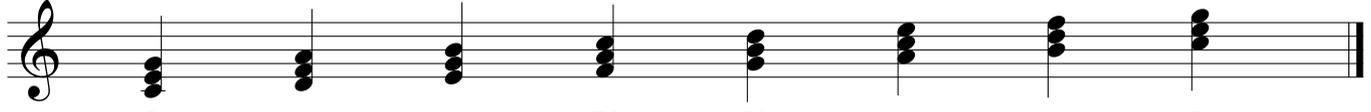


Chords in Classical Music Analysis

Any collection of two or more notes played simultaneously may be considered a chord. In tonal music however, a two note chord generally implies a three note chord or *triad*. Triads are the foundation of Western "tonal" music and they are constructed by adding notes on top of the notes of the scales. The interval used to build chords in tonal music is a third. If you take a tonic note of a scale (^1) and add a third on top of it (^3), and another third on top of that note (^5), you get a *tonic triad*. Each degree of the scale can have chords built on them in this way. The chord always takes its name from the note on which it was built. This is called the *root note*.

Triads build on the major scale

Tonic	Supertonic	Mediant	Subdominant	Dominant	Submediant	Leading note	Tonic
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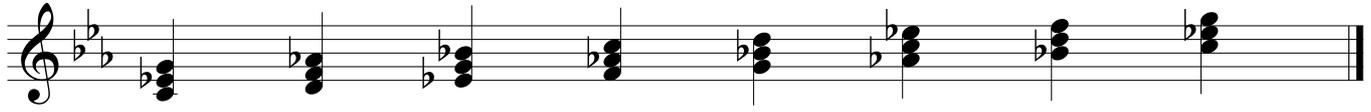
I	ii	iii	IV	V	vi	vii°	I
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In classical analysis, roman numerals are used to denote chords, as above. This shows the relationship between chords much more clearly than using the Jazz or Pop method of Cmaj, Dmin etc. because the symbols remain the same regardless of which key the music is in, that is, a C Major chord in C Major music will be chord I and a D Major chord in D major music will also be chord I. This way you always know which chord is the tonic, which is the dominant etc. This is important because a V - I progression, for example, will sound more or less identical no matter what key it is in, and it is the relationship between chords, not the chords themselves, that has shapes the music we listen to.

Major triads, those with a major 3rd and a perfect 5th above the root note, are given capital letters. Minor triads, those with a minor 3rd and a perfect 5th above the root note, are given lower case letters. If the fifth of a chord is diminished a little circle is written next to a chord symbol (°). If the 5th of a chord is augmented, a + is used (see Intervals). Diminished triads always have a minor 3rd so we use lower case roman numerals. Augmented triads always have a major 3rd so we use capitals.

Triads build on the natural minor scale

Tonic	Supertonic	Mediant	Subdominant	Dominant	Submediant	Subtonic	Tonic
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i	ii°	III	iv	v	VI	VII	i
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Triads build on the harmonic minor scale

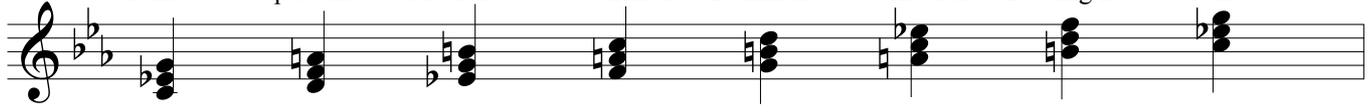
Tonic	Supertonic	Mediant	Subdominant	Dominant	Submediant	Leading note	Tonic
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i	ii°	III+	iv	V	VI	vii°	i
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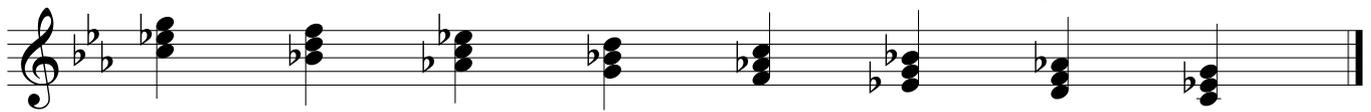
Triads build on the melodic minor scale

