

# IMPROVISATION

## THE RELATIONSHIP BETWEEN SCALES AND CHORDS

**SCALES** - The good news is that there are very few scales you need to know to improvise over the vast majority of chord sequences. These are the main scales:

**THE MAJOR SCALE** - (also referred to as the modes)

Starting on the 1st note of the scale (C in a C major scale) = the Ionian mode.

Starting on the 2nd note = the Dorian mode (D in a C major scale).

Starting on the 3rd note = the Phrygian mode.

Starting on the 4th note = the Lydian mode.

Starting on the 5th note = the Mixolydian mode

Starting on the 6th note = the Aeolian mode

Starting on the 7th note = the Locrian mode.

*Don't bother learning the modes - just learn the major scales.*

**THE MINOR SCALE**

This is the ascending form of the melodic minor scale used for going up and down. It is the same as the major scale with a minor 3rd instead of the major 3rd.

**THE HARMONIC MINOR SCALE**

These scales alone will cover 95% of your needs.

**THE DIMINISHED SCALE**

These are useful for certain circumstances and are quite interesting.

There are only 3 of them. They are formed by a succession of tones and semitones - TSTSTSTS

The 3 of them are:

C D Eb F F# G# A B C...

Db Eb E Gb G A Bb C Db...

D E F G Ab Bb B C# D...

Eb is the same as C, E is the same as Db, F is the same as D,

F# is the same as C, G is the same as Db, Ab is the same as D

A is the same as C, Bb is the same as Db, B is the same as D

In other words, all the notes of the diminished chord use the same scale.

eg Co (C dim) = C Eb F# A all use C diminished scale

(Note: some people prefer to think of the diminished scale as starting with a semitone (ie.STSTSTST). Either way you end up with a diminished scale.

**THE WHOLE TONE SCALE**

This is formed by a succession of tones:

There are only 2 of these scales:

C D E F# G# A# C...

Db Eb F G A B Db...

D is the same as C, Eb is the same as Db etc.

(seldom used)

**THE PENTATONIC SCALES**

The major pentatonic is the 1st, 2nd 3rd 5th and 6th notes of the major scale

The minor pentatonic has the same notes as the major one but starting on

the relative minor, producing the 1st 3rd 4th 5th 7th of the Aolian mode.  
By altering (flattening or sharpening) any of these notes you end up with other pentatonic scales.

#### THE GYPSY/ MIDDLE-EASTERN SCALE

C Db E F G Ab B C

It has a minor 2nd and minor 6th  
(seldom needed)

#### THE BLUES SCALE

The blues notes are the minor 3rd, 7th and sometimes the 5th.

The major 3rd can also be used. The 2nd and the 6th are often omitted.

**CHORDS** - Although there are a lot of chords, a lot of them follow the same rules with regard to which scale applies to them.

First, some more good news. Think of the 4-note chords derived from a major scale.

C D E F G A B C

The chords you get will be:

C major seventh, Dm7, Em7, F major seventh, G7, Am7, B half-diminished (Bm7-5).

or in Latin symbols,

I major 7, II m7, III m7, IV major 7, V7, VI m7 VII m7(-5).

(This is useful for transposing purposes.)

For any chord sequence which uses these chords, eg C Dm7 Em7 F,

or C Dm7 Em7 Am7 or C Am7 Dm7 G7 or C F Em7 Am7 etc

... you can use just the C major scale.

*Therefore try and identify such sequences.*

The so-called 2 5 1 (II V I) sequences are very common. (eg Dm7 G7 C)

You can very often use the same scale over all of them - in this instance C major scale.

In a minor 2 5 1 sequence the chords are a little different:

eg Dm7(-5), G7 Cm (The dominant 7th may also be written G7(b9))

If the Cm chord is a Cm major seventh chord (relatively rare),

you could play a C harmonic minor scale over all three chords since all the chords are derived from a C harmonic minor scale.

More often, the Cm chord is a Cm6 or Cm69 (this is often assumed rather than specified as such). In this case you can still use the C harmonic minor scale over the first 2 chords but you will need to change to a C minor scale (see above) for the last chord.

#### Case by case basis

A **major chord** (eg C, C<sup>Δ</sup>, C major, C6, C69) - use the same major scale.

If the chord has a #11 or sometimes a -5, use the Lydian mode,

ie. the G major scale. To find the Lydian mode go up a perfect 5th.

A major chord with a sharpened 5th (eg C<sup>Δ</sup>(+5), which is a particular favourite of mine but not many other people, uses either an A minor or an A harmonic scale.

A **minor chord** (eg Cm, Cm6, Cm69, Cm maj7) - use same minor scale.

A **minor seventh chord** (eg Cm7) - use either the Dorian mode,

ie. Bb major scale, found by going down a tone. Or see if it is in a recognisable sequence as explained in the last section. (It could be a II m7, III m7 or IV m7)

A **diminished chord** (eg Co or C dim) use the diminished scale on the same note. If in doubt stick to the arpeggio. You could also sometimes use the harmonic minor scale a semitone higher ie. Db harmonic minor for a Co chord)

A **half-diminished chord** (eg. Cm7-5, Cm7(b5) C<sup>ø</sup> ) - use either a Eb minor scale (up a minor 3rd) or a Db major scale (up a semitone).

### **The dominant seventh family**

This is the type of chord which scares the pants of most players.

For a dominant 7 or 9 with no alterations, (eg, C7 or C9) - use the major scale a perfect fifth above (eg F major in this case)

For a dominant 7 or 9 with a sharpened 11th, sometimes written as a flattened 5th, (eg C9(+11) or C9(-5) - use the G minor scale, ie. the minor scale a perfect fifth above. This type of chord is usually found on a foreign note to the key. (Eg. Db7 in the key of C) A C whole-tone scale can also be used.

For a dominant 7 or 9 with a sharpened fifth (eg. C7(+5) or C7+) - use the Fm scale, ie. a perfect 4th above the root of the chord. A C whole-tone scale can also be used.

For a dominant 7 with a flattened and/or sharpened 5th and a flattened and/or 9th (eg. C7(b9+5), C7(b9-5), C7(#9-5), C7(#9+5), C7(b9#9) C7alt) - use the so-called *altered scale* ie. the minor scale a semitone above the root of the chord. In this instance Dbm.

For a dominant 7 or 13 with a flattened 5th and possible also an altered 9th (eg. C13(b9-5) or C13(#9-5) - use the diminished scale a semitone above the root of the chord. In this instance Dbo.

For a dominant 7th with a flattened 9th going to a tonic minor chord, use the harmonic minor scale a perfect fourth above - as mentioned earlier.

## **THEORY - IMPROVISATION**

When you have found out what chords and scales you can use over a sequence you can go to town. Here are a few pointers:

1. Don't forget that you can build chords from scales - eg. Cmajor7, Dm7, Em7 F major 7, G7, Am7, B half-diminished from the C major scale. They can be 3-note, 4-note, 5-note, 6-note, etc. Smaller chords are more usual and they are easier to handle.
2. Think about where you're going to end a phrase. Avoid stopping on the root note of the chord, unless you want to over-play that effect, because it sounds too final. To create suspense, try ending on different notes each time.
3. Make good use of rests between phrases. This enables the rhythm section to fill the gaps and gives you a short breather.
4. Look ahead at what's coming up so mentally you can be prepared for anything difficult or unexpected.
5. Build up to a series of climaxes, with the biggest one at or near the end of your solo.

6. Add variety by using dynamics, different intonations, different length of phrases, different rhythmic patterns, etc.
7. Don't worry about it - enjoy yourself.