

## Relative Minors

*A level 1a tutorial by Lou Stonehill designed to conclude last issues' article on 'The Key System' by explaining the minor keys, how they relate to the major keys, the basic differences between them, and their role within 'The Cycle of Fifths'.*

**PLEASE NOTE:** This tutorial will seem quite brief compared to the last; however, it is my sincere hope that, within its content, I'll be able to get you thinking about some serious fundamentals that will ultimately unlock any fears you may have about more advanced topics still to come. Especially: 'Modes'! Oh I just can't wait to get to that one!

So then, as I said at the close of my last article, we're not talking about younger nieces and nephews here!, but instead, explaining in full, the black letters after the slash marks that appeared in our main Cycle of Fifths diagram.

To begin with, let me start by telling you that all major keys within 'The Key System' have their own Relative Minor Key. Similarly all Minor keys have their own Relative Major Key. In fact, it would be fair to say that both, (in terms of harmonic content), are one and the same thing in that they have the same number of accidentals, (sharps and flats).

In order to put this more simply try to accept that the word 'Major' within the context of a scale or key, is not only a 'label' for a specific interval combination ( $2\frac{1}{2}$ - $3\frac{1}{2}$ ) but also a word used to describe an overall 'happy' or 'up'-sounding sequence of notes, produced as a direct result of this  $2\frac{1}{2}$ - $3\frac{1}{2}$  interval combination. With that in mind, it becomes easier to understand that the word 'Minor' is nothing more than a different 'label' used to describe a contrasting 'sad', 'sombre', or even 'atmospheric' sounding version of the same sequence of notes sharing the same 'Key Signature' (number of sharps and flats).

*Hold on Lou, how can you possibly play the same notes yet make them sound different?*

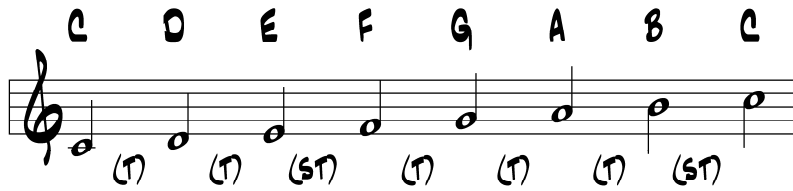
I love that question, since when teaching face-to-face with a student, it's possible to really make them think, "How does that work?" because in essence, one can play the white notes of a piano and make them sound 'happy', and then play the white notes of a piano, and make them sound 'sad'! I kid you not folks, and that was not a typo!

Ok, so let's try and prove this by examining once more our keyboard picture and its notated musical equivalent.



This then, is a photo of the white notes of a piano as viewed from C to C.

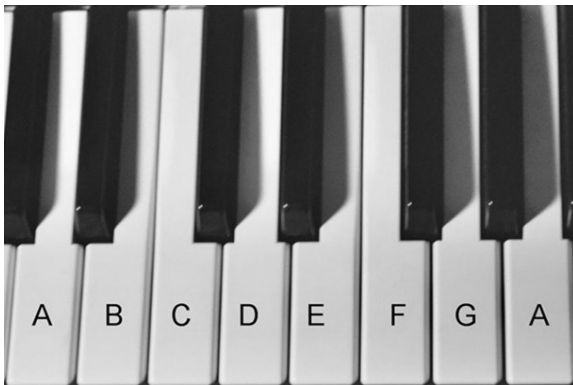
It would, as you now know, be musically represented as follows:



From this standpoint, it's clear that the intervals labelled on the staff correspond to those in the picture. Moreover, if you have access to a keyboard, and

you play the notes shown, you should be able to hear the 'happy', 'up' sound mentioned earlier.

Where this whole topic becomes rather interesting is when we consider the same white notes, but this time viewed from A to A as shown.



The picture clearly reveals the same notes, but effectively starting from a different point.

This sequence of notes would be musically represented as follows:



Once again, it's clear to see that the intervals labelled on the staff match those in the photo. However what this also

immediately shows, is that whilst the notes are indeed still the same, (the white notes i.e., no sharps or flats), we've 'started' from a different place, and have inherently generated a different combination of tone and semitone intervals, and thus created an overall different musical sound, namely, (yup, you guessed it again people!), sad, sombre, atmospheric, or more musically put, - Minor!

Ok, so from now on, you know that the Relative Minor of C Major is A Minor, and conversely, the Relative Major of A Minor is C Major. This means that these two key are 'related' since they consist of the same set of notes, the same number of accidentals, and ultimately the same 'key signature'! This I hope explains the word 'Relative' in our title, and because we started from a different note (A), we generated a different overall sound, (as a direct result of the new tone/semitone combination) which once again, I hope, explains the word 'Minor' in our title.

