phrygian scale and starts on the third step. The third step is also a minor scale(if we are in the C Major scale the third step would be E Phrygian) the fourth step is called the Lydian scale and is a Major scale(if we are in C the step would be F Lydian scale) the fifth step is called the Mixolydian scale and is also a Major scale(in C Major the Mixolydian would be from the step G) the sixth step has a few different names, it's probably the most used mode of the seven modes as the previous named from what is called the Church modes this step is called the Aeolian scale but is also called Natural minor(if in C major again the Aeolian step would be in A) The seventh step of the Major scale is called the Locrian mode and it's a minor flat five mode(if we are in C Major the Locrian step would be in B)

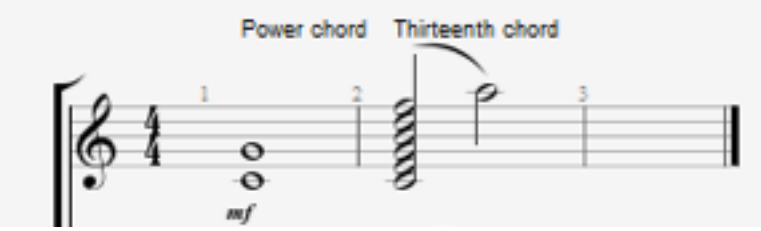
Example 3

Here is shown a C major scale



Chords

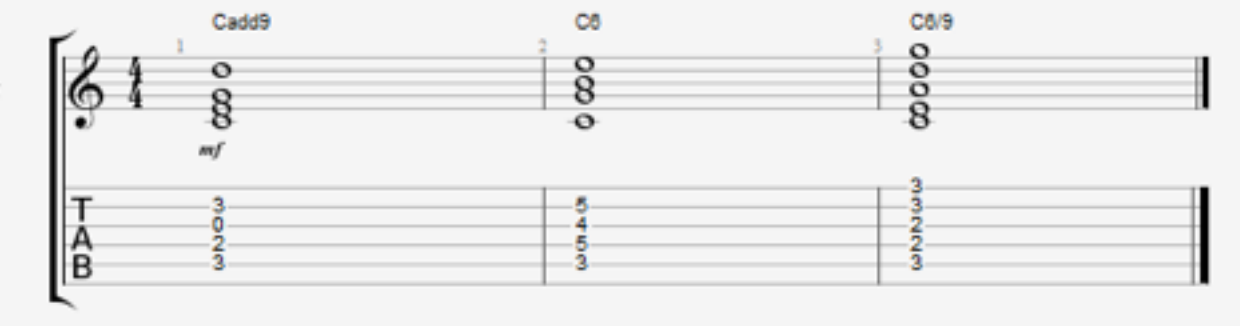
Chords are basically the name for playing more than one note at the time, you can then move on to discuss or have an opinion whether it makes sense to name a certain chord, but this is basically the way it is. For example power chords are two note chords that obviously consist of two notes from the scale(the root note and the fifth so as an example a C power chord consist of the C and the G which is the root note and fifth) and the thirteenth which theoretically consist of all seven notes from the scale(not possible on a six string guitar but we will discuss this more in detail later) ps. Notice I have made a hammer on to the A



3 and 4 note chords

What we encounter in most styles of music is the triads(3 note chords) and four notes chords. The triad consists of the root note, third and fifth. The four note chords consist of the same notes but with the added seventh. There are a few exceptions like the add9 chord, the sixth and six nine – chord. These chords has no seventh but still consists of a variety of four and five notes. The first example is basically a triad chord but with the second of the scale but one octave

higher added to the chord. So if we take a C chord it would be C which is the root note, the E which is the major third, the fifth which is the G and then finally adding the D. the D would be on octave higher than the second step after the root note you are using in the chord and this way you get a Cadd9 chord. In the next example we basically have the same triad but instead of adding the D one octave higher we add the sixth but not an octave higher. So the notes would be root note which is again in this example C, the third which is E and the fifth which is G and finally the A which is the sixth note in the C major scale. The final example we have a five note chord but no seventh. I just want to let you know that you often see the six nine chord with omitted fifth which is very often the case in chords with many notes. The easiest note to omit without it having an effect on the sound of the chord is the fifth. This chord also contains the chord of a basic triad but with the added ninth(the second note one octave higher than the second note in the scale) and added sixth. So in the case of using C as our root we get C and E which again is the third, the fift which is G and then the A which is the sixth in the C major scale. And then finally we add the ninth. The reason that its not called the second since the second and the ninth note in a scale has the same note is that they don't sound equally good in the chord plus it would not be an easy job to add the second note in the scale in the chord on a guitar, it would be quite a stretch



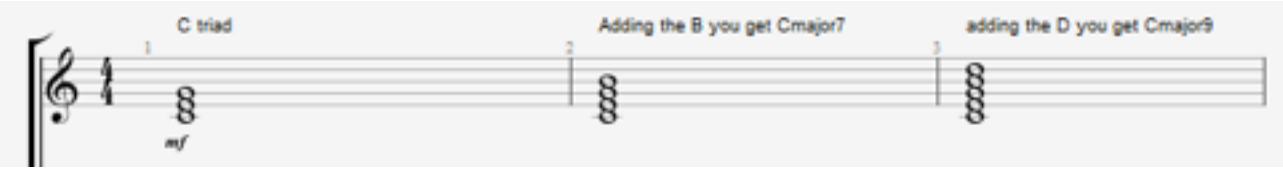
Notice that in the case of the C6 I have switched the third and fifth around. Typically you build the chords in thirds but because of the way that the guitar is tuned you sometimes have to switch the notes around in order to make the chord possible to play. So normally I would have the third on the second fret on the D string but instead I play the fifth on the D string fifth fret and move the third up one octave to the B string fifth fret. This is often the case with playing chords on the guitar but don't be alarmed, we still get the notes we need to play the correct chord

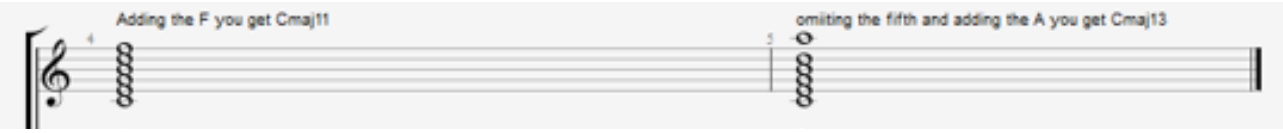
Expansion of the 4 note chord

Now that we are discussing the four note chord what this means is basically the seventh chord. This be the Major sevent, the minor seventh, the dominant or just the seventh chord and then finally the minor seven flat five. So this means the the add9 the sixth and the sixth nine chord are therefore not included. Now there should not be any misunderstanding. Let's start workin´ with the first step first and let's use the C major scale again as a reference, so on the first step we get a Cmajor7 chord because as we discussed previously we take every second step in the Major scale or to be more theoretically correct we build the chords from a variety of major and minor thirds. In this case we get a major third when we take the first note in the C Major scale and then skip the next note which is D and the move into the next note which is the E. this interval is called a major interval and consists of two whole steps on you guitar. So when you play these two notes at the same time you get a Major interval. This obviously the same whether

you play it in any of the other eleven different notes, its still the same interval just played from another note. As an example if we did the same in the A Major scale, the first note we get is the A, the next note in the A major scale is B, we skip that as we did before in the C major scale and then move into the next note in the scale which is a C#. play these two notes at the same time and you will get the Major interval just in the key of A instead of C. let's move back to our C major scale and stacking the thirds. Until now we have the C and the E which was our first major interval, this is also the note that establishes the type of chord, whether its minor or major and in this case it's a major chord, simply because the scale is a major scale. So in other words the chord is created from the scale and the scale therefore decides what type of chord you'll get when you build and stack the third intervals from the scales. We will now continue this formula stacking thirds and since the last not we landed on using our formula where the E, when we do the same skipping the next note in the scale which is an F and then moving into the next note in the C Major scale we land on the G. the interval between the E and the G is again called a third but further analysis shows that this time the third does not consist of two whole steps as it did between the first two notes we stacked, but this time the third consists of a whole step and a half step. This interval is also called a minor third. So now we have the C, the E and the G. if we play these three notes at the same time we get a C triad so in other words if we have a Major third interval plus a minor third we get a Major triad chord. There's no doubt that it can become a little confusing that we keep naming the intervals thirds and that the first interval is called the third and is what decides what type of chord we get, of course all the notes that the chord pertains has an influence on the name of the chord and the sound as well but the first interval in the chord decides if the chord is major or minor. When you refer to any of the notes in the chord or in the scale as well you have a name for each note, the root, the second the third, the fourth, the fifth, the sixth and the seventh. So the reason we call use the term thirds when we stack the chord is because the interval from the root note ot the third is obviously a third, the interval from the major third to the fifth is a minor third interval, the interval from the fifth to the Major seventh is a major third, the interval from the Major seventh to the ninth is a minor third, the interval from the ninth to the eleventh is also a minor third and finally the interval between the eleventh and the thirteenth is a major third. So whenever you hear or read a reference to the third in general what is meant is the first third, the one that decides whether its minor or major. The next note we will stack on our chord is the seventh. So referring back to what we touched upon before regarding all the interval names, our fifth which was the G, from that note we skip the next note in the C Major scale which is the A then continuing into the next note in the scale which is the B. the interval between the fifth and the seventh is a major interval and so in other words if we play a major interval plus a minor interval plus a major interval we get a Major seventh chord and in C that consists of C, E, G and B and for a second we as we touched upon before try another key doing the same and try it in A again for example we get A, C#, E and G# but the intervals are still the same just started on another note, so in this example we get a Amajor7 instead of a Cmajor7. If you count the notes in the C major scale you will see that skipped three notes. These three notes does not change the basic function of the chord, as an example if you play a G9 chord intead of a G7 chord you still get a dominant function from the chord but with a bit different flavoring to the chord and the same goes for playing for example a CMajor13 instead of a CMajor7 chord you still get a first step function from the chord which often is used to end a progression as opposed to the Dominant or the minor seven chords which in theory "wants to move on instead of rest" but don't become confused, this is just theory and some people's ideas to how the chords work, if you want to rest on a Dominant chord then by all means do so. If your song is supposed to sound that way then it's correct and you should not let yourself be diminished so to say by someone else's tastes, ideas and thoughts. So now let's

move on with our formula of creating thirds from the scale, the last note we used in our stack of triads was the seventh which was the B and using the formula to create yet another third we skip the next note after the seventh which was the B so the next we hit in the scale is the root note one octave higher, skipping that we move into the D one octave higher, between the seventh and the ninth we get a minor third. So when we add this interval to our stack of thirds we get a Cmajor9. Let's add the next third to the increasing stack of thirds. Our last note where the ninth which was the D in the C Major scale and as before we skip the next note in the scale which is the E which is also the note we called the third that decides the type of the chord, we skip that note moving into the F. the interval then between the Ninth which was the D and the F is another minor third and when we add the F to the stack of triads we get a Cmjor11. This chord is one that some people reject as usable but there's no doubt it can be used in the right mood and style so don't let that stop you. The final note left in the C Major scale is the A which is also the note you'll hit skipping the note after the eleventh which is also the G(also the fifth one octave below) using our third formula we hit the A. the interval between the F and the A is a major interval, so adding this Major interval to our eleventh we get a Cmajor13.





