

# Chapter 27, Additional Materials

## FURTHER ANALYSIS I

### Chromatic Third Relationships in Modulatory Processes

Listen or play through example 27.26a. This passage is from the beginning of a sonata form development. The movement as a whole is in  $E\flat M$ , and the development begins with a dominant of  $Cm$  which does not resolve to  $Cm$ , but directly into the key of  $A\flat M$  (as in a deceptive  $V_7-VI$  progression). The modulatory process that follows takes us through  $A\flat M$ ,  $EM$ , and  $CM$  (that is, down by M3s; because M3s divide the octave into three equal segments, after two M3 modulations we are back in  $C$ , in a circle  $C-A\flat-E-C$ ). Play the harmonic reduction in example 27.26b, and then the reduction at a higher level in example 27.26c. How are the three keys related? How is the modulatory process effected?

The key sequence  $A\flat M-EM-CM$  spells out two successive  $\flat VI$  modulations, if we consider the adjacent keys with respect to one another (that is,  $EM$  is  $\flat VI$  of  $A\flat M$ , and  $CM$  is  $\flat VI$  of  $EM$ ). Both of these modulations would allow for CT connections between tonics. Instead, Mozart first moves to the minor tonic in each case, and then takes advantage of the two common tones between the minor tonic and the dominant of the next key to achieve an extremely smooth modulation. Example 27.26b demonstrates the whole harmonic process in detail, and example 27.26c shows the essence of the process: the motion from  $I$  to  $i$  in each key, and the double CT connection between  $i$  and  $V$  of the next key ( $\flat VI$ ). Notice also the stepwise bass that supports the complete process linearly.

For another interesting example of modulatory process involving CT modulation to distant keys, refer to anthology, no. 35 (Beethoven, *Waldstein* Sonata, I), mm. 123–132. This is a segment of the development, reduced in example 27.27. In the first modulation, the keys are related by chromatic third ( $E\flat m-Bm$ , or  $i-vi$  spelled enharmonically). How is this modulation similar to the ones we have just discussed by Mozart? How many common tones are used, between what chords? The next modulation,  $Bm-Cm$ , is also a CT modulation, but in this case not to a third-related key, but up a half step. The process, however, is almost exactly the same (by means of two common tones between the tonic chord and the dominant of the next key). How does the same process take us to two different key relationships (down a M3 in the first case, up a  $m2$  in the second)? For an answer, examine the members of the tonic triad that are used as CTs in each case, and you will see the slight difference between the two modulations.

Example 27.26a W. A. Mozart, Symphony no. 39 in E♭ M, K. 543, IV, mm. 105–125

The musical score is presented in four systems, each with a grand staff (treble and bass clefs). The key signature is E-flat major (three flats) and the time signature is 2/4. The score includes dynamic markings *f* (forte) and *p* (piano). Measure numbers 110, 115, and 120 are indicated. Chord symbols are provided below the bass staff: Cm, V<sub>7</sub>, A♭M: I<sub>6</sub>, EM:, and CM:.

System 1 (measures 105-108): The right hand begins with a rest, followed by a melodic line starting in measure 107. The left hand plays a rhythmic accompaniment. Dynamics range from *f* to *p*. Chord symbols: Cm, V<sub>7</sub>, A♭M: I<sub>6</sub>.

System 2 (measures 109-114): The right hand features a melodic line with a slur and a fermata. The left hand continues with a rhythmic pattern. Dynamics range from *p* to *f*. Chord symbols: EM:.

System 3 (measures 115-120): The right hand has a melodic line with a slur and a fermata. The left hand plays a rhythmic accompaniment. Dynamics range from *f* to *p*. Chord symbols: CM:.

System 4 (measures 121-125): The right hand continues with a melodic line. The left hand plays a rhythmic accompaniment. Dynamics range from *f* to *p*.

## Examples 27.26b and c

b.

109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125

AM:  $I_6$   $\frac{4}{2}$   $6$   $\frac{6}{5}$  I i EM:  $\frac{4}{3}$  I i CM:  $\frac{6}{5}$  I i

c.

3 —  $b3$   $\frac{4}{3}$  3 —  $b3$   $\frac{4}{3}$  3 —  $b3$

## Example 27.27

124 128 132

$Ebm$   $6$   $Bm$   $6$   $Cm$

## FURTHER ANALYSIS II

As an additional challenge and after discussing example 27.15 in the textbook, study the modulation from AM to C#M in that example, mm. 11–13. Notice that although the two keys are related by chromatic third, this is not a CT modulation. Rather, it is a slightly disguised modulation of a type you studied in the previous chapter. What kind of modulation is it, and how does it work exactly? Some hints: When the  $V_7$  of AM in m. 11 resolves to what would be an AM tonic in beat 3, the tonic actually sounds like a secondary dominant, which is spelled and resolved as an  $16$  of the new key. The harmonic activity in m. 12, which is simply an elaboration of the dominant of C#M, may seem especially confusing. Interpret the A in the bass as a nonchord tone (an appoggiatura to the following G). How about the fifth of this chord? Is this an example of an altered dominant chord? What kind of alteration?