A Practical Guide to Musical Composition

by Alan Belkin

Alan Belkin, composer

A Practical Guide to Musical Composition

Presentation

The aim of this book is to discuss fundamental principles of musical composition in concise, practical terms, and to provide guidance for student composers. Many of these practical aspects of the craft of composition, especially concerning form, are not often discussed in ways useful to an apprentice composer - ways that help him to solve common problems. Thus, this will not be a "theory" text, nor an analysis treatise, but rather a guide to some of the basic tools of the trade. It is mainly based on my own experience as a composer and teacher.

This book is the first in a series. The others are: Counterpoint, Orchestration, and Harmony.

A complement to this book is my Workbook for Elementary Tonal Composition.

For more artistic matters related to composition, please see my essay on the <u>musical idea</u>.

This series is dedicated to the memory of my teacher and friend Marvin Duchow, one of the rare true scholars, a musician of immense depth and sensitivity, and a man of unsurpassed kindness and generosity.

Note concerning the musical examples: Unless otherwise indicated, the musical examples are my own, and are covered by copyright. To hear the audio examples, you must use the online version of this book. To hear other examples of my music, please visit the <u>worklist</u> page.

Scores have been reduced, and occasional detailed performance indications removed, to save space. I have also furnished examples from the standard repertoire (each marked "repertoire example"). Unfortunately, copyright issues make it prohibitive to supply scores and audio for these: It would be impossible to continue supplying this work free of charge.

For those having problems with the plug-in required to hear the examples, Riccardo Distasi kindly wrote a script adding plain links for each example.

Table of contents

Introduction

- Introduction: Why this book?
- Stylistic assumptions
- Forms and form
- Using this book as a textbook
- Sources
- A final note

- Foreground vs. background
- Flow vs. break; continuity vs. surprise
- Articulation and degrees of punctuation
- Rate of presentation of information
- Stability vs. instability
- Progression
- Momentum

Beginning

- Psychological functions of structural elements
- Structural requirements for the beginning of a musical work
- Some typical starting gestures
- The opening as a distinct section

Elaboration/Continuation, pt. 1

- Organization of this chapter
- General requirements for successful continuation
- Transitional technique: the basis of satisfactory musical flow
- Contrast
- <u>Suspense</u>
- Points of reference
- Climax

Elaboration/Continuation, pt. 2

- Flow
- Major contrasts
- Creating suspense over larger spans of time
- Long range points of reference
- Gradations of climax

Ending

- How can the composer conclude the piece convincingly?
- Resolution: the main issue
- Rounding Off
- Ending gestures
- The ending as a distinct section: the coda

Forms: a Glossary

- Introduction
- Specific forms

Conclusion, acknowledgements, bibliography

3 website © Alan Belkin, 2008

For comments, or to be informed of site updates, please email: belkina_at_yahoo.com (replace _at_ with @)

Introduction

Why this book?

This book arose in response to a specific, personal need. In many years of composing and teaching musical composition at various levels, I was repeatedly struck by the dearth of **practical** information about how music is constructed. There are good texts available on harmony, counterpoint, and orchestration, but useful principles of musical form, explained from the point of view of the composer, are oddly neglected. By "practical principles of musical form" I do not refer to the labeling and categorizing of structural units - useful though that may be - but to the ways musical ideas are organized and connected in time, so that their evolution is compelling and convincing. Even students quite experienced in analysis often have little idea about how to construct a transition, how to build a climax, or how to create a satisfactory sense of conclusion. Again and again, one sees beginnings that fail to create interest or suspense, transitions that bump awkwardly from one idea to the next, sections that never seem balanced, and endings that seem to stop almost arbitrarily. The student needs specific guidance about how to satisfy such basic formal requirements; analysis rarely provides it.

This is probably because the composer's needs are quite different from the analyst's goals. The results of an analysis depend on the questions asked. If the analyst asks: where is the division between two sections, the answer usually arrives in the form of an argument for one spot or another. However for the composer, the problem may be to avoid a too obvious break in the form. He may want to camouflage the joint, perhaps creating momentum for a coming idea.

Another important difference between the composer's and the analyst's point of view is that the composer proceeds from the incomplete to the complete; the analyst begins with the work already whole. The analyst's challenge is to meaningfully decode a complex structure; the composer's is to fill the blank page. One might say that the composer's task is addition, while the analyst's is division.

One may legitimately question whether it is even possible to generalize about these problems. Musical repertoire, even within the stylistic constraints to be defined below, proves upon examination to be very varied indeed: A work of art, after all, is inherently unique, individual.

However, it seems unlikely that composers reinvent the wheel with every piece. Does every new work really solve these common problems in an entirely new way?

It is a fundamental premise of this book that some general principles about these issues do exist and can be formulated in useful ways. While these principles may not be entirely universal, in practice they have proven to be general enough to be of value, especially to a beginner who needs help in developing a sense of form.

This book constitutes an attempt to set forth some of these basic principles in concise, down to earth terms.

It should be clear by now that this work is **not** intended primarily as a theoretical text, nor as an

analysis treatise, but rather as a guide to some of the basic "tools of the trade".

Stylistic Assumptions

It is difficult to teach composition without making at least some assumptions about formal requirements; otherwise, what is there to teach? The crux of my argument here is that basic principles of the type described here result largely from the nature of musical hearing. Let us make clear some of the assumptions subsumed by the phrase "the nature of musical hearing".

We assume, first, that the composer is writing music meant to be listened to for its own sake, and not as accompaniment to something else. This requires, at a minimum, provoking and sustaining the listener's interest in a musical journey, across a range of time. It also requires bringing the experience to a satisfactory conclusion. "Musical hearing" implies here a sympathetic and attentive listener, at least some of whose psychological processes in listening can be discussed in general terms.

We will limit our discussion to western concert music. Non-western musics, which often imply very different cultural expectations about the role of music in society or its effect on the individual are thus excluded from our discussion. (It would be interesting to see to what extent these principles also apply in other cultures, but this would require a much larger study, as well as competence well beyond mine.)

Although some of the notions presented here may also apply to functional music (e.g. music for religious services, ceremonial occasions, commercials) all these situations impose significant, **external** constraints on the form. Specifically, the composer's formal decisions do not derive primarily from the needs of the material. In concert music, by contrast, the composer is exploring and elaborating the chosen material so as to satisfy an attentive musical ear. If extramusical limitations apply - like having to reach a climax twenty seconds into a commercial, or to stop when the priest reaches a given point in the service - the composer cannot give his ideas their head. We will therefore also exclude functional music as an object of direct discussion.

It should be noted that music based on text (songs, opera, etc.) is only partly governed by our principles of musical form: The structure of the text (or the drama, in the case of opera) will determine many formal decisions in these genres. Nonetheless, there are many common elements with purely instrumental music, and the formal imperatives remain intrinsic to the work.

Our discussion will not be limited to tonal music. I have made considerable effort to present these ideas in ways that do not depend on a tonal harmonic language. Indeed, some of these notions become especially useful when the familiar harmonic conventions, which contribute to the listener's sense of formal orientation in tonal music, are **not** available.

Forms and Form

A caveat: this is not a book about forms, but a book about form. I will take the view that any successful piece is a specific application of general formal principles. In the glossary, I will describe the "standard" classical forms in summary fashion, to attempt to show how they exemplify these general principles.

Using this book as a textbook

Most of the material in this book comes from two sources: my own composition, and my work teaching composition. Some of the material was used in an elementary course of tonal composition at the Université de Montréal. In a curriculum of composition study, this book assumes as prerequisite:

- a basic knowledge of tonal harmony.
- an understanding of motives.
- enough knowledge of instrumentation to write idiomatically for keyboard and perhaps one
 or two solo instruments. This implies some understanding of the creation and
 differentiation of planes of tone.

Sources

My thinking on these issues has been influenced by my teachers David Diamond and Elliott Carter, as well as by readings of a few authors, themselves composers for the most part: Roger Sessions, Donald Francis Tovey, and, especially, Arnold Schoenberg, whose *Fundamentals of Musical Composition* exemplifies the kind of discussion of musical form most useful to a student. Schoenberg's lifelong exploration of these issues, even when one disagrees with his conclusions, is a model for such inquiry: His ideas are always anchored in the practical realities of composition. The complete list of sources can be found in the <u>bibliography</u>.

Finally, as is often the case, teaching others has been an excellent way to learn: It has forced me to define and formulate ideas more precisely.

A final note

This main part of this book is not concerned with expressive quality, except to the extent that it is an outgrowth of professional technique. In other words, we consider the skills described here to be a bare minimum for the composer, and not "high art".

Basics

Since music is heard consecutively in time, our examination of the structure of a musical composition will be organized chronologically. We will follow the same path as a listener, examining the structural requirements for beginning, for continuing and developing, and for bringing the work to a satisfactory close.

This mode of presentation will deliberately avoid concentrating on conventional "forms", since this organization seems basic to any satisfactory musical composition, within the limits set forth in the introduction. (In a <u>later chapter</u>, we will provide a concise glossary of standard forms, and there we will specifically discuss the relationship between our general principles and those forms.)

Before beginning, however, it will be useful to define some basic notions.

Foreground vs. Background

Human perception operates simultaneously on several levels: More than one sensation may impinge on our consciousness at a time. When this happens we prioritize our perceptions: We cannot pay equal attention to more than one element at any given moment. This prioritization is ongoing, and changes in the order of priority may result accidentally (the telephone rings while one is reading a book) or - more interesting from our point of view - from artistic intention (a previously almost inaudible detail may attract more and more attention, to eventually become the most important event of the moment).

Musically speaking, we may refer to the element in a multi-layered texture that most engages that listener's attention at any given moment as "foreground", while the secondary elements constitute "background". (Our use of these terms has nothing to do with Schenkerian analysis.)

