

**Altered dominant chords: #5th and b5th and their relation to the augmented sixths**

Two alterations of the dominant common in Romantic and jazz harmony replace diatonic stepwise voice leading with chromatic semitonal voice leading. They are formed by either raising or lowering 2̂.

**V augmented or sharp five**

In a V-I progression, 2̂ may be **raised**, changing the whole step 2̂ - 3̂ to a half step and creating an augmented dominant.

The same can happen with V<sup>7</sup>, in which case the fifth and seventh of the chord typically form the interval of an augmented 6<sup>th</sup> which resolves outward to an octave. (Compare this to a common resolution of IV<sup>dom7</sup> to I<sup>dom7</sup> in the blues.)

A common passing chord between I and IV is an augmented applied dominant.

George and Ira Gershwin, "Of Thee I Sing"

**V<sup>7</sup> diminished or flat 5**

In a V-I progression, 2̂ may be **lowered**, changing the whole step 2̂ - 1̂ to a half step and creating a diminished fifth over the V. Note that V<sup>7b5</sup> retains the **major** third: this is not a diminished chord in the usual sense.

In second inversion, this is the same structure as a Fr<sup>4</sup> chord, but built over b2̂ and resolving to the tonic instead of the dominant. MGTA calls this a *secondary aug<sup>6</sup> chord*: you can see why, but it's odd to call a chord that resolves to the tonic "secondary".

An interesting feature of the dominant  $\flat 5$  chord is that it is enharmonically equivalent to its tritone transposition.

The image shows two systems of musical notation. The top system is in A major (two sharps) and shows a descending fifth progression: A:  $Fr_3^4$  (A major augmented sixth), V (E major),  $V^{7(\flat 5)}/V$  (E major with a flat fifth), and V (E major). The bottom system is in E-flat major (three flats) and shows the same progression:  $E\flat$ :  $V^{7(\flat 5)}/V$  (E-flat major with a flat fifth), V (E-flat major),  $Fr_3^4$  (E-flat major augmented sixth), and V (E-flat major). This demonstrates that the augmented sixth chord in one key is enharmonically equivalent to the augmented sixth chord in the tritone key.

This relates to **tritone substitution**, where a chord in a descending fifth progression is replaced by a chord of the same quality a tritone away. Although only the French chord is **exactly** equivalent to its tritone transposition, the other augmented sixth chords act similarly. The German chord, which normally goes to V, is equivalent to  $V^7$  of the Neapolitan, which is a tritone away from V. The Italian chord is equivalent to  $V^7/N$  without the fifth.

Tritone substitution allows a given chord to be approached by descending half-step root motion in place of descending fifth motion. Note that when root motion by fifth is replaced with root motion by semitone, the pitches forming the tritone of the dominant-like chord are the same, possibly respelled enharmonically.

The image shows four examples (A, B, C, D) of chord resolutions. Example A shows a French augmented sixth chord ( $F: V^7/V$ ) resolving to V, with the note "(no fifth)". Example B shows an Italian augmented sixth chord ( $It^6$ ) resolving to V, with the note "can be thought of as a rootless  $V_3^4(\flat 5)/V$ ". Example C shows a German augmented sixth chord ( $\flat VI^{\flat 7}$ ) resolving to  $V^7$ , with the note "resolves down". Example D shows a Neapolitan augmented sixth chord ( $V^7/V$ ) resolving to  $V^7$ , with the note "resolves down". Above the chords, enharmonic equivalents are shown: A:  $G^7$  and C; B:  $enharmonic equivalent$   $Db^7$  and C; C:  $Db^7$  and  $C^7$ ; D:  $G^7$  and  $C^7$ .

In Broadway, jazz, and pop, these chords are typically spelled as dominant seventh chords rather than augmented sixths. The tritone and  $min7^{th}$  (the enharmonic equivalent of the  $aug6^{th}$ ) often resolve in parallel motion, as in (C) above. Because of this parallel voice leading, some theorists consider the  $\flat VI^{\flat 7}$  chord fundamentally different from the  $aug6^6$  chords used in classical music. But this is exactly how  $\sharp 4$  resolves in classical music when  $V/V$  or  $V^7/V$  resolves to  $V^7$ , as in (D) above and the Mozart example below. In Romantic harmony, augmented sixth chords also sometimes resolve to  $V^7$  in this way as well, such as the famous "Tristan" chord.

The image shows two musical examples. The first is from Mozart, K. 550, 1st movement, in B-flat major. It shows a progression:  $B\flat$ : IV,  $V/vi$ ,  $V^7/ii$ ,  $V/V$ ,  $V^7$ , I,  $ii^6$ . The second is from Wagner, prelude to *Tristan und Isolde*, in A minor. It shows a progression:  $Am$ :  $Fr^6$ ,  $V^7$ . The Wagner example includes the instruction "app." (appoggiatura).

That said, this stylistic generalization holds up pretty well: in classical music, the  $\sharp 4$  in augmented sixth chords generally resolves **up**, while in popular music, the same note (now theorized as  $\flat 5$ ) generally resolves **down**. Just as in classical music, the resulting voice leading is maximally efficient: all voices move down by semitone, including (if present) the fifth, there being no proscription against parallel fifths in popular styles.

Although the downward voice leading from the seventh of the  $\text{VI}^{\flat 7}$  chord is the norm in popular music, occasionally the “minor seventh” resolves upward (as an augmented sixth). In the following example, Lennon uses both  $\text{V}^7/\text{V}$  and its tritone substitute, the  $\text{Ger}^6$ . An interesting feature is the upper pedal tone F, which produces the dissonant flat 9th over the  $\text{V}^7/\text{V}$  and an unresolved 6th over the V. Also interesting: the music that follows is in A **minor**; so the F resolves to E, but the  $\text{C}\sharp$  moves down to  $\text{C}\natural$  and the A dominant never resolves to D minor.

Lennon/McCartney, “I Want You”

The musical score for "I Want You" shows the guitar (8va bassa) and bass parts. The guitar part is in treble clef with a key signature of one flat and a 6/8 time signature. The bass part is in bass clef with the same key signature and time signature. The guitar part consists of a series of eighth-note arpeggios. The bass part consists of a series of quarter notes. The chord symbols below the bass line are: Dm: i, 6,  $\text{V}^{\flat 9}/\text{V}$ ,  $\text{Ger}^6$ , and  $\text{V}^{\text{sus}6}$ . The  $\text{V}^{\flat 9}/\text{V}$  chord is marked with a "7" above it, and the  $\text{V}^{\text{sus}6}$  chord is marked with an "8" above it.

In the following example, the guitar arpeggios follow the conventional blues-based parallel voice leading, with  $\text{E}\flat$  resolving to D. But the vocal line’s  $\text{E}\flat$ , which predominates (with various bluesy intonation variants) in the first four measures, resolves up to the  $\text{E}\natural$  in measure 5 like a classical outward-resolving augmented sixth.

Lennon, “I’m Losing You”

The musical score for "I'm Losing You" shows the piano accompaniment and vocal line. The piano part is in treble and bass clefs with a key signature of one flat and a 4/4 time signature. The vocal line is in treble clef with the same key signature and time signature. The piano part consists of a series of eighth-note arpeggios. The vocal line consists of a series of quarter notes. The chord symbols above the piano part are: Am, Am/G#, Am/G, F7, and E7. The lyrics are: "Here in some stran-ger's room late in the af - ter-noon what am I do - ing here - at all? ain't no doubt a - bout it."