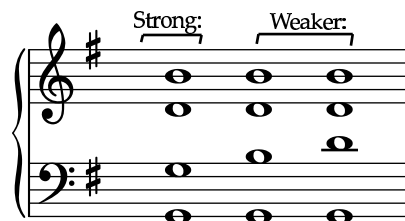


## Basic theory: a note on spacing and doubling

When writing in four voices, particularly at this early stage, most of the chord we write will be three note triads. This means one of the notes is going to have to be doubled.

As a rule of thumb it is almost always **best to double the root** of the chord. As you can see below, this sounds the strongest:



However, there are many exceptions to this, some of which you will come across in the pages that follow about imperfect, plagal and interrupted cadences.

There is a common misconception among many people that is generally speaking unacceptable to double the third. This is actually not true at all, it is of course always better to double the root, but where this is not possible, it is often better to opt to double the third than the root. In fact, I believe that every single one of the Bach's 371 chorales has at least one chord with two thirds.

The most important thing to remember is that, whatever you are writing, you must always make sure that each voice moves as smoothly as possible from one chord to the next without any undue leaps, particularly in the inner parts.

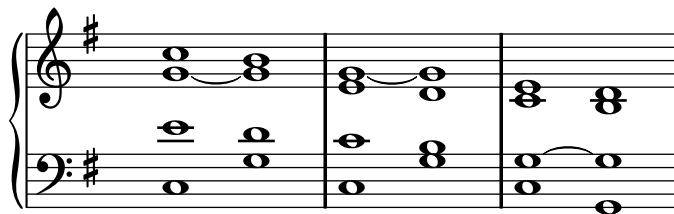
A quick note on spacing - it always sounds best by far, to keep the widest space between the lower parts, i.e. between the tenor and bass voices, particularly when the bass voice gets quite low. This is because the chord will sound a lot more resonant. Likewise, it always sounds much stronger to keep the upper three voices (tenor, alto and soprano) fairly close together.

As a rule of thumb, it's a good idea to keep the upper voices within an octave of one another. The gap between tenor and bass can be anything up to 9th, and in some cases an 11th or (very occasionally) even more.

Keep these rules in mind whenever you're writing!

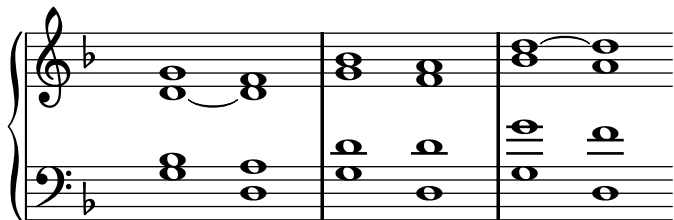
## Plagal Cadences

Plagal Cadences are occasionally referred to as 'Amen' cadences, because they were often used for the final amen of 15th and 16th century hymns and settings of psalms. They simply use the progression IV - I, in root position. When writing in Baroque and Classical styles you are advised to use them as infrequently as possible; they are not at all common. In all of Bach's 371 chorales, they make up for only about 2% of the cadences.



G major: IV I IV I IV I

The part-leading approach you should take is very straight forward and similar to what we saw with perfect cadences. The chords must almost always be in root position, and the note in common should be held over. The two other voices move a step down, in parallel thirds or sixths. The same applies to minor keys:



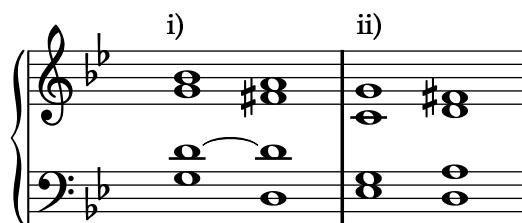
D minor: iv i iv i iv i

## Imperfect Cadence

This is the cadence you are second most likely to use after the perfect cadence, it may also be referred to as a half-close. There are several 'versions' of the imperfect cadence. A strict definition might be:

An imperfect cadence is any cadence that comes to rest on the dominant chord (V). In theory therefore, this dominant chord can be preceded by any chord, but these are usually (I/i, II/ii<sup>6</sup><sub>3</sub> or IV<sup>6</sup><sub>3</sub> or IV in root position).

In my opinion, imperfect cadences often sound better in minor keys, so I shall start with those.

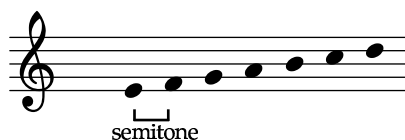


G minor: i V iv<sup>6</sup><sub>3</sub> V

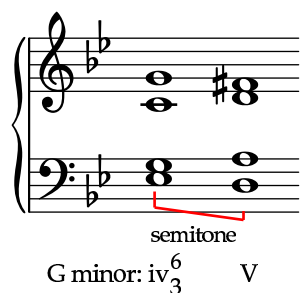
Example i above shows the simplest form of imperfect cadence, chord i moving to chord V, both in root position. Note that as with perfect cadences, the **dominant chord must always be major at cadences**. Again, the note in common is held over in the same voice, the bass voice leaps down a fourth or up a fifth, and the remaining voices move downward by step in parallel thirds or sixths.

