

Dissonances

You may be wondering why, until now, we have not used chord vii at all, avoided all 6/4 chords, and not used any sevenths. This is all because in strict tonal harmony, all of the above involve dissonances of some sort, and all require special treatment. For the same reasons, we are able to use root position and first inversion chords almost completely freely (although some progressions sound better than others, and consecutive fifths and octaves must be avoided).

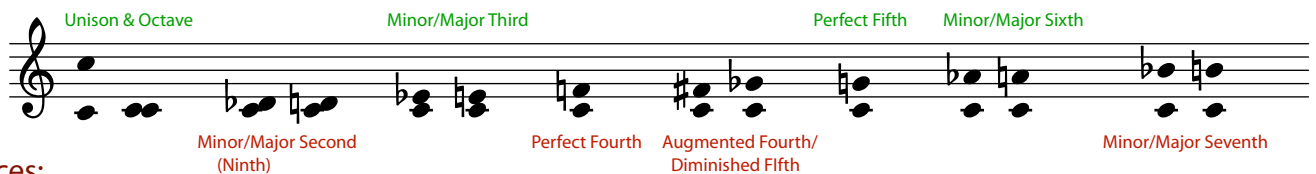
One easy mistake that so many people make when trying to learn harmony, is not actually knowing which intervals are dissonant and which are not.

For example, it may come as a surprise to some that the interval of a **perfect fourth is a dissonance**, and cannot be used without the appropriate *preparation* and *resolution*.

Another common misunderstanding is that 'dissonance' refers to dissonant intervals between each note of the chord. This is not true. A dissonance is almost always **measured against the lowest voice** of a chord, and in most circumstances this is of course the bass note. This is why, as you will see the 6/4 chord (because as we can see from its labelling, contains a fourth above the bass) cannot be used without appropriate preparation and resolution, but when a perfect fourth occurs between the other voices (e.g. alto and tenor) it does not need to be treated as a dissonant interval. Example 1 shows a chart of all the intervals and their 'class' - **dissonant** or **consonant**.

Example 1

Consonances:



Dissonances:

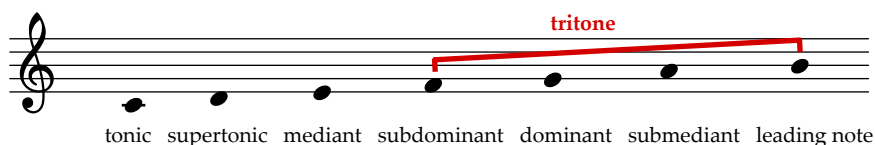
The 6/4 (or second inversion) chord contains a dissonance against the bass (a perfect fourth), and that is why it *must only* be used in specific circumstances, always requiring correct resolution and often appropriate preparation.



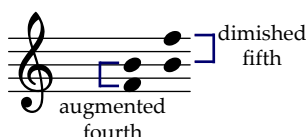
Though first inversion (6/3) chords may be said to contain fourths, they are not dissonant with the bass and are therefore considered acceptable. Indeed, dissonances are almost always measured against the bass note. This holds particularly true when writing strict counterpoint. The main exception to this is when the dissonant note is in the bass itself (but this will be covered later).

As you can also see from the above, both the augmented fourth and diminished fifth are considered to be dissonant. You may have also noticed that they sound exactly the same, it is just their spelling which is different (which depends on the key/context). The interval is often generally referred to as the *tritone* (because the interval is equal to a stretch or leap of three whole tones).

This interval occurs once in the major scale, between the subdominant and leading note (4th and 7th degrees).

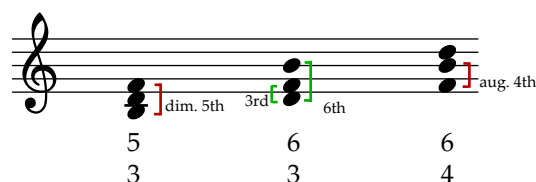


Measured in one direction it spells an augmented fourth, in the other a diminished fifth:



and it is because of this that chord vii cannot be used as freely as the other chords of the scale; it contains the leading note (the root of the chord) and the subdominant note.

Example 2



As you can see in example 2, it is dissonant in root position and second inversion, because in both cases a tritone is formed with the bass.

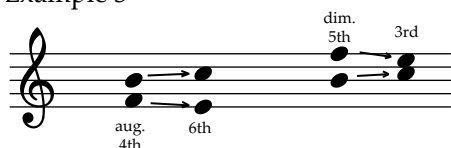
Therefore, the easiest and most accepted way to use chord vii in your progressions is in first inversion. Here the tritone occurs in the upper voices only.

Although with this chord (vii_3^6) we have already noted that there is no dissonance against the bass, the tritone, having such an unstable sound it still needs to resolve in a particular fashion. This has to do its function; it contains the leading note, and this has a strong need to resolve upwards by step to the tonic note of the key. Likewise, the other note of the tritone should always resolve downwards by step in contrary motion.

In other words, when using chord vii, the augmented fourth must resolve outwards by step (to a sixth), and the diminished fifth inwards by step (to a third). If you can play this, you will notice that the 'uncomfortable' and unstable sound of the tritone is resolved.

As we will see a little later, this resolution, and 'function' of the tritone is central to the tonal music of the classical era in particular.

Example 3



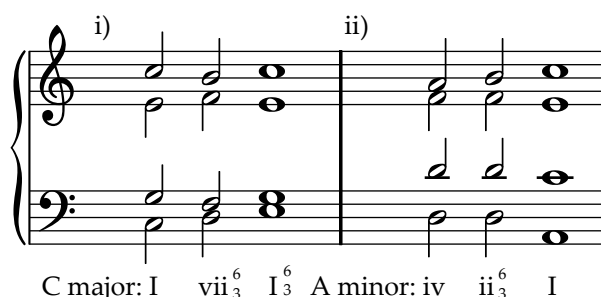
Minor keys contain two diminished chords (as we have seen before), these are chord vii and chord ii. Although there of course exceptions, the same basic rules of part leading apply, to chord ii in minor keys as chord vii in major keys. They are most often found in first inversion, and the tritone in the upper voices needs to resolve correctly.



A minor: i ii III iv V VI viii

When writing four part harmony, there are many ways to arrive at chord vii (or ii in a minor key), and there are several ways to resolve it in the next chord, here are a couple of common ones:

Example 4



C major: I vii_3^6 I_3^6 A minor: iv ii_3^6 I

Perhaps the most common is ex. 4 (i) in which a connection is made between the tonic chord in root position and first inversion. This one works both ways, and is extremely useful! Note that you have to double the third in the last chord, but this is fine because it is approached in contrary motion.