While the specifics determining what will be perceived as foreground or background in any particular case can occasionally get complex, normally they are easy to define. (A good deal of the study of orchestral balance is nothing more than learning to predict what will dominate the texture in a given combination.)

All other things being equal, the ear follows, as foreground:

- the top: The ear more easily grasps extremes of texture than the middle. Examples of melody written over accompaniment figures are omnipresent in the repertoire.
- action: Often the element with the most activity attracts attention, e.g. in a texture consisting of held notes and moving lines, the moving lines take precedence.

(repertoire example) Beethoven, 6th Symphony, 1st movement, m.115 ff: The violin line emerges over sustained pedal tones in the other instruments, due to its richness of pitch, rhythm, and articulation.

• novelty: When presented with familiar and new material at the same time, the new material demands more attention.

(repertoire example) Ravel, Rapsodie espagnole, "Prélude à la nuit", m. 28: When the new melody arrives at m. 28, it stands out because of its novelty, compared to the four note ostinato that has been playing since the beginning of the piece.

• loudness or timbral richness: If playing lines of equal complexity in the same register, e.g. a trumpet will demand more attention than a flute.

(repertoire example) Bartok, Concerto for Orchestra, 2nd movement, m. 90: Despite a very active accompaniment by the strings in the same register, the main line, played by 2 trumpets, emerges clearly as foreground.

Possibly simple curiosity plays an important role here: In trying to follow the music, the listener tends to focus on the things which require the most effort. This would make sense biologically: An organism needs to make sense what is going on around it. It therefore concentrates on the area presenting the most information to decipher. (Note that there is a big difference between **visual** and **auditory** information in music. For example, although a long, held note in a solo violin may be dwarfed on the page by other instruments playing a moving accompaniment figure, the soloist's fairly unpredictable vibrato and constantly evolving dynamics will capture the listener's attention. (Simulated, overly regular vibrato, will not!)

Flow vs. break; continuity vs. surprise

" [...] convincing continuity: one must have that above all other things." Elliott Carter

The distinction between foreground and background bears directly on issues of musical flow. To understand how, we need to explore the nature of musical unity and variety.

It is conventional to speak of unity and variety as the cornerstones of artistic structure. However, these concepts can be formulated in a more useful way for composers. Unity is a difficult notion to define in music because it must rely on memory. Unlike the spatial arts, music takes place in time. In particular, the temporal nature of music does not permit perception of the whole, except in retrospect; or, perhaps more accurately, as an experience spread out over time. Music depends on a web of memories and associations that gets richer as the piece progresses. Unity is therefore required on (at least) two levels: local flow - the convincing connection of one event to the next - and long range association.

Successions of musical ideas can be understood on a continuum of various degrees of continuity, ranging from the smoothest flow to the most abrupt change. Unity and variety thus emerge not as two separate phenomena, but as different degrees of same thing. If the flow of the piece provides no novelty, the music is boring; if there are too many fits and starts, the discontinuities will break up the work's coherence.

The composer's first and most fundamental problem is therefore to ensure the overall flow of the piece, from beginning to end. However the **degree** of novelty must be varied at different points.

The key to controlling this balance, between emphasizing common elements and introducing novelty, lies in the interaction between the perceptual levels described above. If the novel elements are very salient, the effect will be one of contrast. If the changing elements are more subtle, the listener will sense gradual evolution, or relative stability. A convincing musical form is not possible without many degrees of stability and novelty.

(repertoire example) Beethoven, 3rd Symphony, 1st movement, m.65 ff: The change to a new motive (with 16th notes) is in the foreground, but the repeated notes (upper strings and winds), continuing from the previous passage, provide an audible link in the background.

Any clearly audible musical element can create connection, or novelty. Among the most obvious dimensions for the listener, and thus the most useful, are:

• register.

(repertoire example) Ravel, Pavane pour une infante défunte, m. 13: The 2nd theme is quite similar in

character to the first theme, but the fact tha 9the oboe opens up a new register (even though the change is quite mild) creates an effect of freshness.

• speed (note values and harmonic rhythm).

(repertoire example) Beethoven, Sonata, op 2#1, 2^{nd} theme, m. 20 ff: Most of the novelty here comes from the accompaniment, which is in steady 8^{th} notes for the first time.

• motives.

(repertoire example) Brahms, 3rd Symphony, 1st movement, m.3 ff: The arrival of the new theme, in vln. 1, provides foreground novelty, while the imitation of the melodic profile of the opening chords (now in the bass) adds an element of continuity in the background.

• timbre.

(repertoire example) Ravel, Bolero: Over an extremely repetitive and predictable structure, novelty results mainly from timbral variation, at each new presentation of the theme.

Various elements are often combined.



Quartet #3: In m. 135, novelty predominates, introducing a contrasting section. The main line passes from the 1st violin to the cello, leaving the high register empty. The slow, cello line is pizzicato, and introduces triplets. The two sections are linked by the pizzicato chords, which begin as accompaniment in m. 131, and the notes of the D major harmony, heard in the 2nd violin in m. 134.

Articulation; degrees of punctuation

Articulation is necessary, as Schoenberg points out, because listeners cannot grasp or remember that which has no boundaries.

The composer needs many degrees of articulation: The degree of punctuation chosen gives the listener important cues about where he is in the piece. We shall shortly discuss articulation in more detail; what concerns us for the moment is the role of articulation as a fundamental process of musical hearing.

Rate of presentation of information

Closely related to the effects of articulation is the speed at which new elements arrive, and the prominence of the changes: If articulation is brusque, change will be more salient.

The psychological effects of the rhythm of presentation of new information make possiblw a continuum of character effects, ranging from very restless to very calm. The quicker the pacing of new events, the more demanding is the job of the listener, and consequently, the more exciting the effect.



Quartet #2, 1st movement: Between m. 51 and m. 64, there is a steady increase in the rate of new information. This is most obvious aspect in the accelerating harmonic rhythm. But the increasing closeness of the imitations (2nd violin in m. 51, 1st violin in m. 56, and then the viola, newly arriving in m. 58) also adds intensity, as does the increasing presence of simultaneous 16th notes in all the parts. The last major change is the arrival of a simpler, octave doubling texture in m. 63. The overall effect is to "raise the temperature".

(repertoire example) Tchaikovsky, Symphony #6, 2nd movement. New elements are presented gradually, reinforcing the relaxed and gracious character of the movement: m. 1, the theme is first presented in a light setting; m. 8, the celli add momentum with their scale in 8th notes. These 8th notes are echoed in m. 10, m. 12, m. 14, and m. 16 (a and b). In m. 17: winds and horns make the 8th notes continuous; in m. 25, the continuous 8th notes become even more prominent, now in the strings.

(repertoire example) Schubert, String Quartet #9, 1st movement: A restless character results from continuous novelty, reinforced by sudden dynamic changes. The first phrase (m. 1-4) already contains a strong contrast between the monophonic half notes of the first bar and the short chords of m. 3-4. After an answering phrase, in m. 5-8, a new nervous figure in 8th notes leads immediately to yet another new motive (vln. 1, m. 9-10). A climax arrives at m. 13, bringing with it still another new element: syncopation.

Stability vs. instability

If we start from the two extremes of rate of presentation - very slow to very fast - we can define an important polarity: stability vs. instability of structure.

Consider the following passage:



(repertoire example) Beethoven Piano Sonata, op. 7, 1st movement, m. 136-165 (end of exposition, start of development).

Could this passage serve as the beginning of the piece? While it is certainly provocative and "unresolved", as a beginning it seems overly abrupt, and downright hard to grasp as an introduction to the work. Why is this? We may note several aspects of this passage:

- It is tonally roving and unstable, and never settles down for long on any clear tonic.
- Many distinct ideas are presented in a short time; the texture also is very varied.
- These ideas are juxtaposed rather suddenly, with very little transition.

In short, this passage sounds unstable. As indicated abter, instability like this is more demanding on the listener than closed, carefully delimited structures, with smooth internal transitions. The connections between (sometimes incomplete) ideas are not always obvious, and the listener does not have much time to absorb new elements before they are superceded.

Compare this with the exposition from the same movement. Much of the material is the same, but it is organized very differently:



 $(repertoire\ example)\ Beethoven\ Piano\ Sonata,\ op.\ 7,\ 1^{st}\ movement,\ m.\ 1-24.$

This whole paragraph is in one key (Eb major), and the harmony's direction is always clear; the 8th note rhythm is continuous. There is much higher degree of predictability here.

These two examples help to clarify our dichotomy between stability and instability: The issue is largely one of predictability.

Relatively stable structures are suitable for exposing material for the first time, or for giving the listener a sense of resolution (as in a recapitulation). Their purpose is to make the material easily memorable or recognizable.

Unstable structures "heighten the temperature", and thus supply greater intensity. More abrupt, surprising successions of ideas, usually depend for their coherence on the listener's prior familiarity with the material.

The following example might be considered atypical for an exposition, since it quickly presents two contrasting motives in quick succession:

(repertoire example) Mozart, Jupiter Symphony, 1st movement, m. 1-4.

But a closer look reveals that the ensuing phrase repeats this opposition; the harmony and rhythm of the two phrases are quite symmetrical - that is to say, predictable - and the following passage (m.9-23) is solidly cadential, clearly confirming the tonic.

While the opening opposition of ideas does indeed suggest conflict to the listener, and implies a movement of a certain duration, the overall structure of the passage is still fairly stable.

Progression

To give music an overall sense of direction, often its evolution takes the form of a progression. Progressions are important tools for creating expectations, and therefore tension.

By "progression" here we do not necessarily refer to harmonic successions of chords. Rather, we mean any incremental series of events, of the same type and over a limited time span, which are easily perceptible to the listener as moving in a continuous gradation. Examples might include a series of rising high notes in a melody, gradually decreasing registral spread, harmony that gets more and more dissonant - or consonant.

