Chromatic Chords

We are almost finished learning about everything that will typically pop up in a Classical-period piece. Our final topic is chromatic chords – chords that use notes outside the key. They require extra accidentals to make, and can thus confuse students into thinking that a piece has moved into a new key.

Not modulations

Modulations usually cadence in a new key or involves multiple harmonies that only make sense in a new key. Perceptually, they will change the sense of “do” to a new note.

These chromatic chords, on the other hand, are momentary detours within an otherwise normal progression. They usually last for one chord only.

Secondary dominants, or “borrowed chords.”

The most common chromatic chords you will encounter are secondary dominants, or, as one student of mine called them, “borrowed chords.” A secondary dominant seems to serve as a temporary V, V⁷, vii♭, or vii⁹ chord that briefly points to some chord other than I. Here’s an example written in C major:

If you saw chords 2 and 3 out of context, you’d probably think it was a V♭ going to i in d minor.
We’ve “borrowed” the dominant seventh from another key and slipped it into the progression. We’ll call it “V₃ of ii.” Usually, the secondary dominant will continue to its target (in this case, ii).

There are two ways to label secondary dominants:

slash notation

\[ \begin{array}{cccc}
    & I & V₃ \\ii & ii & V₇ & I \\
\end{array} \]

arrow

\[ \begin{array}{cccc}
    & I & V₃ \xrightarrow{\text{arrow}} & ii & V₇ & I \\
\end{array} \]

You can have secondary V’s, V₇’s, vii°’s or vii°⁷’s.

So, whenever you find a secondary chord and must identify it, ask “what is it V (or vii°) of?” If it is a secondary V or V₇, count down a perfect fifth from its root - that’s its target note. If it’s a vii° or vii°⁷, count a half step up from its root.

\[ \begin{align*}
    \text{C: target note is ii, therefore} & \quad V₇ \\ii \\
    \text{C: target note is ii, therefore} & \quad vii°⁷ \\ii \\
\end{align*} \]

Of course, in context it usually helps to just see what the chord leads to. “V₇ of vi” is usually going to go to vi, et cetera. (The main exception is when secondary V₇’s form a chain, which I’ll show in a little bit.)
How Secondary Doms Work in the Flowchart

The dominant to tonic progression (say, V-I or vii°-I) is the most powerful harmonic motion in classical music. It has the ability to pull the ear along and “point to” a new target note.

Often people say that the target note is being “tonicized”, or made into a temporary tonic. I want to avoid this sense of it, because I don’t think we should confuse secondary dominants with modulation. As far as I’m concerned, if we hear a new “do”, we’ve modulated. Let’s say that “tonicization” is a weaker, less stable way to briefly emphasize a chord that is not I.

Substitutions

The simplest way to use secondary dominants is as a substitution for a normal chord in the flowchart. In our first example progression, for example, the V⁷/ii stood in for a vi.

Instead of an A minor triad, we use an A dominant seventh. Thus, we could imagine we’ve put the secondary dominant in the flowchart where vi would normally be.

Chromatic substitutions for the subdominants (ii and IV) are also common.
**Insertions**

Secondary dominants also can be *inserted* into progressions to make a little extra interest. The progression would work without them, but their presence adds some cool chromatic motion.

\[ V^7 \text{ of } V \text{ inserted between } ii \text{ and } V \]

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\begin{array}{c}
\text{C: } I & ii^6 & V^7/V & V & I \\
\end{array}
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**“Wrenching” the Progression**

Because these chords are so good at pointing in new directions, there’s often a sense that they are diverting the progression away from where it would normally go.

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\begin{array}{c}
\text{C: } I & IV & V & vii^6 & vi & IV & V & I \\
\end{array}
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Here we arrive at V rather quickly, but a vii^6 of vi pulls us into deeper waters and keeps the progression going.
Perhaps my favorite secondary dominant is the $V^7$ of IV, which is really a modified I chord. It often has a dramatic wrenching effect, as one moment we are safe at home on the I chord and the next we are pushing away from it.

Secondary Dominants in a Chain

Secondary $V^7$’s in a chain often feature one final twist in the laws of resolving seventh chords. Both the third of the chord and the seventh sink down by half step in a series of parallel tritones.
The “Neapolitan Six” Chord

The “Neapolitan Six” is really quite simple. It’s a II chord that is built on a lowered (or flattened) scale-degree 5 instead of a normal 2. It is usually in first inversion (which is why people call it a “six,” after its figured-bass symbol) and it’s always major instead of minor or diminished. It functions just like normal ii, as a pre-dominant that will continue to a dominant or a cadential 6.

