FUNDAMENTAL HARMONY

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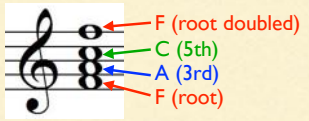
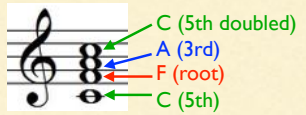
Lesson 2: Diatonic Harmony & Figured Bass

Chords

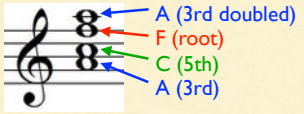
1. A chord is usually three or more different notes that are sounded together. A triad is one of the basic types of chord, using 3 notes stacked up in 3rds.

2. You can make a triad a fuller sounding chord by **doubling any of the notes** that make up a triad (usually the root). For example, the F triad (F-A-C):





Doubling the 3rd rarely happens because it doesn't sound as good as the other two chords above



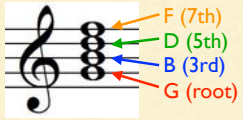
3. They are **always** called the **root**, the **3rd** and the **5th** even if they are inverted or appear in a different octave

7th Chords

1. So far all the triads and chords we have seen have used the basic intervals which make up triads and chords: the root, the 3rd and the 5th (and one or more of these doubled).

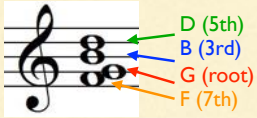
2. More elaborate chords can be made using not only the root, 3rd and 5th. The most common is the **7th chord**:

G = GBD (root, 3rd and 5th)
G^7 = GBDF (root, 3rd, 5th and 7th)



3. This also adds another possible inversion, **3rd inversion**, in which the 7th of the chord is at the bottom:

In the key of C major
V = GBD (root, 3rd and 5th)
V^7 = GBD**F** (root, 3rd, 5th and **7th**)
V^7d = **F**GBD (7th, root, 3rd and 5th)



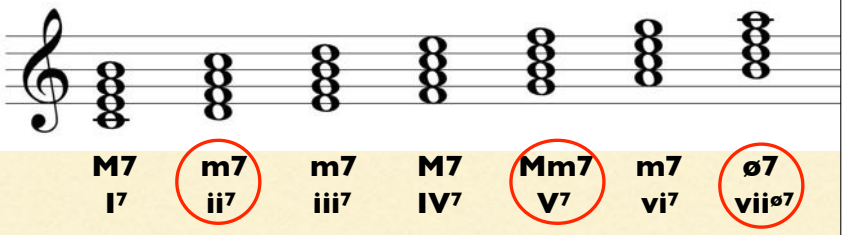
Dominant 7th Chord

Scale Degree	Major Keys	Minor Keys	Frequency
Dominant	V^7	V^7	Most popular seventh chord because it defines keys!

Secondary 7th Chords

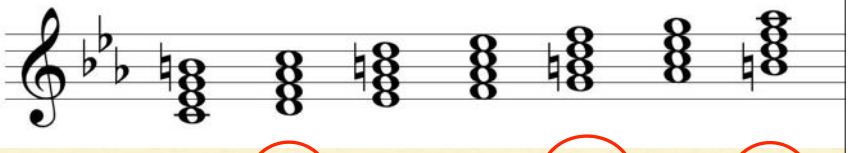
Tonic	I^7	i^7	Not at all common, though occasionally occurs and almost always root position
Supertonic	ii^7	$ii^{ø7}$	Very common!! Almost always in first inversion
Mediant	iii^7	III^7	Very rare! When it does occur, almost always in root position
Subdominant	IV^7	iv^7	Not at all common, though occasionally occurs and almost always root position
Submediant	vi^7	VI^7	Not at all common, though occasionally occurs and almost always root position
Subtonic		VII^7	Common in minor keys, sounds like V^7 of the relative major!
Leading-Note	$vii^{ø7}$	vii^{o7}	$vii^{ø7}$ is not unheard of, but it's not very strong and is often replaced by vii^{o7}

7th Chords in Major Keys



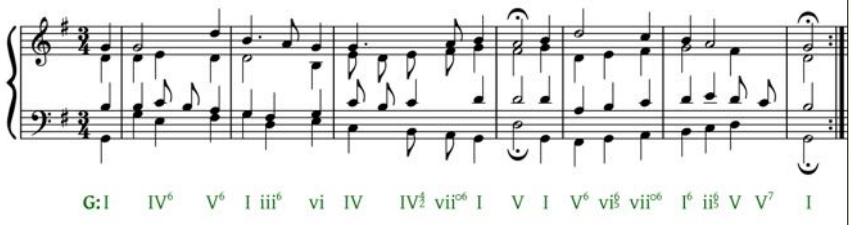
	Triad	7th	Abbreviation
Major	Major	Major	M7
Major-minor (Dominant)	Major	minor	Mm7
minor	minor	minor	m7
half-diminished	diminished	minor	ø7