In order to be able to quickly work out the relative minor of any major key, let's look at the relationship between the two examples above. The note A is the 6<sup>th</sup> note of our C scale, alternatively; A is 9 semitones above C. This '6<sup>th</sup>' note will always dictate the relative minor keynote of any major key. Let's prove this with a key that looks a little more complicated:

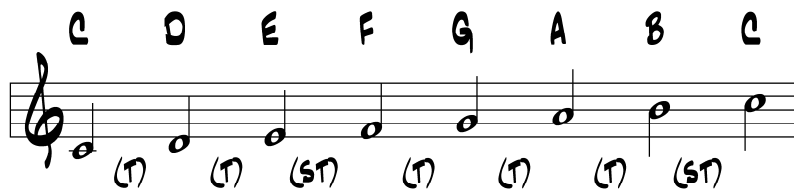
The image shows two musical staves in treble clef. The first staff represents the Gb Major scale with notes Gb, Ab, Bb, Cb, Db, Eb, F, Gb. Below the notes are interval markings: (T) between Gb and Ab, (T) between Ab and Bb, (ST) between Bb and Cb, (T) between Cb and Db, (T) between Db and Eb, (T) between Eb and F, and (ST) between F and Gb. The Eb note is circled in red. The second staff represents the Eb Minor scale with notes Eb, F, Gb, Ab, Bb, Cb, Db, Eb. Below the notes are interval markings: (T) between Eb and F, (ST) between F and Gb, (T) between Gb and Ab, (T) between Ab and Bb, (ST) between Bb and Cb, (T) between Cb and Db, and (T) between Db and Eb. The Eb note at the beginning and end of the scale is circled in red. A red line connects the two circled Eb notes, illustrating that Eb is the 6th note of the Gb Major scale and the 1st note of the Eb Minor scale.

Remember this one from the last issue? The key of Gb Major, in all its glory. The relative minor can be found by counting through six scale steps, which will obviously give us Eb Minor as shown.

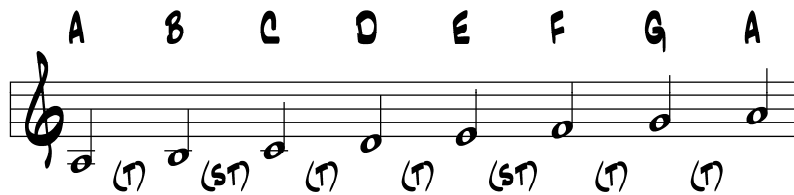
You can now clearly see that we've done exactly the same as before, in that, Eb is 9 semitones above Gb, or that Eb is the 6<sup>th</sup> note of Gb and is therefore its 'Relative

Minor Keynote'. Plus, the notes we've 'ended up' with in our Ebm scale are again identical to those of the original major key, yet they start from a different place. This very basic theory is the same for all the keys shown in our main 'Cycle of Fifths' diagram from the last issue. (All the black letters after the slash marks in our main diagram, show each Major Keys' Relative Minor Key, and are 6 scale steps or 9 semitones above the blue letters).

Ok, now that we know what a relative minor key is, and how to work it out, it's time to point out the big difference! I'll do this by returning to good old C Major for a moment:



By all means consider the note names, but take a close look at the interval structure -  $2\frac{1}{2}-3\frac{1}{2}$  yet again!



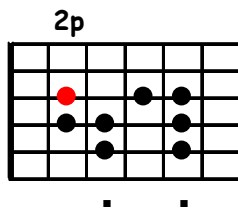
When you look at the relative minor (Am) you can see the note names are again the same, however, the interval structure?  $1\frac{1}{2}-2\frac{1}{2}-2!$

In other words, there is a 'big' difference in the structure, and just as big a difference in the sound!

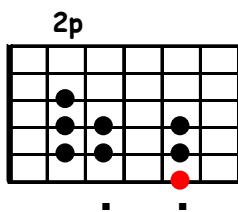
*"Umm, Lou, - I don't have a keyboard mate! - can't hear what you're going on about"*

Sorry Gentlemen, allow me to present the two scales above in 'Guitar speak'

*"Hey, at last! Dude's done a fretboard diagram!"*



Yeah, yeah, with your left hand in the second position, play this pattern from left to right - bottom to top, with the following fingering: 2, 4, 1, 2, 4, 1, 3, 4. What you will hear is of course the C major scale as shown above. The red note is the 6<sup>th</sup> note, or as you now know, the relative minor keynote, namely, A.



Again, with your left hand in the second position, play this pattern in the same way, but with the following fingering: 4, 1, 2, 4, 1, 2, 4, 1. (I know there is an easier way to play this!) What you will now hear is A minor, or C majors' relative minor. A truly massive difference in the sound right?

