2

Fundamental Progressions of Harmony

The important role of harmony in defining formal functions should be evident from the preceding chapter. The intrathematic functions (such as presentation, continuation, and cadential) are especially contingent on specific types of local harmonic progression. Thus one of the earliest tasks in any formal analysis—indeed, perhaps the first task—is to determine the underlying harmony of a given passage. This chapter, a kind of brief *Harmonielehre*, systematically presents the fundamental harmonic progressions used by the classical composers to articulate formal functions. For ease of comparison, the progressions are exemplified as simple paradigms in the key of C major.[1]

HARMONIC FUNCTIONS

Before dealing directly with progressions of harmonies, we must first define the individual *harmonic functions* that make up a progression. Chapter 1 illustrated the concept of functionality with respect to formal organization. Traditionally, however, the concept has been associated more with harmony than with form. In the last quarter of the nineteenth century, Hugo Riemann developed an extensive theory of harmonic functions (*Funktionstheorie*),[2] which he offered in opposition to the prevailing theory of scale-degree progressions (*Stufentheorie*, "step theory").[3] Although Riemann's ideas continue to dominate modern German thinking, harmonic theory in North America is largely rooted in the scale-degree tradition. Aspects of the functional approach have nevertheless made themselves felt on this continent,[4] and, accordingly, this book, too, incorporates notions of harmonic functionality in a general scale-degree theory of harmony.

The strict scale-degree theory recognizes seven distinct and independent harmonies in a given tonality. These harmonies are identified by roman numerals denoting the scale-degrees on which the roots (or fundamentals) of the harmonies stand. The functional theory rejects the notion of seven independent harmonies and instead recognizes three fundamental functions, which embrace all harmonic formations in a key. These functions form a logical progression that serves to express tonality. The most important function is *tonic*, the central harmony of a key, the one to which all others ultimately relate and derive their meaning. The second function includes harmonies whose primary role is to progress to the tonic. These are *dominant* functioning harmonies, all of which contain the leading-tone. The third fundamental function comprises a variety of harmonies whose primary purpose is to lead to the dominant. Traditional functional theory speaks of a "subdominant" function in this connection, but the alternative term *predominant* is used here because this function includes a number of harmonic formations not directly related to the harmony built on the fourth degree of the scale.[5]

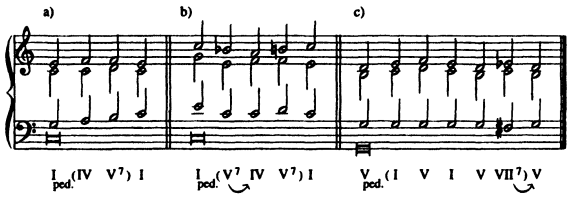
The harmonic theory employed throughout this study combines features from both the scale-degree and the functional theories. Since the former is widely known, it need not be discussed any further. The latter, however, requires more elaboration to specify how the various harmonies and chords of a key are classified in relation to the three fundamental functions.[6]

1. *Tonic function.* Tonic function is usually represented by the major or minor triad built on the first scale-degree (tonic) of a key. In certain contexts, the triad built on the submediant (VI) degree of the scale has a tonic function and can frequently "substitute" for an expected I chord, especially when following a root-position V (the "deceptive resolution" of the dominant).

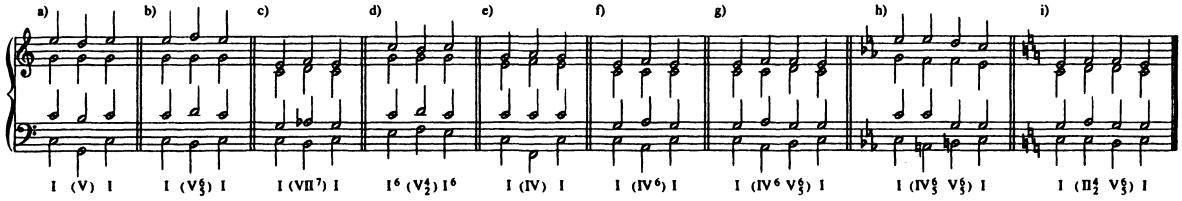
2. *Dominant function.* Dominant function is most often represented by a major triad or a major–minor seventh chord built on the fifth scale-degree. The leading-tone diminished triad in first inversion (VII^6) and the leading-tone seventh chord (VII^7 and its three inversions) also have a dominant function when they resolve to a tonic harmony. These leading-tone chords are not considered dominants when in some sequential situations, they progress to nontonic harmonies (such as III).

