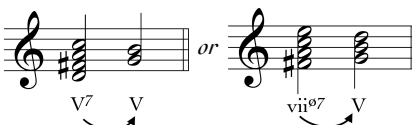
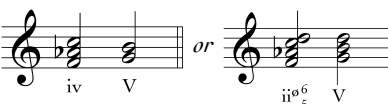



Augmented Sixth Chords, I

1. PRE-DOMINANT CLASS CHORD ALTERATIONS; INTENSIFYING THE APPROACH TO $\hat{5}$

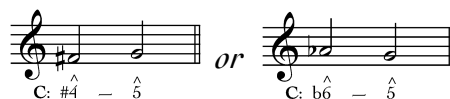
There are two diatonic chords belonging to the *pre-dominant* class: **IV** and **ii** in major keys, **iv** and **ii^o** in minor. We have learned that these chords may be chromatically altered as follows:

1.1) "Secondary" functions (V/V , vii^o/V): 

1.2) Mode mixture (**iv** and **ii^o** in major keys): 

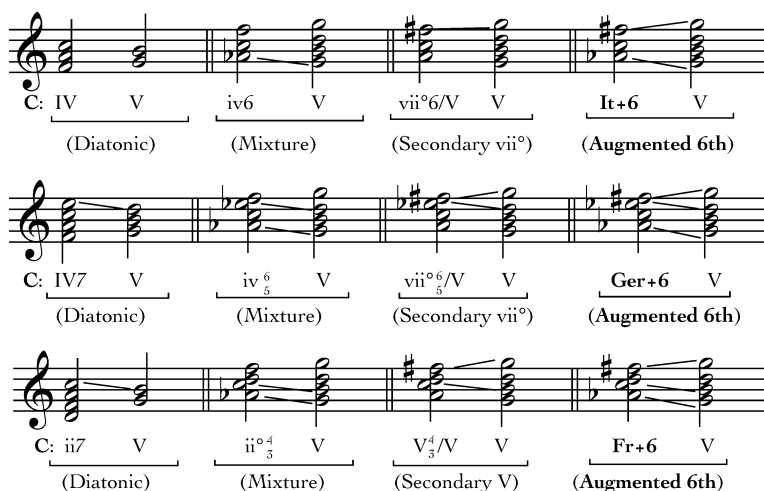
1.3) The Neapolitan 6th ($\flat II^6$): 

☞ All of these chromatic alterations result in an "intensification" of the approach to scale degree $\hat{5}$, either by semitone from below ($\# \hat{4} - \hat{5}$), or by semitone from above ($\flat \hat{6} - \hat{5}$):



C: $\# \hat{4} - \hat{5}$ or C: $\flat \hat{6} - \hat{5}$

☞ AUGMENTED SIXTH CHORDS use *both* of the above "intensified" chromatic approaches to $\hat{5}$ in the same chord! They are the result of combining **secondary functions** and **mixture**:



C: **IV** **V** **iv⁶** **V** **vii^o6/V** **V** **It+6** **V**
 (Diatonic) (Mixture) (Secondary vii^o) (Augmented 6th)

C: **IV⁷** **V** **iv⁶₅** **V** **vii^o6₅/V** **V** **Ger+6** **V**
 (Diatonic) (Mixture) (Secondary vii^o) (Augmented 6th)

C: **ii⁷** **V** **ii^o4₅** **V** **V⁴₃/V** **V** **Fr+6** **V**
 (Diatonic) (Mixture) (Secondary V) (Augmented 6th)

2. DESCRIPTION, ETYMOLOGY

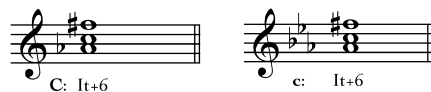
AUG. 6TH CHORDS are thus named because, in their most typical voicing, they contain an *augmented sixth* between the bass and one voice above the bass (between $A\flat$ and $F\sharp$, in the examples above). The three most common varieties of augmented sixth chords are referred to as the *Italian Sixth*, the *German Sixth*, and the *French Sixth*, but there is no logical reason for these national nicknames; they are just names that have stuck, at least in North America and Britain.

☞ Why do you think these chords have *names*, as opposed to Roman numeral chord symbols? (To answer, try to work out what their Roman numeral chord symbols would be.)

3. POSITION; MAJOR VS MINOR KEYS

The **lowered sixth scale degree** ($\flat\hat{6}$) is *usually* in the bass, as above, but other voicings are also possible and will be explored in section 9 of this handout (“**Inversions**, **Inversion Labels**”).

