

**WHERE THE PASSING TONES COME FROM**

Every chord has one or more scales which contain the chord tones (1, 3, 5, 7) and a set of passing tones (2, 4, 6). Diatonic, scale, passing tones come from the chord scale. They can be whole steps or half steps depending on the scale. Chromatic passing tones are always half steps. Below in the B $\flat$  scales, chord tones are marked with an arrow and all other notes are passing tones.

**B $\flat$  Major scale (diatonic)**

**B $\flat$  Chromatic scale (half-tones)**

Below are some I VI II V harmonic phrases where the bass line employs scale and chromatic passing tones. Numbers indicate relationships to the chord on which the notes occur.

Observe that the VI (G7) chord is dominant here. This is common where the VI7 functions as V7 of II (C-7). This is known as a *secondary dominant*. Other I VI II V progressions may use VI-7.

## QUICK REFERENCE FOR CHORD TONES &amp; PASSING TONES

Chord Type	Chord Tones	Passing Tones (Scale)
$\Delta 7$	1, 3, 5, 7	2, 4, 6
$\Delta 7\flat 5$	1, 3, $\flat 5$ , 7	2, 4, 6
$\Delta 7\sharp 5$	1, 3, $\sharp 5$ , 7	2, $\sharp 4$ , 6
$-7$	1, $\flat 3$ , 5, $\flat 7$	2, 4, 6
$\circ 7$	1, $\flat 3$ , $\flat 5$ , $\flat\flat 7$	2, 4, $\flat 6$ , 7
$\emptyset 7 (-7\flat 5)$	1, $\flat 3$ , $\flat 5$ , $\flat 7$	$\flat 2$ , 4, $\flat 6$
$\emptyset \flat 9$	1, $\flat 3$ , $\flat 5$ , $\flat 7$	2, 4, $\flat 6$
$\Delta 6$	1, 3, 5, 6	2, 4, 7
$-6$	1, $\flat 3$ , 5, 6	2, 4, 7
$-\Delta 7$	1, $\flat 3$ , 5, 7	2, 4, 6
Dominant 7	1, 3, 5, $\flat 7$	2, 4, 6
Dom. 7 $\sharp 11$	1, 3, 5, $\flat 7$	2, $\sharp 4$ , 6
Dom. 7 $\sharp 5$ (augmented)	1, 3, $\sharp 5$ , $\flat 7$	2, $\sharp 4$
Dom. 7sus4	1, 4, 5, $\flat 7$	2, 3, 6
Dom. 7 $\flat 9$	1, 3, 5, $\flat 7$	$\flat 2$ , $\sharp 2$ , 4, 6
Dom. 7 $\flat 9 \flat 13$	1, 3, 5, $\flat 7$	$\flat 2$ , $\sharp 2$ , $\sharp 4$ , 6
Dom. 7 altered	1, 3, $\flat 5$ , $\flat 7$	$\flat 2$ , $\sharp 2$ , $\flat 6$
Dom. 7 $\flat 5$	1, 3, $\flat 5$ , $\flat 7$	2, 4, 6

This list shows scale passing tones only. Many more variations exist with chromatic passing tones or approaches, particularly with the dominant chords.



VARIATIONS OF MELODIC BASS LINES  
ON THE FIRST FOUR MEASURES OF RHYTHM CHANGES

Example 1a | Roots only

B $\flat$  G7 C-7 F7 D-7 G7 C-7 F7

Example 1b | Roots and fifths

B $\flat$  G7 C-7 F7 D-7 G7 C-7 F7

Example 2 | Roots, thirds, fifths and sevenths with scale and chromatic passing tones

B $\flat$  G7 C-7 F7 D-7 G7 C-7 F7

Example 3 | Diatonic triad and seventh arpeggios resulting in occasional inversions on chord beats

B $\flat$  G7 C-7 F7 D-7 G7 C-7 F7

Example 4 | Melodic scale sequences

B $\flat$  G7 C-7 F7 D-7 G7 C-7 F7

Example 5 | Melodic scale sequences with chromaticism and implied secondary dominant (A7)

B $\flat$  G7 C-7 F7 (A7) D-7 G7 C-7 F7

Example 6 | Melodic sequences yielding scale passages across barlines and occasional non-chord tones on chord beats

B $\flat$  G7 C-7 F7 D-7 G7 C-7 F7





# LINE 1A

A 2-feel bass line. Here the emphasis lies on beats one and three.