(repertoire example) Haydn, String Quartet op. 76 #2, 3rd movement: In m. 1-3, the melodic line rises first to F, than to G, than finally to A. This progression gives a straightforward sense of direction to the phrase. When the following leaps take the phrase suddenly higher, in m. 3-4, (up to D and then to E) the effect is more dramatic, because of the previous conjunct movement.

By setting up such progressions, the composer gives the listener points of reference, and encourages projection of the music's trend into the future. In short, he creates expectations. The actual course of the music is then compared by the listener with these expectations. If they are met, psychological tension decreases, and if not, it increases.

One of the most effective ways to use progressions is to create predictability on a higher level, while leaving details less obviously organized. For example, within a complex melodic line, successive peaks might rise progressively higher. The relationship between the peaks would provide clear direction and coherence, while the details would provide interest and novelty.



Quartet #4, 3rd mvt.: This melodic paragraph is held to together by two progressions: textural and melodic. Starting with the 1st violin and the cello alone, the texture gradually thickens to include the viola (m. 5) and the 2nd violin (m. 14). The melodic line reaches successive peaks, gradually rising through middle C (m. 5), C an octave higher (m. 7), G# (m. 8), A# (m. 10, vla.), and C (m. 11). After a descent to D (m. 13-15), the line begins to rise again, through E (m. 16, vln. 2), G# (m. 18), and finally surpasses the previous peak, with C# (m. 19, vln. 2), and D (m. 20). While not too obviously linear, the overall rising line is nonetheless very perceptible, and gives the whole passage a clear direction.

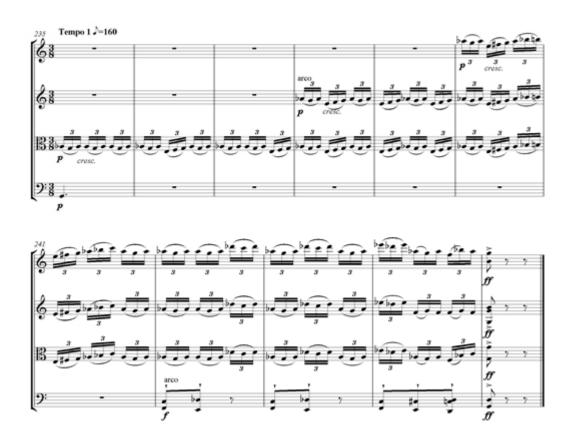
(repertoire example) Chopin, Nocturne op.32 #2, 1st section (m. 1-26): While the phrases are organized fairly straightforwardly, Chopin makes successive presentations of the ornamental figures rise gradually from G (m. 5), through Ab (m. 9), and Bb (m. 14), to C (m. 22). The fact that the ornamentation gets more elaborate at each presentation also contributes to the sense of evolution.

Momentum

One way of understanding the effect of progressions is as creating momentum: the tendency of the music to

continue in a given direction. This is another crucial aspect of musical direction.

Momentum also acts on a rhythmic level, even without progressions: once a given level of rhythmic activity is attained, it is hard to abruptly change it without some punctuating event. (Schoenberg calls this "the law of the smallest notes".) One simple but effective aspect of almost all Bach fugues is their tenancy to continue with their fastest note values all through the piece.



String Quartet #4, finale: The energetic ending results mainly from the momentum of the continuous triplet 16^{th} notes, enhanced by a crescendo, and the thickening texture.

(repertoire example) Stravinsky, Petrushka (original version), one bar before #100 ("A Peasant Enters with a Bear. Everyone Scatters."): At this point, the music has built up a great deal of rhythmic momentum, with steady 8th notes, and rushing 16th note runs. To illustrate the disruption created by the peasant with the bear, the sudden arrival of the low register and the new use of quintuplets in the upper parts break up the previous momentum. All this prepares the listener for the bear's dance.

Beginning

Psychological functions of structural elements

The following discussion is based on a simple but often overlooked fact about musical form: sections, even when derived from the same material, cannot be simply interchanged. (This has important implications for analysis: It is not enough to demonstrate connection or derivation between ideas; the analyst should also attempt to show why an idea is placed **when** it actually appears. A musical analysis which does not at least address this question, does not do justice to music as a temporal art.)

Each section in a well constructed piece has an organic, psychological function, and these functions are rooted in the progress of the piece in time. Let us example these functions in chronological order, as they appear in the work.

Structural requirements beginning of a musical work

Is it possible to generalize about how a musical work should commence? (Note that we are not referring the act of starting to compose, but to the music which the listener hears first.) While a cursory survey of the literature shows enormous variety in the beginnings of musical works, a simple experiment suggests that it is possible to define at least some common characteristics of starting gestures, and to exclude others.

This experiment follows from, and confirms, our fundamental belief that the placement of any given passage in musical time is critical to its meaning: Try starting any work with its ending. Even if one begins at the start of a final phrase, the ending is virtually always unsatisfactory when used as an opening.

Imagine transplanting the ending of Beethoven's 5th Symphony to the beginning of the first movement. The effect is at best comical, at worst ridiculous. Why? Because the simple tonal affirmation, and the rhythmic repetition of the tonic over large spans of time, in completely unornamented form, suggests ending rather than beginning. There is a sense of **arrival**, not of **departure**.

The goal of the composer within the first few seconds of a work is to engage the listener, so that the he will want to hear more of the piece. Metaphorically speaking, if it is to generate interest, the beginning must "ask a question".

Some typical starting gestures

Certain kinds of gestures are better suited to a beginning than others. It is possible to categorize, and to generalize about such gestures. What they have in common is that they are always provocative, and somehow require elaboration and continuation; thus they engender the "question" referred to above, in the listener's mind.

Here are some typical of gestures for beginnings; of course, this list is not exhaustive.

• Crescendi and/or significant expansion of register within the first phrase: A crescendo creates tension and energy, and implies a goal. Expansion of register opens up new terrain.

(repertoire example) Beethoven, Piano Sonata, op. 10 #3, 1st movement.

• Rising lines: Probably by association with the voice, rising lines are associated with increasing stress. (It is no accident that the word for musical ending - cadence - comes from the Latin "cadere", to fall.)

(repertoire example) Beethoven, Piano Sonata, op. 2, #1, 1st movement.

• Unresolved harmony, and otherwise incomplete phrases: If the harmony creates expectations which are not immediately fulfilled, closure is avoided. Incomplete gestures create suspense.

(repertoire example) Beethoven, Piano Sonata, op. 31, #3, 1st movement.

• Rhythmic variety, and contrast of note values, or sudden contrast of motives: The juxtaposition of dissimilar rhythmic elements tends to create discontinuity of movement. Such discontinuity makes the ensuing music less predictable and conclusive, and therefore is suitable for provoking interest.

(repertoire example) Beethoven, Piano Sonata, op. 31, #2, 1st movement.

• Orchestral and registral discontinuities: timbre and register are among the easiest elements for any listener to perceive. Abrupt changes in either of these dimensions tend to suggest later resumption.

(repertoire example) Mozart, Jupiter Symphony, 1st movement: tutti followed by strings alone.

Here is an example combining several of these methods:





Symphony #3, Ist mvt.: The quick, rising line, with its somewhat unpredictable articulation, creates forward momentum. When the line descends (m. 5-7), it ends in a crescendo, the lower octave is added, and it is suddenly interrupted by the timpani. The succeeding phrase begins sfp.

All these gestures create suspense and energy; none suggest closure

One qualification: these types of musical gestures are not limited to beginnings (they are often found in transitional passages as well, for example). The point here is simply that a gesture which does not somehow suggest to the listener that "more is to follow" will not likely succeed in engaging his interest. When a typical beginning gesture is used elsewhere, its effect is often mitigated or modified by other elements.

The opening as a distinct section

While not all works set off their openings as distinct sections, there are enough of the traditional larger forms which do so to make it worth discussing their characteristics.

The introduction

As with any beginning, the function of an introduction is to provoke interest. When the introduction constitutes a separate section, it accomplishes this goal in a fairly impressive way. Often the introduction to a fast movement is in a slower tempo. Although one might expect that an introduction would announce the material to follow, study of the repertoire confirms that it is not necessarily thematically related to the succeeding section.

(repertoire example) Beethoven, Symphony #7, 1st movement: While there is no clear thematic link with the material of the Allegro, the range of modulation covered in the introduction (in particular the zones of b III and b VI) defines exactly those tonal regions that will be the most striking throughout the movement.

Whatever its internal structure, an introduction will end with some kind of upbeat effect: rhythmic, harmonic (e.g. a clearly unstable harmony), dynamic (a crescendo), etc.





String Quartet #4, 1st mvt.: The introduction is quite different from the Allegro that follows. The common element - the leap of a minor 9th from D-Eb - is rather subtle. The purpose of the introduction here is to avoid beginning the movement too abruptly - compare the effect of starting directly with m. 11 - and to provide emotional richness, through contrast. (The slow music will also return, later in the work.) The rising scale in the cello in m. 10, and the Eb in the 1st violin, both lead conjunctly to the D in the following measure. The cello line is distinctly incomplete.

(repertoire example) Bartok, Concerto for Orchestra: The introduction ends with an accelerando into the movement proper.

The exposition

In works which have a separate expository section, the material of the movement is presented in a way which makes it easy for the listener to remember. The most common way to achieve this is within a stable structure. By emphasizing repetition, avoiding major contrasts, and by supplying clear punctuation within balanced, often symmetrical structures, the demands on the listener's memory are kept light. When present, symmetry draws further attention to repetition, encouraging easy memorization.



Symphony #4, Ist mvt.: This opening is a spacious double period There are four phrases, starting respectively in m. 1, m. 14, m. 22, and m. 35. The first and third phrases are similar, as are the second and fourth. Only at the end (after the excerpt) does the structure become less regular. As a result, the listener can easily "learn" several of the main themes.

