

Secondary dominants

Secondary dominants are based on the notion of tonicization. Tonicization is that process where a chord other than tonic is given the emphasis of a tonic function, usually through the use of a dominant chord (or dominant seventh) of that chord coming before the chord in question. That dominant or dominant seventh is called a secondary dominant. In the case of secondary dominants, the temporary tonicization of a chord other than tonic usually lasts for just a few beats (thus, it's too short to be a real modulation, which we'll study later in the semester).

Secondary dominants thus emphasize one chord by preceding it with **its own** dominant triad or dominant seventh chord. The term is "secondary" because the "primary" dominant is simply V⁷ in the key. Secondary dominants are notated like this: V⁷/V; this chord would be called "five seven of five."

- 1. Any diatonic major or minor triad may be preceded by its secondary dominant. Notice that this excludes diminished or augmented triads; thus there's no such thing as V/ii^O, nor V/vii^O. This makes sense: if a secondary dominant and its chord of resolution create a temporary tonicization, then what's tonicized has to be major or minor--there's no such thing as the temporary key of "B diminished."
- 2. For now, the possibilities are V/x and V⁷/x and their inversions. Just as V⁴₂ resolves to I⁶ (or i⁶ in minor), so does V⁴₂/x resolve to x⁶. In a couple of weeks you'll find out more about other kinds of secondary functions.
- 3. Voice leading: secondary dominants resolve just like primary dominants—just like V⁷→I (or i). The third of the chord goes up (like ti→do), and the seventh of the chord goes down (like fa→mi). Any of the three V⁷→I configurations (complete to complete, complete to incomplete, and incomplete to complete) is possible. Note carefully that notes with added sharps (those notes which are altered to be higher than their normal diatonic spelling) usually resolve up, while notes with added flats (those notes which are altered to be lower than their normal diatonic spelling) usually resolve down.
- 4. Note that V/V or V⁷/V can progress to I_4^6 (or i_4^6) before moving on to its V, thus: $V^7/V \rightarrow I_4^6 \rightarrow V^{(7)} \rightarrow I$.
- 5. Secondary dominants thus have a **chromatically altered note** (or sometimes two; the only secondary dominants which **don't** have any chromatically altered notes are V⁷/III and V/VI in minor). Note that V/IV in major is identical to the tonic chord, thus composers almost always add the seventh, creating V⁷/IV.

The chromatically altered note usually functions like a temporary or secondary leading tone. Just like the "regular" $\hat{7}$ intensifies the resolution to $\hat{1}$, this secondary leading tone intensifies motion to the temporary tonic. By the way, don't confuse chromatic nonchord tones with chromatically altered notes that are part of a secondary dominant.

6. So, this means that you follow this procedure: 1) look for chromatically altered notes; 2) see if they're part of a major triad or major-minor seventh; then 3) check to see that the chord in question resolves to its "tonic" [root movement (as distinct from bass line movement) up a P4 or down a P5].



Writing them. Given F: V_5^6/ii , think ii is G. A perfect fifth above G is D. A dominant seventh chord built on D (or, V^7 of g) is D F# A C. $_5^6$ means that the third-the F#--should be in the bass.

Hearing them. 1) determine where you hear major-minor seventh chords; 2) determine whether they're diatonic or chromatic; 3) after determining the chromatic chords, listen to where they resolve; 4) listen carefully to the bass motion to determine the inversion. An example:

you hear ?? \rightarrow ii. Identify the ii chord, then listen to how it was approached in the bass. Say the bass moved up a half step: this means that the secondary dominant was V_5^6/ii .

KNOW the chromatically altered notes:

Think here that # means "raised a half-step from the normal diatonic scale degree" and that be means "lowered a half-step from the normal diatonic scale degree."

Major:
$$V^7/V = \$ \hat{4}$$
, $V^7/IV = \flat \hat{7}$, $V^7/ii = \$ \hat{1}$, $V^7/vi = \$ \hat{5}$, $V^7/iii = \$ \hat{2}$ and $\$ \hat{4}$.

Minor: (here, $\sharp \hat{6}$ means raised to be a half-step higher than the $\hat{6}$ indicated by the key signature, like an F \sharp in the key of a minor. Also, $\flat \hat{7}$ here represents the subtonic rather than the leading tone, like a G \sharp in the key of a minor. There would be no accidental for $\flat \hat{7}$ in this case.). $V^7/V = \sharp \hat{4}$ and $\sharp \hat{6}$, $V^7/iv = \sharp \hat{3}$ and $\flat \hat{7}$, $V^7/VI = \flat \hat{2}$ and $\flat \hat{7}$, $V^7/III = \flat \hat{7}$, $V^7/\flat VII = \sharp \hat{6}$.

The moral of the story: you have to fuss more in minor.



Know the chord roots: $V^7/V = \hat{2}$, V^7/IV (or iv) = $\hat{1}$, $V^7/ii = \hat{6}$, V^7/vi (or VI) = $\hat{3}$, V^7/iii (or III) = $\hat{7}$, V^7/b VII = $\hat{4}$.

Here's a quick way to nail 'em down: a secondary dominant of some chord is built on the note immediately before it in the circle of fifths:

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Deceptively- and irregularly-resolving secondary dominants; also consecutive secondary dominants

Deceptively-resolving:

They will almost always occur in **root position**, and they resolve by root movement **up a step**, usually to a diatonic chord. When part-writing, double the **third** of the chord of resolution. This is just like a deceptive cadence, moving $V^7 \rightarrow vi$ (or VI) in some temporary key.