This is the formula which is used to build chords in general. What's interesting is that if you take this formula and start it from the next step in the same scale we will get a new chord. It's still the same notes but triad stacked from another step. Late we will discover how we can use this idea to compose chord progressions to improvise over and also to analyze and understand chord progressions in other peoples music but more of that later.

Dorian

So now we will go through the rest of the scale creating chords with that formula. As you may remember the second note in the C major scale is a D. So if we start the scale from the D our scale is now D, E, F, G, A, B and C and this is obviously the same notes as in the C major scale just started from D but if we use the scale over a D minor chord the scale becomes a minor scale and is called a Dorian scale and you will see why now. So if we as we did so many times before skip the next note in the scale which is E and then land on the F which is the next note in the scale. You will notice that we get a one and a half note step from the first note in our "new" scale which is an indication that we will get a minor chord and therefore also a minor scale. From the F we skip the next note in our D Dorian scale which is G and then land on the A and if we play D, F and A together we get a D minor triad chord. Next is adding the seventh as we did in the C major scale also called the Ionian scale. The fifth interval to the D was the A and continuing the formula from here we skip the next note in the scale which is B and then land on the C and if we play these four notes together we get a D minor seven chord. Now we have three notes left that can sort of color our basic chord and the first one is the ninth and in the case of the D Dorian scale it is the E. the seventh was the note C so continuing our third interval

formula we skip the next note in the scale which is the root note D one octave higher that the one we started on then landing on the E. We get a two whole step interval also called a major third and adding this note to our chord we get a D minor nine. Adding the eleventh means skipping the note after the ninth in order to follow the third formular. The note we skip is the third one octave higher than the one we use in the chord but the next note is the G which is called the eleventh when we add it to our chord. The interval becomes a major third interval because between the ninth and the third one octave higher is one whole step and between the third which is by the way the minor third we get another whole step between the minor third and the fourth. The last note we will add is the thirteenth following our stacking of thirds that follows the scale. Skipping the note after the eleventh we hit the fifth one octave higher than the one we used in the chord and the next note we land on is the B. the interval that we get following the formula from the eleventh is again a major third. Adding the B to our chord we get a D minor thirteen.

Phrygian

The next mode of the major scale is the third mode and also goes by another name which is Spanish minor. And it also does have that Spanish quality to the sound because of the flat nine, but let's go through it and see what happened on each step of the mode. We start on the E which is the third step in the C Major scale. If we decide that the E is now the root note we get E, F, G, A, B, C and D. The first interval we get picking every other note in the scale which is creating third intervals we get the G and the interval between the E which is our new root note is a minor third. So now we already know that we are working with a minor chord. From the minor third which was our G we skip the next note in the scale which is the A and the next note we hit is a B. The interval between the G and the B is two whole steps which is also called a major third. And as we discussed before a minor third plus a major third is a minor chord or also named a minor triad. The next natural step is to add the seventh which is what happens when we skip the next note after the fifth in the scale. The fifth was the B and the next note after B in the E Phrygian scale is the C so after that we land on the D. The interval between the B and D is a minor interval giving us a minor seventh. So now we end up with a E minor seven chord. Now we will add the ninth and the particular ninth is as we touched upon earlier very special sounding, it's a flat nine which means it's one half step lower than the previous ninths we have been working with until now. If we continue our thirds from where we left off which was our seventh. The seventh was a D so skipping the next note after which is an E which is also the root note one octave higher than the one we have in the chord. The next note in the scale is F and between the root note E and the F we only have a half step so the name of the chord when the F is added will be E minor flat nine. The interval between the last third which was D which is one whole step from from the root note E together with the flat nine then becomes a minor third. I will let it be up to you to decide if it's a good sounding chord. In my opinion it all depends on the situation, if you can find the right spot for this chord then I believe it should be possible to make it work. But that being said this chord is actually more used with a few more additions, let's check them out. The next note in the scale after the F is the G and we skip that to follow the third theory and land on the A which is also called a fourth interval from the root note but if we add this note to the chord the name of the chord will be E minor eleven flat nine. The fourths name becomes eleven because the note is one octave higher than the first fourth in the scale. One trick you can use to remember this is that since you know we have already added the seventh to the chord you just put the numbers together, four and seven which equals eleven. The interval between the ninth and the eleventh is major third because from the flat ninth to the minor third in the chord is a whole step plus the whole step between the minor third and the

fourth. The last note we have left in the scale is the C. And we hit that C after skipping the next note in the scale after our fourth or eleventh which was an A, the next note in the E Phrygian scale is the B which is also the fifth of the chord one octave higher than the one we use in the chord. We skip that note and the next note in the scale is then the C and in other words we play the next third with our formula which then becomes a minor step because we have a whole step between the A and the B and then just one half step between the B and the C. So adding the C to our chord we get an interesting name like E minor flat nine flat thirteen. This chord are more popular than the minor flat nine and if you check it out in the video or from the charts I think you will hear why.

Lydian scale

From now on I will not describe what the intervals between each thirds but just state what the thirds we are using. I hope this will inspire you to check it out for yourself

The next mode in the Major scale is called the Lydian mode and in the case of the C major scale we get a F Lydian scale. The Lydian scale is also a very interesting sounding mode. The only difference between the Lydian mode and the Ionian mode is the fourth step which is raised in the Lydian mode, but that one note completely changes the note of the scale and also create some very interesting sounding chords. Remember to check out the charts and even more effective play the scales for yourself. I need to say that the scale modes played by themselves and not played to anything can easily sound like just like a piece of the major scale. So in other words you will not necessarily get the full effect and sound of the scale unless you play it over the chord that pertains to the scale. Let's start the madness, we start on the root note F and skip the next note in the scale which is G and then land on the next note which then creates out first third, this one being a major third. Let's create a triad chord by adding the next third. We then go from the A which was our major third, then skipping the next note in the scale which is an B and landing on the next note again creating a minor third interval and as we experienced before a major thir plus a minor thid creates a major triad chord. The next third is the seventh. From the C which was our fifth to the root we skip the next note in the F Lydian scale which is D and then land on the E creating a major interval between the fifth and the seventh which then gives us a F major seven chord so until now the Lydian scale has given us the same chords as the Ionian mode, so the coloring of the chord happens in the additions, let's move on. The last note in the chord was the E which is the seventh, we then skip the root note and go into the next note of the scale which is G creating a minor third interval between the seventh and what becomes the ninth. So adding the G to our chord makes it into a F major nine and this again is no deviation from the chords we get in the Ionian mode. But the next third added to this chord makes all the difference. After the ninth which was the G we skip the next note in the scale A and then land on the B creating yet another major interval. This is the first time we get two major intervals from the root note and this very much changes the sound, so now adding the B to our chord we get the in my opinion beautiful sounding Major sharp eleven chord. Let's add the final note of the Lydian scale which is the D because after the sharp eleven which was the B we skip the next note in the scale C and move into the D. And the interval between the B and the D is a minor third and adding that minor third to the chord we get a F major thirteen sharp eleven.

Mixolydian scale

This mode is widely used for dominant chords or seventh chords, it's often referred to as a very clean sounding scale with no edgy sounding notes which is why some people chose to use the