In example ii, we have what is commonly known as a Phrygian cadence, something that was carried on into the Baroque era from the Renaissance. It takes its name from the Phrygian mode, the third mode on which plainsong was based (as on the white keys of the piano).

# The Phrygian Mode

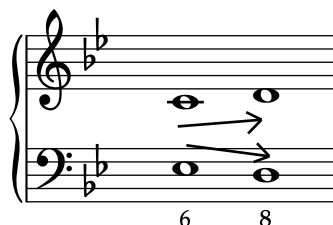


As we see above, the Phrygian mode does not have a raised seventh degree. The 'leading note', is in fact the second degree of the scale, f, because it is a semitone away, and therefore 'leads' downwards. This is what gives the Phrygian imperfect cadence its characteristic feel.



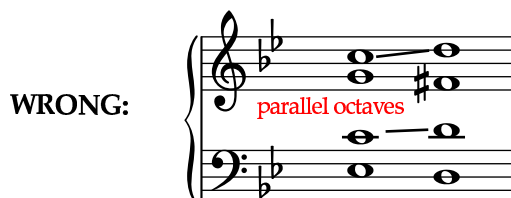
Phrygian cadences can be slightly tricky. As always, when writing tonal music, the dominant chord must again be major (hence the f-sharp), and the preceeding chord, iv, must always be in first inversion (<sup>6</sup><sub>3</sub>), and be a minor chord (according to *harmonic minor scale*). This is imperative!

Secondly, you must make sure that the root of your chord iv, (i.e. the C, a sixth above the E-flat in the bass, because the chord is inverted), moves up to root of the following chord V. This results in contrary motion, starting at the sixth moving outwards to the octave:

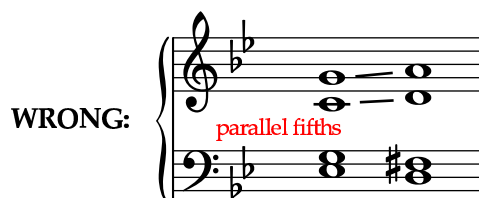


This is the most important and defining aspect of the phrygian cadence. When writing in two part modal counterpoint, this is exactly what you should write at a cadence point in the phrygian mode.

Thirdly, and now comes to tricky part, you must always remember that in phrygian cadences, it is not possible to double the root of the first chord (C), instead you must double the fifth (G). Otherwise you'd end up with parallels:



Similarly you must make sure that the doubled fifths (two Gs) move in opposite directions, and you must be very careful to avoid parallel fifths:



In major keys the process is slightly simpler: (N.B. there is no Phrygian imperfect cadence in major keys).

The image shows three musical examples of imperfect cadences in G major, labeled i), ii), and iii). Each example is written on a grand staff (treble and bass clef) with a key signature of one sharp (F#).

- Example i):** A I-V cadence. The first chord (I) has a doubled root (G). The second chord (V) has a doubled root (D). The common note (B) is tied over. The bass leaps up a fourth or down a fifth, and the remaining voices move down a step in parallel thirds or sixths.
- Example ii):** A first inversion I-V cadence. The first chord (I<sup>6</sup><sub>3</sub>) has a doubled third (B). The second chord (V) has a doubled root (D). The common note (B) is tied over. The bass moves up through a passing note (C) to the root of the next chord.
- Example iii):** A second inversion ii-V cadence. The first chord (ii<sup>6</sup><sub>3</sub>) has a doubled fifth (E). The second chord (V) has a doubled root (D). The common note (B) is tied over.

Below the notation, the chords are labeled: G major: I V I<sup>6</sup><sub>3</sub> V ii<sup>6</sup><sub>3</sub> V

In example i, all the same rules we learnt before apply, we double the root of both chords once again, and the note in common is held over in the same voice. The bass leaps up a fourth or down a fifth, and the remaining voices move down a step in parallel thirds or sixths.

In example ii, the first chord is in first inversion (6/3). Again the note in common is tied over. This time however we have doubled the third, B, which in the bass, moves up through a passing note to the root of the next chord. This is very common in Baroque writing, and was a favourite for Bach when writing imperfect cadences in major keys. Don't worry too much about passing notes yet, we will get onto them later, but you are welcome to have a go at this one if you like.

Example iii is actually a fairly weak sounding progression, but is acceptable. As with the phrygian cadence, I have doubled the fifth of the first chord (E), to avoid parallels. Doubling the third (the bass note) would be unacceptable, as it would lead to consecutive octaves, doubling the root would work (we would have two of them tied over, which is ok), but then the final dominant chord would have a doubled fifth, and sound relatively weak.

## Homework:

Write plagal *and* imperfect cadences in the following keys:

MAJOR:

A major, A-flat major, E major

MINOR:

C minor, B minor and F-sharp minor

Good luck! If anything is unclear, or you need to know something, just ask.