

UNIT 13: MODULATION

The process of changing key or tonal center, called Modulation, is important to harmonic interest and contrast in a composition. Modulation in a phrase is invigorating and sometimes adds to the momentum of a line. Without it, we would tire quickly of the harmonic progressions.

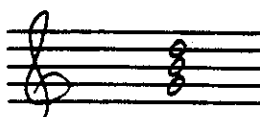
There are four types of modulation which may be used: Common Chord, Static, Chromatic, and Enharmonic. Not all types were used in all periods of music history. Common chord and static modulation have been used since the Baroque period, chromatic modulation was used sparingly in the Classic period, and both chromatic and enharmonic modulation were an important part of the nineteenth and twentieth century literature.

The historical period of a composition can also be determined by the choice of key to which the modulation took place. In the Baroque era it was more common to modulate to the key of the dominant (C Major to G Major) or from a minor key to its relative major (E minor to G Major). As time passes composers are more adventuresome in the choice of keys. In the Romantic period, the keys selected were often the interval of a third apart (C to Ab or C to E). By the twentieth century composers, such as Bela Bartok, chose to modulate to a key a tritone (or Aug. 4th) away (C to F#). Therefore, although changing keys can be as much the harmonic lifeblood of a folksong as of a symphonic work, the technique of modulation and choice of keys are distinguishing features of a composer's style and the historical period in which he or she flourished.

A. COMMON CHORD MODULATION

A simple triad, taken out of context, can be explained in a number of different keys with different Roman numeral function.

Example 13.1



I	G Major
IV	D Major
V	C Major
vi	B minor (harmonic)
iii	E minor (pure)

This variety produces an ambiguity which can be very useful in modulation. Because an isolated chord can be analyzed in different keys, it then can serve as a transitional harmony when the composer shifts from one key to another.

Example 13.2

G Major I IV V I
D Major IV ii I⁶₄ V I

Modulation involves three steps:

1. The establishment of the first key.
2. The use of a common chord or pivot chord. This chord can be analyzed in both keys. Upon first hearing of a piece the listener will not know when the pivot chord is sounded that a modulation is about to occur. Sometimes more than one chord may serve as a pivot chord. In measure 2, both chords may be explained in both keys. The choice is yours.
3. The establishment of the new key. This is accomplished by means of a convincing harmonic progression which points strongly to a new tonic. In Example 13.2 the harmonic formula ii I⁶₄ V I, which includes the cadential second inversion chord, makes the tonal center on D undeniable.

Observe the three steps in the excerpt from Mozart in Example 13.3.

Example 13.3 Mozart - Fantasy in D minor, K. 397

D Maj: I
A Maj: IV

Common Chord modulation is executed to keys which are considered CLOSELY RELATED. These are major and minor keys which have one flat or sharp more in the key signature, or one flat or sharp less in the key signature. In other words, the closely related keys are the tonic, subdominant, dominant keys and their relative majors or minors. For example, the closely related keys of C Major are: F Major, G Major, A minor, D minor, and E minor. The closely related keys of C minor are: F minor, G minor, Eb Major, Ab Major, and Bb Major.

Drill 13.1

Write the closely related keys of the following: E minor, Bb Major, C Major, F# Major, Bb minor.

Drill 13.2

Write all the possible pivot chords in each pair of keys:

F Major and Bb Major
E minor and D Major
Ab Major and Bb minor

Drill 13.3

Write a chord progression in four part harmony (see Example 13.2) which modulates from D minor to a closely related key.

Drill 13.4

Analyze the excerpt from Mozart's Sonata in D Major, K. 284 for key centers and pivot chord.

Mozart - Sonata in D, K. 284

The image shows two systems of musical notation for a piano accompaniment. Each system has two staves: a treble clef staff on top and a bass clef staff on the bottom. The key signature is one sharp (F#) and the time signature is common time (C). The first system contains four measures of music. The second system contains four measures of music, ending with a double bar line. The notation includes various note values, rests, and chord symbols.

