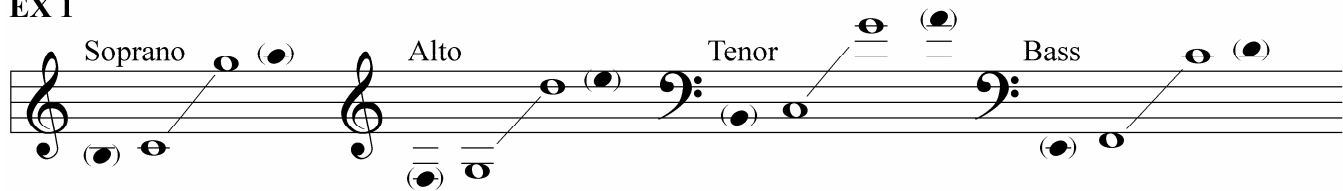


## UNIT III: CONNECTING (ROOT-POSITION) TRIADS

**I. Traditional harmony exercises** are written in 4 parts (SATB); this is the minimum number of parts that requires decisions about doubling but still emphasizes voice-leading. The conventions of such exercises are:

- Write on 2 staves, SA vs. TB, with opposing stems; indicate the Roman numeral analysis with each exercise.
- Use the customary ranges of EX 1:

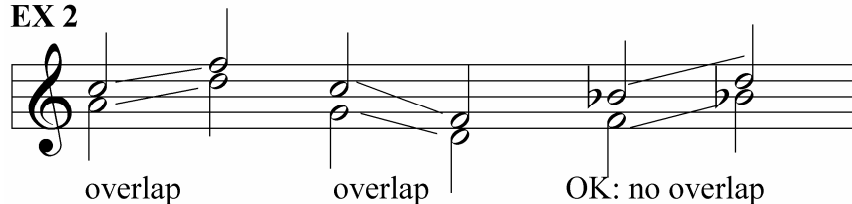
### EX 1



Don't exceed these ranges unless it's very necessary; write as though someone is going to sing the music.

- Don't overlap voices (when one voice proceeds beyond the previous note of an adjacent voice in similar motion): EX 2.

### EX 2



This rule is often violated in the tenor & bass; see the first few notes of the Praetorius example (*Es ist ein Ros entsprungen*) at the end of this chapter. As one can see there, when two voices proceed from a unison by similar motion, overlap is unavoidable. The principle is also difficult to follow if the soprano has wide leaps.

- For now, don't cross voices either (this rule will be modified later).
- Don't let the S-A or A-T distance exceed an octave; unless absolutely necessary, and then only for a note or two.

The T-B distance will often be more than an octave. Wider intervals on the bottom sound best; if the tenor and bass are too close, things get muddy.

When the upper three parts are within an octave, the chord is said to be in “close position”; in “open position” the SAT span exceeds an octave. The keyboard analog is playing the parts 3 notes in the right hand and 1 in the left, or 2 + 2.

## II. Doubling preferences (for root-position triads).

- In major and minor triads, the first preference is to double the root. Notice, this means that the SAT voices form a complete triad. The second choice is to double the 5th, and last choice is to double the 3rd.

Doubling of the root is obligatory at the ends of phrases. The third is somewhat better doubled in minor triads than in major ones.

- In augmented and diminished triads, prefer to double the third. This minimizes the dissonance with the bass. However, one should generally seek to avoid root-position augmented and diminished triads, since they almost always sound terrible (but see IV.e.3 below).
- Don't double the leading tone (the "LT", the 7° of the key).
- Wherever possible, write a complete triad; in any case, the third cannot be omitted.

## III. Melodic Rules

- Avoid augmented intervals, as from -6° to +7° in minor.
- The leading tone generally wants to ascend to the tonic, especially in the soprano and bass. But it is easy to construct situations in which this tendency is not present: EX 3.

EX 3

C: I V  $IV_{\flat}vii^7$  I

I iii IV I

- Try to arrange melodic tritones, especially in the outer parts, so that the line can reverse itself without violating the tendency of the LT to rise, and of 4° to descend; in minor, of 6° to descend, and of 2° to rise.

Another way of saying this: after a leap of several tones, the melody wants to turn back on itself. But the notes in question want to go to their nearest 1/2 -step neighbor (7° → 8°, 4° → 3°; in minor 6° → 5°, 2° → 3°). To arrange the music so that all these things occur, then, one must leap *up* to 4°, *down* to 7°; *up* to 6°, and *down* to 2°: EX 4.

