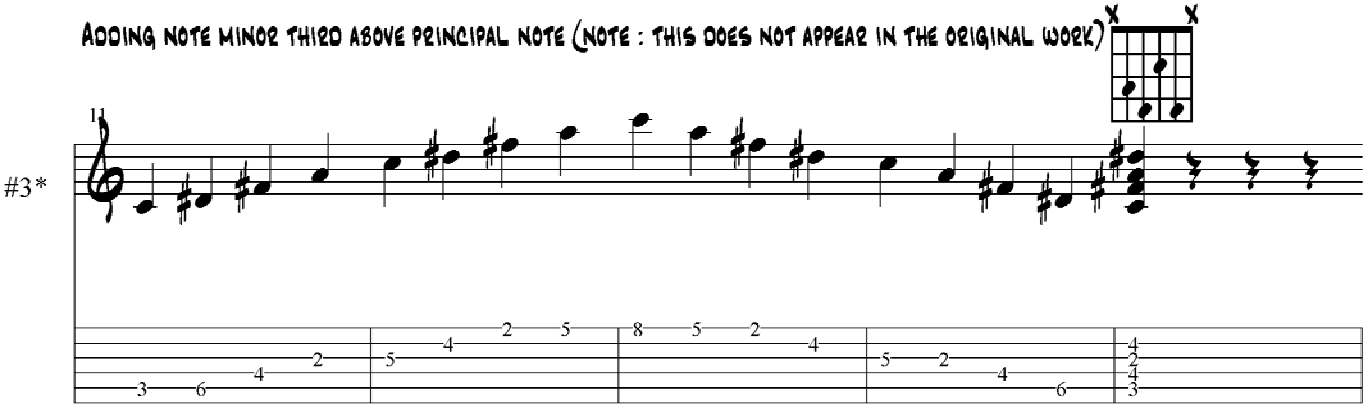
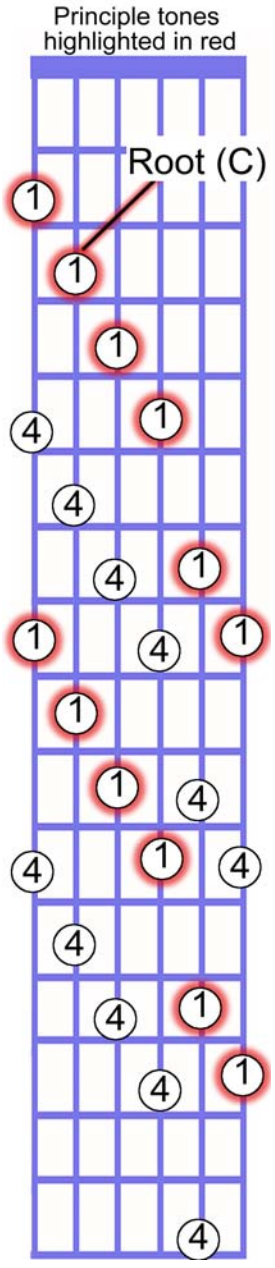
Exercise #3*

Exercise number two uses the same principal tones (C and F#) and adds notes1 ½ steps above each tone (Eb and A). *This pattern was not included in Slonimsky's original work; I include it as it creates a diminished arpeggio which is used frequently and to good advantage by the jazz player. All chords following will be a suitable





I should note at this point, the diminished chord I reference is properly called a diminished 7th. A diminished chord is a triad made up of root, flat 3rd, and flat 5th.The diminished chord in this example is 1,b3,b5,andbb7 (6). For a jazz study the diminished chord will be more frequently used.

The diminished arpeggio presents a unique situation. Each note of the pattern can be considered the root so playing any diminished implies four diminished chords. This is due to the fact that all notes are equally spaced from one another. Also when considering roots outside of the roots suggested by the cluster tones (see chart below) two other chord types are generated; the 7th flatted 9th (7-9), and the maj.7 flatted 13th (maj7-13). In other words, playing one diminished chord can imply 12 different chords when your bass player is playing the alternate bass note. This characteristic makes for easy playing as well.