Elaboration/Continuation, pt. 1

Once the initial material has been presented, and the composer has gained the listener's attention, how to continue?

The subject of this chapter is the "middle" of a musical work: the part framed by the beginning and the ending. Here, the composer takes the listener on a voyage of exploration, elaborating and intensifying the material.

Organization of this chapter

Since there can be enormous variety in the length and complexity of musical construction, we will divide this chapter into two parts. In the first we will deal with general issues that apply to all forms. Problems specific to larger forms will be explored in the second part. This does not imply a hard and fast distinction between short and long forms; rather, it reflects the fact that as the overall duration of the piece increases, the demands on the listener become greater. Consequently, they require the composer to organize the material in more sophisticated ways. Many of the same principles recur, but their application becomes more complex.

General Requirements for successful continuation

The requirements for successful continuation after the beginning include:

- 1. satisfactory flow.
- 2. renewal of interest through contrast.
- 3. suspense.
- 4. points of reference.
- 5. climax.

1) Transitional technique: the basis of satisfactory musical flow

In one sense the problem of transition is a basic problem in all composition: creating what Elliott Carter calls "convincing continuity". While we will discuss transitional sections in part two of this chapter, we need to say a few words here about the general issue of musical flow.

It is reported that Nadia Boulanger and Alban Berg talked often to their students about the presence of a "leading line", and "hearing the work through".

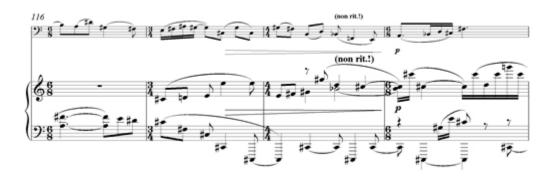
What these notions have in common is an emphasis on narrative continuity: Each event must arise convincingly from the previous one. Even surprises must be limited in their degree of contrast, to avoid incoherence. The music must at all times proceed in such a way as to maintain the listener's sense of flow. When contrasts occur, connecting them requires the presence of common element, to create links.

While new ideas can and do appear after the opening, by limiting the amount of material used, the composer gains in concentration and intensity.

A legitimate question can be raised as to whether it is possible to create a composition with continuously new material. It would indeed seem possible, through carefully crafted transitions, to create continuity between continuously changing ideas. However it is hard to see how such a formal strategy could succeed in creating a

satisfactory whole - at least within the limits mentione 23 n our introductory chapter. Only by developing and exploring previously heard material can the composer stimulate and appeal to the listener's memory, thus setting up the rich, long range associations that give the larger forms their interest and depth.

The notions of foreground and background, already presented, are critical in controlling musical flow. If similarity is in the foreground, the listener will perceive the music as continuing uninterrupted; if difference is more prominent, then the first impression will be of novelty.



Sonata for Cello and Piano: The new section, starting in m. 119, arrives very smoothly, due to its similarity of texture and tempo with the preceding music. Also, the fact that the 16th notes and the low C# pedal in the piano have already begin previously, makes its arrival very gradual.

(repertoire example) Stravinsky, Symphony in C, 1st movement, two bars before rehearsal # 15: The winds engage in a dialogue, during a crescendo which continues up till three bars before before rehearsal # 18. The wind timbres are constantly varied. However the dotted note motive and the string accompaniment - a sort of ostinato - give the passage strong continuity.

(repertoire example) Stravinsky, Symphony in C, 4th movement, before and after rehearsal # 164: The main line here is a leaping figure, first heard in clarinet 1, and then in the violins. However, the dramatic change in the orchestration at # 164 makes discontinuity more prominent.

2) Contrast

When contrast is in the foreground, it is introduced to avoid monotony, and to deepen the listener's experience. Contrast engenders emotional breadth, setting off ideas and heightening relief and definition of character.



Sonata for Cello and Piano: Despite the preparation of the new motive in the left hand of the piano, m. 72 still sounds like a strong contrast. This is because tempo change, and the distinction between legato (m. 70-1, cello) and staccato (m. 72), are more prominent aspects of the music than motivic associations.

(repertoire example) Sibelius, Symphony # 4, 2nd mo**?** ment, at K, Doppio piu lento: In this trio-like section, unified by a quiet tremolo accompaniment motive, the sudden interjections of the winds (four bars after K) and vln/vla (seven bars after K) heighten the emotional breadth of the passage.

An analogy can be made here with the novel: Seeing a character's reactions in varied situations, we get to know him better. Musically, hearing familiar material in new contexts, its meaning is enriched.

The degree and number of contrasts required is proportional to the length of the form: A symphony requires more numerous, and elaborate, contrasts than a minuet.

3) Suspense

To continuously maintain the listener's interest, the composer must maintain suspense until the very end, avoiding a sense of premature closure.

Suspense may be defined as a sense of sharp expectation. The lack of immediate fulfillment leads to listener on.

Following up on our analogy to the novel, if the composer can evoke the musical equivalent of the "whodunit?" response in a thriller, the listener will want to keep listening. The essence of this narrative technique, as in the novel, is not to give away the "answer" too soon.

Suspense implies predictability and progression. Without predictability there can be no expectation; without clear, audible progressions there can be no predictability.

To create musical suspense, the composer can leave gestures incomplete at punctuation points, for example by:

• stopping on rhythmic weakness.



String Quartet #2: The stop in m. 11 makes a crescendo on an upbeat, leading the listener to question what is to follow. This is the introduction to the first movement.

(repertoire example) Bartok, Piano concerto #2, 1st movement, m. 222: The piano starts its cadenza, but stops immediately on the last beat of m. 223, and then restarts at a faster tempo. This stop and start creates suspense.

• stopping on unstable harmony.



String Quartet #2: The last harmony before the new section (m. 32) is a polychord, where the lower notes undermine the stability of the upper dominant sonority.

(repertoire example) Stravinsky, Orpheus: Pas de deux, two bars before #121: This stop, on a dissonant, unstable harmony, creates a climactic tension and suspense before the final "resolving" phrase of the section. Note that this example, like the previous one, stops on an upbeat.

• contrapuntally introducing a new element (motive, timbre, register, etc.) while an old one achieves completion.



String Quartet #2: While the cadential harmony in m. 43 sustains (in the lower instruments) the two violins begin their new phrase.

(repertoire example) Mozart, Symphony #40, I^{st} movement, immediately preceding the recapitulation: The recapitulation of the first theme in the violins starts while the winds are still completing their cadence.

The composer can also use instability - more rapid changes - to "raise the temperature", increasing the demands on the listener. Of course, it is not enough just to present a few ideas in quick succession. To avoid

• refer to previously presented material, enriching the web of the listener's associations.

(repertoire example) Mozart, Symphony #41 ("Jupiter"), 4th movement., m.74: The 1st violins present the new theme, while the winds comment, using fragments of previously presented material.

• be well joined, to ensure local continuity. (We will have more to say about the nature of these joints below. For now we may just remark that the main pitfall to avoid is the "catalogue" effect - a list of unassociated items.)

Finally, an important tool for creating suspense lies in the way in which sections - at any level: phrases, paragraphs, etc. - are articulated from one another: A cadence supplies information to the listener about what will follow. (Of course the continuation may not always fulfill the expectations so evoked.) While we will explore the formal implications of various kinds of punctuation in the second part of this chapter, suffice it to say here, that open cadences contribute largely to suspense, since they create definite expectations and are, by definition, prominently placed.

4) Points of reference

To help the listener make sense of the music, it is important to provide recognizable signposts; these reference points also help to tie the work together. If the music goes on for long without a clear reference to something well defined and familiar, the listener can feel lost. Motives and themes often fulfill this function. These signposts must be clear and easy to recognize; a complex motivic or harmonic relationship in a secondary part is useless.

Ways to such points of reference into relief include:

• a stop before the reference point.



String Quartet #4, 2nd mvt.: The return to the opening idea in m. 113 is made much more prominent by simply pausing before it.

(repertoire example) Chopin, Étude Op. 25, #2: The main theme is announced at the beginning. Each time it returns (m. 20, m. 50-51) it is preceded by a sort of "hesitation", where the left hand stops and the right hand circles around the first two or three notes of the theme. This preparation draws attention to the return.

• a buildup into the reference point.



String Quartet #4, 1st mvt.: the arrival of the theme in m. 35-6 is made much more prominent by the preceding rising sequence.

(repertoire example) Bartok, Concerto for Orchestra, 1st movement, #76: The arrival of the main theme is prepared by a long crescendo, repeating the first part of its motive over a sub-tonic pedal, rising through the orchestra.

• A shock, or accent, at the reference point.



Fantasy and Fugue, for Organ: The sudden arrival of the pedal, f, after the very soft music which precedes, creates a shock, marking the return of the main theme.

(repertoire example) Mahler, 9th Symphony, 4th movement, m. 49: The return of the main idea is set off by a surprising change of dynamics and texture, and the entry of the loud horn.

5) Climax

Not only must the continuation carry the previously presented ideas farther along in a coherent flow, but that flow must develop in intensity. This process of intensification helps create momentum and direction. Climax represents the fulfillment of that momentum.

A climax is a point of maximal intensity, whether of a phrase, a section, or a whole movement. The music reaches an emotional/dramatic culmination.

The intensity of a climax is proportional to the length of the buildup preceding it and the time spent at its peak, as well as its (relative) degree of accent, compared to its surroundings.

Climaxes have three stages: a preparation, a culminating accent, and a release.

Preparing climaxes

One of the most important determinants of the intensi**28** of a climax is its preparation. The longer and more suspenseful the preparation, the more exciting the climax.

Techniques for building up to a climax include:

- crescendos (this is so common as not to require an example).
- speeding up (ditto).
- rising lines.

(repertoire example) Dukas, l'Apprenti Sorcier: two bars before rehearsal #2: Flutes, strings, and harp prepare the climax - a return of the main theme - with a rising 16th note scale.

