

CLASSICAL FORM



*A Theory of
Formal Functions for the
Instrumental Music
of Haydn, Mozart,
and Beethoven*



WILLIAM E. CAPLIN

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To my parents,

ARTHUR AND NATALIE CAPLIN

PREFACE

This project owes its origins to a specific curricular requirement of all music students at McGill University. Shortly after my arrival here in 1978, I was asked to teach a semester course on form that was restricted to music in the classical style. I soon discovered that the standard textbooks, which surveyed a much broader stylistic field, did not address many issues particularly associated with the music of Haydn, Mozart, and Beethoven. I thus turned back to material that I had first encountered several years earlier in a seminar on musical form given by Carl Dahlhaus at the Berlin Technical University, in which the principal reference work was Erwin Ratz's *Einführung in die musikalische Formenlehre*. I began incorporating into my course at McGill some ideas from this treatise, as well as similar material from *Fundamentals of Musical Composition* by Arnold Schoenberg, with whom Ratz had studied.

My own expansion of these concepts of form reached a sufficient stage of development to begin writing this book during a sabbatical leave in 1984–85. In subsequent years, earlier drafts of this book were used as a reference text in a variety of classes at McGill, as well as at Yale University, the University of Ottawa, and the Université de Sherbrooke. Although I have written this book as a comprehensive theoretical treatise, the reader will quickly discern a distinct pedagogical tone, betraying its origins in the interactive experience of classroom instruction.

AMONG THE MANY PEOPLE who helped me realize this project, I must first mention the considerable stimulus and encouragement offered by Janet Schmalfeldt, with whom I have had a continuing dialogue on almost every topic treated in this book. Her work with me at times approached a collaborative effort, and her teaching of this material helped me shape the diverse collection of ideas and concerns into a systematic theoretical–analytical approach. At various stages of the project I also received significant help and support from Brian Alegant, Bo Alphonse, Elliot Asarnow, Wallace Berry, Richard Braley, William Drabkin, Michelle Fillion, Ingeborg Pfingsten Gürsching, Steven Huebner, Patricia Kerridge, Cynthia Leive, Donald McLean, Leonard B. Meyer, Christopher Reynolds, Lewis Rowell, Norma Sherman, Peter Schubert, and Elaine Sisman. In addition, I owe much gratitude to the many students at McGill whose response to my

teaching stimulated many new ideas and helped keep me honest. I particularly want to acknowledge the efforts of Patrick McCreless, William Rothstein, and M. Evan Bonds, who read substantial portions of the book and offered numerous suggestions for its improvement. All remaining errors and misinterpretations are, of course, entirely my responsibility.

The musical examples were prepared with the help of Peter von Holtendorff, Cathrine McKinley, Suzanne Davies, William Brock, François de Médicis, and James Wright; I thank Keith Hamel for allowing me to use early versions of his music notation program NoteWriter II. I also thank Maribeth Payne and her colleagues Soo Mee Kwon and Cynthia Garver at Oxford University Press for their interest in my work and for their many suggestions on how to make it a viable publication. Finally, my wife, Marsha, has sustained me throughout my endeavors to bring this work to completion; for her patience and encouragement I am especially grateful.

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Montreal
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W. E. C.

NOTE ON THE MUSICAL EXAMPLES

I have used as many musical examples as feasible to illustrate the theoretical issues presented in this book. In order to draw maximum efficiency from the examples, I have often used single examples to illustrate multiple theoretical issues. As a result, the book contains numerous cross references to examples within and between chapters. Thus I ask the reader to refer to earlier appearing examples and even, though much less often, to look ahead to examples that appear later than their mention in the text. In a number of cases, I have broken up a relatively long musical passage into individual examples, so that the music may be located near its discussion. Starting with part II, the example discussions, which illustrate the immediately preceding points of theory, are printed in reduced type so that they may be distinguished from the flow of the general theoretical presentation.

To save space, I have reset all the examples as "reduction transcriptions," in which the texture is compressed into a single staff. This procedure often resulted in my shifting

the various voices into different octaves and inverting the inner parts. In addition, I sometimes rewrote orchestral accompanimental figurations in order to make them easier to play at the piano. I tried to keep the melody and bass line as close to the original as possible. The added harmonic analyses are based on the complete texture of the original sources and thus may sometimes not correspond exactly to the transcriptions (e.g., a II^{\sharp} label may be used where the transcription merely shows a II^6 chord).

Works by Beethoven are labeled by opus numbers. Works by Mozart are identified by their original Köchel numbers as well as by a revised number, where necessary, from the sixth edition of the Köchel catalogue (e.g., K. 250/248b). Haydn's symphonies are numbered according to Hoboken group I; his string quartets are labeled by their traditional opus number; and his other works are given complete Hoboken numbers. The reference to "piano" in any work citation or caption is generic for the appropriate keyboard instrument.

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CLASSICAL FORM

Watch the harmony;
watch the root progressions;
watch the bass line.

Schoenberg, *Fundamentals of
Musical Composition*

INTRODUCTION

The time is ripe for a new theory of classical form. Despite many recent, distinguished studies devoted to the instrumental works of Haydn, Mozart, and Beethoven,¹ most writers continue to describe the formal organization of this music using ill-defined concepts and ambiguous terminology derived from theories that have long fallen into disrepute. Once a venerable subdiscipline of music theory, the traditional *Formenlehre* (“teaching of form,” often by means of comprehensive treatises) has largely been abandoned by theorists and historians, for many reasons. These include the influence of Heinrich Schenker’s critique of form as a foreground manifestation of more fundamental contrapuntal–harmonic processes; the acceptance of a historicist attitude that eighteenth-century music is best analyzed by eighteenth-century theories; and the mistrust by the “new musicology” of systematic, classificatory models of musical organization.

This book is intended to revive the *Formenlehre* tradition by establishing it on more secure and sophisticated foundations. The theory here formulates coherent principles and proposes clear terminology to serve as theoretical tools for analyzing form at all hierarchical levels in a single movement.² An extensive set of annotated musical examples drawn from the standard instrumental genres illustrates the theoretical concepts and provides models of formal analysis.³

The immediate sources of inspiration for this study are the principles of form introduced by Arnold Schoenberg early in this century and eventually published in his *Fundamentals of Musical Composition*.⁴ Schoenberg’s ideas were then developed by his student Erwin Ratz in *Einführung in die musikalische Formenlehre*. Central to the concern of these theorists is the notion that the formal units of a work play specific roles in articulating its overall structure. Ratz, in particular, proposed a fundamental model (*Urform*) of five “formal functions.”⁵ Whereas his model generally operates at a single, relatively background level of a given composition, the theory developed here identifies a multitude of functions discernible at all levels in a classical movement. Thus this study strives to realize ideals implicit in the writings of Schoenberg and Ratz by formulating a comprehensive theory of formal functions.⁶

Like most theories of form, the various procedures and techniques are investigated in increasing order of complexity, thus following somewhat the hierarchy of an individual movement from the local to the global. To give the reader a general orientation to the theory before plunging into more detailed examinations of specific formal types, the opening chapter of part I (“Preliminaries”) surveys the basic precepts of the theory; the second chapter then defines the fundamental harmonic progressions that play such crucial roles in establishing formal functions. Part II (“Tight-Knit Themes”) describes the principal forms characteristic of main themes—sentence, period, hybrids, small ternary, and small binary. Part III (“Looser Formal Regions”) discusses the formal organization of broader expanses within a movement—subordinate theme, transition, development, recapitulation, and coda. Part IV (“Full-Movement Forms”) examines the large-scale formal designs of entire movements—sonata, sonata without development, large ternary, theme and variations, minuet/trio, rondo, and concerto.

The following points highlight features of the theory that distinguish it from earlier theories of musical form in general and classical form in particular.

The theory is based on music of a single style. My investigation is limited to the instrumental music of Haydn, Mozart, and Beethoven as representing the core repertory of the high Viennese classical style (ca. 1780–1810).⁷ This restriction is due as much to theoretical as to practical considerations. Though extraordinarily individualistic in melody, rhythm, and dramatic expression, works in this style are grounded in a highly sophisticated set of compositional conventions, what are identified here as formal functions. Indeed, a good deal of the aesthetic pleasure that we gain from listening to this music involves the interaction of our (often unconscious) understanding of functional norms with their particular manifestations in a given work. Although tonal music from earlier and later periods (baroque, early classical, romantic, and late romantic) also exhibits formal functionality in a variety of ways, form in these periods is considerably less conventional, thus frustrating the establishment of general principles. In classical music, how-

ever, formal functions can be defined and illustrated with much greater clarity.

