Modulation (part 3)

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Pivot chords are not always used as the 1st chord in a strong modulating progression:
Example:

$$C - F^6/_4 - C - A7^6/_5 - Dm - A - Dm \qquad \text{or} \qquad C^6/_4 - Dm7^4/_3 - F\#^{\varnothing}7 - B_6 - Em - Am_6 - Em^6/_4 - B7 - E(m)$$

$$\qquad\qquad V \qquad\quad i \qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad ii \qquad\quad V \quad i$$

$$\qquad\qquad\qquad\qquad\qquad\qquad\qquad \uparrow$$

in high register

In the 1st example, C is not really a pivot chord; if you decided to analyze it as one, the progression would then be VII - V – i, which is not normal (not that it's so terrible, but it's not *normally* used by composers). So if you saw this progression in a piece of music, you would be pretty safe in assuming that the composer was thinking V - i not VII - V - i; therefore there is no pivot chord.

The 2nd example above really illustrates, without a doubt, a modulation with no pivot chord; remember, according to our use of the term so far, a pivot chord must be *diatonic* to the home key *and* the new key. The Dm7 is not diatonic to the new key and the F#$^{\varnothing}$7 is not diatonic to the home key, so there is no pivot chord; and yet if you played this example you would see that it sounds good anyway. So we can say that the use of a pivot chord is not *absolutely* necessary (you will see why this is important in a little while).

Now for specific techniques on how to construct a modulation:
What must be known are: At least one, preferably a lot of good chord progressions that establish the *new* key but don't sound forced or abrupt in relation to the home key. Luckily, even when not using pivot chords, most normal progressions will work when modulating from the home key to any related key. When no pivot chord is used, the only way you can *really* know if some progression works as a modulation is to *use your ears*.

The following list of modulating progressions was compiled in two ways:

> 1) All the pivot chords between a home key and its related keys were lined up and normal progressions were built in the *new* keys, starting from these pivot chords.

> 2) All of the most "normal" progressions that had not been derived already from the pivot chords were tried; those that sounded forced or unmusical were scrapped, those that didn't were added to the list. In each progression many inversions or different settings were tried to avoid snap judgments.

You can be sure that Bach, Handel, Scarlatti, and the other masters of the Baroque era had similar lists, but they must have kept them in their minds because they didn't leave us a written record (other than their music itself) of their favorite modulation progressions. It is hoped that you will make a thorough study of this list (eventually) trying many examples of each progression; the rewards are well worth the time it will take.

It is important to realize that there are many ways to *combine* these formulas as well: for example, to go from the key of C to the key of Dm you might try the ii$^{\varnothing}$7 - V(7) - i formula combined with i - iv - i - V - i formula:

$$C - F - Em7b5_2 - A7^6/_5 - Dm - Gm - Dm^6/_4 - A7 - Dm$$

$$\qquad\qquad ii^{\varnothing} \qquad\quad V \qquad\quad i \quad\; iv \quad\; i \qquad\quad V \quad\; i$$

As you might guess, this multiplies the possibilities of this list many times over. Good luck, you'll need it (just kidding).

From Key of I to Key of ii

Modulating Progressions (numbered, of course, in terms of the new key, ii):

| V(7) (i) | ii° V(7) (i) | ii°7 V(7) (i) | iv6 V(7) (i) | iv(7) V(7) (i) | II(7) V(7) (i) |

| II7b9 V(7) (i) | IV(7) V(7) (i) | ii(7) V(7) (i) | II7(b9) ii°7 V(7) (i) | ii°7 II7(b9) V(7) (i) |

i(7) can precede or go between any of the chords in some of these progressions, yielding results like:

| (i) ii°7 i V(7) (i) | i iv6 i V(7) (i) | (i) iv(7) i V(7) (i) |

Actually, i, iv, and V can be combined in many good ways which serve as good modulating progressions.
Other examples (using triad symbols only):

| i V i iv i V i | i V i V i iv i V i | i iv i i iv V i | i iv i iv i V i | i iv i V i iv V |

To really get into these kind of progressions, you should go back and check out the material on "Cadential Progressions as Viewed from the Bass." There are many progressions there that combine tonics, sub-dominants, and dominants, and you will most likely find them very useful for modulation. By "these kind of progressions" it is meant those progressions which use the most *significant* tonics, sub-dominants, and dominants, which are off-shoots of i, ii°, II, iv, bII, IV, VI, Rvi°, and V(in minor keys). [*"R" means "raised"*] Remember also that Rvii°, V7b9, and pedal dominants can be used for V; also pedal dominants can replace II(7) on II7b9; and don't forget *Deceptive Cadences*. Also Rvi° can replace i.

To sum up our list so far, we could say that we can set up the key of ii with the most common progressions using the *Primary* chords and all kinds of "ii's" which we would normally use in that key anyway (except that we aren't using the N6 chord [*Neapolitan sixth chord*] to go to the key of ii).

Other good modulating progressions (using triad symbols only, for simplicity):

| (i) [or I] iv [or IV] VII III VI ii° V etc. | (VII) III VI ii° V etc. | (i) VI ii° V (i) |
| (i) Rvi° II (and/or ii°) V (i) | i VI iv V (i) | (i) III VI iv ii° V (i) | (i) VI III iv V (i) |

| (i) VI III iv i | (i) V VI III iv (and/or ii°) V (i) | ← optional: include II or i II

| (i) v VI iv (and/or ii°) V (i) | ii° VI (iv) V (i) | ii° VI iv (V) i | ii° VI III iv (i) V (i) |

| III ii° (VI) (i) V (i) | III iv (ii°) V i | ii iv (V) (i) | iv i ii° (VI) V (i) | ii° VI bII V (i) |

| I(7) iv [or IV] to any chord that normally follows iv | Also bII VI ii° V

One last point: As mentioned at the bottom of [Part 1], once you enter the new key, any *secondary* harmony may be used.

