Tonality (part 3)

Naming of Triads by Relationship of All Notes to the Bass

Another very important way of naming triads (and especially larger chords) is by viewing the intervals that are formed from the *bass* note (lowest note) to the other notes.

Examples: 1) In a D triad, there is a 3rd interval between D and F# and a 5th interval between D and A.

5th interval
$$\begin{pmatrix} A \\ F \# \\ D \end{pmatrix}$$
 3rd interval

2) In a Gm triad, there is a 3rd interval between G and Bb and a 5th interval between G and D.

5th interval $< Bb \\ G$ 3rd interval

3) In a C^o triad, there is a 3rd interval between C and Eb and a 5th interval between C and Gb.

5th interval
$$< \begin{matrix} Gb \\ Eb \\ C \end{matrix}$$
 3rd interval

Do you see a pattern starting to emerge? If you continued similar studies of the construction of other triads, you would eventually come to the following conclusion:

All common triads contain a 3rd interval and a 5th interval (in relation to the bass).

As usual: the significance of this thought will become clear as you progress on....patience.

There are 3 common specific types of 5th intervals which are as follows:

1) A *Perfect 5th* interval has *3 & 1/2 steps* between the 2 notes involved:

Example: A to E (A B C# D# E) v v v v whole whole 1/2

More examples: Bb to F, C to G, D to A, Eb to Bb, F# to C#, etc.

2) A *Diminished 5th* interval has *3 steps* between its notes (because there are 3 whole steps in this interval, it is also called the *Tri-Tone*).

Example:	A to Eb (A	I	B C	# Eb)	Notice that although A to D# would
		V	V	V	sound the same as A to Eb, it is a
		whole	whole	whole	type of 4th interval, not a 5th.

More examples: B to F, C to Gb, D to Ab, E to Bb, F# to C, G to Db, Gb to Dbb, etc.

3) An *Augmented 5th* interval has *4 steps* between its notes.

Examples: A to E# (A to F is a type of *6th* interval, not a 5th), Bb to F#,

B to F[×](why not G?), C to G#, Db to A, D# to A#, Eb to B, F to C#, etc.

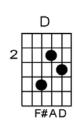
If we now classify the 4 common triad types by their intervals in relation to their bass notes, the following appears:

- 1) A *Major Triad* has a Major 3rd and a Perfect 5th.
- 2) A *Minor Triad* has a **Minor 3rd** and a **Perfect 5th**.
- 3) A *Diminished Triad* has a **Minor 3rd** and a **Diminished 5th**.
- 4) An *Augmented Triad* has a **Major 3rd** and an **Augmented 5th**.

If you are starting to feel swamped with facts, relax...most of this information is being given for reference later, or to lay the groundwork so that you understand the origin of the playing material you are going to be dealing with or are already dealing with. For now, just make sure you understand all this stuff...as mentioned before, memorization will happen gradually, as you work more and more with the material.

Inversions

The notes in a triad need not be arranged in order. Suppose you encounter a D triad as follows: This is still a D chord but the notes are scrambled up a little. This chord is called a *1st Inversion*. Before you find out what that means the following must be said: The note that forms a 3rd interval with the bass note of a triad (speaking about a triad with its notes in regular order now) is called the **3rd** of the triad. Example: F# is the 3rd of D. Likewise, the note that forms the 5th

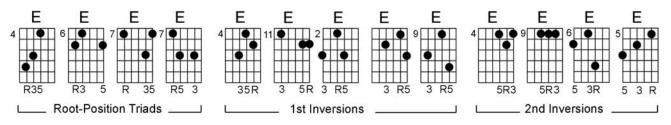


interval with the bass of a triad is called the *5th* of that triad. The bass note of a triad is called the *root* (just as scales have roots, every triad is said to have a root). Examples: A is the 5^{th} of Dm, D is the root of Dm.

A *1st Inversion* is a triad that has its **3rd in the bass**.

A *2nd Inversion* is a triad that has its **5th in the bass**.