The theory emphasizes the role of local harmonic progression as a determinant of form. Theorists and historians widely recognize that the form of a classical work is determined in large part by its pitch organization. Most current discussions, however, have centered on how the succession of various tonal regions or keys within the home tonality is responsible for creating relatively high level formal designs.⁸ Less attention has been paid to how formal functionality at a movement's lower levels is defined by specific progressions of harmonies in a given tonal center, be it the home key (tonic) or related keys (dominant, mediant, etc.). In my theory, local harmonic progression is held to be the most important factor in expressing formal functions in themes (or themelike units). This detailed study of the ways in which surface harmonies and their progressions relate to form distinguishes my approach from virtually all previous theories.

The theory clearly distinguishes formal function from grouping structure. To the extent that traditional theories of form employ labels indicating formal functionality (like antecedent, consequent, main theme, transition, exposition, and coda), such identifications usually correspond directly to a work's "grouping structure"—that is, to the variety of discrete time spans organized hierarchically in a work.⁹ In other words, a given musical group (unit, part, section) is assigned a single functional label, and, conversely, a given function is understood to take place within the confines of a single group. In the theory presented here, on the contrary, formal functionality arises from harmonic, melodic, and rhythmic processes that are not necessarily the same as those that create the work's grouping structure. Function and group are often congruent, but this need not always be the case. In some situations, a group may express more than one function simultaneously; for example, continuation and cadential functions may fuse together in a single four-measure phrase (see chap. 3). At other times, several consecutive groups may express the same formal function, such as when a number of distinct phrases with highly contrasting melodic-motivic material are supported by one expanded cadential progression (see chap. 8). Finally, a given group can at first be understood as expressing a particular function but then be reinterpreted as another function (e.g., codettas of postcadential function are frequently understood retrospectively as an initiating function).¹⁰ Thus in this theory, grouping structure and formal function are conceived as different, yet interactive, dimensions of musical form.

The theory minimizes motivic content as a criterion of formal function. Most theories of form rely heavily on the identification of melodic and motivic relationships for determining a work's formal organization. To be sure, the grouping structure of a given piece is often based on similarities and

dissimilarities of melodic-motivic material. But contrary to common opinion, the formal function of an individual group does not depend on its motivic content. The appearance of a particular melodic motive—leaving aside its implied harmony—rarely determines its formal expression. In fact, a single motive can saturate a musical composition without obscuring the form, precisely because motives carry little in the way of functional implications.¹¹ Given that this theory minimizes motivic relationships as a criterion of formal functionality, it largely sets aside, ironically, Schoenberg's own preoccupation with *Grundgestalt* and "developing variation."¹²

The theory establishes strict formal categories but applies them flexibly in analyses. One reason that the traditional *Formenlehre* has fallen out of favor with many historians and theorists is their belief that the use of rigid, abstract categories of form results too often in procrustean analyses that obscure diversities in style and distort the individuality of the musical work. Yet forsaking categories would make it almost impossible to generalize about formal organization, and such a situation runs counter to most musicians' intuitions that classical form features regularly recurring patterns of conventionalized procedures. Alternatively, broadening the categories to accommodate virtually all formal instances would seriously undermine the general theoretical framework, throw into doubt the meaning of the categories, and obscure the line between what is, or is not, an exemplification of a given formal procedure.

In this book, categories of form are defined in as precise and restricted a manner as possible. These categories are comparable to what Carl Dahlhaus, following Max Weber, calls "ideal types" (*Idealtypen*) and thus represent abstractions based on generalized compositional tendencies in the classical repertory. A category is not necessarily meant to reflect frequency of occurrence in a statistical sense: it is often the case that relatively few instances in the repertory correspond identically to the complete definition of a given category. Nor are categories meant to represent standards of aesthetic judgment, such that passages deviating from the norm are devalued in any respect.

By strictly defining categories of form, it is possible to apply them in analysis with considerable flexibility. Although many situations can easily be seen as exemplars of a given category or procedure, many others defy simple classification. In such cases, one can present the range of options and identify which individual characteristics of the musical passage conform to, and depart from, the definitions of established formal conventions.

It is important from the outset that certain limitations of the theory be clearly spelled out.

The theory is not a comprehensive account of "form" in music. Many of the phenomena and issues broadly associated with "musical form" are not treated here. For example, the role of motivic development in delineating form is, as already

discussed, largely downplayed in this study. The notion of form as “durational proportions” is not explored except to the extent that relatively symmetrical phrase groupings (4 + 4, 8 + 8) are contrasted with asymmetrical ones as more or less appropriate to certain formal situations.¹³ The ways in which the “dynamic curve” of a work helps define its form are discussed in a number of contexts but are not studied exhaustively.¹⁴ The relationship of formal function to Schenker’s conception of form and to other approaches influenced by him are barely touched on.¹⁵ Finally, many traditional *Formenlehren* include considerable material on the various genres of musical composition. Matters pertaining to genre arise now and then in this book, but much information has been omitted because of its ready accessibility in the standard sources (*New Harvard Dictionary*, *New Grove*).

The theory does not include late-eighteenth- and early-nineteenth-century accounts of form. Much of the recent work on classical form has been inspired by a renewed interest in the authority of theorists contemporary to classical composers.¹⁶ Some music historians are thus likely to be disappointed that the theory presented here makes little reference to earlier writings on form. This omission is largely motivated by the goal of developing a modern theory, one that permits an unfettered rethinking of formal issues while

taking advantage of the full history of music-theoretical thought (which certainly includes the work of theorists postdating the classical period). As fascinating and suggestive as contemporary writings may be, their ideas on musical form are limited by a rudimentary theory of harmony (which understands little about harmonic progression at multiple levels) and a lack of familiarity with the huge classical repertory that we have at our fingertips today. An investigation of the extent to which late-eighteenth- and early-nineteenth-century theory incorporates form-functional observations would be highly revealing, but it must be postponed for a later study.

The theory is empirical and descriptive, not deductive and prescriptive. The account of classical form given here is a “theory” only in an informal sense (though no less rigorous in intent). Principles are derived from empirical observation and are largely descriptive. No attempt is made to ground the concepts in some broader system of mathematics, logic, cognition, or the like, and no proof is offered for the many assertions made. For some scholars, what is presented here would indeed not even count as a legitimate theory. I reject the notion that a humanistic theory must resemble a scientific, axiomatic system, but I welcome any future attempt to formalize the observations and principles proposed in what follows.

■ I

PRELIMINARIES

Some Basic Formal Functions: An Overview

Most musicians have a general notion of what constitutes musical form. If asked, they would probably respond that form concerns itself with how the various parts of a composition are arranged and ordered; how standard patterns of repeated material appear in works; how different sections of a work are organized into themes; and how the themes themselves break down into smaller phrases and motives.¹ Indeed, this general understanding of form is a fairly accurate one and can be used as the basis of a more detailed investigation into how the parts of a musical work are defined and distinguished from one another.

More technically, the form of a musical work can be described minimally as a hierarchical arrangement of discrete, perceptually significant time spans, what has been termed the *grouping structure* of the work.² Each *group*—a self-contained “chunk” of music (as psychologists would say) at one level of the hierarchy—can be identified most neutrally in terms of its measure length. Thus we speak of a two-measure idea grouping with another two-measure idea to form a four-measure phrase, which in turn may group with another phrase of the same length to form an eight-measure theme, and so on. (Grouping structures are not always so symmetrical, of course.)

Such identifications by measure length have limited value, since they say nothing about the content of the groups or how they relate to one another (except in regard to duration). Thus, most of the traditional theories of form identify some groups with labels, such as letters of the alphabet, which indicate whether the musical content of a group is the same as, similar to, or different from, another group (e.g., A–A', A–B–A'). Even more precise are labels that specify the *formal function* of the group—that is, the more definite role that the group plays in the formal organization of the work. For example, a given four-measure group may stand as an “antecedent” phrase in relation to a following “consequent”; an eight-measure group may serve as the “main theme” of a minuet; or a seventy-three-measure group may function as the “development section” in a sonata.

