

# Review: doubling, voice leading, and process

## Introduction: your compass

**Harmonies**, or chords, are moments in time made up of simultaneously sounding pitches, so these exist on the *vertical time axis*. With three notes in a triad but four singers, someone must double one of the pitches. With 7th chords, everyone can be on a different note.

When you learn the do's and don'ts of how to distribute the notes of a chord across the voices, you are learning principles of **doubling**.

Melodic **lines** exist on the *horizontal time axis*.

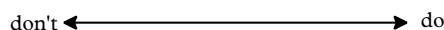
When you learn the do's and don'ts of how to write lines, you are learning principles of **voice leading**.

Ok, so you might say that all semester, you are building a model in your head like....

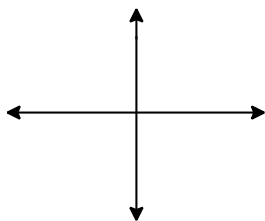
### Doubling



### Voice leading



...and that's like building a compass...



...so as you learn from these sheets this semester, whenever there is an important big-picture principle of doubling or voice leading that applies to all chords, you will see the graphic of a compass shown below. When you see this, add that principle to the compass you are building in your mind to guide you in all of your writing. You will see that each new chord doesn't have it's own rules that you have to tediously remember; rather, your mind's growing compass will guide you to write effectively for any new chords you encounter.





# Doubling

## How to begin and end

In general, usually if you know the voice leading, you can figure out the doubling and thus not have to memorize doubling rules explicitly.

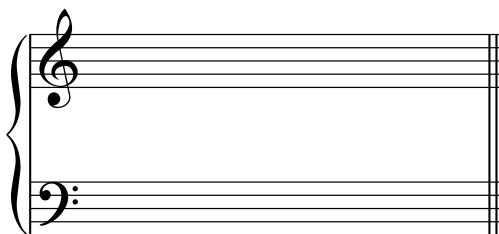
But there are some important basic principles you should know, as reviewed on the following pages.



There are two situations with very little choice:

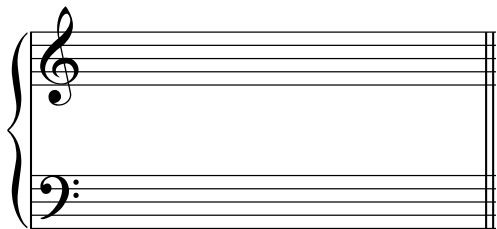
- 1) 1st tonic: 2 roots  
1 3rd  
1 5th

**No exceptions ever!**



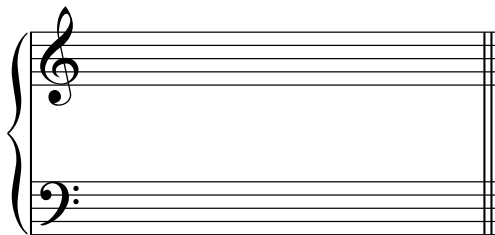
- 2) Final tonic: you have two options...

- 2 roots
- 1 3rd
- 1 5th



...or...

- 3 roots
- 1 3rd





# Doubling

What you can omit



All chords must be complete, with the following exceptions...

You can omit the 5th from only these:

I      ii<sup>7</sup>      V<sup>7</sup>

but not 1st tonic of piece

\* NOTE: inversions of every 7th chord must be complete



ex: what's wrong with each chord?


I      IV      ii<sup>6</sup>      V<sup>6</sup>

usually, avoid the Communist doubling: 2 roots  
2 3rds

I      V      I

however, when you resolve vii<sup>o6</sup> or vii<sup>o7</sup>, sometimes you must have Communism. Here, it is not only fine but required.

i      vii<sup>o6</sup>      i


**Doubling**  
 Tendency tones

Dissonances are:

- the 7th of a 7th chord
- 2nds, 4ths or 7ths above a bass (suspensions and the cad.  $\frac{6}{4}$ )

Tendency tones include this whole group of dissonances, and also LTs



never double a tendency tone

LT:

Musical notation for LT: showing three chords in a sequence: I, V<sup>6</sup>, and I. Each chord is represented by a whole note in both the treble and bass staves. The bass line for the V<sup>6</sup> chord has a double bar line under the bass note, indicating a tendency tone.