EX 4 (in either D major or b minor):

better:

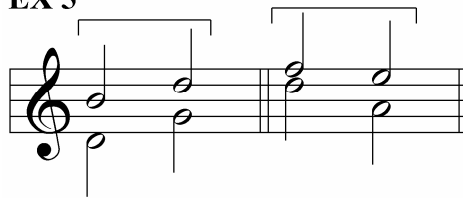
not so good:

Yet another way to formulate this desiderata (not rule): leaps of a diminished fifth are quite acceptable, if the line reverses itself; leaps of an augmented fourth are not so good. Again, one is avoiding the melodic use of augmented intervals. All this applies much more to the soprano more than to the other parts.

- d. Try to write good counterpoint with the good harmony: make the lines vocal, especially the outer parts.

#### IV. Chord-progression rules:

- a. Parallel unisons, octaves, and perfect 5ths are forbidden. They are especially likely to arise in root movement by step.
- b. “Direct” (or “hidden”) fifths and octaves are those in which the motion to the interval is similar, but not parallel: EX 5.

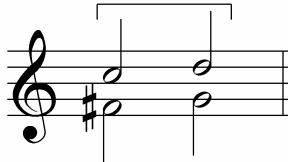


The authorities disagree on these, and they can be found in good music. We shall proceed as follows:

Direct 5ths and 8ves may occur within a single harmony, when the chord is just changing position.

Otherwise, direct 5ths and 8ves are permitted *so long as one part moves by step*.

BUT the stepwise progression tritone → perfect fifth – EX 6 – is acceptable *only if the bass is not involved*.



(The progression perfect 5th → tritone, however, is unrestricted).

- c. The simplest and most common connection between two chords, which we will use exclusively for the first exercises:
  1. Retain all the common tones.
  2. Move the other parts to the nearest chord tones, in accord with the voice-leading rules.

Chords in the same key whose roots are a 3rd or 6th apart have two common tones; a 4th or 5th apart, one common tone; a 2nd or 7th apart, no common tones.



**EX 9** with doubled third in  ${}_oii$

a:  ${}_oii$  V i  ${}_oii$  V i  ${}_oii$  V i

with doubled root in  ${}_oii$

a:  ${}_oii$  V i  ${}_oii$  V i

(more usual:)

a:  ${}_oii^7$  V i

It is therefore customary to double the root of the supertonic in this situation.

(But a progression that solves all these problems, using the  ${}_oii^7$  chord, will be discussed later.)

**V. Freer possibilities**

Since the music written by keeping all the common tones can be quite uninteresting, even at this stage we will want to connect triads more freely for melodic purposes, by:

- moving a chord tone by 4th or 5th, instead of to the nearest note – melodically, these are “easy intervals”;
- moving all parts in contrary motion to the bass, even when not necessary;
- writing the last chord of an exercise or piece (and occasionally the intervening chords) with a *tripled* root, plus the 3rd: when the progression is V-I, this allows a soprano supertonic to descend to the tonic, as well the LT to ascend to  $1^\circ$ : EX 10.

Another way to solve this problem, provided the *LT is in an inner voice*, is to let it drop to  $5^\circ$ , thus ending with a complete tonic triad: EX 11.

**EX 10**

C: V I

**EX 11**

V I V I

Bach does this at times even when the LT is in the tenor, as in the second instance above, and the TB thus form disjunct direct fifths.

In some circumstances the LT (in an inner voice, again) can also leap up, to complete the tonic triad: EX 12.

**EX 12**

V I

- d. When a chord is repeated, the parts can, and should, move - the chord “changes position”, with no harmonic progress.

## VI. Chord Progressions

A number of writers attempt to classify root progressions as intrinsically “strong” or “weak”; this need not be taken too seriously. It’s true that a chord progression in which all the notes are changed (as in IV-V) gives a greater sense of musical motion than one which retains two pitches (I-vi). And certainly the V-I progression is pre-eminent in music of the common practice period. But a great many rhythmic, melodic, and contrapuntal factors cloud the picture, and act to determine chord choice just as strongly as root movement.

Trying to make music with only root-position chords may seem difficult, but cf. the Brahms, Chopin, and Schubert examples below. The Praetorius is in a style called *Cantionale*, that of 16th and 17th-century German chorale settings; today it is often called “familiar” or “hymn” style. It relied heavily, though not exclusively, on root-position triads. The style derives largely from the homophonic writing in polyphonic works of the sixteenth century; cf. the Lasso example (*Missa super Pylons...*).

