

# **Modulation in Major, from I to V and back**

By already doing secondary dominants, you have been right on the edge of modulating. The difference is tonicization is brief, and modulation is a longer visit. Think of modulation as involving a cadence in the new key. The techniques of getting there are also a little more involved than just throwing in a dominant in the new key. We want a sound that is smooth and convincing that we have left home and entered a new land (you will learn 4 different techniques this semester).

In general, each time you modulate...

- 1) first confirm the home key with some progression
- 2) modulate using one of the 4 techniques you'll learn
- 3) confirm the new key with some progression

In major, by far the most frequent and important secondary key to modulate to is the key of the dominant (up a 5th).

In this lesson you'll learn how to get there and then how to return home to the first key.

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"new king" analogy from the genius of David Pereira.

disclaimer: I'm not copyrighting Mario - don's sue me!  
Youths these days need video game analogies to pay attention.

To modulate from I to V you can use the pivot chord technique.  
This is the most common way to modulate.

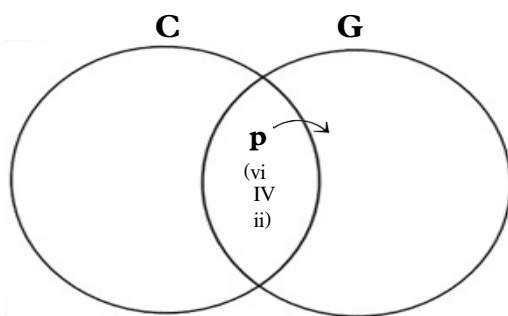


## Modulate with a pivot chord

A *pivot chord* is a chord common to both keys. Because this sound belongs to both keys, it provides a portal from one to the other. It's as if we heard a chord as it functions in C, and then in retrospect we also heard it as it functions in G.

The most effective pivot chords are *predominant in the new key*. It is possible to conceive of other possibilities, but for now, pivot chords must be predominant in the new key.

**Thus, an easy way to find pivot chords between two keys is to first think what are ii, IV, and vi in the new key. Then ask whether any of those chords also exist in the first key. Given that they overlap, it's a pivot. Once again, first think of the predominants of where you are going. It's a bit of reverse engineering.**



\* though not required, a particularly effective way to confirm the new tonic is to use the cadential  $\frac{6}{4}$  right after the pivot. Think of the cadential  $\frac{6}{4}$  as the trumpets that herald in the new king.

Here, the old tonic becomes predominant IV in the new key:

C: I    V<sup>6</sup>    I

G: IV    V<sub>4</sub><sup>6</sup> — 5/3    I

analyze the pivot chord as it functions in each key (warp tube is optional).  
a new line is created for the analysis in the new key.  
*note: the new accidental is  $\uparrow \hat{4}$  of the first key - but it is the LT of the new key!*

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Before, turning the page, what are the other pivot chords between I and V?

Here, the pivot chord is predominant in both keys:

The musical notation shows a four-measure sequence in grand staff. The first two measures are in C major: C major (I), E6 (V6), G major (I), and F major (vi). The last two measures are in G major: D minor (ii), E6 (V6) with a slash and a 5/3, and G major (I). The pivot chord is G major, which is the V6 of C major and the ii of G major.

C: I V<sup>6</sup> I vi  
G: ii V<sup>6</sup>  $\frac{5}{3}$  I

By far the most common pivots are ii and IV in the new key. vi is possible but when it happens, you should go to ii or IV anyway before the cadential  $\frac{6}{4}$ . Here, you were expanding tonic as iii in the home key, but that is then vi of the new key.

The musical notation shows a four-measure sequence in grand staff. The first two measures are in C major: C major (I), E6 (V6), C major (I), and D minor (iii). The last two measures are in G major: F major (vi), E6 (V6) with a slash and a 5/3, and G major (I). The pivot chord is D minor, which is the iii of C major and the vi of G major.

C: I V<sup>6</sup> I iii  
G: vi ii<sup>6</sup>  $\frac{5}{3}$  V<sup>6</sup>  $\frac{5}{3}$  I

You certainly can invert the pivot chord to be in first inversion.

At this point, you might be asking, come on, do we actually hear a pivot chord as it functions in both keys simultaneously?

Answer: yes.

### HW and analysis tips

When harmonizing a modulating line, a good way to work is to first identify whether it only modulates away, or whether it modulates and then comes back home. (beginning, middle, end - identify the keys)

Then locate the cadence in the new key. *hint: maybe you get 4 / the new LT, or look for another implication of V - I in the new key. Usually, the rhythm also slows down, like a breath or comma.*

Finally ask yourself whether the chord right before that cadence can be a pivot.

(when analyzing music, the same thing works: find the cadence in the new key by looking for those new LTs; then work backwards: go hunting for a pivot in the general region right before the cadence)

## V modulating home to I

To modulate from the key of V back home to I, you would probably first assume you could just use the pivot chord again. But in the 18th Century, this wasn't the way back home.

Thus, when going from the key of I to the key of V, think of the pivot chord technique as a one way warp pipe and you can't go back the other direction. There is another technique to get home.

### Modulate by turning tonic into a V<sup>7</sup> chord

In the key of the dominant to get back home, over your tonic chord, add a minor 7th, making a V<sup>7</sup> quality chord.

\*poof!\* this is now V<sup>7</sup> of the home key. That 7th is your ride back home.

This is the same as saying that  $\uparrow\hat{4}$  (the LT in the key of V) lowers back to  $\hat{4}$  of the home key, becoming the 7th of V<sup>7</sup>.

G: I       V       I  
C: V       7       I

NOTE: This works to modulate from V to I, but you can use it whenever you want to modulate a 5th down (4th up). For instance, you could use this technique to modulate from the key of I to the key of IV. Bach does this a lot.

**Analysis Tip:** When analyzing a piece of music, quickly scan for when new LT's /  $\uparrow\hat{4}$  arise on the page (oh, we've modulated to V); then scan forward for when these accidentals disappear (oh, we're back home).

### Summary: from I to V and back

#### pivot chord technique

C:

vi



G: ii

ii

$V_4^6 = \frac{5}{3}$



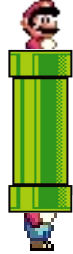
$\uparrow\hat{4}$  / new LT

C:

V

7

$\hat{4}$  lowers to the key sig.



I

turn tonic  
into a dom<sup>7</sup>  
chord

# Putting the whole journey together: hierarchy of cadences

You can now analyze or even write an entire piece of music, modulating from the home key to the key of the dominant, and back home.

Along the way, however, there is a hierarchy of cadences that should be observed.

This is a pacing thing that allows each chapter to not sound so final until the end.

You are saving the best (i.e. strongest) for last.

You know how to soften dominants, using inversion,  $vii^{o7}$ , and/or keeping  $\hat{1}$  out of the soprano - until the end.

The cadence in the home key before modulating is weakest.

Then the cadence in the dominant is stronger.

C: I V<sub>5</sub><sup>6</sup> I<sup>6</sup> V<sub>2</sub><sup>4</sup> I<sup>6</sup> I<sup>6</sup> vii<sup>o6</sup> I vi<sup>6</sup>

G: ii<sup>6</sup> V<sub>4</sub><sup>6</sup> = <sub>3</sub><sup>5</sup> I<sup>6</sup> <sub>3</sub><sup>5</sup>

**And finally the cadence back home is strongest. ....coda.....**

I vi ii<sub>3</sub><sup>4</sup> V<sup>7</sup> I

C: V <sup>7</sup> I IV<sup>7</sup> ii<sup>6</sup> <sub>5</sub><sup>6</sup> V I