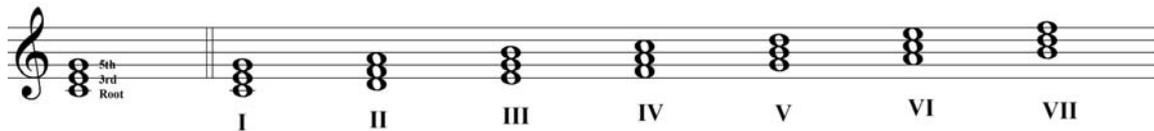


FOUR-PART HARMONY for ARRANGERS – THE BASICS

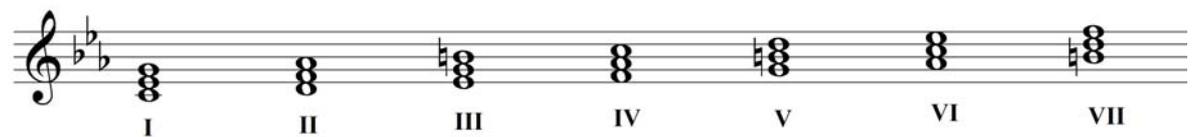
The study of four-part vocal writing, often using the example of Bach's Chorales as a basis, has long been a standard feature of musical education. Such study is clearly of value in learning about composing and arranging for vocal groups but what may not always be made clear to the student is that the knowledge thus gained **also provides the basis for good instrumental and orchestral arranging**. Apart from learning about basic chord construction the study of four-part harmony develops a vital understanding of how to think in 'lines' so that the individual parts move from one chord to the next to produce a satisfyingly melodic effect. Above all it is important (where a 'traditional' harmonic language is being used) to avoid the crude and unmusical effect produced by allowing parts to hop around randomly between notes of consecutive chords with no consideration for smooth 'voice leading'.

1. CHORD CONSTRUCTION.

Three note chords called TRIADS form the basis for standard four-part harmony and consist of a ROOT NOTE (any note you care to choose) to which are added the notes a 3rd and a 5th above. The example below is then followed by triads built on successive notes of a C major scale:



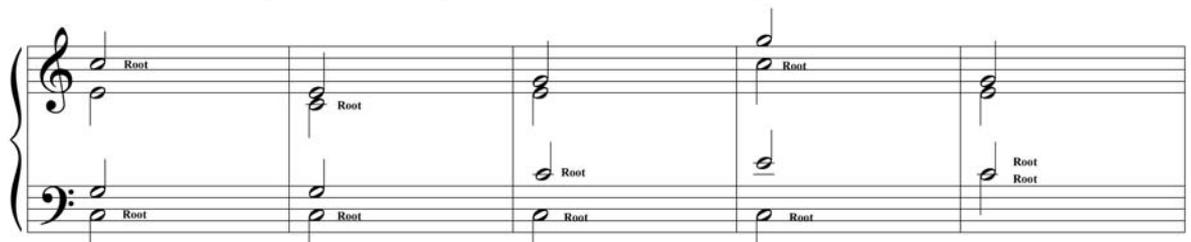
These are the triads built on successive notes of a C harmonic minor scale:



2. DOUBLING

This is the process by which notes of a triad are converted into four-part harmony. One of the notes of the triad is used by two different voices (in unison or in different octaves). Most often, in a **root position chord** (a chord in which the root note is in the bass), the root note itself is doubled.

Here are some examples of a root position chord I in C major with the root doubled:



3. SPACING

A vital factor in producing a good balance and blend in a chord in four-part harmony is the distance or **interval** between each part. If any one of the top three voices is too far distant from the other two it may stand out as a separate entity and sound as if it does not belong to the rest of the chord. The normal rule for voices (which it is advisable to apply to instrumental arranging as well unless there are good reasons not to) is that there should not be more than an octave between any of the top three parts. (It should be noted here that a gap of more than an octave between the lower two parts, Tenor and Bass, is perfectly acceptable – it can in fact produce rich and sonorous results!).

Here are some examples of chord spacing that would be considered ineffective:

The image shows four measures of music on a grand staff. Each measure contains a chord with a single note in the soprano voice that is an octave or more above the other two voices. The chords are labeled I, IV, V, and I. The first measure (I) has a soprano note on G4, while the other voices are on E3 and G3. The second measure (IV) has a soprano note on C5, while the other voices are on G3 and B3. The third measure (V) has a soprano note on G4, while the other voices are on E3 and G3. The fourth measure (I) has a soprano note on G4, while the other voices are on E3 and G3.

4. VOICE LEADING

In any given part a logical and melodious progression from one chord to the next is usually considered to be a desirable attribute. There may be certain styles of music or certain musical effects that one wants to achieve which may override this ambition but, at the moment, we are considering music which uses harmonies and progressions which might be considered traditional (a term which could be applied to almost all popular music of the 20th and 21st centuries and most European ‘classical’ music of the preceding centuries).

The quest for smooth voice leading is one reason why the text books recommend we avoid consecutive 5ths and consecutive octaves in our part writing. In the examples below the appearance of consecutives is almost always accompanied by ungainly melodic movement in one or more parts.