Chord progression for Line 1A:

B $\flat$  G7 C-7 F7 D-7 G7 C-7 F7

B $\flat$ 7 E $\flat$  A $\flat$ 7 D-7 G7 C-7 F7

B $\flat$  G7/B C-7 F7 $\sharp$ 5/C $\sharp$  D-7 G7 C-7 F7

B $\flat$ 7 E $\flat$  E $\flat$ -6 B $\flat$ /D B $\flat$ /F B $\flat$

D7 G7

C7 F7

B $\flat$  G7/B C-7 F7 $\sharp$ 5/C $\sharp$  D-7 G7 C-7 F7

B $\flat$ 7 E $\flat$  A $\flat$ 7 D-7 G7 C-7 F7

Detailed description: This block contains the musical notation for Line 1A, consisting of eight staves of bass clef music in a 2/4 time signature. The key signature has two flats (B-flat and E-flat). The notation includes various chords and melodic lines with triplets. The first staff starts with a B-flat chord and a quarter note G, followed by a quarter rest, a quarter note B-flat, another quarter rest, a quarter note C, and a quarter rest. The second staff begins with a B-flat 7 chord and a quarter note G, followed by a quarter note E-flat, a quarter note A-flat, a quarter note D, and a quarter note G. The third staff starts with a B-flat chord and a quarter note B-flat, followed by a quarter note G, a quarter note C, a quarter note F, a quarter note D, a quarter note G, a quarter note C, and a quarter note F. The fourth staff begins with a B-flat 7 chord and a quarter note B-flat, followed by a quarter note E-flat, a quarter note E-flat 6, a quarter note B-flat/D, a quarter note B-flat/F, and a quarter note B-flat. The fifth staff starts with a D7 chord and a quarter note D, followed by a quarter note F, a quarter note A, and a quarter note G. The sixth staff begins with a C7 chord and a quarter note C, followed by a quarter note E-flat, a quarter note G, a quarter note B-flat, a quarter note C, a quarter note F, a quarter note C, and a quarter note F. The seventh staff starts with a B-flat chord and a quarter note B-flat, followed by a quarter note G, a quarter note C, a quarter note F, a quarter note D, a quarter note G, a quarter note C, and a quarter note F. The eighth staff begins with a B-flat 7 chord and a quarter note B-flat, followed by a quarter note E-flat, a quarter note A-flat, a quarter note D, a quarter note G, a quarter note C, and a quarter note F.

# LINE 1C

Roots, thirds and fifths along with scale and chromatic approaches leading into roots provide solid chord outlines with interesting melodic shapes and directions.



Disc 1  
Track 5  
(1st chorus)

B $\flat$  G-7 C-7 F7 B $\flat$  G7 C-7 F7

B $\flat$ 7 E $\flat$  A $\flat$ 7 D-7 G7 C-7 F7

B $\flat$  G-7 C-7 F7 D-7 G7 C-7 F7

B $\flat$ 7 E $\flat$ 7 F7 B $\flat$ 6

A-7 D7 G7

C7 F7 C-7 F7

B $\flat$  G-7 C-7 F7 D-7 G7 C-7 F7

B $\flat$ 7 E $\flat$ 7 C-7 F7 B $\flat$  F7



# REHARMONIZATION 6

A sections: half time swing/funk over B $\flat$ 7

B section: walk. The first four bars feature an alternate progression with II V of IV

Funk B $\flat$ 7

B $\flat$ 7

*simile*

B $\flat$ 7

B $\flat$ 7

walk F-7 B $\flat$ 7 Eb7

C7 F7

Funk B $\flat$ 7

B $\flat$ 7

Transcribe the 2<sup>nd</sup> and 3<sup>rd</sup> choruses.

# OPEN CHANGES 1 (B $\flat$ )



Transcribe the bass line (6 choruses total).

B $\flat$

B $\flat$ 7 Eb B $\flat$  C-7 F7

B $\flat$

B $\flat$ 7 Eb B $\flat$

D7 G7

C7 G-7 C7 F7

B $\flat$

B $\flat$ 7 Eb B $\flat$  F7



# FREE STYLE 1

This is the line behind "The Lizard of Odds" (slow version) on page 142 (disc 2, track 21).  
Note the 8 bar intro. Complete the transcription.



(Intro bass and drums)

7

3

3

3

3

## MODES AND DIATONIC CHORDS OF THE MAJOR SCALE

Example 1 | Major scale and relative minor scale, possible seventh chords, functions and modes

C major

Chord	Function	Mode	Chord & Upper Tensions
C $\Delta^7$	I $\Delta^7$	Ionian (major)	 1 3 5 7 9 11 13
D-7	II-7	Dorian	 1 3 5 7 9 11 13
E-7	III-7	Phrygian	 1 3 5 7 9 11 13
F $\Delta^7$	IV $\Delta^7$	Lydian	 1 3 5 7 9 11 13
G7	V7	Mixolydian	 1 3 5 7 9 11 13
A-7	VI-7	Aeolian (natural minor)	 1 3 5 7 9 11 13
B $\emptyset$	VII $\emptyset$	Locrian	 1 3 5 7 9 11 13

Notes marked with an "x" are notes that need to resolve.