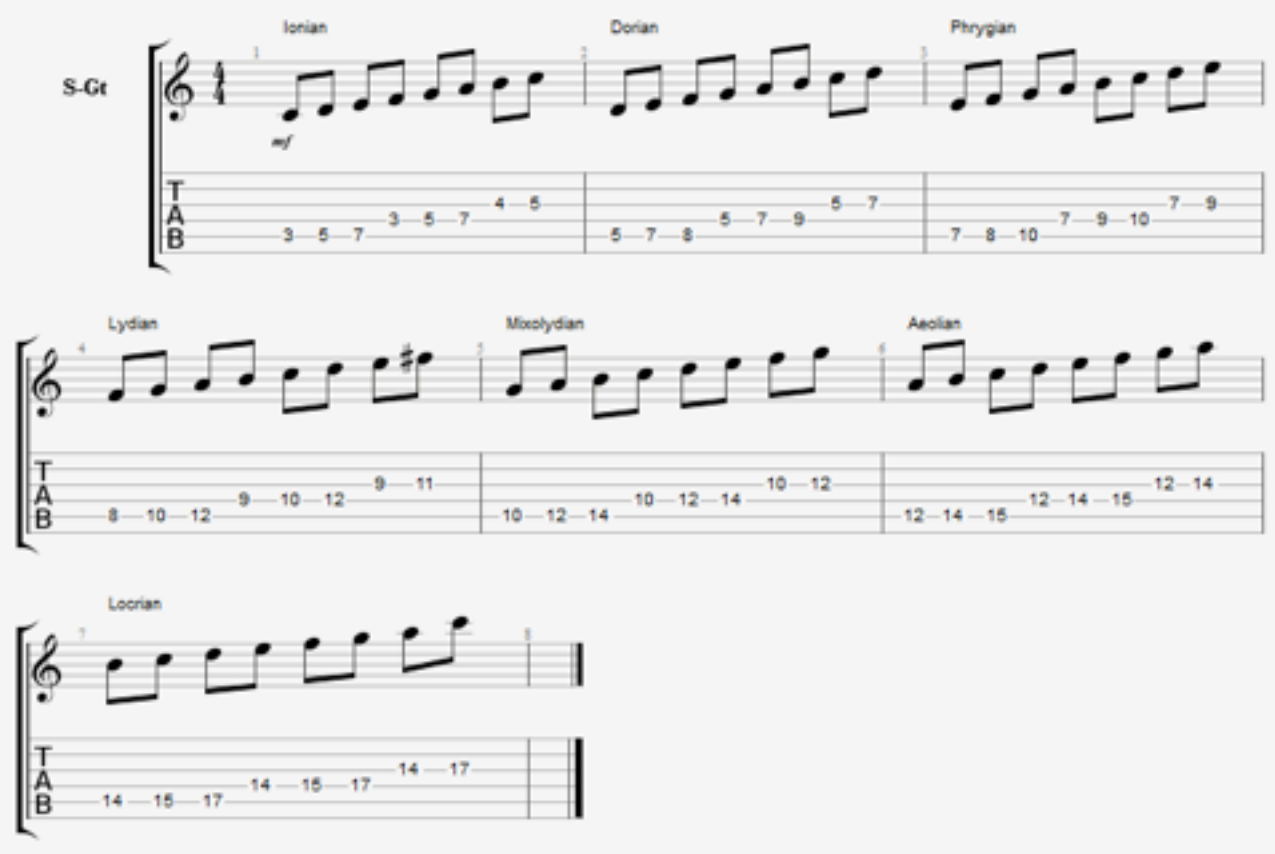
very popular fifth step of the Harmonic minor scale instead, but more on that later. This scale is still a very useful mode to get familiar with. Since we are working from the C major scale and the Mixolydian mode is the fifth mode or fifth step in the Major scale we get a G Mixolydian mode. The first third we create with our formula used from G we skip the A and move into the B, this is a major interval. But let's add the next third so we have a triad to play. After the major thir we need the fifth of the chord and when we continue up the thir intervals in the scale we see that we hit the D after skipping the C in the scalecreatin a minor interval from the first major third in the chord and as you know a major thir plus a minor third creates a major triad chord. Let's add the seventh, skipping the next note in the scale after the fifth which was the D we then hit the F which is then yet another minor interval and adding the F to our triad we end up with a four note chord named G seven that has a dominant effect to the first step of the scale which was the C, but more on that later, let's finish this mode by adding some color with the last three notes. So now we have our basic G seven chord, the seventh that we last added was an F and following the form skipping the next note in the scale which is the root note one octave higher so the next note we land on is A and adding that note to the G seven we get a G nine chord. Continuing the stacking of the thirds we skip the next note after the ninth which is the major third of the chord one octave higher then landing on the forth of the scale but one octave higher and since we already have the seventh and the ninth the C added to the chord becomes an eleventh. The final note in the G mixolydian scale is the E. We land on the e following the formula that creates a major third interval from the eleventh which was the C and adding the E to our G eleven chord we finally get a G thirteenth chord

Aeolian scale

The Aeolian scale is one of the most used steps in the Major scale and it goes by the name the Natural minor scale as well as the Aeolian scale. It's extremely popular in pretty much all styles of western music and once you get aquainted with it Im sure you'll experience for yourself why, it just sounds "right" but let's go through it theoretically. We as in the preivous modes are following the C major scale also called the Ionian scale and starting on the sixth step we get the Aolian mode. A, B, C, D, E, F and G and so the intervals between becomes whole step half step, whole step, whole step, half step, whole step and then whole step again between the seventh and root note. So the first interval we get from skipping the step after the root note is a minor interval, so we land on the C after the root note A. Again skipping the next note in the scale after the minor third which then becomes the D we land on the E and the interval between the the C and E is a major interval and as you know by now a minor interval plus a major interval becomes a minor triad chord. Lets quickly move on and add the seventh. The fifth was an E, we skip the next note in the scale which Is F and then land on a G and adding a G to our minor triad we get a A minor seven chord which we also got on the second and third modes so again the three last notes of the pertaining scales creates the difference between the scales and chords. After the seventh we make another third interval which means skipping a note in the scale and since the last note we used was G we skip the A one octave higher and land on the B and adding B to the chords we get a A minor nine chord. The ninth in the A Aolian scale was a B and skipping the next note in the scale which is the C we land on the D creating a minor interval and adding the D to the minor nine we get a A minor eleven. Adding the final note of the scale sets this mode and chord aparart from the other minor modes in this scale by getting a flattened thirteen but still having a natural ninth. In the Phrygian we had the flat thirteenth as well but also a flattened nine. So skipping the note after the eleveneth folowing our formula we hit the F which is minor third interval from the eleventh and adding the F to the A minor eleven we get a A minor flat thirteenth chord.

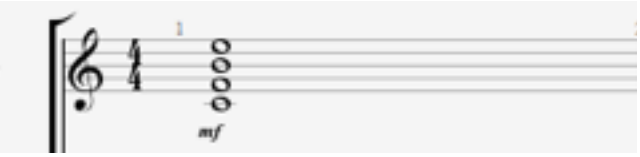
Locrian scale

This final mode of the Major scale is a very interresting mode, because if we only build a triad from the scale we get a Diminished chord but once we add the seventh we get a natural lowered seventh like in all the other minor modes we have been through as opposed to the Diminished scale which has a Doubble Diminished seventh which is actually a half step lower than the low sevenths in the modes we have been through so it's actually the same note as the natural sixth. But lets go through the steps to get a complete understanding of this mode. When we play the mode from the seventh step of the C Major scale we get the B Locrian scale. So following our formular we get as touched upon before a minor third, our first interval is created by going from the root note B and skipping the C landing on the D creating the minor interval, now the interresting thing happens, from the D we again use the formular skipping the next note in the scale E and land on the F which is again a minor interval and when we get two minor interval from the root note we end up with what is called a tritone or diminished triad chord. Moving on to the next triad interval we get a major triad because of skipping the G after the diminished fifth and then æanding on the A so now we have a B minor seven flat five also called a half diminished chord. We also get some quite interresting colorings to the chord with these last three notes from the scale which you will experience watching the video or even better building the chords yourself. We start out from where we just left, the seventh which was the A and skipping the next note which is the root note one octave higher than the one we used in the chord landing on the C. there's only one half step from the root note to this note which then gets dubbed the flattened nine thus creating a minor interval from the seventh following our triad stacking formula. So now we have a chord with a very colofull name, a B minor flat five flat nine. Moving on from the flattened ninth which was C and skipping the minor third of the Chord one octave higher which is the D and landing on the E which is then the natural fourth but since its one octave higher plus we have the seventh in the chord the chord gets dubbed B minor flat five eleven flat nine, that's a crazy long name. the final note we have left in the B Locrian mode is the G and the interval we get from skipping the note after the fourth or call it the eleventh which is E we land on the G giving on a minor interval and adding the note to our already crazy chord we end up with a B minor flat five flat nine flat thriteenth. As long as there are alterations to any of the coloring notes of a chord its mandatory to add them to the chord name so you will have the complete info if you have to improvise over the chord. This mode ends our work on creating chords from all seven modes of the Major scale.



Stacking fourths instead of thirds

There has been different formulas through time, different ideas and approaches, the first that comes to mind is Miles Davies´ quarter stacking of the chords which created a really special sound. Instead of creating chords from thirds as we have been doing and will continue to do through this program if we make use of the C major scale again. We would land on the C as the root, the F which is the first fourth interval and this interval consists of two whole steps and one half step. So continuing this process we land on the B. but here the fourth interval consist of three whole steps which Is also called a raised fourth. The next fourth is again a natural fourth, from the B we skip the C and D and land on the E. there is one very interesting element in soloing over stack of fourths and that is that you can practically play any note over the chords and it will sound good.



Lessons

Analyzing chord progressions

An extremely useful tool is to be able to look at a chord progression and then quickly analyzing the steps and see what scale or scales pertains to the chords. The fastest way to learn this is

actually to take existing chord progressions and see how the chords fit the seven steps we have been working with. In many cases you will discover that one scale fits entire chord structures in songs in most styles. But of course you can never be certain until you do a little research on the chords and the arrangement. Now we will go through a few fairly well known songs in different styles. When we have been through this section I strongly suggest that you do this a little every day. Choose a song you already know or find songs on the internet and start analyzing them using the system from the book. This will arm you in a way so you are able to improvise and understand most music you will probably ever come across.

Get everything you can from the Pentatonic scale

We are spending a lot of time on the Major scale and it's modes in this book but I don't want to neglect the Pentatonic scale and all its possibilities. First of all the Pentatonic scale is such a cool scale to start with for different reasons. It's quick to learn compared to the Major scale and its modes. It's physically easy to play as well compared to the Major scale, especially if the Major scale are played three notes per string style as I do and show. And finally it's really easy to sound good using the Pentatonic scale simply because the majority of the notes in the scale are chord notes. The Pentatonic scale consists of a root note, the minor third, the fourth, fifth and seventh so if you played the minor Pentatonic scale over a minor seven chord all the notes but one would be chord notes. If you played it over a minor triad chord obviously the fourth and seventh would be the only notes not in the chord. The Major step which is the second step in the Pentatonic scale are a little funny in the way that it does not include a seventh but a sixth instead and it contains a second instead of a fourth. So it's root note, second, major third, fifth and sixth. And for this reason the scale is not very edgy but very clean sounding and therefore not that popular. But the first step is probably the most widely used scale at all. I want to make sure that it does not sound like the Pentatonic is a beginner's scale per-se. Some of the most advanced players out there uses the Pentatonic scale a lot. Guys like John Schofield use it almost exclusively, but in many subtle and interesting ways. Shawn Lane used the Pentatonic quite a bit also using some really cool patterns. Im going to show you some examples that after the analyzes needs to be tested as well, because as you know you can only make an opinion on how something sounds once you have tried it for yourself. The cool thing is that the Pentatonic scale is quite easy to phrase with, it sounds so musical in itself as opposed to the Major scale where you really need to make an effort to sound interesting and musical. We will start by analyzing the minor Pentatonic scale played over a A seven chord and see what happens theoretically with all the steps in the scales against the chord. The first step even though it's basically a minor scale are very popular to use over a major chord especially in Blues because the minor step and flattened seventh gives it that bluesy vibe that you could never get with any of the major scale modes unless you get very creative with the scale.