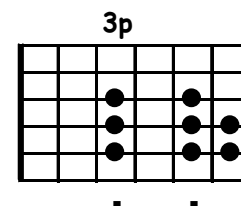
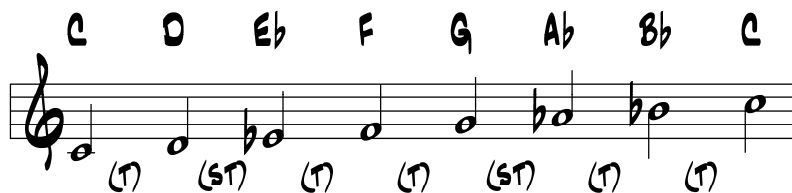
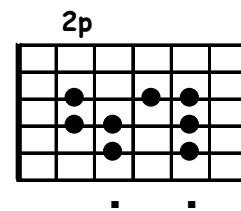
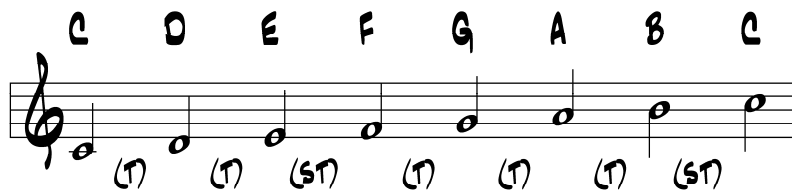
*"Well, umm, actually Lou - no, it just sounds the same but lower!"*

Alright, I admit, this is a little unfair of me, but what I'm trying to point out here, is that this second scale of A minor will sound similar to C major because even though the structure is different, it is after all the 'Relative Minor' which means it's in the same key, which in turn means that since we're effectively playing the same notes, all we're really doing is playing a C major scale starting on A!

*"Huh?"*

You've just had your first lesson on 'Modes'. Sorry, forget I said that.

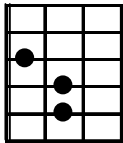
Right let's get back to our notated versions of these scales, and look once again at the interval structure of our Relative Minor -  $1\frac{1}{2}$ - $2\frac{1}{2}$ -2. Suppose we were to apply this combination starting from C instead of A, surely then, we'd see and hear this 'massive difference' in the sound mentioned earlier.



Play this second pattern with your left hand in the third position, and with the following fingering: 1, 3, 4, 1, 3, 4, 1, 3.

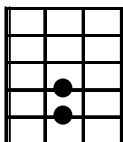
What we now have is C minor as well as C major, and the perfect illustration of how a change in interval structure, can greatly affect the sound of a sequence of notes. As you've probably already worked out, if you count up 3 scale steps in a minor key (or 3 semitones) you'll arrive at the 'Relative Major' keynote, in this case, Eb. Yes folks, C

minor is the relative minor of Eb major. (Check your main diagram to verify!) Whilst there are many types of major and minor scales, (don't panic!) it's fair to say that in all of them, a 'major' sounding scale will have 4 semitones between its 1<sup>st</sup> and 3<sup>rd</sup> notes, whereas, a 'minor' sounding scale will only have 3 semitones between its 1<sup>st</sup> and 3<sup>rd</sup> notes. Moreover, it's this very apparent 'flattening' (lowering in pitch) of the 3<sup>rd</sup> note which gives us the 'minor' sound. Before we start to round this up, let me briefly illustrate this point with a couple of basic chord shapes that you'll all know.



Let's consider a classic 'starter' chord, E major.

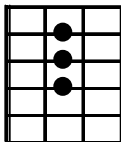
Now it is my intention to get into chord construction (basics) in the next issue, but for now, try to consider the notes that are actually produced when you 'hold down' this shape. So then, from 6<sup>th</sup> (bottom) string to 1<sup>st</sup> (top) string they are: E, B, E, G#, B, E. Don't worry about why for a moment, just bear in mind that if 'E' was the first note in our scale or key, then G# would be the third note. To really be 'on the button' with this,



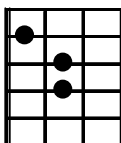
G# is 4 semitones above E, and hence is generating our 'Major' sound. Therefore, if we were to basically lower the pitch of that note by 1 semitone (or flatten it), would we not be creating a 'Minor' sound?

The answer is most definitely, yes! The G# that was being played on the 3<sup>rd</sup> string has been removed to reveal the 'open string' G, in other words, flattened. Furthermore, G is 3 semitones above E so we must have a 'Minor' sound!

Great news people! We do! How about these shapes?