7th Chords in Minor Keys



	Triad	7th	Abbreviation
Augmented-Major	Augmented	Major	+M7
Major	Major	Major	M7
Major-minor (Dominant)	Major	minor	Mm7
minor-Major	minor	Major	mM7
minor	minor	minor	m7
half-diminished	diminished	minor	ø7
(fully) diminished	diminished	diminished	o7

Figured Bass

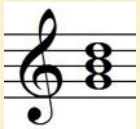
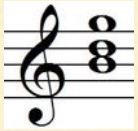
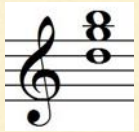


Example of figured bass in four-part writing (Soprano, Alto, Tenor Bass)

Roman Numerals indicate the degree on which the chord is built
Figured Bass indicates the position of the chord (how it is played).

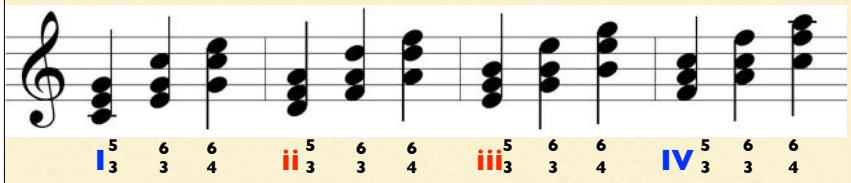
Figured Bass

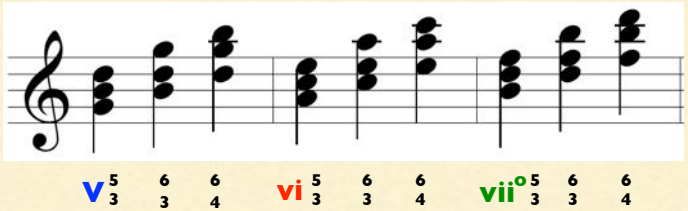
1. Figured bass is a system of describing a chord above a given bass note. The numbers in figured bass refer to the diatonic intervals above the bass note in accordance with the key signature:

				Figured Bass		Abbrev.
Root Position (a)		3rd	5th	5 3	=	To nothing! So common!
First Inversion (b)		3rd	6th	6 3	=	6
Second Inversion (c)		4th	6th	6 4	=	6 4 always written in full

Figured Bass

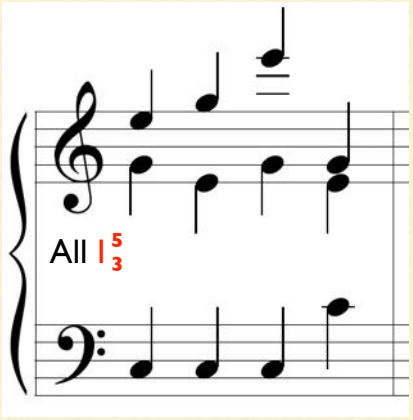
1. **The figured bass stays the same,** regardless of which triad is being described. In the key of C major, this is how each triad in each position would be analysed:





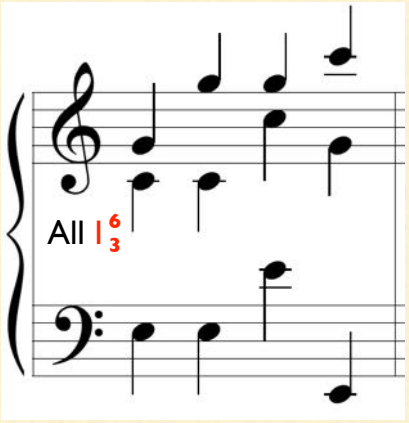
Open Chords & Figured Bass

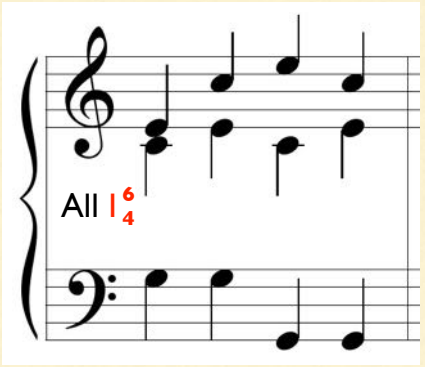
1. Given that all the open positions chords below contain C in the bass, they can all be described as I^{5}_{3}