# Missa super Pilon...

## Gloria (conclusion) and *Credo* (beginning)

[Gloria]

*Orlando Lasso*

Musical score for the beginning of the Gloria, featuring four vocal parts: Cantus, Altus, Tenor, and Bassus. The music is in G minor and common time. The lyrics are: tu in glor - ri - a De - i Pa -

Musical score for the continuation of the Gloria, featuring four vocal parts: Cantus, Altus, Tenor, and Bassus. The lyrics are: tris, in glo - ri - a De - i Pa - tris. A - men, in glo - ri -

Musical score for the continuation of the Gloria, featuring four vocal parts: Cantus, Altus, Tenor, and Bassus. The lyrics are: a De - i Pa - tris in glo - ri - a De - i Pa - tris. A - men.

## Credo in unum deum

Pa - trem o - mni - po - ten - tem, fac - to - rem coe - li

Pa - trem o - mni - po - ten - tem, fa - cto - rem coe - li

Pa - trem o - mni - po - ten - tem, fa - cto - rem coe - li

Pa - trem o - mni - po - ten - tem, fa - cto - rem coe - li

et ter - rae, vi - si - vi - li - um o - mni - um, et in - vi - si - bi - li -

et ter - rae, vi - si - bi - li - um o - mni - um, et in - vi - si - bi - li -

et ter - rae, vi - si - bi - li - um o - mni - um, et in - vi - si - bi - li -

et ter - rae, vi - si - bi - li - um o - mni - um, et in - vi - si - bi - li -

um. Je - sum Chri - stum, Fi - li - um

um. Je - sum Chri - stum, Fi - li - um

um. Et in u - num Do - mi - num, Fi - - - li - um De - i

um. Et in u - num Do - mi - num, Fi - - - li - um De -



# Es ist ein Ros entsprungen

Michael Praetorius

Cantus

Altus

Tenor

Bassus

Es ist ein Ros ent - sprun - gen, aus ei - ner Wur - zel zart,

Es ist ein Ros ent - sprun - gen, aus ei - ner Wur - zel zart,

Detailed description: This system contains the first two lines of the vocal score. It features four staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music is in a common time signature (C) and a key signature of one flat (B-flat). The lyrics are: 'Es ist ein Ros ent - sprun - gen, aus ei - ner Wur - zel zart,'. The Cantus and Tenor parts have lyrics, while the Altus and Bassus parts are instrumental accompaniment.

als uns di Al - ten sun - gen, aus Jes - se kam die Art. Und hat ein Blüm - lein bracht,

als uns die Alt - en sun - gen, aus Jes - se kam die Art. Und hat ein Blüm - lein bracht,

Detailed description: This system contains the third and fourth lines of the vocal score. The lyrics are: 'als uns di Al - ten sun - gen, aus Jes - se kam die Art. Und hat ein Blüm - lein bracht,'. The Cantus and Tenor parts have lyrics, while the Altus and Bassus parts are instrumental accompaniment.

mit - ten im kal - ten Win - ter, wohl zu der hal - ben Nacht.

mit - ten im kal - ten Win - ter, wohl zu der hal - ben Nacht.

Detailed description: This system contains the fifth and sixth lines of the vocal score. The lyrics are: 'mit - ten im kal - ten Win - ter, wohl zu der hal - ben Nacht.' The Cantus and Tenor parts have lyrics, while the Altus and Bassus parts are instrumental accompaniment.

# Impromptu

Op 90 No 4

Franz Schubert

The musical score for Impromptu Op. 90 No. 4 by Franz Schubert is presented in two systems. The first system shows the beginning of the piece in 3/4 time, marked *pp* (pianissimo) in the bass clef and *cresc.* (crescendo) in the treble clef. The second system continues the piece with a similar texture. The score is written for piano and features a delicate, flowing melody in the right hand and a simple harmonic accompaniment in the left hand.

# Nocturne

Op. 37 No 1

Frederic Chopin

The musical score for Nocturne Op. 37 No. 1 by Frederic Chopin is presented in two systems. The piece is in common time (C) and features a characteristic Chopin nocturne texture. The right hand plays a series of chords, while the left hand plays a simple, rhythmic accompaniment. The score is written for piano and captures the intimate and lyrical nature of the piece.

# Ballade

Op. 118 No. 3

Johannes Brahms

*Allegro energico*

*f*

*p*

# Rhapsody

Op. 119 No. 4

Johannes Brahms

*Allegro risoluto*

*f*

*ff*