

# The Evoloution of Key Structure, and The Modes

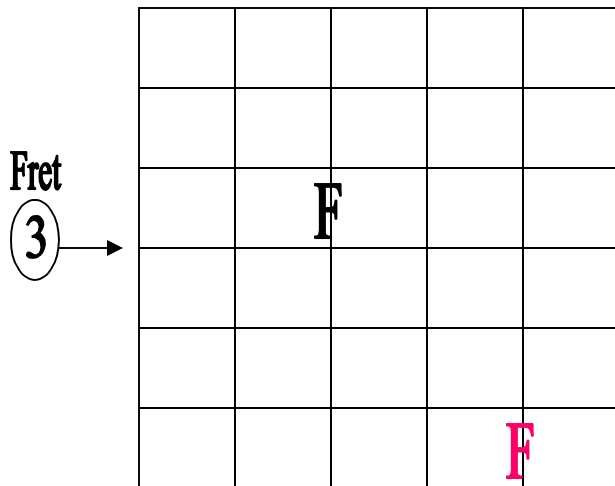
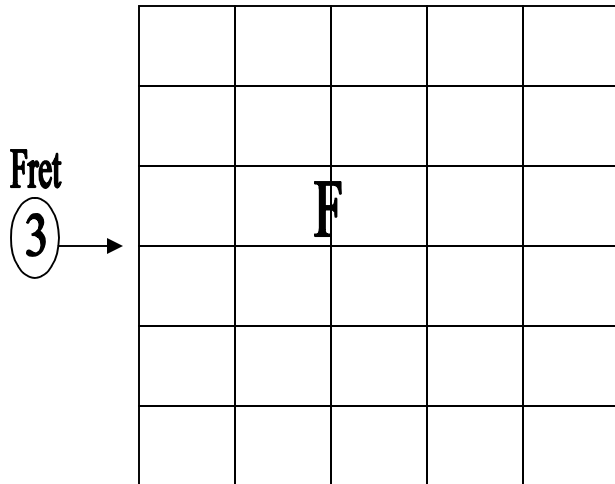
The Overtone Series is part of nature, and available to anyone who has a musical ear and listens. Bird song creates overtones. Key structure began evolving through a natural process thousands of years before music was ever written down.

One does not have to be a trained musician to sense key structure. Over hundreds of years key structure developed as the human ear learned to accept tones that seemed to sound natural when played or sung together. Over time, instruments evolved that were designed to play these tones, and eventually the seven tone key structure we have today came into common use.

Intervals, and then the overtone series, had to be explained before the origin of the key structure could be explained. The Perfect 5<sup>th</sup> because it's born from the Overtone Series is the easiest natural hearing relationship where two different tones are concerned. Key Structure was created over time through projection of the perfect 5<sup>th</sup> overtone and the Octave overtone. This is why Key Structure is the most natural hearing relationship in music.

Now that you are beginning to have a basic grasp of Intervals and The Overtone Series it's possible to go to the genesis point of tonal organization in music and explain key structure, and how music evolved from it..

## (KP2, (3) Key of C



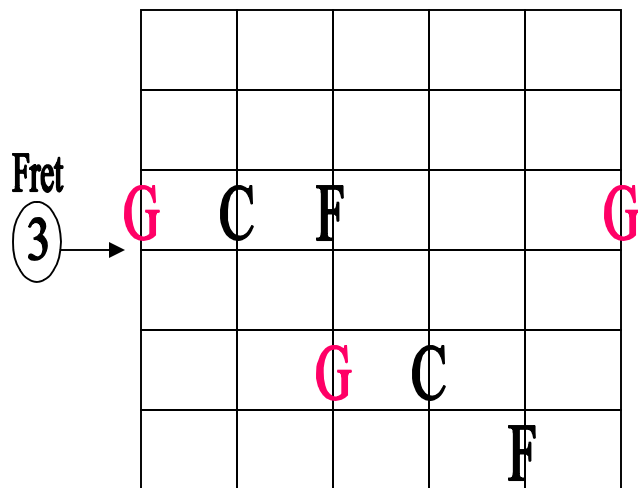
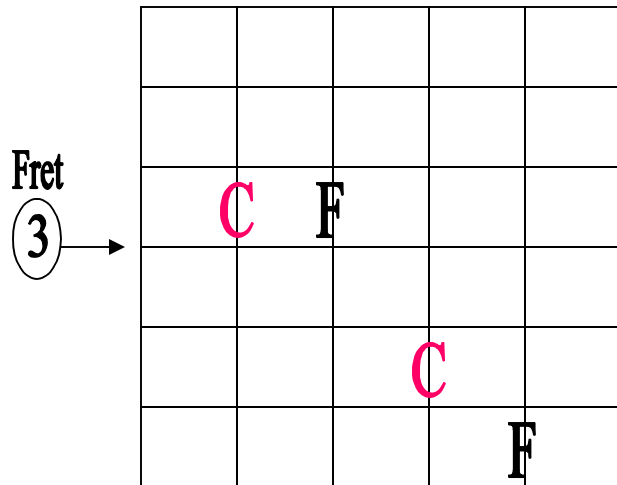
## The Formation of Key Structure

