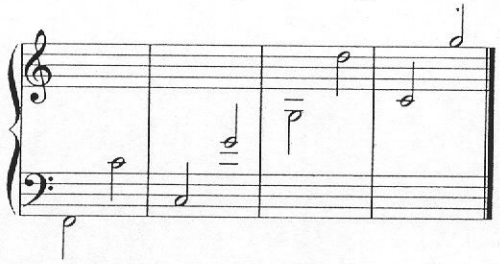
An introduction to four-voice (SATB) writing

Chord *construction*

The number one thing: **be absolutely sure that you're using the correct notes**! Be *especially* aware of this when writing in minor mode—the leading tone ($\hat{7}$, or "ti") always requires an accidental.

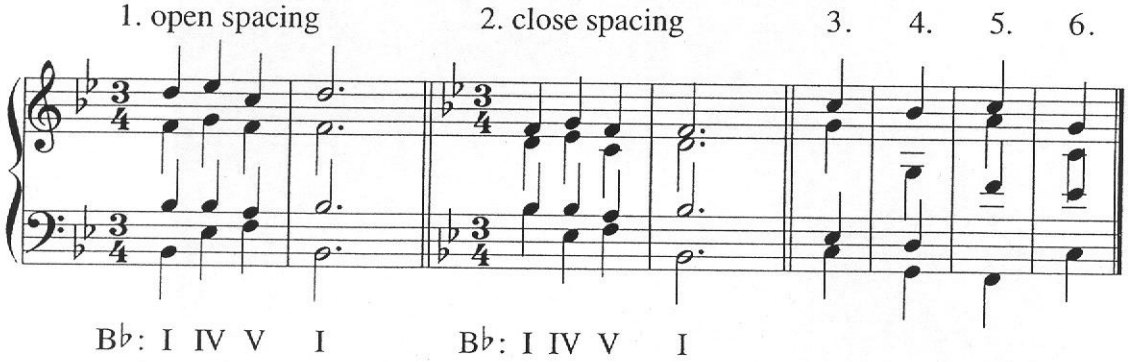
Vocal ranges: if you're writing for SATB, you need to have some idea of the **ranges** (lowest to highest notes) for each voice. They're shown below (moving left to right: bass, tenor, alto, soprano):



Try very hard to stick to these ranges whenever possible. If your writing *very occasionally* goes just a note too high or too low, that's all right.

Spacing: spacing refers to how far apart (vertically) the notes are. Some pointers:

- Example 1 below shows **open spacing**—the notes are spread fairly far apart. Technically, open spacing refers to any chord where the **soprano and tenor are over an octave apart**.
- Example 2 below shows **close spacing**—the notes are fairly close together. Technically, close spacing refers to any chord where the **soprano and tenor are an octave or less apart**.
- Try to retain one kind of spacing through the phrase (as is the case in examples 1 and 2). Changes may occur at cadences, with repeated chords, or when passing through an inverted chord.
- Example 3 is a case of poor, incorrect spacing. Here's why: **adjacent upper voices** (S&A, A&T) **should never be over an octave apart**.
- Example 4 has the same problem.
- Example 5 is fine—the tenor and bass may be over an octave apart.
- Example 6 has a different spacing problem: the alto and tenor are called **crossed voices**, since the tenor is higher than the alto. Avoid crossed voices.



The point about spacing (especially examples 3, 4, and 6): **if it looks goofy, it sounds goofy**.
Notation pointers:

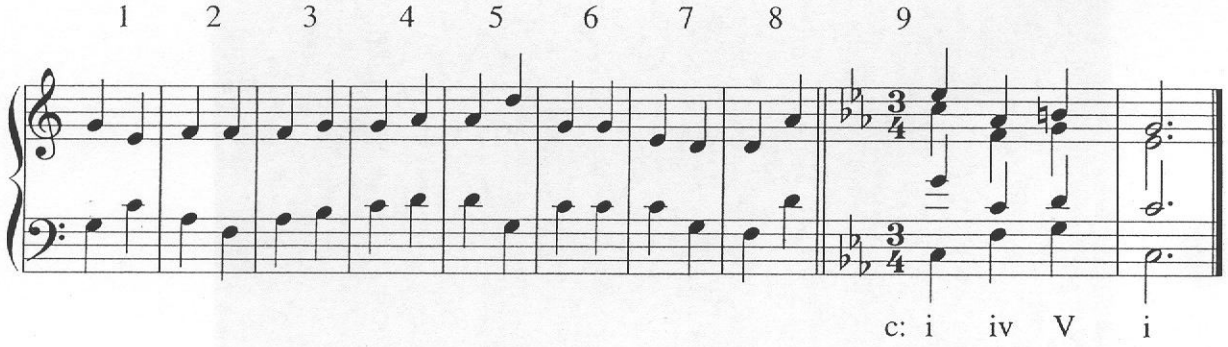
- notice that in SATB writing, there are always two voices in the treble clef (the S&A) and two voices in the bass clef (the T&B).
- notice the stems: soprano always up, alto down, tenor up, bass down.