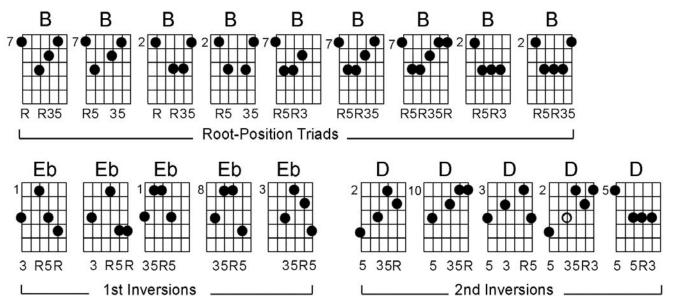
A "*Root-position*" triad (this term refers to the regular, root in the bass triad and will be used occasionally to distinguish the regular triad from its inverted brothers—the 1st and 2nd inversions) or an inversion may have different *Voicings* of its notes. The word '*voicing*' refers to the exact *arrangement* or order of the notes…play and compare the following voicings of an E major triad (and its inversions).



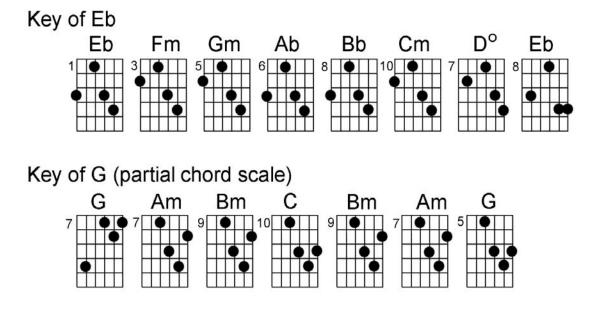
Did you happen to notice that the same voicing can be played in more than one place on the guitar? Ask about this phenomenon if you're not sure.

4 Note, 5 Note, and 6 Note Triads (Triads with Doubled Notes)

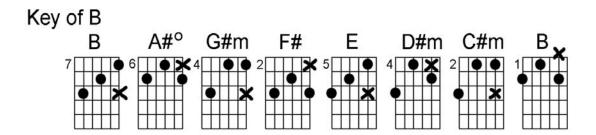
Triads often have doubled notes, that is, 2 roots, 2 3rds, and/or 2 5ths. Play and compare the following examples:



Here are a few examples of some diatonic chord scales using some larger triad sounds:



The **X**'s are played after the \bullet 's; try and keep as many notes ringing as possible (in other words, don't lift anything off to play the **X**'s).



As you can see, there is a whole beautiful world of sound in just triads. If you are interested in being a complete musician, then a serious study of triad sounds will be a tremendously beneficial investment of your time. If you decide to do this though, make sure that it is tune with your musical goals and priorities. For instance, if you have decided to specialize in jazz, and you want to play in a group, then frankly, triads are not one of your main priorities at first. However, if you have any classical music in your blood and you want to be able to play solo guitar, then triads are high on the list of musical tools you will be able to use. (These are just 2 isolated choices out of many. If we haven't nailed down a musical direction for you yet, now is the time, so let's discuss it). Also if you **review** all the material up to now from time to time it *will* sink in.

Fill out Quiz #3 now.

Tonality Quiz #3

1)	Triads contain what type of intervals in relation to the bass?						
2)	How many types of common 5th intervals are there?						
3)	What are they called?						
4)	How do they differ?						
5)	Identify the following 5th intervals (give the specific naA to EbC# to GBb to FE to BF# to C						
6)	Answer true or false:G to Db is a diminished 5th.C to Ab is an augmented 5thCb to Gbb is a diminished 5thFb to B is a diminished 5thC to Hb is a tormented 11-teenth	B to F# is a perfect 5th D# to A# is a perfect 5th If you didn't have to fill out this page you'd be happier					

- 7) What are the 4 types of triads?
- 8) What intervals does each one have in relation to its root?
- 9) What is an inversion?
- 10) Tell which tone is in the bass on the following triads (write either R, 3, or 5 underneath each figure):