7th:

Musical notation for 7th: showing three chords in a sequence: I, V<sup>7</sup>, and I. Each chord is represented by a whole note in both the treble and bass staves. The 7th of the V<sup>7</sup> chord is shown in the bass line with a double bar line, indicating a tendency tone.

4th above a bass:

Musical notation for 4th above a bass: showing two chords. The first is a whole note I chord. The second is a V<sup>6</sup><sub>4</sub> chord (also labeled as  $\frac{5}{3}$ ) with a whole note in both staves. The 4th of this chord is shown in the bass line with a double bar line, indicating a tendency tone.



# Voice leading

Tendency tones  
(again, dissonances and LTs)



outer voice LTs must resolve up to tonic

V I

an inner voice LT doesn't have to resolve to tonic, but it can only do one other thing:

V I

Dissonances need two things:

- 1) resolve down by step regardless of inner or outer voice
- 2) prepare when possible as a common tone in the previous chord

I ii<sup>6</sup> V

I iii ii<sup>6</sup> V



# Voice leading

## Intervals to avoid



-- // 8ths, // unisons, // 5ths

I      V<sup>6</sup>      IV      V

-- // 4ths happen all the time in uppers, no problem  
// 4ths are not ok between bass and another voice

-- hidden 8ths or 5ths



*only when the soprano leaps:*

...and the bass moves in same direction,  
...check the interval they landed on.  
...no good if a 5th or octave.

vi      V      I<sup>6</sup>      ii

so, are these ok?

ii      V      I<sup>6</sup>      ii<sup>6</sup>



## Voice leading

Intervals to avoid  
(cont.)




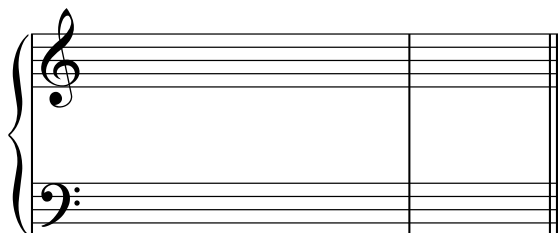
You may not tell one of your poor singers to sing an A2

This just happens in minor when a voice attempts to sing  $\hat{6} - \hat{7} - \hat{1}$



To get rid of this problem rather than go hunting for A2s, instead just trust this:

 In minor, when predominant > dominant, approach the LT *from above*.



a: i      iv<sup>6</sup>      V



## Voice leading

by root movement  
of chords



Rules of thumb for handling every possibility you'll ever run into! Possibly the most important page to know about voice leading.

- If the roots of two chords are a step apart, there are no common tones.



Play the contrary motion game.

Musical notation showing two chords, I and ii, on a grand staff. The treble clef contains the upper voice and the bass clef contains the lower voice. For chord I, the upper voice has a whole note G4 and the lower voice has a whole note C4. For chord ii, the upper voice has a whole note D4 and the lower voice has a whole note E3. This illustrates contrary motion where no tones are common between the two chords.

- If the roots of two chords are a 5th apart, there is 1 common tone.



Keep it in the same voice.

Musical notation showing two chords, I and V, on a grand staff. The treble clef contains the upper voice and the bass clef contains the lower voice. For chord I, the upper voice has a whole note G4 and the lower voice has a whole note C4. For chord V, the upper voice has a whole note G4 and the lower voice has a whole note E3. This illustrates voice leading where the upper voice remains on the same pitch (G4) between the two chords.

- If the roots of two chords are a 3rd apart, there are 2 common tones.



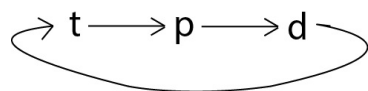
Keep them in the same voices.