This presentation uses **Key Position Two** in the **Key of C** as a basis.

The key structure began evolving from F, what is known today as the the Lydian Tone.

The Lydian Tone F in turn generated its first overtone, another F an octave Higher

## (KP2, (3) Key of C



## The Formation of Key Structure

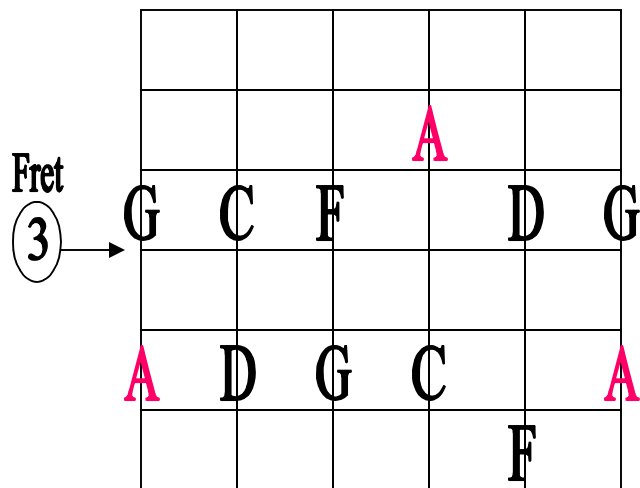
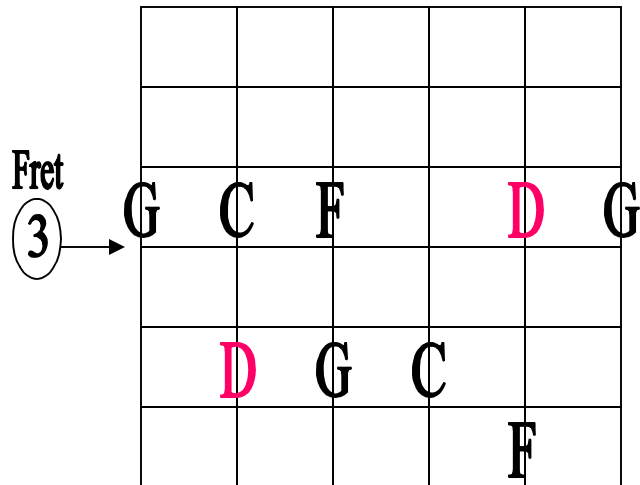
The Lydian Tone F in turn also generated its 2<sup>nd</sup> overtone C, the Ionian Tone. C in turn generated its own octaves. C is a P4 below F and a P5 above F.

C is Root Definitive to F, and gives F the power to sound as a Tonal Center within the key.

C the Ionian Tone in turn generated its 2<sup>nd</sup> overtone G, the Mixolydian Tone, and G generated its octaves. G is a P4 below C and a P5 above C.

G is Root Definitive to C, and gives C the power to sound as a Tonal Center within the key.

## (KP2, (3) Key of C



## The Formation of Key Structure

G the Mixolydian Tone in turn generated its 2<sup>nd</sup> overtone D, the Dorian Tone, and D generated its octaves. D is a P4 below G and a P5 above G.

