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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.
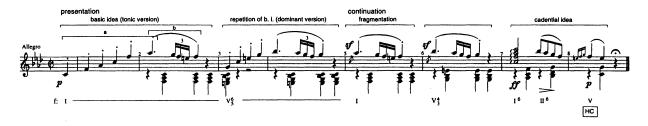
I begin by illustrating the concept of formal function in connection with the three most important theme-types of classical instrumental music—the sentence, the period, and the small ternary. Each contains a conventional set of formal functions that operate in the structural boundaries of the theme. 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.
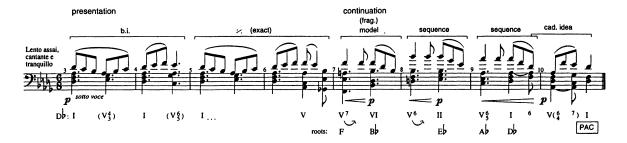
SENTENCE

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).

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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 V⁶₅ 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.
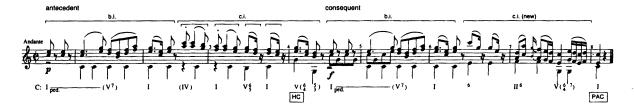
Although continuation and cadential are separate functions, we can observe that the cadential idea of measures 7–8 grows naturally out of the preceding measures. The processes of fragmentation, harmonic acceleration, and liquidation begun in measure 5 extend all the way to measure 8, and thus the cadential 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♭, E♭, A♭, D♭). 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]
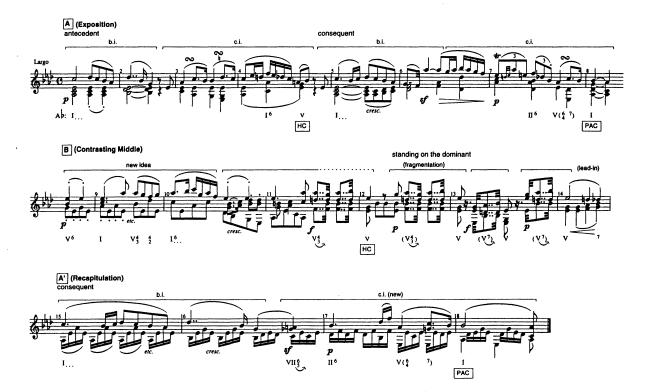
The recapitulation (A') of the small ternary has two main functions: to complete the harmonic–melodic processes left open at the end of the B section (and by a modulating A section) and to create a semblance of formal symmetry by providing a return of the exposition. In order to realize these two functions, 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 (V⁵/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 Ebs 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

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.
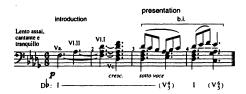
Introduction

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 anacrustic 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, 1–4

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

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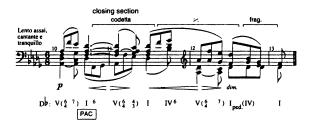
Closing section, codettas. A closing section to a theme consists of a series of codettas; rarely does a closing section contain a single codetta. In most cases the initial codetta is repeated, after which fragmentation brings reduced versions of the same codetta or else entirely new ones. The grouping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

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 nonsyntactic 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.
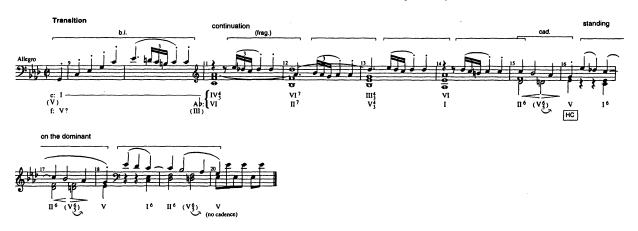
Main Theme

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.
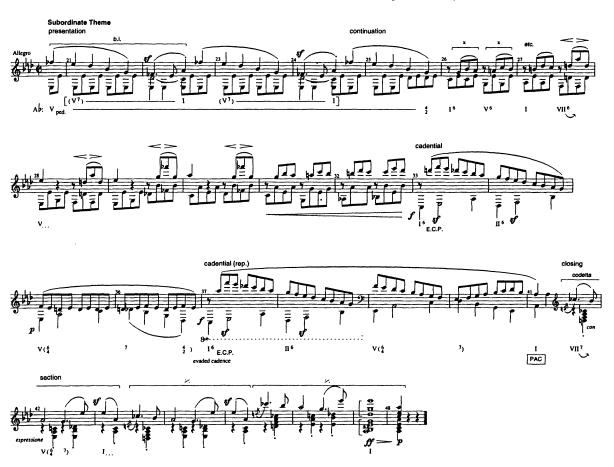
Transition

The transition, shown in example 1.7, begins in measure 9 and stretches to measure 20. The section begins with a re-statement 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

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

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 additional 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($\frac{4}{3}$')–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$\frac{4}{2}$ 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]

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