

Modulation (part 1)

Ted Greene 10-01-1975

One of the greatest joys in all Baroque music is the sound of a good *modulation* (change of key). The great masters of this period (J. S. Bach, Handel, etc.) were all adept at the science of modulation, and this is one reason why their music is so likeable. Good modulations add excitement, interest, variety, and harmonic richness; they also make possible longer pieces of music without everything sounding monotonous (which tends to happen if you stay in one key too long); and, very importantly, they help composers to plan out the main “scheme” of a piece by using the different key areas as dividing points for the different sections or entrances of the themes (for student: define “theme” in your own words).

Play the following: [*The chord diagrams given below show just one way to finger it.*]

1) I (E), III7 (V of vi) (G#7/B#), vi (C#m), #iv°7 (II9) (A#°7), I ⁶/₄ (E/B), V (B7/A), I (E/G#)

1a) ii (C#m/E), V (F#7/E), I (B/D#), (iii) (G#m7), vi (B/F#), I ⁶/₄ (F#7), V (B), I (B)

Notice that phrase 1) uses simple tonicization (G#7 C#m), which some might call *temporary modulation*, while phrase 1a) is a real modulation to a new key. What is the difference? It is a question of *duration* first of all: G#7 - C#m are just two chords in the key of C#m, while the whole 1a) phrase is in the key of B.

Play both phrases again (right in a row); notice that another factor that makes your ear accept that there is a modulation to the key of B is the final CADENCE. Cadences or strong chord progressions tend to firmly establish a key. (The word “strong” here means the same thing as the word “normal” → like some normal progressions you are familiar with are I - vi - ii - V or IV - V - I or vi - iii - IV - I, etc.)

Sometimes you will encounter examples that are ambiguous: Example → C7 - F - B^o7 - E - Am ← is this I - IV - vii^o - III -vi, or III - VI - ii^o - V - i ?

Oftentimes, what *follows* a progression like this will clear up the problem.

Example: C7 - F - B^o7 - E - Am - Dm - G7 - C.

The easiest and most logical explanation of this is unquestionably I - IV - vii^o - III - vi - ii - V - I.

What about C7 - F - B^o7 - E - Am - Dm - Am⁶/₄ - E7 - Am ?

Probably the easiest way to look at this is: III - VI - ii^o - V - i - iv - i - V - i

although some might also like: |----- of vi -----|
I - IV - vii^o - III - i - iv - i - V - i

While there are no hard and fast rules that cover *all* situations as far as modulation analyses goes, if you force yourself to think *logically*, you will be able to deal with these analytical problems if they arise. It is good practice to analyze the works of J. S. Bach and his contemporaries, for there is a wealth of knowledge in them, just waiting.

One question that you might be asking is, “What keys can I modulate to?” In the Baroque period, composers almost always modulated to one of the RELATED KEYS. *Related keys are those keys whose key signature does not differ from the “home key” (the home key is the main key of the piece as indicated by the first key signature) by more than one sharp or flat.*

Examples:

If the home key is C, then the related keys are Am (same key signature), F and Dm (one flat more), and G and Em (one sharp more).

Likewise, if the home key is A, the related keys are F#m (same key signature), D and Bm (one sharp less) and E and C#m (one sharp more).

If the home key is Am, the related keys are C (same key signature), Dm and F (one flat more), and Em and G (one sharp more).

If the home key is F#m, the related keys are A (same key signature), Bm and D (one sharp less), and C#m and E (one sharp more).

Interesting sidelight: It is a phenomenon that the related keys and the home key are the I, IV, V and their relative minors → vi, ii, and iii, (if the home key is major).

If the home key is minor, then the home key and related keys are the i, iv, and v and their relative majors → III, VI, and VII. Pretty amazing stuff.

Now that you know which keys to modulate to (for a Baroque sound), your next question might be, “How do I do it?” The basic steps in most modulations are:

- 1) Establish the *home* key.
- 2) Play a chord or chords that start a strong progression in the *new* key; this chord (or chords) mustn’t clash with the home key (more on this later)
- 3) Confirm the new key by finishing the strong progression, with or without a cadence; often, as in phrase 1a at the top of page 1, more than one strong progression will be “chained” together:

ii - V - I
I - (iii) - vi - I⁶/₄ - V - I

Secondary dominants or subdominants can be used in the new key’s progression(s).