Doubling: if you're writing a triad (three different pitches) for four voices, then, logically, one pitch has to occur in two different voices--it is **doubled**. Here's a global doubling principle: **always double the note that's in the bass**. We will encounter some exceptions to this principle here and there.

Intro to SATB writing: chord *connection* (voice leading)

The number one consideration: voice lead SMOOTHLY. Retain common tones and/or **move by step** wherever possible. Avoid leaps of over a P5 wherever possible (the bass may leap more).

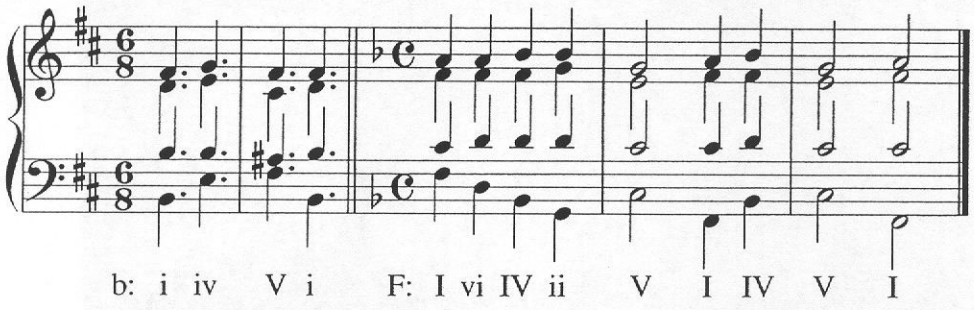
About **voice motions**: there are four kinds—contrary, oblique, parallel, and similar. Ex. 1 below shows contrary motion (a good motion to use); ex. 2 shows oblique (also a good motion); ex. 3 shows parallel (often good to use); ex. 4 shows parallel P5s--avoid these (and avoid parallel P8s and unisons, too). Ex. 5 doesn't *look* like parallel P5s, but it *sounds* like them--avoid this. Ex. 6 is *not* parallel fifths, because the voices aren't moving up or down. Ex. 7 shows similar motion; ex. 8 is an example of **direct fifths**--similar motion to a P5 by leap in both voices (avoid these, along with direct 8vas and unisons).



Example 9 (see above) contains a ***plethora*** of voice leading problems. Moving from i to iv: this is awkward because of the leaps in the upper voices; also, there are two examples of **voice crossing** (the soprano leaps down to a note lower than what the alto just had, and the alto does the same thing in relation to the tenor. Avoid this.). Moving from iv to V: parallel P5 between the bass and tenor; parallel P8 between alto and bass; the soprano moves by a +2 (avoid + or ° interval motion in individual voices). Moving from V to i: the soprano has a frustrated leading tone—ti must resolve up to do here.

Learn, too, to make the connection between **root movement** (the intervallic distance between chord roots) and **voice leading**. Here's how:

- When chord roots are a **fifth** (or fourth) apart, retain the common tone and move to the nearest available chord tones in the other voices (examples below: b minor when moving i → iv and also V → i; F Major when moving ii → V → I → IV; also the final V → I).
- When chord roots are a **third** apart, retain the **two** common tones in the upper voices (examples below: F Major when moving I → vi → IV → ii).
- When chord roots are a **second** apart, move the upper voices in contrary motion to the bass (examples below: b minor when moving iv → V and also F Major when moving IV → V).



A voice motion / spacing connection: if your bassline begins low and ascends, begin with open spacing, so that there's "room" for contrary motion where needed (the voices will gradually come together). Vice versa, too: if your bassline begins high and descends, begin with close spacing--the voices will gradually spread apart.

Basic principles of four-voice writing

Doubling

Here's a **GLOBAL DOUBLING PRINCIPLE**: **always double the bass**, with the exception of I^6, IV^6, V^6, and vi in a deceptive resolution of V or V^7. In other words:

1. **Root position** triads: generally **double the root** of the chord. A tripled root and single third may occur, particularly at a perfect authentic cadence. In the progression V → vi (or V^7 → vi), the **third** of the vi chord is doubled. This enhances the deceptive quality of the resolution to the submediant and it also corresponds with good voice leading.

2. **First inversion** triads: double the **root or fifth** of the chord. For ii^6, the bass note--the third of the chord--may also be doubled. **Another point**: diminished triads usually occur in first inversion. For them, double the bass note (the third of the chord). This is because the root and fifth are a tritone apart. The tritone is unstable, and it's best not to double a note which is unstable.

3. **Second inversion** triads: double the **bass note** (fifth of the chord).

4. **Seventh chords**: in root position they typically have all four notes, though they **may** have two roots, a third, and a seventh (thus the fifth is omitted). Inversions of seventh chords almost **always** include all four notes.

5. **DO NOT** double tendency tones: scale degree $\hat{7}$, the 7th of the V^7 chord, any chromatically altered tones.

Spacing

1. **Adjacent voices** (S&A, A&T) should be **no more than an octave apart**. The tenor and bass **can** be over an octave apart.

2. In chords with **open** spacing, the soprano and tenor are **more** than an octave apart, while in chords with **close** spacing, they are an **octave or less** apart.