3. *Pre-dominant function.* The large number of predominant harmonies in a key generally relate to one of two main types—those built above the fourth degree of the scale and those derived from the dominant of the dominant (V/V).

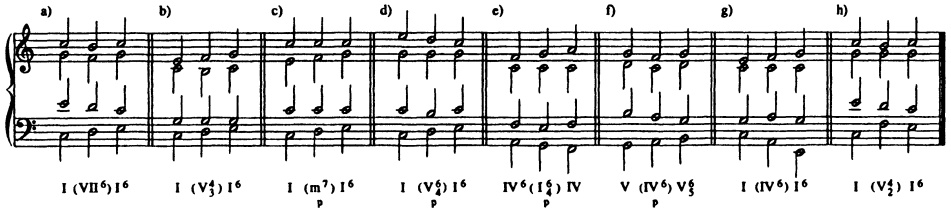
EXAMPLE 2.1 Prolongational progressions—pedal point



EXAMPLE 2.2 Prolongational progressions—neighboring chords



EXAMPLE 2.3 Prolongational progressions—passing chords



Many harmony texts suggest that the subdominant triad leads most typically to the dominant. An examination of the classical literature reveals, however, that the supertonic triad in first inversion (II6) is the more characteristic pre-dominant. Both II6 and IV can be enriched through the addition of dissonant sevenths, and even greater variety can be gained by means of *modal mixture* (or modal borrowing), in which chords containing notes from the minor scale are used in major-mode contexts, or vice versa. The "Neapolitan" or "phrygian" harmony in first inversion (♭II6) is another important pre-dominant, especially in minor.

One group of pre-dominants features the chromatically raised fourth scale-degree, which functions as the leading-tone of the dominant. The significance of the raised fourth degree is highlighted by its normally being placed in the bass voice, so that its motion to the root of the following dominant is all the more enhanced. The most typical pre-dominant of this type is the diminished seventh VII7/V; the less dissonant V6/V and V4/3/V are also regularly encountered.

The three varieties of augmented sixth chords—the so-called Italian, German, and French sixths—are an important subclass of pre-dominant harmonies. They are usually built over the sixth degree of the natural minor scale. On occasion, however, they are also found over the raised fourth degree, thus revealing their kinship to secondary dominants of V.

HARMONIC PROGRESSIONS

Let us now consider how the functions just described can be arranged to make progressions of harmonies. Most progressions can be classified into one of three categories—prolongational, cadential, and sequential. Each category pertains to specific roles that progressions can play in the pitch organization of a particular musical passage: a *prolongational* progression sustains in time an individual harmony (within an implied tonality); a *cadential* progression confirms a tonal center; and a *sequential* progression projects a

melodic–contrapuntal pattern independent of harmonic functionality.[7]

Prolongational Progressions

A harmonic prolongation is created when a single harmonic entity is perceived in the listener's imagination to be sustained through time, despite the presence of an intervening chord (or chords) of different harmonic meaning. The *prolonged harmony* thus "remains in effect without being literally represented at every moment" throughout the progression.[8] The intervening chord can be considered a *subordinate harmony* because it remains under the influence and control of the prolonged harmony. Prolongation thus entails two levels of harmonic activity: a local level that contains the succession of prolonged and subordinate harmonies and a deeper level that contains the prolonged harmony alone.

For the listener to sense that an individual harmony is being prolonged, the subordinate harmony must form a strong functional connection to the prolonged harmony. Failing that, the progression must feature a conventional contrapuntal process that establishes an intimate voice-leading bond among all the chords. Both these conditions are often met within a prolongational progression.

The many different prolongational progressions can be grouped into four main types according to the compositional technique associated with the prolongation. These techniques include the use of (1) a pedal point, (2) neighboring chords, (3) passing chords, and (4) substitute chords. Most of the progressions discussed and illustrated here prolong tonic harmony, although many of them can prolong harmonies on other scale-degrees as well.