You can mark it $\flat$II, or, as I was taught, N6.

Here’s an example, written in C major, where the N6 goes to V.

![Musical notation](image)

Here’s a progression from N6 to a cadential 6, in C minor. (I think this sounds terrible in major but good in minor.)

![Musical notation](image)
Augmented Sixth Chord

The augmented sixth is an interval that’s the same size as a minor seventh. (Think of it as a major sixth that’s been “stretched” an extra half-step.) Augmented sixth chords are a special family of harmonies that lead chromatically to the dominant. The notes in the augmented sixth interval are a half-step above and below the dominant scale-degree.

\[ \begin{align*}
\sharp 4 & \rightarrow \hat{5} \\
F^\# & \rightarrow G
\end{align*} \]

\[ \begin{align*}
\flat 6 & \rightarrow \hat{5} \\
A_b & \rightarrow G
\end{align*} \]

The augmented sixth chord is not just these two notes, however. There’s always one or two more pitches in the chord, and different variations are given somewhat silly geographical names.

**“Italian” Augmented Sixth**

All augmented sixth chords include a scale-degree \( \hat{1} \). The basic version (with nothing else) is called an “Italian” augmented sixth.

\[ \begin{align*}
\sharp 4 & \rightarrow F^\# \\
\hat{1} & \rightarrow C \\
\flat 6 & \rightarrow A_b
\end{align*} \]

**“German” Augmented Sixth**

Here you include a \( \hat{1} \) and a \( \frac{5}{3} \) (or \( \frac{3}{5} \) from a minor scale.) That \( \frac{5}{3} \) can also be spelled as a \( \frac{2}{2} \). German sixths are cool because they mimic the same shape as a dominant seventh chord. They don’t resolve like a dominant seventh, though!

\[ \begin{align*}
\sharp 4 & \rightarrow F^\# \\
\frac{5}{3} & \rightarrow E_b \\
\hat{1} & \rightarrow C \\
\flat 6 & \rightarrow A_b
\end{align*} \]

\[ \begin{align*}
\frac{3}{5} & \rightarrow D^\# \\
\hat{1} & \rightarrow C \\
\frac{6}{5} & \rightarrow A_b
\end{align*} \]
“French” Augmented Sixth

Here you include a Ŵ and a ũ. The French sixth thus makes a very unusual shape and has a very exotic sound. It contains both an aug 6th between the outside notes (which is really like a minor 7th) and a whole tone between the inside notes. This shape doesn’t normally appear in the major or minor scale at all - it actually has more in common with the atonal “whole tone scale.”

Fr.⁴⁶ whole-tone scale

Augmented sixth chords usually appear with the ũ in the bass. Nobody really considers that the “root” of the chord, though. (Usually, roots are stable, they are not “tendency tones.”)

They are usually labeled It.⁴⁶, Ger.⁴⁶, and Fr.⁴⁶.

The augmented sixth chords often appear in conjunction with other cool chromatic harmonies to make smooth contrapuntal lines. Here’s an example in C minor, which also includes a secondary dominant (the V⁷ of iv) as well as “mode mixture” (using a major IV instead of the usual iv.)
Note the cool contrary motion this creates in the outer voices.

\[
\begin{array}{cccc}
\hat{\text{C}} & \hat{\text{D}} & \hat{\text{G}} & \text{F} \\
\hat{\text{C}} & \hat{\text{D}} & \hat{\text{G}} & \text{G} \\
\text{i} & \text{V}^{\text{iv}} & \text{IV}^6 & \text{Gr}^7 \\
\end{array}
\]

Mode Mixture

The majorness or minorness of a scale can be referred to as it’s “mode.” (Mode can also refer to more exotic scales such as phrygian or mixolydian.)

“Mode mixture” is simply the practice of mixing in diatonic triads from a different mode (drawing on, say, the chords of C minor when one is in C major.) Observe these progressions in C major and find the mode mixtures.

\[
\begin{array}{cccc}
\hat{\text{C}} & \hat{\text{D}} & \hat{\text{G}} & \text{F} \\
\hat{\text{C}} & \hat{\text{D}} & \hat{\text{G}} & \text{G} \\
\text{i} & \text{iv} & \text{V} & \text{I} \\
\end{array}
\]

\[
\begin{array}{cccc}
\hat{\text{C}} & \hat{\text{D}} & \hat{\text{G}} & \text{F} \\
\hat{\text{C}} & \hat{\text{D}} & \hat{\text{G}} & \text{G} \\
\text{i} & \text{bVI} & \text{IV} & \text{V} & \text{I} \\
\end{array}
\]