3. Try to retain one kind of spacing through the phrase. Changes may occur at cadences, with repeated chords, or when passing through an inverted chord.

Voice leading

1. Use **contrary motion** whenever possible, **especially** when two chords are a second apart.

2. Keep the **common tone(s)** between two chords.

3. Write **smoothly**: use **stepwise motion** whenever possible.

4. **Avoid leaps** of over a P5 in all voices except the bass.

5. **Avoid parallel** perfect fifths, octaves, and unisons; also **avoid direct** fifths, octaves, and unisons (similar motion to a P5, P8, or P1 by skip in both voices).

6. **Avoid augmented and diminished intervals** (especially the + 2).

7. Resolving the V^7 chord and its inversions: the **third of the chord goes up** (unless it's in an inner voice) and the **seventh of the chord goes down**.

8. **Other seventh chords**: when possible, resolve the seventh of the chord down.

Figured bass guidelines

Three introductory points:

1. Figured bass symbols are **notational**--not analytical--symbols.
2. Numbers appearing **above and below** one another (i.e. $\frac{6}{4}$) always refer to the **intervals sounding together above the bass note** (the larger number is always on the top). They **do not** refer to **specific** voicing or spacing, but they **do** indicate the pitches which should be present somewhere in the upper voices.
3. It's a common misconception, however, that the symbols only refer to chords. They also play an important role in showing voice leading. Here's how: numbers appearing **beside** one another refer to **linear motion in the same voice** above the bass, as in passing tones, suspensions, etc. Examples: 4 3 refers to a 4 - 3 suspension above the bass; 8 7 refers to an octave moving to a seventh above the bass (as in V becoming V^7). A line following a figure indicates that this chord is to be sustained in the upper parts while the bass voice moves.

Triads:

1. A bass note standing alone without figures indicates a root position triad. The bass note is the root of the chord.
2. The figure 6 (sometimes $\frac{6}{3}$; the 3 is often omitted as a shortcut) below a bass note indicates a first inversion triad. The bass note is the third of the chord.
3. The figure $\frac{6}{4}$ below a bass note indicates a second inversion triad. The bass note is the fifth of the chord.

Chromatic alterations:

1. A chromatic alteration by itself (♯, ♭, or ♮) means the **third** above the bass should be altered accordingly. You will see this most frequently at V or V^7 chords in minor mode.
2. **Raised notes** are usually shown in one of two ways:
   a. Placement of the appropriate symbol before (sometimes after) the number: ♯6, ♮3, 4♯, etc.
   b. A number with a slash through it: 6̸
3. **Lowered notes** are shown by the appropriate symbol before (sometimes after) the number: ♭6, ♮7, 3♭, etc.

Seventh chords:

1. The figure 7 below a bass note indicates a root position seventh chord. The bass note is the root of the chord.
2. The figure $\frac{6}{5}$ below a bass note indicates a first inversion seventh chord. Remember how the figure 3 was often omitted from the $\frac{6}{3}$ of a first-inversion triad, as a shortcut? Well, the figure $\frac{6}{5}$ has the same shortcut--a 3 is usually omitted. The bass note here is the third of the chord.
3. The figure $\frac{4}{3}$ below a bass note indicates a second inversion seventh chord. The bass note is the fifth of the chord. The figure $\frac{4}{3}$ is a shortcut--a 6 is sometimes omitted.
4. The figure $\frac{4}{2}$ below a bass note indicates a third inversion seventh chord. The bass note is the seventh of the chord. The figure $\frac{4}{2}$ is a shortcut--a 6 is sometimes omitted. Sometimes just a 2 is used here, and the 6 *and* the 4 are omitted.
5. Chromatic alterations may happen to any member of a seventh chord, too.

Remember how in progressing $I^6_4 \rightarrow V$ or $I^6_4 \rightarrow V^7$ the **upper voices move down by step** (except one upper voice remains the same in $I^6_4 \rightarrow V$)? Here's why:

The voice leading in $I^6_4 \rightarrow V$ is

8 - 8
6 - 5
4 - 3

That of $I^6_4 \rightarrow V^7$ is

8 - 7
6 - 5
4 - 3

Triad Doubling:

Always Double The Bass

Exceptions: I^6, IV^6, V^6, and vi when it follows V or V^7.

Voice leading tips:

Keep the common tone(s) between two chords whenever possible

Use stepwise motion whenever possible

When chords are a second apart (i.e. IV-V): think contrary motion between the bass and the upper voices

Always avoid ||5, ||8, ||1

Resolving V^7:
3rd of the chord goes up
7th of the chord goes down
(generally speaking)

Cummings -- abbreviations used in grading part-writing assignments

Abbreviation	Description
Sp	Chord is misspelled
‖ 5 or ‖ 8	Parallel fifths or octaves
Dblg	Incorrect doubling
$\hat{7}$—$\hat{1}$	Resolve the leading tone to tonic
3rd ↗	Resolve the chord third up by step
7th ↘	Resolve the chord seventh down by step
[Too wide	Over an octave between soprano and alto **or** alto and tenor
Vce cr	Voices crossed
Awk	Awkward voice leading
+2, TT, etc.	Use of an incorrect, awkward interval