Pedal point. The most perceptually forceful way of prolonging a harmony is by means of a *pedal point*. The pedal, which lies in the bass voice throughout the progression, contains the root of the prolonged harmony (ex. 2.1).[9] In most cases, this harmony appears at the beginning and end of the progression. The bass note of the subordinate harmonies is replaced by the pedal note, thus significantly reducing the structural status of these harmonies; hence, they always are placed in parentheses in the analysis located below the music.[10] Since the missing bass often makes it impossible to determine the position of the subordinate chords, they are indicated in root position unless a specific inversion is implied by the context in which the progression arises. Prolongations featuring pedal points are prominently employed in connection with postcadential function. Example 2.1b, with its tonicized subdominant, is frequently used in codettas; example 2.1c is typical of a standing on the dominant.

Neighboring chords. An individual harmony is prolonged by one or more *neighboring chords* when the prolonged harmony remains in the same position (root position or inversions) from the beginning to the end of the progression. In such cases, a melodic neighbor-tone motion is usually (but not necessarily) present in one or more of the voices (ex. 2.2).

Example 2.2a resembles the cadence formula described by many harmony textbooks. This progression can indeed be classified as cadential according to criteria to be developed in the next section. In actual compositional practice, however, the simple I–V–I progression is often better understood as prolongational.

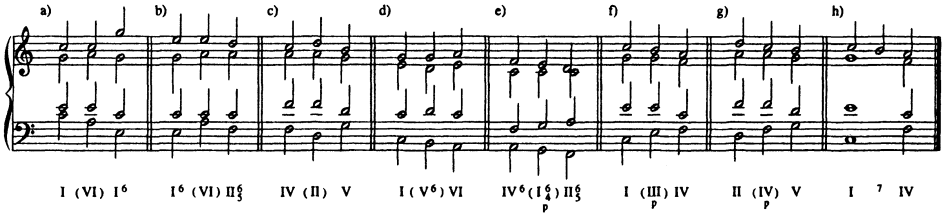
Passing chords. A given harmony is prolonged by one or more *passing chords* when the prolonged harmony changes position from the beginning to the end of the progression. Such prolongations usually see a passing tone in the bass voice lying between the root-position and first-inversion forms of the prolonged harmony. A variety of chords can be built over this passing tone, as shown in example 2.3a–f. Another common prolongation finds an ascending passing motion in the soprano (usually $\hat{3}$–$\hat{4}$–$\hat{5}$) against a bass that leaps in contrary motion (ex. 2.3g). A passing chord may arise, however, without any of the voices literally displaying passing motion (ex. 2.3h).

In some prolongational progressions, the passing chord is not an independent harmony because of its unstable six–four position or its weak functional relation to the prolonged harmony. Such passing chords are placed in parentheses in the analysis at all times and are given an added label, p (passing), to show that they arise primarily from contrapuntal processes and only minimally from harmonic ones. The passing chord in example 2.3c arises entirely out of the counterpoint and thus should not be analyzed as a II^7 harmony. Not only is the progression I–II^7–I nonfunctional, but also the "seventh" (C) is doubled and incorrectly resolved, thus violating the fundamental voice-leading for chordal sevenths. For these reasons, the symbol m^7 (minor seventh chord) is used in place of a roman numeral.

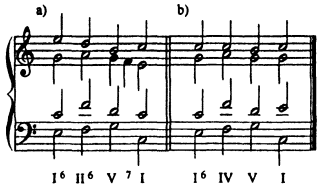
Substitute chords. Some chords can participate in prolonging a given harmony because they express the same fundamental function as does the prolonged harmony. In such cases, the original and substitute harmonies have two chord-tones in common, which largely accounts for their functional similarity (ex. 2.4a–c). Passing chords can be introduced between the original and substitute harmonies to form even more complex prolongations (ex. 2.4d–e).[11]

In the preceding examples, the root of the substitute chord lies a third below the original harmony. In some situations, a chord lying a third above participates in the prolongation (ex. 2.4f–g). Here, the substitute chord is understood to arise out of passing motion in the soprano voice with the simultaneous elimination of the root (ex. 2.4h; cf. ex. 2.4f).