The theory presented here develops a comprehensive set of such functions with the goal of analyzing classical form more precisely than it has been before. In addition, the the-

ory defines a set of formal *processes* (e.g., repetition, fragmentation, extension, expansion) and a set of formal *types* (e.g., sentence, period, small ternary, sonata, rondo). Along the way, a host of concepts associated with harmony, tonality, and cadence are introduced and examined. The purpose of this chapter is to present some fundamental principles of the theory by way of selected excerpts from the Viennese classical repertory. Since what follows in this chapter is merely introductory, many of the ideas are only partially explained. The reader thus may wish at times to look ahead to later chapters, in which all the concepts are fully developed and illustrated and more complete references to the scholarly literature are cited.

I begin by illustrating the concept of formal function in connection with the three most important theme-types of classical instrumental music—the sentence, the period, and the small ternary. Each contains a conventional set of formal functions that operate in the structural boundaries of the theme. Next I examine some additional functions that frame the boundaries of these themes. Finally, I consider how themes themselves can acquire unique formal functions at a higher level of structure, namely, the exposition section of sonata form.

SENTENCE

Example 1.1, the main theme from the first movement of Beethoven's Piano Sonata in F Minor, Op. 2/1, presents perhaps the most archetypal manifestation of the *sentence* form in the entire classical repertory. Indeed, this passage was used by Arnold Schoenberg (the virtual discoverer of the sentence as a distinct theme-type) for his initial example of the form, and his student Erwin Ratz followed suit in the introductory chapter of his treatise.³

The sentence is normatively an eight-measure structure.⁴ It begins with a two-measure *basic idea*, which brings in the fundamental melodic material of the theme. The basic idea frequently contains several distinct *motives*, which often are developed in the course of the theme (or later in the movement).

EXAMPLE 1.1 Beethoven, Piano Sonata in F Minor, Op. 2/1, i, 1–8

EXAMPLE 1.2 Beethoven, String Quartet in F, Op. 135, iii, 3–10

We can readily identify two motives (“a” and “b”) in this basic idea. But because Beethoven gives them to us in the form of a single gesture, we should thus regard the basic idea, not the individual motive, as the fundamental building block of the theme. Beethoven uses specific compositional devices later in the theme to highlight more clearly the motivic duality of the basic idea.

The basic idea is repeated in measures 3–4. This repetition has a number of significant effects, two of which can be mentioned at this point. First, repeating the basic idea helps the listener learn and remember the principal melodic-motivic material of the theme. Second, repetition plays an important role in demarcating the actual boundaries of the idea: although the quarter-note rest at the end of measure 2 suggests that the basic idea has ended, the sense of ending is confirmed when we perceive the idea starting over again in measure 3. As a result of repetition, the basic idea has been unequivocally “presented” to the listener, and so we can speak of this music fulfilling *presentation* function and label the first four measures a *presentation phrase*.⁵

Let us now consider the harmonic context in which the basic idea and its repetition are presented, for the underlying harmony of a passage is an essential criterion of its formal function. The basic idea expresses the root-position tonic of F minor (the home key), and the repetition expresses the dominant. The basic idea is thus given originally in a *tonic version*, also termed a *statement*, and the repetition in a *dominant version* or *response*; such an arrangement results in a *statement–response repetition* of the idea.

When the $V\frac{4}{3}$ of measures 3–4 resolves to I on the downbeat of measure 5, we can characterize the resulting harmonic progression as *tonic prolongational*. As a general rule, all presentation phrases have tonic harmony at their basis. This tonic may be extended literally for four measures or, more frequently, be expressed by a prolongational progression featuring neighboring or passing chords. A presentation is thus defined not only by its melodic-motivic content but also by its harmonic organization.

At this point we can observe a third significant effect of repeating a basic idea. Immediate repetition within a presentation has the result of separating the individual ideas from each other. At the end of the phrase, we do not have the impression that thematic closure (or “cadence”) has been achieved. On the contrary, the strongly ongoing quality created by a presentation generates demand for a *continuation phrase*, one that will directly follow, and draw consequences from, the presentation.

The formal function of *continuation* has two outstanding characteristics: *fragmentation*, a reduction in the size of the units; and *harmonic acceleration*, an increase in the rate of harmonic change. Both characteristics are manifest in this sonata theme.⁶

In the presentation phrase, the size of the constituent units (i.e., the basic idea) is two measures. At the beginning of the continuation phrase, the units are reduced by a half. As in the presentation, the immediate repetition of the units helps clarify their size. When we hear the material of measure 5 starting over again in measure 6, we realize that the

unit is only one measure long. In this example, the fragments derive motivically from the preceding ideas. But such a motivic connection need not occur, for the concept of fragmentation exclusively concerns the *length* of the musical units, not necessarily their motivic content.

In the presentation phrase, the harmony changes every two measures. In the continuation, there is a steady acceleration in the harmonic rhythm. It is a particular feature of this theme that each of the component units through measure 6 contains a single harmony, and therefore fragmentation and harmonic acceleration go hand in hand. In many cases, however, these processes are not congruent. We will encounter examples in which the units decrease in size within a uniform harmonic rhythm or, conversely, in which an increase in the rate of harmonic change occurs without any corresponding fragmentation of the units.

Let us now briefly examine the motivic organization of the continuation phrase. We have already seen that the fragmented units derive from the basic idea. To create the fragmentation, Beethoven simply detaches motive "b" from the basic idea, thus giving that motive special attention. Another way of understanding this process is to say that motive "a" has been largely eliminated, that all that remains is the leaping grace note of measures 5–6 and the arpeggiated chord in measure 7. In that same measure, the sixteenth-note triplet, the most prominent rhythmic idea of motive "b," is abandoned, and the melodic descent occurs via eighth notes instead. This systematic elimination of characteristic motives is termed *liquidation*. Fragmentation and liquidation frequently work together, as in this example. In principle, however, they are different compositional processes: fragmentation concerns the lengths of units, and liquidation concerns the melodic–motivic content of units.

The continuation phrase of this sentence ends with a *half cadence* (HC), which effects closure for the entire theme. *Cadential* function is the third formal function—beside presentation and continuation—in the sentence theme-type.⁷ A cadential idea contains not only a conventionalized harmonic progression but also a conventionalized melodic formula, usually of falling contour. The melody is *conventional* because it lacks motivic features that would specifically associate it with a particular theme. In this sense, the cadential idea stands opposed to the basic idea, whose *characteristic* motives are used precisely to define the uniqueness of the theme. When we hear measures 1–2, we immediately identify them as belonging to a specific piano sonata by Beethoven, but when we hear measures 7–8 alone, we could well imagine them closing any number of themes from different works.

We can now understand that the purpose of motivic liquidation is to strip the basic idea of its characteristic features, thus leaving the merely conventional ones for the cadence. Not all themes feature liquidation, and when they do not, the composer achieves the same end by simply

abandoning material from the basic idea and writing a cadential melody that is not directly derived from the earlier idea.

Although continuation and cadential are separate functions, we can observe that the cadential idea of measures 7–8 grows naturally out of the preceding measures. The processes of fragmentation, harmonic acceleration, and liquidation begun in measure 5 extend all the way to measure 8, and thus the cadential material here seems to be genuinely a part of the continuation process as well. Indeed, the two functions of continuation and cadential normally *fuse* into a single "continuation phrase" in the eight-measure sentence. (We will see later in this chapter, in connection with a subordinate theme, that the two functions can occupy individual phrases of entirely different melodic–motivic content.)

A second example illustrates again the main features of the eight-measure sentence and also reveals some additional characteristics of the basic functions already introduced. Example 1.2 forms the opening theme of the slow movement from Beethoven's final published work, the String Quartet in F, Op. 135. (The theme proper begins in measure 3; it is preceded by a two-measure introduction, to be discussed in connection with ex. 1.5.) Measures 3–4 bring a basic idea whose repetition in the following two measures creates a presentation phrase. The subsequent continuation features fragmentation of the two-measure idea into one-measure units and concludes with a *perfect authentic cadence* (PAC) in measure 10.⁸

Let us now examine some details that distinguish this sentence from the preceding one. As before, the presentation phrase prolongs tonic harmony in root position.⁹ But whereas example 1.1 contains a statement–response repetition of tonic and dominant versions, the repetition in this example brings no fundamental change of harmony. Such a repetition is termed *exact*, even when there are ornamental differences in melody or harmony.