A minor Pentatonic played over A7

you might get confused by the name Raised ninth on the second step. The reason for this name is because the chord already contains a third and other than the chord is in charge of what the name of the notes in the scale becomes the Major third overrules the minor third. So if you play a scale containing both the Major and minor third you should refer it to a major scale with a raised ninth and not a min or scale with a lowered fourth

semitone

If we take our minor Pentatonic scale and instead of playing it in A we move it one half step up the scale to B flat but we still play it over the same A seven chord something very interesting happens. We get some pretty cool alterations to the chord with these new notes we get from playing the same scale pattern only move one half step.This is again a situation where you really need to try it out in praxis before you can decide if you like the sound. The only thing that comes to mind as a problem, but still strictly from a theoretical point of view is the major seventh. That Major seventh could come in conflict with the flattened seventh in the chord, but let's try it out in praxis. Let's go through the B flat and see what happens to each note when played to the A seven chord. The first note, B flat becomes a flattened ninth to the A seven, the next note D flat becomes a major third which is really cool because it's a chord note. The next note in the scale is E flat and I choose to call it a raised fourth instead of a flattened fifth since we already have the perfect fifth in the chord. What was the perfect fifth in the previous Pentatonic scale now becomes a flattened sixth and the sevenh which was flattened in the previous example now is raised. Let's rock and try it out in real life.

Whole tone

Moving the minor Pentatonic another half step we get a very useful scale and pretty much a Dorian scale without the seventh and third. Playing the scale from B we get B, D, E, F# and A. the first note B becomes a ninth to the A seven chord. And the second that originally where the minor third now has a fourth function, the original fourth is now the fifth and the fifth becomes the sixth. Finally what used to be the seventh is the root note. So as you can see this way of using the scale should fit in nicely but let's try it out in real life.

Minor third

If we move the Pentatonic scale up the neck in proportion to the A that we started out with we get these notes. C, Eb, F, G Bb

This seems to be a very interesting scale, we get the very important flat seventh but then the rest of the notes are exclusively coloring to the chord, without even hearing it yet I know that the raised ninth and the flat sixth will fit into my taste, so there's only two notes left that are a little uncertain, but let's try it so you can decide for yourself

Major third

Moving the Pentatonic scale up the fret board another half step creating a major third interval from the benchmark. We get the following notes. C#, E, F#, G# and B. and right of the bat we can see that the G# could come in conflict with the G in the A seven chord, because the G sharp will function as a Major seven to the A, but again it's important to understand that we are talking theory and everything needs to be tested in rality to see if you can use it in your own music for one specific thing? That's why you can only discuss whether you like the sound of something and not really if something is right or wrong. That being said it should be possible to find people who disagree since that is the human nature

Other than that major seventh you can see in the chart that this way of using the Pentatonic scale over the A seven chord gives some very nice and usable steps, major third, perfect fifth are chord notes and the natural sixth and ninth are steps that also are available in the Mixolydian scale which we touched upon before are a very clean sounding scale

Perfect fourth

Let’s move the scale up a perfect fourth, then we get a Pentatonic scale consisting of D, F, G, A and

As you can see in the chart other than the chord notes, the seventh and root note this is also an example with some really good colors to the scale like the raised ninth and flat sixth

Diminished fifth

Playing the scale a Flat fifth interval up from the chord gives us E flat, G flat, A flat, B flat and C flat. This scale gives us some quite challenging notes to the chord, the first one that might conflict with the notes in the chord is the major seven. This seems like a step that might not be that easy to make work

Perfect fifth

Playing the Pentatonic scale a perfect fifth from the A gives us a scale consisting of E, G, A, B and D and you can see in the chart that with this scale we get three chord notes plus a natural ninth and fourth which might not be that interesting, but I will let you decide

Flat sixth

Next is taking the scale a flattened sixth interval up from A which gives us a scale consisting of F, G sharp, A sharp, C and D sharp. By now you can see that its certainly not all the steps that are usable but its definitively worth thinking outside the box with scales and get some interesting sounds. This particular step does seem to be one of the crazy steps though, but let’s try it out in praxis

Natural sixth

Now we will try the Pentatonic scale from a natural sixth interval from the A giving us a scale consisting of F sharp, A, B, C sharp and E. Here we get some really clean steps with no crazy alterations with three chord notes, the natural ninth and sixth so this Is a way to get a sound reminiscent of the Mixolydian scale but that are even easier to use if you have a strong base in the Pentatonic playing

Flat seventh

Moving the Pentatonic scale so that it starts from the flattened seventh where off to a great start but let’s see what happens with the next notes. The scale then consists of G, Bb, C, D and F. So other than the flat seventh you can see in the chart that we get some extremely interesting and usefull steps. The flat seventh, the major third ar critical chord notes and then we get the interesting alterations flat nine and flat six so I would call this a very cool way of using the Pentatonic minor scale. In other words, move it down a whole stop from the key and you get a very interesting sound, quite a bit more edgy than the traditional way of playing the Pentatonic scale.

Major seventh

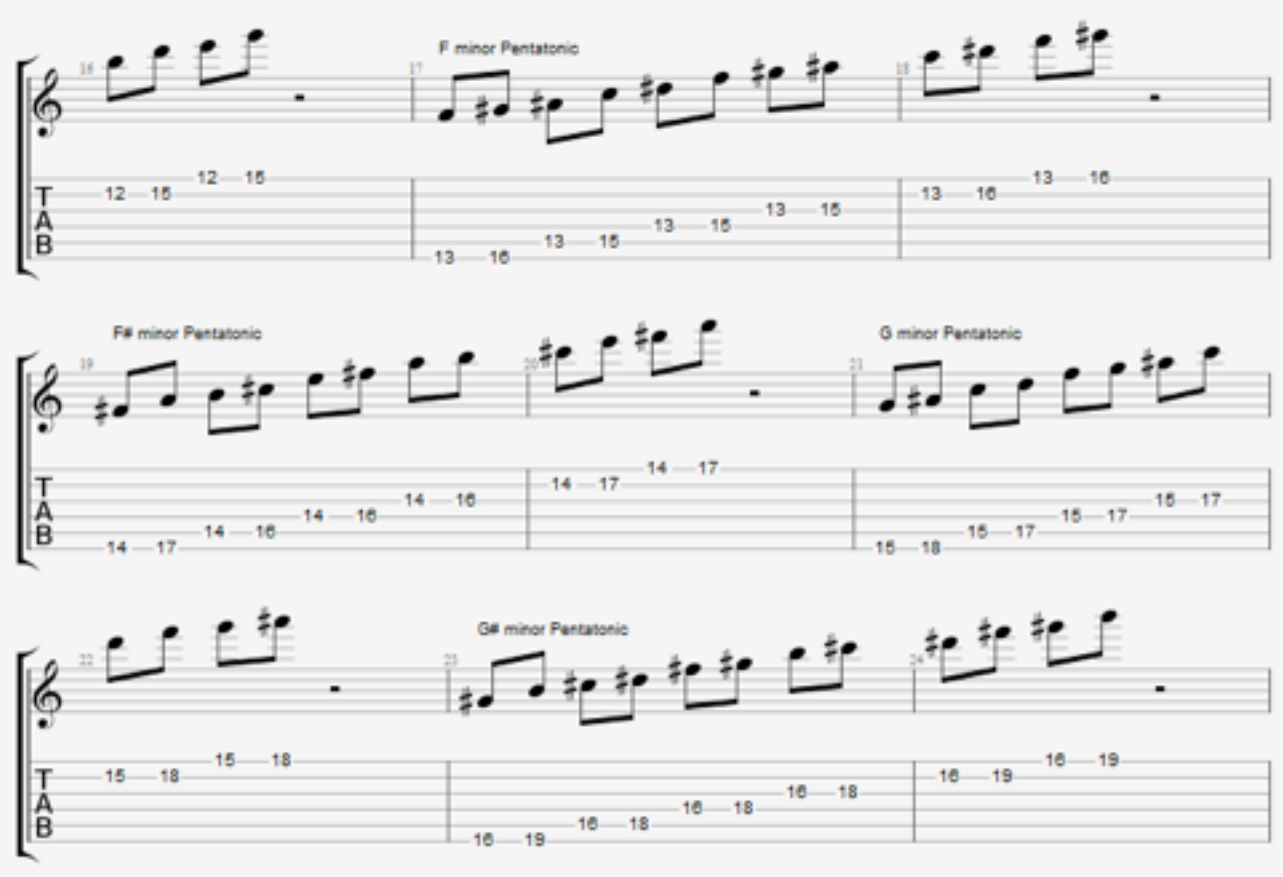
The final way that we can use the Pentatonic scale is unfortunately off to a bad start with the major seventh that so easily conflicts with the flat seventh which is in the chord, but let’s see what the rest of the scale gives us. The scale looks like this. G sharp, B, C sharp, D sharp and F sharp. So you can see here in the chart that other than getting the major seventh we actually

get some ok steps but only one chord note which is the major third but I will let you decide if this is a sound that are usable in the style of music that you play, let’s hear it

First step	Second step	Third	Fourth	fifth

Root note	Raised ninth	Fourth	Fifth	Flat seventh
Flat nine	Major third	Raised fourth	Flat sixth	Major seven
Nine	Fourth	fifth	Sixth	Root note
Raised ninth	Raised eleventh	Flat sixth	Flat seventh	Flat nine
Major third	Perfect fifth	Natural sixth	Major seventh	nine
Fourth	Flat sixth	Seventh	Root note	Raised ninth
Raised eleventh	Natural sixth	Major seventh	Flat ninth	Natura ninth
Fifth	Sevent	Root note	Nine	Fourth