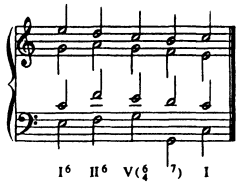
EXAMPLE 2.4 Prolongational progressions—substitute chords



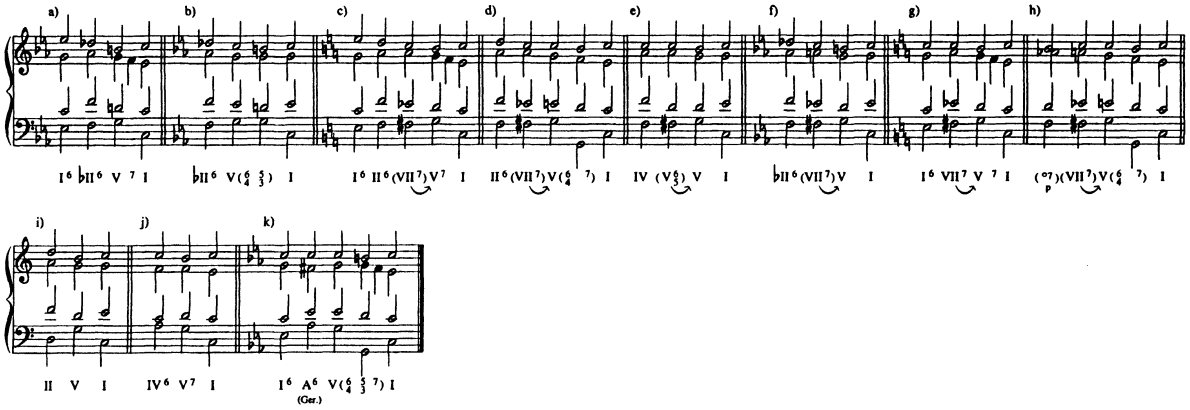
EXAMPLE 2.5 Authentic cadential progressions—basic



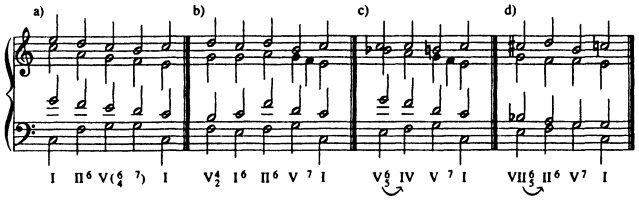
EXAMPLE 2.6 Authentic cadential progressions—dominant embellishment



EXAMPLE 2.7 Authentic cadential progressions—pre-dominant embellishment



EXAMPLE 2.8 Authentic cadential progressions—initial tonic embellishment



Cadential Progressions

The harmonic progressions just discussed involve the prolongation of an individual harmony irrespective of the function that it may ultimately serve in a given tonality. As soon as we assign a specific function to the prolonged harmony —be it tonic, dominant, or pre-dominant—then a tonal center of some kind is logically assumed. Thus a given progression can prolong a "C-major harmony," but this harmony can be understood not only as tonic in the key of C major but also as dominant in F major or even pre-dominant in G. The task of confirming that an implied tonality is indeed the actual tonality of the musical passage in question falls to a second category of progressions—*cadential progressions*.[12] The strongest tonal confirmation is achieved by an *authentic cadential progression*; a weaker confirmation, by a *half-cadential progression*.

Authentic cadential progressions. A *complete* cadential progression is made up of the fundamental harmonic functions in the following temporal sequence—tonic, pre-dominant, dominant, and tonic. (The two cadential tonics are distinguished as *initial* and *final* tonics, respectively.) An *incomplete* cadential progression occurs when the initial tonic or pre-dominant (or both) is omitted.

For the authentic cadential progression to possess sufficient harmonic strength to confirm a tonality, both the dominant and the final tonic must be in root position, their most stable form. The fundamental-bass motion of a descending fifth (or ascending fourth) is exposed in the bass voice so that the sense of a strong harmonic progression can be projected most powerfully. If the dominant were inverted, then the move to the tonic would necessarily result in a stepwise motion in the bass, thus usurping the melodic function of the upper voices and undermining the bass's own role as bearer of the harmonic fundamentals. If the final tonic is inverted (or otherwise altered harmonically) then a *deceptive* cadential progression is created (a variant type to be discussed in connection with ex. 2.9).