Another difference between the examples concerns the content of the fragmented units. In the piano sonata, the fragments retain a motive from the basic idea. In the quartet, they bring entirely different melodic material. Yet structural fragmentation can still be identified there despite the lack of motivic connection between the basic idea and the shorter units of the continuation phrase. The fragmented units of this example also display a new, third type of repetition, in which the entire fragment in measure 7 is transposed to different scale-degrees in measures 8–9. This *sequential repetition* is particularly characteristic of continuation function. By convention, we refer to the initial unit as a *model* and each unit of repetition as its *sequence*. Thus sequential repetition can also be termed *model–sequence technique*.

At the harmonic basis of sequential repetition is a *sequential progression* of the harmonies—that is, chords whose roots are organized according to a systematic intervallic

EXAMPLE 1.3 Mozart, *Eine kleine Nachtmusik*, K. 525, ii, 1–8

pattern. In the example here, the roots progress by a series of descending fifths (F, B \flat , E \flat , A \flat , D \flat). Harmonic sequence is an important characteristic of a continuation. The ongoing quality of such a progression—its projection of harmonic mobility—coordinates perfectly with the forward impetus to a goal associated with this formal function.

At this point we may inquire whether the continuation phrase of this excerpt brings about an acceleration of harmonic rhythm, another trait of continuation function. The foreground harmonies progress at a fairly consistent rate of two chords per measure, hence, no acceleration. But this level of harmonic activity does not necessarily conform to our listening experience. The dominant seventh chords that prolong the tonic in the basic idea and its repetition seem not to represent genuine harmonies in their own right; thus we perceive a kind of harmonic stasis throughout the presentation phrase.¹⁰ In comparison, the sequential progression of the continuation phrase brings a palpable sense of harmonic motion and increased activity. We see, therefore, that an analysis of harmonic acceleration can be problematic and requires careful judgment about the relative structural importance of the constituent chords in the progressions.

As in the sonata example, the fragmented units of the quartet lead directly into a cadential figure to close the theme. Here, however, the perfect authentic cadence creates a greater sense of closure than does the half cadence of the previous example.

PERIOD

The two themes from Beethoven just examined exemplify the principal features of the sentence, although they express the main functions of the form in diverse ways. Most fundamentally, the themes differ with respect to their cadential closure. Whereas the sonata theme remains structurally incomplete because of its ending with a half cadence, the quartet theme fully completes its essential harmonic and melodic processes by means of a perfect authentic cadence.

That formal units can express varying degrees of cadential closure allows for the possibility of creating thematic

organization based largely on such cadential differentiation. If an initial unit ending with a weak cadence is repeated and brought to a fuller cadential close, then we can say, following traditional usage, that the first unit is an *antecedent* to the following *consequent*. Together, the two functions of antecedent and consequent combine to create the theme-type normally termed *period*.

Like the sentence, the period is normatively an eight-measure structure divided into two four-measure phrases.¹¹ Example 1.3, the opening of the slow movement of Mozart's *Eine kleine Nachtmusik*, K. 525, illustrates the model period form. Like the presentation of a sentence, the antecedent phrase of a period begins with a two-measure basic idea. The same features of a basic idea discussed in connection with the sentence apply to the period as well. Instead of immediately repeating the basic idea, however, measures 3–4 of the antecedent phrase bring a *contrasting idea* that leads to a weak cadence of some kind.

The notion of a “contrasting” idea must be understood in the sense of its being “not-a-repetition.” The extent to which a contrasting idea differs from a basic idea may be striking, as in the example here. At other times, however, the contrast may be minimal. Nevertheless, the idea in measures 3–4 of an antecedent phrase must be sufficiently distinct from the basic idea that we do not perceive it to be a repetition, for if it were, we might very well believe that a presentation was in the making.

It is difficult to generalize about the nature of a contrasting idea, but we can say that it often features characteristics of continuation function such as fragmentation, an increased rate of harmonic change, harmonic sequence, and a conventionalized melodic formula for the cadence. In Mozart's theme, measures 3–4 (including the upbeat) reveal obvious fragmentation and a degree of harmonic acceleration.

The consequent phrase of the period repeats the antecedent but concludes with a stronger cadence. More specifically, the basic idea *returns* in measures 5–6 and then leads to a contrasting idea, which may or may not be based on that of the antecedent.¹² In example 1.3, measures 7–8 bring a distinctly different melody for the contrasting idea of the consequent. Most important, of course, the contrast-

ing idea must end with a cadence stronger than the one closing the antecedent, usually a perfect authentic cadence.

SMALL TERNARY

A third fundamental theme-type, the *small ternary*, embraces a new set of formal functions. Two basic notions lie at the heart of this three-part design: (1) a relatively closed thematic unit is juxtaposed with a structurally open unit of contrasting content and formal organization, and (2) the original unit is brought back, but in a manner that ensures complete closure of the theme.

This formal scheme is traditionally indicated in letter notation as *A-B-A'*, and for convenience we can continue to use this nomenclature for the small ternary form. Such letter designations, however, are preferably supplemented by descriptive labels that specify more precisely the formal function of the three sections. Thus, the initial section is termed an *exposition*; the later return of that section, a *recapitulation*; and the section that stands between these two, a *contrasting middle*.¹³

The exposition (A) of the small ternary form is frequently built as one of the conventional theme-types already discussed—namely, a sentence or a period. Less conventional thematic designs are occasionally found there as well.¹⁴ As for its tonal plan, the section may remain throughout in its initial tonality, the *home key*, or else the section may modulate to a closely related *subordinate key* (usually the dominant region if the home key is major, or the mediant if the home key is minor). In either case, the exposition confirms that key with a perfect authentic cadence, thus creating sufficient closure to render the exposition a structurally independent section. We could say, indeed, that the A section emphasizes tonic, since its closing chord and (almost always) its opening one express this harmony.¹⁵

The contrasting middle (B) of the small ternary achieves its contrast foremost through harmonic means—namely, by an emphasis on dominant. The final harmony of the section is almost always the dominant of the home key, and frequently the section opens with this harmony as well. In the simplest case, the B section consists entirely of a *standing on the dominant*, a passage supported exclusively by a dominant prolongation.

This harmonic contrast is usually associated with new melodic and rhythmic material. In addition, the section may feature changes in texture, instrumentation, and accompanimental patterns. Contrary to popular belief, however, contrasts of this sort are of secondary importance and are not required of the form. The contrasting middle of many a small ternary is based entirely on the motivic and textural content of the exposition.

Finally, a word must be said about the general phrase-structural organization of the B section. Compared with the

exposition, the contrasting middle is less often composed as a conventional theme-type (indeed, the period form is never found). Rather, the B section has a *loose* organization in relation to the more *tight-knit* A section. Although the distinction between tight-knit and loose organization has an important role in this book, these expressions are first introduced as vague metaphors whose meaning in relation to strictly musical phenomena must eventually be clarified. For the present, I will not attempt to define these notions; rather, I will gradually demonstrate their significance in connection with specific examples and the formal issues they generate.¹⁶

The recapitulation (A') of the small ternary has two main functions: to complete the harmonic-melodic processes left open at the end of the B section (and by a modulating A section) and to create a semblance of formal symmetry by providing a return of the exposition. In order to realize these two functions, the A' section is required, at the very least, to begin with the basic idea of the A section and to close with a perfect authentic cadence in the home key. On occasion, the recapitulation brings back the entire exposition unchanged. More frequently, however, the A' section eliminates unnecessary repetitions or further develops motives from the A section. If the exposition has modulated to a subordinate key, the recapitulation must be *adjusted* to remain in the home key so as to provide tonal unity to the theme.

Example 1.4 shows the main theme of the second movement of Beethoven's Piano Concerto No. 1 in C, Op. 15. The A section (mm. 1–8) is a fully conventional period: a two-measure basic idea is followed by a two-measure contrasting idea, leading to a weak, half cadence in measure 4; a consequent phrase then repeats the material of the antecedent and closes with a stronger, perfect authentic cadence in measure 8.

The B section (mm. 9–14) achieves its contrasting character most obviously by new motivic content. More significantly, however, it contrasts with the exposition by emphasizing dominant harmony. The section not only opens with this harmony but also concludes with a half cadence in measure 12. The cadential dominant is further intensified by its own dominant (V^1/V), both preceding and following the cadence. From the upbeat to measure 9 through the beginning of measure 10, the dominant scale-degree also is emphasized when the bass line leaps down to the low E's on the second half of each beat.¹⁷ All this dominant emphasis generates considerable harmonic tension, which is eventually resolved in the recapitulation.

