

# Recapitulation

## Tonal System as an Hierarchy

Between approximately 1600 and 1900 tonality was the common and sole language of Western music. The tonal system is an hierarchy based on relations of order between its elements and operates on three levels.

Firstly, a set of seven pitches (diatonic major or minor scales) is selected out of the total number of twelve pitches (chromatic scale) possible in the interval of an octave (the distance between a fundamental tone and its first overtone or partial).

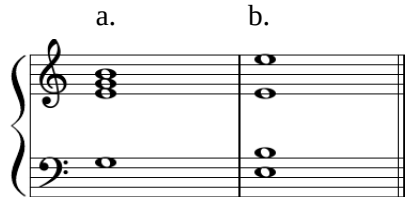


Secondly, the sounds of the diatonic scale are divided into main degrees (I, IV and V) and secondary degrees (ii, iii, vi and vii). Along with the triads built on each degree of the scale - using only intervals of thirds - they form a system of **functions**.

	Tonic		Dominant		Subdominant
Main functions	I		V		IV
Secondary functions		vi	iii	vii	ii

The main functions define the tonality (the sounds included in the I, IV and V triads contain all the sounds of the diatonic scale) and any sequence of chords in tonal music can be eventually reduced to a progression involving only these three functions. Secondary functions substitute for the main functions as shown above. The affinity between main functions and their surrogates is due to the number and to the relative importance of the elements (sounds) they share. The tonal hierarchy is also reflected in the doublings that become necessary when setting chords with three elements in four part writing. Note the change of function of the iii chord when a different sound is doubled:

- a. doubling G (the Dominant in this case) implies a Dominant functions
- b. doubling E (element of the Tonic triad) implies a Tonic function



C Maj:            iii<sup>6</sup> (as V)            iii (as I)

Thirdly, the relations of order governing this system are further reinforced by the requirement that the Dominant, the second important function in the tonality, the can not be followed by the Subdominant, a less significant one. Thus, possible progressions are:

I -> IV	IV -> I	
	IV -> V	
I -> V		V -> I

The same rule applies to the progressions involving secondary functions since they act as substitutes for the main functions. This restriction, like most of the postulates of the system, is justified by a more general concept born out the philosophy and the world view prevalent at the time. Reflected in the tonal system is a dialectic opposition between stability and disruption that is expressed through basic progressions that start on the Tonic, a state of equilibrium, steadiness and psychological relaxation, reach either the Dominant or the Subdominant, recognized as deviations creating tensions which are resolved to a final state of reconciliation, back to the stability of the Tonic. A more powerful sequence involves the subdominant followed by the Dominant while the



And, not often but still in use, the Dominant with lowered 7th. in minor keys:



A minor  $\vee^{7b5\#3}$

**B.**

The Neapolitan 6th. chord :



or in root position as Chopin likes to present it:

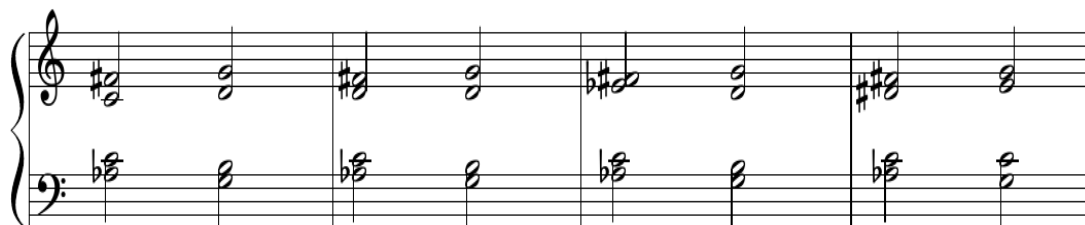


C Maj:  $N^6$

**C.**

The Augmented 6th. Chords, Subdominant (predominant) in function:

- a) Italian; b) French; c) German; d) Doubly augmented (English, Swiss, etc.)



C Major It Fr Gr DA

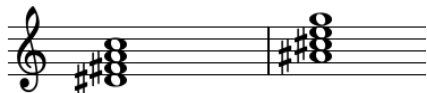
(Note:

- *Gr. resolution results in parallel fifth - and that's OK !*
- *Gr. can be re-spelled as a Dominant 7 chord - F#->Gb*
- *Gr. and DA. contain the exact same sounds -on the keyboard- but resolve differently*
- *the Fr. chord has a symmetrical structure - two M3 separated by two M2)*

**D.**

Common-tone chords build on

- a) raised second degree ( $\#ii^7$  or  $ii^+$ ) and
- b) raised sixth degree ( $\#vi^7$  or  $vi^+$ )



C Major a b

in both instances the third of the chord (4th. degree in a) and tonic in b) were also raised.