Irregularly-resolving:

Fairly uncommon, these include root movement by third or down a second, along with other possibilities.

An approximate hierarchy of voice-leading principles not to break:

1. No parallel fifths or octaves.

2. 7th resolves down (unless smooth, stepwise voice leading overrides it).

In general, use smooth, stepwise motion. You can use incomplete Mm7ths, if needed. Keep common tones whenever possible.

Consecutive secondary dominants: generally by circle of fifths, as shown below.

(Asterisks denote incomplete triads or 7th chords)



Secondary o7 chords (also ø7 and o6)

Note: some theorists use the label vii^o7/x (or whatever) for these chords; we will eliminate the "vii" and simply use the quality and inversion labels: ^o7/x.

Secondary ^o7 chords (and also ^ø7 and ^o6) function just like secondary dominants, only the secondary function (and thus the tonicization of the diatonic chord) is now created through the fully-diminished sound of the ^o7 chord (or half-diminished, or diminished triad in first inversion).

- 1. Any diatonic major or minor triad may be preceded by its secondary °7 (or sometimes ^Ø7 or °6). Notice that this excludes diminished or augmented triads; thus there's no such thing as °7/ii° nor °7/vii°, etc. This is just like it was with secondary dominants. Note carefully that it's possible to have a chord with both a sharp and a flat in it (for example, C♯ E G B♭).
- 2. The possibilities are thus ^O7/x and its inversions, as well as ^Ø7/x and its inversions. The ^Ø7/x is most often used to embellish the dominant in a major key, thus: ^Ø7/V. The ^O6/x (a secondary diminished **triad**) is also possible--generally in just this inversion.
- 3. $^{\circ}7/x$ generally resolves to x; $^{\circ}6/x$ generally resolves to x (occasionally to x6); $^{\circ}3/x$ generally resolves to x6; $^{\circ}2/x$ (rarely used but certainly possible) generally resolves to x6. The same resolution tendencies apply for $^{\varnothing}7/x$. $^{\circ}6/x$ generally resolves to x, or sometimes to x6. By the way: double the bass note in the $^{\circ}6/x$.
- 4. Voice leading: the easiest thing to remember is that the root resolves up, and the other notes all resolve down. Be careful to avoid parallel fifths in the progression ^Ø7/x → x. Composers sometimes resolve the third of the ^O7/x up, thus creating a doubled third in x. This is O.K. to do, except that doubling the third of the V chord means doubling the leading tone in the key—avoid this. Note carefully that notes with added sharps (those notes which are altered to be higher than their normal diatonic spelling) usually resolve up, while notes with added flats (those notes which are altered to be lower than their normal diatonic spelling) generally resolve down.
- 5. Note that ${}^{\circ}7/V$ (or ${}^{\circ}7/V$, or ${}^{\circ}6/V$) can progress to I_4^6 (or i_4^6) before moving on to its V, thus: ${}^{\circ}7/V \to I_4^6 \to V^{(7)} \to I$.
- 6. Secondary ^o7 chords (also ^ø7 and ^o6) thus have at least one **chromatically altered** note (sometimes more). The chromatically altered note usually functions like a temporary or secondary leading tone. Just like the "regular" ⁷ intensifies the resolution to ¹, this secondary leading tone intensifies motion to the temporary tonic.
- 7. Sooo, this means that you follow this procedure: 1) look for chromatically altered notes; 2) determine whether they're part of a °7 (or °6) chord (remember that it may be a "plain old secondary dominant"—V⁷/x), then check to see that it resolves to its "tonic" [in this case, root movement (as distinct from bass line movement) up a half step].

Spelling and writing them: given F: °7/ii, think: 1) the root of ii is G. 2) Now write °7/ii on the note a half-step below G--it's built on F# (F# is the leading tone to G). 3) Write a °7 chord built on F# (remember that a °7 chord is stacked minor thirds): F# A C Eb is the chord.

Another example: D: ${}^{\emptyset}_{5}/V$. 1) V is A. 2) ${}^{\emptyset}_{7}/V$ would be written on the note a half-step below A: it's built on G# (G# is the leading tone to A). 3) Write a ${}^{\emptyset}_{7}$ chord built on G#: G# B D F# is the root-position chord. 4) Since it's ${}^{\emptyset}_{5}/V$, the B would be in the bass.

So remember: they're built on the note a half-step below what they're "of."

Hearing them: By now, you're capable of hearing where chromatic chords occur. So, follow these steps: 1) determine where you hear chromatic chords; 2) determine whether they're majorminor (i.e. "plain old secondary dominants") or some other quality—especially fully- or half-diminished; 3) listen to where they resolve; 4) listen carefully to the bass motion to determine the inversion.

For example: you hear $?? \rightarrow ii$. Identify the ii chord, then go back and determine that the secondary chord was fully diminished (i.e. it's $^{O}7/ii$ or some inversion thereof). Listen for the bass motion to determine the correct inversion. Memorize the following to help you:

 $^{\circ}7/x$: bass resolves up a half step (note the similarity to V_5^6/x).

 $^{\circ}6/x$: bass resolves down a whole step (similar to V_3^4/x).

 $^{\circ}3/x$: bass resolves down a half step if the chord of resolution is major; down a whole step if the chord of resolution is minor (note that this resolution is to a first-inversion chord; also note that this is identical to V_2^4/x).

o₂/x: rare; bass resolves down a half step, and the resolution is to a second inversion (₄) chord.

Some examples:



Notice how the root moves up, other voices down in all °7/x and %7/x. °6/x is an exception.