• widening register.

(repertoire example) Bartok, Concerto for Orchestra, 1st movement, before #76: this example, already referred to, rises to its climax, while covering an ever widening register.

• increasing harmonic tension.

(repertoire example) Bruckner, Symphony #9, 3rd movement, m. 173 ff: In this stupendous buildup, rising chromatic sequences and increasingly rich harmony lead to the rich dissonances of m. 199 ff.

• increasing textural density.

(repertoire example) Dukas, l'Apprenti Sorcier: Orchestral density increases by stages. At the third measure after before rehearsal # 17, the texture is airy, with many rests, staccato articulation, and pizzicato strings; around rehearsal # 19, the harp joins in, and rising scales add movement; at rehearsal # 20 the scales get more and more frequent, and the the texture gets less transparent; from four to seven bars after rehearsal # 20, the rhythm gets more complex, and 16th notes are added. Trumpets and cornets become more active; the texture is generally more dense. At rehearsal # 21, the 16th notes increase, moving towards the climax, at rehearsal # 22, marked by the addition of the glockenspiel.

These techniques can be used together, in various combinations.



String Quartet #2: The climax in m. 66 is prepared by widening register leading up to the peak, thicker scoring (the octaves in the violins), and a general crescendo.

For important climaxes, it can be effective to build up in successive waves.





String Quartet #4, 1st movement: The buildup to this - the movement's main climax - is organized in successive waves. The first one reaches a peak in m. 135, the second in m. 137, two small waves follow in m. 138 and m.138, and the last one leads to the peak, in m. 142.

The culminating accent

A climax achieves completion when it reaches a culminating accent. This accent represents an extreme, in one or more aspects of the music: rhythm, loudness, etc. The number of simultaneous musical elements arriving at extremes for any given climax determines its importance and intensity.

In a preceding example (<u>String Quartet #2</u>), the climax is marked by the arrival of a new motive, in 32nd notes, for the first time in this movement.

(repertoire example) Bruckner, Symphony #9, 3rd movement, m. 206: The climax of this passage - also the main climax of the whole movement -, is achieved by a combination of the most dissonant harmony, the most complex rhythm and orchestration (four layers: sextuplet 8th notes in upper winds and horns; 32nd note figuration in the violins, held notes in the tubas; and the dotted note rhythm in the bass instruments); sheer loudness (fff); and the extremely long buildup.

The resolution

If the descent is more or less equal in weight and length to the buildup (or longer), there will be a sense of resolution.

(repertoire example) Brahms, String Quartet #1, 1st movement, m. 236-end. The climax of the coda (m. 236) gradually winds down until the final cadence in m. 260. This descent, which is actually longer than the buildup (m. 224-235), contributes to the peaceful end of the movement.

If the descent if much more rapid, there will be a sens@fi incompleteness, which can often be exploited to create further suspense.



Sonata for Cello and Piano: After the long buildup (about 28 bars; it begins considerably before the example), the descent after the climax (m. 102-6) does not offer complete resolution; as a result, there is a sense that the music needs to go on.

(repertoire example) Bruckner, Symphony #9, 3rd movement, m. 206-7: The huge climax is followed by a pause and a sudden **pp**, which sets in motion the final section of the movement, in a suspenseful way.

Elaboration/Continuation, pt. 2

As the work gets longer, how can the composer keep the structure comprehensible to the listener?

Hierarchy

Large musical form is hierarchical: A satisfactory large form cannot be constructed just by stringing together a series of short forms. Articulations into sections, and the presence of prominent reference points, make it easier for the listener to grasp and interpret large amounts of musical information. Some divisions, reference points, and climaxes in a large form will normally be more prominent than others, creating structural hierarchies.

In a longer work, the connection of sections and subsections requires varied techniques of transition and articulation, to make the function and relative importance of each section clear. Tying the whole work together by recapitulating prominent reference points - which may extend to entire sections - requires making the arrival of these reference points sufficiently prominent.

Let us examine these issues in more detail, following the same organization as in our previous chapter.

1) Flow

a) Articulation into sections to keep a large form comprehensible.

We have already discussed the need for coherent musical flow. Here we will discuss articulation and transition as they apply to larger musical structures.

The basic reason for subdivision is intelligibility, so that the listener will not lose his way.

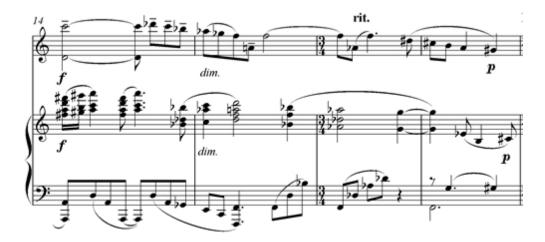
In a hierarchical musical structure, essential information is communicated by the kind of cadence chosen for each section. A cadence is an important moment: The cues it provides for the listener about what is coming next help him to make sense of the whole.

Articulations are classified according to their degree of finality. While the details of punctuation in tonal harmony cannot be literally transferred into non-tonal contexts, the various types of punctuation can be easily generalized. Here are the standard, familiar cadences, with suggested ways of achieving similar effects in non-tonal contexts.

• Full cadence: ending. All the musical elements combine to suggest closure. Examples abound, especially at the ends of movements.

(repertoire example) Elliott Carter, Symphony of Three Orchestras: The final climax of the piece (m. 383) is followed by a series of descending phrases into the lowest register, which become more and more fragmentary. The orchestra thins out, and the resonance from the last piano chord (m.388) slowly dies away.

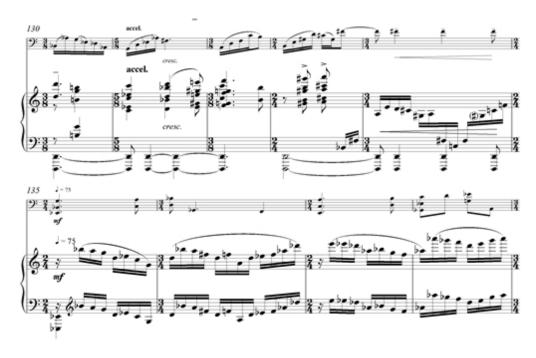
• Open cadence: Clear rhythmic and harmonic punctuation (respiration), combines with at least one musical element (melody, rhythm, timbre, etc.) which remains unresolved on the local level. An example in a non-tonal context might be one instrument starting a crescendo towards the end of a



Sonata for Viola and Piano: The cadence in m. 17 (which is followed by a pause), created by a descending, stepwise line line the viola, along with a "leading tone" effect in the piano, nonetheless ends on an upbeat, and is clearly harmonically incomplete.

(repertoire example) Debussy, Pelléas et Mélisande, Act I, m. 6-7: The melodic phrase in the winds comes to an end, but the continuing quiet timpani roll signals that the music has not come completely to rest.

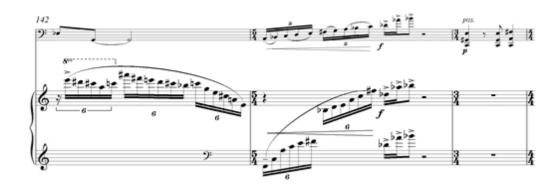
• False cadence: Known as the "deceptive cadence" in tonal harmony, the underlying principle is to avoid finality through a surprise continuation, by first creating a definite expectation, and then **not** resolving exactly as expected. In a non-tonal situation, a long descending line might culminate in a sudden change of direction.



Sonata for Cello and Piano: The pedal point in the bass (D), and the rising lines in both cello (m. 130-4) and piano (m. 130-3) lead one to expect a climax/resolution. In the cello, after the insistence on F# (m. 134), one expects a high G in m. 135. Although G does arrive, it is in the wrong register. The running piano figuration also mitigates the finality of the gesture.

(repertoire example) Stravinsky, The Rake's **B4**ogress, Act III, Scene I, at #9: A humorous effect is created by having the character (Baba the Turk) continue her cadenza, started in a previous scene. However, instead of finishing the quiet, descending line, it leads to a sudden loud and angry outburst at #98.

• Caesura: stops abruptly in mid-phrase, like an interruption in a conversation.



Sonata for Cello and Piano: The stop in m. 143 is abrupt, and clearly not an ending. Instead, it leads to the beginning of a new idea in the cello (pizzicato) in m. 144).

(repertoire example) Stravinsky, The Rake's Progress, Act II, Scene I, four bars after #9: The legato descending sequence suddenly stops with a staccato chord, without reaching harmonic rest. The effect is one of interruption.

b) Transition

The problem

As we remarked earlier, the issue of transition at the local level is basic to all composition. Here we will examine the construction of more substantial transitions, as separate sections. Such sections are by nature unstable, evolving passages, linking presentations of other, more stable ideas.

The difficulty of making a convincing transition lies in balancing the number of things which change and the amount of time available. Depending on where the transition appears in the form, it may need to happen quickly, or there may be quite a lot of time available. In either case, the goal is to prepare the new idea convincingly, camouflaging the joint. (This important process - camouflage - is often misunderstood in musical analysis.)

As a rule, multiple transitions in the same movement should not be overly similar (-predictable) in procedure and proportion; they are better when varied in design. Since transitions contribute so much to sense of the music's evolution, variety and subtlety in their construction contributes greatly to the interest and flow of the composition.

Specific transitional techniques:

A transition is a bridge: It is attached at one end to the old idea, and at the other to a new idea. The bridge leads clearly and gradually from one idea to another. It is possible to measure the difference between any two musical ideas by comparing their various characteristics: melodic line, texture, harmony, register, timbre, rhythm, etc. The more elements differ, the more contrasting the ideas will sound, and the more stages will be required for a gradual transition. Since it is fairly easy to inadvertently surprise the listener (the beginner's

most common fault!) we will concentrate here on achigging gradual transitions. Here are various techniques.

