

Appendix to Part I

Summary and Application:

Diatonic Harmony in Context

We have now completed our study of diatonic harmony. And we can now ask the familiar question again: How is our knowledge of diatonic harmony relevant to the way we hear and perform music? It would be pretentious to argue that everything you have learned is relevant to performance. We have discussed many harmonic and voice-leading details, for instance, which are about how we write music, or how music *was written* by the masters of the past, and not necessarily about how we *perform* music. Acquiring a solid craft and a good understanding of how music is composed and how it works is a valuable goal in itself, even if not everything we know has a direct bearing on performance.

Having said this, however, we may add that a great deal of what we have studied *does* have a direct application in contributing to our improved perception and understanding of musical structure, and hence in making us better performers. We will now discuss an example from this perspective, but first it will help to understand the general musical context for diatonic harmony.

1. Music is seldom totally diatonic.
2. Music does not usually stay in one key for very long. Modulation is an essential element in musical growth and development, and it provides tonal variety.
3. The basic long-range musical (and formal) design consists of *exposition* (statement of musical materials), *development*, and *return* (conclusion or resolution). When music is diatonic, it is usually so in expository and resolute processes. In expository sections (the beginning of a piece) the key is established and the thematic material is first heard. In resolute sections (the return or conclusion, after a central developmental section), the main key is reestablished after sections in which tonal instability and modulation are likely, and the original material is restated in its original key. Both the exposition and the return are possibly diatonic, especially in the Classical period.
4. In the following chapters we will begin our study of harmonic chromaticism and modulation. Chromatic chords are very often linear, or they are harmonically subordinate to diatonic chords. Diatonic chords usually provide the frame for chromaticism, which often has an ornamental function.
5. We have learned in the previous chapters that diatonic triads (and seventh chords) have a variety of functions, and also that triads can have very different roles within a musical phrase or section. In summary, these roles can be stated as follows:
 - a) *Structural*. Structural triads are placed at *points of departure* (beginnings) and *points of arrival* (cadences). Only one triad is a true point of departure: the tonic; both the tonic and the dominant may end sections. The tonic and the dominant are the only truly structural chords (example 16.25a). In the following examples we will illustrate a variety of elaborations of the basic structural progression, I–V–I.
 - b) *Chords that prepare a structural arrival*. These are the pre-dominant chords (ii or IV, occasionally vi), which prepare either an authentic cadence (AC) or a half cadence (HC)

(examples 16.25b and c).

- c) *Prolongational chords.* These are chords whose function is to extend a structural frame in time, either by prolonging the initial tonic, by prolonging a dominant, by prolonging the final tonic, or by prolonging some chord other than the tonic or the dominant. Triads (or seventh chords) in inversion may prolong other chords, as in many of the progressions we have seen involving $\frac{6}{3}$ or $\frac{6}{4}$ chords. Progressions such as $I-(I_6)-V-I$, $I-(P_4^6-I_6)-V-I$, $I-(vii_6^{\circ}-I_6)-V-I$, or $I-(V_5^6-I-V_3^4-I_6)-V-I$ use inverted chords to prolong the initial tonic (the prolongational chords are here shown in parentheses). Progressions such as $I-V-(V_6)-I$, $I-V-(IV_6-V_6)-I$, or $I-V-(V_2^4)-I_6$ include a dominant prolongation. Nonstructural chords such as IV, vi, or iii also function often as prolongations of the initial or final tonic, in progressions such as $I-V-I-(IV-I)$, $I-V-I-(N_4^6-I)$, $I-V-I-(vi-IV-I)$, and $I-(iii)-IV-V-I$. Finally, these same nonstructural chords can themselves be prolonged in progressions such as $I-IV-(P_4^6-IV_6)-V-I$.