C major	G minor	D dim.	Bb major	Db augmented
С	Bb	F	F	Db
G	G	D	D	А
<u>E</u>	<u>D</u>	<u>Ab</u>	<u>Bb</u>	<u>F</u>
				—
E minor	Ab minor	F# major	G# minor	
E minor E	Ab minor Cb	F# major F#	G# minor D#	
		0		
Е	Cb	F#	D#	

- 11) What is a 1st inversion?
- 12) What is a 2nd inversion?
- 13) What does the word *voicing* refer to?
- 14) Can the same voicing be played in more than one place on the guitar?
- 15) Write a very brief summary of the main points discussed in the [three part] pages on Tonality. (Use the back of this paper if you like.)

5.30-76 TONALITY - Page 5 NAMING OF TRIADS BY BELATIONSHIP OF ALL NOTES TO THE BASS (Inother very important way of maning triads (and especially larger chords) is by viewing the intervale that are formed from the bass note (lowestmote) to the other notes, Examples: Elina D triad, there is a 3rd interval between Dand F# and a 5th interval between Dand A. SH INTERNAL (5#> 3RD INTERVAL Delna Gom tried, there is a 3ed interval between Gand Bb, and a 5th interval between G+D. SH INTERVAL C 3RD INTERVAL (3) In a Co triad, there is a 3rd interval between C and Eb, and a 5th interval between SHE INTERVIL ED > 3RD INTERVAL Do you see a pattern starting to emerge? SHE INTERVIL ED > 3RD INTERVAL De you continued similar studies of the construction of other triade, you would eventually come to the following conclusion : ALL COMMON TRIADS CONTAIN A 3RD INTERVAL and A 5TH INTERVAL angualignificance of this thought will become clear as you proper on ... PATIENCE. There are 3 common specific types of 5th intervals which are as follows: O a PERFECT 5th interval has 35 STEPS between the 2 notes involved → Examples: Ato E (A, B, C#, D#, E), Bb to F, C to G, D to A, Eb to Bb, F # to C#, etc. WHOLE WHOLE ± @ a DIMINISHED 5th interval has 3 STEPS between its notes (because there are 3 whole steps in this interval, it is also called the TRI-TONE). Example: A to E (A, B, C#, Eb) + notice that although A to D# would sound the same as whole whole whole whole it is that although A to D# would sound the same as Ato Eb, it is a type of Ath interval mot a 5th. More Examples: Bto F, Cto Gb, Dto Ab, Eto Bb, F# to C, G to Db, G6 to Dbb, G# to D, etc. 3 an AUGMENTED Sth interval has 4 STERS between its motes, Examples: Ato E# (AtoFis a type of 6th, not a 5th), B6to F#, Bto F* (why not 6?), Cto 6# Joto A, Dto A#, Eb to B, F to C#, etc. If we now cleasify the 4 common tried types by their intervals in relation to their bass notes, the following appears: O a MAJOR TRIAD has a MAJOR 3RD and a PERFECT 5th. (2) a MINOR TRIAD has a MINOR 3RD and a PERFECT 5th. 3 a DIMINISHED TRIAD has a MINOR 3RD and a DIMINISHED 5th. (an AUGMENTED TRIAD has a MAJOR 3RD and an AUGMENTED 5th, Tun norther is in the feel swamped with facts, relax, most of If you are starting to feel swamped with facts, relax, most of this information is being given for reference later, or to lay the groundwork this information is being given for reference later, or to lay the groundwork so that you understand the origin of the playing material you are going to be dealing with or are already dealing with, for now, just make sure you understand all this stuff as mentioned before, make sure you will happen gradually, as you work more + more with the material, memorization will happen gradually, as you work more + more with the material, The notes in a triad need not be arranged in order. Suppose you encounter a D triad as follows: D This is still a D chord but the notes are derambled up a little, 2 This is still a D chord but the Before you find out what that The note that forms a 3rd interval in the base mote of a triad (speaking about a triad with the motes in 3RD of the triad Example: F# is the 3rd of the Sth of the mote that forms the Sth interval with the base of a triad is called the 5th of that triad. The base mote of a triad is called the Root (just as dealed have horte, every triad is called to have a root) camples: A is the 5th of Dm, D is the root of Dm. INVERSIONS

