

## Chapter 17 Harmonic Minor

Harmonic Minor has become a popular scale used in normal rock and jazz situations but also for exotic sounds. Lets start first with some background about where it came from.

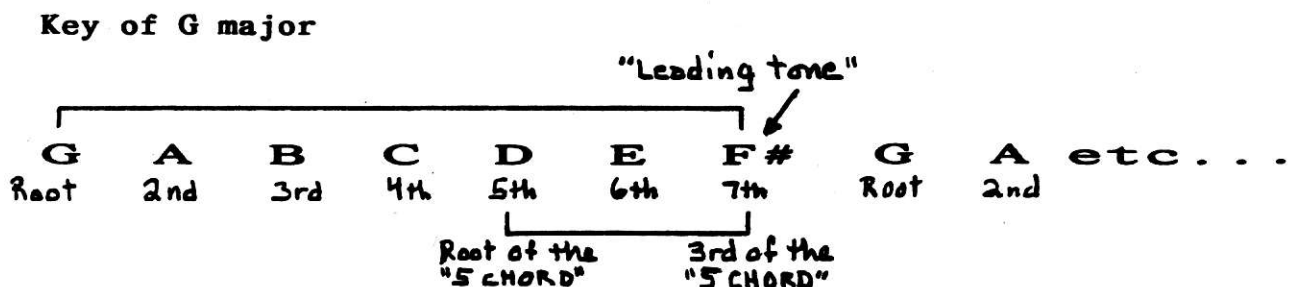
Hundreds of years ago there evolved a very popular chord change, you've heard it a thousand times, its the 5 chord to the 1 chord from the harmonized major scale, for example a "G chord" to a "C chord".

Traditional musicians call this the Authentic cadence. Cadence is a term for a chord change that is usually a concluding phrase, and suggests finality. There are four types of traditional cadences from the harmonized major scale:

- 1) "Authentic cadence": 5 chord - 1 chord.
- 2) "Perfect cadence": This is an authentic cadence but it refers to how the voices (notes in the chord) are arranged. *The "leading tone" in the "5 chord" must be in the melody (highest pitch) and then resolve to the "1 chord" with the root the in the melody.* (I'll explain more in a minute).
- 3) "Imperfect cadence": This also is an authentic cadence but like the perfect cadence it refers to how the voices are arranged. *In this case the "leading tone" (in the 5 chord) is not is not in the melody (highest pitch).*
- 4) "Plagal cadence": 4 chord - 1 chord
- 5) "Deceptive cadence": 5 chord - to any chord other than the root chord.

Most musicians in normal life don't use these traditional terms and since this is the "practical guide" we won't get into them any deeper. I brought up the subject though because the Authentic cadence is very important to understanding harmonic minor.

To this day the Authentic cadence is still one of the most used chord changes. One reason for it's popularity is that the "third" of the 5 chord is the major 7th of the key. The major 7th is also called the "leading tone", probably because it *leads* you to the root, being only a half step below it. Look at the example below:



*The third of the "5 chord" is the major 7th or "leading Tone" in the key.*

Because of all this when playing the 5 chord it sounds like that leading tone (its third) needs to be resolved up a halfstep to the root, or the 1 chord in the key.

Furthermore when using seventh chords that 5 chord is a "dominant 7th chord" which not only has the third or leading tone but also adds some extra tension. Dominant 7 chords have a b5 interval between their 3rd and 7th, creating dissonance and further giving the 5 chord a sound that your ear may perceive needs resolving to the 1 chord. Composers use this simple and quick 5 - 1 to get back to the root chord of the key.

In traditional music theory the 5-1 movement is so important that without it they say the tonality (the key) in a composition has not been established.

Are you keeping up so far? We are going to get to harmonic minor, but I want you to play and listen to an authentic cadence first.