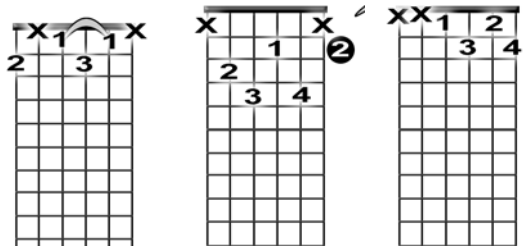
Analysis

Cluster Tones-->	C	Eb	F#/Gb	A	chord implied	Character
C	Octave	-3	b5/#11	6th/13th	**C dim**	Build
C#/Db	7	9	11	#5/b13	**C#maj7-13**	Release
D	b7	-9	3	5	**D7-9**	Tension
D#/Eb	6th/13th	Octave	b3/#9	#5/b13	**Ebdim7**	Build
E	#5/b13	7	9	5	**Emaj7-13**	Release
F	5	b7	b9	b5/#11	**F7-9**	Tension
F#/Gb	b5/#11	6th/13th	Octave	4th/11th	**Gbdim**	Build
G	4th/11th	#5/b13	7	3	**Gmaj7-13**	Release
G#/Ab	3	5	b7	b3/#9	**G#7-9**	Tension
A	b3/#9	b5/#11	6th/13th	Octave	**A dim 7**	Build
A#/Bb	2	4th/11th	#5/b13	7	**Bbmaj7-13**	Release
B	b2/b9	3	5	b7	**B7-9**	Tension

The chromatic scale as possible roots

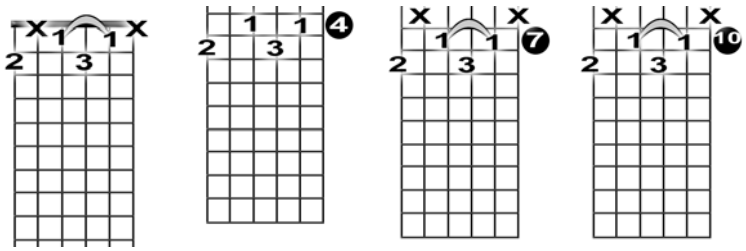
Cluster tones create these intervals when a root is chosen from chromatic scale

I use only 3 diminished chord forms:



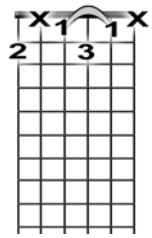
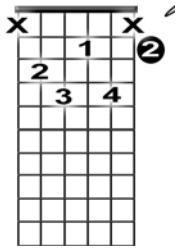
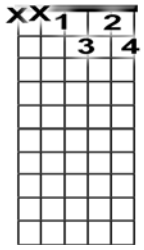
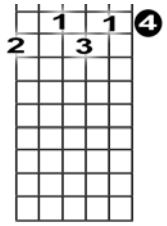
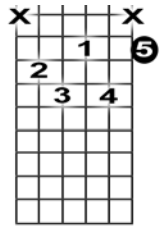
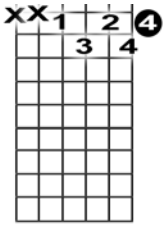
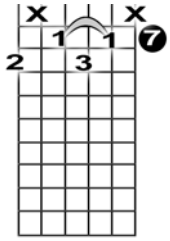
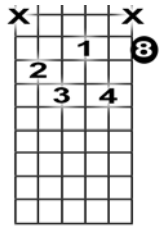
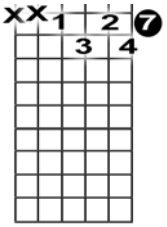
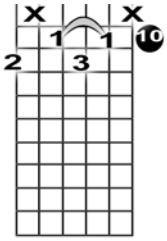
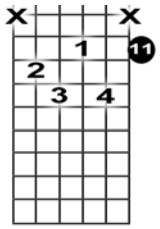
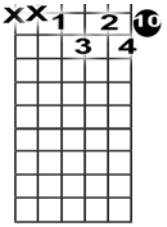
Each chord shown has the same roots; **C, Eb, Gb, or A**

Each form repeats in a linear fashion along the neck every 4th fret (add 3 to fret you are on)