**E.**

Although less frequently used Augmented triads are also characteristic for the period (see Liszt):

a) on the Tonic; b) on the Subdominant; c) on the Dominant; d) on bvi

	a	b	c	d
C Major	I	IV	V	bvi
A minor	iii			

**F.**

A Subdominant chord whose all three elements were raised, (*Mozart's 5ths.*) sometimes sometimes presented with the 7th. - another example of parallel fifths allowed:

C Major:	#IV	V
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The chords A - F are not characterized by their specific structure but have a specific way of resolving (progressing) to the next chord which is typical for the common language of the 19th. century. There are instances when such chords can not be positively identified outside their context, only by their interval content. For example:

could be either G Major Vb5 or C major Vb5/V or C Major French Augmented Sixth. Especially since intentional misspellings are frequent in Romantic music, such ambiguities can be dissipated only by following the resolution of tendency tones and thus determining the tonal function of the chord. A typical example:

could be: D Major vii; G Major common-tone ii+; C Major vii/ii.

When listening to the music without referring to the score, the element of surprise is even greater. The mind has to re-asses the relation just heard and compare it with the expected resolution. Some chords are particularly apt to create such ambiguities due to their symmetric structure. The Diminished 7th. chord built on the vii degree of a minor or major (if the sixth degree is lowered) scale contains only one interval (three semitones): the minor third and its enharmonic equivalent, the augmented second, regardless of inversion.

root	first inversion	second inversion	third inversion
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As a "fully diminished chord" built on vii or as Dominant 9 without fundamental, it resolves to the Tonic (C Major).

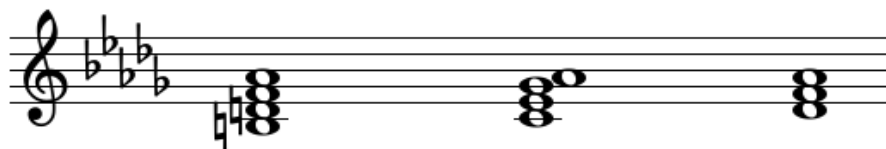
C Major	vii	I
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At the same time, the same chord can be built on ii by chromatically raising the Supertonic and the Subdominant: a common-tone chord resolving to a different Tonic (Ab Major).



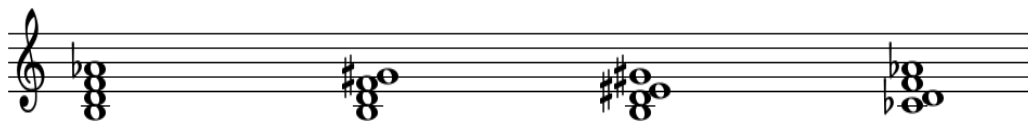
Ab Major      ii+      I

Similarly, the same structure can be found on the raised vi, raised Tonic of major scale in which case it resolves in a different key (Db Major) via a Dominant chord.



Db Major      vi+      V      I

The same aggregate of four sounds can have three different tonal meanings (functions) in different keys. The ambiguity is compounded by the possibility of re-spelling enharmonically one or more of its sounds:



Consequently, one chord could belong to twelve keys at the same time:

as vii in	C	A	F# or Gb	Eb
as ii+ in	Ab	F	D	B or Cb
as vi+ in	Db or C#	Bb	G	E

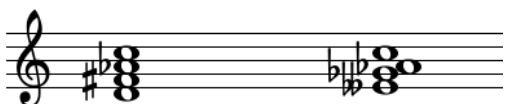
Another symmetrically built chord, the Augmented Triad, contains only the major third interval and its enharmonic equivalent, the diminished fourth. It can be found on iii of chromatic and melodic minor keys as well as on lowered vi in major (see **E**). Together with the chromatic possibilities listed in **E** and considering enharmonic re-spellings, there are nine different keys in which an Augmented Triad can belong:



as I	C	E	Ab
as iii	<u>a</u>	<u>c#</u> or <u>db</u>	<u>f</u>
as IV	G	B	Eb
as V	<u>F</u>	<u>A</u>	<u>Db</u>
as bvi	E	G# or Ab	C

There are six redundant possible resolutions either to the same key - as I and vi - or to minor homonyms - as V and iii - and nine possible resolutions to nine different keys.

Finally, a last case of double-meaning created by a symmetrical structure:



C: Fr or G: Vb5      Gb: Fr or Db Vb5

Such enharmonic re-spellings are possible in the Equal temperament tuning system where, for example, C# is equivalent to Db, D# is equivalent to Eb, etc.

Through devices such as: complex chromatic alterations, enharmonic re-spellings, functional ambiguities or sudden modulations to far away keys, the tonal hierarchy and its relations of order were weakened to the point of becoming irrelevant. Hugo Wolf's song "Mignon" to be presented next exemplifies another way in which tonality was weakened: the tonality defined by the key signature (G minor) is only implicit and a Tonic chord is present, for a brief moment, only once, in the middle of the song, in its first inversion.