Let us now examine in detail the formal organization of this contrasting middle. The section begins with a new two-measure idea. Like the basic idea of a sentence or period form, this idea is essentially grounded in tonic harmony despite its literal beginning with a dominant. The idea begins to sound again, in the form of an exact repetition, which, if realized, would create a normal presentation phrase. But in

EXAMPLE 1.4 Beethoven, Piano Concerto No. 1 in C, Op. 15, ii, 1–18

A (Exposition)
antecedent

b.i. c.i. consequent b.i. c.i.

Largo

p *cresc.* *sf* *p*

Ab: I... I⁶ V I... *cresc.* II⁶ V(♭⁷) I

HC PAC

B (Contrasting Middle)

new idea standing on the dominant (fragmentation) (lead-in)

p *etc.* *cresc.* *f* *p* *sf* *p*

V⁶ I V⁴/₃ I⁶... *cresc.* V⁴/₃ V (V⁴/₃) V (V⁷) V (V⁷) V

HC

A' (Recapitulation)
consequent

b.i. c.i. (new)

p *etc.* *cresc.* *sf* *p*

I... VII[♭] II⁶ V(♭⁷) I

PAC

the second half of measure 11, the harmony is substantially altered, and the passage arrives on dominant harmony for the half cadence. Following the cadence, measures 12–14 function as a standing on the dominant, within which the unit size is fragmented in measures 12 and 13.

How can we understand the overall phrase structure of this B section? If we focus exclusively on the disposition of its melodic–motivic content, we might be tempted to recognize a sentence form (i.e., a two-measure idea that is repeated and subsequently fragmented). Such a view, however, ignores the fundamental harmonic and cadential organization of the passage and thus misinterprets its form-functional behavior.

First, the opening four measures do not prolong tonic harmony, and thus we cannot speak of a genuine presentation phrase. Moreover, the presence of a cadence at the end of this phrase rules out a presentation, since this function, in principle, does not end with a cadence. The possibility of a sentence is further weakened when we recognize that measure 12 brings the only cadential moment in the passage. Thus unlike a real sentence, the fragmentation of the basic idea follows, rather than precedes, the harmonic–melodic goal. As a result, the conclusion of the harmonic process of

the section (as marked by the half cadence in m. 12) does not coincide with the conclusion of the broader grouping process (end of m. 14), which sees the establishment of an idea, its repetition, and its ultimate fragmentation.¹⁸

Since the sentence model is not applicable to an analysis of the B section, we might wish to consider whether the period model offers any help instead. In particular, the presence of a half cadence at the end of a four-measure phrase suggests an antecedent function. This interpretation is not convincing, however, because measures 11–12 (with upbeat) seem to be more a repetition of the basic idea than a contrasting idea, as expected by an antecedent phrase.

We can thus conclude that the contrasting middle section acquires a nonconventional form as a result of two main features: (1) the initial four-measure phrase is neither a genuine presentation nor an antecedent (although it has elements of both), and (2) the half cadence does not come at the end of the fragmentation but, rather, precedes it. Both these nonconventional aspects yield a significantly looser organization in relation to the more tightly knit periodic design of the preceding exposition.

Let us now turn to the A' section (mm. 15–18). In comparison to the exposition, the recapitulation is significantly

reduced in size and content. Its four measures consist of a restatement of the basic idea from measures 1–2 and a new contrasting idea (i.e., one not found in the A section), which leads to a perfect authentic cadence. In effect, the A' is built exclusively as a consequent. And this phrase alone fulfills the two primary conditions of recapitulation function—opening with the basic idea from the A section and closing with a perfect authentic cadence in the home key.

It is easy to understand why Beethoven does not simply restate the entire period of the A section, for the music that he has eliminated is structurally superfluous. It is unnecessary to bring yet another half cadence (as in mm. 3–4), especially after the dominant emphasis of the B section, and it is redundant to repeat the basic idea (as in mm. 5–6), since the listener is by now familiar enough with this material. A single consequent phrase is thus sufficient to give the impression of recapitulating the essential content of the A section.

FRAMING FUNCTIONS

Up to this point we have been discussing the form-functional constituents of the three principal theme-types: presentation, continuation, and cadential for the sentence; antecedent and consequent for the period; and exposition (A), contrasting middle (B), and recapitulation (A') for the small ternary. All these functions occur within the boundaries of the themes as defined by their structural beginning and end.

Some themes contain music standing outside these boundaries—material that functions as a “before-the-beginning” or an “after-the-end.” These seemingly paradoxical functions can perhaps be made clearer by analogy to a running race. The beginning of the race is literally marked by the opening gun; the end, by the moment when each runner crosses the finish line. But the full experience of the race also includes the time preceding and following these temporal boundaries. The period of time when the runners set themselves up in the starting blocks and wait for the officials to fire the gun is filled with a sense of accumulating tension, which is temporarily released when the race finally gets under way. What happens after the runners cross the finish line belongs to the complete experience of the race as well. The runners do not merely stop cold, but instead they gradually release their physical and psychical energy by slowing down into a sprint, followed by some brief walking.

A musical theme contains similar temporal phases. The theme's structural beginning is articulated by the start of its basic idea; its end is defined by the moment of cadential arrival. Occasionally, the theme is framed by material that precedes and follows these structural limits. Such *framing functions* are termed *introduction* and *postcadential*, respectively.

Introduction

An introduction to a theme (or *thematic introduction*, as it may more technically be called) is generally short, two to four measures at most.¹⁹ Sometimes one or two chords alone suffice, such as at the start of Beethoven's *Eroica* Symphony. The melodic–motivic component of such an introduction is either weakly defined or entirely absent, so that the expression of a genuine basic idea can be saved for the structural beginning of the theme. Thematic introductions usually emphasize tonic harmony, although in certain situations (such as at the beginning of a subordinate theme), dominant harmony may be employed.

Introduction function is well illustrated by example 1.5, which immediately precedes the Beethoven quartet theme discussed in example 1.2. This two-measure introduction presents a gradual establishment of the tonic triad through the staggered entrance of each of the four instruments. Even on first hearing, we would not likely mistake these measures for the beginning of the theme, since they possess no distinct melodic profile. Our impression that they serve an introductory function is confirmed with the arrival of the true basic idea in measures 3–4, marking the structural beginning of the theme.

Despite the lack of motivic material and harmonic progression, these measures institute a distinct *dynamic* process. The term *dynamic* is used here in a broader sense than merely “intensity of sound” (i.e., loud or soft, crescendo or decrescendo). Rather, dynamic activity involves the systematic growing or diminishing of tension and excitement created by a variety of musical means, including changes of intensity. As a general rule, a thematic introduction features what Wallace Berry terms a *progressive dynamic*—one in which there is an increasing buildup of energy and anticipation.²⁰ From a rhythmic point of view, this dynamic growth is usually described as an “anacrusis,” an upbeat, whose corresponding “thesis,” a downbeat, is the structural beginning of the theme.

A progressive dynamic is clearly manifest in this example, not only by the actual crescendo but also by the accumulating texture. In fact, the analogy of runners taking their place in the starting blocks is particularly appropriate here, where each instrument enters one after the next. Moreover, the lack of melodic material creates an anticipation for the appearance of a distinctive melody at the beginning of the theme. A definite anacrusic quality is also present in these measures. When the downbeat at measure 3 arrives, it is interesting to observe how Beethoven suddenly pulls back the intensity level (*sotto voce*). This change in intensity should not be entirely surprising, since the moment of beginning, the downbeat, has sufficient structural weight not to require any additional emphasis.

EXAMPLE 1.5 Beethoven, String Quartet in F, Op. 135, iii, I-4

Introduction

Lento assai, cantante e tranquillo

Va. VI.II 2 VI.I

Vc.

p *cresc.* *sotto voce*

Db: I (V $\frac{4}{3}$) I (V $\frac{6}{5}$)

presentation b.i.

Postcadential Function

Introductions to themes are relatively rare, as most themes literally start with their structural beginning. More frequently, a theme may include postcadential material, music that follows the point of cadential arrival. In general, postcadential functions appear in two main varieties, depending on the type of cadence closing the theme. A perfect authentic cadence can be followed by a *closing section* containing *codettas*; a half cadence can be followed by a *standing on the dominant*, a phrase type already discussed in connection with example 1.4 (mm. 12–14).²¹

Both types of postcadential function prolong the final harmony of their preceding cadence. In addition, both tend to feature a *recessive dynamic*, in which the energy accumulated in the motion toward the cadential goal is dissipated.²²

Closing section, codettas. A closing section to a theme consists of a series of codettas; rarely does a closing section contain a single codetta. In most cases the initial codetta is repeated, after which fragmentation brings reduced versions of the same codetta or else entirely new ones. The grouping structure of an extensive closing section can therefore resemble a sentence.