☞ These chords contain the **same pitches** in **major** keys and their parallel **minors**, but the *bass requires no additional accidental in minor keys* because $\hat{6}$ is *already* lowered in the signature:



4. VOICE-LEADING

Since the two notes forming the augmented sixth ($\flat\hat{6}$ and $\sharp\hat{4}$) naturally tend to move to $\hat{5}$, *Augmented Sixth chords usually move to some form of V* (including $V \frac{6}{4} - \frac{5}{3}$) or, less frequently, they pass through vii^{o7}/V on their way to V:

☞ In the 2nd example above, **note that if the Ger.+6 resolves directly to V, parallel 5^{ths} result; the only way to avoid them is to move to $V \frac{6}{4} - \frac{5}{3}$ instead** (e.g., 3rd example above). Because of this, the Ger.+6 *usually* resolves to a $V \frac{6}{4} - \frac{5}{3}$, but it *may* move directly to a V instead (creating a rare, *acceptable* case of parallel 5^{ths}!).

☞ In the 5th example above, the Fr.+6 moves to a vii^{o7}/V . This creates a case of “false relation” (a.k.a. “cross relation”) between the Ab in the Fr.+6 and the A in the vii^{o7}/V , so I used P.T. G’s in the outer voices to lessen the effect of that false relation.

☞ Although $\sharp\hat{4}$ is in the soprano in each of the above examples, it need not be; it may be in *any* voice.

5. SWITZERLAND???

• You *may* be thinking, “it is all very fine to have chords named after Italy, Germany, and France, but what about Switzerland, home of the Alp horn? Or Luxembourg, home of who knows what?” Or you may not. Either way, you may be pleased (or disturbed) to learn that one harmony textbook (by Walter Piston) mentions something called a “Swiss+6th” chord (but alas, no mention whatsoever of Luxembourg!), and this is why:

☞ When a Ger.+6 moves to $V \frac{6}{4} - \frac{5}{3}$ in a **major** key (see 1st example below), one of the notes *temporarily* moves against tendency ($\flat\hat{3} \nearrow \hat{3}$) before continuing to the expected note ($\flat\hat{3} \nearrow \hat{3} \searrow \hat{2}$). **This is normal voice-leading for this chord progression**, justified because $\flat\hat{3}$ eventually falls to $\hat{2}$.

☞ Some composers, concerned over the appearance of voice-leading impropriety in $\flat\hat{3} \nearrow \hat{3}$, enharmonically respell $\flat\hat{3}$ as $\sharp\hat{2}$, creating better-*looking* voice leading (but don’t forget to naturalize $\hat{2}$ on the way back down: $\sharp\hat{2} \nearrow \hat{3} \searrow \hat{2}$). When the Ger.+6 is *enharmonically respelled* in this way, Piston proposed calling it a “Swiss+6th”; other texts have not adopted Piston’s rogue label for this chord and just call it “Ger.+6 enh.,” or “doubly augmented chord”:

☞ The 3rd example above shows a way to bypass this issue in major keys: The Ger.+6 moves to the *mixture* form of the cadential $\frac{6}{4}$ ($V \frac{b6}{4-3}$), which allows $b\hat{3}$ to remain as a common tone between the two chords.

5. CONSTRUCTION (method A — **ONLY 2 E-Z STEPS!**)

Fr.+6:

1. Write $V \frac{4}{3}$ of V.

2. Chromatically-lower the bass ($\hat{4}\hat{6} \searrow b\hat{6}$); in minor keys, this alteration is already in the signature.

☞ The jazz chord symbol for this chord would be $D \frac{7}{b5}/Ab$. (The “slash” Ab means Ab is the bass.)

Ger.+6:

1. Write $vii^{\circ} \frac{6}{5}$ of V.

2. Chromatically-lower the bass ($\hat{4}\hat{6} \searrow b\hat{6}$); in minor keys, this alteration is already in the signature.

☞ There is no jazz chord equivalent for this chord, except to label it enharmonically as Ab^7 .

It.+6:

1. Write $vii^{\circ} 6$ of V.

2. Chromatically-lower the bass ($\hat{4}\hat{6} \searrow b\hat{6}$); in minor keys, this alteration is already in the signature.

☞ There is no jazz chord equivalent for this chord, except to label it enharmonically as Ab^7 .

6. TEST YOUR UNDERSTANDING

Understanding how Aug. 6ths are constructed using the above method is important, because it demonstrates their *function* (pre-dominant) and *derivation* (combining 2^{ndary} dominants with $b\hat{6}$ from *mixture*).