Flat sixth	Major seven	Flat nine	Raised ninth	Raised eleventh
Sixth	Root	Ninth	third	Fifth
Flat seventh	Flat nine	Minor third	Fourth	Flat sixth
Major seventh	Ninth	Major third	Raised eleventh	Natural sixth



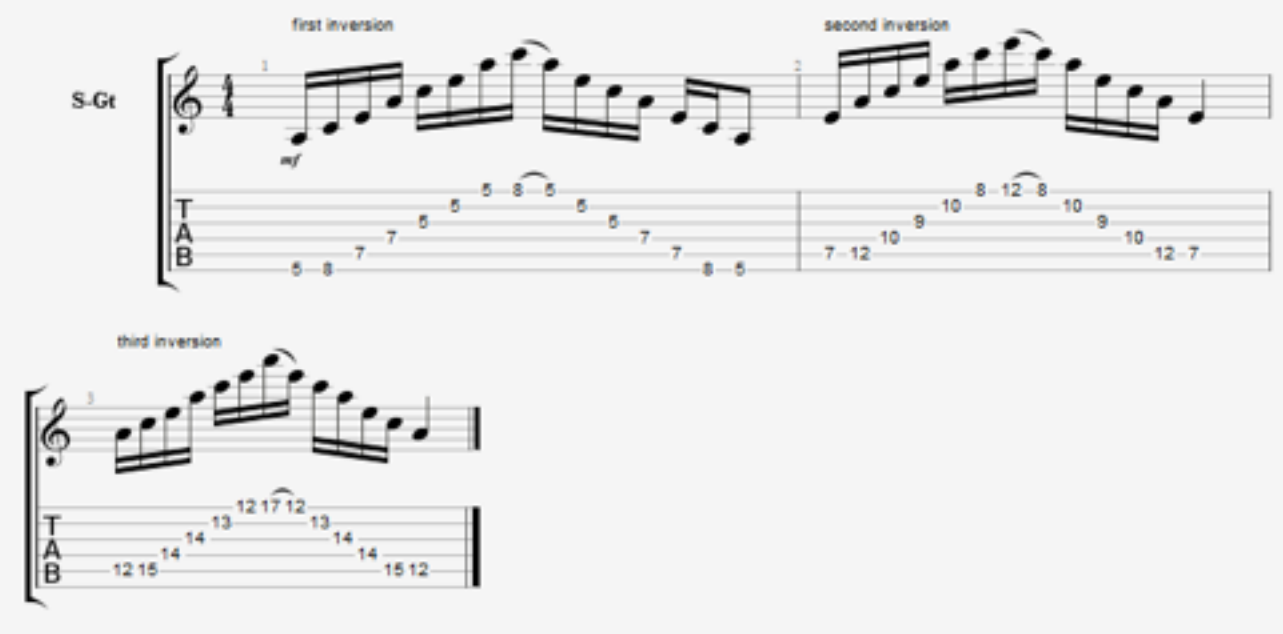
Using arpeggios to alter chords

An extremely cool and relatively easy way to alter the sound when soloing and improvising is the use of arpeggios. In this lesson we will exclusively work with minor and major triad arpeggios. Another way is to use the previous Pentatonic ideas but instead of using the complete Pentatonic scale use a minor seven arpeggio, the only difference between the minor Pentatonic scale and the minor seven arpeggio is that the Pentatonic scale also includes the fourth. In this section I will start you off with some different examples and ideas and then you need to start experimenting with the concept in order to really benefit from the idea yourself. We will use the same basic idea as with the Pentatonic scale by using the A seven chord to experiment with our arpeggios over. Since arpeggios are basically chords where each note are just played one note at the time we can easily take a simple triad arpeggio and analyze it in conjunction to the A seven chord.

Minor triad arpeggio examples

Here are the minor triad arpeggio played from all twelve chromatic steps. Notice that the second, third and sixth steps are all minor steps that fits into the same key. So since the A seven chord pertains to the fifth step we would then be in the key of D and since we are in the key of D we can take the three minor steps from the D majors scale which would then be Em, F#m and Bm. And if you take at those steps in the chart you will see that if we still use the arpeggios that fits our scale(D major scale) we would in the first example E minor triad arpeggio get the fifth, flat seventh and ninth to the A seven chord which is pretty awesome. If we played the third step minor arpeggio from the D major scale over the A seven chord. We would get the Natural sixth, root note and major third, that might not sound as interesting but that's up to you to decide. And finally the sixth step of the D major scale which is a B minor arpeggio gives you the ninth, fourth and the sixth

Am triad arpeggio	Root	Raised ninth	Fifth
Bbm triad arpeggio	Flat nine	Major third	Flat sixth
Bm triad arpeggio	Natural ninth	Fourth	Natural sixth
Cm triad arpeggio	Raised ninth	Raised fourth	Flat seventh
C#m triad arpeggio	Major third	Fifth	Major seventh
Dm triad arpeggio	Fourth	Flat sixth	Root note
D#m triad arpeggio	Raised fourth	Natural sixth	Flat nine
Em triad arpeggio	Fifth	Flat seventh	Ninth
Fm triad arpeggio	Flat sixth	Major seventh	Raised ninth
F#m triad arpeggio	Natural sixth	Root note	Major third
Gm triad arpeggio	Flat seventh	Flat nine	Fourth
G#m triad arpeggio	Major seventh	Ninth	Raised fourth

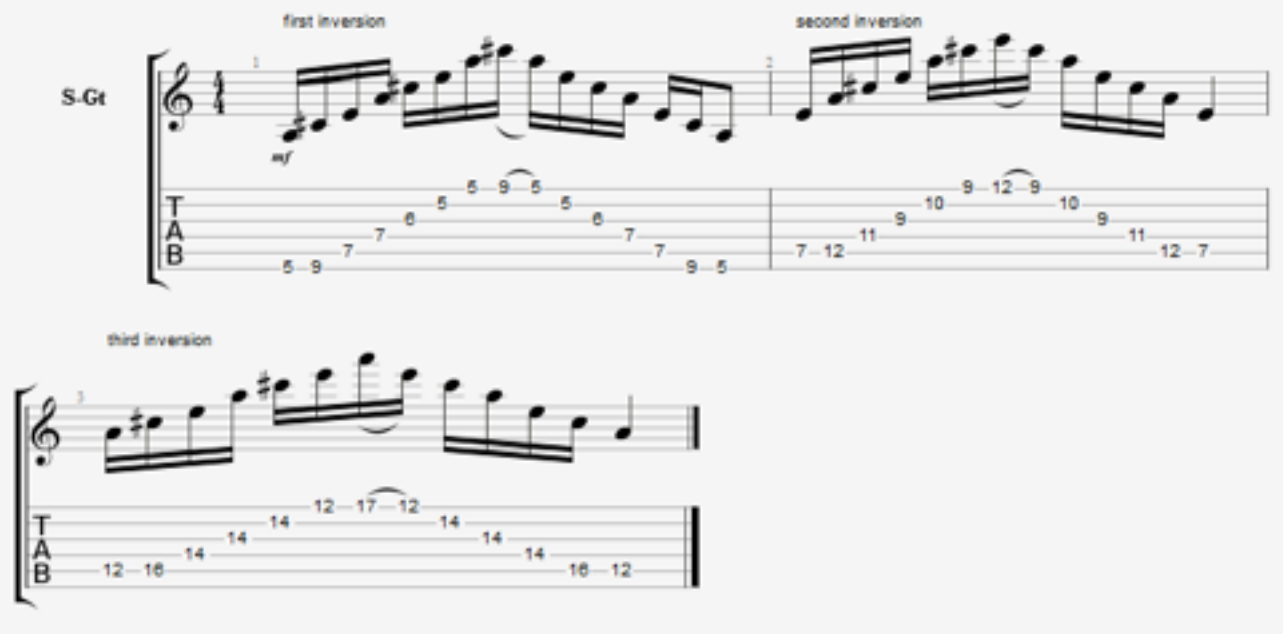


Major triad arpeggio examples

As we discussed in the minor triad arpeggios, we have some steps in the scale in which key the chord we play over pertains to which are the first, fourth and fifth step and Since the key is D we get D major, A and B major triads and if we just check with the chart below you can see that the D triad arpeggio gives us root note, fourth and natural sixth. The A is obviously just root, major third and fifth while the B gives us natural ninth raised fourth and natural sixth, let's check and hear which of them sound good. In case of both the minor and major triads, since we are playing the arpeggios over a seven chord, the chord even though in general a very flexible chord to play over which means that most alterations can work over it, but that being said if you remove the seven the chord becomes even more flexible which means that even more of the arpeggios will work over it. So in other words the less notes in the chord you play over the more options you have regarding the arpeggios and scale choice you choose to use.