# HOP ON THE SCALE

Bruce Gertz

bass

Musical score for bass guitar, featuring diatonic melodies and chords in the key of B-flat major. The score consists of nine staves of music. The key signature has two flats (B-flat and E-flat), and the time signature is common time (C). The chords used are: Bb, G-7, C-7, F7, D-7, G7, C-7, F7, Bb7, Eb, Ab7, D-7, G7, C-7, F7, Bb, G-7, C-7, F7, D-7, G7, C-7, F7, Bb7, Eb, Ab7, Bb6, D7, G7, C7, F7, C-7, F7, Bb, G-7, C-7, F7, D-7, G7, C-7, F7, Bb7, Eb, Ab7, Bb6.

# THE RHYTHM METHOD

Bruce Gertz

bass



Ab $\Delta$ 7 F7 Bb-7 Eb7 C-7 F7 Bb-7 Eb7

Ab7 Db $\Delta$ 7 Gb7 C-7 F7 Bb-7 Eb7

Ab F7 Bb-7 Eb7 C-7 F7 Bb-7 Eb7

Ab7 Db $\Delta$ 7 Ab6

G-7 C7 C-7 F7

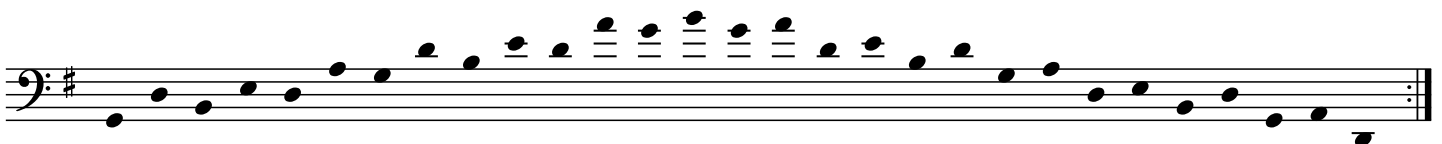
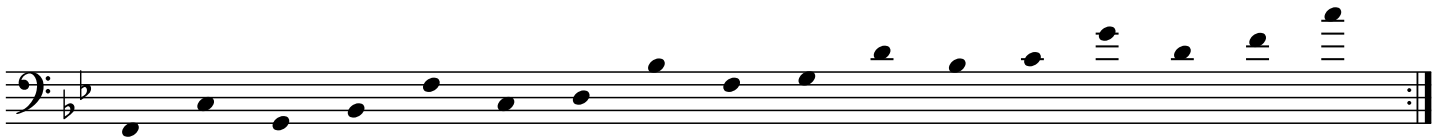
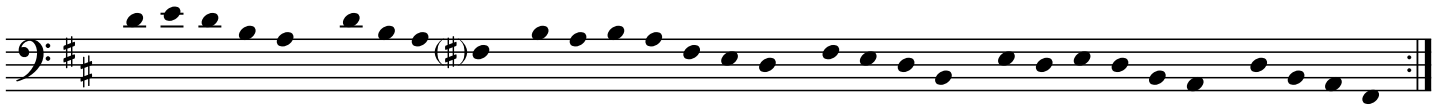
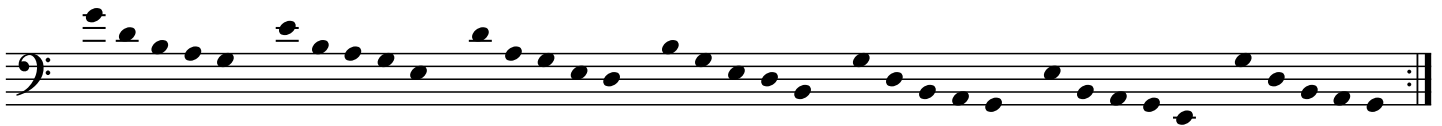
Bb7 F-7 Bb7 Bb-7 Eb7

Ab $\Delta$ 7 F7 Bb-7 Eb7 C-7 F7 Bb-7 Eb7

Ab7 Db $\Delta$ 7 Ab $\Delta$ 7 (Bb-7 Eb7)

### PENTATONIC EXERCISES

Play these exercises in all keys. Play them retrograde (backwards). Try starting every next note in the sequence. Try different rhythms such as triplets, groupings or syncopations.





# PENTA-RHYTHM

All the A sections are B $\flat$ 7 Funk/Hip Hop (half-time feel).

The B section is swing with chord changes.

Bruce Gertz

Disc 2  
Track 13  
or  
Disc 1  
Track 15

bass

Funk B $\flat$ 7

Triads from the Half step/Whole step Diminished Scale

Example 1 | Major triads

A musical staff in treble clef showing the notes of the Half-step/Whole-step Diminished Scale: C, Bb, Ab, Gb, F#, E, D, C. Brackets above and below the staff group these notes into four major triads: A (A, C, E), C (C, E, G), F#/Gb (F#, Ab, C), and Eb (Eb, Gb, Ab).