Prolongational chords are *linear* (or contrapuntal) rather than purely harmonic, because they result from horizontal (melodic) processes. The linear prolongational techniques (or functions) we have studied are *neighbor chord*, *passing chord*, and *bass arpeggiation*. Examples 16.25d to s provide graphic summaries of some of these progressions and of the basic functions of diatonic chords. Realize these basses at the keyboard as a review of the diatonic harmonic structures and functions you have learned. Notice the following points which refer to the harmonic models in example 16.25:

1. The structural I-V-I progression in these examples is connected by a beam. Each of these examples shows a possible elaboration of the structural progression. The Roman numerals under the graphs show two different levels of harmonic activity. The chords in parentheses indicate the prolongational structure illustrated in each example. The parentheses mean that these chords do not really function harmonically, but rather linearly or contrapuntally. The chord actually being prolonged is shown under the parentheses as a Roman numeral followed by a line.
2. In example 16.25a two fundamental structural frames are shown. The first one features the essential I-V-I progression. The second one illustrates an interruption structure of the type we discussed in the additional materials in chapters 2 and 11, as indicated by the double slash showing the interruption after the HC on V (I-V//I-V-I).
3. In examples 16.25b and c a pre-dominant chord has been added to the structural progression. The short slur connecting ii or IV to V means that these are pre-dominant chords leading to the dominant. The long slur connecting I and V (and curving around the pre-dominant chord) means, however, that the essential motion is really from I to V.
4. Examples 16.25d to i feature various means of extending the initial tonic harmony.
5. Examples 16.25j to k show iii and vi dividing the space between I and V or I and IV, respectively.
6. Examples 16.25l to p display extensions of the dominant harmony.
7. Examples 16.26q to r show extensions of the final tonic harmony.
8. Example 16.25s features a prolongation of a pre-dominant chord.

Example 16.25

a. OR b. c.

GM: I V I I V I V I I ii V I I IV V I

d. e. f. g. h.

(I I₆) I V I (I IV I) I V I (I P₄⁶ I₆) I V I (I vi₆^o I₆) I V I (I V₃⁴ I₆) I V I

i. j. OR k.

(I V₅⁶ I V₃⁴ I) I V I (I iii) I IV V I (I vi) I IV V I

l. m. n. o. p.

I (V V₆) I I V ⁶⁻⁵₄₋₃ I I (V IV₆ V₆) I I (V vi V₆) I I (V V₂⁴ I₆ P₄⁶) I

q. r. s.

I V (I IV I) I I V (I N₄⁶ I) I I (IV P₄⁶ IV₆) V I

PRACTICAL APPLICATION AND DISCUSSION

Diatonic Functions and Performance

How does our knowledge of diatonic functions help us understand (and transmit through performance) the structure of a fragment like Haydn's Sonata in Dm, II (anthology, no. 20)? The movement is (and begins) in Dm. A *first cadence* (a HC in Dm) is reached at m. 8. A "new beginning" in m. 9 unexpectedly establishes the relative major key, FM. We will soon study modulation, and we will see that modulation is a process in which a key moves into another key, usually smoothly and by means of elements common to both keys. This is not the case here: FM is directly established, without transition (this may be called a "direct modulation" or, even better, simply a "change of key"). The *second cadence* in the fragment, in

m. 16, is also a HC, now in FM. An AC in FM is prepared in mm. 20–21, deceptively resolved in m. 22, and finally reached, after a cadential extension, in m. 24. This is the *first perfect authentic cadence (PAC)* in the fragment. In m. 25 we see a return to the original key of Dm and to the opening thematic material.

The harmonic goals for the fragment are, then, m. 8 (HC), m. 16 (HC in F), m. 22 [deceptive cadence (DC)], m. 24 (PAC in F), and finally m. 25 (the return to Dm). We have now established the harmonic frame for the passage: two “points of departure” in D and F (mm. 1 and 9), two open (inconclusive) points of arrival (the HCs in mm. 8 and 16), a final point of arrival on F (delayed by a DC), and a return to D. The next questions are: How do we get from one point to another, and how do we tie it all together?

We have already analyzed most of this example by fragments in previous chapters. We will provide here a brief summary. The graph in example 16.26c, a bass reduction for the complete excerpt, may serve as a visual reference to the following analytical outline.

