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A Practical Guide to Musical Composition

Presentation

The following is the table of contents of my book: A Practical Guide to Musical Composition. Its aim is to discuss fundamental principles of musical composition in concise, practical terms, and to provide guidance for student composers. Many practical aspects of the craft of composition, especially concerning form, are not often discussed in ways useful to an apprentice composer; that is to say, ways that help 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.

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

- Structural requirements for the beginning of a musical work
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Introduction

Why this book?

This book arose in response to a practical need. In many years of composing and teaching musical composition at various levels, I have been repeatedly struck by the dearth of practical information about how music is constructed. There are good texts available on harmony, counterpoint, and orchestration, but the *practical* principles of musical form, especially 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 (1). 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.

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 strongly individual.

However, it also seems unlikely that composers reinvent the wheel with every piece. Does every new work really solve such 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 basic "tools of the trade".

Stylistic Assumptions

A legitimate question here is to what extent principles of musical form can be generalized across different styles. This question is especially pointed today: since non-western and popular musics are so much more familiar to many listeners, it can be argued that a beginning composer today no longer starts with a clear attachment to one pervasive tradition.

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 enumerated above 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, as well as managing to bring the experience to a satisfactory conclusion. Thus, "musical hearing" implies here a sympathetic and attentive listener, at least some of whose psychological processes in listening to the work can be meaningfully 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. (2)

Further, 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 in such a way as to satisfy an attentive musical ear. If extramusical limitations apply - like having to reach a climax 23 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. (3)

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 further 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 certain general formal principles. In the glossary,

I will describe the "standard" classical forms in summary fashion, to attempt to show how they exemplify our 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 (4)
- an understanding of motives (5)
- 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. Other texts by Schoenberg, more recently published (6), are also very stimulating: Schoenbergís lifelong exploration into 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.

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 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".

Notes

1. 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 the composer may see this differently: his 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 points of view is that the composer proceeds from the incomplete to the complete; the analyst begins with the work already a 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.

2. It might be interesting to see to what extent these principles apply in other cultures, but this would require a much larger study, as well as competence well beyond mine.

3. It should be noted that music based on text (songs, opera, etc.) is only partly governed by these 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.

4. The issue here is of course not what courses the student has taken or for how many years, but what he/she can do. In the case of harmony, we assume the student can at least:

- determine the tonal direction of a given phrase and suggest possible cadences
- create a bass line which is a solid counterpoint to the main upper lines and which will define important structural moments, supplying both propulsion and punctuation
- use elementary dissonance formulas coherently
- modulate convincingly, at least to closely related keys. This involves not only choosing pivot chords but creating momentum towards the new key, and handling the alterations that define the new key with some sensitivity.

5. While a full discussion of motives is outside the scope of this book, let us mention one distinction we have found very useful: transformations of a given motive may be related very audibly or quite abstractly to the originally presented form. In particular, transformations like retrograde and diminution can disturb continuity, if they suddenly change the rhythmic momentum without special punctuation. The simple test to apply is: at a first hearing in context, does the variant sound familiar, or like something new?

6. Arnold Schoenberg, The Musical Idea, New York: Columbia University Press, 1995.

Basics

Since music is heard consecutively in time, our examination of the structure of a musical composition will be mainly 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 deliberately avoids concentrating on conventional "forms", since these principles seem basic to any satisfactory musical construction, always of course within the limits set forth in the introduction. (1)

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

Foreground vs. Background

It is a well known fact that human perception can operate 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 (e.g. 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 elements in a multi-layered texture that most engage that listener's attention at any given moment as "foreground", while the secondary elements constitute "background". (2)

While the specifics determining what will be perceived as foreground or background in a particular case can occasionally get complex, usually they are quite easy to define. As a general guide, all other things being equal, the ear follows as foreground:

- complexity: usually the element with the greatest level of activity attracts the most attention, e.g. in a texture consisting of simultaneous held notes and moving lines, the moving lines take precedence.