☞ Write the following chord progressions for SATB. Indicate tendency tone resolutions with straight lines.

☞ Make up more exercises in different keys to test your understanding and to develop facility (speed).

- i) Fr+6 to V in E \flat major
- ii) Ger+6 to V in A major
- iii) It+6 to V in d minor
- iv) Fr+6 to V in D major
- v) Ger+6 to V in F major
- vi) It+6 to V in B minor, etc.

7. CONSTRUCTION (method B — **ONLY 4 E-Z STEPS! BUT MORE VERSATILE!**)

A second method for spelling +6th chords involves some memorization, but many find it a faster method. It can also be a easier way to spell +6^{ths} that resolve *irregularly* (see “11. Irregular Resolutions,” below):

- 1) Write the bass (usually the root) of the 2nd chord (the chord to which the +6 chord will resolve), then **double it** in any upper voice. In most cases, that doubled note will be $\hat{5}$ (root of V).
- 2) Write the **two main tendency tones** in the *first* chord (the +6th chord) that resolve to the octave you just wrote in the first step; if moving to V, then $\flat\hat{6} \searrow \hat{5}$ in the bass, and $\#\hat{4} \nearrow \hat{5}$ in an upper voice.
- 3) Add a M3 above the bass of the 1st chord (the +6th), then do ONE of the following:
- 4)
 - Double the M3 above the bass for an It.+6;
 - Add a P5 above the bass for a Ger.+6;
 - Add a +4 above the bass for a Fr.+6.

1) 2) 3) 4)

And that's it! Now try some more exercises as above, using *method b*. Which is faster?

8. OTHER POINTS TO REMEMBER

•A perfectly acceptable tendency-tone *exception* is $\#\hat{4}$ to $\natural\hat{4}$, where $\natural\hat{4}$ is the 7th of V⁷ (this example of a *frustrated leading-tone* resolving directly to the 7th of a chord is possible with secondary dominants as well):

1) 2)

•Aside from a Ger+6 moving directly to V, can you think of one *other* case (with different harmonies) where parallel fifths, used sparingly, are acceptable?

•Remember that chromatically-altered notes need to be *approached carefully*; by chromatic or diatonic step, or small skip in the opposite direction of the resolution are best.

•While +6 chords typically progress to V, they may also be used as a neighbour chord, i.e. V - Fr+6 - V.

•Also, we know these chords often resolve to the Cad. V $\frac{6}{4} - \frac{5}{3}$, but sometimes they move to a *Passing* $\frac{6}{4}$ instead, as in Ger+6 - (I $\frac{6}{4}$) - vii^o7/V - etc. Make up an example of this in E major.

9. 'INVERSIONS', INVERSION LABELS

As we have learned, the great majority of +6th chords are voiced with $\flat\hat{6}$ in the bass and $\#\hat{4}$ in one of the upper voices, which seems to be heard as the most stable position of these voice-leading chords. Interestingly, there is no real 'root' position. **All other inversions are possible**, however, the most common of which has $\#\hat{4}$ in the bass and $\flat\hat{6}$ in one of the *upper* voices. **All voices would still resolve normally.**

•LABELING INVERSIONS: Some theorists suggest labeling inversions with $\#\hat{4}$ in the bass as follows: Fr^o3, It^o3, and Ger^o3, because the inversion of +6 is ^o3. Others do not distinguish between different positions, arguing that the lack of any real sense of 'root' position in these chords makes the concept of inversion irrelevant. These theorists, which include Kostka and Payne, suggest that the label for +6th chords should remain the same, *regardless of inversion*.

I suggest the following compromise:

If it is in 'diminished third' position, label it accordingly (Fr°3, etc.).

Otherwise, label non-standard positions as Fr"+6", etc., regardless of 'inversion'

My rationale for this is that I agree that labeling them identically as +6 chords makes sense. However, since the diminished third position is the most widely-used alternative voicing, it is useful to have it its own label. Below are non-standard positions with resolutions; see how parallel fifths are avoided in the Ger.°3 - V progression (1st ex.):

C: Ger°₃ V It "+6" V₆ Fr "+6" V
(or: V_{b₅}⁷ of V)

10. MORE LABELING (*Ger+6 of V*, etc.)

As we have already seen, *all* augmented sixth chords come from secondary dominants (V₃⁴ of V, etc.). For this reason, it is possible to label these chords in a similar manner: Ger+6/V or Ger+6 of V, etc. This is unconventional, but the label clearly conveys not only the *name* of the chord (i.e. Ger+6), but, more importantly, it also conveys its *function* (i.e. 'of V'). A second benefit of this labeling method is that it makes it easy to label irregular resolutions to chords other than V, such as Ger+6/vi, It+6/ii, or even Fr+6/I!