A triad arpeggio	Root	Major third	Fifth
Bb triad arpeggio	Flat nine	Fourth	Flat sixth
B triad arpeggio	Natural nine	Raised fourth	Natural sixth
C triad arpeggio	Raised ninth	Fifth	Flat seven
C# triad arpeggio	major third	Flat sixth	Major seven
D triad arpeggio	Fourth	Natural sixth	Root note
D# triad arpeggio	Raised fourth	Flat seven	Flat nine
E triad arpeggio	Fifth	Major seven	Natural ninth
F triad arpeggio	Flat sixth	Root note	Raised ninth
F# triad arpeggio	Natural sixth	Flat ninth	Major third

G triad arpeggio	Flat seven	Natural ninth	Fourth
G# triad arpeggio	Major seven	Raised ninth	Raised fourth



Analyzing chord progressions

How the Chords pertains to the scale

Why is it a good idea to understand music theory? well the first answer to that is to have an idea why you are doing what you do on your instrument, why it sounds the way it does and the most important answer, to be able to produce and reproduce the sound you want to hear. The final answer to the question is to give the musicians you might come into contact with a clue on what you are doing so they have a chance to find their role in the music. Of course there's the possibility that you don't intend to play with other musicians or in a band. And in that case you don't necessarily have to communicate with anyone regarding what you are playing, but what I find to be critical is to have an idea on how to manifest what you hear in your head or reproduce what you hear others do that you want to use in your own playing and from personal experience. There's nothing worse than creating something that sounds awesome and you don't know why it get's a specific sound, or hearing someone else creating just the sound you are looking for and the only tool you have to reproduce the sound is by trial and error

Imagine that you have a chosen group of notes in a scale

To understand how the chords pertain to the scale you have to understand the relatively simple template that you follow in order to create a certain chord from a scale. I find its easier to understand if you know that the scale was invented before the chord so you have to imagine that destinguished notes of the scale sounds particularly good and so the template is used to produce chords in any scale to reproduce the result experienced from the major scale which is the mother of scales and therefore all other scales are seen in conjunction to the Major scale in order to baptize them

Indications to what is the key

Once you get acquainted with the seven steps of the major scale and you at least become familiar with the basic three or preferably the four note chords that are created from each of

the seven modes you step by step get some ideas as to what the key could be looking at a piece of music. Let's try a few easy examples. I like to start with songs that many people know so we will start with the Bob Dylan classic Knocking on heavens door which is G, D, Am, G, D and C. I will give you my method and what I look for to quickly identify the key. I notice the C and the D which are two major chords with one whole tone step between. If you think back to our exhausting work with the modes youll remember that we have two major modes with one whole tone step between in the fourth and fourth step. So now let's just assume that this is the correct key, if C and D are the fourth and fifth step, then what are they the fourth and fifth step to? If you guessed G then you where correct. So now we have found that some of the steps do fit the key of G. so lets see if the remaining chord fit as well, the only chord left is Am so what we are going to do is to see if there is an A in the G major scale and it turns out that that the second note in the G major scale is an A, and referring back to when we worked with the church modes you'll remember that on the second step on the Major scale we have a minor step, also called the Dorian mode. So now you can see that G D Am G D C is the first, fifth, second, first, fifth and fourth step of the G major scale also described with roman numbers: I – V – II – I – V – IV. What this means is that to improvise over knocking on heavens door we can use the G major scale also called the G Ionian scale simply because the notes in all the chords pertains to the G Ionian scale. Lets move on to something a little more challenging.

Here I have chosen another quite well known song. It's the Eagles classica Hotel California and I can tell you right now that this song will challenge us a little more than the previous. The Hotel California chord progression is as follows verse. Bm - F# - A – E – G – D – Em - F#. Chorus. G – D – F# - Bm – G – D – E – F#. let's assume that we have no clue what key this could be so we will just start from the beginning which is B minor and if you think back to the church modes you might remember that when we need to find the minor step we use the sixth mode called natural minor or the Aeolian mode. And a way that makes it all much more easy is once we have identified or hope that we have identified the key, and that it is minor then finding the relative major because then from that you can add all the steps as we did previously in the case of the key of G where we added the first, second, fourth and fifth step modes. An easy way to do this when you are finding the major relative to the minor is just to count up since the interval up from the minor step to the major relative is a minor interval, so simple ! so if you count up a minor interval from the B we'll land on the D. So now that we have a suggestion for a key then let's as we ded in the previous example see how many of the root notes in each of the chords are represented in the D major or B minor scale.

D Ionian/ Aeolian	D	E	F#	G	A	B	C#
modes	major	minor	minor	major	major	minor	minor flat five

So from this chart you can see where the chords from the song fits the B Aeolian scale.

Verse	Bm	F#	A	E	G	D	Em
	VI	III	V	IIm	IV	I	II

So from the second chart you can see that there's actually only one chord that does not fit in. it's the E mjor chord that consists of E, G# and B and if you check back to the first chart you'll see that the only note that does not fit from the scale is the G sharp. Later we will discuss what that note's function can become, because it's not all situations where it sounds wrong but for now we'll just notice that that single note from the B Aeolian scale does not fit. I can tell you now that this is a very good percentage so you can chose to do one of two things, one is to shift to a major scale when you hit that E major chord and the other option is to just play the note G# when you enter the E major chord and that can be done in two different ways as well. one is quite theoretical and the other is more musical

The musical option

This option is that once you hear the chord changes to E you make sure that when ever you get close the the G in the scale you play G sharp instead of G. This way can be quite technical if you are not very familiar with improvising with the church modes you may need to count measures and analyze the fret board for the G sharps in your area. But at some point when you get used to improvising in the church modes you will have enough attention left from just playing to actually hear what the next note should be, so even without identifying you should theoretically play to be correct you will be playing al the right notes at the right time, but this obviously takes time. But this is in my opinion also the way that you should aim for because you'll end up actually playing music and at the same time your ear will make sure you hit the correct notes. But this is not attained without a very strong foundation in the scales, because once your knowledge of the scale patterns becomes strong enough you will be able to take attention away from the scale patterns simply because you know them so well and focus more on creating melodies over the chord structures no matter what musical style you are improvising over

The theoretical option

The theoretical option can be necessary in order to develop your skills on playing the scale patterns well enough plus it will make you more aware on how long each chord lasts. What you have to do specifically is to keep your attention on the scale patterns that you play while you are actually just barely listening to the changes of the chords. But before you start you have to make sure that you are aware what number in the sequence of chords the E triad appears and once that happens you again have two options. One is to analyze the fret board in the area you are where all the G sharps are, the other way is to simply pick one of the major scale modes, as we discussed before we have three, the Ionian the Lydian and the Mixolydian. Without even testing my guess would be that the Mixolydian mode or the Ionian mode would fit best, simply because the raised eleventh/fourth in the Lydian could sound a little funny, but you will certainly get the most benefit from trying them all. This way of improvising I actually enjoy a lot, shifting between scales is a big satisfaction once you know them by heart. Remember to try for yourself as well and make your own decision what works best for you.

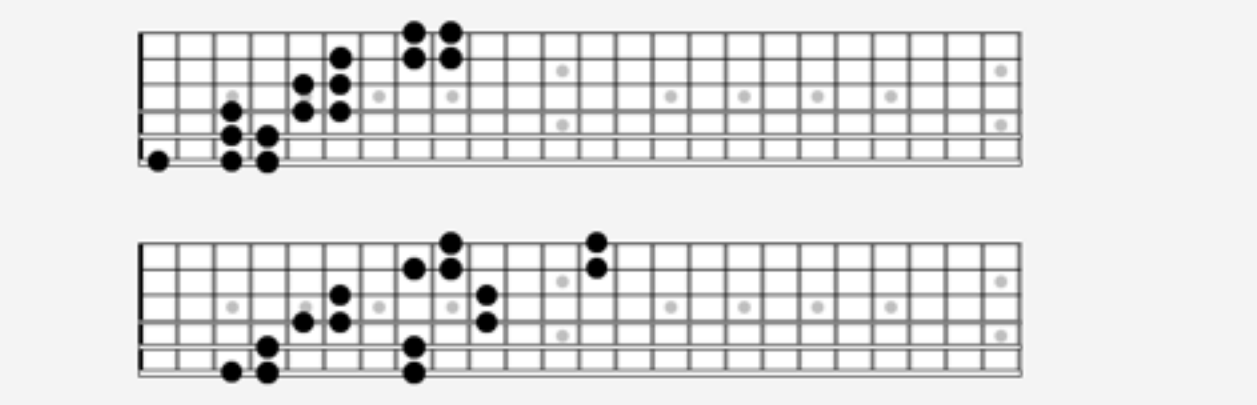
Using exotic scales *new chapter*

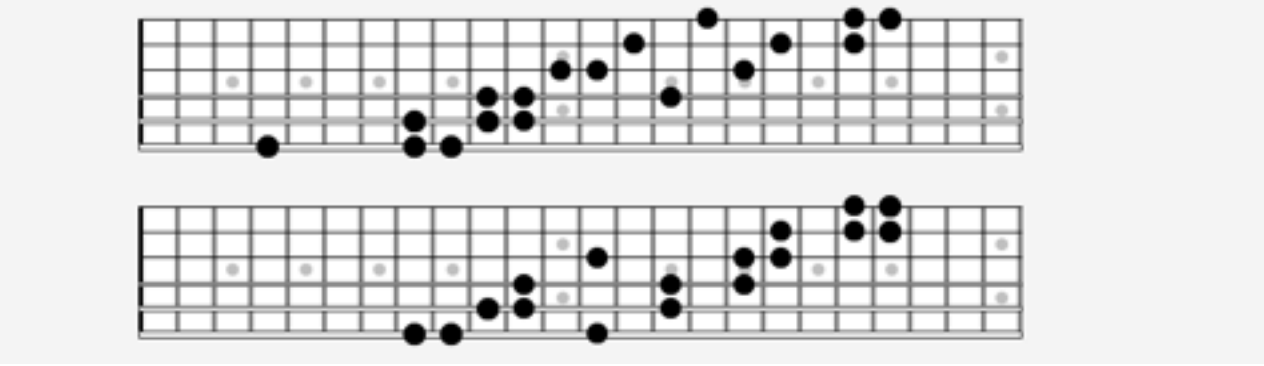
A very effective way of altering you sound and vocabulary is to make use of Exotic scales in your playing and improvising. We will use examples of scales that has very distinct sounds in themselves, in many cases you can actually use the basic modes in the Major scale and add or omit certain notes to get a specific sound and even though this is also a smart way to get the certain sound you are after I believe that you get another view over the fret board, become more aware of new options for licks and phrasing as well as get a more varied way to use the scale and its patterns, and one more thing that I personally really have made use of regarding Exotic scales is composing licks from new scales, this is an extremely inspiring element of learning new and Exotic scales.

Starting with what we already know

In these first examples I want to use the concepts of the new Exotic scales by seeing the in context with the modes of the Major scales, the first thing that comes to mind is the Aeolian or the Natural minor step from the Major scale. So let's start with a scale that only consists of five notes, the Japanese minor scale, it has a very distinctive sound, it consist of root note, second, minor third, natural fifth and flattened sixth and by now we can see that this in theory is the same as omitting the fourth and seventh of either the Natural minor or Harmonic minor scale. I personally play it as a three note per string pattern on the first string where I start it and then the next string I move into a two note pattern, this is repeated in octaves. This also means that the scale pattern moves very much in a sideways fashion which ultimately means that it takes up quite a bit of space on the fret board. In some cases when I move further up the fret board I do make use of some exclusively three notes per string patterns, these works great for creating Legato licks as an example.