Beethoven, 6th Symphony, 1st movement, m.115 ff: Here the violin line emerges over sustained pedal tones in the other instruments, due to its greater complexity of pitch, rhythm, and articulation.

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

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, a trumpet will demand more attention than a flute.

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, has no trouble emerging clearly.

In fact a good deal of the study of orchestral balance is nothing more than learning to predict reliably what will dominate the texture in a given combination.

Possibly simple curiosity plays an important role in the listener's response here: in trying to follow the music, an attentive listener will try to make sense of the things which require the most effort.

Flow vs. break; continuity vs. surprise

" [...] convincing continuity: one must have that above all other things."
Elliott Carter (3)

The distinction between foreground and background has a direct bearing on issues of musical flow. To understand this, 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 relies 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 and overall balance.

Successions of musical ideas can be thought of 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 separate, but rather as different degrees of same thing. If the flow of the piece provides little novelty, the music becomes boring; if there are too many fits and starts, the discontinuities

eventually break up the work's coherence.

The composer's first and most fundamental problem is therefore to ensure that the overall flow is not broken from the beginning to the end of the piece. 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 foreground elements are new, 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.

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

Any audible musical element can participate in creating connection or novelty. Among the most obvious to the listener, and thus the most useful, are:

- register

Ravel, Pavane pour une infante défunte, m. 13: The 2nd theme is quite similar in character to the first theme, but the fact that the oboe opens up a new register (even though the change is quite mild) creates an effect of freshness.

- speed (note values or harmonic rhythm)

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

- motives

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

The best example of this Ravel's Bolero: over an extremely repetitive and predictable structure, novelty is mainly the result of timbral variation at each presentation of the theme.

Articulation and degrees of punctuation

Articulation is necessary, as Schoenberg points out (4), 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. (5) We shall discuss more particulars of articulation in the "Continuing" chapter; what concerns us here 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 issue of the speed at which new elements arrive, and the prominence of the changes: if articulation is brusque, change will be more striking.

In general, the psychological effects of the rhythm of presentation of new information to the listener allow the composer access to 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.

Tchaikovsky, Symphony #6, 2nd movement. Here is an example where 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 new 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)*
>
> *m. 17: winds and horns now make the 8th notes continuous*
>
> *m. 25: the continuous 8th notes become more prominent, now in the strings.*

Schubert, String Quartet #9, 1st movement. Here a more restless character results from successive introduction of more contrasting material (reinforced by sudden dynamic changes):

> *m.1-4: the first phrase 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 motive (vln. 1, m. 9-10).*
>
> *A climax arrives at m. 13, bringing with it yet 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:

Beethoven Piano Sonata, op. 7, m. 136 - m. 165 (end of exposition, start of development)

Could this passage serve as the beginning of the piece? While it is certainly provocative and "unresolved" in a way that might suit an opening gesture, 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.

What all these things add up to is that this passage sounds unstable. As indicated above, 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 now with the exposition from the same movement. Much of the material is the same, but it is organized very differently.

Beethoven Piano Sonata, op. 7, 1st movement, m. 1-24.

This whole paragraph is clearly in one key, Eb major, and the harmony's direction is always clear; the eighth note rhythm is continuous, there is much higher degree of predictability in general.

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 and 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:

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, confirming the tonic very clearly.

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

Progression

To give music an overall sense of direction, often its evolution music takes the form of a progression. Progressions constitute 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. Here is a simple, commonplace example:

Haydn, String Quartet op. 76 #2, 3rd movement: m. 1-3 (vln.): 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 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.

A subtle example of this procedure occurs in Chopin's Nocturne op.32 #2, across the entire first section (m. 1-26): while the phrases are organized fairly straightforwardly, Chopin makes successive presentations of his 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.

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. (6)

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.

Again, this is a crucial aspect of musical direction.

Balance

Apart from the issues of flow, articulation, and direction, there remains one other important general topic to explore: formal balance.