An individual codetta can be as short as a single chord or as long as a full four-measure phrase. Codettas usually contain melodic–motivic material different from that found in the theme itself, though, at times, material from the opening basic idea or from the closing cadential idea may be reused within the codetta. As a general rule, melodic activity tends to center on the tonic scale-degree in order to preserve the melodic closure achieved by the cadence and to prevent the codetta from sounding like a new beginning.

Harmonically, a codetta prolongs the root-position tonic of the cadence. This prolongation can take a variety of forms. In some cases, a tonic pedal in the bass voice underlies the entire codetta; at other times, tonic and dominant harmonies alternate with each other (the dominant thus functioning as a neighboring or passing chord). Frequently, the tonic prolongation features a local tonicization of subdominant harmony.²³

A codetta occasionally has a cadential progression at its

EXAMPLE 1.6 Beethoven, String Quartet in F, Op. 135, iii, 10–13

Lento assai, cantante e tranquillo

10 11 12 13

p *dim.*

Db: V($\frac{6}{5}$ 7) I⁶ V($\frac{6}{5}$ 7) I IV⁶ V($\frac{6}{5}$ 7) I^{ped.}(IV) I

PAC

closing section codetta frag.

basis. This fact has resulted in some serious misunderstandings about the nature of cadence and codetta. When some theorists or historians refer to the closing section as a “cadential area” or a “cadence phrase,” they are suggesting that the music has a cadential function. But only the material leading to the cadential arrival—the point that marks the structural end of the theme—can truly be said to fulfill cadential function. A closing section (and its constituent codettas), on the contrary, plays an entirely different role, namely, a postcadential one. Thus, whereas an individual codetta may indeed resemble a cadential idea, these two units of musical form remain conceptually (and experientially) distinct.

The Beethoven quartet theme (see ex. 1.2) includes a brief closing section, shown here in example 1.6, which consists of codettas based on the cadential idea of the theme.²⁴ Following the cadence in measure 10, Beethoven writes a one-measure codetta by shifting the cadential melody into the bass voice (played by the cello). He then repeats the codetta in the second half of measure 11 by transferring the idea back to its original location in the upper voice. The passage concludes with a single, short codetta built over a tonic pedal (and including a neighboring subdominant). This final half-measure codetta represents fragmentation in relation to the preceding one-measure codettas.

Standing on the dominant. When a theme (or a portion thereof) ends with a half cadence, the final harmony can be prolonged by means of a postcadential standing on the dominant. We have already seen an instance of this procedure in the Beethoven concerto theme (see ex. 1.4). The B section reaches its harmonic goal with a half cadence on the downbeat of measure 12. The dominant is then prolonged to the end of measure 14 through the use of its own dominant (V/V) as neighboring chords. In this example, the postcadential area is based on material of the half cadence itself. Such a procedure recalls how the quartet theme uses the cadential idea for the codettas. More often than not, however, the melodic–motivic content of a standing on the dominant is entirely new.

INTERTHEMATIC FUNCTIONS: A SONATA EXPOSITION

Up to this point we have been focusing on the functional constituents of individual themes—that is, on the formal properties of the various phrases or sections associated with a single thematic unit. These *intrathematic functions*, as they may be termed, are linked together in a specified order and thus establish a kind of “syntax” of formal organization. Thus, a typically syntactical sequence of functions—presentation, continuation, cadential, and closing section—creates a theme conforming to the formal conventions of music in the classical style. Conversely, the following succession of functions—continuation, closing section, cadential, presentation, and introduction—is entirely nonsyntactical and unstylistic.

Just as the component parts of themes are functionally differentiated, so, too, are the various themes (or themelike units) in movements. Moreover, these *interthematic functions* also occur in a conventionalized order (depending on the full-movement form) and thus give rise to a higher-level formal syntax. To conclude this opening chapter, let us briefly consider the nature of interthematic functionality in connection with the three principal functions of an exposition section of sonata form—main theme, transition, and subordinate theme.

As discussed, the definition of intrathematic formal functions depends largely on their underlying harmonic progressions in a given key. For the interthematic functions, issues of tonality—relations among various keys—come more to the fore. Inasmuch as most complete movements contain multiple themes, tonal monotony would result if all of the themes were to reside in the same key. Consequently, most movements feature a prominent modulation away from the initial home key to a new subordinate key, one that is closely related to, and ultimately dependent on, the home key. Eventually, the home key returns (often after the music has explored additional related keys) and is fully confirmed in order to provide tonal unity to the movement as a whole.

The various themes and themelike units of a movement directly participate in expressing this tonal design; hence, their formal functions are fundamentally based on their relationship to tonality. In a sonata-form exposition, the *main theme* expresses the home key through cadential closure. Likewise, a later-occurring *subordinate theme* confirms the subordinate key. Standing between these two functions is the *transition*, a themelike unit that destabilizes the home key and (usually) modulates to the subordinate key.

Tonal considerations are thus central to the functional distinctions among themes and themelike units. But tonality alone does not account for the differing phrase-structural designs manifested by these functions. Rather, we can invoke again the distinction between tight-knit and loose to help characterize the varying formal organization of the in-

terthematic functions. As a general rule, the main theme is the most tight-knit unit in a sonata exposition, whereas the transition and subordinate theme are distinctly looser in structure.²⁵

As mentioned, tight knit and loose are metaphors that defy simple definition. Yet I can now offer some general observations about which musical factors help create one or the other type of formal expression. Tight-knit organization is characterized by harmonic-tonal stability, cadential confirmation, unity of melodic-motivic material, efficiency of functional expression, and symmetrical phrase groupings. Loose organization is characterized by harmonic-tonal instability, evasion or omission of cadence, diversity of melodic-motivic material, inefficiency or ambiguity of functional expression, and asymmetrical phrase groupings (arising through extensions, expansions, compressions, and interpolations). These distinctions are well illustrated by the exposition from the first movement of Beethoven's Piano Sonata in F Minor, Op. 2/1, whose main theme served as the initial example of this chapter.

Main Theme

As already discussed, the main theme of this exposition is a model sentence form (see ex. 1.1). Tight-knit organization is expressed in a number of ways. Harmonic and tonal stability are created by both the clear establishment of the home-key tonic in the presentation phrase and the cadential confirmation of that key at the end of the continuation. (Greater harmonic stability and a correspondingly tighter form would result if the theme closed with an authentic cadence rather than a half cadence.) The melodic material is unified through the use of motives derived exclusively from the basic idea, and the grouping of this material into two four-measure phrases is highly symmetrical. Finally, the constituent functions (presentation, continuation, and cadential) are presented in the most compact and efficient manner possible. Every detail of the musical organization contributes to the functional expression, and nothing can be eliminated without obscuring an aspect of that functionality.

Transition

The transition, shown in example 1.7, begins in measure 9 and stretches to measure 20. The section begins with a restatement of the main theme's basic idea in the lower voice. The appearance of this idea in a C-minor harmony throws the prevailing tonal context into doubt, for this minor harmony would not normally be interpreted as dominant in the home key of F minor. (A genuine dominant harmony contains the leading-tone of the key.) Instead, these measures suggest tonic in C minor, analogous to the harmonic-tonal context at the beginning of the main theme (see ex. 1.1, mm. 1–2).

EXAMPLE 1.7 Beethoven, Piano Sonata in F Minor, Op. 2/1, i, 9–20

Transition

b.i. continuation (frag.) cad. standing

Allegro

c: I (V)
f: V?

Ab: VI (III)
IV⁴/₃
VI³
VI⁷
II⁷
III⁴/₃
V⁴/₃
VI
I
II⁶ (V⁵/₄)
V
I⁶

on the dominant

II⁶ (V⁵/₄) V I⁶ II⁶ (V⁵/₄) V (no cadence)

EXAMPLE 1.8 Beethoven, Piano Sonata in F Minor, Op. 2/1, i, 21–48

Subordinate Theme presentation

b.i. continuation etc.

