

# Aural Perception

## Key Changes and Modulations

### Aims

- To be able to distinguish key changes and modulations.
- Identify, describe and explain them in pieces of music.

### Objectives

- Create a personal definition of each technique.
- Find them in several pieces of music.
- Describe and explain how chord progressions influence tonality.

1. Listen to the following songs; they feature examples of key changes.

- 'Living on a Prayer' by Bon Jovi
- 'Love on Top' by Beyonce
- 'Man in the Mirror' by Michael Jackson

How do key changes effect each of the above songs in terms of pitch?

Once they key changes occur, do they ever return to the original key?

2. Listen to the following songs; they feature examples of modulations.

- 'Hey Jude' by The Beatles
- 'Good Vibrations' by the Beach Boys
- 'Paparazzi' by Lady Gaga

How do modulations effect the above songs in terms of pitch?

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Do the songs ever return to their original key after a modulation?

3. Listen to 'Please Forgive Me' by Bryan Adams.

- Approximately where does the key change occur?

- Does the key change higher or lower?

- The song begins in the key of A major. What key does the song change to?

4. Listen to 'Tangerine' by Led Zeppelin

- Approximately where does the song modulate?

- Which statement is true?

“The song starts major then modulates to a minor key.”

“The song starts minor then modulates to a major key.”

- The verse is made up of Am, G, D and C chords. These are inherent of which diatonic harmony? Highlight your answer below.

D minor

C minor

E minor

A minor

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- The chorus is made up G, D and C chords. These are inherent of which diatonic harmony? Highlight your answer below.

C major

A major

G Major

D major

### How do they work?

*Modulations* require either a *perfect cadence* in the new key or the inclusion of chords that are inherent to the new key. For example, in 'Hey Jude' we hear

A

F C C<sup>7</sup> F B<sup>b</sup> F C<sup>7</sup> F

The image shows a musical staff in 4/4 time with a treble clef. Above the staff, the chords F, C, C<sup>7</sup>, F, B<sup>b</sup>, F, C<sup>7</sup>, and F are written above their respective measures. A blue arrow points to the right at the end of the staff.

All of these chords can be found in F major (or are diatonically inherent to F major). The chords that give this away are C<sup>7</sup> followed by F; this is a *Perfect Cadence* (chords V-I or the dominant to the tonic) which helps to enforce the tonality.

Sometimes, songwriters like to change the key to related key areas. Usually this will be the relative minor, the dominant or the subdominant. Perfect cadences help to establish the modulation.

5. Which keys does the song modulate to here?

B

9 F<sup>7</sup> B<sup>b</sup> B<sup>b</sup>/A Gm F C/E C<sup>7</sup> F F<sup>7</sup>

15 B<sup>b</sup> B<sup>b</sup>/A Gm F C/E C<sup>7</sup> F F<sup>7</sup> C<sup>7</sup>

The image shows two musical staves in 4/4 time with a treble clef. The first staff starts at measure 9 with the chord B above it. The chords F<sup>7</sup>, B<sup>b</sup>, B<sup>b</sup>/A, Gm, F, C/E, C<sup>7</sup>, F, and F<sup>7</sup> are written above their respective measures. The second staff starts at measure 15 with the chord B<sup>b</sup> above it. The chords B<sup>b</sup>/A, Gm, F, C/E, C<sup>7</sup>, F, F<sup>7</sup>, and C<sup>7</sup> are written above their respective measures. Blue arrows point to the right at the end of each staff.

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*Key changes* often rise by a semitone or a tone towards the end of a song. They give the impression of a 'lift' or a new level has been reached. *They do not necessarily require a perfect cadence to establish the new key.*

6. Here are the chords found in 'I Wanna Dance with Somebody' by Whitney Houston. What key is this song written in?

The image shows two lines of musical notation in 4/4 time, with a key signature of three flats (B-flat, E-flat, A-flat). The first line contains the following chords: G<sup>b</sup>, G<sup>b</sup>, G<sup>b</sup>, G<sup>b</sup>, D<sup>b</sup>/F, E<sup>b</sup>m, E<sup>b</sup>m, C<sup>b</sup>, C<sup>b</sup>. The second line, starting at measure 9, contains: G<sup>b</sup>, G<sup>b</sup>, G<sup>b</sup>, G<sup>b</sup>, D<sup>b</sup>/F, E<sup>b</sup>m, E<sup>b</sup>m, C<sup>b</sup>, A<sup>b</sup>m, C<sup>b</sup>, D<sup>b</sup>, G<sup>b</sup>, G<sup>b</sup>.

7. The song features a key change on the final chorus. What key has the song changed to?

The image shows two lines of musical notation in 4/4 time. The first line is in a key signature of three flats (B-flat, E-flat, A-flat) and contains the chords: A<sup>b</sup>, A<sup>b</sup>, A<sup>b</sup>, A<sup>b</sup>, E<sup>b</sup>/G, Fm, Fm, D<sup>b</sup>, D<sup>b</sup>. The second line, starting at measure 9, contains: A<sup>b</sup>, A<sup>b</sup>, A<sup>b</sup>, A<sup>b</sup>, E<sup>b</sup>/G, Fm, Fm, D<sup>b</sup>, B<sup>b</sup>m, D<sup>b</sup>, E<sup>b</sup>, A<sup>b</sup>, A<sup>b</sup>.

### Stretch and Challenge

Based on the ideas discussed in the previous questions, identify, describe and explain the keys that this song ('New Kid in Town' by The Eagles) modulates to. Take note of any potential cadence points or chords that suggest a change in tonality. In particular:

- In what key does the bridge begin?
- Which is the first *non-diatonic* chord?
- What key does the song first modulate to? How do you know this?
- The song modulates two more times. Which keys does it modulate to? Are there any cadence points or diatonic chord progressions to support your answers?

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The image shows a musical score for guitar, consisting of six systems. Each system includes a treble clef, a key signature of three sharps (F#, C#, G#), and a 4/4 time signature. The systems are as follows:

- System 1:** Chords: B<sup>7</sup>, B<sup>7</sup>, E, E, B<sup>7</sup>, B, C<sup>#</sup>m, F<sup>#</sup>7. The staff is empty.
- System 2:** Chords: Am, D, D<sup>7</sup>, G, G<sup>maj</sup>7, Am, D, Am, D, C, D<sup>7</sup>, G, G. The staff is empty.
- System 3:** Chords: G, G<sup>maj</sup>7. The staff is empty.
- System 4:** Chords: Am, D, Am, D, C, D<sup>7</sup>, G. The staff is empty.
- System 5:** Chords: B<sup>7</sup>, Em, A<sup>7</sup>, Em, A<sup>7</sup>, Em, A<sup>7</sup>, Am, B<sup>7</sup>. The staff is empty.
- System 6:** Chords: E, G<sup>#</sup>m, A, B<sup>7</sup>, E, G<sup>#</sup>m, A, B<sup>7</sup>, E, G<sup>#</sup>m. The staff is empty.