Defining balance is not easy. Although the classical notion of proportion points to a sense of equilibrium that artists have sensed since at least the time of the Greeks, it is very hard to state in clear and objective terms how this can be created. Indeed, it is even hard to specify why a given masterpiece seems well balanced, although sensitive listeners often have an acute sense of whether a piece seems balanced or not. Comments like "it seems too short", or "it didn't hold together", testify to the listener's feeling that something is wrong in a work's proportions.

One way to approach the problem of balance is psychologically. A musical work has a "trajectory", engendering a kind of internal voyage in the listener. This voyage takes the listener over varied emotional terrain in a coherent way. The composer's goal is to engage the listener, to maintain his interest and to increase his involvement during the whole voyage, and then finally to lead him back to the normal, external world in a fulfilling way. We call the experience "balanced" when the listener feels satisfied with the experience as a whole. Of course, this does not mean that the experience is necessarily pretty or pleasant - the emotional world may be serious or even troubling - but that the work seems meaningful in an integrated way.

Balance and Length

The sense of balance is closely related to issues of length and duration. While it is impossible to make hard and fast rules here, there are several principles worth noting:

- Greater length implies greater contrasts. This seems obvious: the longer the piece, the more it will require renewal of interest through contrast.
- Greater contrasts usually imply greater length. This proposition is equally true but rather less evident: strong contrasts, especially if presented with little or no transition, tend to demand longer forms. The reason for this may not be immediately evident.

When a strong contrast is abruptly presented to the listener, it acts like a provocative question. While this is an excellent way to stimulate interest (think of the start of Mozart's Jupiter Symphony discussed above), the subsequent working out of the material in such a way that the contrasting ideas come to seem integral to a unified larger conception takes time. The ideas must be presented, joined and combined in various ways before the listener will accept that they do in fact belong together. Once this is achieved, the formal "question" posed by the contrast may be considered to be answered, and a kind of resolution achieved - necessary, of course, for any convincing sense of conclusion.

Greater contrasts usually imply greater formal complexity. Longer forms require more complex proportions, with more sophisticated transitions, if they are not to become overly simplistic and predictable. Sustaining interest over a long time frame requires finding new ways to present and combine the material; the need for many and varied types of transition becomes pressing.

The next few chapters will explore the formal and psychological functions of each part of a musical work in turn.

In chapter 6, we will however provide a concise glossary of standard forms, and there we will discuss the relationship between these large principles and those forms more specifically.

Notes

1. In chapter 6, we will however provide a concise glossary of standard forms, and there we will discuss the relationship between these large principles and those forms more specifically.
2. Our use of these terms has nothing to do with the Schenkerian usage.
3. in Flawed Words and Stubborn Sounds, W.W. Norton and Company, Inc, New York, p. 116.
4. Arnold Schoenberg, Fundamentals of Musical Composition, London, Faber, 1967, p. 1.
5. again, Schoenberg, ibid.: "The presentation, development and interconnection (sic) of ideas must be based on relationship. Ideas must be differentiated according to their importance and function."
For example, an ending has neither the same structure nor function as a transition. And punctuation points are crucial in letting the listener know the function of a given section.
6. Schoenberg refers to this as the "tendency of the smallest notes" in Arnold Schoenberg,

Fundamentals of Musical Composition, London, Faber, 1967, p. 29.

Beginning

Psychological functions of structural elements

The following discussion is based on a simple but often overlooked fact about musical form: even when they are derived from the same material, sections cannot be simply interchanged. (1)

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 issues in chronological order.

Structural requirements for the beginning of a musical work

Is it possible to generalize about how a musical work should commence? (2) While a cursory survey of the literature shows enormous variety in the actual beginnings of musical works, a simple experiment suggests that it is possible to define at least some characteristics of gestures that are appropriate for starting a piece, 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.

Simply put, one has only to try starting any work with its ending. Even if one begins at the start of a final phrase, the ending virtually always is 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, rather than departure.

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

Some typical starting gestures

It turns out upon examination that there are certain kinds of gestures which are better suited to a beginning than others. Further it is possible to categorize and generalize about such gestures. What they have in common is that they are provocative and somehow require elaboration and continuation; in this way they create the "question" referred to above in the mind of the listener.