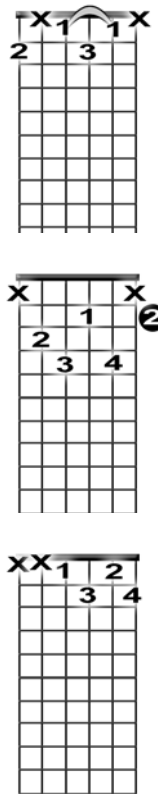
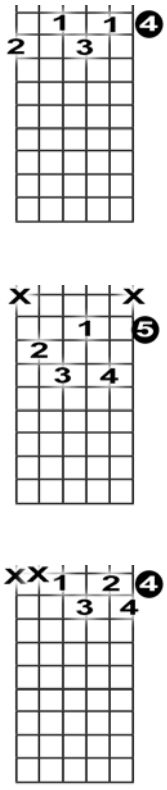
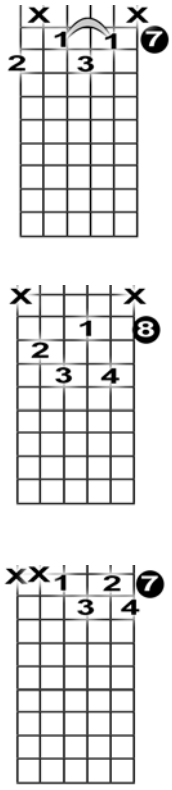
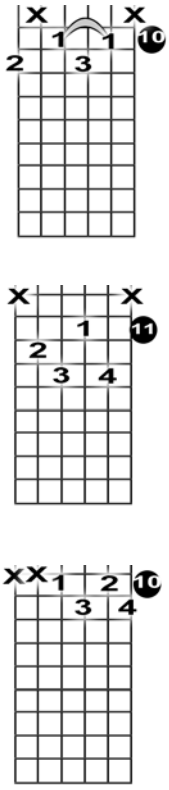


These are all the same root chord C, Eb, Gb, or A

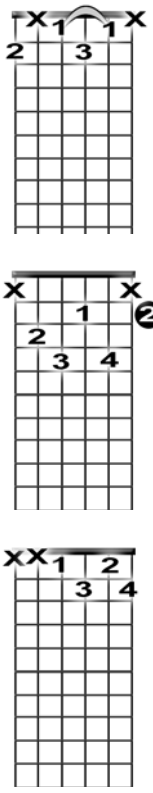
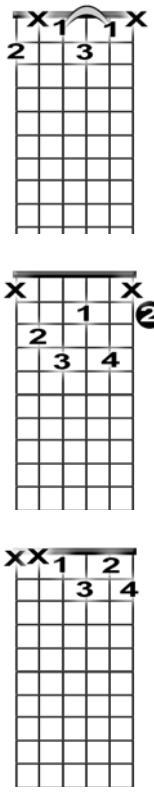
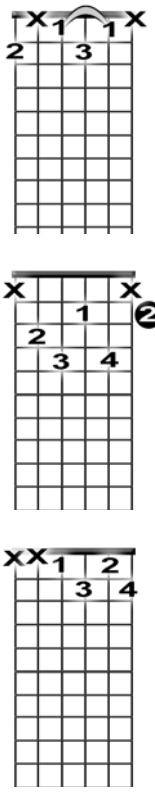
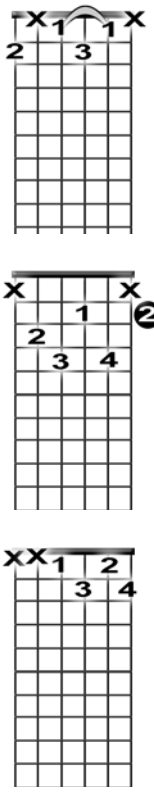
- **Cluster Tones as the <u>Root</u>**

Chord Name And Diagram	**C dim 7**	**Eb dim 7**	**Gb dim 7**	**A dim 7**
	  	  	  	  
comment				
13th	Not necessary	Not necessary	Not necessary	Not necessary
11th	Not necessary	Not necessary	C= +11th	Not necessary
9th	Not necessary	Not necessary	G#=9th	Gb
7th	A=double b7th(6th)	C= double b7th(6th)	Eb= double b7th(6th)	F# = double b7th(6th)
5th	Gb=b 5th	A=b 5th	C=b 5th	Eb=b 5th
3rd	Eb = b3rd	Gb= b3rd	A= b3rd	C= b3rd
Root	**C**	**D#/Eb**	**F#/Gb**	**A**

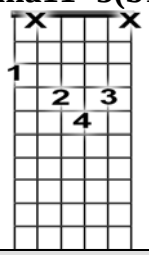
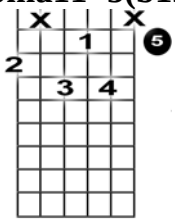
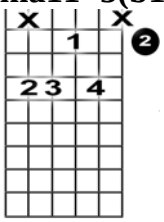
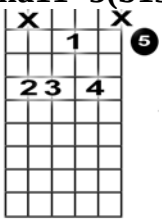
- **Cluster Tones as the <u>Flatted Third</u>**