Pre-dominant function within an authentic cadential progression is built most often over the fourth scale-degree in the bass, although it is occasionally found over the second or sixth degrees as well.[13] The initial tonic is usually placed in first inversion, probably so as not to anticipate (and thus spoil) the solid effect of the final root-position tonic.[14]

The basic form of the authentic cadential progression is shown in example 2.5a. Note that the pre-dominant harmony above the fourth scale-degree is not the subdominant triad, as many textbooks suggest but, rather, the first-inversion supertonic triad. To be sure, the IV chord is regularly encountered (ex. 2.5b), but the version with II^6 is more typical of the classical style.[15]

As already mentioned, either the initial tonic or the pre-dominant may be omitted, thus yielding an incomplete cadential progression. In such cases, the initial tonic is left out more often than the pre-dominant is, for eliminating the latter results in the loss of a fundamental harmonic function. Excluding both of these harmonies occurs infrequently in the literature.

Let us now examine how each of the three harmonies that precede the final root-position tonic triad can be varied and embellished, beginning with the dominant and moving backward through the pre-dominant to the initial tonic. We can then consider how altering the final tonic leads to a deceptive cadential progression.[16]

1. *Dominant embellishments.* The principal embellishment of dominant harmony (besides adding a seventh, of course) occurs through the use of a "cadential six–four" chord constructed over the fifth scale-degree (ex. 2.6).[17] The frequent use of the cadential six–four helps clarify, perhaps, why II^6 is preferred to IV as the main pre-dominant harmony in cadential progressions. If we compare example 2.5a with 2.5b, we see that the II^6 in the former creates a more active and directed melodic line, in which the motion from the second scale-degree to the leading-tone can be filled in by a passing tone, supported by the cadential six–four (ex. 2.6). When the IV chord is used instead (ex. 2.5b), the melody tends to be static, and adding a six–four embellishment would further emphasize the tonic scale-degree.

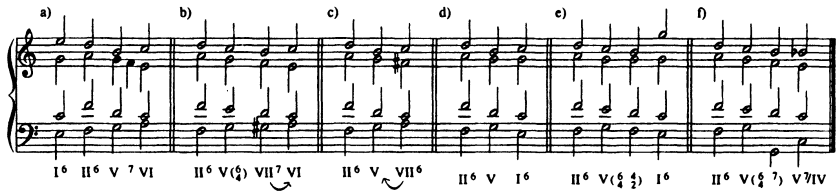
2. *Pre-dominant embellishments.* The pre-dominant function in an authentic cadential progression can take a variety of forms. In addition to the common use of II^6 and IV, the "Neapolitan" or "phrygian" sixth chord ($\flat II^6$) is occasionally found above the fourth scale-degree, usually in minor-mode contexts (ex. 2.7a–b).

The most frequently employed embellishment of pre-dominant function appears over a chromatic passing tone lying between the fourth and fifth scale-degrees in the bass voice (ex. 2.7c–h). In some cases, two consecutive diminished seventh chords prolong pre-dominant harmony (ex. 2.7h): the first diminished seventh is built on the regular fourth scale-degree, and the second, on the raised fourth degree. Although the first chord is spelled like VII^7, it does not have a dominant function but instead serves in this context as a replacement for the pre-dominant $II^{\sharp}_{5}$ (from the minor mode).[18]

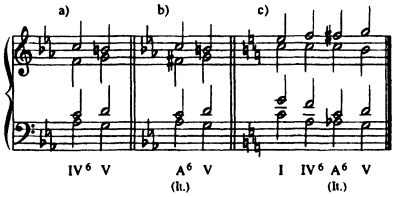
Pre-dominants can also be built on the second and sixth degrees of the scale by changing the position of the harmonies (ex. 2.7i–k).

3. *Initial tonic embellishments.* As already pointed out, the initial tonic occurs most frequently in first inversion, but the root-position form occasionally appears as well (ex. 2.8a). The initial tonic can be embellished, especially in expanded cadential progressions, by a neighboring $V^{\sharp}_{5}$ (ex. 2.8b). Various chromatic alterations can convert the initial