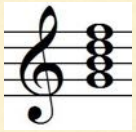
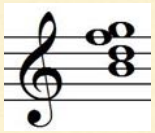
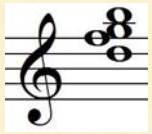
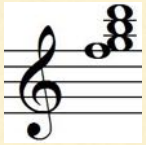
Open Chords & Figured Bass

2. The same also applies to open chords in first and second inversions:





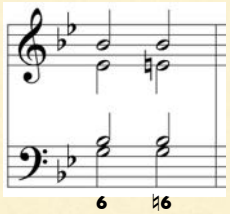
7th Chords & Figured Bass

			Figured Bass		Abbrev.
Root Position (a)		3rd 5th 7th	7 5 3	=	7
First Inversion (b)		3rd 5th 6th	6 5 3	=	6 5
Second Inversion (c)		3rd 4th 6th	6 4 3	=	4 3
Third Inversion (d)		2nd 4th 6th	6 4 2	=	4 2

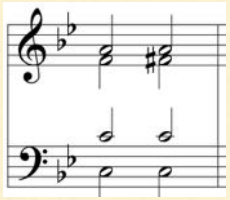
Chromatic Notes in Figured Bass

1. Remember that the numbers in figured bass refer only to the diatonic intervals above the bass note in accordance with the key signature.

In a key signature with two flats, a $\frac{6}{3}$ written beneath a G in the bass tells us that a B♭ and an E♭ would be part of the chord. If you wanted an E♮ you would have to write $\frac{♮6}{3}$.



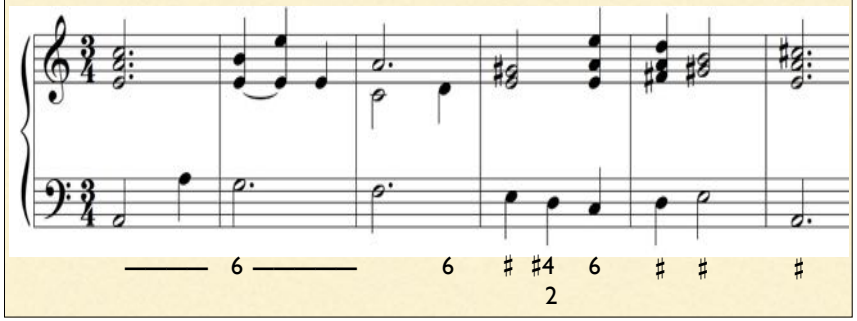
In the same key a $\frac{6}{4}$ written beneath a C in the bass indicates an A and F are part of the chord. If you wanted an F♯ (e.g. to signify G minor) you would have to write $\frac{6}{♯4}$.



Chromatic Notes in Figured Bass

2. An accidental on its own always refers to third above the bass note. So ♯ = ♯3 (implying $\frac{5}{♯3}$), and $\frac{6}{♯}$ = $\frac{6}{♯3}$.

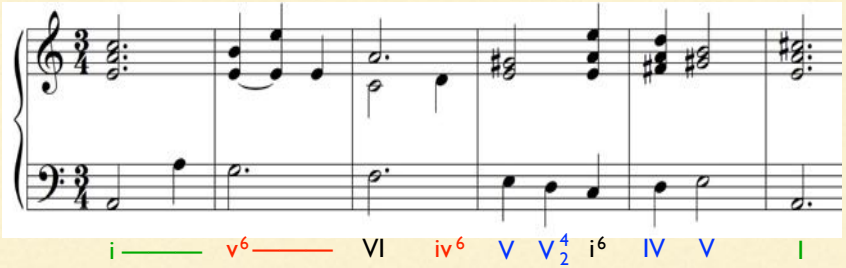
3. These chromatic alterations usually occur in modulations and frequently in minor keys. The **tonic**, **subdominant**, and **dominant** are the most likely affected and can be either major or minor chords depending on the context.



Chromatic Notes in Figured Bass

4. Notice that if you are using ***Roman numerals with figured bass***, then ***you do not need to use accidentals in the figured bass***, because:

   - the Roman numeral will already suggest any accidentals by telling you if the chord is major, minor, augmented or diminished.



A minor: F and G ($\hat{6}$ & $\hat{7}$) can be sharpened if ascending, which can change **minor iv and v** chords to **major IV and V** chords. Chord i can also become a **major chord I** at cadences (*tierce de Picardie*).