

Music improvisation

Music Improvisation Tool



*Example from
'The girl from Ipanema'
bar number 24 and 26*

See www.musicimprotool.dk/xmpl

Introduction

In western music chords do have a so-called 'function', e.g. a tonic, a dominant, a subdominant seven, a parallel minor chord, a bidentant, an altered dominant ninth and so forth a lot.

Chord structures can be 'constructed' according to more methods. Nowadays chords are created by harmonizing the modern western - more than 30 - modal scales. Resulting in round 90 different chord structures, of which round 60 are in steady use. All 60 chords in the Music Improvisation Tool are created this way.

This means, that one can improvise over any of these chords using the scale, or one of the scales, that might have been the chords modal fundament. As more scales can be the fundament of one chord, MIT will select the scale that at the same time supports the actual tune best possible.

MusicImproTool use an algorithm based on above rules. Tell MIT the mode/key of the music played and the chord to improvise over. MIT will answer the question as showed below. Of course, one shall not play the proposed improvisation scale as such, but use its tonal material to 'compose' own improvisation; and spice it with chromatic sequences and odd/larger intervals.

Example using "The Girl from Ipanema"

Simplified version of the melody and chords in bars 21 to 28. All below bars are in F major. See full score and analysis on 'www.musicimprotool.dk/xml/'.

The image displays a musical score for the piece "The Girl from Ipanema". It consists of two systems of music, each with a treble and bass clef staff. The first system covers bars 21 to 24, and the second system covers bars 25 to 28. The melody is written in the treble clef, and the chords are indicated in the bass clef. The key signature is one flat (Bb), and the time signature is 4/4. The chords are: Eb7 (bars 21-22), Am7 (bar 23), D7b9 (bar 24), Gm7 (bar 25), C7b9#11 (bar 26), and Fmaj7 (bars 27-28). The melody features triplet markings in bars 21, 22, 23, 25, and 26.

The chords D7b9 and C7b9#11 both contain a dim7 tetrad - 'standing' on the chords fundamental note: D resp. C - containing 3 minor thirds that gives a soft, blurred transition between the F modal scales around them.

The #11 in the C7 chord are F sharp like the melody-tone.

The tones: D-F#-A-C-Eb in the chord D7b9 around the melody-tones: G-G#-A-Bb signal a chromatic development, as do the tones C-E-G-Bb-Db-F# in the chord C7b9#11 between the tones F and G in bars 25 and 27.

MusicImProTool - proposed improvisation mode:

Selecting the tonality and the chords in bars number 24 and 26 on MIT, displays the following information and recommendation when activating the key: 'Show proposal'.

Bar number 24:

The chord **D7b9** is a/an/the altered secondary dominant seventh chord on step **VI** in the harmonised **F major** scale.

To improvise over **D7b9** on step **VI** in **F major**, use the **G harmonic minor** scale from this scales **5.** step, which is the tone **D**, or use the **D phrygian dominant** scale, which is the **5.** mode in **G harmonic minor**.

Alternative: octatonic scale with its tonic $\frac{1}{2}$ degree above the chords fundamental note. If the chords fundamental is G, the octatonic scales tonic is Ab.

Bar number 26:

The chord **C7b9#11** is a/an/the altered dominant seventh chord on step **V** in **F major**.

This chord does not appear on any step in the major mode, but is often used as a colouring chord. Provided you ought to improvise over the selected chord under the given tonal conditions, you may select a scale that 'hit' the chordtones, on larger or smaller expense of the affinity to the tonality of the music in question. GuitarGuides proposal is as follows:

Improvise over **C7b9#11** on step **V** in **F major** using **Db octatonic** scale from this scales **8.** step, i.e. the tone **C**, or using a **C reversed octatonic** scale (degree sequence: $\frac{1}{2}$ -1- $\frac{1}{2}$ -1- $\frac{1}{2}$ -1- $\frac{1}{2}$ -1, i.e. an octatonic modality/scale without name), i.e. the **8.** mode in **Db octatonic** scale.

Alternative: None.

On the following page find these verbal advices layed out in scores for bars number 24 and 26 respectively.

Remark the similarity between the proposed improvisation scales. A G harmonic minor scale is tonal equal to a D phrygian dominant scale, but they have different fundamentals and degree sequences. They are both so-called modal scales; the first one is the first mode of G harmonic minor, the D phryg.dom. is the fifth mode of G harmonic minor.

These scales 'hit' 5 of the 7 tones in the F major tonality.

Example inspired from:
 "Girl from Ipanema", bars no. 24 and 26

bar # 24

F maj scale D7b9 chord

Piano

F maj D7b9

G harmonic minor (~ Bb maj +) D phrygian dominant

Pno.

D7b9

bar # 26

F maj scale C7b9#11

Pno.

F maj

Db octatonic ~ C reverse octat. 8. mode C reverse octatonic ~ Db octat. 8. mode

C7b9#11

Pno.

The two scales above contain the following tones (i.e. they are tonal equal):

D phrygian dominant: D-Eb-F# -G-A-Bb-C-D

G harmonic minor: G-A-Bb-C-D-Eb-F#-.G

Playing and viewing the proposals

Activating the MIT-keys: 1) Play tonality, 2) Play chord and 3) Play proposal will play the selection and show in notes the 2 selections and the proposal.

The tonality is played as a triad, first the three tones each - from the selected tonic and up, and then the triad chord, while at the same time showed in a score.

The same goes for the chord.

The proposed scale is played and showed as the modal scale with the proposed modal fundamental as the scales fundamental. See 'D phrygian dominant' in bar 24 above. Look like this:



Equal to G harmonic minor from this scales fifth tone.