Without being restrictive, (3) one can say that the following are typical of the gestures composers use as beginnings. (Of course this list is by no means exhaustive.)

- Crescendi and/or significant expansion of register within the first phrase: A crescendo creates tension and energy, and implies a (future) goal. Expansion of register has the effect of opening up new terrain.

Beethoven, Piano Sonata op. 10, #3 , 1st movement.

- Rising lines: Probably by association with the voice, rising lines are associated with increasing stress. (4)

Beethoven, Piano Sonata op. 2, #1, 1st movement.

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

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.

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.

Mozart, Jupiter Symphony, 1st movement: tutti followed by strings alone.

Not all of these elements are required for a successful beginning. Any one such gesture (or a gesture combining several of these characteristics) can attract attention and stimulate the listener's curiosity.

One final 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 likely not succeed in engaging his interest. When a typical beginning gesture is used elsewhere, it is often mitigated 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. In cases where 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. (e.g. Beethoven Symphony #7, 1st movement (5)).

Whatever its internal structure, an introduction will end with some kind of upbeat effect: rhythmic (e.g. the accelerando in Bartok's Concerto for Orchestra), harmonic (e.g. a clearly unstable harmony which tends towards the harmony to follow), dynamic (a crescendo), etc.

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 by setting off this material within a stable structure. By avoiding major changes, and by supplying clear punctuation within balanced (often symmetrical) structures, the demands on the listener's memory are lightened. The symmetry also draws attention to elements of repetition, again encouraging easy memorization.

Notes

1. This has important implications for analysis. It is not enough to demonstrate connection or derivation between ideas; the analyst also has to show why ideas are placed where they actually appear in the form.
2. Note that we are here discussing not the act of starting to compose, but the characteristics of the actual music that the listener hears first.
3. While the techniques described below do indeed work, they do not exclude other, novel solutions to the problem of arousing the listener's interest.
This open-ended, descriptive - rather than rigidly prescriptive - attitude will be our approach throughout our examination of the function and structure of various formal elements.
4. It is no accident that the word for musical ending - cadence - comes from the Latin "cadere",

to fall.
5. This is an interesting case. 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 bIII and bVI) defines exactly those tonal regions that will be the most striking throughout the movement.

Elaboration/Continuation, pt. 1

Once the initial material has been exposed 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. (1)

General Requirements for successful continuation

The requirements for successful continuation after the beginning include:

- Satisfactory Flow
- Renewal of Interest through Contrast
- Suspense
- Points of Reference
- Climax

Let is examine these points in more detail.

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". (2) 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 teachers such as Nadia Boulanger and Alban Berg talked often 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, they usually refer to material already

presented (3), and - an especially important point - connecting them requires the presence of common element(s) to create links.

The notions of foreground and background, presented in the second chapter, 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 perception will be one of contrast.

Stravinsky, Symphony in C, 1st movement, 2 before rehearsal # 15: Here the winds engage in a dialogue during a crescendo which continues up till 3 before before rehearsal # 18. The wind timbres are constantly varied. However the dotted note motive and, especially, the string accompaniment - a sort of ostinato - give the passage a strong sense of continuity.

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 the discontinuity more prominent.

We will explore the technical aspects of creating transitions in greater detail in the second part of this chapter.

2) Contrast

In the latter case - when contrast is in the foreground - it is introduced to avoid boredom, and to deepen the listener's experience. Contrast creates emotional breadth, setting off ideas and heightening relief and definition of character.

Sibelius, Symphony # 4, 2nd movement, letter K (Doppio piu lento) : In this trio-like section, unified largely by a quiet tremolo accompaniment motive, the sudden interjections of the winds (4 after K) and vln/vla (7 after K) heighten the emotional breadth of the passage.