In some cases the new key can be quite remote from the original one, as in Example 13.6 where Haydn modulates from C minor to E Major.

Example 13.6 Haydn - Sonata in Eb Major, Hob. XVI/52 (1st Mvt.)

The image displays a musical score for the first movement of Haydn's Sonata in Eb Major, Hob. XVI/52. The score is presented in three systems, each with a grand staff (treble and bass clefs). The first system is in C minor, indicated by a key signature of two flats. The second system shows the modulation to E Major, indicated by a key signature of one sharp. The third system continues in E Major. Handwritten chord symbols are placed below the notes to identify the harmonic structure. The first system's symbols are: C min: vii^o7 of V, V, i⁶₄, V, i⁶. The second system's symbols are: V, i⁶₄, V, i⁶₄, V. The third system's symbols are: E Maj: I, V, i⁶, I, V.

Schumann's "The Wild Rider" (Example 13.7) is in three-part form, ABA. The A and B sections are distinguished by an abrupt change of key rather than by a contrast of thematic material.

Example 13.7 Schumann - The Wild Rider, Op. 68, No. 8

A min.

F Maj.

C. CHROMATIC MODULATION

When key change is accomplished by means of a chromatic inflection in a single voice (C to C#), it is referred to as a chromatic modulation. No common chord is possible here. The key center simply shifts at the point of the chromatic inflection.

Example 13.8 J.S. Bach - Du grosser Schmerzensmann

F Major: I V

D minor: V i iv V

Where common chord modulations always sound smooth, the chromatic modulations may sound more abrupt. Analyze the chords in the Schubert excerpt in Example 13.9 and note the unexpected shift from the D major triad to the F seventh chord.

Example 13.9 Schubert - Waltz, Op. 27, No. 12



G min:



Bb Maj:

D. ENHARMONIC MODULATION

Enharmonic modulation is used less frequently than the other varieties. It involves the enharmonic respelling of a note or chord in order to effect a common chord or chromatic modulation.

The Beethoven excerpt of Example 13.10 uses an enharmonic spelling to modulate from G minor to the more distant key of E minor.

Example 13.10 Beethoven - Sonata, Op. 13 (1st Mvt.)

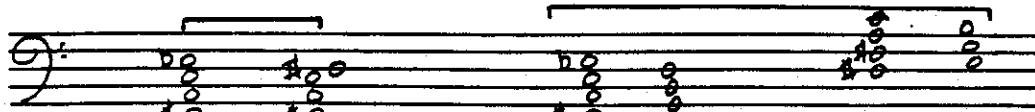


G min: $vii^{\circ 4}_2$ V i

E min: $vii^{\circ 4}_3$ $i^{\flat 6}_4$ v^7 $i^{\flat 6}_4$ $v^{\flat 9}$ v^7

Enharmonic

Dim. 7 chord with resolution



G min: $vii^{\circ 7}$ i E min: $vii^{\circ 7}$ i

E_b and D^\sharp are enharmonic equivalents. Therefore, the respelling of the chord does not change the sound and both chords are diminished seventh quality. The first resolves to a G triad and the second to an E triad. Thus the need for enharmonic spellings to facilitate the modulation.

Example 13.11 illustrates modulation to a foreign (or distant) key by means of an enharmonic chord.

Example 13.11

Db Major: I IV V I vi

IV B Major: V V⁷ I

Enharmonic chords

The analysis of tonal centers in a work which you are performing can enhance your understanding of harmonic progression and facilitate the reading of the score. For example, it is easier to remember accidentals if you can associate them with a particular key.

There are no written drills to this section because it is more beneficial to analyze the music which you play or teach. Begin with the easier pieces of the literature where modulation is more limited and yet clear-cut. Then analyze a few works from the Baroque, Classic and Romantic periods which are more difficult technically. Let your ear be your guide as you search for the new tonics and then determine which of the four techniques was used to achieve the modulation. This can be fun and very enlightening at the same time.