

THE TRITONE SUBSTITUTION

A *tritone substitution* is the term used to describe a chord that replaces the dominant chord with a different dominant chord. It is called a tritone substitution because the root of the new chord is a tritone (three whole-steps) away from the root of the chord it replaces. An example would be C7 replaced by Gb7, or A7 replaced by Eb7.

These replacements happen regularly in II–V–I chord progressions. If the chord progression is a II–V–I in the key of G major (Ami7–D7–Gmaj7), the D7 can be replaced by Ab7. These kinds of replacements and substitutions occur often for a number of reasons. First, they promote good voicing leading in the bass. In other words, the bass—instead of moving from A to D to G (which is common in the bass as a descending 5th)—moves by the smaller interval of a *half-step*.

Here is the original progression, a II–V–I in the key of G major:

The image shows a musical staff in G major (one sharp) with three chords: Ami7, D7, and GMa7. The bass line consists of the notes A, D, and G, which is a descending fifth interval.

G: IImi7 V7 IMA7

Here is the original progression with a tritone substitution. Notice the descending chromatic bass line that replaces the original bass line:

The image shows a musical staff in G major (one sharp) with three chords: Ami7, Ab7, and GMa7. The bass line consists of the notes A, Ab, and G, which is a descending half-step interval.

G: IImi7 bII7sub IMA7

Another reason why these substitutions happen regularly is because the third and seventh of the original dominant chord (F# and C) become the seventh and the third of the substitute chord. This is referred to as a *pun*, because the same two notes find themselves in a completely different situation. The tritone of the original dominant (this has nothing to do with the tritone in the tritone substitution), C and F#, is now part of the Ab dominant seventh chord. It still creates the same tension that resolves the chord to the tonic.

It is also possible to have a tritone substitution for an *applied* or *secondary dominant seventh* chord. In the progression below, the II chord, normally a minor seventh, is altered to become a V7 of V:

The image shows a musical staff in G major (one sharp) with four chords: Emi7, A7, D7, and GMa7. The bass line consists of the notes E, A, D, and G, which is a descending fifth interval.

G: VIImi7 V7/V V7 IMA7

Here, the applied dominant, A7, is replaced by its tritone substitution, Eb7:

Emi7 Eb7 D7 GMa7

G: VI mi7 bIIsub/V V7 IMa7

Of course, tritone substitutions can also be easily understood as simply descending passing chords that approach the tonic chord by half step, so the concept of tritone substitution is only one possible explanation of what is going on when these types of chord progressions occur.

Keep in mind that as an improvising musician, arranger, or composer, you *must* also consider the *melody*. In jazz commercial music, when the melody is played it is the most important feature of the music and the chords chosen must support it. Accordingly, when you are using tritone substitutions, there is one melody /chord relationship that must be avoided. If the melody forms a *minor ninth* with the root of the tritone substitution (for example a D natural appearing over a Db7 in the progression Dmi7–Db7–CMA7), the tritone substitution will not work. In the example below, the melody moves from E to D to C, and forms a flatted ninth with the root of the tritone substitute Db7:

Dmi9 Db7b9 C6

II mi7 bII7sub I Ma7

The broad principal at work here is that a diatonic scale degree (a note in the scale of the key that you are in) seldom works alongside an altered scale degree in the chord that supports it. For example, an altered fifth (Gb or G# in the key of C, as part of the C major seventh chord) would not work with an unaltered fifth (G natural) in the chord. There are some exceptions, particularly in blues related chords and melodies. This will be discussed in more detail when we begin to explore the harmonization of melodies.