

CHAPTER 10

MODULATION

10.1 Modulation means changing from one key to another.

It is common to change key in a piece of music, particularly to one of the five closely-related keys.

10.2 CLOSELY-RELATED KEYS

a) The closely-related keys are:-

<u>Major</u>	<u>Minor</u>
- V and its relative minor	- the relative major
- IV and its relative minor	- V minor and its relative major
- the relative minor	- IV minor and its relative major

b) In C major, these would be G major, E minor; F major, D minor; A minor.

In C minor: E^b major; G minor, B^b major; F minor, A^b major.

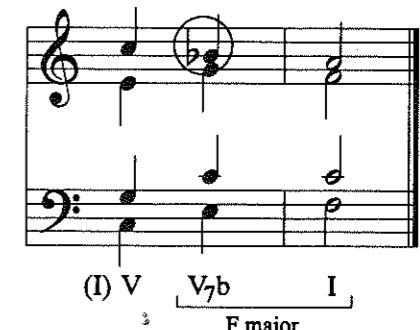
10.3 a) A modulation is usually effected by a perfect cadence in the new key, often using V₇.

- b) The modulating chord must contain a note which is foreign to the old key. This cancels the old tonality and introduces the new one:

Eg. 10.3(i)



Eg. 10.3(ii)



NB. A "foreign" note in a key is termed "chromatic", in contrast to a "diatonic" note, which is part of the scale of the prevailing key.

10.4 There are two ways of leading to the modulating cadence:

- a) by using a chord which is found in both the old and the new keys. This is called a **pivot chord**.
- b) by using a chord which is not part of the new key. This is called **abrupt modulation**.

10.5 PIVOT CHORD

This is the smoothest way of changing key, because the chord is common to both keys.

- a) The pivot chord is reached in the context of the old key.
- b) It is then treated as belonging to the new key and leads immediately to the modulating cadence:

Eg. 10.5(i)

- c) It is necessary to discover the common chords when pivot-chord modulation is to happen.
- d) Eg. To modulate from C major to G major, the following chords are available as pivot chords.

C major	I	IV
E minor	III	VI
G major	V	I
A minor	VI	II

a) b) c) d)

The image shows four musical staves (a, b, c, d) illustrating different ways to pivot from C major to G major. Staff a: I/IV V I. Staff b: III/VI V I. Staff c: Vb/Ib V I. Staff d: VI/II V I. The music consists of two measures per staff, with the first measure in C major and the second in G major. The pivot chord is circled in each example.

Eg. 10.5(ii)

10.6 ABRUPT (OR DIRECT) MODULATION

- a) A chord from the old key (usually a primary chord) is used immediately before the modulating cadence.

a) b)

The image shows two musical staves (a and b) illustrating abrupt modulation. Staff a: I (C mi) V7 (in F mi) I. Staff b: IV in C V7b (G major) I. In both cases, a chord from the old key (I or IV) is followed by a dominant seventh chord (V7) that immediately leads to the new key (G major).

Eg. 10.6(i)

- b) Because the approach chord (chord 1) is not diatonic in the new key, one or more of its notes need to be altered chromatically in chord 2.

- c) This chromatic change will result in "false relation" [Eg. 10.6(ii) below], unless the alteration is made in the same part, [Eg. 10.6(i)].

a) b)

The image shows two musical staves (a and b) illustrating false relation. Staff a: Ib in C V7 A minor Ib. Staff b: V in G V7b C major. In staff a, the bass note changes from a natural in C major to a sharp in G major, creating a false relation. Staff b shows a correct approach where the alteration is made in the same part (bass).

Eg. 10.6(ii)

While it is not always possible to avoid false relation, it is preferable to try to do so, especially for examination purposes.

10.7 Abrupt modulations in succession result in TRANSIENT or PASSING modulations:

ABRUPT MODULATIONS

pivot chord

The image shows a musical staff illustrating abrupt modulations in succession. The staff shows a sequence of chords: A mi, D mi, G maj, F maj, D mi, E mi, A mi, IVb/IIIb, Ic, Va, I. Brackets above the staff group the chords into pairs, indicating the pivot chords for each abrupt modulation. The last three chords (IVb/IIIb, Ic, Va) represent a transient modulation to a new key.

Eg. 10.7

- a) This means that the new key is only briefly touched on.
- b) The music here "passes through" the keys indicated in brackets before the final modulation.
- c) This contrasts with a modulation to a new key in which the music remains for a longer time.

In such a case, the music is said to have "moved into" the new key.

10.8 RECOGNITION OF MODULATIONS

Modulations are easy to recognize when an accidental is in the given part:

Eg. 10.8

a) C major to A minor (relative minor)

b) C major to D minor (relative minor of subdominant)

c) C major to E minor (relative minor of dominant)

Each example shows a progression V (V7 in a) - I (I in a), with the modulation occurring at the start of the second measure.

- 10.9** When there are no helpful accidentals in the given part, the phrase-ends must be considered carefully.

