

8. Scales as 'Keys' (part 1)

Scales are often referred to as *Keys* because they "unlock" tunes. If you know the scale which the composer used to create the melody, you can delve into that scale and find the notes.

On the guitar, this might also mean finding the correct shape of the scale used e.g. if someone tells you that a popular tune like *Parisienne Walkways* by Gary Moore is in the Aeolian Mode of C Major, it would be wise to ask what position and fingering of the scale was used, if you are you get the *timbre* and *techniques* as intended. If this information is not available you could always attempt to play the Aeolian Mode in all positions on the board and keep listening to the song until you find the solution. This is the preferred approach. Of course, it also helps if you have similar gear to the artist because if you can get close to their tone, it makes transcribing their tunes easier.

If you have created a melody or riff without thinking about which scale was used, and then get asked for the key, you would first need to work out the name of every note used and assemble them in alphabetical order from the first note - as they might have appeared in a scale, before being put to use in your tune e.g. if your melody was D F E C B G A C D, you would rearrange the notes as follows D E F G A B C - this is the scale your tune is derived from.

Bear in mind, that depending on how progressive your tune is, the actual scale may have additional notes which you have not accessed. You may even have used notes from different scales. In certain cases your notes may be derived from more than one key. This clarity is vital in order to both communicate what you are trying to put across to other musicians and also if you intend to transcribe it to paper.

As it happens, in this case, the notes D E F G A B C come from the C Major scale, only presented in a slightly different order.

The reason I thought of the C Major scale is because each scale has a unique *signature* which identifies it.

Key Signatures

Remember the C major scale did not land on any # / b notes.

6E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

The number of # / b notes that appear in a scale is known as its *Key Signature* because no other Major scale has the same number of # / b notes, in other words, zero.

If we start the Major scale from a G note, using the same T, T, ST, T, T, T, ST formula, we get G, A, B, C, D, E, F# / Gb, G:

6E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Notice that the G Major scale lands on a note with two names - the F# / Gb note. When a scale is spelled it must have each of the notes A, B, C, D, E, F, G present, but can only have one of each.

This means the F# / Gb note in the spelling G, A, B, C, D, E, F# / Gb, G must now only be called F# as follows: G, A, B, C, D, E, F#, G. The letter G cannot appear twice in the spelling and the letter F must appear once.

Here is another example using an F note as the root with the same T, T, ST, T, T, T, ST Major scale formula.

6E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

The notes that emerge are F, G, A, A# / Bb, C, D, E, F. The A# / Bb must be called just Bb, otherwise the letter A will have been used twice and the letter B will not have been used at all.

If you start on a C#, then the scale must be spelled: C# D# E# F# G# A# B# C#. This reveals the fact that in certain circumstances, E and B do have sharps!

6E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B	C	C#/Db	D	D#/Eb	E
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

If you continue to build Major scales following these rules then you can confirm that each scale does in fact have its own signature spelling based on the unique number of # / b notes. Also, the C Major scale is the only key with zero sharps or flats. Returning to our melody D F E C B G A C D it is clear why its key is the C Major Scale because the notes do not match the other scales. There is a handy diagram called the Circle of 5ths (see Chapter 30) which collects all the keys and

their signatures for handy reference.

The key is provided

If you are reading a published songbook version of a tune, where someone else has done the investigative work and transcription, then the name of the scale is published in coded form at the beginning of each song. If you can decipher the code then you can practice the scale (plus it's modes) and chords (see Chapter 27) in different positions in preparation for tackling the notes of the song. This is dealt with in Chapter 30.

Changing Keys

If you change from one scale to another within the same piece, this is referred to as a *key change* or *modulation*. See also *transposition* or the act of rendering a tune from one key into another (see Chapter 35).