Pivot chords are not always used as the 1st chord in a strong modulating progression: EXAMPLE → C F$^6_4$ C A$^{7}_6$ Dm A Dm. or C$^6_4$ Dm7$^4_3$ F#⌀7 B$^6_5$ Em Am$_7$ Em$^6_4$ B7 E(m)
           V   i   "high register"   V   i

In the 1st example, C is not really a pivot chord; if you decided to analyze it as one, the progression would then be VII V i, which is not normal (not that it's so terrible, but it's not normally used by composers). So if you saw this progression in a piece of music, you would be pretty safe in assuming that the composer was thinking V i not VII V i; therefore there is no pivot chord. The 2nd example above really illustrates, without a doubt, a modulation with no pivot chord; remember, according to our use of the term so far, a pivot chord must be diatonic to the home key and the new key. The Dm7 is not diatonic to the new key and the F#⌀7 is not diatonic to the home key so there is no pivot chord. and yet if you played this example you would see that it sounds good anyway. So we can say that the use of a pivot chord is not absolutely necessary (you will see why this is important in a little while).

Now for specific techniques on how to construct a modulation →

What must be known are: At least one, preferably a lot of good chord progressions that establish the new key but don't sound forced or abrupt in relation to the home key. Luckily, even when not using pivot chords, most normal progressions will work when modulating from the home key to any related key. When no pivot chord is used, the only way you can really know if some progression works as a modulator is to use your ears.

The following list of modulating progressions was compiled in two ways:

① All the pivot chords between a home key and its related keys were lined up and normal progressions were built in the new keys, starting from these pivot chords.

② All of the most "normal" progressions that had not been derived already from the pivot chords were tried. Those that sounded forced or unmusical were scrapped, those that didn't were added to the list. In each progression, many inversions or different settings were tried to avoid snap judgments.

You can be sure that Bach, Handel, Scarlatti, and the other masters of the Baroque era had similar lists, but they must have kept them in their minds because they didn't leave us a written record (other than their music itself) of their favorite modulation progressions. It is hoped that you will make a thorough study of this list (eventually) trying many examples of each progression, the rewards are well worth the time it will take.

It is important to realize that there are many ways to combine these formulas as well. For example, to go from the key of C to the key of Dm you might try the ii⌀7 V(7) i formula combined with i iV i V i formula: C F Em7♭5 A7$^6_4$ Dm Gm Dm$^6_4$ A7 Dm
                                                 ii⌀   V   i   iv   i   V   i

As you might guess, this multiplies the possibilities of this list many times over. Good luck, you'll need it (just kidding).

FROM Key of I to Key of ii

MODULATING PROGRESSIONS (NUMBERED, of course, in terms of the new key, ii):

V(7)(i) | ii° V(7)(i) | ii⌀7 V(7)(i) | iV6 V(7)(i) | iv(7) V(7)(i) | II(7) V(7)(i) | II7♭9 V(7)(i) |

IV(7) V(7)(i) | ii(7) V(7)(i) | II♭6(♮) ii°7 V(7)(i) | ii°7 II7(♭9) V(7)(i) |

i(7) can precede or go between any of the chords in some of these progressions, yielding results like: (i) ii⌀7 i V(7)(i) | (i) iV6 i V(7)(i) |
(i) iV(7) i V(7)(i) Actually i, iV, and V can be combined in many good ways which serve as good modulating progressions. Other examples (using triad symbols only):

i V i iV i V i | i V i V i iV i V i | i iV i i iV V i | i iV i iV i V i | i iV i V i iV V |

To really get into these kind of progressions, you should go back and check out the material on CADENTIAL PROGRESSIONS AS VIEWED FROM THE BASS. there are many progressions there that combine TONICS, SUB-DOMINANTS, & DOMINANTS and you will most likely find them very useful for modulation. By "these kind of progressions" it is meant those progressions which use the most significant TONICS, SUB-DOM's & DOM's, which are off-shoots of i, ii°, II, iv, ♭VII, IV, VI, & Rvi°, & V (minor keys). Remember also that Rvii°, V7♭9 & PEDAL DOM's can be used for V. also PEDAL DOM's can replace II(7) or ii7♭9; and don't forget DECEPTIVE CADENCES. also Rvi° can replace i

To sum up our list so far, we could say that we can set up the key of ii with the most common progressions using the PRIMARY chords and all kinds of "ii's" which we would normally use in that key anyway (except that we aren't using the N6 chord to go to the V or I). Other good modulating progressions (using triad symbols only, for simplicity):   : key of ii).

(i) IV(or iV) VII III VI i° V etc. | (VII) III VI ii° V etc. | (i) VI ii° V (i) | (i) Rvi° II (and/or ii°) V (i) — opt: include II or i II
i VI iv V (i) | (i) III VI iv ii° V (i) | (i) VI III iV V (i) | (i) III iV i | (i) V VI III iV (and/or ii⌀) V (i)

(i) V VI iV (and/or ii°) V (i) | ii° V III (iV) V (i) | ii° V iV (V) i | i ii° VI III iV (i) V (i) | III ii° (VI)(i) V (i) | III iV (ii°) V i
ii iV (V)(i) | iv i ii° (VI) V (i) | ii° VI ♭II V (i) | i(7) iV to any chord that normally follows iV | also ♭II VI ii° V

one last point: As mentioned at the bottom of page 1 once you enter the new key, any secondary harmony may be used.