The particular turn of phrase may suggest what key the cadence is in, and whether or not a modulation is "implied":

- a) In a minor key the LN is usually raised.

If, therefore, it is not raised at a phrase end, it is probably because a modulation is taking place.

Eg. 10.9(i)

A minor to D minor

NB.
The lack of G[#] here (LN of A minor) implies a modulation to another key.

- b) The following phrase-end looks like a modulation to F major:

Eg. 10.9(ii)

It suggests this harmonisation:

Eg. 10.9(iii)

V₇ I I

However, the B^b cannot here be harmonized with V₇, leading to F major, because the perfect cadence is not weak-strong. In any case, it is wrong to use the same chord across a bar-line. So, this phrase should be treated as a modulation to D minor, with B^b as note 6 (submediant) and the repeated notes harmonized V₇—I:

Eg. 10.9(iv)

V₇ I

10.10 SEQUENCE

If a given phrase contains a modulation, and if that phrase is repeated in sequence, or imitatively, it is likely that a modulation will happen in the repeated phrase also, even though it may not be obvious. The modulation is likely to be a transient one:

Eg. 10.10

V₇ I V₇ I etc.

EXERCISE 4 — MODULATION

1. Add the bass only of 3-chord modulations in the keys indicated.
List the available common (pivot) chords between the new and old keys. (These should be with reference to the old key).

Indicate the chords used. Insert key signatures.

e.g. C major to A minor

II, IV, VI, VII
II^b/IV^b V₇ I

a) C major to E minor

b) G major to D major

c) A major to B minor

d) A major to C# minor

e) G minor to F major

f) E major to A major

g) Bb major to D minor

h) F major to Bb major

CHAPTER 10

EXERCISE 4 — MODULATION

2. Complete the following modulations:

NB. Remember that in an abrupt modulation, the middle chord must contain a chromatic note which is foreign to key 1 but part of the perfect cadence.

a) *Example:* C major to F major

V V₇ (F maj) I

b)

c)

d)

e)

f)

g)

h)

i)

j)

k)

l)

m)

n)

o)

p)

q)

r)

s)

t)

u)

3. Write suitable modulations as indicated; add the key signature and identify the chords used:

a) Example:

II_b/IV_b V₇ I

C major. to A min.

b)

F maj. to D min.

c)

A min. to C maj.

d)

G min. to B^{flat} maj.

e)

D maj. to G maj.

f)

D min. to G min.

g)

G maj. to D maj.

h)

E maj. to B maj.

i)

E min. to A min.

j)

A maj. to D maj.

k)

C maj. to G maj.

l)

B^{flat} maj. to G min.

4. Modulate to the key indicated at the end of each exercise. Identify all chords.

a)

G major

b)

C# minor

c)

G minor

d)

B-flat major

e)

A major

f)

D major

g)

E-flat major

h)

B minor

D major

i)

G major

j)

D major

k)

A major

l)

E minor

m)

A minor

ANALYSIS

1. Indicate the key changes in the following extract:

Musical extract by Mozart, piano sonata No. 11, movement 1, measures 1, 7, and 13. The music is in common time. Measure 1 starts in G major (two sharps). Measure 7 starts in D major (one sharp). Measure 13 starts in E major (two sharps). The extract shows melodic fragments with dynamic markings like *tr* (trill) and *z* (acciaccatura).

2. To what key does the following modulate?

Musical extract by Chopin, Mazurka Op. 24, No. 1, measures 1 and 7. The music is in common time. Measure 1 starts in A minor (no sharps or flats). Measure 7 starts in C major (one sharp). The extract shows melodic fragments with dynamic markings like *vivo, ma non troppo* and *>*.

3. What key is established by the end of this extract?

Musical extract by Haydn, piano sonata No. 21, movement 1, measures 1-3. The music is in common time. The key changes from C major (no sharps or flats) to F major (one sharp) and then to B-flat major (two flats). The extract shows melodic fragments with dynamic markings like *p* (piano), *tr*, and *etc.*

4. State the key at the end of each of the following and its relationship to the opening key:

a)

Musical extract by Haydn, piano sonata No. 21, movement 1, measures 1-3 (continued). The music is in common time. The key changes from B-flat major (two flats) to E major (one sharp) and then to A major (no sharps or flats). The extract shows melodic fragments with dynamic markings like *tr*.

b)

Brahms

5. To which keys do these two extracts modulate?

a)

Mozart

Haydn

b)

Haydn

6. Indicate what keys the music passes through and ends in:

Schubert

Bach

7. Through what keys does the following music pass? Indicate the relevant bar numbers:

8. In what key does this end?

9. Name the key at the end of each phrase at points 1 – 9:

1. _____ 4. _____ 7. _____
2. _____ 5. _____ 8. _____
3. _____ 6. _____ 9. _____

10. Identify the keys at points 1 – 8:

1. _____ 4. _____ 7. _____
2. _____ 5. _____ 8. _____
3. _____ 6. _____