Chord Name And Diagram	**A dim 7**	**C dim 7**	**D#/Eb dim 7**	**F#/Gb dim 7**
				
comment				
13^{th}	Not necessary	Not necessary	Not necessary	Not necessary
11^{th}	Not necessary	Not necessary	C= $+11^{th}$	Not necessary
9^{th}	Not necessary	Not necessary	G#=9^{th}	Gb
7^{th}	F# = double $b7^{th}(6^{th})$	A= double $b7^{th}(6^{th})$	C= double $b7^{th}(6^{th})$	Eb = double $b7^{th}(6^{th})$
5^{th}	Eb=b 5^{th}	F#/Gb=b 5^{th}	A=b 5^{th}	C=b 5^{th}
b 3rd	**C**	**D#/Eb**	**F#/Gb**	**A**
Root	**A**	**C**	**Eb**	**Gb**

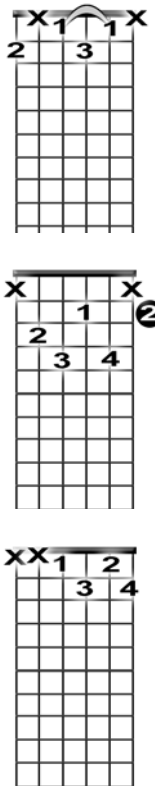
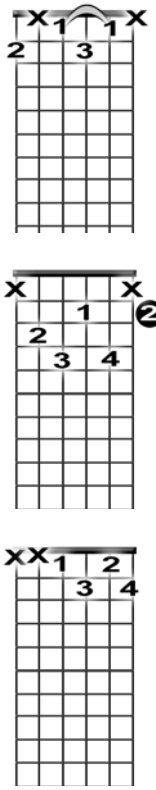
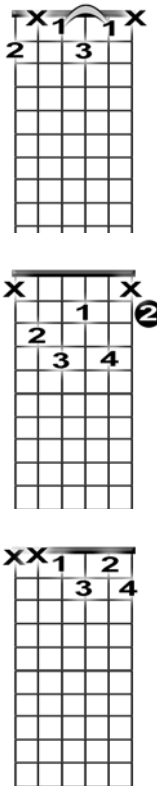
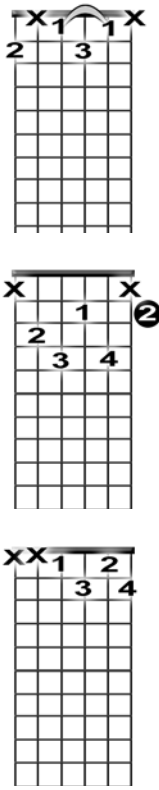
Cluster Tones as the Maj Third

Chord Name And Diagram	Ab 7-9	B 7-9	D7-9	F7-9
				
comment	The usual practice is to play a diminished chord a half step above the root, omitting the root, assuming your bass player will cover the root. Some easily played forms are possible though.			
13^{th}	Not necessary	Not necessary	Not necessary	Not necessary
11^{th}	Not necessary	Not necessary	Not necessary	Not necessary
9^{th}	A=$b9^{th}$	C=$b9^{th}$	Eb=$b9^{th}$	Gb
7^{th}	Gb/F# = $b7^{th}$	A= $b7^{th}$	C= $b7^{th}$	D#/Eb = $b7^{th}$
5^{th}	Eb=5^{th}	F#/Gb= 5^{th}	A= 5^{th}	C= 5^{th}
3rd	**C**	**D#/Eb**	**F#/Gb**	**A**
Root	**Ab***	**B/Cb***	**D***	**F***

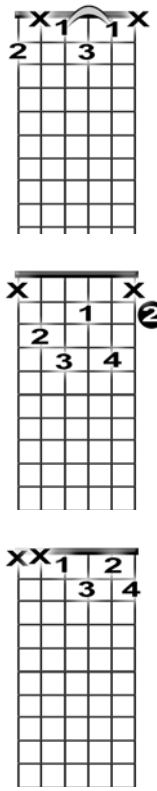
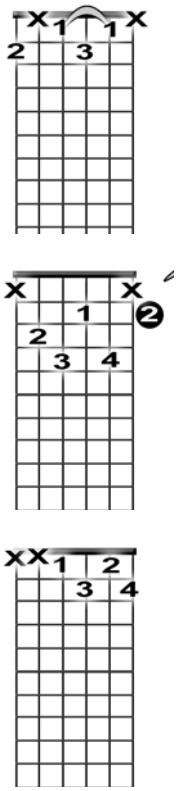
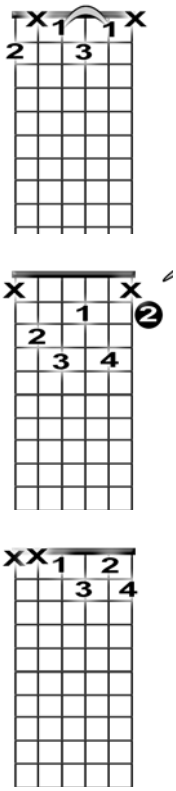
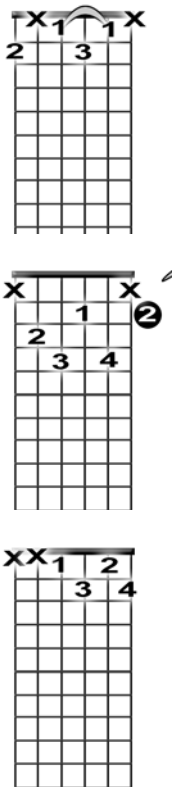
Cluster Tones as the <u>Fourth/Eleventh</u>