• Gradual evolution: Here the transition is a more or less fully developed passage or section in its own right, acting as a bridge. Once the composer determines the main differences between the ideas to be connected, as described above, the next step is to devise a step by step progression between them. If there are important differences in more than one musical element, it is best to change only one at a time. For example: Do not change register at the same time as changing rhythm. While this rule is not absolute, the principle is useful, in that it can help the composer to gauge where a given transition needs to be compressed or expanded for smoother effect. The result is like a musical game of telephone: At each individual stage, change is easy to follow, but the final result can be very far removed from the original idea.



Quartet #3: From the elided cadence in m. 115, the music evolves by gradual stages towards a climactic presentation of the work's main theme, in m. 123. Vln. 1 enters (m. 116) with a repeated, semitone motive, in 8th notes, echoing the beginning of the viola's figure in the previous bar. Then. cello pizzicati set off a quicker, triplet rhythm in m. 118. The triplets become broken chords in m. 119; the broken chords widen and become 16th notes in m. 120. Then the 16th notes rise, becoming more melodic (m. 122) anticipating the contour of m. 123. Finally, they overlap (viola) with the arrival of the theme, at the melodic peak, in m.123. On has only to imagine placing m. 124 directly after m. 115 to realize the terrain which has been traversed.

(repertoire example) Beethoven Quartet, op. 131, 4th movement, at the second Allegretto (this is a preparation for Var. 8, which is characterized by trills in vln. 1, and the main theme in octaves in vln. 2 and vla.): The trills gradually evolve from the previous motive in vln. 1. First the motive settles down on one note, E. Then the rhythm smoothes out, eliminating the quarter notes, and the minor second becomes a major second (E-F#). Finally the rhythm becomes even and the repeated notes are eliminated; the trill arrives as a simple acceleration. A few more trills descend into the main body of the variation.

• Repeat with a new turn: this offshoot of period structure (question/answer) consists of a repeated phrase, which however goes off in a new direction at its second presentation. The repetition starting the

new phrase supplies unity. This technique is ver**36** ommon in classical sonata movements, especially when leaving the first theme.



Sonata for Cello and Piano: The phrase in m. 111 starts like the previous phrase (m. 109), but then goes off in a new direction, leading to a much longer phrase.

(repertoire example) Beethoven, Quartet op. 18, #1, 2nd movement, m. 14: The transition starts with a reprise of the opening phrase, which quickly begins to modulate, rather than staying harmonically stable.

• Anticipation: To make the arrival of a new idea more convincing, the composer anticipates some element of it - melodic contour, rhythmic motive, etc. - just before it actually arrives.



Quartet #3: Before pausing between phrases, in m. 16 the cello (pizzicato) anticipates the accompaniment figure which will accompany the next section.

(repertoire example) Beethoven, Quartet op. 132, transition into last movement: The accompaniment figure in the second violin, at the start of the last movement is prepared by violin 1, first as an appoggiatura (10 bars before the Allegro) and then on the exact pitches to be used by the 2nd violin (one bar before the Allegro).

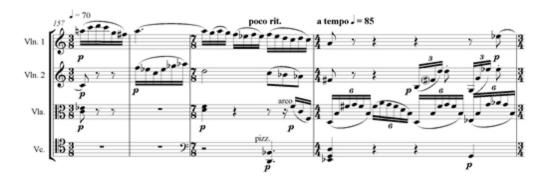
• Elision: the final note of the first idea also serve \$70 begin the second idea. There is thus no full stop, and the listener only perceives in retrospect that what sounded like the end of one section was really also the beginning of another. This tends to attenuate the normal "respiration" effect of a cadence.



Sonata for Viola and Piano: The G# at the peak of the first phrase (m. 79) is also the first note of the following new idea. The accompaniment signals the new section.

(repertoire example) Berg Lulu-Suite, m. 244: The last note of the cadence, the G at the end of the descent in cello, harp and piano, is picked up by the basses, acting as the first (bass) note of the new phrase.

• Overlap: overlap differs from elision in that it uses counterpoint. Whereas elision depends on a link of a common note or two within the same line, overlap uses counterpoint to introduce a new idea while the old is being completed. (Counterpoint, by its very nature - parts will normally overlap - mitigates squareness of construction.)



String Quartet #3: The end of the phrase in the 1st violin (m. 160) overlaps with the start of the accompaniment for the next phrase, in the viola.

(repertoire example) Elliott Carter, Symphon **38** Three Orchestras, m. 9: As the shimmering texture of the opening dies away, the trumpet enters quietly, beginning a long solo passage, like a song mysteriously emerging out of a whirlwind of activity.

• Alternation: Instead of simply ending the first idea and starting the second one, it is possible to move back in forth between fragments of both two or three times. Often it is also helpful to gradually diminish the length of the first idea's presentations while expanding those of the second.



Sonata for Viola and Piano: The end of the lyrical phrase is marked by a change to staccato articulation, in m. 121. This is echoed, fragmentarily, in m. 122. A contrasting theme enters in the viola in m. 123, followed, in m. 125, by an echo of the material from m. 121. Finally the new theme takes over, decisively. The alternation blurs the joint, enhancing continuity.

(repertoire example) Shostakovitch, Symphony # 15, 4th movement, m. 1-17. The introduction to this movement leads to an important theme in m. 14, in the violins. The contour of this new theme's first three notes is prepared by pizzicato basses, first in m. 5-6, and then again in m. 11-12. Note also the elision between the last statement of the opening idea (a quotation from Wagner) and the violin phrase.

• Climax can engender change: For example, a crescendo (often realized as a rising sequence) can culminate in a shift to a new idea. The climax serves as a **turning point**: The novelty provides a psychological boost and acts as the accent fulfilling the buildup.



Piano Sonata: In m. 81, after a sequential rise, the music stops abruptly on a climactic high note. This common tone becomes the first note of a contrasting section. The rising line and the crescendo create tension; the new section resolves it, but in an unexpected way.

(repertoire example) Beethoven, 5th Symphony #5, transition between the 3rd and 4th movements: The buildup into the finale via a long rising sequence, over a dominant pedal, creates great tension, which is released by the arrival of the finale's main theme. Note how Beethoven explicitly avoids adding the crescendo until the very end of the melodic rise, thereby creating greater suspense.

• Interruption: An interesting way to make a transition is to leave the first idea incomplete. Instead of completing the gesture, the music is stopped in midstream, often by a sudden, percussive attack. By interrupting the first idea, tension is created. This method also tends to suggest that the incomplete idea will return later, and thus can be useful in creating larger scale unity in the form.



String Quartet #3: the energetic, running passage is suddenly interrupted in m. 45, by the **sfpp** in the viola. The interruption sets off the first note of a contrasting phrase.

(repertoire example) Stravinsky, Orpheus, last movement: Here the "cross-cutting" effect of the harp solo interludes, which stop abruptly, precludes any impression of finality.

• Full stop and restart: in a sense this is not a transition at all, since it is so abrupt. Rather like a chapter in a novel that begins, "and then a strange thing happened", this device is only useful as a (rare) special effect. If it happens more than once or twice in a movement, the effect is to weaken continuity.

(repertoire example) Beethoven, Sonata op. 10, 1st movement, end of 1st theme.

2) Major Contrasts

In Fundamentals of Musical Composition, Schoenberg speaks of "the generating power of contrasts".

There is a relation between the degree of contrast required to renew interest, and the length of the piece: Normally, greater contrasts generate longer continuations. Or, put another way, after a long passage in one character, a more vivid contrast is needed for renewal. Whereas within a section of short piece, a subtle modulation to a closely related key may suffice, a larger work requires more vivid contrasts of orchestration, texture, register, tempo, etc.

Contrasts between sections can be effected by the following techniques, or by combinations of them:

- changing the character:
 - thematic/motivic material.
 - o harmonic rhythm.
 - o orchestration, texture.
 - o register.
- substantially varying the length of the sections.
- changing the internal (phrase) construction.

(repertoire example) Brahms, Clarinet Quintet, m. 25: The new section starts abruptly, with a strongly accented chord, and immediately introduces a dotted note rhythm not heard before. The harmonic rhythm is much faster, and includes syncopations. A new motive of triplet 16th notes is added (m. 28).

3) Creating suspense over larger spans of time

We have already mentioned that suspense is valuable in all forms. The major differences in its application to larger forms have to do with the prominence given to incomplete gestures.

As mentioned above, interrupting an idea in midstream and continuing it later creates powerful suspense.

It is possible to start and suspend a musical idea more than once in a large form. In such cases, often the interruption may seem peculiar in its first presentation, but will gain in meaning as the movement progresses.

(repertoire example) Beethoven 8th Symphony, finale: The main theme, in F major, comes to a bump on a surprising Db. This happens several times in the course of the movement. However the last time it occurs, the Db is reinterpreted as a C#, and leads to a dramatic digression in the remote key of F# minor.

4) Long range points of reference

Rounding off: In a large form, the principle of points of reference often extends to fairly literal repeats of whole sections.

The familiarity of a reprise can be reinforced by making it start identically to the original passage, only allowing variation to arrive later. The more literal the repeat, the easier it is for the listener to make the association.

Such a reprise may either:

- go off into a new direction, or,
- represent a return to stability. (This function will be discussed further in the "Ending" chapter.)

(repertoire example) Tchaikovsky: Serenade in C, op. 48, 1st mvt.: The introduction returns at the end of the movement (m. 275). However, at m. 289, it is cut short and takes a new turn, reinforcing the final cadence.

5) Gradations of Climax

We have already discussed the principles of climactic construction. It remains to be seen how a series of climaxes relate to one another in a large form.