An analogy can be made here with the novel: seeing the characters' reactions in varied situations, we get to know them better. Musically, when we hear 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 some 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 clearly 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

Bartok, Piano concerto #2, 1st movement. (Boosey & Hawkes p.34): the piano starts its cadenza at m.222, but stops immediately on the 4th beat of m. 223, and then restarts at a faster tempo. This stop and start creates suspense.

stopping on unstable harmony

Stravinsky, Orpheus: Pas de deux, 2 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, also stops on an upbeat.

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

Mozart, Symphony #40, 1st movement, immediately preceding the recapitulation: This famous transition provides a perfect example of this procedure. The recapitulation of the first theme in the violins starts while the winds are completing their cadence.

- 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 incoherence, the ideas so presented should:
    - refer to previously presented material, continuously enriching the web of the listener's associations

Mozart, Symphony #41 (jupiter), 4th movement., m.74: The 1st violins present the new theme, while the winds comment with 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 always supplies information to the listener about what will follow. (4) While we will explore the formal implications of different 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 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 a great length of time without a clear reference to something well defined and familiar, the listener starts to feel lost. In classical music, motives and themes often fulfill this function.

Ways to throw such points of reference into relief include:

- a stop before the reference point

Chopin, Étude no. 2 Op. 25: 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 helps launch the theme as a new phrase.

- a buildup into the reference point

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

- a sudden accent at the reference point

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

5) Climax

Not only must the continuation must 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 momentum.

Definition: 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 the (relative) degree of accent compared to its surroundings.

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

Ways of preparing climaxes

One of the most important determinants of the intensity 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)
- rising lines

Dukas, l'Apprenti Sorcier: 2 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

Bartok, Concerto for Orchestra, 1st movement, before #76: this example, already referred to, rises to its climax, while constantly covering a larger and larger register.

- increasing harmonic tension

Bruckner, Symphony #9, 3rd movement, m. 173 ff: In this stupendous buildup rising chromatic sequences and increasingly rich harmony incorporating augmented sixths and appogiaturas lead to the remarkable dissonances of m. 199 ff.

- increasing textural density

Dukas, l'Apprenti Sorcier: an increase of orchestral density in several stages:

> *3rd measure after before rehearsal # 17: the texture is airy with many rests, staccato articulation, and pizzicato strings*
>
> *around rehearsal # 19, the harp is added and rising scales add movement*

rehearsal # 20 the scales get more and more frequent, and the former rests now are filled up: the texture is less transparent

4-7 bars after rehearsal # 20 the rhythm gets more complex, 16th notes are added. Trumpets and cornets are 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.

The culminating accent

A climax achieves completion when it goes all the way up to 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 in a given climax determines its importance and intensity.

Bruckner, Symphony #9, 3rd movement, m. 206: The climax of this passage, which is also the climax of the whole movement, is achieved by a combination of the most dissonant harmony, the most complex rhythm and orchestration (4 layers: sextuplet 8th's 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 (referred to above).

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.

Brahms, String Quartet #1, 1st movement, m. 236-end. Here the climax of the coda (in 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 sense of incompleteness, which can often be exploited to create suspense. (5)

Bruckner, Symphony #9, 3rd movement, m. 206-7: Here 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.

Notes

1. 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.

2. Flawed Words and Stubborn Sounds, a conversation with Elliott Carter, by Allen Edwards, New York, W.W. Norton and Co., 1971, p. 116.

3. While new ideas can and do occasionally 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 set in our introductory chapter - since only by developing and exploring previously heard material can the composer stimulate and appeal to the listener's memory, thus setting up the kind of rich, long range associations that give the larger forms their interest and depth.

4. Of course the continuation may not always fulfill the expectations so evoked.

5. see "Interruption" in the discussion of transitional techniques in part 2 of this chapter, and also the section on stability/instability in the "Basic Notions" chapter.

Elaboration/Continuation, pt. 2

As the work gets longer, how can the composer keep the organization 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 meaningfully 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 substantial work, the connection of sections and subsections requires varied techniques of transition and articulation, to make the function and relative importance of the sections clear. Tying the whole work together by recapitulating prominent reference points (which may extend to entire sections) requires techniques for making the arrival of such 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 in the first part of this chapter. Here we will discuss issues of 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.