Tonic	Supertonic	Mediant	Subdominant	Dominant	Submediant	Leading note	Tonic
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i	ii	III+	IV	V	vi°	vii°	i
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Tonic	Subtonic	Submediant	Dominant	Subdominant	Mediant	Supertonic	Tonic
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i	VII	VI	v	iv	III	ii°	i
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Eleventh chords can function as dominants and non-dominants. When dominant, or when the chord is based on a major triad, the 3rd of the chord is omitted as it creates a harsh dissonance with the chordal 11th. Non dominant 11th chords based on minor triads are usually complete. Thirteenth chords are almost always dominants.

Dominant 11th chords: V11, V11 (w/out 3rd), V11(-9), V11(-9) (w/out 3rd)

Non-dominant 11th chord: ii11

Dominant 13th chord: V13, V13 (w/out 3rd)

Other common types of chord include "added 6th" and "added 9th" chord (an added 9th is different from a 9th chord as it does not include the chordal 7th), and a variety of "augmented 6th" chords.

Added 6th chords: Iadd6, iadd6

Added 9th chords: Iadd9, iadd9

Italian 6: It 6

French 4/3: Fr 4/3

German 6/5: Ger 6/5

It is important to remember when reading music that composers are in no way confined to one key. You will often find in almost any piece of music notes and chords that do not belong to the key in which the piece is said to be. Changes of key within a piece of music can be brief or extended so it is helpful to be familiar with all the chords in every key so you can better understand what is happening in the music. This will not only help with interpretation of the music but is of tremendous benefit to your memory of music as well.

Chord spacing

Chords don't need to be written in close position as I have written them here but can have their notes spaced out in virtually any way.

Chord inversions

When the note a chord is based on is the lowest note in the chord, it is said to be in "root position". However, a composer may want to have a different note of the chord as the bass note. When the 3rd of the chord is on the bottom the chord is in "first inversion", when the 5th is on the bottom it is in "second inversion", and so on. In most cases this won't change what we call the chord but it does subtly alter the quality of the chord. Root position chords are the most stable, i.e. they don't want to progress to other chords as much as their inverted form. 1st inversion chords are less stable, and 2nd inversion chords less stable still. 3rd inversion chords are possible only with 7th, or bigger, chords. 4th inversion could technically exist, but those chords are usually interpreted in a different way, e.g. as a 2-3 suspension.

The image shows four chord inversions on a single staff in treble clef. Each chord is represented by a vertical line with dots indicating the notes. Below each chord is its label and figured bass notation. The first chord is in root position (I). The second is in first inversion (I 6 or I 6 3). The third is in second inversion (I 6 4). The fourth is in third inversion (V 4 or V 4 3 3).

Extended Practices

Everything that has been discussed here relates to "tonal harmony", the kind of harmonic practice that most music we hear today is based on. But music can be organised in other ways, even disregarding the many different tuning systems that have been used throughout history. There is "atonal", "polytonal", "modal", and "serial" music, to name a few. These kinds of musical organisation can, and are, used freely and at the composer's will, so it is a good idea to be aware of them if you wish to understand how a piece of music is constructed.

One technique which is useful to know about, as it is not an uncommon one, is "quartal" harmony. Tonal music uses chords based on 3rds, it is, therefore, tertian harmony. Quartal harmony uses chords based on 4ths. It occurs frequently in Jazz and music of the early 21st century. Quartal chords can be "diatonic", using notes of the scale, or use only perfect 4ths.

Here are some quartal chords. The first in each pair are diatonic, the second use only perfect 4ths;

The image shows four pairs of quartal chords on a single staff in treble clef. Each pair is separated by a double bar line. The first pair shows a diatonic quartal chord (C4, E4, G4) and a perfect 4th quartal chord (C4, F4). The second pair shows a diatonic quartal chord (D4, F4, A4) and a perfect 4th quartal chord (D4, G4). The third pair shows a diatonic quartal chord (E4, G4, B4) and a perfect 4th quartal chord (E4, A4). The fourth pair shows a diatonic quartal chord (F4, A4, C5) and a perfect 4th quartal chord (F4, B4).