▪ A Major. (C# played on the 2<sup>nd</sup> string is the 3<sup>rd</sup>)

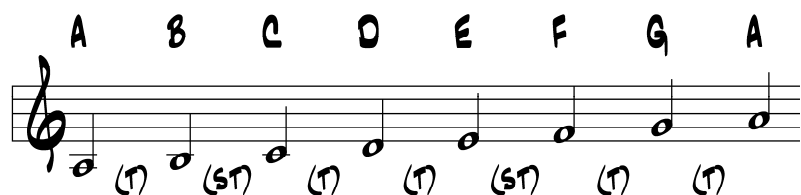


▪ A Minor. (C# flattened to produce a C, and the minor sound).

We could go on like this all day, but I'm sure you can see what I'm driving at.

Ok, we've discussed what Relative Minor keys are, how to work them out, and how they fundamentally differ from major keys. All we need to do now is explain a couple of things that you really should know and then we're done!

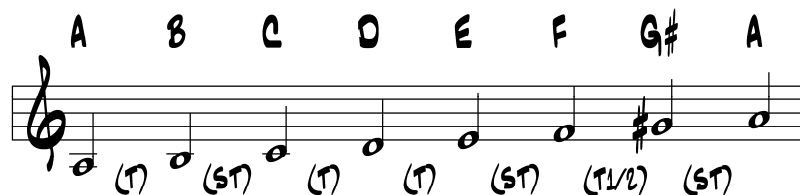
I mentioned earlier that there are many different types of major and minor (sounding) scales. You already know 1 type of major sounding scale, namely The Major Scale - Yup!  $2\frac{1}{2}$ - $3\frac{1}{2}$ ! This you learned from my 'What the hell's a semitone' article. In this issue we've looked at one type of minor scale, its structure, and where it came from. You would however be wise to familiarise yourself with another, and both of their correct names.



This is the minor scale we've already looked at. Its correct name is: (You'll love this!)  
A Enharmonic Minor.

*(There's that word again!)*

True - that word again! This scale can also be described by substituting the word 'Enharmonic' for any of the following words: 'pure', 'true', 'natural', 'unaltered', 'diatonic', 'real', the list goes on, but at least there is a connection, since they all seem to imply 'the same as', meaning in this case, the same as the 'Relative Major', and that is absolutely correct as we've already learned. The above scale is really nothing more than a C Major scale starting on A, i.e., no change in the notes, only in the order and hence the structure.



This version has a slight alteration in that by sharpening the 7<sup>th</sup> note, we've generated a tone and a half as the penultimate interval, and thus created a semitone in the last

interval which gives us the classic 'Egyptian' sound at the end. This would be correctly named:

A Harmonic Minor.

As I've said, there are others, but these two will give you plenty to get your teeth into, especially when you try and work out all relative minor keys, and/or scales, enharmonic or

harmonic! To put it simply, you can create a harmonic minor scale in any relative minor key by sharpening the 7<sup>th</sup> note!

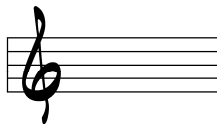
This as I hope you can appreciate, is one of those situations where you might end up correctly mixing sharps and flats in the same key! Furthermore, I can now justify the fact that any one 'Key Signature', will always relate to two keys, namely a major key and its relative minor!

*"How do I tell which is which if the key signature is the same?"*

Well, I thought you'd be asking that, the truth is that this should probably be left for another tutorial! I could mind you, be flippant and say:

"Just play Dude; you'll know if it's happy or sad!"

This, as I'm sure you know by now is not my style. So by way of encouraging you to study and learn this thoroughly, if you had this as a key signature:



You'd now know that it could mean C major or alternatively A minor. However, I can promise you that if in the music you saw G#'s cropping up all over the place, both in the melody and the chords, (E7 etc), you'd be in Am and not C major. By the same token (to get the chaps thinking!) if you had this as your key signature:



and, you had A 'naturals' everywhere, you'd be in Bbm, not Db major!

I apologise for the last example, but it is logical if you take the time to think about it!

That just about wraps it up for this issue folks, if you've stuck with it from the start and thoroughly absorbed the content of these first three tutorials, you're now well armed with all the harmonic knowledge you need to tackle topics such as Chord Construction, Diatonic Harmonisation of Scales, Chord Voicing, Note Priority, Modes, Secondary Dominants, Tri-Tone Substitutions, you name it! More importantly, this knowledge when applied to the fretboard will improve all aspects of your playing immeasurably! I promise!



So then, another tutorial in the can. In the next issue I'll be taking you through the basics of Chord Construction, talking about Primary and Secondary Triads, (not the Hong Kong Mafia!), adding 7ths, Tonality, Note Priority, and Chord Function. I realise that this sounds like another epic, but as I've said, with the knowledge you've now acquired, you'll wonder what all the mystery was about!

"Learning it is the easy bit. Applying it is the tricky bit!"

Thanks for reading.

'Till next time.....'

Regards,

Lou.

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