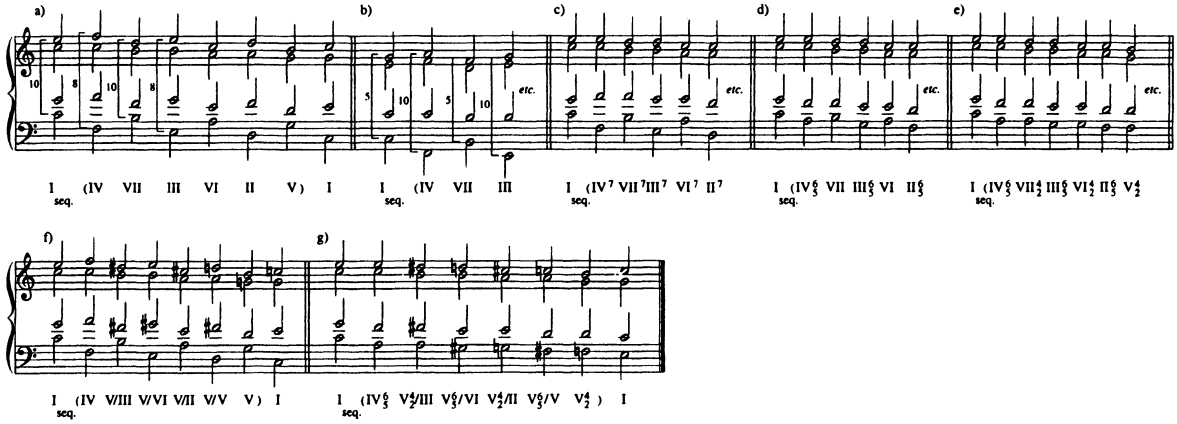
EXAMPLE 2.9 Deceptive cadential progressions



EXAMPLE 2.10 Half-cadential progressions



EXAMPLE 2.11 Sequential progressions—descending fifth



tonic into a secondary dominant of IV or II, thus emphasizing motion into the pre-dominant (ex. 2.8c–d).

4. *Deceptive cadential progressions.* The deceptive cadential progression is created when the final tonic of the authentic cadential progression is replaced by a related harmony.[19] The most common form of this progression sees the bass ascend stepwise from the fifth scale-degree to the sixth, which supports a submediant substituting for the implied final tonic (ex. 2.9a). This progression can be embellished by a passing secondary dominant of VI (ex. 2.9b). Further variants arise when different harmonies are built over the sixth degree in the bass voice (ex. 2.9c).

In less frequently encountered instances of the deceptive cadential progression, the dominant leads to a first-inversion tonic rather than to the expected root-position form (ex. 2.9d). In order to make the move to I^6 more compelling, a passing V^7_5 is frequently inserted following the root-position dominant, which itself often contains the six–four embellishment (ex. 2.9e).[20] A more dramatic deception can be achieved by converting the final tonic into a secondary dominant seventh of the subdominant (ex. 2.9f); the addition of a chordal dissonance makes the tonic too unstable for cadential articulation.[21]

Half-cadential progressions. In the authentic cadential progression, the final tonic is the harmonic goal of the progression. The dominant occupies the *penultimate* position and thus creates a powerful dynamic impulse into the final tonic.

In the half-cadential progression, the dominant itself becomes the goal harmony and so occupies the *ultimate* position. To be sure, this dominant usually resolves to tonic, one that normally initiates a new harmonic progression, but within the boundaries of the half-cadential progression itself, the dominant possesses enough stability to represent a harmonic end.

To acquire the requisite stability for an ending harmony, the dominant of the half-cadential progression must take the form of a root-position triad. Adding a dissonant seventh—appropriate to the penultimate position in an authentic cadential progression—would overly destabilize the ultimate dominant of a half-cadential progression.

Except for omitting a final tonic and ensuring that the dominant is a consonant triad, half-cadential progressions can contain the same harmonies as authentic cadential ones do. Complete progressions include an initial tonic and a pre-dominant; incomplete versions omit one of these functions. All the authentic cadential paradigms (with the adjustments just mentioned) thus apply to the half-cadential progression as well. Several other paradigms, in which the ultimate dominant is approached by descending motion from the sixth degree (usually lowered), are especially associated with that progression (ex. 2.10).

Sequential Progressions

Sequential progressions involve harmonies arranged according to a consistent intervallic pattern among the individual voices of the chords (e.g., a 5–6 soprano–bass pattern).[22] Although some sequential progressions exhibit a degree of harmonic functionality among their constituent chords, this aspect of the progression is secondary to the fundamental purpose they are meant to serve—to move the music away from, or return it to, a particular harmonic function or tonal center. Thus sequential progressions are especially suitable for destabilizing harmonic activity in a given key or for modulating from one key to another.