Allegro

Ab: V ped. [(V⁷) I (V⁷) I] I⁶ V⁶ I VII⁶

V... I⁶ E.C.P. II⁶ V(5/4) I VII⁷

cadential (rep.) closing codetta

V(5/4) I I⁶ E.C.P. II⁶ V(5/4) I VII⁷

section

V(5/4) I... I

The basic idea is neither repeated (as in a presentation phrase) nor juxtaposed with a contrasting idea (in the manner of an antecedent). Rather, it is followed by four measures that display features of continuation function: fragmentation into one-measure units (cf. mm. 5–6 of the main theme), acceleration of harmonic rhythm, and a descending fifth sequential progression.²⁶ In measures 15–16, the tonal context is finally clarified when the continuation phrase concludes with a half cadence in the subordinate key of A♭ major. Beethoven then extends the sense of arrival by twice repeating the half-cadence idea, thus creating a postcadential standing on the dominant for four measures.

How does this transition express a looser organization? Most obviously by its harmonic and tonal instability in relation to the main theme. At first, the sense of home key is disrupted by the C-minor harmony, which seems to function as a new tonic. But the key of C minor never receives cadential confirmation, nor is its tonic even prolonged by a dominant (as in mm. 3–4 of the main theme). The subsequent move to A♭, the genuine subordinate key, renders the transition modulatory. Additional harmonic instability is imparted by the sequential progression and by the dominant emphasis of the postcadential area.

In addition to harmonic-tonal means, the transition acquires a looser organization by virtue of its asymmetrical grouping structure—2 mm. (basic idea) + 6 mm. (continuation) + 4 mm. (standing on the dominant). Moreover, the formal functions of these groups, though fully identifiable, are not as efficiently expressed or as clearly defined as are those in the main theme. For example, the continuation is *extended* by two measures over its typical four-measure length in a tight-knit sentence.²⁷ Since these two measures are not essential for establishing continuation function, their presence creates a degree of redundancy that loosens the functional expression. Moreover, the moment of cadential arrival at measure 16 is somewhat obscured by the repetition of the half-cadence gesture within the standing on the dominant (which dominant chord—m. 16, m. 18, or m. 20—represents the real cadence?). Finally, the lack of a full presentation phrase renders the transition's beginning less solid, and so looser in expression, than the opening of the main theme.

With respect to this last point, the absence of a presentation must not be seen to reflect a compositional weakness. An additional statement of the basic idea is hardly necessary in light of its firm establishment in the presentation of the main theme. Likewise, the foregoing observations on functional inefficiency and cadential obscurity are not meant to imply a faulty structure of any kind. On the contrary, these loosening techniques are entirely appropriate to the transition's fundamental functions—namely, to destabilize the home key, to effect a modulation to the subordinate key, and to motivate the appearance of the subordinate theme, which will eventually confirm the new key.

Subordinate Theme

The subordinate theme, shown in example 1.8, begins with a new two-measure basic idea. (This "new idea" is actually an inverted variant of the main theme's basic idea; see ex. 1.1, mm. 1–2.) With the repetition of this basic idea in measures 23–24, the melodic-motivic requirement for presentation function is fulfilled; however, we may wonder whether the harmonic requirement—the presence of a tonic prolongation—is satisfied as well.

At first glance, measures 21–24 would seem to prolong dominant harmony (of A♭ major) as a result of the bass pedal. But temporarily ignoring the pedal, we can also hear a tonic prolongation, since the goal of the melody, the A♭ on the third beat of measure 22 (and m. 24), demands to be supported by this harmonic function.²⁸ In this latter interpretation, the tonic is not merely a neighboring chord to the preceding and following dominant; rather, the dominant is subordinate to the tonic. We can thus recognize two levels of harmonic activity in this phrase: (1) a surface level containing the tonic prolongation, which satisfies the harmonic requirement of presentation function, and (2) a deeper level containing the dominant prolongation (created by the bass pedal), which undermines, but does not obliterate from our perception, the lower-level tonic prolongation.²⁹

A continuation phrase starts in measure 25. The basic idea begins to be repeated again, but before reaching completion, the melodic line leads abruptly into a new eighth-note motive ("x"). The continuation develops this motive, fragments the preceding two-measure units of the presentation phrase into half-measure segments, and accelerates the harmonic rhythm.

The continuation reaches a climax at measure 33 with a prominent arrival on I⁶. At this point, too, the melodic and rhythmic material changes when motive "x" gives way to a long, descending scale passage. The resulting four-measure phrase is then repeated (beginning in m. 37) and extended by an extra measure in order to bring a perfect authentic cadence on the downbeat of measure 41. To understand the formal function of this new phrase (and its repetition), it is necessary to carefully examine its underlying harmonic organization.

The repeated phrase (mm. 37–41) features a complete authentic cadential progression: I⁶–II⁶–V([♯])–I. The initial phrase (mm. 33–36) is also based on this progression, but the promised cadence is *evaded* when the bass descends stepwise (through a V[♯] chord) onto the I⁶ in measure 37, which initiates the repetition of the phrase.

In all the themes that we have looked at so far, the authentic cadential progression is a relatively short harmonic formula constituting the last part of a continuation or consequent phrase. In this example, however, the cadential progression is expanded to the extent that it supports an entire phrase, one whose melodic-motivic content fully distin-

guishes it from the preceding continuation. A phrase built exclusively on such an *expanded cadential progression* (E.C.P.) can be said to have a uniquely cadential formal function.

Following the authentic cadence in measure 41 comes a section made up of three short codettas (mm. 42–48). In traditional theories of sonata form, such a passage is often termed a “closing theme” or even a “cadence theme.” Since these codettas do not constitute a genuine theme in the sense developed in this study and since they are clearly postcadential in function, we can label these measures a closing section, as defined earlier in this chapter.

Let us now interpret the structure of the subordinate theme (including its closing section) in terms of the criteria for tight-knit and loose formal organization that I have developed thus far. In comparison to the eight-measure main theme, the subordinate theme distinguishes itself most obviously by its greater length—twenty-eight measures. Within its temporal boundaries, the subordinate theme consists of the same formal functions found in the main theme: presentation, continuation, and cadential. However, these functions assume a distinctly looser form. In the tight-knit sentence of the main theme, continuation and cadential functions are fused into a single four-measure continuation phrase. The entire theme thus acquires a symmetrical 4 + 4 grouping structure. The subordinate theme, on the contrary, becomes considerably looser when the continuation and cadential functions are given their own distinct phrases that possess a different melodic–motivic content and harmonic progression. Moreover, these functions are both extended and expanded to create an asymmetrical 4 + 8 + 4 + 5 grouping structure for the theme proper. Adding seven measures of the closing section (grouped 2 + 2 + 3) further lengthens the theme and renders it all the more asymmetrical.

Distinguishing between processes of extension and expansion is useful and important, especially since this subordinate theme features both loosening devices.³⁰ *Extension* results from “adding on” material to stretch out a particular formal function in time. Continuation phrases are frequently extended when more units of fragmentation are included in the phrase than are necessary to express the function. It usually takes only two measures of fragmentation to make the continuation function evident to the listener; thus the sense of continuation is fully manifest in this subordinate theme by the end of measure 27. But Beethoven then extends the phrase by five more measures of fragmented material (mm. 28–32) and thereby significantly loosens the functional expression of the phrase.³¹

Extension can also occur with cadential function. In that case, an implied cadence fails to materialize, and the function is repeated in order to achieve the cadential goal. The subordinate theme could have closed with an authentic cadence in measure 37, but the cadential evasion motivates a repetition of the entire cadential phrase that substantially

extends the function. Delaying the expected cadence makes its eventual arrival seem all the more powerful, thus dramatically reinforcing the subordinate theme’s primary function of confirming the subordinate key.

Whereas extension occurs after a function has already been expressed, *expansion* arises in the process of establishing the function. Expansion involves the internal lengthening of component members of the function over their normative size in tight-knit themes. This loosening technique is most commonly associated with cadential function, in which the individual harmonies of the cadential progression are lengthened compared with their relatively compressed appearance (usually in two measures) at the end of a tight-knit phrase.³² Expansion thus resembles the rhythmic technique of “augmentation,” in which the durational values of the individual notes of an idea are systematically increased so that the original proportional relations among the durations is retained (i.e., doubled or quadrupled). In this subordinate theme, the component harmonies of the cadential progression are twice the length of those in the main theme (cf. ex. 1.1, mm. 7–8). But expansion technique does not require that the durational proportions of the normative form be strictly maintained. A single harmony of the cadential progression, for example, can become highly expanded in relation to the other harmonies (a procedure exemplified in the discussion of subordinate theme organization in chap. 8).