Normally, a number of climaxes are created within a movement, and they are not all of equal intensity. The strongest climax tends to occur fairly late in the movement, for several reasons:

- The intensity of a climax is proportional to the length of the buildup preceding it and the time spent at its peak; the largest climax requires the longest buildup.
- The listener mentally needs comparative points of reference to determine that it is the strongest accent. This usually implies several previous climaxes.
- Once the highest point of intensity is reached, it is difficult to go on for any great length of time without lessening interest.
- Imposing a progression on the peaks of several successive climaxes draws the listener's attention to large scale relationships, encouraging a bird's eye view of the form. This makes overall comprehension easier and helps situate the listener.

(repertoire example) Beethoven, Symphony #7, 1st mvt.: Note how the buildup to the final climax (starting in m. 401) is the longest of all in the movement, and how, when the crescendo is completed (m. 423), the music maintains its intensity to the end.

(Note: These last four aspects of large form - construction of major contrasting sections, long range suspense, long range points of reference, and gradations of climax - are impossible to illustrate here with score and audio, as they would requite very extended excerpts.)

Ending

How can the composer conclude the piece convincingly?

Satisfying ending is one of the most difficult formal requirements. Since the ending is heard in the light of the whole movement, the balances affecting it are complex: it must satisfy the listener on various structural levels simultaneously. It must completely close off and resolve any outstanding motivic, rhythmic, dynamic or melodic momentum.

In our discussion we will first examine this question of resolution. We will then say a few words about the use of a coda as a separate section. Finally, we will enumerate some typical ending gestures.

The ending is a critical point in any musical form, since it tends to remain in the listener's memory.

We will give less frequent examples in this chapter, since the processes described are few in number and extremely common in the repertoire.

Resolution: the main issue

The final cadence must be unmitigated. It must be powerfully conclusive, giving the listener clear indications that all musical elements are complete, both locally and in long range terms.

Specifically, the sense of cadence must involve:

- the harmony.
- the melodic line.
- the rhythm.
- the dynamics.

The resolution must be the strongest possible, and this final resolution cannot be followed by novelty; that would suggest continuing the form.

(repertoire example) Prokofieff, Piano Sonata #9: At the end of each of the first three movements, a final phrase announces the theme of the next movement. The last movement recalls the main theme of the first movement. The effect is to make the whole four movement work into one larger, integrated whole.

Rounding Off

At the level of the whole form, points of reference may extend to more or less literal repeats of whole sections. Such a salient reprise helps orient the listener in the piece, and, by rounding off the form, contributes to closure, bringing a sense of stability. Since the material is familiar, there is a sense of relaxation: The listener's job is less demanding.

Ending gestures

Just as some musical gestures are more appropriate for beginning, others suggest ending. Usually the ending represents an extreme in the work, either of maximum or minimum intensity. Such an extreme gives the

feeling that one cannot go any farther; this is conducivate a sense of completion.

The two most common types of endings are: the climax and the fade out.

Climax

Here, the ending is the largest and most impressive climax of the piece, pushing many elements - rhythm, dynamics, register, orchestration, etc., - simultaneously to extremes.

Note that there are differences between an ending climax and an internal climax: An internal climax must maintain an expectation of continuation, since the movement will in fact go on. It must therefore supply cues that more is to come. For example: One or more elements maintains some momentum after the culminating accent; resolution is incomplete (compared to preceding tension); the arrival point is rather short compared to the preparation; the climax is followed by novelty.

An ending climax, on the other hand, creates a sense of unmitigated finality, making clear that that every musical element is closed off.



Symphony #6, finale: Up till the last bar, every stop in the music also includes some element which remains unresolved, e.g. an attack on the upbeat, an unfulfilled crescendo, a dissonant harmony. Only in the very last bar do **all** the aspects of the music come to rest. This tutti passage is loud and long; there is no comparable climax anywhere else in the whole symphony.

Fade out

This is ending by dying away. The music reduces to nothing: Rhythmic activity dies away; the texture progressively thins out; often there is a progression to the lowest or the highest register.



Piano Sonata: After the work's main climax (m. 202), the harmony dissolves into a slow, static tremolo at the extremes of the keyboard, the low register disappears, and finally the rhythm slows to a halt. Although not really a tonal piece in the traditional sense, the bass line does move through a tonal cadential progression (E-A-D).

Some Special cases

Occasionally endings do not fall clearly into one or the other of these types. Above and beyond the minimum requirements for closure, some works end in more spectacular ways.



Symphony #8: After the main climax of the work (m. 472-5), the music seems to be fading away, until the harp quietly interrupts the fade-out. Then, a sudden, loud final chord ends the symphony with a surprise. This kind of ending (inspired by end of the second act of Wagner's Meistersinger) can only work when there has been a loud passage shortly before.

(repertoire example) Mahler 6th symphony, 4th movement: The listener first gets has impression that the ending will be a loud climax. Then, a gradually diminishing passage follows, seeming to reach almost complete immobility. Finally, there is a brief explosion, which quickly dies down again. One can easily imagine the work ending at each of the preceding stages; Mahler goes beyond the basic requirements for closure, not so much to improve the sense of finality, as to heighten the dramatic force and emotional breadth of the music.

(repertoire example) Berg, Wozzeck: here the music seems to stop in mid-stream. But this is an opera, with a story that communicates closure; musically, there is nonetheless a slowing of harmonic rhythm and an arrival at relatively consonant harmony. There is also a reason in the story to suggest why the music is slightly open-ended: The child does not yet understand what has happened.

The ending as a distinct section: the Coda

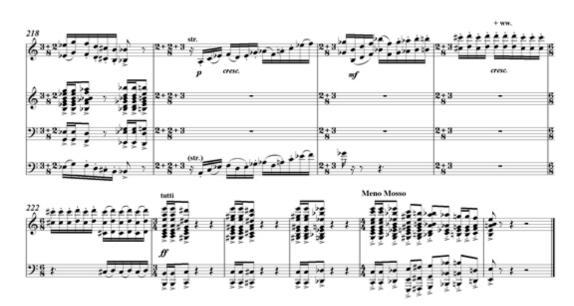
Just as a beginning may be expanded into a substantial introductory section, in a work of substantial size, the

The role of the coda is to enhance and emphasize the final cadence. It reinforces and concentrates the sensation of ending. This is usually accomplished by such devices as:

• a prolonged build-up to a climactic ending, often getting louder and faster.







Symphony #3, 1st mvt.: Starting in m. 194, the coda section is in a faster tempo, and made up of short, nervous phrases, often crescendo, which create great tension, which is only released in the tutti of m. 223-7.

• repeated cadencing.

(repertoire example) Beethoven, Symphony #5, 1st movement, m. 491-end.

• short development-like digressions, which however return to their starting points more quickly and predictably than they would in a real development. These digressions momentarily increase tension, and the desire for resolution. When the resolution arrives, its effect is thus stronger.

(repertoire example) Beethoven, Symphony #7, 1st movement, m. 391 ff: The coda starts with a remote modulation, in the manner of a development section, but quickly returns to the home key, where the music remains, while developing momentum for a final climax.

Forms: A Glossary

Introduction Specific forms

- Phrase
- Period
- Symmetry and Assymetry
- Double Period
- Phrase Group
- Phrase Chain
- Variations of the classical type
- Simple Ternary
- Simple Rondo
- Binary
- Complex Ternary
- Beethoven Scherzo
- Sonata
- Sonata Rondo

Note: for a discussion of contrapuntal forms, please see my book on counterpoint.

Introduction

All through this book, we have related musical form to basic psychological principles, and consequently have formulated the composer's task in these terms.

So-called "standard" forms are simply patterns of construction that recur frequently enough to have been labeled. However, two movements in sonata form can nonetheless be very divergent in organization and in character. To the extent that the standard forms are meaningful categories, it is our premise that they are useful because they address the same formal problems we have described throughout this book. Many other forms are possible which address the same psychological needs; some already occur in the repertoire as "unique" forms, others have yet to be invented.

In this chapter we will take a look at some of these standard forms to see how our principles apply. We assume a basic familiarity with these designs; our interest here is to see how they express general principles of form.

We will begin with smaller forms, and progress to larger ones.

Specific forms

Phrase

A single phrase demonstrates in a microcosm all the basic elements of a satisfactory design.

A phrase must have a beginning that provokes interest; it must develop coherently, inviting increasing involvement on the part of the listener, and it must supply a sense of resolution at its end. The degree of finality implicit in its punctuation will depend on the phrase's position in the whole piece.

Period

A period contains two phrases, in a question and answer relationship. This relationship largely results from the cadences: The first is open, the second closed. The listener hears the second phrase in the light of the first, and the antecedent-consequent relationship is evident at least at the start and at the end of the second phrase. As in a single phrase, over the whole period, the listener should be drawn in quickly, experience a gradual intensification, and feel closure at the end.

Symmetry and Assymetry

As soon as we deal with structures longer than one phrase, the listener inevitably **compares** the individual phrases. The comparison is more pointed when the material is similar and the phrases for the composer to influence the music's emotional pacing. Symmetrical phrasing generally gives a sense of repose. Asymmetrical phrasing, provided it is not simply arbitrary, either compresses (shortens) or expands (lengthens) a previously heard idea. The former usually has an effect of "raising the temperature"; the latter generally relaxes the musical pace.

Double Period

The double period is a highly symmetrical - and therefore stable and predictable - structure which also gradually develops in intensity. However the tension is prolonged over four phrases. The three internal cadences are subordinate to the final cadence, which provides a proportionately stronger release.

Because the structure is stable and reinforces memory, a double period is especially useful for presenting new material; it is more often found in exposition than in development.

Phrase Group

A phrase group is a succession of related phrases, without the clear symmetry of a period or double period. However the final cadence is still clearly the strongest than the preceding ones in the group. The phrase group is therefore less predictable than a period or double period, while still displaying a clear hierarchy of (cadential) structure. It can be useful in mitigating the squareness of other, more regular structures.

Phrase Chain

A phrase chain avoids a hierarchical organization of cadences; often its successive phrases are even based on different material. It is usually found in transitional or developmental sections, since the structure evolves rapidly and somewhat unpredictably. It provides contrast of construction when compared to a period or double period.

