

Tonality and Modulation

Tonality - The hierarchical relationship of tones to a pitch center or "tonic." Tonal music involves the use of twelve major and twelve minor keys, the scales that comprise these keys, and the tertian harmonies generated from the notes of these scales. A harmony may be constructed on each of the seven diatonic scale degrees resulting in seven different harmonic functions. The seven different functions exhibit varying levels of strength but all serve to support the tonic which is embodied in the tonic triad. Tonality is achieved through a variety of means. The strongest tonality would involve:

- (1) Only diatonic pitches.
- (2) A pitch center (tonic) which exhibits a sense of stability and to which all tonal movement flows.
- (3) Strong cadences. Perfect authentic cadences (PAC) especially.
- (4) Begin and end with the tonic key.
- (5) Pedal points and ostinatos which involve reiteration of the tonic scale degree.
- (6) Strong harmonic progressions. In particular, dominant to tonic progressions which involve the leading-tone resolution to tonic.
- (7) Doubling of the tonic pitch. The tonic is given long rhythmic durations. The tonic appears in the outer voices. The tonic is framed by neighboring tones.

The following progression employs many of the above mentioned techniques creating a strong sense of C major.

PAC

The musical score is written for piano in 4/4 time. It features a harmonic progression of nine chords in C major. The chords are: I (C major), IV⁶₄ (F major, first inversion), I (C major), V₇ (G7), I (C major), I₆ (C major, first inversion), IV (F major), V₇ (G7), and I (C major). The final I chord is a perfect authentic cadence (PAC), indicated by the label 'PAC' above the staff. The progression is characterized by strong harmonic movement, including a dominant-to-tonic resolution (V₇ to I) and a leading-tone resolution (V₇ to I).

I IV⁶₄ I V₇ I I₆ IV V₇ I

Modulation - The process of moving from one key to another. There must be a distinct aural shift from the original key to some other key center. A modulation consists of three parts: (1) a tonality is confirmed, (2) the tonal center changes, (3) a new tonality is confirmed by a cadence in that tonality. The new key must be stated sufficiently enough for the modulation to occur. If the modulation only appears in the middle of a phrase it may be termed a "transient" modulation. That is, if a phrase begins in one key, modulates briefly to another key, but then cadences in either the original key or a key other than the key of the middle section, it is a transient modulation. If only one or two chords are involved, for example a secondary function, the modulation should be called a "tonicalization."

Key relationships consist of four possibilities:

- (1) **Closely related** - By far the most frequent. A closely related key is one which differs from the original key by one accidental. For example, the keys C, F, and G, and their respective relative minor keys, a, d, and e, are all closely related to C and a.
- (2) **Foreign related** - The new key differs from the original by more than one accidental. For example, C and Bb or A and Eb.
- (3) **Parallel Key** - The tonic note stays the same but the mode changes. For example, C to c.
- (4) **Relative** - The keys share the same key signature.

Types of Modulations:

- (1) **Common Chord** (pivot chord) - Involves a chord that functions diatonically in both the original key and the new key. The common chord will often appear directly preceding a chord which contains the leading- tone of the new key.

PAC

C: I V₅ I ii | a: iv V₇ i

- (2) **Direct** (chromatic) - Involves a chromatic alteration and no common chord exists. In the following example, the D7 chord (downbeat of the second measure) no longer supports the key of C. Likewise, the d minor chord, the last chord of measure one, does not support the tonality of G. There is therefore no common chord and the modulation must be considered direct.

PAC

C: I V₅ I ii | G: V₇ I

Notice in the above example that the cross relation between the pitches F and F# occurs between two different voices (tenor and alto). The cross relation should not appear in the same voice.

(3) **Phrase** - A key change occurs between two adjacent phrases.

C: I V⁶ I ii V V₇ I a: V₇ i iv V₇ i

(4) **Common tone** - A common note is used to create a link between two keys.

C: I V I Ab: I V₇ I

(5) **Enharmonic** - A type of pivot chord modulation where the pivot chord is enharmonically reinterpreted as a chord belonging to the new key. The most frequent possibilities consist of either the V₇ reinterpreted as a G+6, a G+6 reinterpreted as a V₇, or a vii^o7 reinterpreted with any one of its notes becoming the leading-tone of the new key. The chord involving the enharmonic reinterpretation may be spelled as it would appear in the new key or the old.

(F# = Gb) (Gb = F#)

c: ii^o₅ Gr+6 I Db: I V₇ i₄ V i c: i c: vii^o₇ Eb: vii^o₂ i i₄ i₆ i Gb: vii^o₃ a: vii^o₅

Notice that if a G+6 is involved, the new key will be a half-step relation to the original key. If a V₇ is reinterpreted as a G+6 the new key will be one half-step lower than the original. However, if a G+6 is reinterpreted as a V₇ the new key will be one half-step higher than the original.

(6) **Implied** - The notes of an unaccompanied melody may suggest a modulation.

C: G: V I