Example:

C - F - C - G7 - Am - C7 - F - A7 - Dm - Gm₆ - F⁶/₄ - C7 - F
I - IV - I - V - vi - V7 - I - III7 - vi - ii - I⁶/₄ - V - I
|----- of IV -----|

Example:

C - G₆ - C - F - E - E7⁶/₅ - Am - B7b9⁴/₃ - B~~ø~~7⁴/₃ - B7b9⁶/₅ - Am⁶/₄ - E7 - Am
I - V - I - IV V..... - i - II7 - ii~~ø~~ - II7 - i - V - i
|----- of vi -----|

Since you already know how to establish a key, we will move right along and talk about step 2), that is, how you can start to set up the new key. One of the smoothest ways to do this is to use a strong progression (in the new key) whose first chord(s) is (are) diatonic to the home key *and* the new key. This chord is known as a *common chord* or *pivot chord*. The pivot chord serves as a “bridge” between the two keys, helping one to flow gradually into the other. In the phrases at the top of [page 1], the first chord in the key of B is the pivot chord (it is vi of E and ii of B). Those examples will follow on the next page.

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Play the following:

Notice that phrase ① uses simple TONICIZATION (G#7 C#m), which some might call TEMPORARY MODULATION, while phrase ② is a REAL MODULATION to a new key. What is the

difference? → It is a question of DURATION first of all: G#7 C#m are just two chords in the key of C#m while the whole ② phrase is in the key of B. Play both phrases again (right in a pop); notice that another factor that makes your ear accept that there is a modulation to the key of B is the final CADENCE. Cadences or strong chord progressions tend to firmly establish a key. (The word "strong" here means the same thing as the word "normal" → like some normal progressions you are familiar with are I VI ii V or IV VI I or VI iii IV I etc.). Sometimes you will encounter examples that are ambiguous:

Example → C7 F Bb7 E Am ← is this I IV vii# III vi or III VI ii# V i? Often times, what follows a progression like this will clear up the problem: Example → C7 F Bb7 E Am Dm G7 C

The easiest and most logical explanation of this is unquestionably I IV vii# III vi ii V I. What about C7 F Bb7 E Am Dm Am# E7 Am? Probably the easiest way to look at this is III VI ii# V i IV V i although some might also like I IV vii# III of VI of VI i IV i. While there are no hard + fast rules that cover all situations as far as modulation analysis goes, if you force yourself to think LOGICALLY, you will be able to deal with these analytical problems if they arise. It is good practice to analyze the works of J.S. Bach and his contemporaries, for there is a wealth of knowledge in them, just waiting.

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are Am (same key signature), F and Dm (one flat more), + G and Em (one sharp more). Likewise if the home key is A, the related keys are F#m (same key signature), D and Bm (one sharp less) + E and C#m (one sharp more).

If the home key is Am, the related keys are C (same key signature), Dm and F (one flat more) + Em and G (one sharp more). If the home key is F#m, the related keys are A (same key signature), Bm and D (one sharp less) + C#m and E (one sharp more).

Interesting sidelight: It is a phenomenon that the related keys and the home key are the I, IV, V and their relative minors → vi, ii and iii, (if the home key is major). If the home key is minor, then the home key and related keys are the i, iv, and v and their relative majors → III, VI and VII. Pretty amazing stuff.

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EXAMPLE → C G C F E E7 Am B7b9#9 Bb7#9 B7b9#9 Am# E7 Am

I V I V I i II ii# III IV V I

EXAMPLE → C F C G7 Am C7 F A7 Dm Gm F# C F

I III V vi V I III V ii I V I

Since you already know how to establish a key, we will move right along and talk about step ②, that is, how you can start to set up the new key. One of the smoothest ways to do this is to use a strong progression (in the new key) whose first chord(s) is (are) diatonic to the home key and the new key. This chord is known as a COMMON CHORD or PIVOT CHORD. The pivot chord serves as a "bridge" between the two keys, helping one to flow gradually into the other. In the phrases at the top of the page, the 1st chord in the key of B is the pivot chord (it is vi of E + ii of B). More examples will follow on the next page.