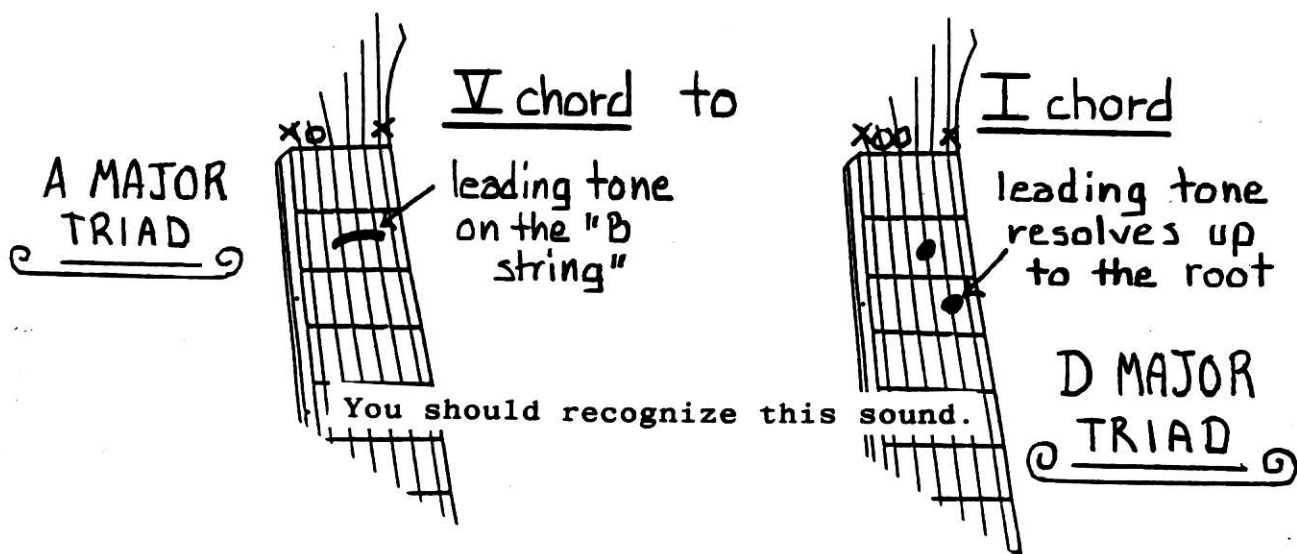
### Exercise:

Try playing the example below:

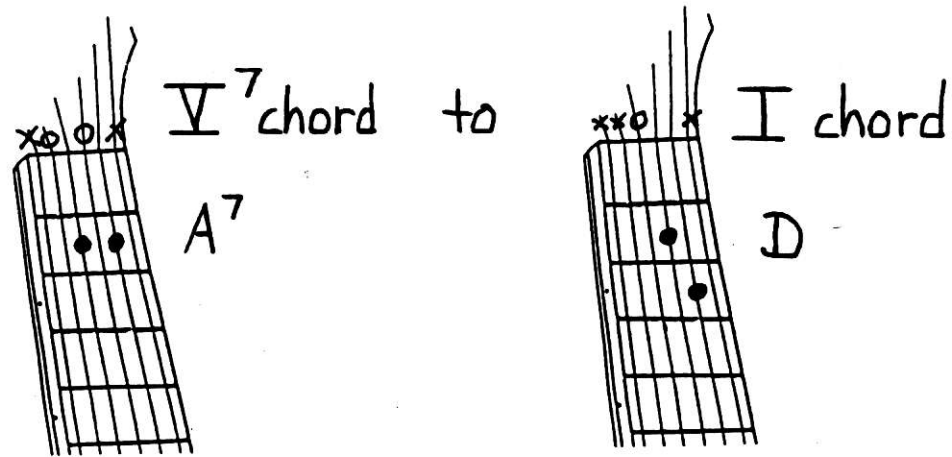
1) An "A major" (5 chord) with the 3rd on the "B string".

2) Then move to an open D chord (the 1 chord) with its root "D" also on the "B string". (In each chord do not play the high E because I want you to closely listen to the "leading tone to the root movement" which is happening on the "B string").

This is an example of a 5-1, authentic cadence in D major. It's also a perfect cadence because we play the 3rd of the 5 chord in the *melody* (highest pitch) in the chord. One more thing we say the "5 chord" here is *functioning*. It is functioning as a way to lead you back to the root chord.



Now if we play 7th chords the effect is even more pronounced because the 5 chord, being "dominant 7", adds extra tension which is then released, or resolved to the 1 chord!



This is where Harmonic minor fits in. In the last chapter we looked at the *harmonized minor scale*, do you remember what kind of chord the 5 chord was? It's a minor chord which has a minor 3rd. Not the cool leading tone (major 3rd) like in the 5 chord of the major scale. The natural minor scale 5 - 1 cadence doesn't have the same effect. That is a flaw with the minor scale.

As most people know, musicians are not good at following rules. So long ago those composers began playing "major" and "dominant" 5 chords in minor keys anyway.

But, lets say you're writing a melody or playing a solo in a minor key and have that *major 5 chord* which has been used in place of the minor chord, you then need to adjust the minor scale to fit the new chord. (If you play the "minor 7 note" from the minor scale over the "major 7 note" in the "5 chord" they may really clash).

So by raising the minor 7 in the minor scale up a halfstep to a major 7 (the leading tone) the scale now fits the chord... this natural minor scale with a major 7th is called the "*Harmonic minor Scale*". Simply a minor scale with a raised 7th.

You now have a special scale that you can use that fits the harmony of the major 5 chord. Harmonic minor. This is also why natural minor is called *natural minor*. If you're using the scale and not altering it some way like raising the 7th to make it harmonic minor, then you are using the "Natural Minor" scale.