1. *Measures 1–4.* A prolongation of i by means of a passing vii°_6 (or, to be more exact, a vii°_6 if we consider the high B \flat), leading to a predominant-dominant progression.
2. *Measures 5–8.* A prolongation of i by arpeggiation, a pre-dominant/dominant/tonic progression, a vi chord which functions both as a prolongation of i and as a pre-dominant, and the final HC, which functions as the goal of the complete passage. The HC is ornamented linearly by a cadential $\frac{6}{4}$ and a chromatic neighbor note (NN). Instead of resolving to i in Dm, the half cadence moves abruptly into a new key, FM.
3. *Measures 9–16.* A prolongation of I in FM first by means of a neighbor-group figure (V^4_3 – V^6_5 , mm. 9–12), then a neighbor $\frac{6}{4}$ (m. 13–14), and a neighbor $\frac{6}{5}$ (m. 15). The HC in F (m. 16) is ornamented by a cadential $\frac{6}{4}$, and preceded by a chromatic pre-dominant chord (a chord with a secondary dominant function of the type we will study in the next chapters).
4. *Measures 17–24.* The V in F reached in m. 16 moves to I_6 through a passing V^4_2 , and a series of V^4_2 – I_6 progressions prolong this first-inversion tonic. A new pre-dominant/dominant progression announces a PAC in mm. 20–21, resolved deceptively in m. 22. A cadential extension repeats the cadential progression (including another chromatic chord, also a secondary dominant to be studied in the next chapter), prolonging the dominant harmony for two more measures, and finally resolving it to I at m. 24, the ultimate goal for the complete passage in FM (mm. 9–24).

How does it all tie together? The excerpt is a long prolongation of Dm. Just as a Dm tonic may be prolonged by arpeggiation to a mediant chord (i–III–i), the Dm key (i) moves here, by a long-range bass arpeggiation, to FM (III), and back to Dm (i) in m. 25. The two graphs in examples 16.26a and b show this long-range tonal motion, and show moreover that the main tonal frame of the example outlines the Dm tonic triad which it thus prolongs (\hat{i} , $\hat{5}$ in m. 8, $\hat{3}$ in the FM section, and $\hat{1}$ again).

The slurs above example 16.26c indicate the phrase structure of the fragment. We can break the passage into three eight-measure phrases. The first two phrases can themselves be divided into 4 + 4 segments. The division of the third phrase (6 + 2), on the other hand, is not symmetrical, and is determined by the deceptive cadence in m. 22 and the two-measure extension that follows. Notice that this division of the passage into phrases and phrase segments corresponds exactly with the long-range harmonic analysis represented in the graph.

What conclusions can we draw from the above analysis that would apply to the performance and perception of the piece? It is easy to argue that our understanding of *long-range tonal goals*, of the excerpt as an *organic tonal whole*, and of how the different sections are *connected* by tonal design should help in our rendition or perception of the piece: We know where the music is coming from, where it is going (what is its tonal purpose or goal), and why. Furthermore, we also know *how*. Because we understand the difference between *structural chords* and *linear prolongational chords*, we have established a hierarchy, we have plotted a “tonal path” from one structural point to another, and we can follow and understand the role of each chord as a linear step toward the goal (or, say, as words within sentences, themselves part of a paragraph).

All of this should help us propel the music toward the tonal goals through phrasing. By hearing phrases as musical units that prolong a harmony linearly and move toward a goal, we can create the appropriate tension for the music to move forward. Arrivals on HCs enhance the tension. And although the “new beginning” in m. 9 could be seen as a point of momentary release of tension, the fact that we are abruptly taken away from the main key is in itself a source of tension (also enhanced by the increase of rhythmic activity in the right hand throughout this FM section). The only true point of arrival in the complete passage, and hence the only place where we can really feel the release of tension, is the return to Dm in m. 25. We should now be able to avoid listening to or playing this piece mechanically, or “chord by chord.” Try listening to the passage several times (or, if possible, play it), hearing (and enjoying!) your knowledge of its long-range tonal design and following the “musical story” that the harmony unfolds.

Example 16.26

a.

Dm: i ——— III ——— i

b.

Dm: i ——— V FM: I ——— V ——— I Dm: i

Mm: 1 4 5 7 8 9 12 13 14 16 17 20 21 22 23 24 25

c.

Dm: i — V i — V i vi V $\frac{6}{4}-\frac{5}{3}$ FM: I — V $\frac{6}{4}-\frac{5}{3}$ — V $\frac{6}{4}\frac{7}{3}$ vi — V — I Dm: i