Chord Name And Diagram	**Gma11+5(b13)** 	**Bbma11+5(b13)** 	**Db ma11+5(b13)** 	**E ma11+5(b13)** 
comment	Not all components appear in the form…essentially a diminished form is used with the appropriate bass.	Not all components appear in the form…essentially a diminished form is used with the appropriate bass.	Not all components appear in the form…essentially a diminished form is used with the appropriate bass.	Not all components appear in the form…essentially a diminished form is used with the appropriate bass.
13th	D#=b13th	F#/Gb= b13th	A= b13th	C= b13th
11th	**C**	**D#/Eb**	**F#/Gb**	**A**
9th	A=9th	C= 9th	**D#/Eb= 9th**	Not necessary
7th	Gb/F# = maj7th	A= maj7th9not used)	C= maj7th	D#/Eb = maj7th
5th	D#=#5th	F#/Gb= #5th	A= #5th	C= #5th
4th	**C**	**D#/Eb**	**F#/Gb**	**A**
3rd	**B= 3rd**	**D=3rd**	**F=3rd**	**G#=3rd**
Root	**G**	**Bb**	**Db**	**E**

Cluster Tones as the Fifth

Chord Name And Diagram	F7-9	Ab 7-9	B7-9	D7-9
				
comment				
13th	Not necessary	Not necessary	Not necessary	Not necessary
11th	Not necessary	Not necessary	Not necessary	Not necessary
9th	F#/Gb=b 9th	A=b9th	C =b9th	D#/Eb=b 9th
7th	Eb= dom 7th	F#/Gb= dom 7th	A=dom 7th	C= b7th
5th	**C**	**D#/Eb**	**F#/Gb**	**A**
3rd	**A**	**C**	**D#/Eb=3rd**	**F#/Gb=3rd**
Root	**F***	**Ab***	**B***	**D***

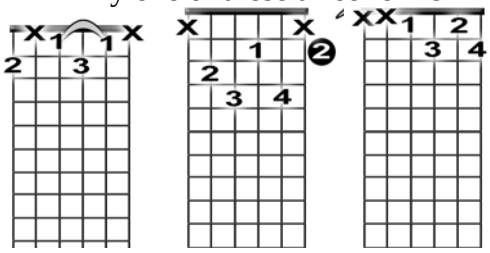
Cluster Tones as the <u>Seventh</u>

Chord Name And Diagram	D 7-9	F7-9	Ab7-9	B7-9
				
comment				
13th	Not necessary	Not necessary	Not necessary	Not necessary
11th	Not necessary	Not necessary	**F#/Gb**	**A**
9th	D#/Eb=b 9th	F#/Gb=b9th	Eb=b9th	Gb
7th	**C**	**D#/Eb**	**F#/Gb**	**A**
5th	A=5th	C=5th	A= #5th	C= #5th
3rd	**F#/Gb= 3rd**	**A=3rd**	**F=3rd**	**G#=3rd**
Root	**D**	**F**	**Ab**	**B**

In summary:

Chords generated by this pattern tend to be dissonant, dominant qualities despite the analysis that would reveal a tonic quality (maj9-13). When viewing this chord as triads super imposed upon one another, they contain the one chord as well as the five chord as well. This leads to a non-committed quality so I don't try to qualify it as a one chord…it just doesn't work for my ear except in very *out* harmonic situations. So we are left with the diminished chord and the dominant 7th with a flatted fifth and the one chord that sounds more like a five chord.

Any one of these three forms



will satisfy the names in the graph below

C dim 7	**B7-9**
Eb dim 7th	**D7-9**
Gb dim 7th	**F7-9**
A dim 7th	**Ab7-9**

Each one of these chords will repeat by moving up the neck 3 frets (minor third movement)

A dim 7	**C dim 7**	**D#/Eb dim 7**	**F#/Gb dim 7**