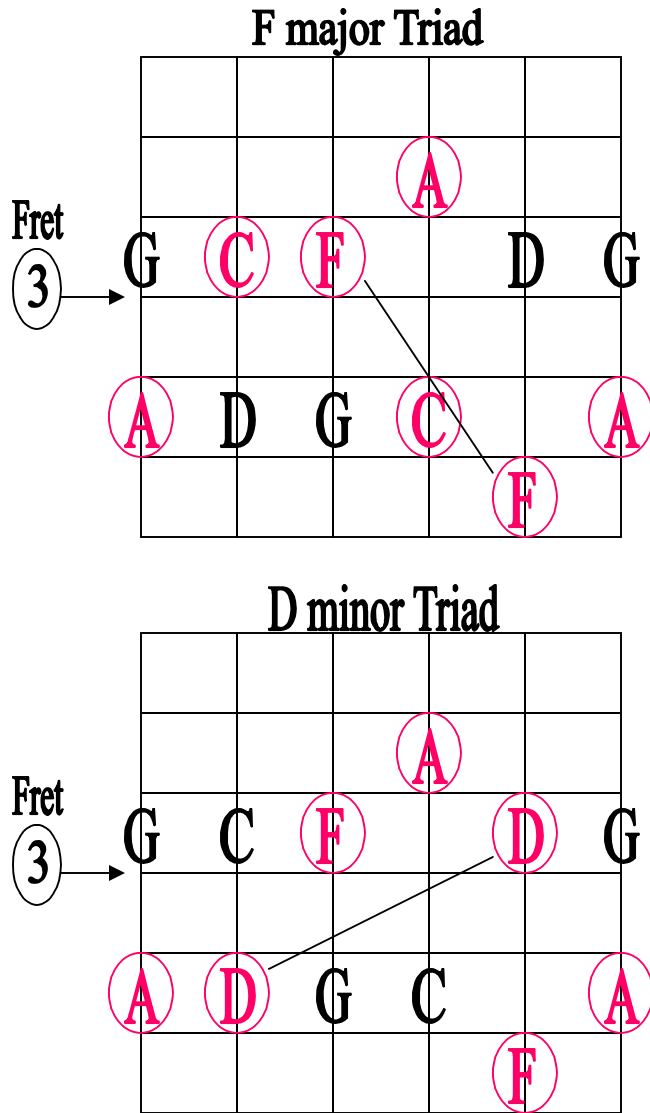
D is Root Definitive to G, and gives G the power to sound as a Tonal Center within the key.

D the Dorian Tone in turn generated its 2<sup>nd</sup> overtone, A the Aeolian Tone, and A generated its octaves. A is a P4 below D and a P5 above D.

A is Root Definitive to D, and gives D the power to sound as a Tonal Center within the key.

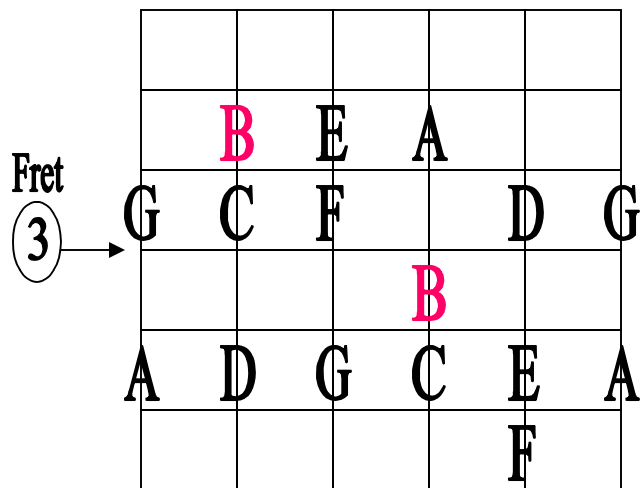
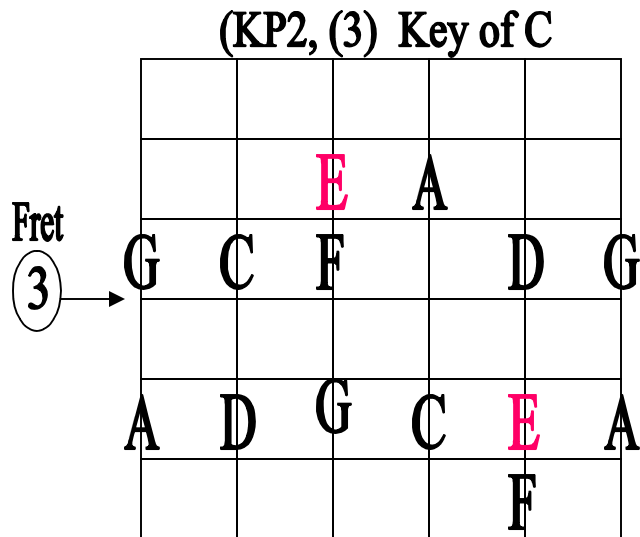
At this point we arrive at the **Pentatonic or five tone scale** which is in use all over the world to this very day.