A sequential progression normally begins with a chord that has a definite harmonic function within a key. The subsequent chords are linked together according to a particular melodic–contrapuntal pattern and consistent root motion, and the final chord restores a clear functional meaning in either the initial key or, in the case of modulating sequences, a new key.[23]

Sequential progressions can express a large number of melodic–contrapuntal patterns. Moreover, the same progression of harmonies can yield different patterns depending on how the individual notes of the chords are distributed among the voices. As a result, sequential progressions are most easily classified on the basis of the interval generated by the roots of the component chords.

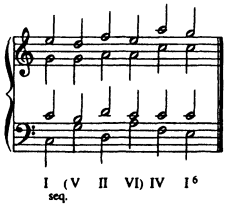
Sequential progressions can feature consistent root motion by descending or ascending fifths, thirds, or seconds, thus yielding six categories of sequential progression.[24] The following discussion treats each category by focusing on the conventional contrapuntal patterns associated with the progressions, as well as the degree of harmonic functionality that they express.

Descending fifth. The most commonly used sequential progression features chords whose roots are organized into a series of descending fifths (or ascending fourths) (ex. 2.11a–b). This "circle-of-fifths" progression (as it is frequently called) can be varied in manifold ways through chord inversion, chromatic alteration, and added dissonances (ex. 2.11c–g).

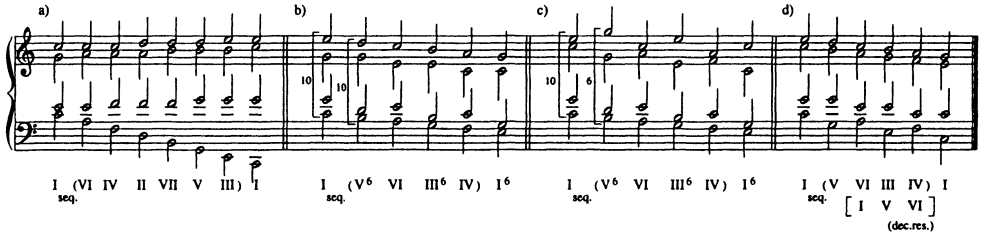
Compared to the other categories of sequential progressions, the descending fifth pattern features the strongest harmonic–functional expression. Since the root motion of a descending fifth lies at the basis of every dominant-to-tonic progression, this functional relation is implied, by analogy, at each link in the sequential chain (e.g., VI–II, or III–VI), even if the "dominant" does not actually contain the leading-tone of the "tonic."[25]

Despite the prominent sense of harmonic functionality inherent in the descending fifth progression, its use nevertheless promotes a weakening of the harmonic–tonal envi-

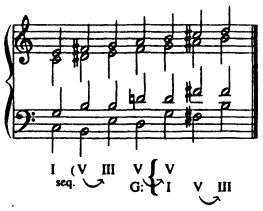
EXAMPLE 2.12 Sequential progressions—ascending fifth



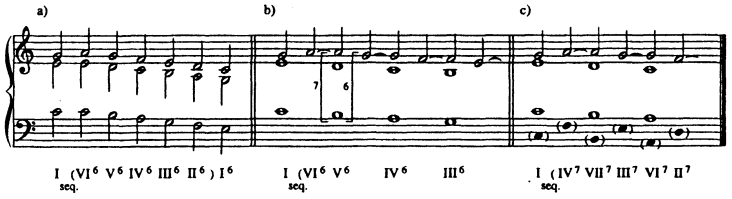
EXAMPLE 2.13 Sequential progressions—descending third



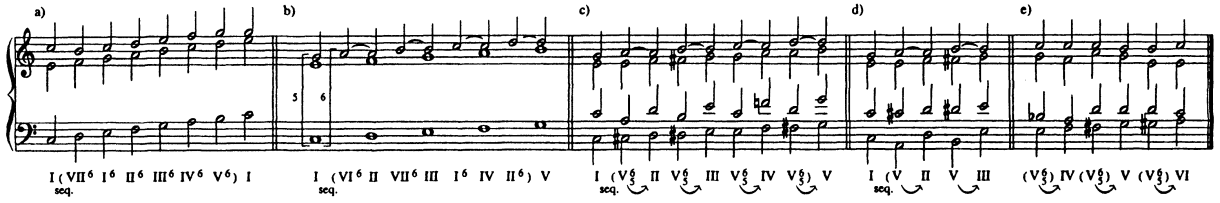
EXAMPLE 2.14 Sequential progressions—ascending third