Example 2 | Minor triads

A musical staff in treble clef showing the notes of the Half-step/Whole-step Diminished Scale: C, Bb, Ab, Gb, F#, E, D, C. Brackets above and below the staff group these notes into three minor triads: C- (C, Eb, F), Eb- (Eb, Gb, Ab), and F#- (F#, Ab, C).

Sixth and Seventh Chords

Example 1 | Minor seventh chords

A musical staff in treble clef showing the notes of the Half-step/Whole-step Diminished Scale: C, Bb, Ab, Gb, F#, E, D, C. Brackets above and below the staff group these notes into three minor seventh chords: C-7 (C, Eb, F, Ab), Eb-7 (Eb, Gb, Ab, C), and F#-7 (F#, Ab, C, Eb).

Example 2 | Sixth and seventh chords (major, minor, half-diminished and diminished)

A musical staff in treble clef showing various sixth and seventh chords derived from the Half-step/Whole-step Diminished Scale. The chords are: C6, C-6, Eb6, Eb-6, F#6, F#-6, A6, and A-6. A second staff shows diminished chords: Cø, Ebø, Aø, and F#ø. A third staff shows half-diminished chords: C°7, C#°7, D#°7, E°7, F#°7, G°7, and Bb°7.



### Arpeggio Study with Tensions

After inverting each chord go to the nearest available tension. Inversions may start an octave lower.

#### Example 8 | Inversion Formulas

Example 8 illustrates arpeggio study with tensions for three chords: CΔ7#11, C-7, and D7#11. Each chord is shown in its root position and its first, second, and third inversions. The notes are written on a bass clef staff, and the corresponding tensions are listed below the staff.

**CΔ7#11**

- Root position: 9 #11 13
- 1st inversion: 9 #11 13
- 2nd inversion: #11 13 9
- 3rd inversion: 13 9 #11

**C-7**

- Root position: 9 11 13
- 1st inversion: 9 11 13
- 2nd inversion: 11 13 9
- 3rd inversion: 13 9 11

**D7#11**

- Root position: 9 #11 13
- 1st inversion: 9 #11 13
- 2nd inversion: #11 13 9
- 3rd inversion: 13 9 #11

Adding approach notes to the chord tones can produce interesting melodies.

#### Example 9 | Approach notes

Example 9 illustrates approach notes for two chords: CΔ7#11 and C7b9#9b13. The notes are written on a bass clef staff, and the corresponding tensions are listed below the staff.

**CΔ7#11**

- Tensions: 9 #11 13

**C7b9#9b13**

- Tensions: b9 #9 b13



### INTERVALIC LINES

Example 1 | Major triads moving up in whole steps

Musical notation for Example 1. The bass clef contains notes for F, G, A, B, Db, Eb, and F. The treble clef contains notes for Eb and F.

It is a good exercise to change the sequence of notes in an arpeggio: 1357, 1375, 1735, 1753, and so on. Including the inversions there are 24 permutations for a seventh chord. The next example combines two sequences (1375 and 3157) over major seventh chords to form an intervallic line in ascending major thirds. The notes come from the hexatonic (six-note) symmetric augmented scale.

Example 2 | Major seventh chord sequence

Musical notation for Example 2. The bass clef contains notes for C $\Delta$ <sup>7</sup>, E $\Delta$ <sup>7</sup>, A $\flat$  $\Delta$ <sup>7</sup>, and C $\Delta$ <sup>7</sup>. The treble clef contains notes for the symmetric augmented scale (hexatonic).

Example 3

Musical notation for Example 3. The bass clef contains notes for an intervallic line with intervals  $\uparrow P4$  and  $\downarrow m3$ .

Example 4

Musical notation for Example 4. The bass clef contains notes for an intervallic line with intervals  $\uparrow P4$  and  $\downarrow m2$ .

Example 5

Musical notation for Example 5. The bass clef contains notes for an intervallic line with intervals  $\downarrow m3$ ,  $\uparrow P4$ ,  $\downarrow m3$ ,  $\downarrow P4$ ,  $\downarrow m3$ , and  $\uparrow P4$ .

Example 6 | Whole step/half step symmetric diminished scale

Musical notation for Example 6. The bass clef contains notes for a whole step/half step symmetric diminished scale with intervals  $\uparrow P4$ ,  $\downarrow m3$ ,  $\downarrow P4$ , and  $\downarrow m3$ .

Example 7

Musical notation for Example 7. The bass clef contains notes for an intervallic line with intervals  $\downarrow m3$ ,  $\uparrow P4$ ,  $\downarrow m3$ ,  $\uparrow P4$ ,  $\downarrow m3$ ,  $\uparrow P4$ ,  $\downarrow m3$ , and  $\downarrow P4$ .