## The Formation of Key Structure The Pentatonic



At this point in the evolution of the Key, there are only two complete Triads, F major and D minor. **This gives the Pentatonic scale two modes, F major Pentatonic, and D minor Pentatonic.** At this point, we have Tonality and major and minor Modality, but the Key Structure is still not Complete.

These are also called “Relative” minor and major modes because they’re two different Tonal Centers derived from the same pentatonic scale.



## The Formation of Key Structure

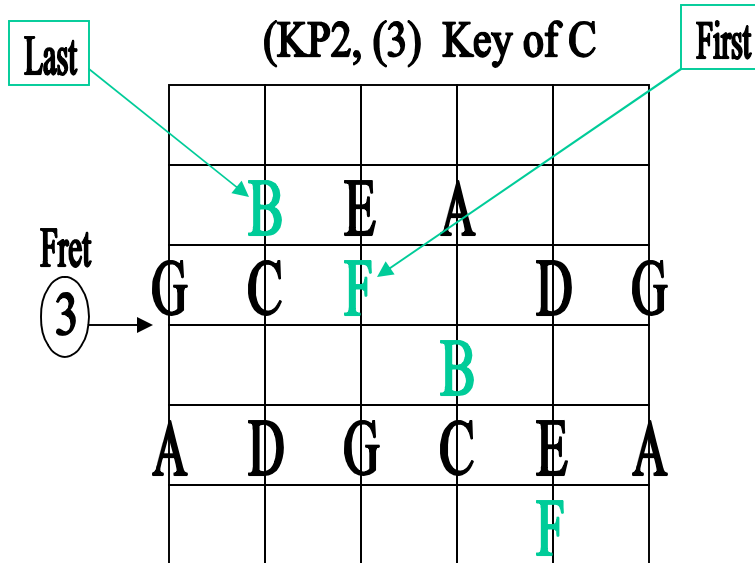
A in turn generated its 2<sup>nd</sup> overtone E, the Phrygian Tone, and E generated its octaves. E is a P4 below A and a P5 above A.

E is Root Definitive to A, and gives A the power to sound as a Tonal Center within the key.

E the Phrygian Tone in turn generated its 2<sup>nd</sup> overtone B, the Locrian Tone, and B generated its octaves. B is a P4 below E and a P5 above E.

B is Root Definitive to E, and gives E the power to sound as a Tonal Center within the key.

## The Formation of Key Structure, The Tritone



The **Modal names** for the notes of the Key Structure can be abbreviated.

**Ion.** = Ionian, **C**

**Dor.** = Dorian, **D**

**Phr.** = Phrygian, **E**

**Lyd.** = Lydian, **F**

**Mix.** = Mixolydian, **G**

**Aeo.** = Aeolian, **A**

**Loc.** = Locrian, **B**

Between the Lydian Tone **F**, the starting tone, and the Locrian Tone **B**, the last tone added to the key structure, we get the **Key Tritone**. The Key Tritone is colored **Green**. The Key Tritone is the most unique sounding interval in the Key Structure. Its sound is disconcerting and unstable to the human ear.

The next Perfect 5<sup>th</sup> overtone generated by B would have been F#. Adding it to the key structure would only have created another Tritone between C and F#, and another ½ step between F and F#. Adding more tones to the key structure would have only created more Tritones, and more ½ steps.

To the human ear, one disconcerting unstable Tritone was enough. This is why the Key Structure stopped evolving when it reached 7 tones.

The Key Structure evolved from the Overtone series, which is a part of nature, and the projection of the Octave and Perfect 5<sup>th</sup> intervals which are the two most natural hearing relationships in music. The **Tritone** completes the Key Structure, and because of its disconcerting character, **it's the most unique sounding Interval** contained within it.

This is how the Key Structure evolved over time.