## Understanding Guitar Scale Patterns: 2. Minor Scales by Matt D'Netto

In the first of these mini-articles I explained why it's possible to take a pattern of notes for a simple major scale, for example a two octave G-major scale, shift it up two frets and somehow arrive at an A-major scale. The answer turned out to be that a scale is made up of a specific pattern of tones and semitones, which is identical for all scales of the same type, in this case all major scales. In other words, when working out scale patterns, it's often more useful and more efficient to think in terms of the intervals between the notes rather than worrying about memorising the different flats and sharps used for any particular key.

Following on from that discussion, I wanted go ahead and explain how to also derive a pattern of tones and semitones for the three different types of minor scale; the natural minor scale, the harmonic minor scale and the melodic minor scale.



Similar to the major scale, the natural minor scale can be first derived by playing all the natural notes from A to A, which is easy to visualise on the keyboard (see image above). From this, we can clearly see a pattern of tones and semitones (T, S, T, T, S, T, T) that acts as our template for creating natural minor scale patterns over one, two or three octaves on the guitar in any minor key. This takes very little time to derive and is a much more powerful tool for creating scale patterns than trying to memorise flats and sharps for each different minor key, especially as guitarists tend to naturally be better at seeing shapes and interval patterns rather than visualising the actual pitch of each note.

If we compare this pattern to the pattern for a major scale (T, T, S, T, T, T, S) we can see that the final interval is a tone in the natural minor scale rather than a semitone in the major scale. Try playing a simple one octave natural A-minor scale for yourself by sounding the natural notes from A to A (from the open 5<sup>th</sup> string up to the 3<sup>rd</sup> string) and listen very carefully to the interval from the seventh note (G) to the eight note (A), also known as the octave. Now do the same with a simple one octave major scale, for example C-major, by playing the natural notes from C to C (from the 5<sup>th</sup> string up to the 2<sup>nd</sup> string). You will

notice that there is a feeling of completeness or "resolution" when playing the seventh note followed by the octave in the major scale that isn't there with the natural minor scale.



The presence of this feeling of resolution is desirable for composers, so rather than being satisfied with the natural minor scale it would be useful to formally define a different type of minor scale which has the same sense of resolution as the major scale. This is the idea behind the harmonic minor scale and it is derived by simply raising the seventh note of the natural minor by a semitone. In the example shown on the keyboard with our A-minor scale, this means raising the G to G# (see image above). This creates an Augmented interval (A) which is equivalent to one and a half semitones. I've switched from using tones (T) and semitones (S) to whole steps (W) and half steps (H) in the illustration for the harmonic minor scale out of personal preference when talking about augmented intervals, the meaning remains the same. From this we get a pattern of intervals (W, H, W, W, H, A, H) that can be used to create a harmonic minor scale pattern in any key.

Now we have a minor scale with the same sense of resolution from the seventh to the octave as we have in a major scale, however, the augmented interval was seen by composers as being rather awkward, so we can go one step further to create a smoother sounding minor scale. To do this, we take the natural minor scale and raise both the sixth and seventh notes by a semitone when ascending. So, again, in our example of A-minor we now have F# and G# (see image above). This gives a pattern of intervals (T, S, T, T, T, T, S) for ascending the melodic minor scale which has a smoother sound that the harmonic minor scale but retains the same sense of resolution. When descending we return to playing the notes of the natural minor scale. This is the trickiest of the minor scales to play as we have two patterns to work out, an ascending melodic minor pattern with a descending natural minor pattern.

Overleaf I've provided a set of simple two octave scale patterns for the natural minor, harmonic minor and melodic minor scales. These are the simplest examples and I'd encourage you to use the interval patterns provided here to work out your own two octave scale patterns starting on the  $6^{th}$  string and on the  $5^{th}$  string along with full three octave patterns. Remember to return to the natural minor pattern as you descend while playing the melodic minor scale.