5-30-76 TONALITY Page 6 a 1st INVERSION is a triad that has its 3RD IN THE BASS. a 2ND INVERSION is a triad that has ite Sth IN THE BASS. a "root position" triad (this term refers to the regular, root in the base triad and will be used occasionally to distinguish the regular triad from its inverted brothers - the 1st + 2nd wversions) or an inversion may have different VOICINGS of its notes; the word voicing refers to the exact arrangement or order of the notes. plays compare the following voicings of an E MAJOR TRIAD (and its inversions): 183 5 R 35 135R 315R 3185 13185 3185 1583 1583 5138 ROOT - POSITION TRIADS IST INVERSIONS 2ND INVERSIONS Did you happen to notice that the same voicing can be played in more than one place on the guitar? ask about this phenomenon if you're not sure, 4 NOTE, 5 NOTE and 6 NOTE TRIADS (Iniada with DOUBLED notes) Play & compare the following examples: Roor INV. 35R5 35R5) 4135R 535R 531R5 535R3 5 5R 3 R5R 35R5 Here are a few examples of some distorie chord scales using some larger triad sounds: Kuyof G (PARTIAL SCALE) : 6 Ab 8 Bb 10 Cm E6 3 - The x's are played after the o's; try and keep as many motes - The x's are played after the o's; try and keep as many motes B Atto Ctim Ett E of the Other of the played of the words of The 6 of the other of the other of the other words of the first evenything the other of the words of the words of the first evenything the other of the other words of the words of the other other of the other other other of the other of the other o Here and off to play the x = 2 Reyou can see, there is a whole beautiful world of sound in fust triads. As you can see, there is a whole beautiful world of sound in fust triads. If you are interested in keing a complete musician, then a serious study of triad sounds will be a tremendously keneficial investment of your of triad sounds will be a tremendously keneficial investment of your time; if you decide to do this though, makes sure that it is time with your time; if you decide to do this though, makes sure that it is time with you musical goals + priorities for instance, if you have decided to specialize in jary, and you want to play in a group, then frankly, triads are not one of jour main priorities at first. However, if you have any classical music in your blood and you want to be able to play sologentar, then this is the dist of musical tools, you will be able to use. , then frankly, triads Lie in your blo Trials are high on the list of musical tools you will be able to use. see are just 2 is flated choices out of many - if we haven't nailed down musical direction for you get, now is the time, so lete discuss it). Also, if you REVIEW all the material up to now from time to time, IT we SINK IN.

5-30-76 TONALITY QUIZ #3 O triade contain what type of intervals in relation to the base? Thow many types of common 5th INTERVANS are there ? I what are they called ? A How do they differ ? B cldentify the following 5th intervale (give the <u>specific</u> mamea): A to Eb _____ C# to G _____ Db to Ab _____ G to D#____ Bb to F _____ E to B _____ F# to C _____ Ab to E____ 6 answer true or false: G to Db is a diminished 5th. . B to F# is a perfect Sth. C to Ab is an augmented 5th. . D# to A# is a perfect 5th ... C6 to Gbb is a diminished Sth. _ F to B is a diminished 5th. _ fillout this page you'd be happier. C & to Hb is a tormented 11-teenth ... @ what are the 4 types of triads? @ what intervals does each one have in relation to its root?

@ what is an inversion ? @ Tell which tone is in the bass on the following triade (write either R, 3, or 5 underneath each figure): A^b MIN. F#MAJ. CMAJOR GMINOR D DIMINISHED BOMAJOR DO ANG. EMAJ. D# F# 60 B C₽ B <u>A#</u> 67 @ what is a 1st INVERSION? @ what is a 2nd INVERSION? 3 What does the word voicing refer to? (If Can the same voicing be played in more than one place on the guitar? (5) Write a very brief summary of the main pointe discussed on the first 6 pages on Tonality. (Use the back of this paper if you like):