This is a scale that in my opinion really benefits from creating chops that uses moves around on the fret board in such a way so it becomes easier to use the lick whether you are on the low or high end of the fret board, this could be done by using slides between patterns. Notice that I have created patterns that fills out the entire fret board, on the smaller frets I use almost only three notes per string



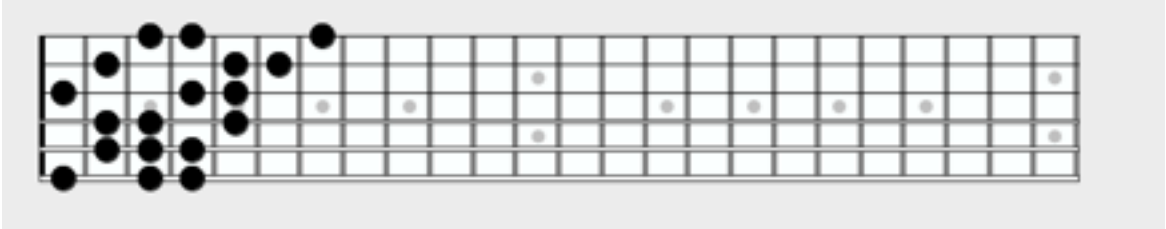


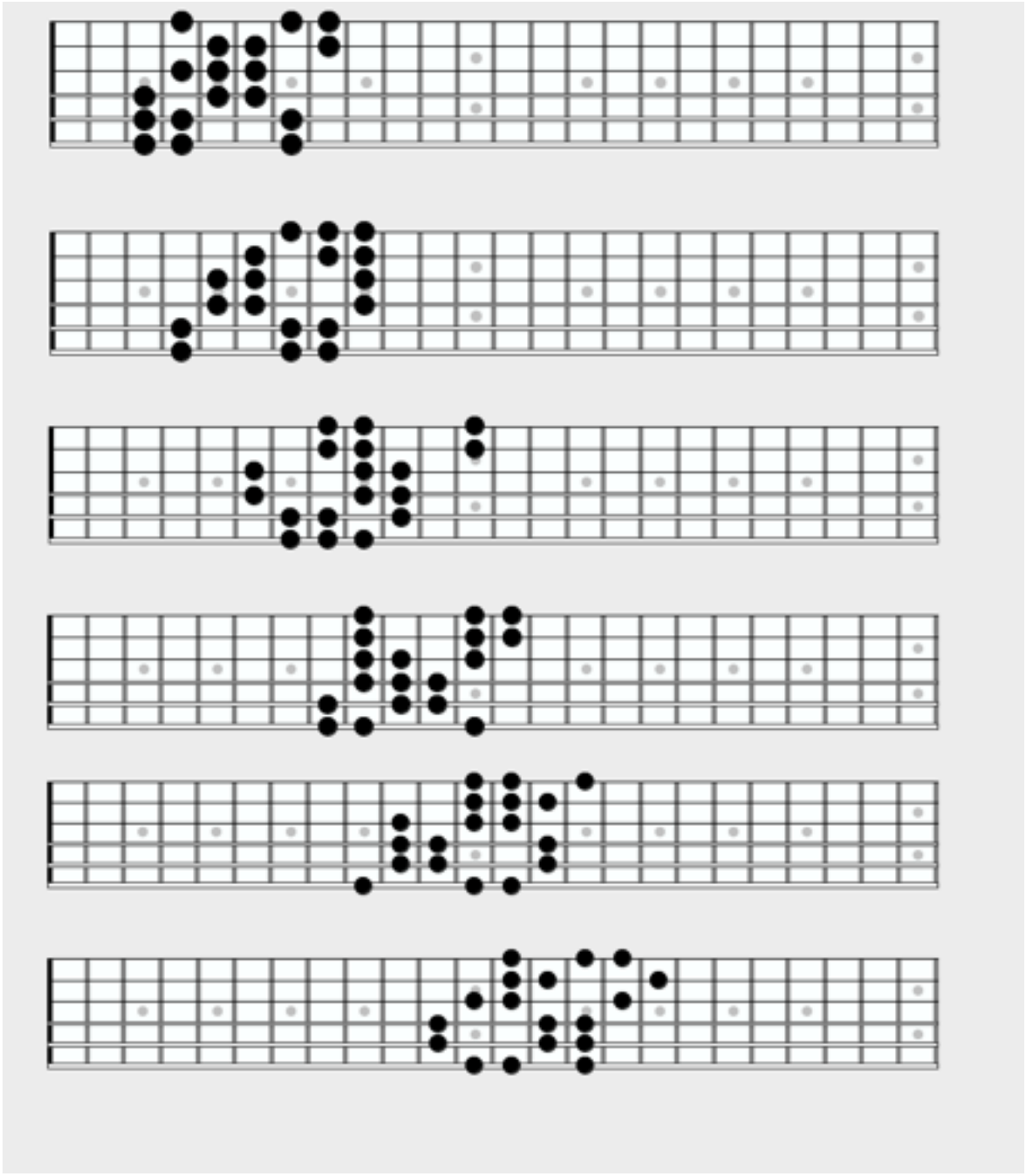
These patterns are obviously not as easy to play as the regular three notes per string patterns that we get in the Major scale as well as many of the other popular scales like Harmonic minor and Melodic minor. But as described before it’s perfect to create a specific sound with this as well as creating some pretty insane chops.

Bulgarian minor

The Bulgarian minor scale is a lot easier to play physically with the three notes per string concept even though it has some unusual structures like three semitones in a row from the raised fourth to the natural fifth to the flattened sixth. The Bulgarian minor scale is quite a curiosity, it's minor with a raised seventh much like the Harmonic minor and Melodic minor scale, and a flat sixth like the Natural minor and Harmonic minor scale but then the real kicker is the raised fourth that it pertains. This results in a short chromatic course which is between the raised fourth, the natural fifth and the flat sixth. But another really interresting thing about this scale is that we then get not one but two one and a half step intervals. Between the flat sixth and the raised seventh like in the Harmonic minor scale but also between the minor third and the raised fourth. So this gives us quite some interresting patterns. So since we get a minor scael and the flat sixth and the Major seventh it would be a natural thing to combine it with the Harmonic minor scale since actually the only difference there is between those two scales is the raised fourth in the Bulgarian minor compared to the natural fourth in the Harmonic minor scale. This is the easiest way of combining scales with this particular one, but you coul also experiment with combining it with the Natural minor since that is the one that most people use. This will

give a very drastic change in sounds between the scales but some spots do call for this kind of change of sound. But this is more a question of taste of course. Obviously making use of this scale is in some situation a little dangerous, especially because of the raised seventh and thats the reason that it fits better into the Harmonic minor scale. Because it's very seldom that you make use of the raised fourth in the chord and for this reason the raised fourth only gives a change of sound and does not sound wrong since the raised fourth is in most cases not a chord note. In the case of playing over a minor seven chord it can be a little far fetched to use a scale with a raised seventh though, but if you play over a minor triad it becomes much more flexible