Musical notation showing two chords, I and vi, on a grand staff. The treble clef contains the upper voice and the bass clef contains the lower voice. For chord I, the upper voice has a whole note G4 and the lower voice has a whole note C4. For chord vi, the upper voice has a whole note F4 and the lower voice has a whole note E3. This illustrates voice leading where both the upper voice (G4 to F4) and the lower voice (C4 to E3) move in the same direction.



a) Come up with a harmonic plan based on what's given.

Every sentence you ever make will have the same cycle of grammar:



Start with the big picture, and keep zooming in. First, identify the beginning and all the cadences.

Zoom in further: identify your tonic expansions - a group of three chords with bookends of tonic  
(put a slur over them if you want and mark them "t")

identify your predominants - ask yourself about the chord right before each dominant  
(mark it "p" if you want)

be curious: realize that the given note could be the 7th of a chord.

$\hat{1} =$   
 $\hat{3} =$   
 $\hat{4} = V^7$   
 $\hat{5} =$   
 $\hat{6} =$

Now you have a plan going, and understand it's flexible because maybe voice leading will later make you change the colors ever so slightly when you fill in all four voices.

b) Write your outer voices first. NOT all 4 voices at once, chord by chord!

Know the notes in each chord, the paint in each bucket. Keep this active as you sculpt.

Outers are guided by:

- 1) stepwise motion
- 2) contrary motion
- 3) goal-oriented lines with a nice shape

\* Even when you sculpt outers, your voice leading and doubling compass is activated.

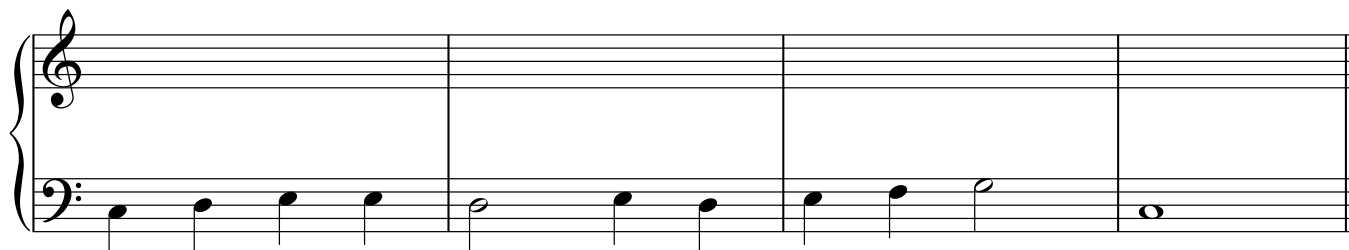
- e.g., in  $V^7$  know if the 7th is in your line and what to do with it
- e.g., already begin voice leading by root movement

c) Write inner voices.

Inners are guided by the principle of going nowhere. That is...

- 1) keep common tone whenever possible
- 2) or move to the nearest chord tone, which will usually be stepwise

\* Again, your voice leading and doubling compass is activated.



## Editing

After all this, your job is not quite over until you edit for illegal parallels one last time.

....do it.

....it takes 5 more minutes, DO IT.



Editing for illegal parallels is like training your eye to find Waldo in those Where is Waldo puzzles.

Be particularly suspicious that Waldo might be present when you have root movement by step.



Go through, and spot any parallel motion between pairs of voices. You'll get more fluid at it with practice.

When you spot parallel motion, check the interval between those voices.

Move merrily along with 3rds, 6ths, or upper voice 4ths.

But when you find illegal parallels, that pesky Waldo, destroy him with heavy artillery:

- 1) do anything else other than the bad thing - fix the bad thing and reverse engineer around that
- 2) go the other direction
- 3) add a 7th?
- 4) take away a 7th?
- 5) omit the 5th?
- 6) flip voices (but that often creates leaps, so not always the best option)
- 7) change the chord to a different inversion or color entirely?