11. IRREGULAR RESOLUTIONS

Three types of *irregular resolutions* are possible for +6th chords:

i) AUG.6TH CHORDS RESOLVING TO HARMONIES OTHER THAN V: Just as you can have a secondary dominant *of* any harmony other than diminished triads (V/ii, V/iii, V/IV, etc.), **you can also have +6ths of any harmony other than diminished triads** (Fr.+6/I, It.+6/ii, Ger.+6/iii, etc.), and not just *of* V. Augmented sixth chords are chromatically-altered secondary dominants which *typically*, but *not always*, move to V. The examples below show a secondary V₃⁴ /iii and its Fr+6 equivalent, then a regular V₃⁴ -I with its equivalent:

C: V₃⁴ of iii Fr+6 of iii V₃⁴ I Fr+6 of I

Check your understanding with the chord-spelling exercises below; when you've tried these, make up more on your own or with some classmates, and then check them.

• Write the following two-chord progressions for SATB. Indicate the resolution of tendency tones.

- i) Fr+6 of I in E^b major
- ii) Ger+6 of ii in A major
- iii) It+6 of III in d minor
- iv) Fr+6 of IV in D major
- v) Ger+6 of bVI in F major
- vi) It+6 of VII in B minor, etc.

ii) AUG.6TH CHORDS RESOLVING TO POSITIONS OTHER THAN ROOT: The next unusual feature of these chords is that the scale degree to which the +6 resolves (typically $\hat{5}$, but as we have just learned, possibly $\hat{2}$, or $\hat{3}$, etc., instead) **does not have to be the root of the chord!** *The +6 interval occasionally expands to the third or fifth of a chord, resulting in unexpected (deceptive?) progressions!* When this happens, **our text suggests enclosing the augmented sixth chord symbol in square brackets**, like this: [Fr+6]. However, this type of label would *not* be correct for an augmented sixth that approaches the cadential $\frac{6}{4}$, since the cadential $\frac{6}{4}$ is not a *true* inversion of I, but a V chord in root position with a couple of NCTs over the bass. Below are two examples:

C: [Ger+6]/ $\hat{6}$ $ii \frac{6}{4}$ [Fr $^{\circ}$ 3]/ $\hat{4}$ $ii6$

• Write the following two-chord progressions for SATB. Note that these +6 chords all resolve to the **bass note** of the indicated inversions. Indicate the resolution of tendency tones.

- i) [Fr+6]/ $\hat{3}$ to I6 in E major
- ii) [Ger+6]/ $\hat{6}$ to $ii \frac{6}{4}$ in Db major
- iii) [It+6]/ $\hat{5}$ to III6 in F minor
- iv) [Fr+6]/ $\hat{1}$ to $iv \frac{6}{4}$ in D minor
- v) [Ger+6]/ $\hat{4}$ to N6 in F major, etc.

iii) CONVENTIONAL AUG.6TH CHORDS RESOLVING DIRECTLY TO I: A *conventional* +6th chord (i.e. one that normally resolves to V) may sometimes be found resolving directly to I. You could look at this as +6th chords that resolve to the fifth of I, but the voice leading often indicates otherwise, as in the examples below, in which $b\hat{6}$ in the bass moves to $\hat{1}$, and not $\hat{5}$. Instead, this chord progression is based on the **common-tone diminished seventh** (a chord we will study in future weeks); the augmented sixth chords below have a note in common with the tonic chord (the root). The Ger+6 is particularly well-suited for this treatment, because it is identical to the common-tone diminished seventh chord of I, but with a $b\hat{6}$ instead of $b\hat{7}$. If using the Ger+6 as a common-tone chord, it works better with major chords than minor, because the D \sharp (in the 1st example below) would have nowhere to go if resolving to Eb. The Fr+6 works equally well as a common-tone chord in major and minor keys.

C: I Ger.+6 (enh.) I I Fr.+6 I

12. AND FINALLY ...

•Not *all* +6th chords fall into the three types studied (It., Fr., and Ger.). There is an example by R. Strauss in our textbook, for example, in which we find a chord similar to a Fr.+6 chord, but with a *minor* third above the bass instead of a *major* third (*Till Eulenspiegel*; Ex. 24-11). In a case like this, just label the chord "+6" and don't try to assign one of the three nationality labels studied to it.