



Modulation by Sequence

Sequences are travelin' music. So far you have only really been using them to give the impression of moving somewhere, while always ending up back in the home key. Now you are finally going to use sequences to take a trip to a new key.

1) Do some key-defining thing; then just move it / sequence it to get to another key

Think of the "Charge" theme, played on the organ at every baseball game in America, where the bass goes $\hat{1} - \hat{5} - \hat{6} - \hat{7} - \hat{1}$, over and over in keys rising by 1/2-step.

That's kind of like this technique of modulation, only you aren't in chromatic harmony yet to learn how to modulate by 1/2 step.

But this sort of thing can be used to modulate to the closely related keys.

State some key defining progression in the home key and then simply move it to a new key and do the exact same thing there.

Here, the key defining thing in C major is simply moved to modulate to keys falling by thirds.

key defining thing

C: I V⁷ vi IV⁶ V⁷ I

a: i V⁷ VI iv⁶ V⁶₅ i

F: I V⁷ vi IV⁶ V⁶₅ I

Most commonly, use this technique to move **to keys that are rising by step or falling by 3rds.**

HANDEL: MINUET IN F MAJOR

Musical score for Handel's Minuet in F Major, measures 1-4. The piece is in 3/4 time and F major. The right hand features a melodic line with eighth and sixteenth notes, while the left hand provides a simple harmonic accompaniment.

Musical score for Handel's Minuet in F Major, measures 5-8. The right hand continues the melodic line, and the left hand maintains the accompaniment.

J. S. Bach - Short preludes for keyboard

BWV 924

Musical score for J.S. Bach's Short prelude BWV 924, measures 1-3. The piece is in C major and common time. The right hand has a rhythmic pattern of eighth notes, and the left hand has a simple accompaniment.

Musical score for J.S. Bach's Short prelude BWV 924, measures 4-6. The right hand continues the rhythmic pattern, and the left hand has a simple accompaniment.

Musical score for J.S. Bach's Short prelude BWV 924, measures 7-8. The right hand continues the rhythmic pattern, and the left hand has a simple accompaniment.

2) Modulating with Falling 5ths

Here's the good old diatonic falling 5ths yet again:

i iv VII III VI ii° V i

This sequence is ripe with possibilities to modulate because anytime you have a falling Perfect 5th, that pair of notes is $\hat{5} - \hat{1}$ in some key, and thus it contains many pairs of notes that could be harmonized as V - I in that new key.

You already uncovered this behavior when learning the applied chords version of this sequence.

a V G V F V a

V d V C V e

That gives you an idea why this is going to work so well.

Specifically, this sequence is great for modulating to a relative key, e.g. if starting in C Major, modulating to a minor.
if starting in a minor, modulating to C Major.

It is also great for modulating a P5 up or down.

Modulating up or down a 5th

As a test example, starting in a minor, you can modulate a P5 up to e minor or down a P5 to d minor. Remember, modulate to closely related keys only (in this example, not E Major and not D Major).

First set up your bass with falling 5ths until you get V - i in e minor:

Here, the key signatures are not the same. So is it the notes/chords of the home key or the new key? It can really be a combination, but usually composers switch over to the new key towards the beginning of the sequence, often with a pivot chord in there.

a: i

V i

And here's a harmonic plan

a: i

e: iv VII III VI ii° V i

a: i V₅⁶ i

e: iv VII III VI ii° V i

analysis tips

For every modulation, as usual **identify V - I in the new key** by looking ahead in the music. Look for obvious basslines that say $\hat{5} - \hat{1}$, or other key defining lines. Put a dotted square around it, or anything you invent to **make it pop on the page** so you know where you are going. This can also be informed by the new accidentals you have now come to expect. Circle those.

To identify the technique of modulation, you've been told to go hunting for pivot chords directly before that first V-I in the new key.

And **if there is no pivot** before that but you see a rising chromatic line somewhere, that's clearly direct modulation by rising chromatic voice leading.

How do you spot modulation by sequence? *Use your ears (and eyes)*. **If you think you hear/see a pattern** before that cadence, just **write in the roots of those chords, i.e. the letter names**, even if you don't yet know how the chords function or where to switch over to the new key analysis yet. Then if you see that you wrote on the page something like A - D - G - C, etc, you just confirmed what your ears suspected: you have a falling 5ths sequence leading to the new key.

After you identify that the technique of modulation was sequence, do one more thing: comb across the sequence and figure out where the notes/chords of the new key begin. This will tell you where to begin analyzing in the new key instead, and it will usually involve identifying a pivot within the sequence.

From the Notebook for Anna Magdalena

Polonaise.

(2nd half)

Carl Philipp Emanuel Bach
Helm 1/4 (BWV Anh. 125)

The first system of the musical score consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The key signature has two flats (B-flat and E-flat). The music begins with a series of chords in the right hand, followed by a melodic line. The left hand provides a steady accompaniment with eighth and sixteenth notes.

The second system continues the piece. The right hand features a more active melodic line with eighth notes and some grace notes. The left hand maintains a consistent rhythmic pattern with eighth notes.

The third system concludes the piece. It features a final melodic flourish in the right hand and a concluding bass line in the left hand. The piece ends with a double bar line and repeat dots.

Bach Invention #4 in d minor

Allegro. (♩ = 72)

IV.

The first system of the piece consists of two staves. The right hand (treble clef) begins with a piano (*p*) dynamic and features a series of eighth-note patterns with fingerings 2, 1, 1, 4, 2, 1, 2, 4, 1, 3, 5, 2, 1. The left hand (bass clef) starts with a *cresc.* dynamic and plays a similar eighth-note pattern with fingerings 5, 2, 1, 3, 4. The system concludes with a forte (*f*) dynamic.

The second system continues the piece with two staves. The right hand features a series of eighth-note patterns with fingerings 1, 4, 2, 3, 1, 5, 3, 2. The left hand continues with eighth-note patterns and fingerings 5, 3, 1, 4, 4, 4, 3.

The third system consists of two staves. The right hand has eighth-note patterns with fingerings 3, 2, 4, 2. The left hand continues with eighth-note patterns and fingerings 1, 2, 2, 1, 1. The system concludes with a *dim.* (diminuendo) dynamic marking.

The fourth system consists of two staves. The right hand has eighth-note patterns with fingerings 1, 5, 4. The left hand continues with eighth-note patterns and fingerings 1, 3, 3. The system concludes with a piano (*p*) dynamic marking.