The image shows a sequence of chords in 4/4 time, with voice leading indicated by slurs. The chords are labeled IV, V, II, V, II, V, V, I, I, IV, IV, V, V, VI. The first three measures (IV, V, II) are grouped under the heading 'Consecutive octaves'. The next three measures (V, I, I) are grouped under 'Consecutive 5ths'. The final two measures (V, VI) are grouped under 'Both'. The notation shows the movement of individual voices between chords, highlighting the problematic intervals.

Here are the same progressions with consecutives removed. Reducing the amount of leaping in the inner parts lessens the likelihood of consecutives and notice the way the parts move in the V –VI progression resulting in two parts arriving on the 3rd of chord

VI. Doubling the 3rd in this way is the standard method of avoiding consecutives in this progression.

While we need not always avoid consecutives quite so scrupulously in popular and modern styles (parallel 5ths are an integral part of the style of composers like Debussy and Vaughan Williams for example) as was the norm in most classical styles, consecutives between the bass and the melody line hardly ever sound convincing.

NOTE: When writing for larger groups it is very common to double a melody in one or more different octaves and the bass is likewise often doubled at the lower octave (as seen frequently between cello and double bass parts). Such doublings of an individual line (‘Soprano’ or ‘Bass’ for example) are not to be confused with consecutive octaves which are when **different** parts (e.g. ‘Soprano’ and ‘Alto’) move in octaves between two or more chords.

5. INVERSIONS

If a note other than the root of a chord appears in the bass part the resulting chord is said to be in an inversion.

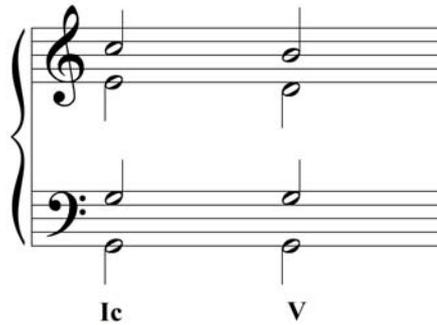
If the 3rd of the chord is in the bass the chord is in first inversion (**Ib**).

If the 5th of the chord is in the bass the chord is in second inversion (**Ic**).

Here are some examples of first inversion chords in C major. Note that although it is usually acceptable to double the root of the chord, other notes can be doubled instead.

In fact, in chords **I**b**** and **V**IIb**** the most usual note to double is the 3rd – see the chords marked * below.

Second inversion chords sound unstable – they need to ‘resolve’ (like discords) in a particular way and are most commonly encountered in a context like this:



Note that the bass note (i.e. the 5th of the chord) is doubled and the same bass is still in place for the resolution to chord V. This use of Ic is by far the commonest use of second inversion chords in traditional harmony (either in an Imperfect Cadence or as the approach to a Perfect Cadence in which case the full progression is **Ic – V – I**).

6. A NOTE ON THE DOUBLING OF THE 3rd IN CHORDS

Text books advise us not to double the 3rd of a chord but we have already seen exceptions to this advice above. Rather than blindly accepting this recommendation we should exercise some common sense. There are many examples in published music where the arranger, fearful of breaking this ‘rule’, produces piano parts in accompaniments to melody instruments in which the 3rd disappears from the piano chord every time the melody instrument is also playing the 3rd (presumably to avoid ‘doubling the 3rd’). The result is that the piano part sounds incomplete – the chord lacking the 3rd sounds bare because the 3rd provided in the melody instrument is the wrong sound quality to blend with the piano timbre. It is better to make the harmonies in the piano part complete in themselves, whatever note of the chord is in the melody instrument. Similarly in orchestral writing – if all the main pitched sections of the ensemble (Woodwind, Brass, Strings) are playing a C major chord each section needs to be complete harmonically – a 3rd played in the strings will not make a brass chord lacking the 3rd sound complete.

7. A NOTE ON THE USE OF DESCANTS AND COUNTER-MELODIES IN ARRANGEMENTS.

A traditional method of introducing a fresh element into an arrangement is to compose a counter-melody to complement the main melody after it has already been presented. It is probably not a good thing to introduce the counter-melody simultaneously with the *first* appearance of the main melody – it is better saved as a welcome surprise for later on! Often the counter-melody will have a distinctively different rhythmic quality to what has gone before though context and good taste will determine *how* different it can be.

The counter-melody also naturally needs to fit the harmonies being used to accompany the main melody at that point (not necessarily the same harmonies that were first used to accompany the tune – harmonic variation is another weapon in the arranger’s arsenal) though, of course, the counter-melody might introduce an element

of tension and excitement through the judicious use of dissonance in the form of suspensions, appoggiaturas and accented passing notes.

All the positive impact of a counter-melody will be undermined though if it shows any tendency to 'shadow' either the main melody or the bass line. Take great care to ensure that your counter-melody remains independent of both. Even just two consecutive notes which see (for example) the counter-melody duplicate the notes of the bass line (albeit in a different octave) will weaken the effect.