We should also mention here the sequence, which, when the units to be repeated are full phrases, amounts to a special, symmetrical kind of phrase chain. Because it is predictable, a sequence creates a certain momentum, which must be broken eventually by asymmetry.

Variations (classical type)

Classical variation technique is based on the distinction between an underlying skeletal structure and its surface ornamentation. In composing variations of the classical type, the underlying harmonic outline and phrase structure of the original theme are maintained, and new motives and accompaniment figures create novelty on the surface. The original melody may or may not provide a melodic skeleton for any given variation.

The theme of a set of variations has several special structural requirements:

- It should be harmonically straightforward. Unusual or complex progressions become tiring when heard repeatedly over the course of many variations, and may be difficult to ornament convincingly, since such progressions often depend on very specific voice leading.
- The phrase structure should be clear. Since the effect of variation form is cumulative the listener gradually senses the underlying periodicity created by repeating the structure of the theme if the structure is vague or unclear, the relationship to the theme is easily lost.
- ABA forms do not work well, since the repetition of the A section becomes tiresome when repeated through all the variations. More often, variation themes are binary structures, which may include some mild rounding off.

Since,e as a whole, variation form is periodic and repetitive, the large design can become overly predictable. One way to avoid this is to group variations, through progressions. For example, several consecutive variations may successively accelerate, or get denser in texture. Combined with occasional vivid and surprising contrasts between variations, this creates a more interesting macro-structure.

Achieving satisfactory closure requires special attention in variation forms, again because of their periodic construction. The last variation is usually set off from the others, by breaking from the theme's structure. The change may be as simple as adding a cadential extension, or may extend to casting the entire final movement in another form, say fugue or sonata. In the latter case, the theme of this new form is usually related to the original variation theme.

Simple Ternary

Simple ternary form (ABA) is based on the most fundamental structural principle of all: variety followed by return. In its simplest form, the return is completely literal. The predictability thus created is mainly suited to smaller movements of light character, such the dance movements in classical symphonies. (More dramatic ideas require more elaborate forms which allow for architectural suspense.)

In a simple ternary form, the main and middle sections are constructed as closed forms: Each has a completely conclusive cadence, and can even be played alone. The middle section has its own motive and, if the harmony is tonal, is cast in a related key. However the contrast between sections should not be extreme; otherwise, the already sectional nature of the form risks creating the impression of two completely separate pieces.

More complex ternary forms mitigate the squareness of the basic arrangement, by using transitional sections, and sometimes also ornamentation in the reprise.

Simple Rondo

The rondo form simply extends the principles seen in ternary form: (statement, contrast, reprise. There are several contrasting episodes and the starting material returns after each one.

This form is fairly naive, but it can be refined by:

- varying the reprises (including abbreviation).
- varying the transitions into and out of the main theme.
- varying the proportions of the sections.
- adding a coda to create a stronger ending.

Binary

Binary forms come in many varieties: The two parts may be symmetrical or not; the first part may have a conclusive cadence ("sectional binary") or an open cadence ("continuous binary"); the second part may or may not bring back elements from the first section to round off the form. It is typical of the form that both sections develop the same material. Frequently each section is repeated with a double bar.

The first part is normally a closed design, such as a period or a double period.

In the simpler types (symmetrical, sectional), the main type of contrast in the second part is in harmonic detail.

In more sophisticated designs, the beginning of the second section acts like a miniature development section: Its structure is less stable and predictable. Frequently, sequence is used. (Note that sequence uses the principle of progression, and to that extent is a predictable device. However, unlike, say, a period, the listener can not foresee when the repetitions will end.) Rounding off the form, by bringing back material from the first part, then re-establishes stability and allows a strong conclusion.

Complex Ternary

Complex ternary explicitly introduces the aspect of hierarchy: Each section in the overall ternary form is in itself a binary (usually continuous, often rounded). This has the effect of expanding and enriching the overall form.

Complex ternary may be further refined by:

- adding links between some or all of the main sections.
- mitigating the finality of the end of the middle section so as to create a transition back to the reprise.
- varying the reprise.

Beethoven Scherzo

The Beethoven scherzo extends the complex ternary to include a reprise of the middle section, and a final reprise of the main theme.

The "going in circles" feeling is exploited by adding some surprise new turn or abbreviation the last time around, often in the last reprise of the main theme (e.g. there may be a hint of a third return of the middle theme, only to be cut short).

The essence of this design lies in its sophisticated playing with listeners' expectations; transitions may also become more elaborate.

Sonata

Sonata form is an outgrowth of the rounded binary form.

The drama and richness, typical of the form, result from:

- breadth: substantial duration, and the integration of strongly contrasting material.
- stable initial presentations of the material, linked by a transitional section.
- long term suspense engendered by an open cadence at the end of the the second group.
- avoidance of the tonic at the start of the development, creating the effect of a formal interruption, which maintains suspense at the highest architectural level.
- contrast of structure in the development section: increased instability, use of surprise.
- buildup of expectation, to prepare the return to the tonic.
- substantial recapitulation to round off the form, with the second group restated in the tonic area, to heighten stability.

Sonata form is thus an elaborate, suspenseful, narrative structure, with rich potential for digressions, elaborations, and complex emotional balances. It also provides the opportunity to explore material in different formal contexts.

It is very useful for long pieces because of its inherent suspense. It is adaptable to many harmonic styles, since the basic principles -balance through varied reprise; contrast and suspense in themes/motives and construction; intensive development of material, showing it many different formal contexts; connecting contrasting characters through elaborate and varied transitions - fulfill the psychological requirements for maintaining interest and intensity over an extended time period.

A sonata form, conventionally divided into exposition, development, and recapitulation, may also include an introduction and/or a coda.

Sonata Rondo

The sonata rondo functions similarly to a sonata, except that the development is preceded by a rondo-like reprise of the main theme; the development itself acts like the second episode in a normal rondo.

The reprise of the main theme following the contrasting material lowers the tension considerably, and makes this form suitable for less intense drama.

Conclusion

In this book we have attempted outlined some of the basic principles of musical form. Our approach has been largely psychological: we have tried to understand formal processes in terms of how they are designed to affect the listener's experience.

Following a narrative model, we have characterized the musical experience at each stage of the listener's progress through a work: beginning, development/elaboration, and ending. Our discussion has leaned heavily on basic psychological principles, which allow the composer to attract attention, to intensify and amplify the listener's experience, and to create closure.

The advantages of approaching musical form in this way are several. First, relating the processes of musical form to basic psychology helps the composer organize his music in ways that are clearly comprehensible. Also, the student focuses on clear links between his musical decisions and their effects on the listener. Finally, these principles are not limited to one specific style.

The student who has absorbed fundamental writing skills, understood these principles and learned to apply them, should have reached a professional level of competence in controlling musical form. Of course, to reiterate our caveat from the introduction, this in itself is no guarantee of art, but it is a prerequisite to achieving greater things, at least within the western artistic tradition that concerns us here.

There is an important characteristic of the artist that distinguishes him or her from the artisan. The artisan seeks a consistently high standard of craftsmanship. The artist goes beyond this, sometimes questioning the boundaries imposed by those standards, and on occasion expanding these boundaries, to satisfy expressive needs. When bending or breaking the traditional rules in this way, it is important that the artist be fully conscious of the imperatives behind the original requirements. New and inventive solutions to the deep problems of musical form remain possible. It is our hope that this book will not be seen as a collection of formal recipes, but rather as a starting point for artistic exploration.

Acknowledgements

First of all, I am indebted to the Université de Montréal for according me a sabbatical during which I worked on this project.

Apart from the bibliographic sources enumerated below, discussions with colleagues and friends have helped me refine many ideas. My friend Cindy Grande gave me many ideas to improve and clarify the writing. My colleague Sylvain Caron read the manuscript and commented in great detail, always with tact and perception. My colleagues Massimo Rossi and Marcelle Guertin each contributed valuable feedback. Julien Valiquette provided assistance in finding and analyzing appropriate musical examples. Guillaume Jodoin kindly tested the web version.

Bibliography

Sophisticated, practical books about musical composition are exceedingly rare. Most books about musical form are written from the point of view of analysis. However, as mentioned earlier, composers add, whereas analysts divide; their needs are quite different. It is no accident that so many of the items in the following bibliography are by composers. I have nevertheless omitted actual biographies, although the better ones often provide very useful information about composers' working methods. To include them would have lengthened the list enormously, and the relevant information is often scattered about in odd places within them.

- Carter, Elliott. Flawed Words and Stubborn Sounds. New York: W. W. Norton, 1971.
- Monsaingeon, Bruno. Mademoiselle. Paris: Editions van de Velde, 1980. (?)
- Rosen, Charles. Sonata Forms. New York: W. W. Norton, 1980.
- Tovey, Donald Francis. The Forms of Music. New York: Meridian Books, 1963.
- Schoenberg, Arnold. *Fundamentals of Musical Composition*. London: Faber and Faber, 1967.
- Schoenberg, Arnold. Models for Beginners in Composition. New York: G. Schirmer, 1942.
- Schoenberg, Arnold. *The Musical Idea, and the Logic, Technique, and Art of its Presentation.* New York: Columbia University Press, 1995.
- Olmstead, Andrea. *Conversations with Roger Sessions*. Boston: Northeastern University Press, 1987.
- Sessions, Roger. *The Musical Experience of Composer, Performer, Listener*. New York: Atheneum, 1968.
- Sessions, Roger. Questions About Music. New York: W. W. Norton, 1971.
- Smith Brindle, Reginald. Musical Composition. London: Oxford University Press, 1986.

© Alan Belkin, 1995, 2008. Legal proof of copyright exists. The material may be used free of charge provided that the author's name is included.

email: belkina@yahoo.com