We have seen how extension and expansion significantly loosen the continuation and cadential areas of this subordinate theme. The presentation is loosely organized as well, although it achieves its looser form not by phrase-structural means but by harmonic ones, namely, its underlying dominant pedal. As pointed out, the foreground harmony of the passage projects a tonic prolongation, but this inherent harmonic stability—particularly appropriate to the expression of a structural beginning—is undermined by the destabilizing dominant prolongation, a progression more naturally associated with an after-the-end, postcadential function (or sometimes a structural middle, as in small ternary form).³³ Consequently, the harmonic situation at the opening of this subordinate theme is not entirely supportive of an initiating formal function, and a looser organization is created from the resulting functional ambiguity (is the phrase still part of the preceding standing on the dominant, or is it a new beginning?).

If the subordinate theme is distinctly looser than the main theme, how does the former stand in relation to the transition section, which also features a looser organization? In general, it is difficult to compare degrees of loosening between transitions and subordinate themes, since both functions use many of the same loosening techniques. Nevertheless, somewhat different devices tend to be emphasized by the two functions. In this exposition, the transition is rendered loose by harmonic, tonal, and cadential means,

whereas the subordinate theme acquires its looser form from extensions and expansions of the grouping structure.

Although it may be difficult to judge whether in a sonata exposition a given transition is more or less loose than a subordinate theme, the subsequent development section is

almost always distinctly looser than any of the interthematic functions in the exposition. Indeed, a development combines harmonic-tonal instability with phrase-structural extensions and expansions to create the most loosely organized part of an entire sonata movement.³⁴

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 progres-

sion 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 *pre-dominant* 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 (VII⁶) and the leading-tone seventh chord (VII⁷ 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 non-tonic harmonies (such as III).

3. *Pre-dominant function.* The large number of pre-dominant 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

a) $I_{ped.} (IV \ V^7) I$ b) $I_{ped.} (V^7 \ IV \ V^7) I$ c) $V_{ped.} (I \ V \ I \ V \ VII^7) V$

EXAMPLE 2.2 Prolongational progressions—neighboring chords

a) $I (V) I$ b) $I (V^{\flat}_2) I$ c) $I (VII^7) I$ d) $I^{\flat} (V^{\flat}_2) I^{\flat}$ e) $I (IV) I$ f) $I (IV^6) I$ g) $I (IV^6 \ V^{\flat}_2) I$ h) $I (IV^{\flat}_2 \ V^{\flat}_2) I$ i) $I (\Pi^{\flat}_2 \ V^{\flat}_2) I$

EXAMPLE 2.3 Prolongational progressions—passing chords

a) $I (VII^6) I^{\flat}$ b) $I (V^{\flat}_2) I^{\flat}$ c) $I (m^7) I^{\flat}$ d) $I (V^{\flat}_2) I^{\flat}$ e) $IV^6 (I^{\flat}_2) IV$ f) $V (IV^6) V^{\flat}_2$ g) $I (IV^6) I^{\flat}$ h) $I (V^{\flat}_2) I^{\flat}$

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 (II^6) is the more characteristic pre-dominant. Both II^6 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 ($\flat II^6$) 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 VII^7/V ; the less dissonant V^6/V and V^{\flat}_2/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 har-

mony 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 II⁷ harmony. Not only is the progression I-II⁷-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 m⁷ (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

a) b) c) d) e) f) g) h)

I (VI) I⁶ I⁶ (VI) II⁶₃ IV (II) V I (V⁶) VI IV⁶ (I⁶₂) II⁶₃ I (III)_p IV II (IV)_p V I ⁷ IV

EXAMPLE 2.5 Authentic cadential progressions—basic

a) b)

I⁶ II⁶ V⁷ I I⁶ IV V I

EXAMPLE 2.6 Authentic cadential progressions—dominant embellishment

I⁶ II⁶ V(♯⁷) I

EXAMPLE 2.7 Authentic cadential progressions—pre-dominant embellishment

a) b) c) d) e) f) g) h) i)

I⁶ bII⁶ V⁷ I bII⁶ V(♯⁷) I I⁶ II⁶(VII⁷)V⁷ I II⁶(VII⁷)V(♯⁷) I IV (V⁶) V I bII⁶(VII⁷)V I I⁶ VII⁷ V⁷ I (♭⁷)VII⁷V(♯⁷) I

j) k)

II V I IV⁶ V⁷ I I⁶ A⁶ V(♯⁷) I (Ger.)

EXAMPLE 2.8 Authentic cadential progressions—initial tonic embellishment

a) b) c) d)

I II⁶ V(♯⁷) I V⁶₂ I⁶ II⁶ V⁷ I V⁶₃ IV V⁷ I VII⁶₂ II⁶ V⁷ I

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 II⁶ 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 II⁶ 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 II⁶ 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 II⁶ and IV, the “Neapolitan” or “phrygian” sixth chord (♭II⁶) 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 VII⁷, it does not have a dominant function but instead serves in this context as a replacement for the pre-dominant II⁶ (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 V¹ (ex. 2.8b). Various chromatic alterations can convert the initial

EXAMPLE 2.9 Deceptive cadential progressions

a) $I^6 \ II^6 \ V^7 \ VI$
 b) $II^6 \ V(\frac{5}{4}) \ VII^7 \ VI$
 c) $II^6 \ V \ VII^6$
 d) $II^6 \ V \ I^6$
 e) $II^6 \ V(\frac{5}{4}) \ I^6$
 f) $II^6 \ V(\frac{5}{4}) \ V^7/IV$

EXAMPLE 2.10 Half-cadential progressions

a) $IV^6 \ V$
 b) $A^6 \ V$ (It.)
 c) $I \ IV^6 \ A^6 \ V$ (It.)

EXAMPLE 2.11 Sequential progressions—descending fifth

a) $I \text{ seq. } (IV \ VII \ III \ VI \ II \ V) \ I$
 b) $I \text{ seq. } (IV \ VII \ III \ V) \ I$
 c) $I \text{ seq. } (IV^7 \ VII^7 \ III^7 \ VI^7 \ II^7) \ I$
 d) $I \text{ seq. } (IV^{\frac{5}{4}} \ VII \ III^{\frac{5}{4}} \ VI \ II^{\frac{5}{4}}) \ I$
 e) $I \text{ seq. } (IV^{\frac{5}{4}} \ VII^{\frac{5}{4}} \ III^{\frac{5}{4}} \ VI^{\frac{5}{4}} \ II^{\frac{5}{4}} \ V^{\frac{5}{4}}) \ I$
 f) $I \text{ seq. } (IV \ VII/III \ V/VI \ VII/V \ V) \ I$
 g) $I \text{ seq. } (IV^{\frac{5}{4}} \ V^{\frac{5}{4}}/III \ V^{\frac{5}{4}}/VI \ V^{\frac{5}{4}}/II \ V^{\frac{5}{4}}/V \ V^{\frac{5}{4}}) \ I$

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 I⁶ more compelling, a passing V¹ 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

I (V II VI) IV I⁶
seq.

EXAMPLE 2.13 Sequential progressions—descending third

a) I (VI IV II VII V III) I
seq.

b) I (V⁶ VI III⁶ IV) I⁶
seq.

c) I (V⁶ VI III⁶ IV) I⁶
seq.

d) I (V VI III IV) I
seq. [I V VI]
(dec.res.)

EXAMPLE 2.14 Sequential progressions—ascending third

I (V III V) V
seq. G: I V III

EXAMPLE 2.15 Sequential progressions—descending second

a) I (VI⁶ V⁶ IV⁶ III⁶ II⁶) I⁶
seq.

b) I (VI⁶ V⁶ IV⁶ III⁶)
seq.

c) I (IV⁷ VII⁷ III⁷ VI⁷ II⁷)
seq.

EXAMPLE 2.16 Sequential progressions—ascending second

a) I (VII⁶ I⁶ II⁶ III⁶ IV⁶ V⁶) I
seq.

b) I (VI⁶ II VII⁶ III I⁶ IV II⁶) V
seq.

c) I (V⁶ II V⁶ III V⁶ IV V⁶) V
seq.

d) I (V II V III)
seq.

(V⁶) IV (V⁶) V (V⁶) VI

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