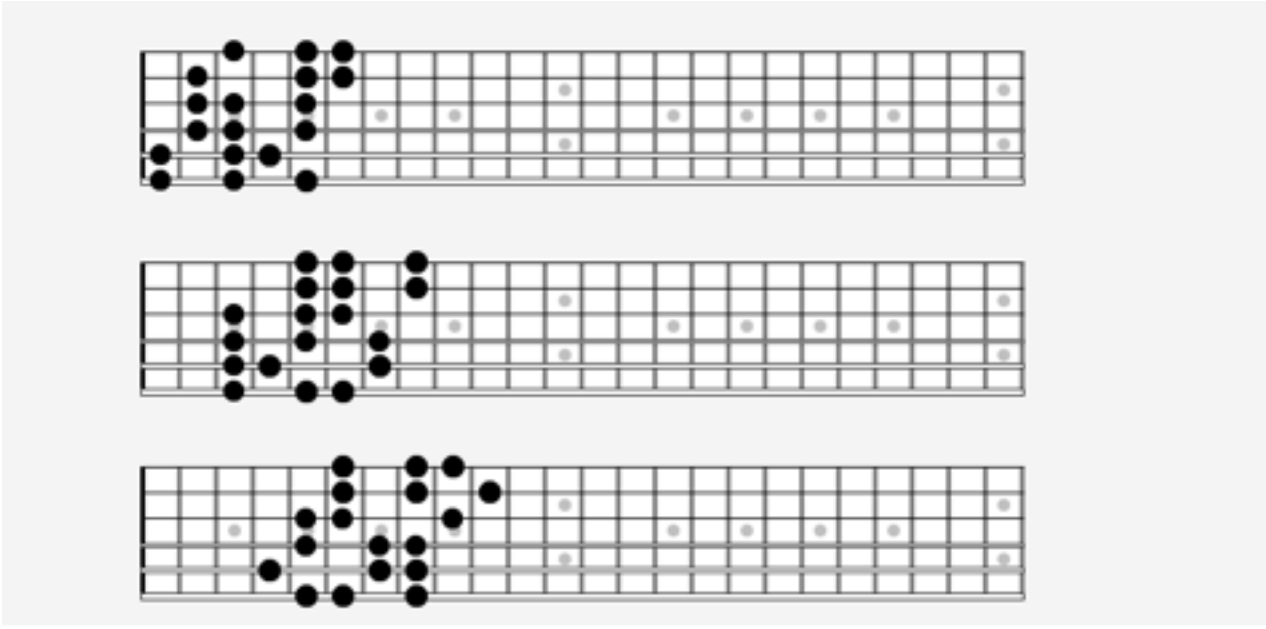


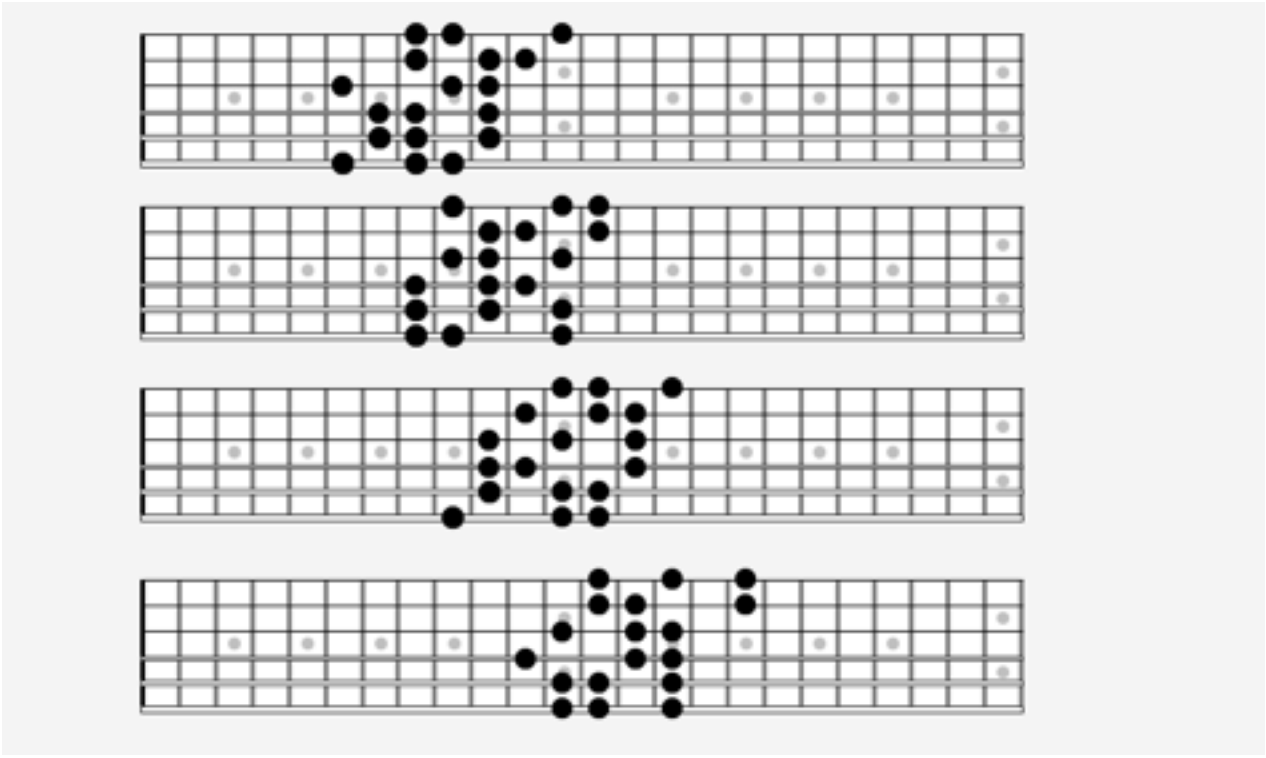
Here is all seven three notes per string patterns shown and if you have a strong basis in the Harmonic minor scale three notes per string pattern you will immediately see that quite a few of the patterns look quite similar to each other.

Major Flat six

The Major flat six is yet another completely new scale and not just another mode from any other scale, this means we actually got seven new modes, but what we will talk about here is the first step. It's obviously really easy to weave this whole new scale into the basic major scale and this way get a completely new sound. I just want to mention again that the reason for not just alter one note, in this case the sixth is because once you have that approach you also change the sound of your playing. I believe that when you have the scale type approach which we are talking about here you are absolutely free of any kind of thinking while you are improvising which allows you to both have melodic way of improvising as well as a more shredding way of improvising with fast scale runs and such and such. This is obviously also a hot topic which I'm convinced there's many different opinions about, but I will naturally only cover my own view of this in this ebook. Of course if you are a Jazz guitarist you don't necessarily want to play the fast scale runs and therefore are more free to think about what sound you want to generate through the scales, so this is of course an exception to what I'm talking about.

So back to talking about the way to make use of this scale, one of the cool things about the Major flat six scale is that it's just that single note, the sixth which is flattened compared to the Ionian scale which is the other name for the Major scale. So for example if we take a visual look at the patterns of the two scales and compare how they look you can see that on the A string and on the B string there's a difference, so for example when you are improving in the Major scale and you are doing it from the first pattern try to make use of the first pattern in the Major flat six scale and compare the sounds of the two. you can easily weave in and out between the two different scales in their first patterns because they are so similar. Check the seven new patterns of the Major flat six scale here below.

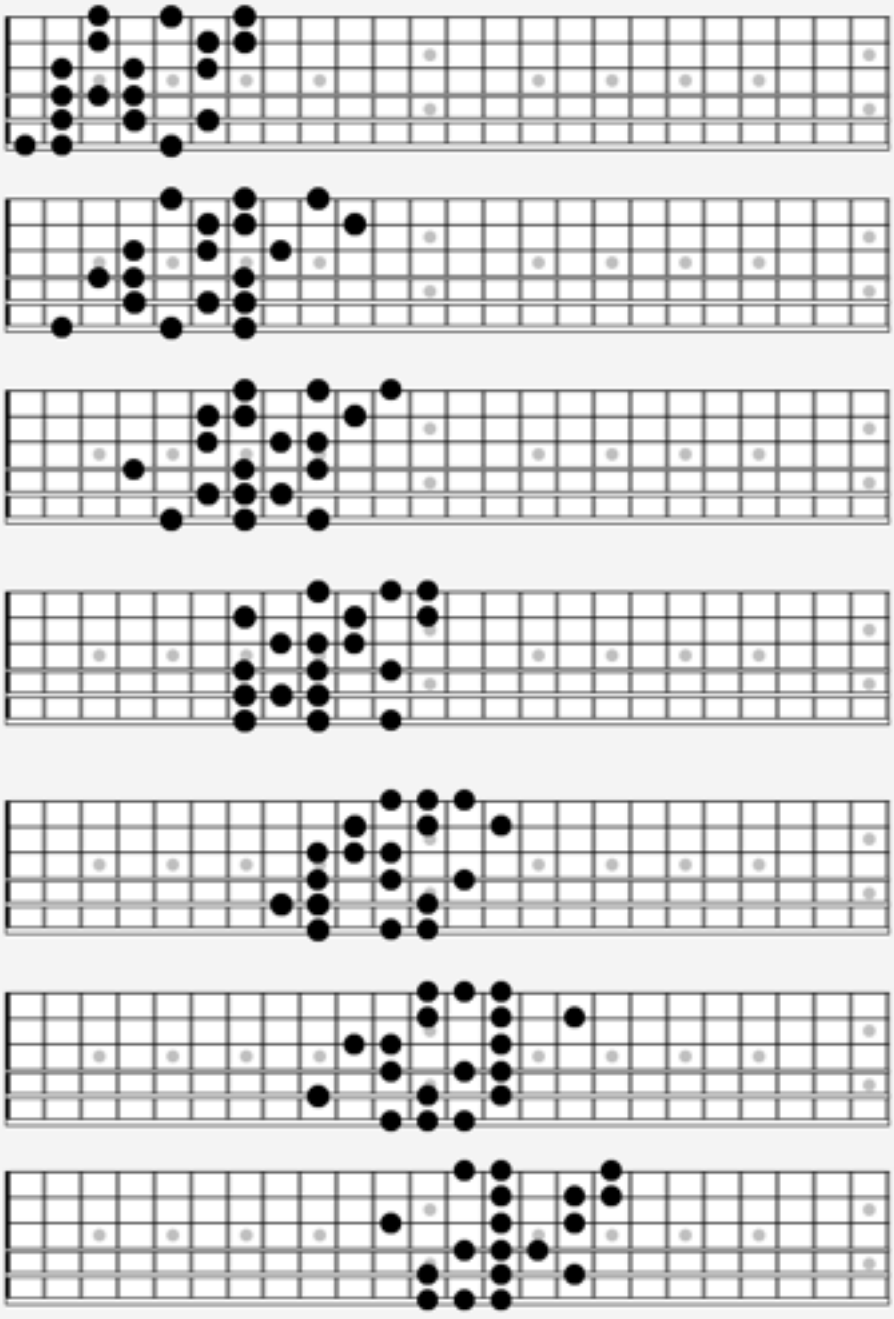




So in these seven examples you can see that all of them has very close relation to all seven of the regular Major scale which makes it nice and easy to weave in and out of these two quite different sounding scales even though they are closely related.

The Enigmatic scale

The last scale we are going to work with is the scale, it's a really awesome sounding scale in my opinion. Their obviously dozens of scales out there and some of them are usable and really cool, but some of them are then again in my opinion just not that great sounding, even though they differ from the usual we use most often. So to some degree you could say that there might be a reason that we have something like the Major scale, Harmonic minor, Melodic minor and Pentatonic and they are most used for a reason, but I will let that be up to you decide, I definitively find a lot of inspiration in using and testing new scale every now and then, but as I said you will often come across some scales that might not be very well known just because they don't sound that great. But back to the Enigmatic scale, it's the type of scale that when you use it, it almost sounds like you are playing something that is wrong, but as soon as you get back into the scale that you would normally use you get the effect of the Enigmatic scale which is really crazy and out there but also extremely effective in creating an exotic sound. The other thing is also that I think this scale is perfect in case of inspiring you to create new chops just by the fact that the scale patterns look so different (Note. Visit my blog for a pretty sweet Enigmatic lick) I don't think you have to learn all the patterns of all the Exotic scales, for me it's perfectly all right to just have one or two patterns that you move into from one of the regular scales like the Major scale or the Harmonic minor scale for a fantastic effect.



I hope these unusual but awesome sounding scales has given you an idea what possibilities you will get by using them in context with the regular scales you are using. I cannot stress enough how important it is to start small though, so this means don't attempt to learn all seven modes of several of these if they are absolutely new to you, this will most definitively just result in that you will never start using them, so start with one pattern and so how it fits into any of the scales that you already know by heart. The key is to take baby steps with this

Enjoy !

Niels Vejlyt