EXAMPLE 2.15 Sequential progressions—descending second



EXAMPLE 2.16 Sequential progressions—ascending second



ronment. Whereas each link may be functionally related, the overall direction of the progression remains somewhat in doubt until it is completed. To be sure, many sequential progressions have conventional ending points (indeed, the descending fifths progression normally concludes with tonic harmony). But in relation to prolongational or cadential progressions, which strongly imply their final harmony, sequential progressions are more open-ended and often conclude with an unexpected harmony or in a different tonality.

Ascending fifth. The strong functional drive exhibited by the descending fifth pattern is entirely absent in sequential progressions by ascending fifths. Most such sequences begin with tonic harmony and progress to the submediant (ex. 2.12), at which point the sequential chain is broken and the music proceeds to pre-dominant harmony (usually IV).

Descending third. The unembellished form of descending third progressions is illustrated in example 2.13a. More often, however, the leap in the bass voice is filled in by stepwise motion, which produces intervening passing chords in first inversion (ex. 2.13b–c).

The passing chords introduce a degree of harmonic functionality. Since each root-position harmony is followed by a passing chord whose fundamental is a fifth above (or a fourth below), the latter stands as a "dominant" in relation to the former. When the root-position harmony is a tonic, then the passing chord is its literal dominant, and when the root-position harmony is another scale-degree, then the passing chord is a dominant "by analogy." These dominant-like passing chords then resolve deceptively to the next root-position chord, which can be understood as a tonic substitute.[26] This functional interpretation is made even more evident when the passing chords themselves are placed in root position (ex. 2.13d).

Ascending third. The ascending third progression is the least frequently used sequential pattern in the classical repertory. Its unembellished form is rarely, if ever, found. A version employing passing chords is more viable (ex. 2.14). Each passing chord is the "dominant" of the following main harmony of the sequence, and thus a degree of functionality accrues to the progression. Yet even this pattern seldom appears in the literature.[27]

Descending second. Sequential progressions by descending seconds pose a potential problem of voice-leading:[28] if the chords appear in root position, then parallel fifths can easily arise. Therefore, the unembellished form of the descending stepwise progression finds all the chords in first inversion (ex. 2.15a), thereby eliminating any interval of a fifth against the bass. The progression is frequently embellished by a series of 7–6 suspensions (ex. 2.15b). Sequential progressions of this category express little, if any, sense of harmonic functionality, since there is no syntactical relationship between harmonies whose roots move in a stepwise descent.[29]

Ascending second. The potential problem of faulty parallels encountered with the descending second progression applies to ascending ones as well. Using first-inversion triads can eliminate the difficulty (ex. 2.16a), although this version occurs infrequently in the literature. Instead, the stepwise ascent usually remains in root position while the parallel fifths are broken up by means of a 5–6 pattern formed by one of the upper voices against the bass (ex. 2.16b).

This contrapuntal procedure generates intervening first-inversion chords that stand, by analogy, in a dominant–tonic relationship to the succeeding root-position chords. This functional implication can be made even more explicit through chromatic alterations in the bass, so that each six–three chord becomes a genuine secondary dominant (ex. 2.16c). Finally, a more emphatic dominant-to-tonic expression is produced when the intervening chords themselves are placed in root position (ex. 2.16d).

Like descending second progressions, ascending second ones have little inherent functionality. Nevertheless, the passing chords that tonicize each member of the sequence (either literally or by analogy) and the ascending motion of every voice help propel the progression forward and create a powerful tension-building effect.

One form of the ascending stepwise progression resembles an embellished version of the deceptive cadential progression (ex. 2.16e).[30] The potential ambiguity of this progression can be effectively exploited by composers who wish to make obscure whether a particular formal unit has a continuation function (as supported by a sequential progression) or a cadential function (as supported by a deceptive cadential progression).[31]

BLANK PAGE