There can be many levels of articulation. In a hierarchical musical structure, essential information is communicated by the kind of cadence chosen for each section. A cadence is an important moment, and the cues it provides the listener about what is coming next are very important for making sense of the form.

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 familiar classical distinctions can easily be generalized. Here are the main classical types of punctuation, with some suggested ways of achieving similar effects in non-tonal contexts:

- full cadence: ending. All the musical elements combine to suggest closure.

Elliott Carter, Symphony of Three Orchestras: Here, 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 long resonance from the last piano chord (m.388) slowly dies away.

- open cadence: clear rhythmic and harmonic punctuation (respiration), while at least one musical element (melody, rhythm, timbre, etc.) 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 general orchestral diminuendo.

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 really come to rest.

- deceptive cadence: avoids finality through a surprise continuation, by first creating a definite expectation and then not resolving it as expected. Again, in a non-tonal situation, a long descending line might culminate in a sudden rise.

Stravinsky, The Rake's Progress, Act III, Scene I, at #9: here 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 unexpected interruption in a conversation.

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 problem of transition at the local level is basic to all composition. However, here we will explore the construction of more substantial transitions, which often become 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 with 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.

As a rule, multiple transitions in the same movement should not be overly similar in procedure and proportion; they are better varied in design. Since transitions contribute greatly to the listener's sense of the music's evolution, variety and subtlety in their construction can contribute enormously to the interest and flow of the composition.

Specific transitional techniques:

A transition can be thought of as a bridge: it is attached at one end to the old idea, and at the other to the 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 constituent characteristics: line, texture, harmony, register, timbre, rhythm, etc. The more elements differ, the more contrasting the ideas, and the more stages will be required for a gradual transition. Since it is fairly easy to surprise the listener (the beginner's most common fault!) we will concentrate here on how to construct more gradual transitions.

- gradual evolution: here the transition is a more or less fully developed section in its own right, acting as a bridge, as described above. Once the composer determines the main differences between the ideas to be connected, 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 not to change more than 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.

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.): Here 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 completely even and the repeated note is eliminated; the trill arrives as a simple acceleration. A few more trills descend into the main body of the variation.

- a repeat with a new turn: this derivative of the period structure (question/answer) consists of using a repeated phrase that goes off in a new direction at its second presentation. The repetition starting the new phrase supplies unity. This technique is very common in classical sonata movements, especially when leaving the first theme.

Beethoven, Quartet op. 18, #1, 2nd movement, m. 14 ff: Here 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.

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

- elision: the final note of the first idea also serves to 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 is really also the beginning of another. This tends to attenuate the normal "respiration" effect of a cadence.

Berg Lulu-Suite m. 244: Here 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 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, overlap uses counterpoint to introduce a new idea while the old is being completed. In fact, counterpoint, by its very nature - parts overlap - tends to mitigate overly square construction.

Elliott Carter, Symphony of Three Orchestras, m. 9: As the shimmering texture of the opening dies away, the trumpet enters quietly , beginning a long solo passage. The poetic effect is of a song emerging mysteriously 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.

Shostakovitch, Symphony # 15, 4th movement, m. 1- 17. The introduction to this movement precedes an important theme which starts 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 be used to lead to 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.

Beethoven, Symphony #5, transition between third and fourth movements: Here 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 new theme which begins the finale. It is interesting to note how Beethoven explicitly avoids adding the crescendo until the very end of the melodic rise, thereby creating greater intensity.

- interruption: an interesting way to make a transition is to leave the first idea incomplete. Instead of fulfilling the gesture, the music is stopped in midstream, often by some percussive sound. This suggests to the listener that change is afoot. By leaving the first idea incomplete, tension is created. This method also has the advantage that it tends to suggest that the incomplete idea will return later, and thus can be useful in creating larger scale unity in the form.

Stravinsky, Orpheus, last movement: Here the "cross-cutting" effect of the harp solo interludes, which stop abruptly, precludes any impression of finality and creates tension.

- full stop and restart: in a sense this is not a transition at all. It is rare precisely because 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.

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". (1)

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 will be 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 combinations of them:

- changing the character:
    - thematic/motivic material

        - harmonic rhythm
        - orchestration, texture
        - register
    - substantially varying the length of the sections
    - changing the internal (phrase) construction

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 importance and prominence given to incomplete gestures.

In particular, 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.

Beethoven Symphony #8, 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.)

5) 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.

Notes

1) p. 178.

Ending

How can the composer conclude the piece convincingly?

A satisfying ending is one of the most difficult of all 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 architectonic levels simultaneously. It must completely close off (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.
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
- this final resolution cannot be followed by novelty: this would suggest continuing the form.

An interesting example in this regard is Prokofieff's 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. Not only do such major reprises help orient the listener in the piece, but by rounding off the form, they also contribute to closure, since they bring a return to stability. Since the material is familiar to the listener, there is a sense of relaxation: the music 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 conducive to a sense of ending.

We will now discuss in more detail the most common types of endings: climactic and diminishing.

Climactic

Here the ending is the largest and most impressive climax of the piece, pushing many elements - rhythm (specifically, the degree of accent at the summit) dynamics, register, orchestration, etc., - simultaneously to extremes. (1)

Diminishing

This is ending by fading away. The music in effect reduces to nothing: rhythmic activity dies away; the texture progressively thins out; usually there is a progression to the lowest or the highest register.

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

Here are some unusual examples:

Mahler 6th symphony, 4th movement: Here the listener first gets the 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 however quickly dies down. 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.

Berg Wozzeck: here the music seems to just stop in mid-stream. But this is an opera with a story that communicates closure, and musically, there is nonetheless a slowing of harmonic rhythm and an arrival at relatively consonant harmony.

The ending as a distinct section: the Coda

Just as a beginning may be expanded into a substantial introductory section, so, in a work of substantial size, the ending may be enlarged to form a coda.

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

- repeated cadencing

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 therefore stronger.

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

Notes

1. 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, e.g.:

- one or more elements will usually maintain momentum after the culminating accent.
- resolution is relative (i.e. compared to preceding tension), and not the strongest possible.
- often the arrival point is rather short compared to the preparation.
- the climax is usually followed by novelty.

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

Forms: A Glossary

Introduction

All through this book, we have tried to relate musical form to simple psychological principles, and consequently we 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, and 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.

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 amounts to a special, symmetrical kind of phrase chain. In a sequence, the same pattern is repeated at various transpositions. A sequence creates a certain momentum, which must be broken eventually by asymmetry.

Variations of the 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 quite 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 theme's structure - 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 as a whole variation form is periodic and repetitive, the large design can become overly predictable. One way to avoid this is to create groupings of variations through progressions: 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 structural mold. The change may be as simple as adding a cadential extension, or may extend to casting the entire final movement in another form, say a fugue or a sonata. In the latter case, the theme of this new form is usually related melodically 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 very 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 to create more 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 mold by using transitional sections, and sometimes ornamentation in the reprise.

Simple Rondo

The basic 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. Also, 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. Its structure is less stable and predictable. Frequently sequence is used. (1) Rounding off the form, by bringing back material from the first part, is then used to re-establish stability and to provide for 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 out 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 (and not ternary form, with its self-contained sections):

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 a major open punctuation at the end of the the second theme
- avoidance of the tonic at the start of the development, creating the effect of a formal interruption, which maintains suspense at the highest 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 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 also adaptable to many harmonic styles, since the basic principles -balance through varied reprise; contrast and suspense due to material and construction; intensive development of material, showing it many different formal contexts; connecting contrasting characters through elaborate and varied transitions - answer 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.

Notes

1. 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.

Conclusion

In this book we have attempted to survey some of the basic principles governing 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 simple psychological principles that 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 focusses 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 the fundamentals of 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 great 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 primarily 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.

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